Annual Report 2019

We are a leading independent and listed producer of green energy in Europe

Group key figures*

(in TEUR)	2015	2016	2017	2018	2019	+/- (yoy)
Revenues	112,802	141,783	222,432	248,785	**273,822**	10%
EBITDA	86,826	106,064	166,768	186,890	**217,626**	16%
EBIT	55,397	61,589	100,387	113,682	**132,229**	16%
EBT	25,761	22,906	46,739	56,753	**76,627**	35%
EAT	23,395	20,486	39,962	47,036	**63,446**	35%
Balance sheet total	1,324,816	2,353,797	2,519,698	2,649,065	**2,859,938**	8%
Equity	256,994	608,556	698,594	687,057	**722,713**	5%
Cashflow from operating activities	74,501	103,755	153,017	174,282	**189,315**	9%

* The Group operating KPIs are based solely on the company's operating profitability and do not take any IFRS-related valuation effects into account.

II

A European leader

Solar Parks

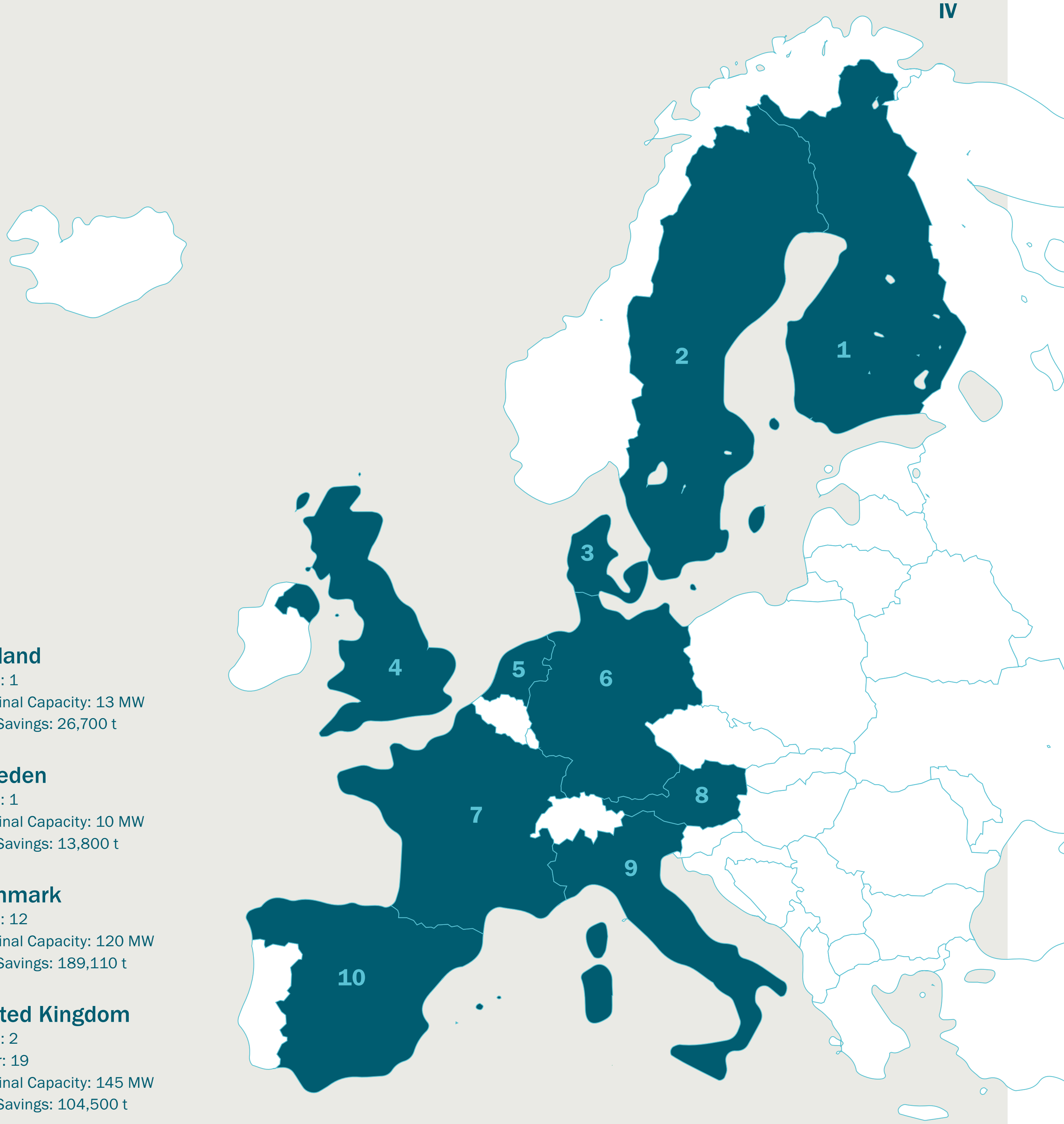
	Encavis AG		Encavis Asset Management	
Country	**Parks**	**MW**	**Parks**	**MW**
Germany	47	262	11	103
France	24	194	3	34
Italy	70	154	3	7
United Kingdom	19	127	–	–
The Netherlands	4	106	4	54
Spain	2	500	–	–
Total	**166**	**1,343**	**21**	**198**

Wind Farms

	Encavis AG		Encavis Asset Management	
Country	**Parks**	**MW**	**Parks**	**MW**
Germany	21	215	28	322
France	4	36	8	103
Italy	1	6	–	–
Denmark	12	120	–	–
Austria	3	36	1	17
United Kingdom	–	–	2	18
Finland	–	–	1	13
Sweden	–	–	1	10
Total	**41**	**413**	**41**	**483**

Encavis Group

	Encavis Group
Solar Parks	**187**
Wind Parks	**82**
Nominal Capacity	**2,437 MW**



1 Finland
Wind: 1
Nominal Capacity: 13 MW
CO_2 Savings: 26,700 t

2 Sweden
Wind: 1
Nominal Capacity: 10 MW
CO_2 Savings: 13,800 t

3 Denmark
Wind: 12
Nominal Capacity: 120 MW
CO_2 Savings: 189,110 t

4 United Kingdom
Wind: 2
Solar: 19
Nominal Capacity: 145 MW
CO_2 Savings: 104,500 t

5 The Netherlands
Solar: 8
Nominal Capacity: 160 MW
CO_2 Savings: 73,900 t

6 Germany
Wind: 49
Solar: 58
Nominal Capacity: 902 MW
CO_2 Savings: 912,400 t

7 France
Wind: 12
Solar: 27
Nominal Capacity: 367 MW
CO_2 Savings: 361,300 t

8 Austria
Wind: 4
Nominal Capacity: 53 MW
CO_2 Savings: 71,300 t

9 Italy
Wind: 1
Solar: 73
Nominal Capacity: 167 MW
CO_2 Savings: 122,600 t

10 Spain
Solar: 2
Nominal Capacity: 500 MW
CO_2 Savings: 595 t

The specified values are target values after grid connection.

Table of Contents

Foreword from the Management Board

Dear Shareholders,
Ladies and Gentlemen,

We accomplished a lot for the Encavis Group during the 2019 financial year: on the one hand with regard to our own objectives for operating KPIs, which we once again managed to increase compared to the previous year. On the other hand, we laid the groundwork for accelerated growth with our “>> Fast Forward 2025” strategy which we are consistently implementing. The goal of the initiative is to double the generation capacity of the renewable energy installations in our possession from the current 1.7 gigawatts (GW) to 3.4 GW by the end of 2025. Over the same period, we plan to increase the weather-adjusted revenue from currently around EUR 260 million to approximately EUR 440 million in 2025. This accelerated growth should not be to the detriment of profitability – we expect to grow our weather-adjusted operating EBITDA from the current figure of EUR 210 million to EUR 330 million.

We have set these ambitious medium-term goals for ourselves because our >> Fast Forward 2025 strategy is based, on the one hand, on a growth initiative with which we intend to expand our position as the largest independent exchange-listed power producer in the field of renewable energies in Europe. On the other hand, it is comprised of a number of measures aimed at reducing costs as well as increasing efficiency within the Group. We see potential for savings in, for example, operating business and in the financing of our wind and solar parks. To this end, we plan to introduce a Group-wide cash-pooling system for the project companies. These and other measures are meant to ensure our operating EBITDA margin of 75 % and our equity ratio of more than 24 % over the long term. We also see additional growth potential in inorganic growth – for example through the acquisition of other companies or equity transactions. When formulating our growth objectives, we have also not yet factored in profitable business models which could result from the use of battery storage systems. We will take an opportunistic approach to realising such projects as additional opportunities based on widely varying framework conditions in our markets.

The organic growth – i.e. the further expansion of our portfolio of wind and solar parks – forms the basis for the implementation of the >> Fast Forward 2025 programme. In the future, we will also realise both opportunities to purchase installations that benefit from guaranteed feed-in tariffs as well as to acquire parks for which the sale of the electricity produced is secured via long-term contracts with industrial customers (so-called power purchase agreements – PPAs). To this end, we have a project pipeline of wind and solar installations at our disposal with a total generation capacity of more than 2 GW that we have secured with the help of our strategic partners.

During the 2019 financial year, we reached significant milestones along our path towards entering the lucrative and seminal PPA market as well as towards the implementation of our growth strategy. In mid September 2019, we concluded a PPA for our solar park in Talayuela, Spain, with an energy company that has a good credit rating. In the next ten years, our contractual partner will purchase a total of some 4,300 gigawatt-hours (GWh) of electricity at a fixed price. Our solar park with a capacity of 300 megawatts (MW) is among the largest in Europe and is currently being constructed on an area of approximately 790 hectares. Grid connection is planned for the end of this year. Our project partner Solarcentury is participating in the project with an investment cost share of up to 20 %. In addition, other installations with a generation capacity of 200 MW are currently under construction at the solar park in Cabrera, near Seville, which we intend to connect to the grid at the end of the third quarter of 2020. We also were able to gain an important player in the digital revolution with Amazon, which will be purchasing the electricity produced in Cabrera. This opens up the world of direct sales of green electricity to companies for us – a global market undergoing extremely dynamic growth. Over the next ten years, Amazon will purchase 3,000 GWh of electricity, including the corresponding green-electricity certificates. An additional 1,000 GWh will be sold at daily prices on the commodities market.

With our two PPA-based solar parks in Talayuela and Cabrera, we will not only generate stable returns, but we will also eliminate around 3.4 million tonnes of harmful CO_2 emissions over the ten-year period – all without being dependent on government subsidies. In the future, we not only hope to establish ourselves in the rapidly growing PPA market in Spain, which has competitive and predictable prices, but we also intend to take our activities to other newer PPA markets such as Italy, Germany and Denmark, where we can also find legally secure and attractive framework conditions for investment. These major investments were supplemented during the reporting period by the acquisition of a solar park in the Netherlands and a wind park portfolio in Denmark with a total generation capacity of 95 MW which generates its income via feed-in tariffs.

Additionally, our subsidiary Encavis Asset Management – in Neubiberg, near Munich – made a significant contribution to the successful conclusion of the 2019 financial year. The target group consisting of institutional investors such as insurance companies, building societies and cooperative banks entrusted us with considerable funds during the reporting period to invest more than EUR 300 million in special funds made up of wind and solar parks. Additional institutional investors hired us to act as consultants in the design of funds and the establishment of a portfolio of wind and solar parks.

Since mid December 2019, Versicherungskammer Bayern has been one of our major shareholders with a share of some 4 %, which we also consider an expression of the trust in our company. The shares stem from a capital increase which we successfully placed with a capital management company belonging to our new core investor, which helped us generate gross proceeds of some EUR 48 million from the issue that are available to us to finance our continued growth.

At the beginning of September 2019, we were also able to increase our hybrid convertible bond – which was issued by our subsidiary Encavis Finance B.V. in 2017 – through the issue of new bonds with a total nominal value of EUR 53 million. These funds are recognised as equity under the International Financial Reporting Standards (IFRS). We have therefore increased our free liquidity by another EUR 60 million, including the paid-in surplus. At the same time, increasing our equity base strengthens our ability to negotiate with banks when taking out loans for the acquisition of further wind and solar parks.

The Encavis Group underwent very positive development during the financial year. The progressing expansion of our portfolio and the favourable meteorological conditions contributed to the achievement of our forecast targets, generating revenue in the amount of EUR 273.8 million. This equates to an increase of more than 10.0 % on the previous-year value of EUR 248.8 million. Operating earnings before interest, tax, depreciation and amortisation (EBITDA) increased by 16.4 % to approximately EUR 217.6 million (previous year: EUR 186.9 million). Operating earnings before interest and taxes (EBIT) came to EUR 132.2 million compared to EUR 113.7 million in the previous year (increase of 16.3 %). Cash flow from operating activities rose by some EUR 15 million to EUR 189.3 million. Operating earnings per share – a KPI which is crucial in management of the company – also improved significantly, increasing to EUR 0.43. These results are within the expectations of the guidance, which we revised in August and affirmed in November 2019.

The extremely positive development of the Encavis Group is also reflected in the continuous upward trend of our share price. During the reporting period, our share price increased by 75 % and was therefore considerably more successful than the DAX, MDAX, SDAX and ÖkoDAX indexes.

Honoured Shareholders, we would of course like you to take part in the successful growth of Encavis AG, beyond the positive development of the share price, which is why we – in accordance with our long-term dividend strategy from the Annual General Meeting – recommend the distribution of a dividend of EUR 0.26 per voting share for the 2019 financial year. As in years past, this will once again be offered as an optional dividend, enabling shareholders to choose between receiving the dividend in the form of shares in the company or in the form of cash.

In light of this, the Supervisory Board and Management Board have decided to continue together on the course of successful growth for the long term. Our management contracts were extended through August and September 2025, respectively. We would like to take this opportunity to thank the Supervisory Board for the trust placed in us, and we look forward to leading Encavis AG with dedication and judgement into its successful future.

Encavis's transition into the PPA markets is also associated with longer time periods between the acquisition and grid connection for projects whose size, for construction reasons, leads to these extended periods. The current 2020 financial year will be particularly affected by this, because our two major projects in Spain will not be connected to the grid until the second half of the year. For this reason, we expect a moderate increase in revenue to more than EUR 280 million for the 2020 financial year. Furthermore, we plan to achieve an operating EBITDA of more than EUR 220 million. At the Group level, we anticipate EBIT in the amount of some EUR 130 million. The operating earnings per share would reach a level of EUR 0.41. We expect to be able to reach cash flow from operating activities of more than EUR 200 million. These expectations for the 2020 financial year are based on the composition of our portfolio of wind and solar parks as of the beginning of March 2020.

Honoured Shareholders, our new strategy is the key to the accelerated growth with which we can reach new dimensions in a short period of time. We would be pleased if you accompany us on this chosen path in future as well.

Hamburg, March 2020

The Management Board

Dr Dierk Paskert

CEO

Dr Christoph Husmann

CFO

Dr Dierk Paskert
Chief Executive Officer (CEO)

Dr Christoph Husmann
Chief Financial Officer (CFO)

The Encavis share

Key financial figures

Listed since	28.07.1998
Subscribed capital	137,039,147.00 EUR
Number of shares	137.04 Mio.
Stock market segment	Prime Standard
Dividend 2016 per share	0.20 EUR
Dividend 2017 per share	0.22 EUR
Dividend 2018 per share	0.24 EUR
Dividend 2019 per share*	0.26 EUR
52-week high	11.74 EUR
52-week low	5.86 EUR
Share price (12 March 2019)	7.79 EUR
Market capitalisation (12 March 2019)	1,067.53 Mio. EUR
Indexes	SDAX, HASPAX, PPVX, Solar Energy Stock Index
Trading centres	Regulated market in Frankfurt am Main (Prime Standard) and Hamburg; over-the-counter market in Berlin, Düsseldorf, Munich and Stuttgart; Tradegate Exchange
ISIN	DE 0006095003
Designated sponsor	HSBC Trinkhaus & Burkhardt AG, Oddo Seydler Bank AG
Payment office	DZ BANK

* Proposal to the Annual General Meeting for the appropriation of distributable profit

Significant price rises in the 2019 stock market year

Prices on the German stock markets began 2019 with a strong upward trend. In the first few weeks of the year, the DAX – the primary German index – had already recorded significant increases. By the end of the year, the DAX had risen to 13,249 points and thus closed 25.5 % above the level of the last trade date in 2018. This positive development was interrupted by only temporary price drops in May, August and October and the index managed quick recoveries in each case. The SDAX index, where the Encavis share is listed, underwent similar development, closing on 30 December 2019 at 12,511 points, 31.6 % higher than the end of 2018. During the same period, the MDAX and ÖkoDAX also made significant gains and ended the trading year 31.1 and 43.4 %, respectively, higher than the previous year.

The continued low interest rates in Europe and Germany aided the positive development on the German stock markets. The European Central Bank (ECB) left the prime interest rate at 0.0 % and resumed buying bonds via the capital market. At the same time, the trade conflict between the United States and China continued to smoulder. Geopolitical tensions and social unrest in several countries weighed on the global economy, which is why the International Monetary Fund (IMF) expects significantly lower growth in gross domestic product (GDP) for the eurozone (1.2 %) and Germany (0.5 %) in 2019 compared to the 2018 figures of 1.9 and 1.5 % respectively.

Capital markets in other important economies also recorded strong growth in 2019. The Dow Jones in the United States closed 2019 22.3 % higher than the last trade date in 2018, and in the United Kingdom the FTSE 100 Index grew by 12.1 % in the same period. The weaker yet still positive development in the United Kingdom is primarily due to the Brexit process. The MSCI Emerging Markets Index grew by 15.4 % in 2019, with the slower growth in China, India, Mexico and South Africa preventing more positive development. Despite the slowed growth of GDP, shares on the Chinese capital market developed most positively and grew by 38.0 % in 2019.

The Encavis share soars

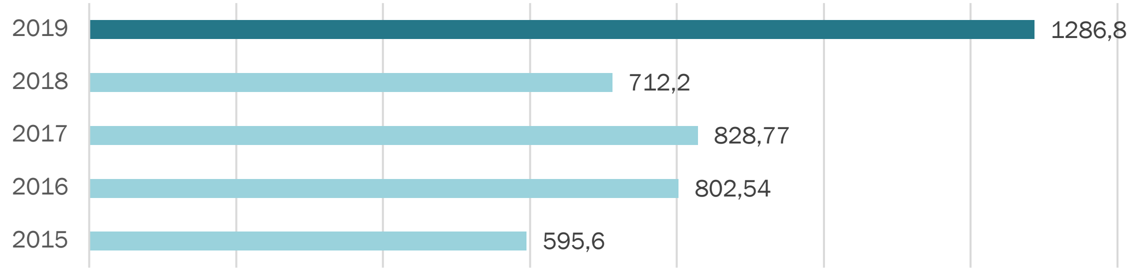
The Encavis share price underwent consistently positive development in 2019. In a favourable capital market with rising prices overall, the Encavis share gained some 75 % in value in 2019, thereby performing significantly better than the DAX, MDAX, SDAX and ÖKODAX indexes. Following an up-and-down market year in 2018, the Encavis share began the 2019 financial year at a price of EUR 5.34. By mid April, the share had steadily risen to a price of EUR 6.51. After a minor setback, the share price continued to rise from June and was only limited briefly by profit-taking. The share price kept rising steadily – including individual volatile phases in September – until it reached its highest level of EUR 9.67 on 16 December. The share closed the year at a price of EUR 9.39. The overall positive development of the share price was supported by countless announcements from the company. Bolstered by the meteorological conditions, Encavis increased its forecast figures twice during the reporting period. Additionally, Encavis was given an investment-grade issuer rating by Scope Ratings. Successful news from the operations side such as the acquisition of further solar and wind parks and the expansion of existing installations had a positive impact on the share price.

Following the end of the reporting period, the Encavis share price rose to more than EUR 11.00 within a few weeks and held steady at the two-digit level until the end of February. In March of this year, the bear market caused by the coronavirus also left its mark on Encavis shares, with the share price falling back below EUR 10.00 per share. At the close of trading on 12 March 2020 the share reached a price of EUR 7.79.

Market capitalisation and trading volume increase greatly

At the end of trading on 30 December 2019, the last trade date of the year, market capitalisation of Encavis AG amounted to some EUR 1,287 million (28 December 2018: EUR 712 million). This means that the market capitalisation rose by some 80 % within a single year. There were 137,039,147 shares at the end of the reporting period. The liquidity of the share increased significantly over the course of the year: while an average of 92,203 shares were traded daily in the first half of the year, the second half of the year saw an average of 297,045 shares being traded daily, a more than threefold increase. For the year, an average of 195,848 shares were traded daily (2018: 149,341 shares).

Market capitalisation
(as of 31 December of the given year; in EUR million)



Research coverage – the Encavis share is evaluated exclusively as a "buy" or "hold"

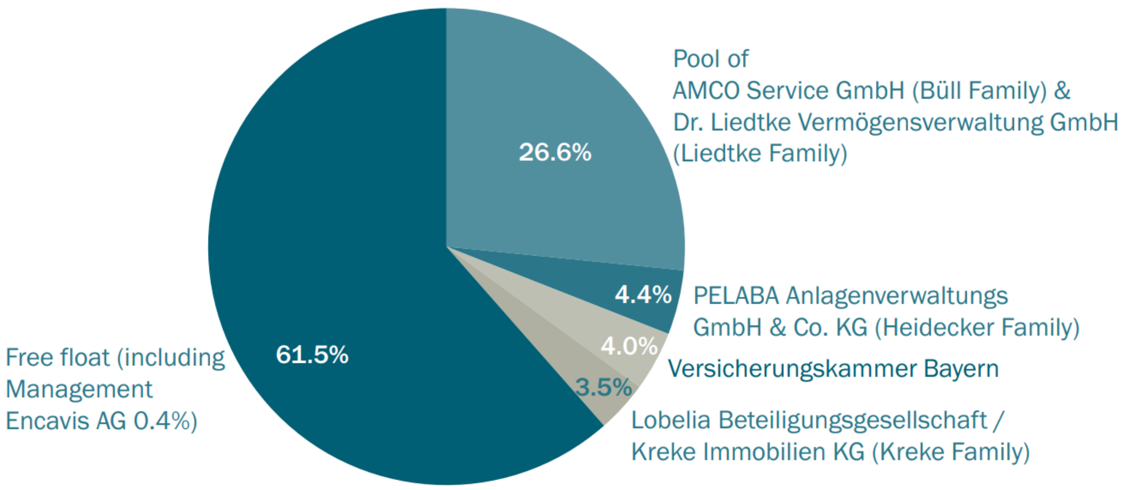
A total of 11 financial institutions and analysts observed the Encavis AG share in 2019 and 2020 and published research reports. The six institutions Baader Bank, Bankhaus Lampe, Credit Mutuel-CIC, DZ BANK, Quirin Privatbank and Warburg Research recommend the Encavis share as a "buy" in their reports. Four other institutions – namely Berenberg, Commerzbank, Jefferies and ODDO BHF – each evaluate the share as a "hold" or "neutral". The most recent Spotlight Research of Raiffeisen Centrobank is generally not intended to make recommendations. On average, the analysts expect a fair price of EUR 10.51, with all estimates coming in between EUR 7.20 and 15.00.

Encavis AG publishes the latest target share prices issued by analysts, along with their contact information, in the Investor Relations section of its website under "Research".

Shareholder structure

There were slight changes in the shareholder structure of Encavis AG in the reporting period. Versicherungskammer Bayern, Bavaria's chamber of insurance companies, strengthened the shareholder structure and became a core shareholder with a holding of 4.0 %, which resulted in a slight reduction in the percentual values of the otherwise unchanged shareholdings of the other major shareholders. The free float, which is now slightly lower proportionally, remains at a high level of 61.5 %, compared to 64.4 % in the previous year. After the conclusion of a voting rights pooling agreement, AMCO Service GmbH and Dr. Liedtke Vermögensverwaltung GmbH of the two Büll and Liedtke families of entrepreneurs now jointly hold 26.6 % of shares.

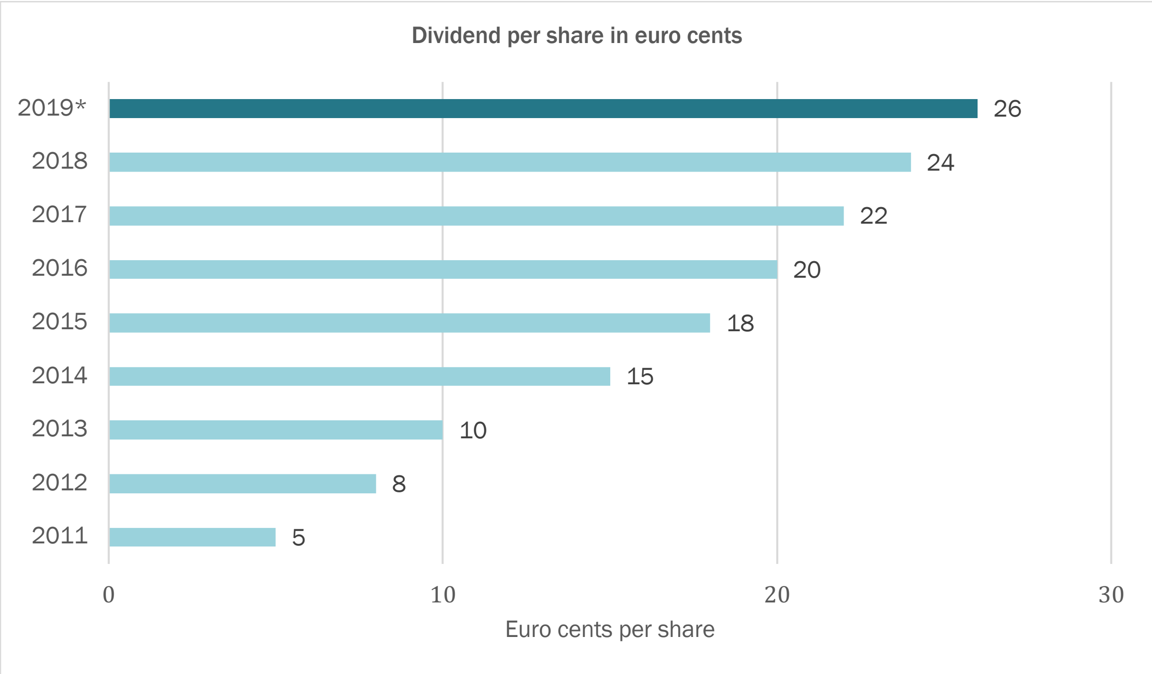
Shareholdings in Encavis AG as of January 2020:



Annual shareholders' meeting confirms shareholders' trust in Encavis AG

Encavis AG's annual shareholders' meeting was held in Hamburg on 15 May 2019. The shareholders and shareholder representatives in attendance represented around 56 % of the share capital, and approved all of the items on the agenda by large majorities.

In particular, at the Annual General Meeting, the shareholders and their representatives approved with a large majority the recommendation of the Management Board to pay out a share dividend from a portion of net earnings from the 2018 financial year. This was increased to EUR 0.24 per share. As in previous years, the shareholders were able to choose between having their dividend paid out as a cash dividend and a dividend in kind in the form of shares in Encavis AG.



*) Proposal to the Annual General Meeting for the appropriation of distributable profit

Information on the annual shareholders' meetings of Encavis AG can be found in the Investor Relations section of the company website under "Annual shareholders' meeting".

Questions and information

All relevant information relating to Encavis AG is published and provided on the company's website www.encavis.com under "Investor Relations" in the interest of transparent capital market communication.

Encavis AG has also been using social media such as LinkedIn (https://de.linkedin.com/company/encavis-ag) and Twitter (https://twitter.com/encavis) to share company news and information quickly and transparently.

The Investor Relations department is at the disposal of all existing and potential shareholders at any time for questions and suggestions on the share and the company.

We look forward to hearing from you!

Encavis AG

Grosse Elbstrasse 59
22767 Hamburg, Germany
Tel.: +49 (0)40 3785 620
Email: ir@encavis.com

Encavis AG financial calendar

Date	Financial event
2020	
19 March 2020	Annual Report 2019
13 May 2020	Annual shareholders' meeting – Hamburg, Germany
19 May 2020	Goldman Sachs Utilities Conference: Heading to Net Zero – London, United Kingdom
20 May 2020	Berenberg Conference USA 2020 – Tarrytown NY, USA
27 May 2020	Interim statement for Q1/first three months of 2020
9 June 2020	DIRK Conference 2020 – Frankfurt am Main, Germany
11 to 12 June 2020	Crédit Mutuel-CIC Conference - Market Solutions Forum by ESN – Paris, France
18 June 2020	Quirin Champions Conference 2020 – Frankfurt am Main, Germany
18 June 2020	Natixis/ODDO BHF Renewables Conference – Paris, France
24 June 2020	Raiffeisen Bank International Bond Conference SSD – Frankfurt am Main, Germany
18 to 19. August 2020	Bankhaus Lampe German Corporate Conference 2020 – Baden-Baden, Germany
26 August 2020	Interim financial report for Q2/first half of 2020
2 to 3 September 2020	Commerzbank sector conference – Frankfurt am Main, Germany
9 to 10 September 2020	Stifel Cross Sector Insight Conference – London, United Kingdom
12 September 2020	Interest payment on the 2018 Green Schuldschein bond
13 September 2020	Interest payment on hybrid convertible bond
21 to 22 September 2020	German Corporate Conference 2020 (Berenberg and Goldman Sachs) – Munich, Germany
21 to 22 September 2020	Jefferies Equity-Linked Conference 2020 – London, United Kingdom
14 October 2020	Jefferies European Mid-Cap Industrial Forum 2020 – London, United Kingdom
16 November 2020	Interim statement for Q3/first nine months of 2020
16 to 18 November 2020	German Equity Forum (Deutsche Börse) – Frankfurt am Main, Germany
24 November 2020	DZ Bank Equity Conference – Frankfurt am Main, Germany
11 December 2020	Interest payment on 2015 debenture bond

Report of the Supervisory Board

Dear Shareholders,

The Supervisory Board, as composed throughout the year, exercised its rights and duties in accordance with the law, the Articles of Association and the rules of procedure without restriction in the 2019 financial year. It regularly advised the Management Board in its management of the company and continuously oversaw material management measures for the Group. It also reviewed the risk management and compliance functions of the company and believes that they satisfy the requirements in full. The Supervisory Board was directly involved in all decisions of particular note for the company. The Supervisory Board approved individual transactions insofar as this was required in accordance with the law, the Articles of Association or the rules of procedure.

The Management Board met its information obligations and informed the Supervisory Board regularly, promptly and extensively in writing and orally about the company's financial and economic position, strategic orientation, investment projects as well as risk management and compliance. The Supervisory Board discussed all measures requiring approval with the Management Board in advance. The chairman of the Supervisory Board also received detailed information between the Supervisory Board's meetings and was therefore always aware of important issues for the company and the Group. The Management Board and the Supervisory Board jointly coordinated the Group's strategic orientation and development.

There were four ordinary Supervisory Board meetings during the 2019 financial year. All members of the Management Board attended all the meetings, unless the chairman of the Supervisory Board determined otherwise. No member of the Supervisory Board attended less than half of the meetings held during their period of office in the past financial year. An overview of individual members' attendance can be found in the table below.

Supervisory Board members' attendance at meetings in the 2019 financial year*	Supervisory Board	Audit committee	Personnel committee
Dr Manfred Krüper, Chairman	4/4	2/2	2/2
Alexander Stuhlmann, Deputy Chairman	4/4	2/2	2/2
Christine Scheel	4/4	-	-
Albert Büll	4/4	-	2/2
Dr Cornelius Liedtke	4/4	-	-
Professor Fritz Vahrenholt	3/4	2/2	2/2
Peter Heidecker	4/4	-	-
Dr Henning Kreke	4/4	-	-
Professor Klaus-Dieter Maubach	1/1	-	-
Dr. Marcus Schenck	3/3	-	-

* Attendance = number of meetings attended by the Supervisory Board member/total number of meetings.

The Management Board sent detailed reports and presentations to the members of the Supervisory Board before all Supervisory Board meetings. If decisions requiring approval had to be made, the documents contained detailed submissions to facilitate the decision-making and investment process. The Supervisory Board also passed 13 resolutions in circulation procedures. The resolutions of the Supervisory Board passed by circular procedure included resolutions on the conclusion of borrowing measures (including the issue of two registered bonds with the Versicherungskammer Bayern), on increasing the hybrid convertible bond (tap) originally issued in 2017, on the company law investments in the Italian company Stern Energy S.p.A. to strengthen technical services and on the extension of both Management Board employment contracts.

Scope of topics and deliberation focus

One focus of the Supervisory Board's discussions and resolutions in the first half of the 2019 financial year was a status update on the Talayuela solar project in Spain, in particular on the status of the PPA negotiations and the underlying modalities with the respective project partners. In addition, Cabrera – the other solar project in Spain – and the further steps regarding the structure of a power purchase agreement and the underlying project financing were discussed.

In addition, the range of topics included the annual and consolidated financial statements as of 31 December 2018 which – at the recommendation of the audit committee and following discussions with the auditing firm PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC) – were approved by the Supervisory Board in its meeting on 21 March 2019, as well as preparations for the Annual General Meeting.

Additionally, the focus of the other meetings was, among other topics, the growth strategy of the Group through the year 2025, which the Management Board presented to for the first time and discussed with the Supervisory Board in its meeting in March 2019. The Supervisory Board then discussed this strategy in more detail at a subsequent separate strategy conference with the Management Board, and it was presented and discussed again at the meeting on 25 September 2019. Among other things, the further expansion of the existing portfolio of solar and wind parks with additional ready-to-build and early-stage projects was discussed in this regard.

In the context of the Encavis Group management report and its strategic development, new investments and deal flows (including the implementation of the two major projects Talayuela and Cabrera with the project developer Solarcentury), as well as the resolution to enter into a strategic investment in the Italian company Stern Energy S.p.A. in order to further develop and expand the O&M business played a major role in discussions and consultations.

At its meeting on 11 December 2019, the Supervisory Board dealt with, among other things, the approval of the capital increase with Versicherungskammer Bayern as investor for further growth financing, which was published on the same day in an ad hoc report.

The Supervisory Board's deliberations also regularly focused on the presentation of investment resources, the development of the PV Parks and Wind Parks segments, the Asset Management segment and financing for future projects. The Management Board regularly presented investment opportunities and discussed the current state of negotiations. In the process, the Management Board explained the financial conditions of these projects to the Supervisory Board in detail, along with the associated opportunities and risks. Opportunities to procure capital in order to finance further growth were also discussed in detail.

The Management Board reported on the development of the existing portfolio in all of the Supervisory Board's regular meetings. The development of other target markets was considered as well.

Meetings held by the personnel committee

The personnel committee is composed of Dr Manfred Krüper (chairman), Alexander Stuhlmann, Albert Büll and Professor Fritz Vahrenholt. The committee held two meetings in the past financial year. The personnel committee focused on, among other things, the rearrangement of a virtual share option programme for the Management Board, selected managers and other key personnel in order to ensure employees' and Management Board members' loyalty to the company over the long term. In addition, the personnel committee prepared the extension of the two Management Board employment contracts and presented them to the Supervisory Board at its meeting on 25 September 2019. The resolution was then passed by circulation procedure following the meeting in October 2019.

The personnel committee extensively prepared the decisions on personnel matters that were made in plenary.

Meetings held by the audit committee

The audit committee is composed of Alexander Stuhlmann (chairman), Dr Manfred Krüper and Professor Fritz Vahrenholt. The audit committee held two meetings in the past financial year. In March 2019, it dealt with the 2018 consolidated and annual financial statements and discussed these with the Management Board prior to their publication. The auditors attended the meeting and reported on the findings of their audits. The audit committee also dealt with the current status of the audit and determined the focal points for the audit of the 2019 consolidated and annual financial statements together with the auditors in its last meeting at the end of the year.

In addition, some of the heads of the Group functions were available in the audit committee's meetings for reporting and to answer questions on individual issues.

Corporate governance

In recognition of the fact that corporate governance significantly contributes to responsible, value-oriented management and control, the Supervisory Board also dealt with topics and issues relating to corporate governance in 2019. Together with the Management Board, the Supervisory Board issued an annual declaration pursuant to section 161 of the German stock corporation act (*Aktiengesetz* – AktG) on the recommendations contained in the German Corporate Governance Code. Further information on corporate governance can be found in the combined declaration on corporate governance in accordance with section 315 (5) in conjunction with section 289f of the German Commercial Code (HGB). The combined declaration on corporate governance also includes the corporate governance report prepared by the Management Board and the Supervisory Board and the declaration on the recommendations contained in the German Corporate Governance Code. The combined declaration on corporate governance can be accessed permanently on Encavis AG's website at http://www.encavis.com/investor-relations/corporate-governance/.

The members of the Management Board and the Supervisory Board disclose any conflicts of interest to the Supervisory Board without delay. The Supervisory Board did not have any indications of conflicts of interest on the part of the members of the Management Board and the Supervisory Board in the 2019 financial year.

Audit of the annual and consolidated financial statements

The Hamburg branch of PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft was the auditor of the annual financial statements and of the consolidated financial statements. The auditing firm issued an unqualified audit opinion on the annual financial statements of Encavis AG and the consolidated financial statements of the Encavis Group.

The Supervisory Board discussed the annual financial statements prepared pursuant to the German Commercial Code, the consolidated financial statements of Encavis AG and the combined management report in detail at its meeting on 19 March 2020, which the auditor also attended. The Management Board's proposal regarding the appropriation of net earnings was also discussed at the meeting. The consolidated financial statements in accordance with IFRS, the combined management report for Encavis AG and the Group, the annual financial statements of Encavis AG and the relevant auditor's reports were made available to all members of the Supervisory Board in due time. The auditors presented the most important findings of their audit and were available for further questions. The Supervisory Board raised no objections following its own examination and adopted the auditors' report. The audit committee discussed the annual and consolidated financial statements, the management report, Group management report, audit reports and the proposal on the appropriation of distributable profit at length in its meeting on 18 March 2020 in the presence of the auditors. The key audit matters were also discussed with the auditor. Following the Supervisory Board's own examination, there are no objections to be raised against the financial statements. The Supervisory Board therefore approved the annual financial statements of Encavis AG and the consolidated financial statements of the Encavis Group on 19 March 2020. The annual financial statements were thus adopted. Finally, the Supervisory Board has endorsed the Management Board's proposal for the use of distributable profit for 2019, i.e. the distribution of a dividend of EUR 0.26 per dividend-entitled share. The dividend will either be paid in cash or in the form of Encavis AG shares. The details of the cash distribution and the opportunity available to shareholders to choose shares will be provided in a document made available to shareholders, along with the invitation to the Annual General Meeting, that contains in particular information on the number and type of the shares and explains the background and details of the offer.

The dividend amount and the residual amount to be carried forward to new account in the proposed resolution on the appropriation of distributable profit are based on the eligible share capital on 31 December 2019 of EUR 137,039,147.00, divided into 137,039,147 shares.

The number of eligible shares may change by the time the resolution on the appropriation of net earnings is passed. In such a case, the Management Board and the Supervisory Board will submit a suitably amended proposed resolution to the Annual General Meeting on the appropriation of distributable profit.

Changes in the composition of the Supervisory Board

Professor Klaus-Dieter Maubach resigned his position on the Supervisory Board of the company effective upon the conclusion of the Annual General Meeting on 15 May 2019. Dr Marcus Schenck was elected as a new member of the Supervisory Board with effect from 15 May 2019. There were no other changes in the composition of the Supervisory Board or its committees in the reporting year. The Supervisory Board and the company would like to thank Professor Klaus-Dieter Maubach for his excellent contribution to the Supervisory Board.

Changes in the composition of the Management Board

There were no changes in the composition of the Management Board in the reporting year.

On behalf of the Supervisory Board, I would like to thank the Management Board and all employees of the Encavis Group's companies for their commitment and personal contribution to the successful the 2019 financial year.

Hamburg, 19 March 2020

For the Supervisory Board

Dr Manfred Krüper

Chairman

Dr Manfred Krüper

Chairman of the Supervisory Board

Alexander Stuhlmann

Deputy Chairman of the Supervisory Board

Albert Büll

Member of the Supervisory Board

Peter Heidecker

Member of the Supervisory Board

Dr Henning Kreke

Member of the Supervisory Board

Dr Cornelius Liedtke

Member of the Supervisory Board

Christine Scheel

Member of the Supervisory Board

Dr Marcus Schenck

Member of the Supervisory Board

Professor Fritz Vahrenholt

Member of the Supervisory Board

Table of Contents of Management report and Group management report

Management report and Group management report for the 2019 financial year

The Encavis Group

General information

The combined management report covers the Encavis Group (hereinafter referred to as the “Group” or “Encavis”) and the parent company Encavis AG, based in Hamburg, Germany. It was prepared in accordance with the provisions of the German Commercial Code (HGB) and in application of German Accounting Standard (DRS) no. 20.

Encavis AG prepares the individual financial statements in accordance with the accounting principles set out in the HGB and the consolidated financial statements in accordance with the accounting principles set out in the International Financial Reporting Standards (IFRS). The management report and Group management report are combined, whereas the financial performance, financial position and net assets are presented separately.

The share capital amounts to EUR 137,039,147.00 and is divided into 137,039,147 no-par-value shares. The average number of shares in circulation (undiluted) in the reporting period was 131,052,531 (previous year: 129,040,364).

All disclosures in this report relate to 31 December 2019 or the financial year from 1 January to 31 December 2019, unless stated otherwise.

Basic information about the Group

Business model

Encavis AG, which is listed on the SDAX of the German stock exchange, makes use of the various opportunities to generate power using renewable energy. As an independent operator of environmentally friendly and emission-free power plant capacities, Encavis has continued to expand its generation portfolio since 2009. The company’s core business is the acquisition and operation of solar parks and onshore wind parks. In the acquisition of new installations, the company generally focuses on construction-ready projects or existing installations that have guaranteed feed-in tariffs or long-term power purchase agreements and that are in geographic regions that offer a stable economic environment and reliable framework and investment conditions.

Encavis also offers attractive opportunities to institutional investors through its subsidiary Encavis Asset Management AG to invest in installations that generate renewable energy. The Asset Management field covers all services in this area, i.e. the launching of funds, the individual design and structuring of other investments for professional investors in the field of renewable energy and the management of the investments held by these investors.

Through the wholly owned subsidiary Encavis Technical Services GmbH, the company also ensures the highest technical availability possible of solar and wind parks at all times. The experience and expertise of the technical unit are also used in investment processes to review the structural quality and technical capacity of the parks to be acquired.

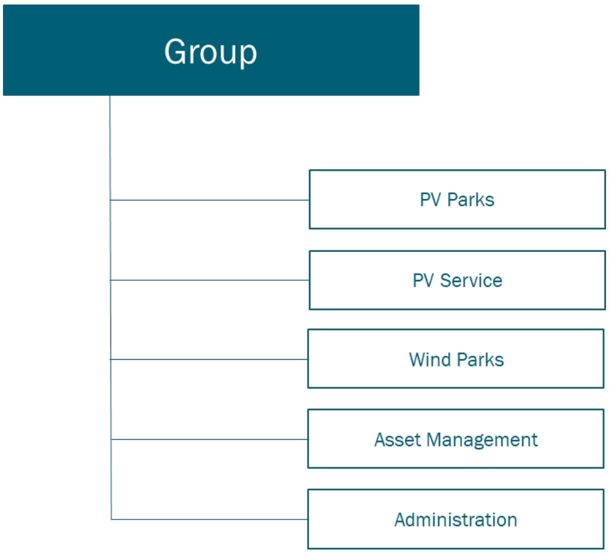
The Encavis portfolio is currently comprised of a total of 187 solar parks and 82 wind parks with a capacity of more than 2.4 GW in Germany, Italy, France, the United Kingdom, Austria, Finland, Sweden, Denmark, the Netherlands and Spain. Of these, the Group operates 21 solar parks and 41 wind parks for third parties in the Asset Management segment.

By generating power from renewable energy, the Encavis Group makes a significant contribution to a sustainable, clean energy supply. The amount of power produced by the group of companies in 2019 that is reflected in revenue amounts to more than 1.7 terawatt-hours (TWh).

Group structure

Encavis AG is the parent company of the Encavis Group. In addition to Encavis AG, the consolidated financial statements included 233 subsidiaries held directly or indirectly as at 31 December 2019 (previous year: 230).

The diagram illustrates the Group's segments as of 31 December 2019:



PV Parks	This segment comprises all photovoltaic parks in the company's portfolio as well as any holding companies in Germany, Italy, France, the United Kingdom, the Netherlands and Spain.
PV Service	This segment consists of Encavis Technical Services GmbH, Stern Energy GmbH as well as the minority interest in Stern Energy S.p.A. Also included are the transactions of Encavis AG assigned to this segment.
Wind Parks	This includes all the Group's own wind parks in Germany, Italy, France, Austria and Denmark and the associated holding companies.
Asset Management	The segment includes those activities undertaken by Encavis GmbH relating to the asset management field and other companies assigned to this field, especially Encavis Asset Management AG.
Administration	The segment comprises management-related transactions for the Group's parent company, Encavis AG, and transactions allocated to this segment from Encavis Asset Management AG. Encavis Finance B.V., Encavis Real Estate GmbH and Encavis Renewables Beteiligungs GmbH are also included in this segment.

Internal control system of Encavis

The major aim of Encavis is profitable growth and therefore an increase in the company's value. The Management Board is informed about current developments on a regular basis as regards the implementation and monitoring of targets. The information received covers technical and commercial aspects of existing parks such as the cumulative power production, installations' technical availability and the integration of newly acquired solar or wind parks into the Encavis Group. Potential investment opportunities and spare cash available for investment purposes are also discussed by the Management Board. The liquidity of the operating solar and wind parks is monitored on a continuous basis, which allows the Management Board to respond to circumstances at short notice and to take suitable measures.

The forecast for the following financial year is also published in the annual report. This is based on the detailed plans of the individual Group companies. The published forecast is reviewed quarterly and adapted by the Management Board where required.

The earnings indicators EBITDA and EBIT for Encavis include material valuation effects resulting from the application of IFRS. These include the differences determined in the course of purchase price allocations (PPA) when solar parks and wind parks are consolidated for the first time. These effects are nearly impossible to predict, as they are related to future investments and are determined by various project-specific parameters.

Encavis therefore publishes earnings adjusted for these effects that reflect the company's operating profitability and development in a substantially more transparent and sustainable manner.

The earnings forecast for the 2020 financial year in the forecast report is also based on these adjusted financial figures.

The financial and non-financial control parameters used internally within the Group that are orientated towards the interests and expectations of shareholders include in particular:

- Operating cash flow
- Technical installation availability
- Revenue
- Adjusted operating EBITDA
- Adjusted operating EBIT
- Operating earnings per share

The achievement of key figures as regards technical installation availability, kilowatt-hours (kWh) produced and the resulting revenue is presented in the regular performance report and discussed with the Management Board.

Operating cash flow is determined using the indirect method in accordance with IAS 7. Interest payments are reported in full in the cash flow from financing activities. The operating cash tax expense is included in the operating cash flow.

The focus in investment decisions in particular is on the expected internal rate of return (IRR) that reflects the return on the capital invested or the return on the investment over a multi-year period. The return on equity (ROE) is also an important parameter in investment decisions. It reflects the relationship between adjusted operating earnings after interest and taxes (operating EAT) and the equity invested. Qualitative and strategic criteria such as stable remuneration systems, high-quality components and attractive financing terms are also taken into consideration.

Adjusted operating EBITDA and adjusted operating EBIT are both derived from the IFRS key figures EBITDA and EBIT and are adjusted for the following effects.

Operating EBITDA = IFRS EBITDA less the following effects:

- Income and expenses resulting from the disposal of financial assets and other non-operating cash income
- Other non-cash income, mainly gains from company mergers (badwill) and cancellation of the interest advantage from subsidised loans (government grants)
- Non-cash share-based remuneration and other non-operating expenses
- Selected one-off effects

Operating EBIT = IFRS EBIT less the following effects:

- Already-adjusted effects from operating EBITDA
- Amortisation of intangible assets acquired in business combinations
- Impairments resulting from impairment tests on assets resulting from purchase price allocations
- Depreciation of step-ups on property, plant and equipment acquired in business combinations

The financial control parameters for Encavis AG are essentially identical to the key figures used in the Group. EBITDA and EBIT adjustments at Encavis AG mainly relate to effects from disposals of financial assets, from currency translation and from other non-cash income. In contrast, revenue and technical installation availability are not considered control parameters as they are of no or only little importance to Encavis AG.

Economic report

Framework conditions

Economic framework conditions

Global economic growth loses momentum

Following dynamic momentum in recent years, global economic growth has slowed tangibly in 2019.

World economic growth slower than expected

The global economy grew by 2.9 % in 2019 according to the most recent estimate published by the International Monetary Fund (IMF) on 20 January 2020. Compared to 2018, this represents a significant decrease of 0.9 %. In October 2019, IMF analysts still expected that the 3 % hurdle would be cleared, but the surprisingly weak economic development in several emerging markets – above all India, Mexico and South Africa – necessitated this course correction.

According to estimates of the IMF, the economies in emerging and developing markets grew by 3.7 %, following 4.5 % in the previous year. For industrial nations, the IMF economists determined a growth in GDP for 2019 of 1.7 % (previous year: 2.2 %).

Disputes in global trade, geopolitical tensions and the dramatic effects of climate change – such as the fires in Australia, the drought in Africa and the tropical storms in the Caribbean – contributed to the high levels of uncertainty in the global economy. Continued loosening of monetary policy by numerous central banks around the world was, according to IMF experts, able to make a decisive contribution to preventing this slowdown of growth from being even more severe.

Economic output rose by 1.2 % in the eurozone, thus coming in markedly weaker than in the previous year, which saw growth 0.7 percentage points higher. In particular, the two largest economies – Germany and France – gave up significant ground with regard to growth. Growth in Germany slowed tangibly from 1.5 % in 2018 to 0.5 % in 2019. In France the decrease was more moderate, coming in only 0.4 percentage points lower; overall, the French economy grew by 1.3 %. Italy managed only a slight increase of 0.2 % (2018: 0.8 %) and the Spanish economy also suffered a setback, but recovered relatively strongly by 2.0 % (2018: 2.4 %).

For the US economy, the IMF forecasts that economic output will grow by 2.3 %, after recording growth of 2.9 % in 2018. This regression can also be attributed to the strained relations with several trade partners that are the result of the threat or the introduction of customs barriers.

As in the prior year, China’s economic growth was negatively affected by the contentious trade relations with the United States. In 2019, the economy grew by 6.1 %, while the previous year saw growth of 6.6 % achieved. According to IMF estimates, Japan’s economy achieved growth of 1.0 % in 2019 (previous year: 0.3 %). India, in contrast, recorded a significant reduction in its growth rate: the IMF assumes that the Indian economy only grew by 4.8 % in 2019 compared to 6.8 % in the previous year.

Growth in global economy accelerates

The IMF expects the global economy to regain some upward momentum in 2020. In its current forecast, the experts predict that the world’s economy will grow by 3.3 % this year, while growth for 2019 amounted to a mere 2.9 %. This means that the IMF economists’ expectations of global growth are lower than their last forecast from October 2019, in which growth of 3.4 % for 2020 was predicted. For 2021, the IMF revised its forecast from 3.6 down to 3.4 %, with the recovery less pronounced than first predicted by the IMF experts in October 2019.

The primary reason for the slight downward correction of the forecast is the surprisingly negative reports from several emerging economies, including South Africa, Mexico and especially India. Although growth in those countries is expected to go from 5.8 % in 2020 to 6.5 % in 2021, the IMF corrected its forecast from October 2019 downward by 1.2 and 0.9 percentage points respectively. Despite the recent rapprochement, the trade dispute between the United States and China, geopolitical risks in the Middle East and the effects of climate change weigh on further growth around the globe.

For China, for example, the experts expect more slowing of economic growth to 5.8 % in 2021, after 6.0 % in the current (2020) and 6.1 in the previous year (2019). The IMF economists forecast a gradual decrease in growth for the United States as well – from 2.3 % in 2019 to 2.0 % in 2020 and 1.7 % in 2021.

The IMF forecasts the opposite trend in the eurozone, although with lower growth rates: following 1.2 % in the previous year, economists expect 1.3 % in this year and 1.4 % next year. The German economy is predicted to undergo relatively positive growth: after limited growth of an estimated 0.5 % in 2019, the IMF expects an increase in GDP of 1.1 % for this year and 1.4 % for 2021.

The IMF analysts presume that the global economic situation will stabilise, which will be to the benefit of the export-heavy German industry. IMF economists point out that the United States and China have agreed an initial partial agreement in their trade dispute, which will reduce the negative impact of all trade conflicts on the global economy in 2020 from 0.8 to 0.5 percentage points. Additionally, the continuing loose monetary policy of the major central banks around the world and the dissipating concerns regarding the United Kingdom possible withdrawing from the EU without a deal are causes for optimism. According to the IMF economists, both factors will provide positive momentum to the global economy.

ECB keeps prime interest rate stable for now

The European Central Bank (ECB) will not be changing interest rates in the eurozone for the time being. The key rate for supplying commercial banks with money remains at 0.0 % for the time being, the ECB Governing Council announced on 23 January 2020. The prime rate has been at this record low since March 2016. The ECB also maintained the so-called deposit rate at the previous level of 0.5 %, which means that banks will still have to pay penalty interest if they have excess money on deposit at the ECB. At the same time, the council announced that it intended to review its strategy of price stability, which had been in place since 2003, by the end of 2020. The loose monetary policy is intended to implement an inflation rate of around 2 % in Europe over the medium term.

The market for renewable energy

The global energy revolution

The growth of renewable energy continued in 2019. Energy markets worldwide are in the midst of transformation as conventional sources of energy and fossil fuels are increasingly being supplemented or replaced by the growth and use of regenerative energy sources.

The following factors play a key role in shaping the global energy revolution and growth in the renewable energy sector:

- The negative effects of climate change come with new, stronger international agreements on climate protection and fighting global warming, including the global Paris Agreement that entered into force in 2016. There are also numerous other national and supranational initiatives and measures to achieve climate targets, to stop using nuclear power and to create a carbon-free economy.
- Private initiatives such as “RE100” show that not only governments but also businesses are increasingly interested in covering a large part of their energy needs with renewable energy and are therefore making corresponding commitments to meet 100 % of their energy needs with renewable energy. In addition to sustainability aspects, in particular the increasing efficiency of renewable energy and the ability to plan energy costs in the long term as a result of long-term power purchase agreements play a major role.
- The significant decline in power generation costs – especially for photovoltaics and wind energy – has led to a drastic increase in competitiveness and in the efficiency of power generation from renewable sources. In many regions today, renewable energy installations are economical even without the support of government subsidies.
- Global investments in renewable energies increased once again, reaching a level of USD 363 billion in 2019 as reported by a recent analysis published by Bloomberg New Energy Finance (BNEF) in mid January 2020.
- Energy requirements are increasing worldwide. The digitisation of the economy, the progressing urbanisation of society and electromobility will only increase global energy requirements. For example, by 2040, an increase of some 30 % is expected in global energy requirements compared to 2015. A large portion of this growth is attributed to the demand for green electricity.

The total worldwide installed generation capacity had exceeded the one-terawatt (1 TW) mark already by mid 2018. According to the 2019 Global Status Report of the Renewable Energy Policy Network for the 21st Century (REN21) published in mid June 2019, more than one-fifth of the world's energy needs is already covered by renewable energies. The estimates assume that this proportion will increase to one-third by 2023.

According to information from the German Solar Association, new photovoltaic installations with a generation capacity of some 100 GW were installed worldwide in 2018. The generation capacity installed thus reached the milestone of 500 GW. No figures are available yet for the first half of 2019; however, according to a study conducted at the beginning of April, experts from IHS Markit, for example, expect the worldwide expansion of photovoltaic installations to increase by around 25 % to some 129 GW in the current year. With a share of 19 GW, Europe will again be the region with the highest growth rates.

Based on surveys by the Global Wind Energy Council, new wind installations with a total generation capacity of 51.3 GW were installed worldwide in the wind energy sector in 2018. The generation capacity installed worldwide for wind energy thus amounted to some 591 GW at the end of 2018 (2017: 540 GW). The analysts at the US consulting firm Wood Mackenzie assume that the growth rates for wind capacities worldwide will gain considerable momentum in the coming years. In the report "Global Wind Power Market Outlook Update: Q2 2019" published at the beginning of July 2019, they forecast an annual increase of around 71 GW for the years 2019 to 2023, which is to rise to 76 GW by 2028.

Interest in PPAs continues to increase considerably

The increasing profitability of renewable energies compared to conventional forms of energy production and the clear commitment of companies to achieving a climate-friendly energy balance – for example, as expressed in the RE100 initiative – are providing increasing momentum in the market for private power purchase agreements (PPAs). According to information from Bloomberg New Energy Finance (BNEF), the total generation capacity concluded via PPAs has more than doubled, from around 5.6 GW in 2017 to some 12.8 GW in 2018. The trend continues: for 2019, BNEF forecasts that PPAs for an installed solar and wind capacity of more than 18.6 GW will be concluded. At the end of January 2020, total capacity was around 51.5 GW, of which some 36.2 GW were contracted in the United States. In comparison, second-place Australia accounted for a mere 2.1 GW.

In Europe, the PPA market is relatively small; however, interest in photovoltaic and wind installations with PPAs increased significantly in 2019. This is the result of the recent analysis "Status Quo: Market Parity of PV and Onshore Wind in Europe" published by Enervis Energy Advisors, who included data from 25 countries in the analysis. According to the analysis, a Europe-wide pipeline of photovoltaic and wind installations existed in 2019 with a generation capacity of some 21 GW that were announced as PPA projects, i.e. projects without the benefit of government subsidies.

In the solar sector, the PPA market in Spain has made particular advances: in Spain alone, photovoltaic installations with a capacity of 4,396 MW were announced in 2019. Italy and Germany come next with 1,913 and 1,057 MW respectively, and the demand is beginning to rise in Portugal (444 MW), Denmark (338 MW) and France (158 MW) as well. With regard to both onshore and offshore wind installations, Sweden is leading the way with 3,995 MW, ahead of the United Kingdom (2,711 MW) and the Netherlands (1,176 MW).

The five most important electricity buyers via such PPAs in the world are Google (6.0 GW), Facebook (5.0 GW), AT&T and Amazon (2.2 GW each) and Microsoft (2.1 GW).

Political framework conditions

International UN Paris Agreement

As part of the UN Climate Change Conference in Paris in 2015, nearly 200 countries signed a climate protection agreement – the Paris Agreement – which provides for the limitation of global warming to well under 2 °C, or 1.5 °C if possible, compared to the pre-industrial level. This target can only be achieved if global climate protection policies are effective and immediate. The further implementation of the Paris Agreement was determined at the UN Climate Change Conference in Katowice in 2018.

In spite of the alarming reports from the scientific community, increasing numbers of natural catastrophes around the world and the Fridays for Future movement, the participants of the climate conference in December 2019 in Madrid were not able to agree on further measures for the implementation of the Paris Agreement. The member states of the Paris Agreement will now not present their new national climate protection plans for 2030 until the next meeting in 2020.

Climate policy within the European Union

The EU Commission presented its Green Deal in December 2019. The aim of this climate plan is for the EU to become climate-neutral by 2050 and, at the same time, become the world leader in green technology and industry. To this end, EUR 1 trillion is to be invested by 2030.

Instead of the reduction of greenhouse gas emissions by at least 40 % by 2030 compared to 1990 levels as previously planned in the European Union's 2020 climate and energy package, the Green Deal calls for a 50 % reduction in greenhouse gas emissions by that time.

A decision is expected to be made at the end of the first quarter of 2020 as to whether the Green Deal will become law as presented.

Political framework conditions in core regions

When acquiring new installations, Encavis primarily focuses on ready-to-build or turnkey projects, or existing installations with guaranteed feed-in tariffs or long-term power purchase agreements. Any already-known future changes to the structuring of subsidy systems and mechanisms for renewable energies are accounted for within the return calculations for new investments and have no influence on the company's existing portfolio. Furthermore, as part of its Asset Management segment, Encavis offers institutional investors – both via various investment vehicles as well as direct investments – the opportunity to invest in attractive renewable energy installations.

Europe

More than half of EU member states have fallen behind with regard to targets for the expansion of renewable energies, as determined by the evaluation of Eurostat – the statistical office of the European Union – for the year 2018, which was published in January 2020. By the year 2030, the proportion of energy from renewable sources in the gross final energy consumption in the EU is to be increased to at least 32 % – and 12 of the 28 EU member states are well on their way to achieving this goal. The intermediate goal along this path is at 18 % across the EU for 2018 which is to be achieved with the help of individual targets for each member state. These national target values are calculated from various factors such as the status quo, the potential in the field of renewable energies and the economic productivity of the respective country.

In 2018, the level of expansion already achieved within the European Union varied greatly: Sweden lead the way, for example, by producing more than 54.6 % of its energy consumption from renewable sources, followed by Finland (41.2 %), Latvia (40.3 %), Denmark (36.1 %) and Austria (33.4 %).

Other countries were well behind the leaders and remained below the threshold of 10 %, including the Netherlands (7.4 %), Malta (8.0 %) Luxembourg (9.1 %) and Belgium (9.4 %).

Germany

In Germany, the 2017 Renewable Energy Sources Act (EEG 2017) has been in effect since 1 January 2017. Its aim is to increase the amount of renewable energy used to 30 to 45 % of gross power consumption by 2025. The agreement of the major coalition stipulates that this share is to rise to 65 % by 2030. In their climate programme, the CDU and SPD expect gross energy consumption in Germany to then be "slightly below the current level" of 595 TWh.

However, a series of scientific studies – among them one from the Institute of Energy Economics at the University of Cologne (EWI) from January 2020 – forecasts that the gross energy consumption will climb to 748 TWh by the year 2030. At the same time, energy production from renewable sources would rise to 345 TWh. The proportion of renewable energies would therefore only be 46 % rather than the target of 65 %.

In a comprehensive study from May 2019, the German Renewable Energy Federation (BEE) had also already determined that gross energy consumption in Germany will be approximately 740 TWh by the year 2030. To be able to generate the relevant 65 % proportion, amounting to 481 TWh, from the various renewable energy technologies, the BEE's experts have calculated that significant capacities have to be installed annually:

what is required is the addition of around 4,700 MW of onshore wind energy and approximately 1,200 MW offshore, as well as photovoltaic installations with an output of 10,000 MW and 600 MW of bioenergy. In addition, hydroelectric power plants with a capacity of 50 MW and geothermal plants with the same capacity are required. Representatives of the association recommend that the necessary capacities be distributed among the various types of generation.

In 2019, wind energy surpassed all other forms of energy production in Germany for the first time, coming in at more than 118 TWh as of mid December 2019. Since 2011, this top spot had been occupied by lignite, which is not climate-friendly. As calculated by the scientists of the Fraunhofer Energy Charts, this figure represents some 24 % of net energy production in Germany.

Denmark

The Danish government is pursuing the long-term strategic objective of Denmark's independence from fossil fuels by 2050. To this end, Denmark's government last raised its expansion target for renewable energies by five percentage points by 2030. The share of renewable energies in the overall energy mix is to be increased to 55 % by then. Denmark hopes to have a complete supply of renewable energies by 2050. The Danes have come a long way in this regard: the proportion of green electricity there is already a good 53 % – mainly thanks to wind power, which alone contributes some 43 %. This means that Denmark has the highest share of wind energy in total electricity consumption in the world.

Similar to the German EEG, the Denmark grants a fixed feed-in tariff for onshore wind parks of EUR 0.0335 (DKK 0.25) per kilowatt-hour. What is more, all revenue generated beyond EUR 0.0335 per kilowatt-hour by electricity sold in the open market represents additional revenue. Unlike with the German EEG, the feed-in tariff is not valid for a fixed period, but rather for the first 22,000 full-load hours per MW.

In 2017, the Danish government decided to gradually phase out the Public Service Obligation, which is comparable to the German EEG levy, by 2021. Instead, the energy transition is to be financed by public budgets.

France

In early 2019, France's minister of the environment presented an energy and climate strategy designed for the years 2019 through 2028. Among other things, it is comprised of a six-year programme for tendering for photovoltaic installations. As part of this programme, some 2.7 GW in 2019 and 2.9 GW in each of the next five years are to be awarded. The total installed photovoltaic capacity in France is to reach the 20-GW mark by 2024. For onshore wind installations, a total capacity of 11.4 GW will be tendered by 2025.

In mid June 2019, Prime Minister Édouard Philippe announced in a policy statement that he would speed up change in ecological aspects over the next 12 months and, among other things, begin the process for a new energy and climate law. The goal remains to reduce the proportion of nuclear energy in France to 50 % by 2035, with a massive expansion of renewable energies and offshore wind energy in particular. The closure of coal-fired power plants in France is already planned by 2022.

However, the expansion of renewable energies is developing too slowly to make up for these closures. In the first nine months of 2019, for example, solar installations with a capacity of 707 MW were commissioned; the cumulative installed photovoltaic capacity thus amounts to 9.6 GW. By comparison, to achieve the medium-term goal of 18.2 GW of installed photovoltaic capacity by the end of 2023, more than 500 MW of new capacity would need to be created per quarter in France.

United Kingdom

With its upcoming withdrawal from the European Union, the United Kingdom is no longer subject to the regulations and requirements of European climate policies. However, in 2008, the United Kingdom had already established its own targets for a low-carbon economy by 2050 in the from the British Climate Change Act. The primary aim is to decarbonise the economy, which is why the United Kingdom continues to rely on low-carbon energy sources, including nuclear energy. In this respect, the United Kingdom remains officially committed to the completion of the Hinkley Point C nuclear power plant, which is scheduled to be connected to the grid in 2024.

The United Kingdom has steadily increased the proportion of renewable energies in electricity generation, already amounting to 35.8 % at the end of the first quarter of 2019. The options for government subsidies which apply in particular to smaller wind and ground-mounted photovoltaic installations expired in April 2019.

For the first time in the United Kingdom, more electricity was produced from renewable sources than from fossil fuels in the third quarter of 2019. Wind and solar parks, as well as biomass and hydroelectric plants, generated an estimated 29.5 TWh in England. Green energy in the United Kingdom has more than quadrupled since 2010, while energy production from fossil fuels has been cut in half in the last 12 months from 288 to 142 TWh.

The United Kingdom is also relying in particular on the expansion of a comprehensive network of battery storage, with the goal of establishing a national network of battery storage facilities with an output of more than 2 GW.

Italy
With the announcement of a new comprehensive 2030 climate and energy strategy, the Ministry of Economic Development has finalised the planned energy policies of Italy's national energy strategy (*Strategia Energetica Nazionale*) from the end of 2017. Among other plans, the strategy calls for Italy's departure from coal power by the year 2025. Additionally, renewable energies are supposed to make up around 27 % of total energy consumption by the year 2030. To achieve this, the energy generation capacities are to be expanded to 50 GW in the photovoltaic sector and to 18.4 GW in the wind sector. Photovoltaics would then make up more than 50 % of the total generation capacity in the renewable energy sector in Italy, followed by hydroelectricity and wind power. Around EUR 35 billion are planned for the expansion of renewable energies.

Italy plans to have an installed photovoltaic capacity of around 50 GW by 2030. At the same time, the increasing economic competitiveness of photovoltaic installations is showing itself in Italy – in recent months, numerous large projects were concluded with long-term power purchase agreements.

Netherlands
The Netherlands has committed itself to more climate protection as part of a cross-party initiative. The climate law adopted at the end of June 2019 provides for greenhouse gas emissions to be reduced by 49 % by 2030 and 95 % by 2050 compared to the reference year 1990. All coal power plants in the Netherlands are to be closed by 2030.

Austria
At the beginning of January 2020, the new coalition federal government of Austria made up of the Austrian People's Party (ÖVP) and the Green Party presented the basic points of their climate programme, which is based on an aggressive schedule: by the year 2030, 100 % of the energy needs are to be covered using renewable sources. According to Eurostat, the statistical office of the European Union, Austria covers 32.6 % of its gross energy consumption with renewable energy sources. By 2040 – and ten years before the other EU member states – Austria is to be climate-neutral. To this end, the vice chancellor from the Green Party hopes to implement either CO_2 pricing or an eco-socialist tax reform package by 2022. A new energy expansion law is intended to specify clear expansion targets and create suitable framework conditions for environmentally friendly expansion. A so-called one-million-roofs photovoltaic programme is also included in the coalition agreement.

Spain
The renewable energy market in Spain experienced a significant upsurge in 2019 – above all in the photovoltaic sector: at the end of the year, solar installations with a total generation capacity of some 8.7 GW were installed. According to the grid operator Red Eléctrica de España (REE), nearly half of the capacities (3,975 GW) was newly installed over the course of the year. Looking at the expansion figures from the previous year make it clear how enormous this growth really is: according to information from REE, capacities of a mere 261.7 MW in 2018, 135 MW in 2017 and 55 and 49 MW in 2016 and 2015, respectively, were newly installed.

Behind Germany and Italy, Spain comes in third place in Europe with regard to total generation capacity; at the same time, the severe economic and financial crisis has lead to Spain significantly as well as retroactively cutting subsidies for renewable energy since 2010. In 2012 they were nearly dispensed with entirely. In 2016, the first tendering rounds since 2012 for photovoltaic and onshore wind projects were held.

The Spanish government set itself ambitious goals in the form of its law on climate change and energy transition: by the year 2050, it hopes to cover the energy needs of Spain entirely from renewable sources. The last coal and nuclear power plants are to be closed by 2030, which would reduce Spain's greenhouse gas emissions by around 90 % compared to 1990 levels. In order to achieve this goal, at least 3 GW of new solar and wind capacities are to be installed each year over a period of ten years.

But Spain also benefits particularly from the growing market for power purchase agreements, i.e. long-term private-sector power purchase contracts that do not require and government subsidies. The combination of a drastic decrease in costs of photovoltaic technology, the high levels of sunshine and a low population density in the country make the Spanish market suitable for this.

Asset Management segment
With its Asset Management segment, the Encavis Group offers institutional investors the opportunity to invest in assets in the renewable energy sector through various investment vehicles. In addition to individually tailored investment strategies and direct investments, Asset Management enables institutional investors – through the use of funds structured in accordance with Luxembourg law – to invest in a highly diversified portfolio of wind and solar parks.

Institutional investors can place their trust in the many years of experience in renewable energy of the entire Encavis Group.

Renewable energy installations offer reliable and attractive returns on investment and stable cash flows which are in large part government-guaranteed or secured by creditworthy customers. With their long terms and a low correlation to other asset classes or to economic fluctuations, these types of investment are particularly suited for pension funds and insurance products, for example, which invest over the long term and must diversify very large portfolios. In addition, the decarbonisation of investment portfolios has established itself as a trend internationally. Institutional investors are increasingly reducing their investments in fossil fuels like coal and oil in favour of new investments in the renewable energy sector. According to the Renewable Global Status Report, institutional investors invested approximately a combined USD 9.9 billion in renewable energies in 2017, which is an increase of 42 % compared to the previous year.

Significant events

Encavis AG acquires additional solar park in the Netherlands and expands the generation capacity on the Dutch market to more than 100 MW

On 14 January 2019, Encavis AG announced that it had acquired an additional solar park in the Netherlands with a generation capacity of more than 14 MW. The Zierikzee solar park in the Zeeland province, which was acquired in January 2019, was connected to the grid at the end of 2018 and has a generation capacity of 14.1 MW. Over the first 15 years, the solar park will receive a feed-in tariff of nearly EUR 0.11 per kilowatt-hour; the park will then receive the market price. From the first full year of operation onward, Encavis expects the Zierikzee solar park to make annual revenue contributions of some EUR 1.4 million. The investment volume, including project-related debt financing costs, amounts to EUR 10.6 million. The sellers retain a total participating interest of 10 % in the solar park. With this newly acquired solar park, the active generation capacity of Encavis AG in the Netherlands increases to some 106 MW. Encavis is therefore contributing to a sustainable supply of green electricity in the Netherlands.

Encavis AG receives investment-grade rating from Scope Ratings

On 19 March 2019, Encavis was rated for the first time by the rating agency Scope and received an issuer rating in the investment-grade range (BBB–); the outlook for the rating is stable.

Scope’s rating assessment takes into account, among other things, the risk-averse business model from the operation of solar and wind installations with long-term and government-guaranteed feed-in tariffs. In addition, the consistently expanded regional diversification of the portfolio and the high share of non-recourse financing in Encavis’s growth financing contribute to this good valuation. The rating agency Scope thus attests Encavis a very good and sustainable credit rating, as expected.

With the issuer rating, Scope provides market participants on the international financial markets with a clear orientation and independent assessment of the company’s current and medium-term creditworthiness, thus ensuring greater security and transparency. The investment-grade rating by a recognised rating agency should not only broaden Encavis’s range of options for future growth financing, but also reduce the cost of raising these funds.

Encavis Group releases cash reserves through sale of minority interest in wind parks

On 28 May 2019, Encavis AG announced that Encavis Asset Management AG – on behalf of Encavis AG – had sold a 49 % of shares in each of the four German wind parks Briest, Breitendeich, Debstedt and Lunestedt to a special fund of Versicherungskammer Bayern managed in Luxembourg. This fund made the most impressive offer compared to the two other interested parties. As a result of the transaction, the Group received cash and cash equivalents of around EUR 24 million. The strategic decision of the Encavis Group to sell minority interests of up to 49 % in selected wind and solar parks to institutional investors in the future releases existing cash reserves for investment in further projects, results in operating accounting profits and – in particular for wind parks – leads to additional risk diversification.

Encavis Asset Management AG further expands portfolio of wind and solar parks in Germany and France

Encavis Asset Management AG announced on 2 July 2019 that it had advised two Luxembourg special funds on investments in renewable energies. The total generation capacity of the installations is around 36 MW.

In cooperation with Bayerische Landesbank, the company served as investment adviser to Encavis Infrastructure Fund II S.A. (SICAV-RAIF), a special fund established for banks, insurance companies and pension funds, for the purchase of a wind park in southern Germany. The Gussenstadt wind park in the Baden-Württemberg district of Heidenheim commenced operations in April of last year. Four Nordex turbines at a hub height of over 140 metres provide a total generation capacity of around 14 MW. This special fund is managed by HANSAINVEST LUX.

CHORUS Infrastructure Fund S.A. (SICAV-SIF), a special fund managed by Hauck & Aufhäuser, was established in 2014 and has since financed solar and wind installations in Germany and Finland. Recently, an institutional investor significantly increased its exposure. Those funds have now been used to purchase two ground-mounted photovoltaic installations in sunny regions of southern France. Together, the two solar parks have a nominal output of around 22 MW and benefit from long-term feed-in tariffs.

Additionally, the solar park in Friedmannsdorf, in the Bavarian administrative district of Hof, was completely connected to the grid in mid May 2019. This solar park was acquired during the construction phase at the end of February 2019 by the above-mentioned fund.

Encavis Asset Management AG: Banks and building societies subscribe to special funds and facilitate investments of over EUR 100 million

Encavis Asset Management AG announced on 24 July 2019 that it had again received extensive subscriptions. Building societies and cooperative banks have subscribed to the special fund Encavis Infrastructure II Renewables Europe II. With the newly acquired funds, Encavis can invest more than EUR 100 million in renewable energy installations as part of its asset management. This is already the third closing for the SICAV special fund in accordance with Luxembourg law with an investment focus on ready-to-build solar and wind parks in Germany, the Netherlands, Austria and France. The current portfolio consists of German solar and wind parks and is to be rapidly supplemented by investments in the Netherlands and France.

Encavis AG acquires 30 % of shares in Stern Energy S.p.A. – strategic move to strengthen technical services

Encavis AG announced on 22 August 2019 that, to strengthen its business with technical solar services, it had acquired a minority interest of 30 % in Stern Energy S.p.A (Stern), its long-standing partner in the areas of operation and management (O & M).

The investment in Stern is a key strategic step for Encavis to establish an important presence throughout Europe in the field of technical solar services. The competitive advantage of representing all segments of the value chain will strengthen the existing O & M business platform. Encavis has had a long and successful partnership with Stern, which is already responsible for the technical operation of a majority Encavis' portfolios in Italy and the United Kingdom as well as parts of the portfolio in the Netherlands. Together, Encavis and Stern will work towards further increasing the value of this well-oiled partnership by expanding the joint business activities in the field of O & M solar services to the entire Encavis portfolio. The decision to select Stern as the preferred O & M contractor for all existing solar installations reduces costs and offers additional economies of scale in the technical services business of Encavis.

Revenue of the combined O & M business and the additional O & M services business of Stern has increased by more than 35 % per year on average over the past five years (2012–2017). For 2019, a further increase of this growth is expected, with revenue forecasts of around EUR 12.5 million.

Successful increase of the hybrid convertible bond issued in 2017 through the issue of new bonds with a total nominal value of EUR 53 million

On 5 September 2019, Encavis AG successfully increased the outstanding perpetual subordinated bond with time-limited conversion rights into ordinary bearer shares in the company issued by its wholly owned subsidiary Encavis Finance B.V. through the issue of new bonds with a total nominal value of EUR 53 million (the "new bonds"). The total nominal value of the hybrid convertible bond thus increases to up to EUR 150.3 million. From the effective date, the new bonds will be consolidated with the original bonds, placed on 13 September 2017 with a total nominal value of EUR 97.3 million, to form a total issue under the existing ISIN DE000A19NPE8. The funds generated by the issue of the new bonds will be used to finance new investments in solar parks and wind parks and, in accordance with the International Financial Reporting Standards, will be recognised as equity. The new bonds were placed with institutional investors in European countries and issued at 114.25 % of their nominal value.

Encavis AG signs long-term power purchase agreement (PPA) over ten years for the Spanish Talayuela solar park (300-MW capacity)

On 5 September 2019, Encavis AG announced that it had concluded a long-term power purchase agreement with a leading international energy company over a period of ten years. With a generation capacity of some 300 MW, this installation near the Spanish city of Talayuela is among the largest solar parks in Europe and is, to date, the largest solar park in the history of the company.

With the long-term private power purchase agreement in Spain, the company is realising a solar project entirely without government feed-in tariffs and, in doing so, is applying the practice of direct power purchase agreements with industrial customers, which is already successful in the wind sector, to the rapidly growing solar market. The electricity agreed to be supplied over the term of the agreement totals 4,300 GWh. The purchaser is a leading international energy company that operates in more than 40 countries, has a good credit rating and has been awarded an investment-grade rating. The parties have agreed to maintain secrecy regarding both the economic conditions of the purchase price, which is fixed for a period of ten years, and the name of the contractual partner.

Encavis Asset Management AG: Insurance company hires the company as investment adviser

Encavis Asset Management AG announced on 23 October 2019 that a renowned insurance company had entrusted it with the investment management of its special fund. The fund, which has a target volume in the hundreds of millions, is intended to invest in a portfolio comprised of solar parks and wind parks. The partners worked together to flesh out the framework conditions of the fund. With this fund, the insurance company hopes to make a further contribution to the energy revolution and to generate attractive yields in conjunction with an appealing risk–opportunity profile.

The first fund transactions with a volume of 32 MW have already been successfully realised. The acquisition of the Les Landes wind park in France, which was only recently completed, adds a further 18 MW to the portfolio. Additional wind and solar parks in central Europe are currently undergoing the due-diligence review.

Encavis AG extends management contracts of CEO and CFO another five years until autumn 2025

On 31 October 2019, Encavis AG announced that the Supervisory Board of the company had extended the contracts of the two members of the Management Board, Dr Dierk Paskert (58) and Dr Christoph Husmann (54), until 31 August 2025 and 30 September 2025 respectively. The previous existing contracts of the Management Board members both had terms until 2020.

Alexander H. Stütz appointed CEO of Encavis Asset Management AG (EAM), Karsten Mieth becomes spokesperson of the Management Board

Effective on 1 January 2020, the Supervisory Board of Encavis Asset Management AG appointed Mr Alexander H. Stütz to the position of CEO of the company. The appointment is for a period of three years until 31 December 2022. At the same time, the previous sole director, Mr Karsten Mieth, was named the spokesperson of the Management Board of Encavis Asset Management AG.

Alexander H. Stütz, an aerospace engineer, has more than 20 years of experience in corporate management positions at independent financial services institutions specialising in the fields of asset management, sales and controlling. In 2011, Stütz had already integrated the renewable energies sector into the portfolio structure of long-term investors. He now ascends from Head of Institutional and Private Clients at Encavis Asset Management AG, a position which he has held since June 2017, to the Management Board of Encavis Asset Management AG.

Encavis AG concludes long-term PPA with Amazon

On 5 December 2019, Encavis announced that it had concluded a long-term power purchase agreement (PPA) with Amazon. In the direct vicinity of Seville, the company’s second-largest solar park with a capacity of some 200 MW is being constructed. To increase the income generated, the solar modules are mounted on single-axle trackers. The installation is expected to be connected to the grid at the end of the third quarter of 2020.

The electricity agreed to be supplied over the ten-year term of the agreement totals some 3,000 GW-hours (GWh) and will be sold to Amazon including the corresponding certificates for green electricity. Encavis has thus realised its second solar project in Spain and has contracted more than 7,500 GW-hours of green electricity over the long term, without any government subsidies. An additional 1,000 GW-hours from the Cabrera solar park will initially be sold at daily prices on the commodities market.

The investment volume, including project-related debt financing, is approximately EUR 158 million. Project developer Solarcentury is participating in this investment with a 20 % share and has already developed half of the agreed capacity of 1.1 GW with the projects previously developed exclusively for Encavis. Pexapark, a participating interest of Encavis, is once again acting as PPA adviser for Encavis AG.

Encavis AG gains Versicherungskammer Bayern as an investor for the financing of further growth

The Management Board and Supervisory Board welcome Versicherungskammer Bayern as a new investor for financing further growth. To this end, on 11 December 2019, on the basis of the authorisation resolution of the Annual General Meeting on 18 May 2017 and with the approval of the Supervisory Board, the Management Board of Encavis AG decided on an increase in the share capital of the company of up to 4.21 % in exchange for cash contributions. The company's share capital is to be increased from its current EUR 131,498,147.00 to EUR 137,039,147.00 using a portion of the existing Authorised Capital 2017 through the issue of 5,541,000 new bearer shares with a proportional amount of the share capital of EUR 1.00 per share. The new shares were placed at a price of EUR 8.72 per new share, i.e. 3 % below the volume-weighted average price of the preceding five days, the typical measure on the market. The company received gross proceeds from the issue of some EUR 48 million. Shareholders' subscription rights were excluded. Versicherungskammer Bayern therefore received approximately 4 % of share in Encavis AG.

The new shares were acquired by BayernInvest Kapitalverwaltungsgesellschaft mbH, Munich, Germany, acting as the capital management company for and on the account of the BayernInvest BWA fund, a special fund of the Versicherungskammer Bayern public insurance institution. The new shares will have dividend rights from 1 January 2019 onwards. Immediately after the capital increase was entered in the trade register, the new shares were approved for trading on the regulated market of the Frankfurt Stock Exchange with simultaneous approval for the segment of the regulated market with additional approval obligations (Prime Standard) of the Frankfurt Stock Exchange, as well as on the regulated market of the Hamburg Stock Exchange.

Encavis AG acquires operation 81-MW wind park portfolio in Denmark

In December 2019, Encavis AG acquired a portfolio consisting of eight already-operational wind parks in Denmark with a total of 81 MW of generation capacity. The strength of this portfolio lies in the diversification of the local wind risk across eight different locations. The high-quality turbines from the companies Vestas and Siemens Gamesa provide a technical availability rate of greater than 99 % and are professionally maintained by the manufacturers within the framework conditions of long-term full-service contracts with terms of between three and 15 years. The annual electricity production of around 214,000 MW-hours is enough to provide more than 50,000 households with power. The electricity is sold within the Danish remuneration system, from which normalised annual revenue in the amount of some EUR 13.4 million is expected. The enterprise value of the wind park portfolio in Denmark amounts to approximately EUR 108 million, with an equity share of Energi Danmark A/S of nearly EUR 52 million.

Comparison of the actual and forecast figures in 2019

Encavis's Management Board assumed in the forecast issued in the 2018 management report in relation to the operating figures adjusted for non-cash IFRS effects that the positive development of revenue and earnings will continue in the 2019 financial year.

In EUR million

	Forecast (AR 2018)	Forecast (incl. IFRS 16 effects)	Forecast (PR 28 May 2019)	Forecast (Q2 2019)	Actual 2019 (operating)	Actual 2018 (operating)	% change on the previous year
Revenue	>255	>255	>260	>270	273.8	248.8	+10.0
Operating EBITDA	>190	>199	>210	>218	217.6	186.9	+16.4
Operating EBIT	>112	>114	>125	>132	132.2	113.7	+16.3
Operating cash flow	>180	>188	>190	>198	189.3	174.3	+8.6
Operating earnings per share in EUR	0.35	0.35	0.40	0.42	0.43	0.31	+38.7
Technical installation availability in %	>95	>95	>95	>95	99	98	+1.0

Compared to the previous year, revenue was increased by EUR 25.0 million, or 10 %, and thus exceeded the target figure from the forecast published in the 2019 half-yearly financial report by EUR 3.8 million; compared to the forecast from the 2018 annual report, the increase in revenue even amounts to some EUR 18.8 million. Altogether favourable weather conditions compared to the long-term average resulted in solar parks in particular in Germany, France and Italy being able to generate revenue significantly over the target figures. The solar parks in the United Kingdom and the Netherlands were slightly above their forecast figures. The Wind Parks segment benefitted from the fact that the wind parks in Denmark acquired in 2018 made revenue contributions for the entire year for the first time. Generally speaking, there is more planning uncertainty in the Wind Parks segment than in the PV Parks segment. The amount of wind is subject to greater annual fluctuations than sunshine. In the 2019 financial year, wind levels were below the long-term average, which meant that the revenue development in this segment was not quite able to reach the forecast levels. Revenue slightly exceeded expectations in the Asset Management segment.

The EBIT and EBITDA forecast figures based on the existing portfolio as of 30 June 2019 – which were published in the 2019 half-yearly financial report and increased twice compared to the 2018 annual report – were achieved and nearly achieved, respectively.

Operating cash flow was increased from EUR 174.3 million in the previous year to EUR 189.3 million in the 2019 financial year. The increased forecast figure published in the 2019 half-yearly financial report was not reached due to a capital gains tax refund in the amount of EUR 9 million which was expected in the 2019 financial year but was not received until the first quarter of 2020 and therefore not before the balance sheet date.

Operating earnings per share developed positively and increased compared to the previous year. At EUR 0.43, this is above the figure of EUR 0.42 forecast in the 2019 half-yearly financial report, which had been increased multiple times. Compared to the original guidance published in the 2018 annual report in the amount of EUR 0.35, operating earnings per share therefore increased by more than 20 %.

Segment development

PV Parks segment

As of 31 December 2019, the solar parks in the portfolio of Encavis comprised a total of 166 solar parks with a total generation capacity of more than 1.3 GW, with parks located in the countries of Germany, Italy, France, the United Kingdom, the Netherlands and Spain.

The Group’s business activities are subject to seasonal influences, which leads to fluctuations in revenue and earnings during the course of the year. In terms of the PV Parks segment, which comprises all solar parks in the Group’s own portfolio, the months from April to September generate more revenue than the autumn and winter months.

In 2019, the solar park portfolios of all countries managed to record figures well above their targets. In terms of the kilowatt-hours generated, Encavis’s solar park portfolio was cumulatively around 6 % above target.

The electricity supplied by the solar parks held by the Group in the 2019 financial year was 985,550 megawatt-hours (MWh) (previous year: 857,504 MWh). The amount of electricity thus increased by some 15 % over the previous year. The solar parks in Germany accounted for 29 % of the fed-in electricity (previous year: 34 %), those in France for 25 % (previous year: 27 %), those in Italy for 22 % (previous year: 24 %), those in the United Kingdom for 13 % (previous year: 15 %) and those in the Netherlands for 11 % (previous year: 0 %).

The following solar park was acquired in the 2019 financial year:

- Zonnepark Zierikzee B.V., Netherlands, Group share: 90 %

Wind Parks segment

As of 31 December 2019, the wind parks in the portfolio of Encavis comprised a total of 41 wind parks with a total generation capacity of 412 MW, with parks located in the countries of Germany, Italy, France, Austria and Denmark.

Due to weather conditions, the wind parks generate more revenue in the autumn and winter months than they do in summer.

The wind volume in 2019 was below the long-term average. Measured against the long-term average, the volume of electricity produced was therefore below expectations.

The electricity supplied by the wind parks held by the Group in the 2019 financial year was 742,933 MWh (previous year: 655,711 MWh). The amount of electricity thus increased by some 13 % over the previous year. Of the electricity fed in, 62 % (previous year: 67 %) is attributable to wind parks in Germany, 11 % (previous year: 12 %) to wind parks in France, 11 % (previous year: 10 %) to wind parks in Austria, 15 % (previous year: 9 %) to wind parks in Denmark and 1 % (previous year: 2 %) to the wind park in Italy.

The following wind parks were acquired in the 2019 financial year:

- Energiepark Debstedt 2 RE WP DE GmbH & Co. KG, Germany, Group share: 51 %
- Encavis Nordbrise A/S, Denmark, Group share: 100 %

The company Energiepark Debstedt 2 RE WP DE GmbH & Co. KG was previously recognised under associates and, after the acquisition of the remaining shares on 20 September 2019, was merged with the company Energiepark Debstedt GmbH & Co. RE WP KG.

PV Service segment

Encavis Technical Services GmbH, Group share: 100 %

Earnings of Encavis Technical Services GmbH after tax in the 2019 financial year were TEUR 4,313 and therefore TEUR 2,753 higher than in the previous year (TEUR 1,560). While revenue and other income recorded an increase of TEUR 2,884, depreciation and amortisation, expenses for materials and personnel and other expenses increased in total by TEUR 132. As in the previous year, the financial result was TEUR 0. The company assumes technical management for many German and Italian solar parks in the Encavis Group. The volume managed within the Group was some 274 MW peak as of 31 December 2019.

Encavis Technical Services GmbH also took over contracts in 2012 for the technical management of parks that are not part of the Encavis Group. The parks are in Saxony-Anhalt, Thuringia, Brandenburg and northern Italy. The volume of non-Group assets managed was around 15 MW peak.

In the 2019 financial year, the company founded Stern Energy GmbH and transferred all of its property, plant and equipment as well as a portion of its agency agreements as part of an asset deal. The shareholding in Stern Energy GmbH was sold to the associated company Stern Energy S.p.A. in the first quarter of financial year.

Asset Management segment

The Asset Management segment covers all services for third-party investors, such as the launching of funds, the individual design and structuring of other investments for professional investors in the field of renewable energy and the management of the investments held by these investors. As of 31 December 2019, the portfolio comprises a total of 21 solar parks and 41 wind parks in the countries of Germany, Italy, France, the United Kingdom, Finland, Sweden, Austria and the Netherlands.

Revenue exceeded expectations in the Asset Management segment, in particular due to the significant expansion of the portfolio of wind and solar parks managed.

Financial performance, financial position and net assets of the Encavis Group

General

The first-time application of IFRS 16 “Leases” has a significant impact on the operating earnings, net assets and financial position as well as those figures according to IFRS. Due to the first-time application, EBITDA for the financial year increased by TEUR 8,621; the balance sheet total as of 1 January 2019 increased by TEUR 115,377. The notes contain detailed information on the transition as well as on the current valuations and influences the standard has on earnings.

The conclusion of the PPAs also had a major impact on the Group’s assets position, financial position and results of operations. In 2018 and 2019, Encavis acquired 80 % shareholdings via Encavis Iberia GmbH in each of the project companies Talayuela and Cabrera, both of which are building a solar park in Spain. The purchase price for the two Spanish investments was determined together with the partner Solarcentury using financial models that already take into account the PPAs to be concluded in the expected inflows. However, due to the contractual arrangements, there is no control over the companies prior to commissioning, so that the shareholdings are valued as financial assets accounted for using the equity method in accordance with IAS 28 due to the significant influence. This accounting method stipulates that participating interests be initially recorded at acquisition cost and then amortised over the allocated pro rata results.

In the 2019 financial year, both companies concluded a PPA in the form of a derivative for a period of ten years, in which the fixed electricity purchase price is presently below the current market price level, but at the level of the joint valuation model with Solarcentury and thus the assumptions of the purchase price.

In the context of equity accounting, the derivatives with a negative market value recognised in the balance sheets of both participating interests mean that, following a complete reduction of the equity approaches (due to the attributed pro rata results) in accordance with IFRS regulations, the associated loans are also reduced in part with no effect on income. The recognition of the derivatives in the balance sheet is separate from the determination of the investment values in which the effects of the PPAs were already included in the purchase price. This consolidation technique does not in any way lead to the intrinsic value of the participating interests being impaired.

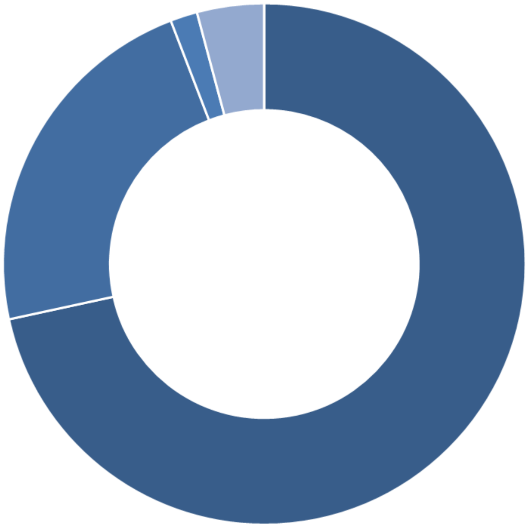
The current equity ratio of 25.3 % would be 26.9 % without the recognition of derivatives at the level of the Spanish investments.

Financial performance

The Group generated revenue in the amount of TEUR 273,822 in the 2019 financial year (previous year: TEUR 248,785). This represents growth of some 10 %. The growth is supported by the solar park portfolio in the amount of TEUR 13,617 and the wind park portfolio in the amount of TEUR 5,276. The solar parks in the Netherlands generated revenue for an entire year for the first time in the 2019 financial year, thereby contributing TEUR 11,353 to growth. The French and British solar parks generated higher income compared to the previous year in the amount of TEUR 2,137 and TEUR 1,175 respectively. The Italian solar parks contributed to growth as well, with revenue growth of TEUR 736. The German solar park portfolio was not expanded via acquisitions during the reporting period, so the weather-related decrease in revenue compared to the previous year – which was heavily influenced by favourable meteorological conditions – in the amount of TEUR 1,784 could not be compensated for through capacity increases. The wind park portfolio recorded an increase in revenue of TEUR 5,276, including in particular the Danish and Austrian wind parks, which contributed growth of TEUR 3,569 and TEUR 1,308 respectively. The revenue also included income in the amount of TEUR 11,612 (previous year: TEUR 4,140) from the Asset Management segment.

Group revenues are made up of revenue from feeding electricity into the grid, from the operation of parks owned by third parties and from additional revenue from asset management.

Revenue is broken down by segment as follows:



The Group generated other income in the amount of TEUR 14,839 (previous year: TEUR 17,463). In accordance with IFRS 3, the Encavis Group provisionally allocated purchase prices at the time of acquisition of the solar and wind parks in the 2019 financial year in order to include the acquired assets and liabilities in the consolidated financial statements. All acquired assets and liabilities of which the Group was aware at that time were identified and valued at their fair value as part of the purchase price allocations. This resulted in a negative difference of TEUR 2,055 (previous year: TEUR 6,424) that was credited to income in the 2019 financial year. This included a change to a provisional purchase price allocation in the amount of TEUR –753 within the assessment period in accordance with IFRS 3.45 for the Boizenburg I and Boizenburg II solar parks acquired in the course of 2018. Additionally, the main changes to the provisional price allocation for the two solar parks and the figures presented in the 2018 annual report are a decrease in intangible assets of TEUR 1,054 and an increase in deferred tax assets of TEUR 301. The purchase price allocation was adjusted due the now-finalised valuation of intangible assets. This type of negative difference from the purchase price allocation can only arise for parks which are already connected to the grid at the time of their acquisition. Because the Group now generally acquires parks prior to their grid connection in line with market developments, this income – which results from initial consolidation in accordance with IFRS rules and does not reflect the operating performance of the company and is therefore eliminated in the reconciliation to the operating result – is declining as planned.

Furthermore, the temporary nature of two purchase price allocations in the 2019 financial year is due to the fact that the technical assessments and the corresponding final version of the planning calculations that form the basis for the valuation of intangible assets are not yet complete.

This item still includes income from the reversal of deferred accrual items (government grants) in the amount of TEUR 2,255 (previous year: TEUR 2,166) and non-period income of TEUR 4,759 (previous year: TEUR 3,129). Of the non-period income, TEUR 476 (previous year: TEUR 1,236) is due to the reversal of provisions. Additionally, these amounts include non-operating one-time effects in connection with IFRS 16 (TEUR 2,456).

The cost of materials amounted to TEUR 2,136 in the reporting period (previous year: TEUR 1,756). This includes primarily the expenses for purchased power in the solar and wind parks.

Personnel expenses rose from TEUR 13,306 in the 2018 financial year to TEUR 16,997 in the reporting year. The increase is due to, on the one hand, higher expenses from the share option programme (SOP) in connection with the very positive development of the share price and, on the other hand, to the expansion of teams in various departments of the Group necessitated by growth. In the 2019 financial year, TEUR 44 (previous year: TEUR 122) from the 2012 physical share option programme (SOP 2012), TEUR 1,718 (previous year: TEUR 180) from the 2017 virtual share option programme, TEUR 1,070 (previous year: TEUR 7) from the 2018 share option programme and TEUR 194 from the virtual share option programme relaunched for the 2019 financial year were recorded as personnel expenses. The expenses for SOP 2012 resulted from the valuation of options at their fair value on the relevant issue dates and have been recorded for the fourth and the sixth tranche of the programme. SOP 2017 through 2019 are annually recurring, long-term remuneration components related to the overall performance of the Encavis share. An allotment amount defined by the Supervisory Board is converted into virtual share options known as share appreciation rights (SARs). The amount of the variable component was calculated based on the share-option plans for 2017 through 2019 (SOP 2017, SOP 2018 and SOP 2019), which entered into force on 1 July 2017, 1 July 2018 and 1 July 2019 respectively.

Besides the Management Board, the Encavis Group employed 134 people as of 31 December 2019 (previous year: 118). This increase is the result of the growth-induced expansion of teams within various functional areas of the Group.

Other operating expenses in the 2019 financial year amounted to TEUR 53,427 (previous year: TEUR 55,860). This includes in particular the costs of operating solar and wind parks in the amount of TEUR 36,643 (previous year: TEUR 40,167). This includes expenses for technical and commercial management, repairs, maintenance, insurance, and various other costs such as vehicle costs and costs for IT and telecommunications. The decline in other expenses is due primarily to the first-time application of IFRS 16, as the majority of the rental and lease expenses previously reported under other operating expenses no longer apply. Instead, depreciation is recognised on the rights of use newly recognised in fixed assets under the lease agreements as well as interest expenses on the corresponding liabilities recognised as such. Other expenses also include costs of current operations in the amount of TEUR 16,657 at the level of the holding companies (previous year: TEUR 15,051).

Thus, in the 2019 financial year, the Group generated earnings before interest, taxes, depreciation and amortisation (EBITDA) in the amount of TEUR 216,101 (previous year: TEUR 195,326). The EBITDA margin was around 79 % (previous year: 79 %). Without the effects from IFRS 16, the EBITDA margin in 2019 would have been around 76 %.

Depreciation and amortisation of TEUR 124,674 (previous year: TEUR 123,770) consists principally of depreciation of photovoltaic installations and wind turbines and amortisation of intangible assets. Due to the first-time application of IFRS 16, depreciation on the capitalised rights of use from the lease agreements (TEUR 6,808) is also included. The expected increase in depreciation and amortisation is reduced by an opposing effect: the previous-year figure contained an impairment loss for goodwill of a portfolio of solar parks in the United Kingdom in the amount of TEUR 12,305, while no impairment loss on goodwill has been recorded for the current financial year.

Earnings before interest and taxes (EBIT) rose from TEUR 71,556 in the previous year to TEUR 91,426 in the 2019 financial year. This corresponds to an EBIT margin of around 33 % (previous year: 29 %).

Financial income rose from TEUR 14,784 in the previous year to TEUR 24,771 in the reporting year. Income in the amount of TEUR 11,485 (previous year: TEUR 8,916) results from interest income from the cancellation of step-ups for bank loans and lease liabilities. This also includes non-cash income from currency translation in the amount of TEUR 4,253 (previous year: TEUR 1,508) as well as income in connection with the changes in the market values of interest rate swaps in the amount of TEUR 1,032 (previous year: TEUR 2,631). Financial expenses of TEUR 62,468 were incurred (previous year: TEUR 66,577). This includes in particular the interest expenses for the non-recourse loans to finance installations in the park companies and interest expenses in connection with the mezzanine capital of Gothaer Versicherungen, as well as various non-cash expenses. In addition, interest expenses on the lease liabilities carried as liabilities in connection with the first-time application of IFRS 16 are reported in the financial result for the first time.

Earnings before taxes (EBT) therefore came to TEUR 50,652 (previous year: TEUR 19,754). The EBT margin is some 18 % (previous year: 8 %).

The tax expenses reported in the consolidated statement of comprehensive income amounted to TEUR 21,257 in the 2019 financial year (previous year: TEUR 8,975) attributable to non-cash deferred taxes and effective tax payments. The current tax expense amounted to TEUR 16,196 (previous year: TEUR 10,739). A deferred tax expense was recorded in the amount of TEUR 5,061 (previous year: income in the amount of TEUR 1,763).

Altogether, this resulted in consolidated earnings of TEUR 29,394 (previous year: TEUR 10,779).

Consolidated earnings are made up of earnings attributable to shareholders of the parent company totalling TEUR 22,189 (previous year: TEUR 5,113), earnings attributable to non-controlling shareholders totalling TEUR 1,280 (previous year: TEUR 558) and the earnings attributable to hybrid bondholders totalling TEUR 5,925 (previous year: TEUR 5,108).

For 2019, consolidated comprehensive income amounted to TEUR -44,438 (previous year: TEUR 11,511). This figure is made up of consolidated earnings and changes in other reserves shown in equity. A total of TEUR –65,769 of the changes in other reserves is the result of the recognition of expanses from participating interests valued according to the equity method with no effect on profit or loss. In addition to the currency translation reserve in the amount of TEUR -51 (previous year: TEUR -140), other reserves also contain hedge reserves in the amount of TEUR –10,476 (previous year: TEUR 1,206), which also contain amounts to be recognised in profit or loss in future over the remaining term of the respective underlying items for interest rate swaps previously held in a hedging relationship, as well as well as costs of hedging in the amount of TEUR 8 (previous year: TEUR –34). Amounts recognised in equity will be reclassified in full to consolidated earnings once the corresponding hedged items have expired. In the 2019 financial year, TEUR 1 was reclassified from the currency translation reserve to consolidated earnings. On the other hand, there were corresponding deferred tax effects in the amount of TEUR 2,455 (previous year: TEUR -270). Undiluted earnings per share (after non-controlling interests) amounted to EUR 0.17 (previous year: EUR 0.04). The average number of shares on issue in the reporting period amounted to 131,052,531 (previous year: 129,040,364). Diluted earnings per share were EUR 0.17 (previous year: EUR 0.04).

Calculating operating KPIs (adjusted for IFRS effects)

As described under “Internal control system of Encavis”, the Group’s IFRS accounting is affected by non-cash valuation effects and the resulting depreciation and amortisation. Non-cash interest effects and deferred taxes also hamper a transparent assessment of the operating income situation pursuant to IFRS.

In TEUR	Notes	01.01.–31.12.2019	01.01.–31.12.2018
Revenue	3.20; 5.1	273,822	248,785
Other income	5.2	14,839	17,463
Cost of materials	5.3	-2,136	-1,756
Personnel expenses, of which TEUR -3,026 (previous year: TEUR -308) in share-based remuneration	5.4	-16,997	-13,306
Other expenses	5.5	-53,427	-55,860
Adjusted for the following effects:			
Income resulting from the disposal of financial assets and other non-operating income		-1	-41
Other non-cash income (mainly gains from business combinations [badwill], reversal of the interest advantage from subsidised loans [government grants] and non-cash income from other periods)		-1,373	-8,612
Other non-operating expenses		2,856	96
Share-based remuneration (non-cash)		44	122
Adjusted operating EBITDA		**217,626**	**186,890**
Depreciation and amortisation	5.6	-124,674	-123,770
Adjusted for the following effects:			
Depreciation and amortisation of intangible assets (electricity feed-in contracts) and goodwill acquired as part of business combinations		46,228	57,516
Subsequent measurement of uncovered hidden reserves and liabilities on step-ups for property, plant and equipment acquired as part of business combinations		-6,951	-6,955
Adjusted operating EBIT		**132,229**	**113,682**
Financial result	5.7	-40,775	-51,803
Adjusted for the following effects:			
Other non-cash interest and similar expenses and income (mainly resulting from effects from currency translation, calculation of the effective rate, swap valuation and interest expenses from subsidised loans [government grants])		-14,828	-5,127
Adjusted operating EBT		**76,627**	**56,753**
Tax expenses	5.8	-21,257	-8,975
Adjusted for the following effects:			
Deferred taxes (non-cash items) and other non-cash tax effects		8,077	-742
Adjusted operating EAT		**63,446**	**47,036**

Financial position and cash flow

Changes in cash and cash equivalents amounted to TEUR -10,336 in the reporting year (previous year: TEUR 51,549) and is comprised as follows:

Net cash flow from operating activities increased by approximately TEUR 15,033, from TEUR 174,282 the previous year to TEUR 189,315 in the reporting year. It consisted largely of cash inflows from the operating business of the solar parks and wind parks. Also included here are changes in assets and liabilities not attributable to investing or financing activities.

Cash flow from investing activities of TEUR -232,701 (previous year: TEUR -118,421) was mainly the result of payments related to investments in financial assets for financial investments recognised using the equity method and/or loans to them as well as payments for the acquisition of a wind park portfolio in Denmark as well as the acquisition of a solar park in the Netherlands.

Cash flow from financing activities amounts to TEUR 32,676 (previous year: TEUR -4,255) and results from, among other things, the regular loan repayments and interest paid less the loans for newly acquired solar and wind parks paid out after the dates of initial consolidation. Additionally, this contains payments received from the sale of minority interests in four wind parks in the amount of TEUR 24,855. The successful increase of the hybrid convertible bond issued in 2017 had a positive effect in the amount of TEUR 60,553 on the cash flow from financing activities. This also contains an inflow of funds in the amount of TEUR 47,452 from a capital increase in December 2019. The payment of the dividend for the 2018 financial year in the amount of TEUR 19,113 and the dividend payment to hybrid bondholders in the amount of TEUR 5,108 had an opposing effect. Additionally, the changed recognition of expenses from lease agreements in connection with the first-time application of IFRS 16 had a negative impact.

In the 2019 financial year, TEUR 120,237 (previous year: 211,836) was raised in the form of loans. Of this, TEUR 40,225 (previous year: TEUR 112,008) results from long-term loans for financing solar and wind parks, TEUR 60,000 from the issue of registered bonds and TEUR 20,000 from a shareholder loan. In the 2019 financial year, interest and amortisation expenses for the Group's existing loans resulted in cash outflow of TEUR -214,840 (previous year: TEUR -183,100).

At the Encavis AG annual shareholders' meeting held on 15 May 2019 it was resolved that a dividend of EUR 0.24 per entitled share would be paid out. This constituted an increase of around 9 % on the previous year (EUR 0.22 per share). Pursuant to the resolution passed at the Encavis AG Annual General Meeting, a proportion of the company's net earnings for the 2018 financial year amounting to EUR 75,565,652.20 was to be used for the dividend payout, which occurred on 18 June 2019. With an acceptance rate of more than 50 %, the optional dividend was once again well received. In total, 2,010,807 new bearer shares were issued.

As of the balance sheet date, the Group had unused credit lines available in the amount of TEUR 35,021.

Net assets

As of 31 December 2019, equity amounted to TEUR 722,713 (31 December 2018: TEUR 687,057). The change in the amount of TEUR 35,656, or 5.19 %, is primarily due to the increase of the hybrid convertible bond issued in 2017, the issue of new shares as a result of the share dividend chosen by the majority of shareholders, the capital increase carried out in December 2019 and the positive result for the period. The payment of the dividend as well as various changes in value recognised in equity had the opposite effect. Share capital increased by contribution in kind in the amount of TEUR 2,011 and by another TEUR 5,541 from cash contributions. The equity ratio is 25.27 % (31 December 2018: 25.94 %), see explation for development of the equity ration on the page 31.

The balance sheet total rose from TEUR 2,649,065 in the previous year to TEUR 2,859,938 in the reporting year.

As of 31 December 2019, the Group reported intangible assets in the amount of TEUR 547,168 (31 December 2018: TEUR 579,950). As part of the (to some extent still preliminary) purchase price allocations for the solar parks and wind parks acquired or first consolidated in the 2019 financial year, the feed-in contracts between the parks and the utility companies and/or the exclusive rights of use were evaluated. This resulted in the capitalisation of intangible assets in the amount of TEUR 13,257 (31 December 2018: TEUR 16,323). The capitalised asset value is amortised over the term of the feed-in tariff guaranteed by the state (generally 20 years).

As of 31 December 2019, the company's goodwill amounted to TEUR 26,569 (31 December 2018: TEUR 19,989). This is an increase in the amount of TEUR 6,580 compared with the previous year. Encavis had annual goodwill impairment testing conducted as of 30 September 2019. This testing took place at the level of a group of cash-generating units (CGUs) which, since the 2016 financial year, represent the operating segments by country. The impairment test did not give rise to an impairment loss. The change compared to the previous year results from the goodwill of TEUR 6,482 recognised as part of the initial consolidation of a portfolio of wind parks in Denmark and, to a lesser extent, from currency effects.

The increase in property, plant and equipment to TEUR 1,749,657 (31 December 2018: TEUR 1,548,639) primarily results from the first-time application of IFRS 16, after rights of use in the amount of TEUR 214,343 were recognised in the non-current assets of the Group for the first time. The rights of use result from reclassifications, new capitalisations as of 1 January 2019 and acquisitions. More detailed information can be found in the notes.

The deferred tax assets primarily result from differences in property, plant and equipment in the comparison between IFRS and tax balance sheets as well as tax loss carry-forwards likely to be usable.

Current assets decreased from TEUR 341,812 in the previous year to TEUR 301,582 as of 31 December 2019. These included liquid assets of TEUR 222,481 as of the balance sheet date (31 December 2018: TEUR 252,491).

The liquid assets include restricted funds in the amount of TEUR 57,980 (31 December 2018: TEUR 76,927). Of these, TEUR 54,734 (previous year: TEUR 69,228) is attributable to capital services and project reserves, and TEUR 3,246 (previous year: TEUR 7,699) to other restricted credit.

The Group’s bank and lease liabilities amounted to TEUR 1,749,585 as of 31 December 2019 (31 December 2018: TEUR 1,602,631). These comprised loans and lease agreements for the financing of solar parks and wind parks and the mezzanine capital provided by Gothaer Versicherungen in November 2014. They also contained liabilities from listed notes from the Grid Essence portfolio, including accrued interest in the amount of TEUR 38,791, as well as liabilities from debenture bonds and/or registered bonds including accrued interest in the amount of TEUR 133,937. This does not include amounts recognised under other liabilities totalling TEUR 8,833 (31 December 2018: TEUR 10,625), which comprises interest advantages from low-interest government loans (KfW) and is to be accounted for in accordance with IAS 20 and shown separately. As a result of the first-time application of IFRS 16, additional liabilities from lease obligations amounting to TEUR 114,909 were reported as of the balance sheet date. Non-current liabilities from the mezzanine capital amounted to TEUR 150,000 as of 31 December 2019 and as of 31 December 2018. In almost all debt financing, the liability risk relating to the parks is limited (non-recourse financing).

Deferred tax liabilities are virtually unchanged compared to the previous year, because the reversal of differences between IFRS and tax balance sheet values and the additions to deferred tax liabilities from the acquisition of new solar and wind parks almost correspond with regard to amount.

Trade payables amounted to TEUR 10,738 on 31 December 2019 (31 December 2018: TEUR 16,784).

Segment reporting (operating)

Expenses and income within the segments were largely attributed to services relating to technical and commercial company management and to interest income from, and interest expenses for, internal loans. These loans are normally granted as bridge financing for VAT and investments in solar park projects.

PV Parks

Revenue in the solar parks increased to TEUR 200,124 in the 2019 financial year (previous year: TEUR 186,507). Primarily responsible for this increase were the solar park portfolios in the Netherlands and France, which achieved revenue increases of TEUR 11,353 and TEUR 2,137, respectively, compared with the previous year. The British solar parks, too, contributed positively to revenue development, achieving an increase of TEUR 1,175. The increase in revenue from the solar parks in the Netherlands is due to the fact that they contributed to revenue for an entire year for the first time in the 2019 financial year. In France, in particular higher levels of sunshine compared to the previous year led to the increase in revenue. Other income in 2019 came to TEUR 4,236 (previous year: TEUR 5,229). This was offset by the costs for operation of the solar parks as well as other expenses of TEUR 37,051 (previous year: 39,584) and depreciation and amortisation on PV installations and other intangible assets in the amount of TEUR 62,416 (previous year: TEUR 54,610). The increase in depreciation and amortisation results primarily from the solar parks in the Netherlands, which did not commence operation and/or were not acquired until the end of the 2018 financial year and/or over the course of the 2019 financial year. In total, the PV Parks segment achieved operating earnings before interest and taxes (EBIT) of TEUR 104,894 (previous year: TEUR 97,542).

PV Service

In the PV Service segment, revenue and other income, less the cost of materials, of TEUR 4,542 (previous year: TEUR 4,388) were counteracted by personnel expenses and other expenses totalling TEUR 3,065 (previous year: TEUR 2,751). After depreciation and amortisation, earnings before interest and taxes (EBIT) amounts to TEUR 1,429 (previous year: TEUR 1,587).

Wind Parks

Revenue in the amount of TEUR 63,115 (previous year: TEUR 57,839) is recognised in the reporting year. With revenue growth of TEUR 3,569 and TEUR 1,308 respectively, the wind park portfolios in Denmark and Austria in particular contributed to this increase. But wind parks in Germany – with a moderate increase of TEUR 962 – also contributed to the positive development in revenue. Other income in 2019 came to TEUR 7,526 (previous year: TEUR 1,930). The increase in other income results in the amount of TEUR 5,936 from accounting profits from the sale of a 49 % shareholding in a 66-MW wind park portfolio. In total, expenses for operating and managing the parks and other expenses came to TEUR 18,817 (previous year: TEUR 18,238) and were thus around the same level as the previous year. Depreciation and amortisation on the wind installations and other intangible assets amounting to TEUR 21,447 (previous year: TEUR 17,727) were recognised. In total, the Wind Parks segment achieved operating earnings before interest and taxes (EBIT) of TEUR 30,378 (previous year: TEUR 23,804).

Asset Management

Earnings before interest and taxes (EBIT) amounted to TEUR 5,046 in the 2019 financial year (previous year: TEUR -1,697). Revenue and other income in the amount of TEUR 12,047 (previous year: TEUR 4,509) was offset by cost of materials, personnel expenses, other expenses and depreciation and amortisation in the amount of TEUR –7,001 (previous year: TEUR –6,206).

Administration

Operating earnings before interest and taxes (EBIT) for the Administration segment amounts to TEUR -9,499 (previous year: TEUR -7,401). Offsetting other income, which rose from TEUR 1,157 in the previous year to TEUR 1,824 in the reporting year, were personnel expenses, other expenses and depreciation and amortisation. Other expenses comprised, in particular, operating expenses as well as legal and consulting costs relating to, among other things, the purchase of new park companies.

Notes to the individual financial statements of Encavis AG (HGB)

The annual financial statements of Encavis AG for the 2019 financial year were prepared pursuant to the provisions of the German Commercial Code (HGB) and taking into account the supplementary provisions of the German Stock Corporation Act (AktG).

Financial performance

Encavis AG achieved revenue of TEUR 6,506 in the reporting year (previous year: TEUR 2,436). This resulted primarily from charging expenses for tax return preparations, accounting and management of the solar parks and wind parks, as well as the costs of their administration and running, to Encavis Group companies.

Other operating income amounted to TEUR 3,403 (previous year: TEUR 64,116). The previous year’s figure was also impacted by internal restructuring within the Group.

Personnel expenses amounted to TEUR 13,758 (previous year: TEUR 8,626). The increase compared to the previous year is primarily due to the addition of 11 employees at Encavis AG as well as increased expenses in the amount of TEUR 3,794 (previous year: TEUR 186) from the share option programme as a result of the stark increase in the share price during the reporting period.

Other operating expenses amounting to TEUR 14.173 were incurred in the reporting year (previous year: TEUR 8,757). These primarily include the costs for legal advice and for other consultancy services in the amount of TEUR 3,533 (previous year: TEUR 3,276), insurance in the amount of TEUR 3,281 (previous year: TEUR 168), costs related to the capital increase in the amount of TEUR 1,989 (previous year: TEUR 144), maintenance costs for hardware and software in the amount of TEUR 422 (previous year: TEUR 769), office space in the amount of TEUR 750 (previous year: TEUR 609), financial statement preparation and audit costs in the amount of TEUR 597 (previous year: TEUR 503) and Supervisory Board remuneration in the amount of TEUR 389 (previous year: TEUR 393).

Financial income rose to TEUR 39,329 in the 2019 financial year (previous year: TEUR 24,745). This also included in particular interest income resulting from loans issued to affiliates amounting to TEUR 20,930 (previous year: TEUR 16,047) as well as income from loans to companies with which an investment relationship exists in the amount of TEUR 3,030 (previous year: TEUR 0). Additionally, this includes distributions of dividends from subsidiary companies, in particular from Capital Stage Solar IPP GmbH in the amount of TEUR 7,000 (previous year: TEUR 3,500), from Capital Stage Wind IPP GmbH amounting to TEUR 4,600 (previous year: TEUR 0) and from ten further Italian companies amounting to TEUR 1,011 (previous year: 3,048). The dividend distribution from Capital Stage Wind IPP GmbH results from the sale of multiple minority interests in wind projects to third parties. Encavis AG collected a profit transfer of TEUR 4,313 from the control and profit transfer agreement concluded in the 2012 financial year between Encavis AG and Encavis Technical Services GmbH (previous year: TEUR 1,561).

Financial expenses of TEUR 10,744 were incurred (previous year: TEUR 8,356). These mainly include interest paid to affiliates of TEUR 6,411 (previous year: TEUR 5,761), interest paid to financial institutions of TEUR 3,647 (previous year: TEUR 1,852) and impairments receivables in foreign currencies in the amount of TEUR 1,058 (previous year: TEUR 629).

In addition to trade tax of TEUR 15 for the current year, income taxes include an expense of TEUR 8 for previous years as a subsequent payment for the company audit concluded in 2019.

Encavis AG reported a net profit for the year of TEUR 9,885 (previous year: TEUR 65,226). The result from the previous year was impacted by internal restructuring within the Group.

Financial position

Equity increased from TEUR 597,073 in the previous year to TEUR 636,163 as at 31 December 2019. The increase stems principally from the capital increases in the financial year due to the share dividend carried out in 2019 and the capital increase in exchange for cash at the end of the year. The recognition of dividends for 2018 (TEUR 31,077) had an offsetting effect. The equity ratio as of the reporting date was 59.9 % (previous year: 70.2 %).

The balance sheet total increased from TEUR 850,971 in the previous year to TEUR 1,061,698 in the 2019 financial year. With regard to assets, the increase primarily results from the expansion of financial assets through the issue of loans and acquisition of shares.

With regard to liabilities, listed notes from the issue of registered bonds in the amount of TEUR 60,613 (previous year: TEUR 0) have been newly added. Liabilities to affiliates increased considerably to TEUR 212,235 (previous year: TEUR 116,680), which is the result of the expansion of internal Group financing as well as the new issue of convertible bonds for a subsidiary.

In 2019, cash flow from operating activities in the amount of TEUR –2,862 (previous year: TEUR –14,935) was generated. The improvement compared to 2018 is primarily the result of a tax refund in the amount of TEUR 11,119 for 2017 that was assessed in 2019. Another capital gains tax refund in the amount of TEUR 9,445 was received in the first quarter of 2020.

Investment activity yielded a cash flow of TEUR –202,180 (previous year: TEUR 23,034). The high amount of payments compared to the previous year are almost entirely attributable to the issue of loans to the two Spanish solar projects Cabrera Energia Solar S.L. and Genia Extremadura Solar S. L. (Talayuela) with a total of TEUR 144,236 as financing during the construction phase as well as the investment in a large wind park in Denmark with a total of TEUR 57,064.

Cash flow from financing activities was TEUR 217,824 (previous year: TEUR 41,966). The significant increase compared to the previous year is attributable to the following measures: on the one hand, registered bonds with a nominal value of TEUR 60,000 were issued in 2019 and, on the other hand, an internal Group loan in the amount of TEUR 52,000 was made available by a subsidiary. Furthermore, TEUR 60,552 could once again be raised through the issue of a convertible bond via a subsidiary. Finally, through a capital increase in exchange for cash at the end of 2019, TEUR 48,318 could be collected towards equity.

In the 2019 financial year, a dividend of EUR 0.24 per share was distributed to the shareholders of Encavis AG (previous year: EUR 0.22 per share). The shareholders could select whether to have the dividend paid out in cash or in the form of Encavis AG shares. With an acceptance rate of more than 50 %, the optional dividend was once again very well received. A cash dividend in the amount of TEUR 19,112 was paid out to shareholders in June 2019 (previous year: TEUR 20,838).

Supplementary report

Between the balance sheet date of 31 December 2019 and the preparation of the annual and consolidated financial statements for 2019, the general situation regarding the Encavis Group's business activities did not change significantly from the circumstances described in the following.

Encavis AG plans to double its own generation capacity by 2025

On the basis of detailed planning and internal measures, as well as comprehensive market analyses, the Management Board of Encavis AG has decided on a strategic growth plan for the next six years.

This strategic outlook through the year 2025 is based on a growth initiative as well as packages of measures aimed at further increasing efficiency:

1) Investments in ready-to-build wind and solar parks as well as securing projects in earlier phases of development in coordination with the strategic development partners while maintaining a long-term equity ratio for the Group of more than 24 %; no capital measure is planned as a part of this plan.
2) Disposal of minority interests in wind and individual selected solar parks of up to 49 % to free up liquidity for investments in additional wind and solar parks.
3) Reduction and optimisation of costs related to the operation and maintenance of solar parks.
4) Optimisation/refinancing of SPV project financing.
5) Introduction of Group-wide cash pooling, including all single entities.

On the basis of forecast figures for 2019, the >> Fast Forward 2025 growth strategy of the Encavis Group focuses on the following target values for the year 2025:

- Doubling the company's own contractually secured generation capacity from 1.7 to 3.4 GW
- Increasing the weather-adjusted revenue (wa) from EUR 260 million to EUR 440 million
- Increasing the weather-adjusted operating EBITDA (wa) from EUR 210 million to EUR 330 million
- A margin of the weather-adjusted operating EBITDA (wa) of 75 %
- Increasing the operating earnings per share (EPS) (wa) from EUR 0.40 to EUR 0.70

The corresponding compound annual growth rates (CAGR) for the next six years until 2025 are evidence of the ambitious strategic measures of the Encavis Group:

- Capacity growth of 12 % CAGR
- Revenue growth (wa) of 9 % CAGR
- Operating EBITDA growth (wa) of 8 % CAGR
- Growth in operating earnings per share (wa) of 10 % CAGR

To date, this basis case of the >> Fast Forward 2025 Encavis growth strategy has not taken any opportunities for growth into account which may arise from inorganic growth via mergers and acquisition transactions and potential equity transactions. Opportunities which could arise from profitable business models in association with future battery storage capacities at the wind and solar parks are also not taken into consideration. A possible expansion into regions outside of Europe offers further potential for growth.

Encavis Asset Management: New subscriptions enable investments of more than EUR 300 million

In the fourth quarter of 2019, Encavis Asset Management AG invested in more than 173 MW in wind and solar installations in Europe for institutional investors.

On the one hand, additional building societies and cooperative banks made extensive investments in the special fund Encavis Infrastructure II Renewables Europe II, which is exclusively sold by BayernLB. Due to the market price model developed and tested specifically for financial institutions, this fund is particularly attractive for this group of investors for risk management in accordance with the minimum requirements. The special fund is managed by HANSAINVEST Lux S.A.

The new funds were used to acquire eight renewable energy parks over a short period of time: two wind parks in Germany (Brandenburg) with a total generation capacity of 22 MW as well as solar parks in Mecklenburg-West Pomerania, Brandenburg and Bavaria with a generation capacity totalling 81 MW. Additionally, four solar parks in the Netherlands with a total generation capacity of 53 MW were acquired. The current fund portfolio of Encavis Infrastructure II Renewables Europe II is therefore comprised of seven installations in Germany and four in the Netherlands and will be supplemented with further investments in Europe.

On the other hand, a renowned insurance company has considerably increased its current commitment level to its Encavis special fund. The BayWa r.e. wind park in Fürstkogel was recently acquired using a portion of these funds. This wind park in Austria has a nominal output of some 17 MW and is situated in a mountainous location in the Austrian state of Styria.

Scope Ratings confirms its investment-grade issuer rating of BBB– with stable outlook for Encavis AG

Encavis AG has again been evaluated by the rating agency Scope Ratings in an updated analysis confirming the Encavis issuer rating in the investment-grade range (BBB–); the outlook for the rating is stable. Scope has updated both the rating and the financial outlook of Encavis AG. The update underscores the previous BBB–/“stable outlook”/S-2 issuer rating of Encavis AG and its financing subsidiary Encavis Finance B.V. as well as the BBB– rating for the unsecured bonds and the BB rating for subordinated hybrid liabilities such as the hybrid convertible bond.

The issuer rating of BBB–/“stable outlook” is largely supported by the company’s secure business model, both through the priority feed-in of generated electricity under availability-based remuneration systems (FIT) and through risk mitigation through long-term power purchase agreements (PPAs). The company’s >> Fast Forward 2025 growth strategy, which provides for a doubling of capacity to 3.4 GW by 2025, is expected to further stabilise the business profile as an independent power producer by reducing the incremental effects of certain generation installations or regions.

Other

Personnel

In the 2019 financial year, there were an average of 123 employees at the Group (2018: 119 employees). Of these, 76.5 were employed at Encavis AG, ten at Stern Energy GmbH (transfer from Encavis Technical Services GmbH), 26 at Encavis Asset Management AG and 10.5 at Encavis GmbH.

At the end of 2019, there were 134 employees in the Group. This increase in employees was due to the growth-induced expansion of the Encavis team. The number of employees per function at the end of 2019 is as follows:

Number of employees per function at the year end	Encavis AG	Stern Energy GmbH respectively Encavis Technical Services GmbH	Encavis Asset Management AG	Encavis GmbH	TC Wind Management GmbH	Total
Finance	20					20
(Previous year)	(18)					(18)
Operations	29					29
(Previous year)	(25)					(25)
Staff	19					19
(Previous year)	(14)					(14)
Investments	7					7
(Previous year)	(8)					(8)
Corporate Finance/ Project Finance	6					6
(Previous year)	(3)					(3)
Asset Management			29	14	0	43
(Previous year)			(39)	(0)	(1)	(40)
Technology/ Administration		10				10
(Previous year)		(10)				(10)
Total	**81**	**10**	**29**	**14**	**0**	**134**
(Previous year)	(68)	(10)	(39)	(0)	(1)	(118)

On 31 December 2019, Encavis AG had a two Board members, while Encavis Asset Management AG had one Board member.

Supervisory Board

Professor Klaus-Dieter Maubach resigned his position on the Supervisory Board of Encavis AG effective upon the conclusion of the annual shareholders' meeting on 15 May 2019. At the same time, Dr Marcus Schenck was appointed by a large majority to the Supervisory Board. There were no other changes to the composition of the Supervisory Board.

Remuneration report

Structure of Management Board remuneration

The remuneration packages for Board members are based on the individual Board member's role and performance. They comprise the following three main components:

- A fixed annual basic salary
- A short-term variable remuneration relating to the financial year (annual bonus)
- A long-term variable remuneration linked to the Encavis share price

Basic remuneration and fringe benefits

The basic remuneration comprises a fixed remuneration component paid out in 12 monthly instalments. Remuneration in kind and fringe benefits comprise, in particular, the provision of a company car, insurance premiums, travel expenses and other fringe benefits.

Variable remuneration

The annual bonus is a success- and performance-dependent variable remuneration and is paid out for the previous financial year, taking into account the company's result and financial position, as well as the individual performance of the Supervisory Board members. The annual bonus is due and payable upon conclusion of the Supervisory Board meeting in which the respective annual financial statements were approved and the bonus defined. With regard to goal achievement, an upper limit of 200 % of the respective target value is applicable. The Supervisory Board is also entitled, if faced with extraordinary, unforeseeable events, to adjust the payment amount upwards or downwards in the interest of the company.

SOP 2017 is a programme that is designed as an annually recurring long-term remuneration component based on the overall performance of the Encavis share in terms of framework and objectives. An allotment amount defined by the Supervisory Board is converted into virtual share options known as share appreciation rights (SARs). The amount of the variable component was calculated based on the 2017 share option programme (SOP), which entered into force on 1 July 2017. The allotment date, however, was 13 December 2017. The aim of SOP 2017 is to secure long-term loyalty to Encavis AG of the executives of the Encavis Group. The SARs may be exercised for the first time after a vesting period of three years from 1 July 2017. After that, they can be exercised at half-year intervals within the two years following the three-year waiting period. A prerequisite for exercising a SAR is the successful achievement of the respective goal. To achieve the target within SOP 2017, the overall performance of the Encavis share within the XETRA trading system (or in a comparable successor system) on the Frankfurt Stock Exchange must exceed the basic price by at least 30 % (strike price) on the day on which the SAR is exercised, as measured by the interim rise and the dividends paid since issue of the SAR. The basic price is the arithmetic average of the daily closing price of the Encavis share performance index within the XETRA trading system on the Frankfurt Stock Exchange (or in a comparable successor system) half a year before the plan takes effect. For each SAR assigned, a claim to payment of the difference between the strike price and the basic price accrues. The maximum payment amount is three times the difference between the strike price and the basic price. If a Board member leaves the company of his/her own volition or has his/her contract terminated for good cause, the assigned SARs will expire, in whole or in part, pursuant to the pertinent programme rules.

In the 2018 and 2019 financial years, two further share option programmes (SOP 2018 and SOP 2019) were launched on the basis of SOP 2017, which have essentially identical conditions to SOP 2017. SOP 2018 entered into force on 1 July 2018 and SOP 2019 on 1 July 2019. The allotment dates, however, were 12 December 2018 and 25 September 2019 respectively. The vesting period for SOP 2018 begins on 1 July 2018 and, analogously, the period for SOP 2019 begins on 1 July 2019. The remaining conditions were agreed analogously to SOP 2017.

In financial years from 2013 to 2016, the Management Board was granted share options SOP 2012. The subscription rights deriving from these share options can be exercised at the earliest after a waiting period of four years from the respective assignment date. If a Board member leaves the company of his/her own volition or has his/her contract terminated for good cause, the assigned share options will expire, in whole or in part, pursuant to the pertinent programme rules. In the 2019 financial year, the exercisable tranche from SOP 2012 was settled in cash at its market value.

Details about the share option programmes and about valuations are provided in the notes to the consolidated financial statements.

In the event of the termination of employment, any different compensation payments may be contractually agreed.

Remuneration for 2019

The following table lists the individual remuneration for the active Board members in the 2019 financial year pursuant to section 314 (1), no. 6a, of the German Commercial Code (HGB).

In EUR	Fixed salary	Fringe benefits	One-year variable remuneration	Multi-year variable remuneration	Total for 2019	Total for 2018
Dr Dierk Paskert	400,000.00	30,893.02	500,000.00	316,037.00	1,246,930.02	971,245.93
Dr Christoph Husmann	400,000.00	27,452.20	500,000.00	316,037.00	1,243,489.20	938,776.00
Total	**800,000.00**	**58,345.22**	**1,000,000.00**	**632,074.00**	**2,490,419.22**	**1,910,021.93**
Previous year	800,000.00	86,271.93	750,000.00	273,750.00	1,910,021.93	

The amount for the multi-year variable remuneration listed in the table above represents the fair value at the time of granting (in accordance with IFRS 2). As in the previous year, Board members did not receive any loans or advances in the 2019 financial year.

In the 2019 financial year, Dr Dierk Paskert and Dr Christoph Husmann were granted 112,070 SARs each from SOP 2019 with a fair value of TEUR 316 at the time the option was granted. The expense for share option programmes recorded in the 2019 financial year amounts to TEUR 845 for Dr Dierk Paskert and TEUR 883 for Dr Christoph Husmann.

Management Board remuneration in accordance with the German Corporate Governance Code

In accordance with section 4.2.5, appendix tables 1 and 2 (benefits granted and received) of the German Corporate Governance Code (GCGC), the two tables below disclose the benefits granted by and received from Encavis AG. The basic remuneration and fringe benefits are consistent with the disclosures as per section 314(1), no. 6a, of the German Commercial Code (HGB).

Benefits granted (all amounts in EUR)	Dr Dierk Paskert Chairman of the Management Board Joining date: 01.09.2017			
	2018	2019	2019 (Min)	2019 (Max)
Fixed salary	400,000.00	400,000.00	400,000.00	400,000.00
Fringe benefits	59,370.93	30,893.02	30,893.02	30,893.02
Total	**459,370.93**	**430,893.02**	**430,893.02**	**430,893.02**
One-year variable remuneration	375,000.00	500,000.00	0.00	500,000.00
Multi-year variable remuneration				
SOP 2018	136,875.00	-	-	-
SOP 2019	-	316,037.00	0.00	670,739.00
Total	**511,875.00**	**816,037.00**	**0.00**	**1,170,739.00**
Contributions	-	-	-	-
Total remuneration	**971,245.93**	**1,246,930.02**	**430,893.02**	**1,601,632.02**

Benefits granted (all amounts in EUR)	Dr Christoph Husmann Management Board member Joining date: 01.10.2014			
	2018	2019	2019 (Min)	2019 (Max)
Fixed salary	400,000.00	400,000.00	400,000.00	400,000.00
Fringe benefits	26,901.00	27,452.20	27,452.20	27,452.20
Total	**426,901.00**	**427,452.20**	**427,452.20**	**427,452.20**
One-year variable remuneration	375,000.00	500,000.00	0.00	500,000.00
Multi-year variable remuneration				
SOP 2018	136,875.00	-	-	-
SOP 2019	-	316,037.00	0.00	670,739.00
Total	**511,875.00**	**816,037.00**	**0.00**	**1,170,739.00**
Contributions	-	-	-	-
Total remuneration	**938,776.00**	**1,243,489.20**	427,452.20	**1,598,191.20**

Benefits received (all amounts in EUR)	Dr Dierk Paskert Chairman of the Management Board		Dr. Christoph Husmann	
	2019	2018	2019	2018
Fixed salary	400,000.00	400,000.00	400,000.00	400,000.00
Fringe benefits	30,893.02	59,370.93	27,452.20	26,901.00
Total	**430,893.02**	**459,370.93**	**427,452.20**	**426,901.00**
One-year variable remuneration	375,000.00	119,416.67	375,000.00	340,000.00
Multi-year variable remuneration				
SOP 2012	-	-	522,000.00	-
SOP 2017	-	-	-	-
Total	**375,000.00**	**119,416.67**	**897,000.00**	**340,000.00**
Contributions	-	-	-	-
Total remuneration	**805,893.02**	**578,787.60**	**1,324,452.20**	**766,901.00**

Supervisory Board remuneration

Since 2018, Supervisory Board remuneration has no longer been determined by resolution of the Annual General Meeting; instead it is set out in the Articles of Association as fixed remuneration, whereby membership in committees should be taken into account to increase remuneration. The members of the Supervisory Board and its committees receive an attendance fee of EUR 1,000 for each Supervisory Board and committee meeting they attend. For multiple meetings of the Supervisory Board and/or its committees on one calendar day, the attendance fee will be paid only once. The chairperson of the Supervisory Board receives a fixed salary of EUR 50,000, and the deputy chairman receives EUR 37,500. All other Supervisory Board members are entitled to a fixed salary in the amount of EUR 25,000. Additionally, the committee chairs receive remuneration of EUR 15,000 each and other members of these committees receive EUR 10,000.

Total remuneration recorded for the Supervisory Board amounts to TEUR 389 for the financial year. The amounts are based on the remuneration rules described above. Remuneration for the personnel committee and for the audit committee is included in the total remuneration for Supervisory Board.

In EUR	Supervisory Board remuneration		Remuneration for commitee participation		Total	
	2019	2018	2019	2018	2019	2018
Dr Manfred Krüper	54,000	54,000	28,000	29,000	82,000	83,000
Alexander Stuhlmann	41,500	41,500	28,000	29,000	69,500	70,500
Dr Cornelius Liedtke	29,000	29,000	-	-	29,000	29,000
Albert Büll	29,000	29,000	12,000	12,000	41,000	41,000
Professor Fritz Vahrenholt	28,000	29,000	23,000	24,000	51,000	53,000
Christine Scheel	29,000	29,000	-	-	29,000	29,000
Peter Heidecker	29,000	28,000	-	-	29,000	28,000
Dr Henning Kreke	29,000	28,000	-	-	29,000	28,000
Dr Marcus Schenck*	18,625	-	-	-	18,625	-
Professor Klaus-Dieter Maubach	10,375	28,000	-	-	10,375	28,000
Total	**297,500**	**295,500**	**91,000**	**94,000**	**388,500**	**389,500**

* Remuneration presented pro rata.

Other disclosures

Disclosure of barriers to takeovers pursuant to section 289a, paragraph 1, and section 315a, paragraph 1, of the HGB

- As of the reporting date of 31 December 2019, the subscribed capital of the company amounted to EUR 137,039,147.00 (one hundred thirty-seven million thirty-nine thousand one hundred forty-seven), divided into 137,039,147 no-par-value shares. The shares are issued in bearer form.
- There are no restrictions on voting rights or transferability.
- The following shareholders held equity carrying more than 10 % of voting rights as of the balance sheet date:

  Pool of AMCO Service GmbH (Büll family), Hamburg, Germany, and Dr. Liedtke Vermögensverwaltung GmbH, Hamburg, Germany.
- In the event that a person who was not an Encavis AG shareholder subject to notification in accordance with section 21 of the German Securities Trading Act (WpHG) on 14 November 2014 acquires more than 50 % of the voting rights in Encavis AG, Gothaer Lebensversicherung Aktiengesellschaft has the extraordinary right to terminate the mezzanine capital contract concluded on 14 November 2014. This right of termination entitles Gothaer to claim repayment from Encavis AG. The mezzanine capital drawn as of 31 December 2019 amounted to TEUR 150,000.
- There are no special-rights shares.
- There are no limits of any kind of voting rights.
- Management Board members are appointed and dismissed in accordance with the provisions of section 84 et seq. of the German Stock Corporation Act (*Aktiengesetz* – AktG).
- Any amendments to the Articles of Association require a resolution by the Annual General Meeting. The power to make editorial changes has been granted to the extent specified in the Articles of Association.
- Authority granted to the Management Board by the Annual General Meeting in relation to increasing the share capital and issuing shares is set out in sections 4 and 6 of the Articles of Association. Please refer to the detailed information on shareholders' equity provided in the notes for further information.

Key features of the internal control system for the accounting process

The Encavis AG Management Board is responsible for preparing the annual financial statements and management report for Encavis AG in accordance with the provisions of the German Commercial Code (HGB) and the German Stock

Corporation Act (AktG). In addition, the consolidated financial statements are prepared according to International Financial Reporting Standards (IFRS). German Accounting Standard 20 (GAS 20) is applied to the consolidated management report.

The Management Board has established an appropriate internal control system in order to safeguard the accuracy and completeness of the financial reports, including the integrity of the accounting system.

The internal control system has been designed to ensure the prompt, uniform and accurate recording in accounts of all business processes and transactions, as well as to guarantee compliance with statutory requirements and financial accounting regulations. Any amendments to legislation, the accounting standards and other official announcements are continually analysed for their implications for the individual and consolidated financial statements. The internal control system is also based on a number of control measures embedded in the process. These process-integrated control measures include organisational safeguards, ongoing automatic measures (segregation of duties, access restrictions, organisational policies and procedures such as powers of representation) as well as control mechanisms integrated into workflows. In addition, non-process-based control measures guarantee the effectiveness of the internal control system.

Accounting for the majority of the fully consolidated companies and the consolidation procedures are centralised. Automated controls are monitored by staff and complemented by manual checks. A standard consolidation system is applied to consolidation procedures.

All staff involved in accounting processes receive regular training.

The Supervisory Board of Encavis AG is responsible for regularly reviewing the effectiveness of the internal control and monitoring systems and receives regular reports from the Management Board. In this context, an auditing firm was tasked with auditing the internal controlling and monitoring systems in the 2019 financial year regarding the processes for maintaining insider lists in accordance with the WpHG and for entertainment costs. A report detailing the outcome of the audit was submitted to the Management Board and Supervisory Board.

Opportunities and risks

Risk and opportunity management system

Risk and opportunity management is an essential component of all planning, controlling and reporting systems in the individual companies and at Group level and is a central element of reporting. It comprises the systematic identification, evaluation, control, documentation and monitoring of both risks and opportunities which are controlled by a Group-wide risk management system. However, the effects of opportunities and risks are not offset against each other. The risk management system enables Group management to act and intervene quickly and effectively to take timely measures to minimise risks and to exploit opportunities for the benefit of the Group.

The objectives and strategies of the risk and opportunity management system are:

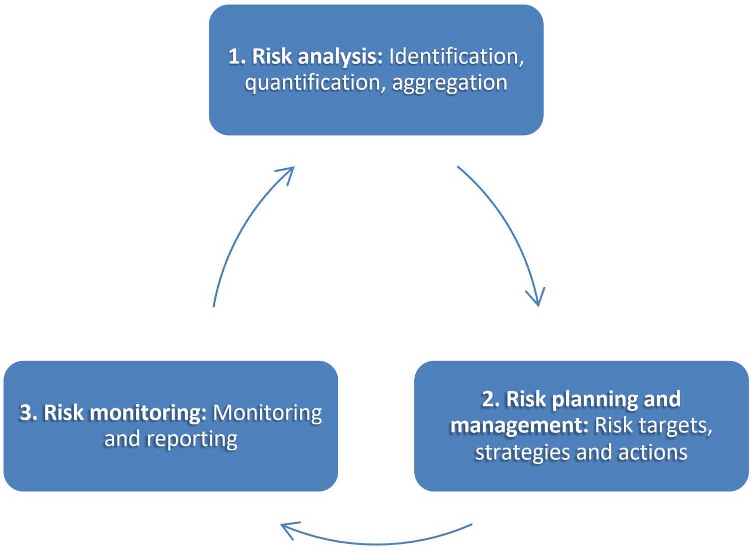
- To meet legal and regulatory requirements
- To ensure the continued existence of the Encavis Group by means of early, sustainable and transparent identification of overall risks
- To protect or increase the company’s value through the holistic and active management of all risks and opportunities that could impair the achievement of the Group’s commercial goals
- To create added value by taking appropriate account not only of return but also of risks in relevant decisions and processes, including investment decisions, risk capital allocations and corporate planning

Organisation of the risk and opportunity management system

Overall responsibility for monitoring and controlling the total risk of the Group is borne by the Management Board of Encavis. It established rules and minimum standards and thus decides on the framework of risk management an the superordinate risk management strategy of the Encavis Group.

The company's proactive and efficient management of risks and opportunities is based on transparent, intelligible nomenclature as well as timely and targeted communication. Standardised communication across all divisions has been set out to ensure that pertinent information is forwarded both to the Management Board (decision maker) as well as the risk manager and/or the risk owner.

Risk management at Encavis is to be understood as an iterative process. This can be illustrated as follows:



The risk manager is responsible for the implementation, further development and coordination of the framework for risk and opportunity management, and is supported in this by the risk owners. The risk owners are the heads of the following areas of Encavis AG with Group-wide responsibility: Tax, Investments, Group Accounting, Accounting, Controlling, Project Finance, Corporate Finance & Treasury, IR/PR, Legal – Corporate & Compliance, Legal – Energy & Investments, Operations/Process Management/IT and HR. The risk owners are responsible for identifying any risks at an early stage, assessing them adequately and managing them in accordance with corporate guidelines. The risk manager reports to the chief financial officer and is responsible for implementing the risk management system and reporting the Group's risk exposures to the Encavis AG Management Board. Additionally, the Management Board reports to the Supervisory Board about the risk situation of the Group.

Risk and opportunity management is a continuous process and integrated into all operational procedures. Risks and opportunities – defined as having a negative or positive impact on corporate goals or at least one of the general project targets of time, costs, scope or quality – are reported at least annually as well as for all significant decisions. The risk exposures are also monitored between the quarterly reporting dates. Any material changes in risk exposure are reported to the Management Board immediately.

Risk assessment

Risks are presented gross, and a period of 12 months is generally considered to be the period during which the risk arises. However, this may extend beyond this period in individual cases for longer-term significant risks. Identified risks are evaluated based on their probability of occurrence and effect and assigned to risk classes (high, medium, low) using the combination (multiplication) of the two factors. Both probability of occurrence and effect are assessed a score on a scale from 1 (very low) to 10 (very high). The scores for probability and impact are then multiplied. which results in a risk index ranging from 1 to 100. For this purpose, the evaluation of an effect is associated with the estimated cost or income loss that would occur if the corresponding risk were to arise. Risks with a rating of up to 19 points are classified as "low risk". Medium risks are those with a score of 20 to 50 points, and risks assessed scores from 51 to 100 are classified as high risks.

Risk class	Thresholds for risk assessment
Low	1
Medium	20
High	51

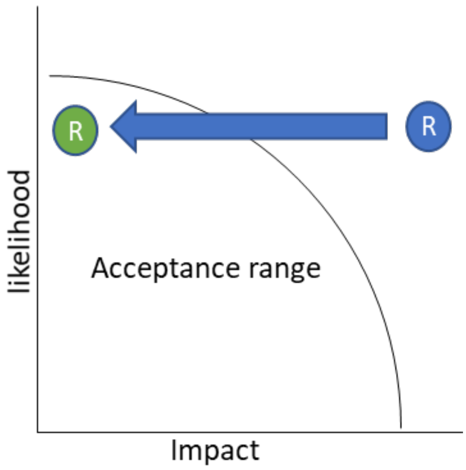
Particular attention is paid to risks classified as “fact”, “high” or “medium”, with strategies focusing on managing the risk(s) in order that these risks are in a lower-middle range within the net approach. Additional classification of inventory and growth risks have been introduced to assess the impact of the identified risk on either existing business operations or the future growth prospects of the Encavis Group. Inventory risks are assessed in terms of probability of occurrence and impact. Growth risks are only assessed in terms of probability of occurrence because such risks have no influence on the existing business of the Encavis Group.

Risk actions

As part of managing risks through appropriate instruments, both active as well as passive measures are available (“risk strategies”). Insofar as possible, significant risks are to be brought into acceptable ranges in the optimal way with regard to costs. This is generally achieved through a mix of the measures and instruments described in the following.

Using active measures involves a direct effect on the probability of occurrence and/or the scope of impact of the risk. This is comprised of the following steps:

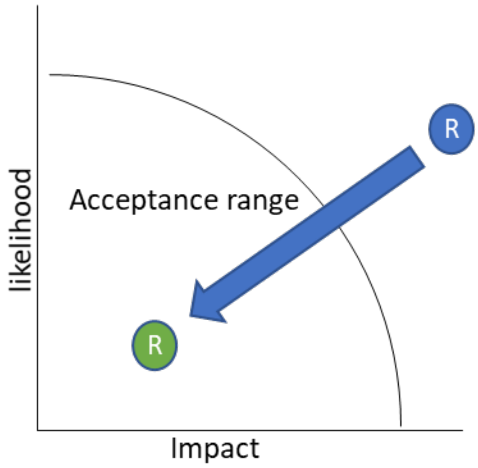
a) Avoidance: By avoiding activities in certain areas of projects, it can be avoided that an activity leading to risk is ever carried out.



For example, possible ways to avoid risk are:

- ✓ Foregoing investments in politically unstable countries.
- ✓ Using only tried-and-tested technology.

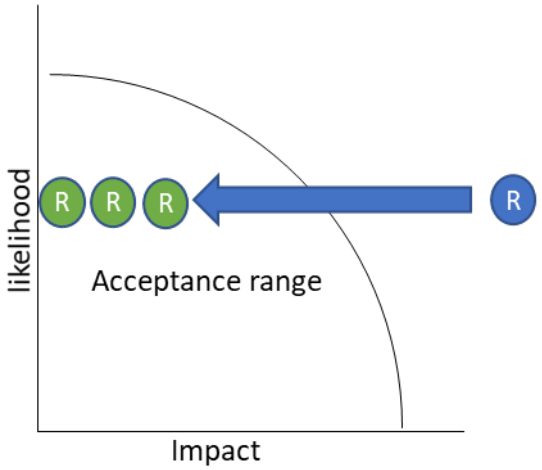
b) Mitigation: Risks are still taken, but are secured to a certain extent. This is reflected in a reduced probability and scope of impact.



For example, possible ways to mitigate risk are:

- ✓ Reduction of interest risk through the use of swaps.
- ✓ Projects to increase the stability of the IT system.

c) Diversification: This involves attempting to limit the risk by spreading the risk around or actively passing on losses to other parties.



For example, possible ways to diversify risk are:

- ✓ Energy production in various countries.
- ✓ Use of different generation technologies (wind, water, solar, etc.).
- ✓ Acquisition of parks from various project companies.

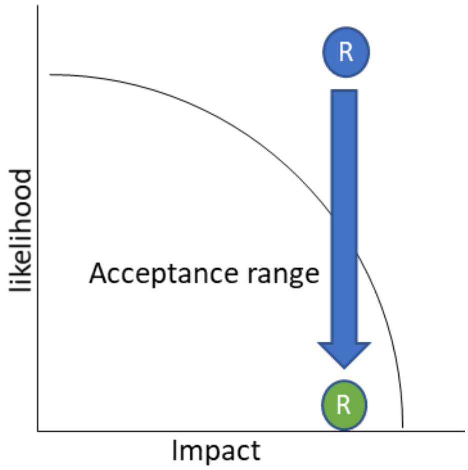
Unlike active measures, passive measure do not impact the risk structures.

The objective of these measures is to be able to react to risks at short notice, without delay and quickly with sufficient resources and an appropriate level of potential effectiveness.

Passive measures include primarily the following:

d) Independent risk taking: This involves taking and bearing risks in a conscious manner. This can be done, for example, by taking precautionary measures or forming reserves.

e) Risk transfer: By concluding corresponding agreements/contracts, the risk can be transferred to another party. In addition to insurance, this also includes the use of financial derivatives and/or transferring risks to customers and suppliers.



For example, possible ways to transfer risk are:

- ✓ Sale of receivables without recourse.
- ✓ Insurance.

Risk management

The Encavis Group has developed a variety of risk mitigation and risk avoidance strategies with appropriate measures. The Group's focus is still primarily on existing installations in order to minimise the risks relating to project planning. However, the company increasingly pursues projects that stipulate involvement at an earlier phase of the project, thus representing development risk for the company. This means that Encavis assumes project risks in an early phase on an individual-case basis, for example the monetary protection of project rights which, if the project does not materialise, would be considered sunk costs. However, Encavis always has the option to withdraw from the project during the individual project phases of the development partnership. The contract are structured accordingly, so that individual phases are subject to risks of the project possible not being pursued, but these are limited in nature. There are manufacturer's warranties for the unlikely event of a reduction in performance and appropriate insurance policies are in place to cover any loss of earnings. In addition, project reserves which can be used to replace components have been built up from current cash flows in the solar parks and wind parks. Online monitoring in real time minimises downtimes. Monitoring is carried out either by the Encavis Group or external partners. To minimise financing risks, the Group ensures that the financing banks do not have any recourse to companies other than the respective borrowers. Therefore, as a rule, only non-recourse financing is taken out, whereby the collateral is limited to the installation in question. Meteorological risks are taken into account in the form of haircuts in the calculation for wind parks, as levels of wind may be subject to considerable annual fluctuations. Independent yield assessments are also commissioned in many cases. Interest rate swaps may be used in order to hedge interest rate risks because they allow reliable calculation and planning.

Risk control

The objective of Encavis's approach is holistic risk management, i.e. it becomes an integral part of everyday life at all levels and in all areas of the company. All employees are encouraged to actively engage with the topic of risk management. Each member of staff can and should report any newly identified risks, changes or revised estimates directly to the relevant risk owner. In addition, at least once per year, risk management meetings take place in the form of individual discussions or interviews between the respective risk owner and the risk manager. In preparation for these meetings, all risk owners review the risk assessment of their area/risks and formulate and present any appropriate measures they would like to suggest.

If necessary, the entire risk inventory is presented at the end of the year for discussion of any revision of individual risk assessments and classifications as well as any changes to the previous year.

Information regarding material changes to risk

Encavis identifies, analyses, assesses and monitors the relevant risks for the company on an ongoing and comprehensive basis. Material risks are listed, explained and classified in the following risk report. In addition, any measures and strategies employed by the company to avoid or mitigate these risks are also presented.

No new risk categories were identified in the 2019 financial year compared with the previous year.

Opportunity management

Systematic management of risks is one side. As part of opportunity and risk management, on the other side, the opportunities for securing long-term corporate success are recorded and exploited by means of a holistic opportunity management system. Opportunities are discussed and recorded at the same time as risks and, following their assessment, specific measures are decided upon for taking advantage of these opportunities. In the context of opportunity management, a distinction is made between two types of opportunity:

- External opportunities which have causes we are unable to influence, e.g. lowering of a tax
- Internal opportunities which arise in our company, e.g. as a result of achieving synergies

The opportunities identified within the Encavis Group can be found in the opportunity report.

Risk report

The risk exposures of the Encavis Group and Encavis AG listed below have been assessed and classified according to their probability of occurrence and impact within the context of the risk management process.

Risk class “growth risk”

Risk exposures within this class may affect the future growth of the Encavis Group.

Risk class “fact”

The risks in this class have already occurred but do not necessarily have any major impact on the Encavis Group.

Risk class – “high”

Risks in this class are highly likely to occur and have a major impact on the Encavis Group and Encavis AG.

Risk class “medium”

Risks in this class are highly likely to occur but are unlikely to have a major impact, or their probability of occurrence is low, but they are likely to have a major impact on the Encavis Group and Encavis AG.

Risk class “low”

Risks in this class have a low probability of occurrence and are unlikely to have a major impact on the Encavis Group and Encavis AG.

Disclosure of material risks

In the following, we discuss the individual risk classes and the significant individual risks within these classes. Encavis identifies, analyses, assesses and monitors the relevant risks for the company on an ongoing and comprehensive basis. In addition, any measures and strategies employed by the company to avoid or mitigate these risks are also presented and illustrated.

Financial risks

Encavis is exposed to various financial risks (e.g. interest risks) and, due to its comprehensive business relationships, also credit risks (e.g. counterparty default risks under project contacts such as PPAs or EPC agreements).

Project financing risk: Growth risk “medium probability of occurrence”

The construction and commissioning of solar parks and wind parks are associated with high investment costs. These are financed through borrowing on project-related loans which, Depending on the geographic region and the level of guaranteed remuneration for the electricity purchase, this can make up as much as 80 % of the total investment. Restrictions on appropriate loans and stricter covenant requirements by the lending banks could make financing any future projects much more difficult if not impossible. As a result, there would be fewer investment opportunities for the Encavis Group, which would significantly slow down its potential growth.

The Encavis Group therefore maintains direct and ongoing contact with a number of European financial institutions that have been in this business for many years. Dividing the funding requirements for individual Group projects between different banks means that the company is not dependent on any particular institution. At the same time, the Group’s 269 solar parks and wind parks are proof that the investment concept for projects is economically sustainable.

The continued low-interest environment in Europe, the lack of alternative investments with comparable risk–opportunity profiles and corresponding competition for these projects among the financial institutions currently offer the company a position from which to secure project financing at favourable conditions. Moreover, the Encavis Group has been able to renegotiate existing project finance deals and secure better terms from the banks.

Additionally, the Encavis Group continues to constantly monitor compliance with the covenants for all existing as well as any new project funding. The company also examines any available alternative financing options.

Risks associated with the Group’s capital procurement: Growth risk “low probability of occurrence”

Investment in solar and wind installations for the portfolio of the Encavis Group are financed on a project basis through borrowing as well as assets from the Group’s investment resources. Any inability of the Encavis Group to make sufficient resources available in future would have a negative impact on the further growth of the company.

These investment resources have been raised via smaller capital increases of Encavis AG in the past. In 2014, they were supplemented with EUR 150 million from a strategic partnership with Gothaer Versicherungen from successfully placing multiple debenture bonds, including the first-time placement of a Green Schuldschein bond in September 2018 with a volume of EUR 50 million. In 2019 as well, Encavis AG successfully issued another debenture bond in the form of a registered bond with a total volume of EUR 60 million. Additionally, Encavis AG realised the increase in the hybrid convertible bond through the issue of new bonds with a total nominal value of EUR 53 million, which is recognised as an equity measure.

However, using borrowing purely for growth capital and without corresponding measures would lead to a lowering of the Encavis Group equity ratio due to the additional leverage at project level through the corresponding increase in financial liabilities at Group level. Safeguarding financial stability is a top priority for Encavis. The Encavis Group has therefore deliberately refrained from expanding or entering into any partnerships similar to that with Gothaer Versicherungen through further mezzanine capital.

As an independent producer of power from renewable sources operating in Europe, Encavis is the biggest listed solar and wind energy company in Germany operating exclusively in the solar and wind sectors, measured in terms of market capitalisation. Due to the global climate debate, more and more investors are opting for sustainable investment opportunities. Encavis now enjoys a wider selection of available options to finance further growth, as demonstrated by issuing a hybrid convertible bond in 2017 and the successful increase of this bond in 2019 for instance. The capital increase from authorised capital carried out at the end of 2019 shows that Encavis is also open to alternative forms of financing for the further growth of the company. Encavis also has the option of another capital increase in the future, especially for inorganic growth, for example, for which corresponding authorised capital is to be created and made available.

The current size of the Encavis Group makes any possible placements to raise capital in recent years (2017–2020) more certain due to greater visibility, a greater balance sheet total, the compliance with the target equity ratio, the market capitalisation and the listing in the SDAX index of the German stock exchange, among others.

The conditions on the borrowing market are largely dependent on the creditworthiness of Encavis as well as the underlying rating issued by international ratings agencies. The issuer rating awarded by Scope in the spring of 2019 and confirmed in March 2020 in the investment-grade range (BBB–) has led Encavis to remain confident that it will continue to be able to successfully generate liquid funds for the financing of further growth.

Currency risk: Risk class "medium"
Encavis is also active outside of the European Union and operates ground-mounted photovoltaic installations with a generation capacity of approximately 127 MW in the United Kingdom and wind parks with a generation capacity of 120 MW in Denmark. Investments and revenue denominated in foreign currencies are subject to exchange rate fluctuations as soon as one currency is exchanged for another. The British pound lost value against the euro following the decision made by the United Kingdom in June 2016 to leave the European Union. Encavis had hedged its revenue from the UK solar parks up until the fourth quarter of 2020 against exchange rate fluctuations even before the referendum. Further hedging transactions have also been carried out for the period thereafter. Revenue from the Danish wind parks has not been hedged, however, since the Danish krone is subject to the European exchange rate mechanism (ERM II) and has therefore been tied to the euro since 1 January 1999.

In addition, the Asset Management segment of the Encavis Group is engaged with two wind parks in the United Kingdom and one in Sweden, which is also outside the eurozone. No foreign currency risks arise from these engagements since Encavis does not own the installations but only manages them for third parties.

Encavis proactively minimises the risk by continuously monitoring the performance of the British pound and the Danish krone and being prepared to enter into hedging arrangements as and when required, as successfully done in the lead-up to the Brexit decision.

Risks from existing covenant agreements: Risk class "low"
The mezzanine capital contract with Gothaer Versicherungen from November 2014 contains standard covenants on compliance with defined financial ratios. There is always the risk of a breach of these covenants, which, in principle, would entitle the holder to immediately call in the mezzanine capital paid out. This would result in a substantial burden on the financial performance, financial position and net assets of Encavis.

In addition, the solar and wind park project companies normally raise project funding for the development and construction of their installation. These contracts also contain covenants that must be complied with by the relevant project company. Encavis mitigates financial risk for the Group by ensuring that financing banks at project company level do not have access to any companies other than the borrower. For this reason, financing arrangements are generally on a non-recourse basis, in which the collateral for the bank is limited to the park in question. A violation of the covenants contained in these contracts could result in the early termination of the respective loan agreement by the financing bank, which would in turn cause the remainder of the borrowed amount to become due immediately. In order to minimise this risk, Encavis monitors all existing agreements and, in particular, compliance with any covenants they contain. This enables the company to recognise any undesirable developments at an early stage and manage them proactively before any contractually agreed covenants are breached.

Interest rate risk: Risk class "low"
The financing strategy of the Encavis Group for the acquisition of suitable wind and solar parks includes a borrowing portion in the form of loans, but the consolidated equity ratio of the Encavis Group should not fall below the target figure of 24 % (since the application of IFRS 16; previously 25 %). The solar parks and wind parks are financed with loans at both fixed and variable interest rates with maturities of up to 19 years. The company's calculations factor in substantial interest rises once fixed-interest periods expire. Any rises following the expiry of fixed-interest periods above and beyond those allowed for in the calculations may reduce the profitability of some solar parks or wind parks. The company does

consider appropriate interest rate hedging instruments, known as interest rate swaps, for variable-rate loans, as they allow reliable calculation and planning in the long term.

Working capital and guaranteed lines of credit in place with standard market interest rates and maturities are also in place. The currently low levels of interest rates contribute to an overall very moderate interest rate risk. According to the announcement by the European Central Bank, monetary policy in the eurozone will remain expansive for the time being.

Risks arising from financial instruments: Risk class “low”

For the first time in September 2017, Encavis issued a subordinate bond in the amount of EUR 97.3 million with time-limited conversion rights. In 2019, the bond was increased to EUR 150.3 million at the same conditions. There is no fixed deadline for repayment of the hybrid convertible bond. The hybrid convertible bond can be converted into fully paid-in new and/or existing ordinary bearer shares in the company by the tenth trading day before 13 September 2023 (the “first redemption date”). The coupon for the hybrid convertible bond will be 5.25 % p.a. until the first redemption date. After the first redemption date, the interest rate for the hybrid convertible bond will be fixed at 1,100 basis points above the five-year euro swap rate. This rate will be reset every five years. The interest is payable every six months in arrears. There is therefore a risk that interest rates will change after the first redemption date.

Risks arising from negative interest: Risk class “fact”

The solar and wind park project companies have primarily entered into long-term non-recourse project financing deals with banks. Building up a debt servicing reserve is normally agreed as part of the respective project financing to ensure that debts can still be serviced even if there is insufficient income. Debt servicing reserves usually amount to the sums required to service debts for the next six months. The negative interest rates on deposits set by the European Central Bank mean that the banks financing the projects try to pass on these negative deposit interest rates to the project company’s debt servicing reserves. This entails the risk that any negative interest payable would result in a burden on the financial performance, financial position and net assets of the project companies and ultimately the Encavis Group. Encavis undergoes relevant negotiations with the banks for the granting of allowances for which no negative interest rates are demanded. Encavis is currently negotiating with banks to reduce these debt servicing reserves or to replace them with additional credit facilities for the project companies in the same amount which, if necessary, can be drawn on to cover debt servicing. For example, in the financing for the solar park in Talayuela concluded in 2019, only one credit facility was included in the overall financing from the outset.

Tax risk: Risk class “medium”

Due to the various entities subject to taxes within the individual national markets (tax groups and service relationships within the Group) as well as different legal forms within the Encavis Group, the tax structure is to a certain extent very complex. In particular, restrictions on the tax deductibility of interest expenses, the taxation of dividends and minimum taxation in the event of loss offsetting according to the tax legislation in the various countries are of material relevance.

For the acquisition of new projects, tax risks are assessed by performing tax due diligence and an investment evaluation as well as, for foreign transactions, by involving experts in the respective national tax law.

In international tax law, risks are primarily dependent upon the transfer prices within the Group. Intra-Group services provided to subsidiaries are rendered in the form of services or through the provision of loans. Encavis AG has agreed target figures with experts in transfer pricing for the corresponding invoicing processes. Even though the company audit conducted in 2019 did not result in any findings, there is a risk – at least for the years from 2016 – of a partial non-recognition of transfer prices in the Encavis Group by the German or foreign tax authorities. Because this would in fact concern merely a shift between the individual national markets, the tax risk is limited, however.

Even if the company is of the opinion that tax risks have been taken into account comprehensively with the tax provisions, taxes may become payable as a result of future external audits. The Group ensures that all relevant tax-related issues (especially due to the initiatives regarding BEPS/ATAD) are regularly discussed with the tax advisers. There were no findings relating to subsequent years from the company audit carried out in 2019, so no adjustments due to findings of the tax authorities need to be taken into account.

Strategic risks

Risks related to investments and investment opportunities: Growth risk “low probability of occurrence”

Being in a position to identify and secure suitable investment opportunities in solar parks and wind parks (or similar operating companies) and to effectively integrate newly acquired companies is critical for the success of the Encavis Group. The company is planning to acquire additional suitable solar parks and wind parks as part of its sustainable growth strategy.

Due to the relatively low entry barriers, it cannot be excluded that new rivals will enter the market and compete with Encavis for investment opportunities.

Encavis’ many years of experience and growing financial strength result in a strong competitive position for the Encavis Group from which to be able to identify and realise investments in accordance with the continued growth strategy of Encavis, even in light of potentially growing competition.

Moreover, entering into a strategic partnership with the British project developer Solarcentury in 2017 and additional partnerships for the establishment of a project pipeline provided Encavis with more predictable growth opportunities.

Dependence on national programmes to subsidise renewable energy: Risk class “low”

The success of generating solar and wind power is generally closely linked to national support programmes for promoting renewable energy. The greatest threat for the Encavis business model is that of retroactive interventions, which would have a negative impact on the profitability of existing investments. For the generation of electricity on the basis of renewable energy sources, there is a danger that governments reduce subsidies, for instance due to national budget deficits. In Spain, for example, subsidy rates for renewable energies underwent massive cuts in 2014, retroactive to 2013, even for existing installations. Italy, too, saw reductions in 2014 through various changes in legislation and ordinances which have already led to decreases in income and which will lead to further decreases over the course of the operational term.

Based on the assessment of an external law firm hired for this purpose that would represent us in the event of a lawsuit against Italy, and which represents a large number of European plaintiffs in the arbitration proceedings against Italy and Spain, among others, we assume that it is highly probably that we will receive compensation for the lost income.

In addition, the increasing establishment of tendering processes may have an impact on the profitability and realisability of projects in the sector of renewable energies, among other things due to lower subsidies or if tenders are not won. By contrast, any forward-looking adjustments of support mechanisms or subsidy levels can be factored into the investment calculations of the Encavis Group to their full extent and are therefore fully reflected in the purchase prices offered.

The dependence of renewable energy sources on public support has generally continued to decline in recent years. Technological advances, experience gained and economies of scale have all contributed towards a marked reduction in prices, especially in the photovoltaic and wind energy sector. Solar and wind energy have already achieved grid parity in many regions and no longer need public subsidies. The Talayuela and Cabrera projects in Spain are examples of this which are currently under construction and will commence operations by the end of 2020. These projects do not feature any subsidies and are realised exclusively on the basis of expected future electricity prices. To reduce the price risk, long-term power purchase agreements have been concluded with companies such as Amazon. Public support, for instance in the form of feed-in tariffs, has continued to decline in the Encavis Group’s European core regions over the past few years. In contrast, production costs also fell significantly during the same period. Experts expect further cost savings in the coming years, and new technologies such as battery storage could enable the electricity produced to be marketed even more flexibly.

National and international climate targets, such as the one agreed at the UN Climate Change Conference in Paris in December 2015 for example, will not be achieved without the further expansion of renewable energy sources.

Encavis therefore remains positive that renewable energy will continue to be a global megatrend for years to come. Geographic diversification of the current portfolio across several countries has generally reduced any potential negative impact on the financial performance, financial position and net assets of the Encavis Group from any amendments to national legislation, especially retrospective restatements.

Additionally, more and more companies are securing access and prices for green electricity over the long term. While the proportion of power purchased via PPAs in 2017 was still approximately 5.6 GW, this had already more than doubled in 2018 to 12.8 GW. This figure was around 18.6 GW in 2019.

Encavis, too, constantly examines alternative ways of marketing its projects in order to further reduce dependence on national renewable energy subsidy programmes. One example is entering into long-term power purchase agreements with creditworthy customers to sell the electricity generated. Encavis has already successfully positioned itself in this market with the new Talayuela and Cabrera solar parks currently under construction.

With 500 MW of generation capacity, Spain is set to become the largest location in the solar segment of Encavis. In December 2019, Encavis concluded a long-term power purchase agreement for a period of ten years with Amazon. In the direct vicinity of Seville, the company's second-largest solar park with a capacity of some 200 MW is being constructed. The installation is expected to be connected to the grid at the end of the third quarter of 2020. Amazon will be provided with a capacity of 149 MW via PPA, and 50 MW of additional capacity will be freely sold at market prices. Encavis did not sign the first long-term power purchase agreement (PPA) over ten years for the Spanish Talayuela solar park (300-MW capacity) until September 2019. The purchaser is a European energy company.

Legal risks: Risk class "low"

Business operations necessitate the assumption of legal risks from court or arbitration proceedings.

The Encavis Group companies are exposed to risks from current or possible future legal disputes. Such legal disputes may arise from ordinary activities, in particular from the assertion of claims resulting from failures relating to performance or delivery, or from payment disputes.

Encavis recognises provisions for litigation risks when an obligation is likely to arise and a reasonable estimate of the sum can be made. An actual claim may exceed the deferred amount under certain circumstances.

However, legal risks may also arise from infringements of compliance guidelines by individual employees or from infringements other legal requirements arise. With the introduction of the anonymous whistle-blower system in accordance with the requirements of the German Corporate Governance Code, which applies not only to internal purposes but also to external business partners, any irregularities, in particular violations of applicable law and internal directives and processes, can be reported and tracked anonymously.

The increased risk related to the introduction and fulfilment of the obligations arising from the new General Data Protection Regulation (GDPR) in 2018 is also present in the Encavis Group and is continuously monitored with the help of an externally appointed data protection officer.

Economic and industry risk: Risk class "low"

The Group is focused on the development of the renewable energy sub-market, which is one of the strong global growth industries. Operating solar parks and wind parks is only subject to minor economic fluctuations as a result of legally guaranteed feed-in tariffs (FIT), long-term power purchase agreements (PPAs) or renewable purchase obligations (RPO), as set out in the German Renewable Energy Act (EEG) for instance.

Weak economic development could even lead to an increase in the number of solar parks and wind installations on offer, as companies and private investors may need to sell assets due to economic reasons or liquidity shortages. What is more, weak economic development is often accompanied by lower interest rates, which would result in lowered financing costs on a Group and project level.

Nevertheless, the Group continuously monitors the relevant markets in order to respond to any arising economic and industry risks appropriately and at an early stage. For this purpose, the company subscribes to various trade publications, attends conferences, symposiums and trade shows and is a member of industry associations. In addition, the company cultivates direct contacts and participates in regular discussions on relevant issues as part of a network of partners, experts and industry representatives.

Operational risks

Sales risks arising from expanding asset management activities: Growth risk “medium probability of occurrence”

Encavis Asset Management AG specialises in services for institutional investors within the Encavis Group. The subsidiary provides institutional and professional investors who wish to invest in the renewable energy sector with structured investment options (e.g. special funds, debt instruments, direct investments). These institutional investors, in particular insurance companies and financial institutions, are subject to specific regulations designed to safeguard the interests of their beneficiaries. Investment options for European insurance companies are further limited by EU directives. The Solvency II directive, for instance, introduces new capital requirements for insurance companies and pension funds. This and other unforeseen amendments of the regulatory framework may reduce the willingness of institutional and professional investors to engage with renewable energies.

This may make it more difficult for the Encavis Group to persuade institutional investors to increase their holdings in (special) funds or invest directly in renewable energy projects. The result of such a development would be a reduction in future revenues from performance-related remuneration and asset management fees in this business segment.

From the perspective of the Encavis Group, the market environment continued to develop in favour of a positive investment climate for institutional investors in the renewable energy sector. Considerable cost reductions for technical components of solar and wind installations have increased the profitability of such investments. Conventional power stations are no longer more profitable and are exposed to political uncertainties. Furthermore, the UN Climate Change Conference in Paris in December 2015 provided the latest evidence that the worldwide growth of renewable energies will continue over the coming years. With growth rates in the double-digit percentage range, the RES market therefore remains an important growth market that is also largely unaffected by economic fluctuations. Sales risks are therefore currently low and Encavis is confident that it will be able to further expand the Asset Management segment as a sustainable third source of income.

Moreover, the company continually optimises its sales activities and constantly works towards a wider spectrum of potential investors, for example to include differently regulated client segments such as insurance companies, pension funds, utility companies, foundations and religious organisations. Further geographical expansion of the activities in this business segment has also been planned and partially realised in the current financial year (e.g. solar parks in the Netherlands and Spain).

Liability or reputation risks from activities in the Asset Management segment: Risk class “low”

Non-compliance with investment criteria when purchasing and, as a result, a performance that is worse than expected for solar parks and wind parks that are managed for institutional investors by Encavis Asset Management AG or poor decisions within the scope of the management of these parks could lead to a liability for Encavis Asset Management AG and thus to a deterioration in the reputation of the Encavis Group.

Such risks are counteracted insofar as clear criteria for investment in the fund are laid down and, if there is a deviation thereof, the relevant investor is asked to make a decision prior to payment of the investment. In addition, Encavis Asset Management AG is appropriately insured for any liability arising from its activities.

Downtimes: Risk class “medium”

Technical faults in the installations or substations can bring solar parks and wind parks to a standstill, or they may be temporarily disconnected from the grid by energy suppliers so that necessary works can be undertaken. This carries the risk of prolonged downtimes if they are not detected early and any technical faults are not repaired in due time.

The Encavis Group can mitigate the risk of downtimes in its solar and wind power plants at an early stage, as the management and monitoring of the installations are undertaken either by the Group itself or by experienced external partners. Online monitoring in real time ensures that technical issues are detected and investigated immediately. Moreover, all installations are insured against the risk of business interruption due to external events.

Meteorological risks (solar): Risk class “medium”

The output of solar parks (ground-mounted systems) depends on meteorological conditions, which may negatively impact the performance. Assessments of expected solar radiation may prove inaccurate and climate changes and pollution could result in predicted weather conditions not occurring or deviating from both existing assessments and the meteorological mean.

Encavis looks to its own experience and external assessments of expected solar radiation as part of the economic efficiency calculation for the acquisition of new solar parks. These assessments are based on long-term historical data on the levels of sunshine and form median values for the forecast. The effects of deviations from these prognoses on the economic efficiency calculation are also tested with sensitivity analyses. In addition, diversification of the current portfolio of solar parks reduces dependence on the meteorological conditions in one region. It must also be considered that, due to changes in climate, the hours of sunshine in several European countries are regularly increasing and are well above the long-term average. This meteorological effect has been observed in recent years and is not factored into the evaluation of the parks.

Meteorological risks (wind): Risk class “medium”
Generally speaking, generation capacity in the Wind Parks segment is subject to greater fluctuations than the solar power sector. Fluctuations in the wind energy sector may be up to 25 % above or below the median value per year. Encavis mitigates the risk by factoring in the greater volatility in the wind segment in the economic efficiency calculation for the acquisition of new (onshore) wind parks in the form of haircuts and/or by simulating worst-case scenarios. Here, too, the Group relies on its own experience and external assessments of expected levels of wind.

However, such fluctuations cannot be completely ruled out, with the resulting risk that the performance of individual wind parks will fall below the values originally planned. Geographic diversification of the current portfolio of wind parks as well as the lower share of individual parks in the Wind Parks segment in the Group’s total revenue makes the associated overall risk acceptable for the Encavis Group.

Risks arising from the project planning/construction of solar parks and wind parks: Risk class “low”
Authorisations, regulatory approval and permissions for both building as well as operating installations for power generation from renewable sources carry considerable risks associated with the planning process of new solar parks and wind parks.

The focus of the core business of the Encavis Group remains unchanged on the operation of solar and wind parks that are either newly constructed or already in operation. Nevertheless, in individual cases, a project may still bear development risks in order secure investment opportunities at an early stage.

In these cases, drawing on the company’s extensive experience in the commercial and technical management of its existing portfolio as well as occasional project developments in the past enables Encavis to identify any potential risks early in the process, even at earlier phases of the project, or to minimise them. In addition, payments for projects in the development phase are only made once certain milestones have been reached.

Risks arising from negative power prices: Risk class “low”
The strong increase in renewable energy suppliers and the establishment of the German electricity market may lead to negative power prices at the energy exchange due to an excess of supply. Negative power prices have become much more common in recent years. As a result of amendments to the EEG and splitting of feed-in tariffs into fair value and market premium, negative power prices are passed on to the project companies. Negative power prices may result in a burden on the financial performance, financial position and net assets of the project companies and the Encavis Group as a whole.

In order to reduce the burden of negative power prices for the individual project companies, the Group is continuing to investigate the possibilities of storing the generated power in the event of negative prices on the energy exchange and is continuously pursuing the battery storage segment as an important strategic fit for increasing the generation of electricity from renewable sources.

Technical risks and reduction of performance: Risk class “low”
The technical risks of permanently installed solar parks are low and restricted to a few key components. Such risks are higher with wind parks, as wear and tear or material fatigue of the moving parts may occur.

The Encavis Group takes particular care in selecting its solar park and wind park partners and in ensuring the quality of the components used and/or installed. All installations undergo an extensive technical due diligence process. Moreover, since Encavis Technical Services GmbH is a wholly owned subsidiary of the Encavis Group and specialises in the technical management of solar parks, it can carry out inspections of the installations as part of the due diligence process. The Group relies on external service providers for wind parks.

As a rule, manufacturer's or general contractor's warranties cover the event of a reduction in performance or breakdown of technical components during the operating phase of an installation. Furthermore, appropriate insurance policies are in place to cover any damages or loss of earnings. The review of existing insurance cover for installations to be acquired is also an integral part of the overall due diligence process that is conducted for new acquisitions.

In addition, project reserves for the solar parks and wind parks are being built up. These can be used to replace components for example. Current cash flows from the parks are used for the project reserves. The amounts saved are based on many years of experience.

Risks arising from investment calculations: Risk class "low"

A detailed economic efficiency calculation of the solar park or wind park in question is carried out before every new investment. Evaluations of the solar parks and wind parks are based on long-term investment plans and the assumption of long-term electricity price developments that are sensitive to any changes in power plant expansion, in capital and operating costs or in income. Changes in any of these factors may cause an installation to become unprofitable, contrary to the original calculation.

Due diligence calculations factor in changes in one or several of these parameters based on carefully conducted sensitivity analyses. Furthermore, plausibility checks are an integral part of the Encavis Group calculation models. Additionally, the company's own valuations and assumptions are compared with the wind or solar forecasts from independent experts. Electricity price forecasts are backed up by the analyses of multiple external providers. The Group's extensive portfolio of installations provides Encavis with many years of experience which are taken into consideration when performing the relevant investment calculations.

Health risks (viral epidemics): Risk class "low"

Viral epidemics that spread around the globe, such as the coronavirus, have no economic impact on the operating activities of the Encavis Group. The wind and solar parks in ten countries in western Europe produce electricity from renewable energy sources predominantly on their own and fully automatically. Due to the impeccable technical condition of the installations, practically no staff are required on-site. Wind and sunshine are not affected by the coronavirus.

In light of the macroeconomic impact of the coronavirus so far, no negative impact is expected for the Encavis Group over the longer term. If the current spread of the coronavirus continues for an extended period or worsens in the coming months, limitations in the on-site maintenance of the solar and wind parks due to individual technicians cannot be excluded; however, these could be replaced by alternative service providers. At the present time, it is not possible to evaluate – and therefore cannot be quantified conclusively – whether the completion of parks in construction phase will be delayed as a whole as a result of illnesses of third parties or interruptions in the supply chains, which would in turn reduce the number of parks available for acquisitions.

Organisational risks

Personnel and organisational risks: Risk class "low"

With regard to personnel, the Encavis Group competes with other companies for qualified technical staff and managers to remain well prepared for future challenges.

To this end, Encavis relies on comprehensive talent management and the continual development of a motivating and family-friendly work environment. In this context, annual appraisal interviews are held with each employee where both their performance in the past year as well as the goal agreements and expectations for the coming year are discussed in detail. In the process, the employee and their supervisor agree on monetary and non-monetary goals as well as measures for their professional development. Half-yearly feedback meetings are now planned for the 2020 financial year, making it possible to adjust goals agreed at the beginning of the year to the actual circumstances during the year. In this way, Encavis actively contributes to the qualification and motivation of its staff and promotes long-term loyalty to the company.

IT risks: Risk class "low"

The business activities of the Encavis Group are characterised by the use and development of information technology. Among other measures, the server landscape was completely reworked. All essential operational processes are supported by IT and mapped with the help of modern software solutions. At the same time, however, the inherent systemic risk rises with increasing complexity and the dependence on the availability and reliability of IT systems.

Encavis continuously optimises its IT to minimise risks. The Group also makes use of professional external service providers so that utilisation of internal resources for ongoing maintenance of the IT system and implementation of new components is kept at an appropriate level. Comprehensive precautions such as firewalls, up-to-date antivirus software, emergency plans and data protection training safeguard the processing of data. In addition, an external data protection officer independently monitors compliance with data protection standards for organisational purposes.

Total risk

An overall assessment of the current risk situation as of the balance sheet date does not show any risks which would jeopardise the Group’s going-concern status. Nor are any risks currently recognisable that might threaten this status in the future. The total risk exposures of the Encavis Group should be considered low.

These risk exposures were constantly identified, analysed and managed by means of a proactive risk management system. The Encavis Group has implemented appropriate risk management measures as and when required.

Opportunity report

Conservative investment strategy

The merger of Capital Stage AG and CHORUS Clean Energy AG in 2016 created the Encavis Group. Under the new name of “Encavis”, successful histories and expertise come together: two independent solar and wind park operators and integrated service providers for renewable energy have been shaping the future together ever since.

Encavis was successful in its efforts to further expand its position as an exchange-listed independent power producer (IPPs). The solar park portfolio alone comprises 187 parks with a total generation capacity of nearly 1,540 MW and is one of the largest portfolios in Europe. On top of that come 82 wind parks, which have a generation capacity of more than 896 MW.

The adoption of the Paris Agreement at the UN Climate Change Conference in 2015, which primarily aims to limit the annual increase in global warming, has driven the end of the use of fossil fuels for energy generation and laid the foundation for a new era of international climate protection. For many years, the continuous development of renewable energy sources has made a significant contribution towards achieving national and global climate protection targets.

The dynamic and growing RES market constantly opens up new chances and opportunities for Encavis. Systematic identification and exploitation of these opportunities, whilst recognising and minimising any potential risks, is the basis for the company’s sustainable growth.

This includes taking advantage of any opportunities that arise internally and, for instance, that will increase the Group’s efficiency and profitability. The foundation for identifying, analysing and successfully exploiting these opportunities is the profile of Encavis Group employees, whose personal qualifications are compared with the job descriptions.

The Encavis Group will continue to primarily focus on ground-mounted PV installations and onshore wind parks in the future and also be active in the Asset Management segment as a service provider for investments in the renewable energy sector. The Group’s business model will remain largely risk-averse. By concentrating on existing installations and turnkey or ready-to-build projects, Encavis benefits not only from an extensive portfolio of solar and wind parks but also from continuing market growth, Encavis makes demands on the quality of the legal certainty and economic stability in the countries where it invests. Encavis currently operates wind and solar parks in the markets of Germany, France, the Netherlands, Austria, the United Kingdom, Denmark, Sweden, Finland, Italy and Spain, and is currently planning to enter the market in Ireland – all countries with an investment-grade rating.

Encavis continues to set great store in the technical components of the parks, their condition and construction, and generally only invests in solar and wind parks that either have a long-term feed-in tariff or otherwise guarantee the sale of the electricity produced via long-term power purchase agreements. The acquisition of the Talayuela solar park in Spain is of outstanding importance in this context and represents a milestone in the company’s history. It also marked Encavis’ successful entry into the growing market for subsidy-free projects on the basis of private-sector power purchase agreements, which can generate returns in the mid to upper single-digit percentage range. An additional milestone was the conclusion of a power purchase agreement with Amazon for another solar project in Spain at the end of 2019.

Opportunities arising from economic growth

The economic environment has little or no direct impact on the Encavis Group portfolio or its business activities, i.e. its financial position, financial performance, net assets as well as its cash flow. The company generally only acquires solar parks and wind parks with long-term and guaranteed feed-in tariffs and corresponding certainty of sales, or long-term power purchase agreements. Both of these are relatively unaffected by economic fluctuations. Nevertheless, a revival of economic conditions may lead to higher electricity demand and thus higher electricity prices, which may have an impact on the implementation of future projects.

Weak economic growth could actually present opportunities for the Encavis Group when it comes to acquisitions in the secondary market for solar parks and wind parks, as some players in the market may come under increasing pressure to sell. As a result, prices for such assets would improve in the secondary market in favour of the Encavis Group as an investor.

The low correlation to economic growth makes the RES market attractive for institutional clients in particular, such as insurance companies, since they are reliant on constant income that is predictable in the long term. Consequently, the Asset Management segment offers attractive investment opportunities for these customer groups even in the event of weaker economic development.

Opportunities arising from sustained low interest rates

Due to the persistent low-interest-rate environment, costs of capital acquisition for the Encavis Group as well as the loan financing costs on a project level have decreased.

Encavis actively takes advantage of the low interest rates and assesses opportunities to refinance existing loans at more favourable conditions for the long term on an ongoing basis.

Opportunities arising from meteorological conditions

The generation capacity of solar parks and wind parks is highly dependent on meteorological conditions. In view of this, Encavis generally takes a conservative approach to calculating the profitability of any solar parks and wind parks it plans to acquire. Any positive deviation from the predicted long-term mean of sunshine hours or wind levels has a direct short-term impact on the financial performance, financial position and cash flow of the company. At the same time, meteorological forecasts and prognoses have become more and more precise over the past years, with only rare material discrepancies. The forecast accuracy for sunlight in particular is now very high, whereas wind forecasting remains volatile. Encavis works on the general assumption that the differences between forecast and actual values will continue to fall on average in future, especially for newly acquired installations.

Opportunities arising from the regulatory environment and international developments

By adopting the Paris Agreement at the UN Climate Change Conference in December 2015, the international community has shown an unequivocal will to counteract the threat of climate change by increasing the proportion of renewable and CO_2-neutral clean sources of energy. The agreement sends a strong signal to further expand renewable energy sources and to achieve the climate protection targets by means of appropriate national and international support programmes and investments. According to Bloomberg New Energy Finance, global investments in this field nearly reached USD 330 billion in 2018, and even reached USD 363 billion in 2019. Consequently, the RES market remains a growth market with percentage growth rates reaching double figures.

The various public support instruments are generally designed to strengthen the profitability of solar and wind parks. The global need to increase sources of renewable energy may therefore make new regions and countries attractive and worthwhile for Encavis and enable further geographical diversification.

There is a growing trend towards private power purchase agreements, irrespective of the use of public support schemes. The option to enter into power purchase agreements for up to 20 years directly with the industrial sector without the involvement of the public purse makes energy costs more predictable for companies and thus independent of the public supply. The International Energy Agency expects that half of the newly created global supply of energy from renewable sources will be provided via power purchase agreements either in auctions or directly with companies by 2022. It is already clear that more and more companies are moving towards securing the purchase and price of “green” electricity in the long term through these power purchase agreements. While the proportion of power purchased via PPAs in 2017 was still within the range of approximately 5.6 GW, this had already increased to 18.6 GW by 2019.

Opportunities arising from geographical diversification

Encavis constantly monitors and reviews the development of RES electricity and relevant opportunities in other regions. The company focuses mainly on developed countries in (Western) Europe, but also in the NAFTA region (the United States, Canada and Mexico), with stable economic policies and regulatory frameworks and which promote growth of renewable energy sources via assessment-financed feed-in tariff systems. Geographic diversification contributes to further reducing risk in the existing portfolio by increasing independence from the sunshine or wind in individual regions as well as theoretically plausible retroactive adjustments to the subsidy programmes and amounts. Furthermore, entering markets in new countries gives the Company additional potential for growth outside its previous core markets.

Opportunities from large portfolio volumes in the core regions

Encavis operates in the European core markets that have been investing in the renewable energy sector for some time now and thus have a corresponding portfolio of solar parks and wind parks. With its focus on turnkey and fully functional installations already connected to the national grid, the company benefits from the large number of existing installations in the core regions.

Opportunities arising from innovation

The RES sector enjoys continuous innovation. This not only leads to more efficient existing technologies, it also means that new technologies can be brought to market which, in turn, will increase or prolong the profitability of future projects. Many public support programmes for expanding electricity generation from renewable sources aim to provide additional incentives for further innovation by integrating degression models into the support tariffs. Furthermore, new and innovative manufacturing processes and economies of scale have markedly reduced the production costs for the technical components of solar parks and wind parks. This has helped the RES sector to achieve grid parity in some regions and it is already competing with conventional power stations. Experts anticipate that prices for technical components will continue to fall over the coming years, too. Lower-priced yet technically and qualitatively superior installations are likely to increase the profitability and geographic usability of the technologies, opening up further opportunities for the Encavis Group. The establishment of new technologies – for example the use of battery storage systems and the application of existing technologies such as energy management systems – could also offer fresh business opportunities and greater freedom from weather conditions for energy production while enabling more needs-based power generation and decentralisation.

Opportunities arising from business relationships and collaborations

Encavis has firmly established itself in the industry as market player and operator of wind and solar parks. Its 269 solar parks and wind parks with a generation capacity of approximately 2.4 GW make the company one of the biggest independent power producers (IPP) in Europe in the solar energy segment. Encavis is visible in the market thanks to the size of the company and the track record of its current portfolio. Also, thanks to its expertise in the area of long-term power purchase agreements that has been built up in the meantime, Encavis is increasingly being approached by project developers as a possible cooperation partner in the realisation of project pipelines. This has enabled the Encavis Group to build up a broad and reliable network of project developers, general contractors, operators, partners, service providers, brokers, consultants and banks over the years. The strategic partners are, among others, the British project developer Solarcentury, the Danish project developer GreenGo, project development fund Aurora and two Italian developers, as well as four other developers. This strategic partnership was agreed in December 2017 with the internationally active project development company Solarcentury, based in the United Kingdom. This partnership provides exclusive access to a project pipeline with a total generation capacity of 1.1 GW over a period of three years. Today, Encavis has already successfully implemented more than half of the projects. With a total of nine strategic partnerships, Encavis currently has a pipeline with a capacity of over 2 GW.

The size of our power plant portfolio makes Encavis attractive to utilities and large electricity consumers with whom we have already concluded long-term power purchase agreements.

The continuously growing renown and good reputation of the Company grows the circle of potential business partners and investors on an ongoing basis – as well as for the Asset Management segment for institutional clients. In July 2019, for example, this segment was able to announce that building societies and cooperative banks had subscribed to extensive participation in the special fund Encavis Infrastructure II Renewables Europe II, which will enable over EUR 100 million to be invested in renewable energy systems.

To support its further growth strategy, Encavis AG was able to gain BayernInvest Kapitalverwaltungsgesellschaft mbH, Munich, in December 2019 as a strategic investor, which acquired a 4.21 % shareholding by increasing Encavis' share capital in return for a cash contribution.

In 2019, Encavis worked closely with banks on the realisation of projects. For example, the European Investment Bank (EIB) and Deutsche Bank have provided project financing totalling around EUR 165 million for the Talayuela project to finance a proportion of the total project costs of EUR 228 million. EIB financing is secured by the European Fund for Strategic Investment (EFSI), the core of the Investment Plan for Europe, also known as the Juncker Plan.

Opportunities arising from consolidation of the market

The acquisition of CHORUS Clean Energy AG in October 2017, and the size of the company that it has gained as a result, has not only promoted awareness of the company on the acquisition side, but it also creates new opportunities that each company would not have been able to implement on its own. This includes acquiring bigger installations or entering new markets outside Europe, for example.

Opportunities arising from the size of the company

Higher market capitalisation, an increase in the balance sheet total of the Encavis Group, the equity ratio and the improved liquidity of the share have opened up access to new forms of growth financing and types of investors for Encavis. In September 2017, Encavis AG was therefore able to successfully place a perpetual subordinated hybrid convertible bond with a volume of EUR 97.3 million with temporary conversion rights on the company's ordinary bearer shares. The resulting improvement in the equity ratio gave Encavis more scope to borrow outside capital. Encavis took advantage of this opportunity in September 2018 and placed a Green Schuldschein bond with a volume of EUR 50 million in the market for the first time. In 2019, Encavis successfully continued the growth financing it had begun and issued a further debenture bond in the form of a registered bond with a total volume of EUR 60 million, as well as successfully implemented the increase in the hybrid convertible bond recognised as equity with a nominal volume of EUR 53 million. Encavis is currently engaged in examining various other options to finance future growth.

Future outlook

The statements below include projections and assumptions which are not certain to materialise. Actual results and developments may differ materially from those described to the extent that one or more of these projections and assumptions do not materialise.

Macroeconomic developments

The experts of the IMF expect economic growth of 3.3 % for 2020, followed by a growth rate prediction of 3.4 % the next year. On the one hand, the IMF sees positive and healthy economic development overall with, on the other hand, the US trade disputes, geopolitical risks in the Middle East and the effects of climate change making their mark on global growth rates. Furthermore, the forecasts do not include the effects that a global spread of the coronavirus would have on the world economy.

Viral epidemics that spread around the globe, such as the coronavirus, have no economic impact on the operating activities of the Encavis Group. The wind and solar parks in ten countries in western Europe produce electricity from renewable energy sources predominantly on their own and fully automatically. Due to the impeccable technical condition of the installations, practically no staff are required on-site. If the current spread of the coronavirus continues for an extended period or worsens in the coming months, limitations in the on-site maintenance of the solar and wind parks due to individual technicians cannot be excluded; however, these could be replaced by alternative service providers. At the present time, it is not possible to evaluate – and therefore cannot be quantified conclusively – whether the completion of parks in construction phase will be delayed as a whole as a result of illnesses of third parties or interruptions in the supply chains, which would in turn reduce the number of parks available for acquisitions.

Expansive monetary policy continues

Market observers do not expect any significant changes in monetary policy and the interest rates in the eurozone will remain unchanged at 0.0 % for the time being. IMF experts also expect no changes in the short term to the so-called deposit rate, which is currently 0.5 %. Nevertheless, the ECB announced that it intended to review its strategy of price stability, which had been in place since 2003, by the end of 2020.

The market for renewable energy

Megatrend renewable energy

Protecting the climate and the environment has become one of the greatest challenges of our time. Energy markets worldwide are in the midst of transformation as conventional sources of energy and fossil fuels are increasingly being supplemented or replaced by regenerative energy sources. During the reporting year, the expansion of renewable energy sources continued to accelerate, thereby offering Encavis clear opportunities for growth.

Global investments in renewable energy rose to USD 363 billion during the 2019 reporting year, with continued growth forecast for 2020 as determined by an analysis of Bloomberg New Energy Finance (BNEF). The experts are also very optimistic with regard to the long-term development: electricity from wind and solar parks is expected to amount to nearly half of the global energy supply by 2050. In Germany, the proportion of electricity from renewable energy sources is now around 40 %. In light of the fact that EU Commission is planning a new EU strategy to adapt to climate change, this proportion can be expected to increase further.

The increasing demand for private-sector power purchase agreements (PPAs) also fits this trend. According to information from BNEF, the total generation capacity of PPAs has more than doubled, from around 5.6 GW in 2017 to some 12.8 GW in 2018. The trend continues: for 2019, BNEF forecasts that PPAs for an installed solar and wind capacity of more than 18.6 GW will be concluded. At the end of January 2020, the total capacity was already at around 51.5 GW.

Intelligent battery storage facilities should also give a boost to the market for renewable energy, impacting the solar segment in particular. By coupling, for example, photovoltaic or wind installations with modern storage systems, electricity from renewable energy sources can be fed into the grid in a more demand-oriented manner, which would make the energy supply less dependent upon meteorological conditions. As a result, BNEF expects significant growth in the renewable energy sector in the coming years as well.

Experts from IHS Markit forecast the worldwide expansion of photovoltaic installations to increase by around 25 % to some 129 GW in the current year, with Europe again as the region with the highest growth rate and an increase of 19 GW. Wind capacity will also continue to grow: the annual expansion will be some 71 GW from 2019 to 2023 and will increase to 76 GW annually by 2028 as forecast by the analysts at the US consulting firm Wood Mackenzie.

Encavis on a clear course for growth with >> Fast Forward 2025

Today, Encavis is one of the largest independent power producers in the field of renewable energy in Europe. The positive framework conditions and the successful economic development of the company are the perfect prerequisites for further strengthening this position. In order to always make use of growth opportunities that present themselves and to further increase the efficiency of the company, Encavis introduced the strategy package “>> Fast Forward 2025” on 8 January 2020. The plan for the next six years is focused on five areas:

1. Further investments in ready-to-build wind and solar parks as well as securing projects in earlier phases of development in coordination with strategic development partners while maintaining a long-term equity ratio of more than 24 %
2. Disposal of minority interests in wind and individual selected solar parks of up to 49 % to free up liquidity for investments in additional wind and solar parks
3. Reduction and continued optimisation of costs related to the operation and maintenance of solar parks
4. Optimisation and refinancing of SPV project financing
5. Introduction of Group-wide cash pooling, including all single entities

Within the framework of >> Fast Forward 2025, Encavis is focusing on the following target figures on the basis of the forecast values for the year 2019:

1. Doubling the company’s own contractually secured generation capacity from 1.7 to 3.4 GW
2. Increasing the weather-adjusted revenue (wa) from EUR 260 million to EUR 440 million
3. Growing the weather-adjusted operating EBITDA (wa) from EUR 210 million to EUR 330 million

4. A margin of the weather-adjusted operating EBITDA (wa) of 75 %
5. Increasing the operating earnings per share (EPS) (wa) from EUR 0.40 to EUR 0.70

The expected dynamic growth of Encavis can be seen not least in consideration of the corresponding annual growth rates (CAGR): the generation capacity is to increase by some 12 % annually to the year 2025. In the same period, revenue is to increase by approximately 9 % per annum, and an annual growth rate of operating EBITDA (wa) of 8 % is expected. Annual growth of the operating earnings per share (EPS) (wa) amounts to around 10 %.

These assumptions are a basis case that does not take any additional growth opportunities into account which may arise inorganically from mergers and acquisition transactions and potential equity transactions. Opportunities which could arise from profitable business models in association with future battery storage capacities at the wind and solar parks were also not taken into consideration. A possible expansion into regions outside of Europe offers further potential for growth.

Overall assessment of future development

In light of the Encavis Group's business strategy, which is geared towards qualitative growth, the Management Board expects moderate growth for the 2020 financial year. This can be explained above all by the strategic transformation of the company. While, in the past, Encavis AG has purchased solar and wind parks with a fixed feed-in tariff, the course was set for expanding to the PPA business in the 2019 financial year. The Talayuela and La Cabrera solar parks in Spain, which Encavis has acquired to date, are each bound by a power purchase agreement with well-known companies such as Amazon. Since these types of parks are usually acquired before construction begins, the two PPA solar parks are currently still in the construction phase. Therefore, as planned, only La Cabrera will contribute marginally to revenue and consolidated income in the current 2020 financial year from the fourth quarter of 2020. After completion and the connection of both parks to the grid, these investments will then have an impact in the 2021 financial year.

The Management Board therefore predicts that revenue will increase to more than EUR 280 million (2019: EUR 273.8 million) for the 2020 financial year, based on the existing portfolio as it stands on 10 March 2020. Operating EBITDA is expected to increase to more than EUR 220 million (2019: EUR 217.6 million). The Group anticipates growth in operating EBIT to more than EUR 130 million (2019: EUR 132.2 million). The Group expects operating cash flow of over EUR 200 million (2019: EUR 189.3 million). An operating earnings per share of EUR 0.41 is also expected (2019: EUR 0.43). Earnings per share will initially grow disproportionately, as the number of shares will increase but the investments made with the funds will only fully realise their contribution to revenue in subsequent years, as explained in the text above.

Technical availability of the installations is expected to remain at 95 % in the 2019 financial year.

These predictions are based on the following assumptions:

- No significant retroactive changes to legislation
- No significant deviations from the multi-year weather forecasts

The Encavis Group will be able to cover the liquidity requirements of its business operations and other planned short-term investments from its existing liquidity portfolio together with the expected cash flows from operating activities in the 2020 financial year. Identification of attractive acquisition opportunities or possible business combinations or takeovers may lead to additional capital requirements during the course of the year. Other financing options, such as borrowing or mezzanine capital at Group or company level, as well as equity capital measures are not ruled out should they be required, provided that they are economically advantageous.

The Management Board predicts that earnings before interest, taxes, depreciation and amortisation (EBITDA) will amount to approximately EUR –21.7 million for the 2020 financial year for Encavis AG, which, as the holding company, bears the administrative expenses of the Group – i.e. essentially the costs of acquisitions, financing and operational supervision of the park. Earnings before interest and taxes (EBIT) are expected to amount to approximately EUR –22.3 million. The negative result is mainly influenced by existing share option programmes. For the 2020 financial year, the Management Board again expects further growth for the company.

Corporate governance declaration in accordance with sections 289f and 315d of the German Commercial Code (HGB)

The corporate governance declaration contains the annual declaration of conformity, corporate governance report, disclosures on corporate governance practices and a presentation of the working practices of the Management Board and the Supervisory Board. The declaration has been made permanently available to shareholders on the Group website at http://www.encavis.com. It has therefore been omitted from the combined management report. The declaration on corporate governance in accordance with sections 289f and 315d of the HGB is a component of the combined management report.

Hamburg, 19 March 2020

The Management Board

Dr Dierk Paskert	Dr Christoph Husmann
CEO	CFO

Consolidated financial statements of Encavis AG

Consolidated statement of comprehensive income

In TEUR	Notes	2019	2018
Revenue	3.21; 5.1	273,822	248,785
Other income	5.2	14,839	17,463
Cost of materials	5.3	-2,136	-1,756
Personnel expenses	5.4	-16,997	-13,306
- of which in share-based remuneration		*-3,026*	*-308*
Other expenses	5.5	-53,427	-55,860
- of which in expected credit losses	5.5	*-2,555*	*-88*
Earnings before interest, taxes, depreciation and amortisation (EBITDA)		**216,101**	**195,326**
Depreciation and amortisation	5.6	-124,674	-123,770
Earnings before interest and taxes (EBIT)		**91,426**	**71,556**
Financial income	5.7	24,771	14,784
Financial expenses	5.7	-62,468	-66,577
Earnings from financial assets accounted for using the equity method	6.4	-3,078	-11
Earnings before taxes on income (EBT)		**50,652**	**19,754**
Taxes on income	5.8	-21,257	-8,975
Consolidated earnings		**29,394**	**10,779**
Items that can be reclassified to profit or loss			
Currency translation differences	5.9	-51	-140
Cash flow hedges – effective portion of changes in fair value	5.9	-10,476	1,206
Cost of hedging measures	5.9	8	-34
Other comprehensive income from investments accounted for using the equity method	5.9	-65,769	0
Income tax relating to items that may be reclassified to profit or loss	5.9	2,455	-270
Reclassifications	5.9	1	-29
Other comprehensive income	5.9	**-73,832**	**733**
Consolidated comprehensive income		**-44,438**	**11,511**
Consolidated earnings for the period			
Attributable to Encavis AG shareholders		22,189	5,113
Attributable to non-controlling interests		1,280	558
Attributable to hybrid capital investors		5,925	5,108
Consolidated comprehensive income for the period			
Attributable to Encavis AG shareholders		-51,451	5,849
Attributable to non-controlling interests		1,088	554
Attributable to hybrid capital investors		5,925	5,108
Earnings per share	3.25; 12		
Average number of shares in circulation in the reporting period			
Undiluted		131,052,531	129,040,364
Diluted		131,121,575	129,088,626
Undiluted earnings per share (in EUR)		0.17	0.04

Consolidated balance sheet

Assets in TEUR	Notes	31.12.2019	31.12.2018
Non-current assets			
Intangible assets	3.5; 3.8; 6.1	547,168	579,950
Goodwill	3.6; 6.2	26,569	19,989
Property, plant and equipment*	3.7; 3.8; 3.24; 6.3; 6.16	1,749,657	1,548,639
Financial assets accounted for using the equity method	3.9; 6.4	9,590	14,514
Financial assets	3.10; 6.5	104,830	6,474
Other receivables	3.10; 3.11; 6.6	3,650	19,518
Deferred tax assets	3.14; 6.7	116,892	118,169
Total non-current assets		**2,558,356**	**2,307,252**
Current assets			
Inventories	3.13; 6.8	412	422
Trade receivables	3.10; 3.15; 6.9	45,283	36,178
Non-financial assets	3.15; 6.10	5,340	9,714
Receivables from income taxes	3.14; 6.10	15,703	29,269
Other current receivables	3.10; 3.15; 6.10	12,361	13,738
Liquid assets	3.16; 6.11	222,481	252,491
Cash and cash equivalents	3.16; 6.11	164,501	175,564
Liquid assets with restrictions on disposition	3.16; 6.11	57,980	76,927
Total current assets		**301,582**	**341,812**
Balance sheet total		**2,859,938**	**2,649,065**

* Due to the first-time application of IFRS 16 as of 1 January 2019, property, plant and equipment as of 31 December 2019 contains the rights of use which were capitalised in this regard. The rights of use are recognised in the same balance sheet item as the underlying asset in the possession of Encavis.

Equity and liabilities in TEUR	Notes	31.12.2019	31.12.2018
Equity			
Subscribed capital	6.12	137,039	129,487
Capital reserves	6.12	468,873	413,104
Reserve for equity-settled employee remuneration	3.23; 6.13	143	383
Other reserves	6.12	-75,358	-1,718
Net retained earnings	6.12	33,430	41,200
Equity attributable to Encavis AG shareholders	6.12	**564,127**	**582,456**
Equity attributable to non-controlling interests	6.12	10,009	9,145
Equity attributable to hybrid capital investors	6.12	148,577	95,456
Total equity	6.12	**722,713**	**687,057**
Non-current liabilities			
Non-current liabilities to non-controlling interests	3.20; 6.14	40,122	5,264
Non-current financial liabilities	3.18; 6.15	1,366,789	1,349,602
Non-current lease liabilities	3.24; 6.16	178,092	73,933
Other non-current liabilities	3.18; 6.19	7,945	10,764
Non-current provisions	3.19; 6.17	50,388	39,724
Deferred tax liabilities	3.14; 6.7	248,498	234,540
Total non-current liabilities		**1,891,834**	**1,713,827**
Current liabilities			
Current liabilities to non-controlling interests	3.20; 6.14	2,971	17,140
Liabilities from income taxes	3.14; 6.19	7,681	7,694
Current financial liabilities	3.18; 6.15	194,937	174,420
Current lease liabilities	3.24; 6.16	10,860	6,764
Trade payables	3.18; 6.18	10,738	16,784
Other current liabilities	3.18; 6.19	8,560	18,756
Current provisions	3.19; 6.17	9,646	6,623
Total current liabilities		**245,392**	**248,181**
Balance sheet total		**2,859,938**	**2,649,065**

Consolidated cash flow statement

In TEUR

	Notes	2019	2018
Net income for the period		29,394	10,779
Depreciation and impairments of fixed assets	5.6	124,674	123,770
Profit/loss from the disposal of fixed assets		8	4
Other non-cash expenses		6,120	447
Other non-cash income		-7,393	-8,802
Financial income	5.7	-24,771	-14,784
Financial expenses	5.7	62,468	66,572
Taxes on income (recognised in income statement)	5.8	21,257	8,975
Taxes on income (paid)		-10,814	-7,627
Increase in other assets not attributable to investing or financing activities[1]		-11,047	-288
Decrease in other liabilities not attributable to investing or financing activitiesAbnahme anderer Passiva, die nicht der Investitions- oder Finanzierungstätigkeit zuzurechnen sind[1]		-581	-4,762
Cash flow from operating activities		**189,315**	**174,282**
Payments for the acquisition of consolidated entities, net of cash acquired	4.2	-63,474	-34,413
Refunds of purchase price payments		0	766
Payments for investments in property, plant and equipment		-4,593	-77,515
Proceeds from the sale of property, plant and equipment		4	1
Payments for investments in intangible assets		-405	-622
Payments for investments in financial assets		-166,438	-12,210
Proceeds from the sale of financial assets		2,165	5,538
Dividends received		40	35
Cash flow from investing activities		**-232,701**	**-118,421**
Loan proceeds		120,237	211,836
Loan repayments		-146,155	-129,029
Repayment of lease liabilities[2]		-10,230	-4,942
Hybrid capital proceeds		60,553	0
Interest received		967	656
Interest paid		-58,455	-49,129
Proceeds from capital increases		48,331	317
Payments for issuance costs		-1,989	-144
Payments received from the sale of shares without change of control		24,855	0
Payments for the acquisition of shares without change of control		-232	0
Dividends paid to Encavis AG shareholders		-19,113	-20,838
Dividend payments to hybrid capital investors		-5,108	-5,108
Payments to non-controlling interests		-1,912	-2,232
Change in cash with restrictions in disposition		20,928	-5,640
Cash flow from financing activities		**32,676**	**-4,255**
Change in cash and cash equivalents		-10,710	51,607
Changes in cash due to exchange rate changes		374	-59
Change in cash and cash equivalents		**-10,336**	**51,549**
As of 01.01.2019 (01.01.2018)	6.11	171,533	119,984
As of 31.12.2019 (31.12.2018)	6.11	161,196	171,533

[1] The previous year's figures were adjusted with regard to deferred taxes, resulting in a shift between the increase in other assets not attributable to investment or financing activities and the decrease in other liabilities not attributable to investment or financing activities.

[2] As part of the first-time application of IFRS 16, repayments of lease liabilities were reported separately in the consolidated cash flow statement. In order to improve comparability, the repayments from 2018, which were presented under IAS 17 in the loan repayments item, were also shown separately. The values in this line item from 2018 only contains the repayment of liabilities from finance leases pursuant to IAS 17.

Consolidated statement of changes in equity

in TEUR	Subscribed capital	Capital reserve	Other reserves				
			Currency translation reserve	Hedge reserve	Cost of hedging measures	Reserve from equity valuation	Reserve from changes in fair value
As of 01.01.2018	**128,252**	**406,834**	**1,176**	**-3,630**			**-298**
Effect from the first-time application of IFRS 9							298
As of 01.01.2018 (adjusted for IFRS 9)	**128,252**	**406,834**	**1,176**	**-3,630**			
Consolidated earnings							
Other comprehensive income*			-136	930	-28		
Reclassifications to profit/loss			-29				
Consolidated comprehensive income for the period			**-165**	**930**	**-28**		
Dividends							
Income and expenses recognised directly in equity							
Changes from capitalisation measures	1,235	6,329					
Transactions with shareholders recognised directly in equity		22					
Issuance costs		-117					
Exercise of the share option programme		35					
Acquisition of shares from non-controlling interests							
As of 31.12.2018	**129,487**	**413,104**	**1,010**	**-2,700**	**-28**		
As of 01.01.2019	**129,487**	**413,104**	**1,010**	**-2,700**	**-28**		
Consolidated earnings							
Other comprehensive income*			-50	-7,829	7	-65,769	
Reclassifications to profit/loss			1				
Consolidated comprehensive income for the period			**-49**	**-7,829**	**7**	**-65,769**	
Dividends							
Income and expenses recognised directly in equity							
Changes from capitalisation measures	7,552	52,730					
Transactions with shareholders recognised directly in equity		-2,618					
Issuance costs		-1,293					
Hybrid capital proceeds		7,553					
Settlement for stock options		-603					
Acquisition of shares from non-controlling interests							
As of 31.12.2019	**137,039**	**468,873**	**961**	**-10,529**	**-22**	**-65,769**	

* Excluding separately recognised effects from reclassifications.

in TEUR	Reserve for equity-based employee remuneration	Net retained profit	Equity attributable to Encavis AG shareholders	Equity attributable to non-controlling interests	Equity attributable to hybrid capital investors	Total
As of 01.01.2018	458	63,737	596,528	6,582	95,484	698,594
Effect from the first-time application of IFRS 9		-456	-158			-158
As of 01.01.2018 (adjusted for IFRS 9)	458	63,281	596,371	6,582	95,484	698,436
Consolidated earnings		5,113	5,113	558	5,108	10,779
Other comprehensive income*			766	-4		762
Reclassifications to profit/loss			-29			-29
Consolidated comprehensive income for the period		5,113	5,849	554	5,108	11,511
Dividends		-28,215	-28,215	-902	-5,108	-34,225
Income and expenses recognised directly in equity	-39	1,022	983			983
Changes from capitalisation measures			7,564	130		7,694
Transactions with shareholders recognised directly in equity			22	-22		
Issuance costs			-117		-28	-145
Exercise of the share option programme	-35					
Acquisition of shares from non-controlling interests				2,802		2,802
As of 31.12.2018	383	41,200	582,456	9,145	95,456	687,057
As of 01.01.2019	383	41,200	582,456	9,145	95,456	687,057
Consolidated earnings		22,189	22,189	1,280	5,925	29,394
Other comprehensive income*			-73,641	-192		-73,833
Reclassifications to profit/loss			1			1
Consolidated comprehensive income for the period		22,189	-51,451	1,088	5,925	-44,438
Dividends		-31,077	-31,077	-698	-5,108	-36,883
Income and expenses recognised directly in equity	-31	1,126	1,095			1,095
Changes from capitalisation measures			60,282	14		60,296
Transactions with shareholders recognised directly in equity		-8	-2,626	-2		-2,628
Issuance costs			-1,293		-696	-1,989
Hybrid capital proceeds			7,553		53,000	60,553
Settlement for stock options	-209		-812			-812
Acquisition of shares from non-controlling interests				463		463
As of 31.12.2019	143	33,430	564,127	10,009	148,577	722,713

* Excluding separately recognised effects from reclassifications.

Table of contents of notes to the consolidated financial statements

Notes to the consolidated financial statements of Encavis AG

1 General information

Encavis AG, as the parent company of the Group, was entered in the commercial register of the Hamburg district court under registration number HRB 63197 on 18 January 2002. The company's registered office is located at Grosse Elbstrasse 59, 22767 Hamburg, Germany.

According to the Articles of Association, the business activities of Encavis AG comprise the operation of installations for the production of electricity from renewable energy sources in Germany and abroad, either by the company itself or its subsidiaries, as an independent power producer.

Other business activities include the provision of commercial, technical or other services not subject to authorisation or approval in connection with the acquisition, construction and operation of installations for the production of electricity from renewable energy sources in Germany and abroad, either by the company itself or its subsidiaries, as well as the acquisition, holding, management and disposal of equity interests. The Group also provides advisory and asset management services to institutional investors in the renewable energy sector.

The company is entitled to undertake all measures and transactions which are suitable for promoting the company's purpose. It may set up branches in Germany and abroad, establish other companies, acquire existing ones or acquire an interest in such companies and conclude corporate contracts. It may acquire, use and transfer patents, trademarks, licences, distribution rights and other objects and rights. The business purposes of subsidiaries and associated companies may differ from that of Encavis AG if they seem suitable to further the company's purpose.

The consolidated financial statements present the operations of Encavis AG and its affiliated undertakings. Please refer to the list of shareholdings in section 18 of the notes for more information on the companies included in the scope of consolidation.

The consolidated financial statements of Encavis AG have been prepared in accordance with the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) – including the interpretations of the IFRS Interpretations Committee (IFRS IC) regarding the IFRS as adopted by the European Union and the additional requirements of German commercial law pursuant to Section 315e(1) of the German Commercial Code (HGB) – and are published in the German electronic Federal Gazette (Bundesanzeiger).

To improve clarity, various statement of comprehensive income and balance sheet items have been combined. These items are disclosed separately and explained in the notes. The statement of comprehensive income has been prepared using the total-cost (nature of expense) method. The figures in the notes correspond to the respective denomination in euros (EUR), thousands of euros (TEUR) or millions of euros (EUR … million). Rounding differences may occur in percentages and figures in this report.

As a rule, the consolidated financial statements are prepared using the acquisition cost principle. This does not apply to certain financial instruments that are measured at their fair value.

The Group's business activities are subject to seasonal influences that lead to fluctuations in revenue and earnings during the course of the year. Due to seasonal factors, revenue in the PV Parks segment is usually higher in the second and third quarters than in the first and fourth quarters of the financial year, while revenue and earnings in the Wind Parks segment are generally higher in the first and fourth quarters than in the second and third quarters of the financial year.

2 Application of new and amended International Financial Reporting Standards (IFRS)

The Group applied the following new and amended International Financial Reporting Standards and interpretations, as adopted by the EU, in the financial year. This also includes the amendments published as part of the IASB's ongoing Annual Improvements to IFRS Project (AIP). Unless stated otherwise, application of these amended standards and interpretations does not have any material impact on the presentation of the Group's financial performance, financial position and net assets.

The Group has applied the following new and/or amended standards and interpretations for the first time in the 2019 financial year:

New and amended standards and interpretations - obligatory as of 31.12.2019		Application obligatory in financial years beginning on or after the date specified	EU endorsement status (as of 31.12.2019)
IFRS 16	New standard – Leases	01.01.2019	Adopted
IFRS 9	Amendment – Prepayment Features with Negative Compensation	01.01.2019	Adopted
IFRIC 23	Uncertainty over Income Tax Treatments	01.01.2019	Adopted
IAS 28	Amendment – Long-term Interests in Associates and Joint Ventures	01.01.2019	Adopted
IAS 19	Amendment – Plan Amendment, Curtailment or Settlement	01.01.2019	Adopted
AIP	Annual Improvement Programme for IFRS: 2015–2017 cycle	01.01.2019	Adopted

Standards, interpretations and amendments of standards and interpretations to be applied for the first time in the reporting period which had an impact on the amounts and disclosures reported in the period under review

The new and amended standards/interpretations – with one exception – have no material impact on these Group consolidated financial statements.

IFRIC 23, applicable from 1 January 2019, governs how uncertainties regarding the income tax treatment of items are to be taken into account. There are no reasons to assume that the tax authorities will not approve the tax treatment of the circumstances existing within the Group and the transactions realised by the Group. As a result, the introduction of IFRIC 23 had no consequences for the consolidated financial statements.

IAS 12 (AIP) clarifies that the income tax consequences of dividend payments as defined in IFRS 9 on financial instruments classified as equity are to be treated in accordance with the treatment of the transactions giving rise to the tax effect. The interest on the hybrid bond classified by Encavis as equity is also recognised in equity. This interest is not proportionally dependent on the consolidated profit and therefore does not represent a dividend in the sense of IFRS 9. The tax relief effect from the tax deductibility of these interest payments is therefore recognised in equity.

With regard to IFRS 16 "Leases", the following effects exist on the presentation and measurement in the consolidated financial statements.

New and amended IFRS and interpretations not yet required to be applied and which were not applied early by the Group

In addition, the IASB or IFRS IC has published or amended the following new standards and interpretations which will either not be applicable until a later date or which have not yet been endorsed by the European Commission.

New and amended standards and interpretations - not obligatory as of 31.12.2019		Application obligatory in financial years beginning on or after the date specified	EU endorsement status (as of 31.12.2019)	Status of application at Encavis
IFRS 14	New standard – Regulatory Deferral Accounts	01.01.2016	Adoption not proposed due to very limited user group	Not applied
IFRS 10, IAS 28	Amendment – Sale or Contribution of Assets between an Investor and its Associate or Joint Venture	Postponed indefinitely by the IASB	Not yet adopted	Not applied
Conceptual Framework	Amendment – References to the Conceptual Framework in IFRS	01.01.2020	Adopted	Not applied
IAS 1, IAS 8	Amendment – Definition of Material	01.01.2020	Adopted	Not applied
IFRS 3	Amendment – Definition of a Business	01.01.2020	Not yet adopted	Not applied
IFRS 17	New standard – Insurance Contracts	01.01.2021	Not yet adopted	Not applied
IFRS 9, IAS 39, IFRS 7	Amendment – interest rate benchmark reform	01.01.2020	Not yet adopted	Applied

Encavis AG has opted for early application of the amendments to IFRS 9, IAS 39 and IFRS 7 “Interest Rate Benchmark Reform”. This affects hedging relationships that existed at the beginning of the reporting period or were designated thereafter. On the basis of the associated simplifications, Encavis assumes that the effectiveness of the hedges carried on the balance sheet will not be impaired by the IBOR reform and that no hedges will have to be terminated.

The change in the definition of materiality according to IAS 1 and IAS 8 is generally relevant to Encavis, but is not reflected in the Group’s earnings, net assets and financial position.

The effect of the change in the definition of a business operation under IFRS 3 on the consolidated financial statements is currently being reviewed, but cannot yet be conclusively assessed at the time of preparation of the annual report.

At the moment, Encavis AG does not expect the application of the other new accounting standards to have a material impact on the consolidated financial statements, if adopted by the EU in this form.

IFRS 16 – Leases

IFRS 16 was published in January 2016 and adopted into European law on 31 October 2017, and its application is not obligatory until financial years that begin on or after 1 January 2019. The new standard governs how leases are recognised, measured, presented and disclosed in the financial statements of enterprises reporting in accordance with IFRS. For the lessee, the standard provides for a single accounting model, the right-of-use model, which eliminates the distinction between finance and operating leases made under IAS 17. Until the 2018 financial year, finance leases were recognised as assets and liabilities at the beginning of the lease term at the lower of the fair value of the asset and the present value of the minimum lease payments. Operating leases were not recognised in the balance sheet; instead, the lease payments were recognised as expenses in the consolidated statement of comprehensive income on a straight-line basis over the term of the lease. The new right-of-use model results in the lessee, as a rule, having to recognise in the balance sheet all assets and liabilities arising from lease agreements. In contrast, the introduction of the new standard does not lead to any significant changes for the lessor.

Encavis applied the modified retrospective method when IFRS 16 was first applied on 1 January 2019. The rights of use were recognised in the amount of the respective lease liabilities, adjusted for all advance payments already made and deferred lease payments presented in the balance sheet as of 31 December 2018. Accordingly, the comparative figures for 2018 have not been restated retrospectively, but are still presented in accordance with IAS 17.

As part of the transition to IFRS 16 as of 1 January 2019, all previous operating leases were recognised in the balance sheet as rights of use and lease liabilities. Exceptions to this were short-term leases with a term of up to 12 months and leases with low-value underlying assets for which the accounting option was exercised. There were no leases with a negative impact at Encavis at the time of first-time application that would have required an impairment of the initial rights of use.

Encavis also has a number of contracts already classified as finance leases in accordance with IAS 17. For this purpose, the carrying amounts of assets and liabilities recognised immediately before the first-time application of IFRS 16 were recognised in accordance with IAS 17.

Encavis has made use of the following simplifications permitted by the standard in connection with the first-time application of IFRS 16:

- Due to their short-term nature, leases with a remaining term of less than 12 months as of 1 January 2019 were generally not accounted for in accordance with IFRS 16.
- Earlier estimates of whether a lease with a negative impact exists have been adopted.

Encavis has also made use of its right to not carry out a reassessment regarding the existence of a lease for existing contracts at the date of first-time application. For contracts that were already classified as leases in accordance with IAS 17 and IFRIC 4 prior to 1 January 2019, the existence of a lease was therefore assumed.

The quantitative effects related to the implementation of IFRS 16 on the consolidated balance sheet as of 1 January 2019 are as follows:

Change in assets in TEUR	01.01.2019
Change in long-term assets	
Property, plant and equipment	134,077
Assets related to asset retirement obligations	*-37,547*
Power generation installations previously recognized as finance leases	*-39,129*
Right-of-use assets	*210,753*
Other long-term assets	-17,275
Change in short-term assets	
Other current receivables	-1,425
Total change in assets	**115,377**

Change in equity and liabilities in TEUR	01.01.2019
Change in long-term liabilities	
Change in long-term lease liabilities	113,218
Change in short-term liabilities	
Change in short-term lease liabilities	2,159
Total change in equity and liabilities	**115,377**

Due to the capitalisation of rights of use, property, plant and equipment increased as of 1 January 2019 to a total of TEUR 134,077. Within property, plant and equipment, assets from retirement obligations in connection with leased land in the amount of TEUR 37,547 as well as finance leases in accordance with IAS 17 in the amount of TEUR 39,129 were reclassified to rights of use. All advance payments for operating leases reported in other receivables in the amount of TEUR 17,275 as well as the other current receivables in the amount of TEUR 1,425 have also been reported under rights of use since 1 January 2019. In the course of the initial application, the lease liabilities also increased accordingly (in the amount of TEUR 115,377).

The following table shows the reconciliation of the lease obligations as of 31 December 2018 to lease liabilities as of 1 January 2019:

Reconciliation of lease commitments as of 31.12.2018 to lease liabilities as at 01.01.2019 in TEUR	2019
Operating lease commitments according to IAS 17.35 as at 31.12.2018	168,467
Minimum finance lease commitments as at 31.12.2018	90,524
Short-term lease commitments	-58
Low-value lease commitments	-37
Gross lease commitments as at 01.01.2019	**258,896**
Present value of operating lease liabilities	115,377
Present value of minimum finance lease commitments	80,697
Total lease liabilities as at 01.01.2019	**196,074**

Liabilities from operating leases correspond to the present value of the outstanding payments that were discounted at the incremental borrowing rate as of 1 January 2019. The weighted average incremental borrowing rate applied was 3.69 %.

The effects of the first-time application of IFRS 16 described in this section differ from the figures published in the 2019 half-yearly financial report, as corrections were made in the second half of the financial year. Encavis classifies the deviations as immaterial.

3 Material accounting policies and consolidation principles

3.1 Consolidation principles

Encavis AG and all significant domestic and foreign subsidiaries under its control are included in the consolidated financial statements. Control exists if the company is exposed to, or has rights to, fluctuating returns on its investment and is able to influence those returns through its power of disposal. As a rule, control is exercised if a direct or indirect voting right majority exits. The profits and losses of subsidiaries acquired or sold during the year are included in the statement of comprehensive income from the acquisition date or until their date of disposal. Intra-Group transactions are conducted on arm’s-length terms.

The effects of intra-Group transactions are eliminated. Loans and other receivables and payables between consolidated companies are offset against each other. Inter-company profits and losses are eliminated and intra-Group income is offset against the corresponding expenses.

Companies over which Encavis AG has a significant influence on the financial and operating policies (associates) are generally recognised using the equity method, as are joint ventures which are controlled together with other companies. A joint venture is then classified as such if the parties which jointly control the venture have rights to the net assets of the venture. Changes in the equity interest of the enterprise/joint venture that do not have to be recognised in the statement of comprehensive income are recognised directly in equity. The same accounting policies are applied to determine Encavis AG’s interest in the equity of all companies using the equity method.

The reporting date of all consolidated subsidiaries corresponds to that of Encavis AG.

The following table shows the main valuation principles underlying the preparation of the consolidated financial statements:

Balance sheet items	Subsequent measurement principle
Assets	
Intangible assets	Amortised cost (IAS 38)
Goodwill	Acquisition cost less impairment losses (IFRS 3)
Property, plant and equipment	Amortised cost (IAS 16)
Right-of-Use assets	Detailed description in section 3.24 (IFRS 16)
Financial assets accounted for using the equity method	Proportional change in net assets (IAS 28)
Financial assets	Detailed description in section 3.10 (IFRS 9)
Other receivables	Amortised cost (IFRS 9)
Deferred tax assets	Detailed description in section 3.14 (IAS 12)
Inventories	Lower of cost and net realisable value (IAS 2)
Trade receivables	Amortised cost less expected credit losses (IFRS 9)
Non-financial assets	Amortised cost
Receivables from income taxes	Amortised cost less expected credit losses (IAS 12)
Other current receivables	Amortised cost (IFRS 9)
Cash and cash equivalents	Nominal value (IFRS 9)

Balance sheet items	Subsequent measurement principle
Equity and liabilities	
Reserve for equity-settled employee remuneration	Detailed description in section 3.23 (IFRS 2)
Liabilities to non-controlling interests	Detailed description in section 3.20 (IFRS 9)
Financial liabilities	Amortised cost under the effective interest method (IFRS 9)
Lease liabilities	Detailed description in section 3.24 (IFRS 16)
Other liabilities	Expected settlement amount (IFRS 9)
Provisions	Expected settlement amount (IAS 37)
Deferred tax liabilities	Detailed description in section 3.14 (IAS 12)
Trade payables	Amortised cost (IFRS 9)

3.2 Business combinations

The acquisition of a business is accounted for using the purchase method. The consideration transferred in a business combination is recognised at fair value, which comprises the sum of the fair values of the assets transferred at the date of exchange, the liabilities assumed by the former owners of the acquiree and the equity instruments issued by the Group in exchange for control of the acquiree. As a rule, any incurred costs associated with the business combination are recognised in profit or loss.

The identifiable assets acquired and liabilities assumed are carried at fair value, with the following exceptions:

- Deferred tax assets or deferred tax liabilities and assets or liabilities associated with employee benefit arrangements are to be recognised and accounted for in accordance with IAS 12 “Income Taxes” or IAS 19 “Employee Benefits”.
- In accordance with IFRS 2 “Share-based Payment”, liabilities or equity instruments associated with share-based payments or the reimbursement of share-based payments by the Group are recognised at the acquisition date.
- Assets (or disposal groups) classified as held for sale as per IFRS 5 “Non-Current Assets Held for Sale and Discontinued Operations” are recognised in accordance with this standard.

Goodwill represents the excess of the sum of the consideration transferred, the amount of all non-controlling interests in the acquiree, the fair value of the equity interest previously held by the acquirer in the acquiree (if any) and the balance of the amounts of identifiable assets acquired and liabilities assumed on the acquisition date. In the event that, following reassessment, the Group's share of the fair value of the identifiable net assets acquired is greater than the sum of the consideration transferred, the non-controlling interest in the acquiree and the fair value of the equity interest previously held by the acquirer in the acquiree (if any), the excess amount is recognised directly in profit or loss as income (within other operating income).

Non-controlling interests that currently confer ownership rights and, in the event of liquidation, entitle the holder to receive a proportionate share of the net assets of the enterprise are recognised upon addition either at fair value or at the corresponding share of the recognised amounts of the identifiable net assets. This option can be exercised with every new business combination. Other components of non-controlling interests are recognised at fair value or at value measurements derived from other standards.

If initial accounting for a business combination is incomplete at the end of the financial year in which it takes place, the Group discloses provisional amounts for the items with incomplete accounting. The provisional amounts recognised are adjusted during the accounting period, or additional assets or liabilities must be recognised in order to reflect the new information on facts and circumstances existing at the acquisition date and which would have affected the measurement of amounts recognised at that date had they been known.

Technical factors may cause a slight discrepancy between the technical date of initial consolidation and the actual closing date when accounting for business combinations.

3.3 Foreign currency translation

The consolidated financial statements are prepared in euros. The euro is the functional and reporting currency of Encavis AG. The annual financial statements of the consolidated subsidiaries prepared in foreign currencies are translated into euros using the functional currency concept as set out in IAS 21. The functional currency of foreign companies is determined by the primary economic environment in which they operate. Assets and liabilities are translated at the closing rate, while equity, with the exception of income and expenses recognised directly in equity, is carried at historical rates. Until the disposal of the subsidiary, any resulting currency translation differences are not recognised in the statement of comprehensive income and are reported as a separate item in equity. The statement of comprehensive income items are converted into euros using weighted average exchange rates.

Currency translation is based on the following exchange rates:

EUR 1 =	Closing exchange rates		Average exchange rates	
	31.12.2019	31.12.2018	2019	2018
British pound (GBP)	0.8508	0.8945	0.8773	0.8847
US dollar (USD)	1.1234	1.1450	1.1196	1.1815
Danish krone (DKK)	7.4715	7.4673	7.4661	7.4532

3.4 Significant accounting decisions and key sources of uncertainties in estimates

Within the scope of preparing the consolidated financial statements, in certain cases estimates and assumptions are made that affect how accounting methods are applied as well as which amount of assets, liabilities, income and expenses are recorded. The actual values may differ from these estimates. The estimates and underlying assumptions undergo continuous reviews. The adapted estimates are accounted for on a prospective basis.

In the following section, the main assumptions for the future and other key sources of estimate uncertainties at the end of the reporting period will be listed which may give rise to a significant risk that calls for a material adjustment to assets and liabilities in the next financial year.

Presentation of PPAs using the equity method

In 2018 and 2019, Encavis acquired 80 per cent shareholdings via Encavis Iberia GmbH in each of the project companies Talayuela and Cabrera, both of which are building a solar park in Spain. The purchase price for the two Spanish investments was determined together with the partner Solarcentury using financial models that already take into account the PPAs to be concluded in the expected inflows. However, due to the contractual arrangements, there is no control over the companies prior to commissioning, so that the shareholdings are valued as financial assets accounted for using the equity method in accordance with IAS 28 due to the significant influence. This accounting method stipulates that participating interests be initially recorded at acquisition cost and then amortised over the allocated pro rata results.

In the 2019 financial year, both companies concluded a PPA in the form of a derivative for a period of ten years, in which the fixed electricity purchase price is presently below the current market price level, but at the level of the joint valuation model with Solarcentury and thus the assumptions of the purchase price.

In the context of equity accounting, the derivatives with a negative market value recognised in the balance sheets of both participating interests mean that, following a complete reduction of the equity approaches (due to the attributed pro rata results) in accordance with IFRS regulations, the associated loans are also reduced in part with no effect on income. The recognition of the derivatives in the balance sheet is separate from the determination of the investment values in which the effects of the PPAs were already included in the purchase price. This consolidation technique does not in any way lead to the intrinsic value of the participating interests being impaired.

The current equity ratio of 25.3 per cent would be 26.9 per cent without the recognition of derivatives at the level of the Spanish investments.

Economic life of property, plant and equipment and intangible assets

When evaluating the values of property, plant and equipment and intangible assets, the expected useful life of the assets must be estimated while taking into account, in particular, contractual provisions, industry insights and assessments by company management. Additional information is included in notes 3.5 and 3.7.

Lease terms

In order to measure lease liabilities and rights of use under leases in accordance with IFRS 16, it is necessary to estimate the term of the lease; in particular, the probability of the use of extension options must be estimated. Explanations of the estimates can be found in note 3.24 and note 6.16.

Impairment of goodwill

In order to determine whether goodwill is impaired, it is necessary to calculate the value in use of the Group's cash-generating units that are allocated to goodwill. Calculating the value in use requires an estimate of future cash flows from the Group's cash-generating units as well as an appropriate capitalisation interest rate for the calculation of the present value. A material impairment may result if the actual expected future cash flows are less than previously estimated. The calculation was carried out as of 30 September 2019. In the period from 30 September to 31 December 2019, there were no fundamental changes that would have required an adjustment of the calculated values.

The carrying amount of goodwill as of 31 December 2019 was TEUR 26,569 (previous year: TEUR 19,989). The increase is mainly due to the addition of TEUR 6,482, which is attributable to a wind park portfolio in Denmark acquired in December 2019. It also includes effects of translation at closing exchange rates in accordance with IAS 21 on the goodwill of British companies whose functional currency is British pounds sterling in the amount of TEUR 98.

Business combinations

All identifiable assets and liabilities are recognised at their fair values at the time of initial consolidation within the scope of business combinations. The estimated fair values recognised are subject to uncertainties. If intangible assets are identified, the fair value must be estimated using generally accepted valuation methods. The valuations are based on the company's plans, which are based on estimates by management while taking contractual agreements into account. The discount rates (WACC) applied in connection with the valuation of intangible assets are between 2.04 % and 3.85 % (previous year: 1.39 % and 3.53 %). This range is primarily due to the varying interest rates in the individual markets as well as differences in the remaining useful lives of intangible assets.

The acquisition of solar and wind installations already connected to the grid is treated as a business combination, since the Group considers the requirements of an existing business operation to have been met.

Control of the companies Windkraft Sohland GmbH & Co. KG, BOREAS Windfeld Greußen GmbH & Co. KG, Windkraft Olbersleben II GmbH & Co. KG and Windkraft Kirchheilingen IV GmbH & Co. KG

The aforementioned wind parks are structured in the form of a limited commercial partnership (KG) formed with a limited liability company (GmbH) as general partner and the members of the GmbH, their families, or outsiders as limited partners. The general partner and thus the personally liable partner in each case is BOREAS Management GmbH, Reichenbach. The general partner has no share in the company's assets or profit and loss and has not made a financial contribution. The limited partners are Capital Stage Wind IPP GmbH, Hamburg (with a contribution over 50 %), and BOREAS Energie GmbH, Dresden (with a contribution under 50 %). Encavis does not hold interests in the general partner.

In accordance with IFRS 10, a control situation is assumed if the parent company bears the risk exposure due to fluctuating yields from the commitment in the investment, is able to influence the amount of returns, has full control of the investment and thus decides on the relevant activities. For one wind park, the relevant operational and financial activities are mainly liquidity planning and control as well as decisions on the conclusion of maintenance agreements and on necessary repairs.

The management is the responsibility of the general partner. However, the main decisions mentioned above call for the simple majority of the voting rights at the shareholders' meeting according to the partnership agreement. Encavis holds the direct or indirect voting majority (with an investment of over 50 %) in all the aforementioned wind parks and can exert significant influence on the operating and financial activities.

Encavis is therefore not restricted to the supervisory role typical of a limited partner, but instead plays an active role in all significant decisions. If a decision does not call for a vote by the shareholders' meeting, the general partner prepares decision proposals that Encavis may approve, amend or reject.

Encavis thus assumes control of the company, as it initially holds the decision-making power on financial and operating activities and these activities allow it to generate significant economic benefits through its shareholding of over 50 %.

The aforementioned wind parks are therefore included in the fully consolidated companies in the consolidated financial statements.

Control of CHORUS CleanTech GmbH & Co. Solarpark Bitterfeld KG

Encavis controls CHORUS CleanTech GmbH & Co. Solarpark Bitterfeld KG with a share of 36.0 % by carrying out the management of this company as well as of the company that holds the significant remaining shares. The remaining 64.0 % of shares was acquired in February 2020, making Encavis the sole shareholder of the solar park.

3.5 Intangible assets

With the exception of goodwill, intangible assets all have a limited useful life and are valued at their acquisition cost less scheduled linear amortisation. They are amortised on the basis of their economic life.

If the recoverable amount is below the carrying amount as of the balance sheet date, the lesser value is allocated. If the reasons for the impairment losses previously carried out are no longer in effect, write-ups are made with an effect on net income.

Amortisation of feed-in contracts is usually carried out over the term of the regulated period for each respective wind park or solar park. The expected useful lives of the individual intangible assets are as follows:

Expected useful lives in years	
Feed-in contracts for wind parks ans solar parks (Germany, Italy)	20
Feed-in contracts for solar parks (France)	20
Feed-in cotracts for solar parks with feed-in tariffs (FiT) (United Kindom)	20
Feed-in contracts for wind parks (France)	15
Feed-in contracts for solar parks (the Netherlands)	15
Feed-in cotracts for wind parks after the expiry of bonus compensation depending on the supported number of kWh (Denmark)	Approx. 6 to 8
Feed-in cotracts for wind parks subsidised through renewable obligation certificates (ROC) (United Kindom)	Max. 30
Project rights	18 to 30
Other intangible assets	3 to 5

3.6 Goodwill

The goodwill resulting from a business combination is accounted for at acquisition cost less impairment losses, if necessary, and is recorded separately in the consolidated balance sheet.

For the purposes of assessing impairment of goodwill, the amount of goodwill is assessed separately for each cash-generating unit (or groups thereof) of the Group which may be expected to be able to take advantage of the synergy effects resulting from the combination.

Cash-generating units to which a part of goodwill has been allocated must be assessed annually for impairment. If there is proof that a unit has been impaired, it will be evaluated more frequently. If the recoverable amount of a cash-generating unit is less than the carrying amount of the unit, the impairment loss is initially allocated to the carrying amount of the goodwill associated with the unit and then proportionately to the remaining assets based on the carrying amount of each asset in the unit. Any impairment recognised as a goodwill impairment loss is recorded directly in the statement of comprehensive income. An impairment loss recognised for goodwill may not be offset in future periods.

If a cash-generating unit is disposed of, the corresponding amount of goodwill within the scope of calculating the deconsolidation earnings is taken into account.

3.7 Property, plant and equipment

Property, plant and equipment are valued at acquisition cost minus accumulated depreciation. Profits or losses from the disposal of property, plant and equipment are included in other income or expenses. The depreciation period and the depreciation method are reviewed at the end of each financial year.

Property, plant and equipment are written off proportionally over the period of their estimated economic life. The expected useful lives of individual property, plant and equipment are as follows:

Estimated economic lives in years	
Photovoltaic and wind installations	18 to 30
Other office equipment	2 to 15

3.8 Impairment of property, plant and equipment and intangible assets with the exception of goodwill

The impairment test is carried out at least once a year to determine whether there are indications of impairment. If such indications are discovered, the recoverable amount of the asset is estimated in order to determine the amount of any impairment loss.

The recoverable amount is the higher amount of either the fair value less the disposal costs and the value in use of an asset or a cash-generating unit. In determining the value in use, the estimated future cash flow from the continued use of the asset and from its ultimate disposal with a pre-tax rate are discounted. This pre-tax rate takes into account current market assessments of the fair cash value as well as inherent risks from the asset value, insofar as the estimated future cash flow has not been adapted to this.

If the recoverable amount of the individual asset cannot be estimated, the estimated value will be the recoverable amount of the cash-generating unit to which the asset belongs.

If the estimated recoverable amount of an asset or a cash-generating unit is less than the carrying amount, the carrying amount of the asset or the cash-generating unit will be reduced to the recoverable amount. The impairment loss for a cash-generating unit first reduces the carrying amount of any goodwill that is allocated to the cash-generating unit and then proportionately the other assets of the unit according to the carrying amounts of each individual asset. The effect of the impairment loss on net income is recognised immediately.

If the reasons for a previously recognised impairment are no longer in effect, the carrying amount of the asset or the cash-generating unit is increased to the most recent estimate of the recoverable amount as recognised in net income. The increase in the carrying amount may not exceed the value that would have been determined if no impairment loss was recognised in previous years. A reversal of an impairment loss for a cash-generating unit is allocated to the asset values of the unit, except for goodwill, proportionally to the carrying amount of these assets.

3.9 Financial assets accounted for using the equity method

Financial assets accounted for using the equity method are initially recognised at acquisition cost and in subsequent periods at amortised pro rata net assets. The carrying amounts are increased or reduced annually by the pro rata results, the distributions and all other changes in equity. Other changes in equity include, in particular, items recognised directly in equity (reserve from equity valuation) via other comprehensive income. Any goodwill is not reported separately but is included in the carrying amount of the participating interest. Financial assets accounted for using the equity method are written down if the recoverable amount is less than the carrying amount. Once the carrying amount is fully depleted by negative allocations of earnings and/or distributions, the allocations are transferred to any existing assets associated with the investment, such as loans to these entities.

3.10 Primary financial instruments

The accounting treatment of primary and derivative financial instruments has been regulated in IFRS 9 “Financial Instruments” since 2018.

3.10.1 Financial assets

IFRS 9 stipulates a uniform model for classifying financial assets, which classifies them into the following three categories:

- Financial assets measured at amortised cost (AC)
- Financial assets measured at fair value through profit or loss (FVPL)
- Financial assets (both equity and debt instruments) measured at fair value in other comprehensive income (FVOCI)

Financial assets whose cash flows consist exclusively of interest and principal payments are classified according to Encavis’s business model. Financial assets held within a business model that intends to hold the asset in order to collect the contractual cash flows are measured at amortised cost. These business models are managed primarily on the basis of the interest rate structure and the credit risk. If the business model generally provides for holding the assets, but disposals are also made if this is necessary, for example to cover a certain liquidity requirement, these assets are measured at fair value in other comprehensive income. Financial assets that contain only interest and principal payments but are not held within one of the two business models mentioned are measured at fair value through profit or loss. Encavis recognises standard market transactions on the settlement date.

At Encavis, financial assets whose cash flows do not consist exclusively of interest and principal payments, such as investments in investment funds, are measured at fair value through profit or loss. For equity instruments, IFRS 9 optionally permits measurement at fair value in other comprehensive income. Encavis does not currently use this option.

Under IFRS 9, trade receivables, loans, other current receivables and liquid assets are classified as measured at amortised cost (AC) and are generally subject to the effective interest method.

Under IFRS 9, mezzanine capital held and investments in investment funds which are reported under non-current financial assets are classified as at fair value through profit or loss (FVPL). They do not meet the criteria for measurement at amortised cost, as the cash flows from this do not only represent interest and principal payments.

Derivative financial assets at fair value through profit or loss relate to derivatives outside of hedge accounting (category FVPL).

Changes in the value of financial assets measured at fair value are either recognised directly in equity under other reserves (FVOCI) or in consolidated earnings through profit or loss (FVPL).

Impairment model based on expected credit losses (ECL model)

IFRS 9 defines an impairment model based on expected credit losses which is applicable to all financial assets (debt instruments) that are either measured at amortised cost or at fair value in other comprehensive income. This approach takes into account not only credit losses that have already occurred, but also expectations about the future. The recognition of expected credit losses generally uses a three-step procedure for allocating impairments:

Level 1: Expected credit losses within the next 12 months

This includes all contracts without a material increase in credit risk since initial recognition and regularly includes new contracts and those whose payments are not, or not materially, overdue. The portion of the expected credit losses over the term of the instrument that is attributable to a default within the next 12 months is recognised.

Level 2: Expected credit losses over the entire term – no impaired credit rating

A financial asset is allocated to this level if it has experienced a material increase in credit risk but its credit rating is not impaired. The expected credit losses over the entire term of the financial asset are recorded as an impairment.

Level 3: Expected credit losses over the entire term – impaired credit rating

A financial asset is allocated to this level if its credit rating is impaired or defaulted. The expected credit losses over the entire term of the financial asset are recorded as an impairment. From Encavis's point of view, objective indications that the credit rating of a financial asset is impaired include, for example, an overdue period of 90 days or more and further information on the debtor's material financial difficulties.

The determination of whether a financial asset has experienced a material increase in credit risk is based on an assessment of the probability of default, which is carried out at least quarterly and takes into account both external rating information and internal information on the credit quality of the financial asset. A material increase in credit risk is primarily determined on the basis of information regarding overdue payments. The Group regularly assumes that the loans are past due from 30 days.

A financial asset is transferred to level 2 if the credit risk has materially increased compared to its credit risk at the time of initial recognition. Credit risk is estimated on the basis of the probability of default. For trade receivables, the simplified approach is applied, according to which the expected credit loss for these receivables is calculated over the entire term. Accordingly, no assessment of a material increase in credit risk is required. Encavis applies the simplified impairment model of IFRS 9 to trade receivables and thus recognises the expected losses over the entire term. Other receivables and loans, including interest receivables, are shown using the general approach.

Valuation of expected credit losses

Expected credit losses are calculated based on the following factors:

a) Credit risk, broken down by country (based on the one-year CDS of the respective country)

b) Credit risk divided into private and public or semi-public customers

c) Receivables, subdivided according to the aspects mentioned above as of the balance sheet date

d) The expected default loss rate

e) Time value of money

A financial instrument is derecognised if it is reasonably unlikely that a financial asset can be fully or partially realised, for example after the end of insolvency proceedings or as a result of court decisions.

Material modifications (for example if the present value of the contractual cash flows changes by 10 %) of financial assets result in derecognition. The expectation is that this will usually not be relevant for Encavis. If the terms of the contract are renegotiated or modified and this does not result in derecognition, the gross carrying amount of the contract is recalculated and any difference is recognised in profit or loss.

For reasons of materiality, despite the classification in the AC category, no expected loss is determined for liquid assets and recorded in the consolidated statement of comprehensive income.

In detail, the following items are affected by impairments:

Trade receivables

The Group applies the simplified impairment model of IFRS 9 for trade receivables in accordance with the standard. This is based on the so-called lifetime expected loss.

In order to determine the expected credit defaults, trade receivables have been combined into largely homogeneous groups with similar characteristics with regard to their estimated credit risks. In particular, there was a separation between governmental and semi-public buyers, which account for the majority of buyers in the electricity production sector, and private buyers. The Encavis Group has private buyers mainly in the Asset Management segment and, to a lesser extent, also in the electricity buyers segment.

Loans to associates and other loans as well as other current receivables

In principle, the Group estimates the credit risks for loans granted and other current receivables to be low, which is why a provision for losses on receivables was formed for these items in the amount of the expected 12-month losses on receivables.

Material estimation uncertainties and accounting judgements

Impairment losses on financial assets are generally based on estimates for loan defaults and expected default rates based on the valuation parameters described above and, where appropriate, on individual estimates on a case-by-case basis in the case of items actually at risk of default. The Group exercises certain discretion in making this assessment. Even minor deviations in the valuation parameters – in interest rates, for example – used for calculation can lead to material deviations in the calculation, particularly due to the amount of trade receivables.

3.10.2 Financial liabilities

The Group’s financial liabilities include trade liabilities, financial liabilities, liabilities to non-controlling interests and other financial liabilities. These are carried at amortised cost (AC). Lease liabilities and liabilities from contingent consideration are not allocated to any category of IFRS 9.

Financial liabilities are recorded if a Group company becomes a contractual party to the financial instrument. They are measured at amortised cost pursuant to the effective interest method.

The effective interest method is a way of calculating the amortised cost of a financial liability and allocating the interest expense to the respective periods. The effective interest rate is the rate that discounts estimated future cash payments (including all fees and payments received or effected which are an integral component of the effective interest rate, transaction costs and other premiums or discounts) through the expected lifetime of the financial instrument or a shorter period, if applicable, to the net carrying amount from the initial recognition.

Derecognition of financial liabilities

The Group only derecognises a financial liability if the Group’s corresponding liability (or liabilities) has (or have) been settled, cancelled or expired. The difference between the carrying amount of the derecognised financial liability and the consideration received or to be received must be recorded as profit or loss.

3.10.3 Fair value measurement

Calculating the fair values financial assets and liabilities requires a wide range of accounting and valuation methods and information from the Group.

To determine the fair value of an asset or a liability, the Group relies as much as possible on observable market data (market or stock exchange price). If no active market value exists, the fair value is determined as much as possible using other observable input factors. If no observable input factors are available, the fair value is determined using methods of financial mathematics, for example by discounting future cash flows at the market interest rate or by applying recognised option pricing models, and is verified as far as possible by confirmations from the banks settling the transactions. Depending on the availability of observable parameters and the significance of these parameters for measuring fair value as a whole, the fair value measurement is assigned to level 1, 2 or 3. This fair value hierarchy is defined as follows:

- Input parameters for level 1 are quoted prices (unadjusted) on active markets for identical assets or liabilities that the Company can access on the measurement date.
- Input parameters for level 2 are listed prices other than those used for level 1, which can either be observed for the asset or debt directly or indirectly, or which can be derived indirectly from other prices.
- Input parameters for level 3 are unobservable inputs for the asset or liability.

Assets and liabilities consistently measured at fair value are reclassified from one level to another if necessary – for example, if an asset is no longer traded on an active market or is traded for the first time.

3.11 Derivative financial instruments and hedge accounting

Encavis only uses derivative financial instruments to hedge future cash flows (so-called underlying transactions) for financial risks resulting from commercial business or refinancing activities. These are primarily interest rate and currency risks. In accordance with the Group's risk management principles, generally 100 % of the forecast highly probable cash flows are hedged. There are no expected transactions at Encavis for which hedge accounting was used in the previous period but which are no longer expected to occur.

Derivative financial instruments are recognised at fair value upon initial recognition and on each subsequent balance sheet date. The fair value corresponds to their positive or negative market value. If no market values are available, they are calculated using recognised financial mathematical models, such as discounted cash flow models or option price models. Derivatives are recognised as assets when their fair value is positive and as liabilities when their fair value is negative.

A prerequisite for hedge accounting is that the clear hedging relationship between the underlying transaction and the hedging instrument is documented and its effectiveness has been demonstrated. Interest rate and currency swaps and forward exchange contracts are used as hedging instruments. If the requirements of IFRS 9 for hedge accounting are met, Encavis designates and documents the hedging relationship as a cash flow hedge from this point in time. In the case of a cash flow hedge, fluctuations in future cash flows from highly probable expected transactions or cash flows to be paid or received in connection with a recognised asset or liability are hedged. The Group enters into interest rate swaps that generally have the same terms as the underlying transaction, such as reference interest rates, repricing dates, payment dates, maturities and nominal amounts. During the financial year, all material contractual terms and conditions were the same, so that there was an economic relationship between the hedged item and the hedging instrument. The documentation of the hedging relationships includes the objectives and strategy of risk management, the type of hedging relationship, the hedged risk, the designation of the hedging instrument and the underlying transaction, as well as an assessment of the effectiveness criteria, which include the risk-reducing economic relationship, the effects of the credit risk and the appropriate hedge ratio. Hedging relationships are regularly reviewed to determine whether they have been effective throughout the period for which they were designated. The reasons for ineffectiveness of interest rate swap hedges may be credit value/debit value adjustments that are not offset by changes in the value of the hedged loans, and subsequent designations in which the date on which the interest rate derivative is designated differs from the date on which it is designated as a hedge.

The designated effective portion of the hedging instrument is recognised directly in other comprehensive income, and the designated ineffective portion of the hedging instrument is recognised directly in other comprehensive income under the costs of the hedging measures. The future component of a forward as well as any foreign currency basis spreads are excluded from the designation of a derivative as a hedging instrument and recognised as costs of hedging. Changes in the fair value of these components are recognised temporarily in other comprehensive income (cost of hedging) and transferred to the income statement (financial result) upon realisation of the underlying transaction. The ineffective portion of a cash flow hedge is recognised immediately through profit or loss and transferred to the income statement (financial result) over the term of the hedge. Changes in the value of derivatives not designated are measured at fair value through profit or loss. Under IFRS 9, amounts recognised as effective hedging gains/losses from hedging transactions in other comprehensive income are removed from the equity reserve and directly added to the acquisition cost of the underlying transaction upon recognition if the underlying item, e.g. the expected transaction, results in the recognition of a non-financial asset or non-financial liability.

In the case of cash flow hedges, the cumulative hedging gains/losses from the hedging transactions are transferred from the equity reserve to the consolidated earnings for other underlying transactions at the same time as the effect on profit or loss of the hedged underlying transactions.

If derivative financial instruments are not, or no longer, included in hedge accounting because the requirements for hedge accounting are not, or are no longer, met, they are measured at fair value through profit or loss (FVPL). Forward exchange transactions are also allocated to the FVPL category.

3.12 Collateral

The financial liabilities from the solar parks and wind parks are essentially non-recourse loans. For these financial liabilities and, where appropriate, also contingent liabilities, the consolidated Group companies for the most part have provided collateral to the financing banks or creditors. As usual in this type of financing, property, plant and equipment and all rights as well as future claims have been assigned to the banks. The current amount of the collateral furnished thus corresponds to the carrying amount of the assets or the amount of reserves (section 6.11 of the notes), or involves intangible assets (such as the right to join feed-in contracts). The main forms of collateral are:

- Enforceable land charges (property, plant and equipment)
- Pledging of debt service and project reserve accounts (liquid assets with restrictions on disposition)
- Assignment of the various companies' rights to payment of the electricity feed-in tariff and assignment of payment and compensation claims vis-à-vis third parties from any direct marketing contracts (revenue)
- Assignment of goods stored in a specific place (property, plant and equipment)

3.13 Inventories

The inventories mainly comprise replacement parts for power generation equipment and merchandise. They are recognised at the lower value of either acquisition or production cost or net realisable value. The net realisable value is calculated from the expected selling price less the estimated costs until completion and the estimated necessary distribution costs.

3.14 Income taxes

Income tax expenses are the sum of current tax expenses and deferred taxes.

Current and deferred taxes are recorded in the consolidated statement of comprehensive income, unless they are related to items recognised in other comprehensive income or directly in equity. In this case, the current and deferred taxes are also recognised in other comprehensive income or directly in equity. The income tax consequences of dividend payments within the meaning of IFRS 9 on financial instruments classified as equity are treated in accordance with the treatment of the transactions giving rise to the tax effect. The tax effects from the deductibility of interest on the hybrid bond classified as equity, which, due to its lack of profit dependency, does not include any profit distributions within the meaning of IFRS 9, are therefore recognised in equity.

Current taxes

The actual tax refund claims and tax liabilities are valued at the expected amount of a reimbursement from or payment to the tax authorities. They are based on the tax rates and tax laws in effect as of the balance sheet date.

Deferred taxes

Deferred taxes are calculated in relation to temporary recognition and valuation differences between the IFRS carrying amount of an asset or liability and its tax base. Deferred tax liabilities are generally recognised for all taxable temporary differences; deferred tax assets are recorded to the extent that it is probable that there will be sufficient excess taxes in future which can be used for the deductible temporary differences. Deferred tax assets from unused loss carry-forwards are capitalised to the extent that it is likely within a planning period of five years that these can be offset in the future with available taxable income. In addition, further stipulations of IAS 12 must be observed if there is an excess of deferred tax liabilities, and if the existing loss carry-forwards cannot be used within the period of five years.

Deferred tax assets and liabilities offset each other if the Group has a legally enforceable right to offset the actual tax refund claims against the actual tax liabilities and if these relate to taxes on earnings from the same taxable entity levied by the same tax authority.

Deferred tax assets and liabilities are generally calculated using the respective individual corporate and country-specific tax rate for the company which is expected to be valid as of the date of performance of the liability or realisation of the asset. For the German companies, a weighted tax rate that takes into account the various corporation tax rates in Germany was used.

The tax reconciliation and additional information are provided in section 5.8 of the notes.

3.15 Trade receivables and other assets

Trade receivables are initially carried at their fair value, which generally corresponds to the nominal amount less the expected credit losses. As a result, they are valued at their amortised cost. Value adjustments have been made on the basis of the expected credit loss model in accordance with IFRS 9.

3.16 (Restricted) cash and cash equivalents

Cash and cash equivalents consist of cash on hand and bank and deposit balances which have a high degree of liquidity and a total maturity of up to three months. They are not subject to any interest rate risk and are carried at nominal values. The debt service and project reserve accounts are an exception, which serve as collateral for the lending banks for solar parks and wind parks and can only be used with the approval of the lending banks; to a lesser extent, another exception is restricted cash at Encavis AG and other Group companies. They are classified as restricted cash and cash equivalents but do not form part of cash and cash equivalents within the meaning of IAS 7.

3.17 Assets held for sale and associated liabilities

Individual non-current assets or groups of assets and any directly attributable liabilities (disposal groups) are reported in these line items if they can be disposed of in their current condition and there is a high possibility that their disposal will actually take place. For a group of assets and associated liabilities to be classified as a disposal group, the assets and liabilities in it must be held for sale in a single transaction or as part of a comprehensive plan.

Discontinued operations are components of an entity that are either held for sale or have already been sold and can be clearly distinguished from other corporate operations, both operationally and for financial reporting purposes. Additionally, the component classified as a discontinued operation must represent a major business line or a specific geographic business segment of the Group.

Non-current assets that are held for sale either individually or collectively as part of a disposal group or that belong to a discontinued operation are no longer depreciated. They are instead accounted for at the lesser value between the carrying amount and the fair value less any remaining costs to sell. If the fair value is less than the carrying amount, an impairment loss is recognised.

The income and losses resulting from the measurement of components held for sale at fair value less any remaining disposal costs as well as the profits and losses arising from the disposal of discontinued operations are reported separately in the statement of comprehensive income under income/loss from discontinued operations together with the income from the ordinary operating activities of these divisions. However, results from the valuation of individual assets held for sale and disposal groups are recognised in depreciation.

At present, the Encavis Group has no assets held for sale and associated liabilities.

3.18 Financial liabilities and other liabilities

Financial liabilities are recognised at their fair value at the time they are recorded in the balance sheet. Subsequent valuation is carried out at amortised cost using the effective interest method. The financial liabilities from the solar parks and wind parks are essentially non-recourse loans; that is, the solar and wind energy installations are the collateral for each respective loan. Other liabilities are recognised at the amount required to settle the respective obligation if fair value is negligible given their short maturity (less than one year).

3.19 Provisions

Other current provisions are recognised in the amount of their expected settlement without a discount and take into account all liabilities identifiable as of the balance sheet date which are based on past transactions or past events prior to the balance sheet date and whose amount or maturity is uncertain. The amount is calculated on the basis of the most likely settlement value.

Non-current provisions are discounted (risk-free) at an appropriate interest rate.

Provisions are only made if there is an underlying legal or de facto obligation towards third parties and the probability of occurrence is greater than 50 %. Forming provisions presupposes that the fulfilment of the obligation is likely to result in the outflow of resources and a reliable estimate of the amount of the provision is possible.

3.20 Liabilities to non-controlling interests

Non-controlling interests in private companies are reported as non-current or current liabilities. Upon initial recognition, they are measured either at fair value or at the proportionate share of the identifiable net assets recognised in the balance sheet. The further development of liabilities is carried out through the further development of the pro rata net assets. Liabilities also include loans issued to non-controlling shareholders plus accrued interest.

3.21 Revenue

The core principle of IFRS 15 is the recognition of revenue in the amount that an entity can expect in return for the transfer of goods or services to a customer. Revenue is recognised when the customer has control over the goods or services. IFRS 15 also contains requirements for the disclosure of existing power reserves or service obligations at contract level.

To determine the timing (or period) and the amount of revenue to be recognised, IFRS 15 has introduced a five-step model, which Encavis uses in assessing its business transactions.

The goods transferred by Encavis (supply of electricity) and services offered represent individual service obligations or service obligation bundles.

Revenues from the supply of electricity are recognised in exact amounts using an output-based method, and revenues from the services provided to third parties by the Group are recognised on an ongoing basis in accordance with the performance of the service. The simplification rule is applied to record revenue in the amount invoiced by Encavis.

3.22 Financial income

Dividend income from investments is recognised when the shareholder’s right to receive payment has been established (provided it is probable that the economic benefit will flow to the Group and the amount of income can be measured reliably).

Interest income must be recognised if it is likely that the economic benefit will flow to the Group and the amount of income can be measured reliably. Interest income must be accrued or deferred on the basis of the outstanding nominal amount via the applicable effective interest rate. The effective interest rate is the exact rate by which the expected future payments over the lifetime of the financial asset will be discounted from the net carrying amount of that asset on initial recognition.

3.23 Share option programmes

Share options (equity-settled share-based payment transactions) are measured at their fair value at the time they are granted. The fair value of the obligation is recognised as personnel expenses over the vesting period, and a capital reserve is recognised at the same time (reserve for equity-settled employee remuneration to be met through equity instruments). The options issued are measured via a binomial option price model.

The valuation of share-based payment awards with cash settlement (share appreciation rights – SARs) is calculated using a Monte Carlo simulation. The SARs are assessed at each reporting date and settlement date. The calculated value of the SARs that are expected to become exercisable is recognised in profit and loss on an accrual basis as personnel expenses in the vesting period. Provisions are formed to the same extent. When SARs expire, the provisions already formed are released to other operating income with an effect on profit or loss.

3.24 Leases

Since the application of the uniform accounting model for leases in accordance with IFRS 16 as of January 1, 2019, the lessee no longer distinguishes between operating and finance leases, so that in principle all assets and liabilities from lease agreements must be recognised in the balance sheet. For the lessor, the new requirements do not result in any significant changes. Because Encavis does not act as lessor, the following explanations are limited to the accounting of the lessee.

At the start of each contract, an assessment is made as to whether the contract constitutes a lease in the sense of IFRS 16 or contains a lease. A lease within the meaning of IFRS 16 exists when the agreement grants Encavis the right to control the use of an identified asset for a specified period of time in return for a fee.

If a lease has been identified, a right of use is to be capitalised in an amount equal to the acquisition cost on the provision date, i.e. the date on which asset is available for use by Encavis. The acquisition cost includes:

- The amount recognised as a lease liability at initial valuation
- All initial direct costs incurred
- All lease payments already made before or as of the provision date less lease incentives received
- All estimated asset retirement and comparable obligations

Subsequent valuation is carried out at acquisition cost less any linear depreciation, amortisation and impairment losses, and adjusted for revaluations of the lease liability. The depreciation period is defined as the shorter of the useful life and the lease term. If the exercise of a call option is deemed sufficiently certain, the asset is depreciated over the useful life of the underlying asset.

On the provision date, a lease liability is to be recognised as a liability in the amount of the present value of the outstanding lease payments over the term of the lease. Encavis uses the marginal borrowing rate as the basis for discounting, provided that the interest rate implicit in the lease cannot otherwise be readily determined. Since the interest rate implicit in the lease cannot usually be readily determined, Encavis usually uses the marginal interest rate. The marginal interest rate is defined as the interest rate that a lessee would have to pay if it were to borrow, for a comparable period of time and with comparable certainty, the funds it would need in a comparable economic environment for an asset with a value comparable to the right of use. Encavis' marginal interest rate estimates are based on observable market yields, from which effective interest rates are derived and which are subsequently adjusted for liquidity and country-specific risks.

The lease liabilities include:

- Fixed payments (including de facto fixed payments) less lease incentives to be received
- Variable lease payments linked to an index or interest rate
- Amounts expected to be paid as part of residual value guarantees
- Exercise prices for call options, provided that their exercise is sufficiently probable
- Penalties for early termination of the lease, if it is reasonably certain that the termination will be exercised

Variable lease payments not pegged to an index or interest rate are recognised in the statement of comprehensive income. In the case of Encavis, these are mainly lease payments, which are linked, for example, to the revenues or other earnings figures of the respective energy installation.

The lease term consists of the binding term plus any extension options whose exercise is sufficiently likely as well as periods during which a termination option is granted, provided that this option is sufficiently unlikely to be exercised.

The lease liability is compounded over the term and reduced by the payments made. In the event of any changes in the lease that affect future lease payments, the lease must be revalued. These changes include, for example, revised estimates of the exercise of extension and termination options or adjustments to the amount of the lease payments.

Encavis makes use of its optional right granted by the standard to not recognise short-term leases with a term of up to 12 months and leases with low-value underlying assets (i.e. with an original value of up to USD 5,000) as assets and/or liabilities in the balance sheet. All related payments are recognised in the statement of comprehensive income on a straight-line basis over the term of the lease. As Encavis primarily has long-term contracts due to its business model, these exceptions rarely occur within the Group and are not considered significant.

3.25 Earnings per share

Undiluted earnings per share are calculated by dividing the earnings attributable to shareholders by the weighted average number of shares in circulation during the period. Diluted earnings per share are calculated by dividing the earnings attributable to shareholders by the weighted average number of shares in circulation during the period, plus the number of exercisable options. The options were taken into account if the average weighted market price of the ordinary shares had reached or exceeded the exercise price of the option during the period. The potential ordinary shares from the issued hybrid convertible bond do not have a dilutive effect due to the anti-dilution protection in accordance with IAS 33.41.

3.26 Borrowing costs

Borrowing costs incurred directly in connection with the creation of qualified assets from the start of production to commissioning are capitalised and then depreciated with the corresponding asset value. The cost of funding is determined on the basis of the specific financing costs of capital borrowed specifically for the production of a qualified asset. The cost-of-funding rates on which the capitalisation is based were between 0.72 and 5.50 % in the previous year (no further capitalisation took place in the current financial year). Other borrowing costs are recognised as current expenses.

3.27 Government grants

The benefit of a government loan (e.g. a subsidised loan from the KfW Group) at a below-market rate of interest is treated as a government grant and measured as the difference between the proceeds received and the fair value of the loan determined at the market rate. The interest rate advantage is recognised as deferred income and dissolved in profit and loss over the term of the subsidised fixed-interest rate for the loan.

3.28 Segment reporting

Segment reporting is carried out based on the accounting standard IFRS 8 “Operating Segments” in accordance with the management approach set out therein, which provides for segmentation and reporting based on the internal organisational and reporting structure as well as the internal control parameters. The segments were therefore defined and identified in accordance with the internal organisational and reporting structure. The Group has the following reportable operating segments: PV Parks, PV Service, Wind Parks and Asset Management. In addition, the non-reportable segment Administration is reported under other companies and Group functions because it is not a separate business segment under IFRS 8.6. Reporting is generally based on services rendered and products; a breakdown by region is shown in note 7. In particular, revenue and operating earnings before interest, taxes, depreciation and amortisation (EBITDA) are monitored separately by management in order to make decisions about the allocation of resources and to determine the profitability of the segments. Management also monitors the following operating performance indicators of the segments: EBITDA margin and earnings before interest and taxes (EBIT).

3.29 Risk management

The Encavis Group’s risk management system is designed to detect potential risks at an early stage and evaluate them precisely. Risk identification is therefore of great importance for the Encavis Group. For detailed information on the various types and classes of risk, please refer to the management report.

4 Subsidiaries

4.1 Disclosures on subsidiaries

Details on subsidiaries as of the balance sheet date are listed below:

Segment	Country	Number of wholly owned subsidiaries 31.12.2019	31.12.2018
PV Parks	Germany	48	48
	Italy	63	65
	France	8	8
	United Kingdom	23	23
	Netherlands	2	2
	Ireland	1	1
	Spain	2	1
	Denmark	1	0
Wind Parks	Germany	16	22
	France	4	4
	Austria	3	3
	Denmark	3	4
PV Service	Germany	2	1
Asset Management	Germany	19	19
Administration	Germany	4	3
	Netherlands	1	1
Total		**200**	**205**

Segment	Country	Number of non-wholly owned subsidiaries 31.12.2019	31.12.2018
PV Parks	Germany	4	4
	France	7	7
	Ireland	7	6
	Netherlands	2	1
Wind Parks	Germany	11	5
	Denmark	1	1
	Italy	1	1
Total		**33**	**25**

The following changes in the subsidiaries included in the consolidated financial statements occurred in the 2019 financial year:

Changes in subsidiaries included in the consolidated financial statements	In Germany	Abroad	Total
Included as of 31 December 2018	102	128	230
Acquisition	1	2	3
Foundation	3	3	6
Dissolution/liquidation/merger	-2	-4	-6
Included as of 31 December 2019	**104**	**129**	**233**

The following companies were renamed in the 2019 financial year:

Renamings

Former company name	New company name
CHORUS CleanTech 7. Solarinvest GmbH	Encavis Windinvest GmbH
CHORUS GmbH	Encavis Asset Management AG
CHORUS Solar S.r.l. & Co. Foggia Cinque S.a.s.	CHORUS Solar Foggia 5 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Due S.a.s.	CHORUS Solar Foggia 2 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Nove S.a.s.	CHORUS Solar Foggia 9 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Otto S.a.s.	CHORUS Solar Foggia 8 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Quattro S.a.s.	CHORUS Solar Foggia 4 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Sei S.a.s.	CHORUS Solar Foggia 6 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Sette S.a.s.	CHORUS Solar Foggia 7 S.r.l.
CHORUS Solar S.r.l. & Co. Foggia Tre S.a.s.	CHORUS Solar Foggia 3 S.r.l.
Encavis Asset Management AG	Encavis GmbH

The following holding companies were founded in the financial year:

Foundations

Foundation in the financial year	Segment
Encavis Grundstück Beteiligungs GmbH	Administration
Encavis Hispania S.L.U.	PV Spain
Mermaid Solar Holding Aps	PV Denmark
Stern Energy GmbH	PV Service
Thöringswerder GmbH & Co. KG	PV Germany

The two Danish operating companies Norhede-Hjortmose Vind 12 K/S and Norhede-Hjortmose Vind 19 I/S – which are allocated to the Wind Parks segment – were merged with Encavis Wind Danmark ApS effective on 1 January 2019.

The two Italian intermediate holding companies CHORUS Solar S.r.l. & Co. S.a.s. and CHORUS Solar S.r.l. – which are allocated to the PV Parks segment – were merged with CHORUS Solar Italia Centrale 5. S.r.l. effective on 1 January 2019.

On 20 September 2019, the remaining 51 % of shares in Energiepark Debstedt 2 RE WP DE GmbH & Co. KG were acquired, which was previously reported as an associate (detailed information on the company acquisition is provided in Note 3). At the same time, the company was merged with the parent company Energiepark Debstedt GmbH & Co. RE WP DE KG.

With effect from 26 November 2019, the German intermediate holding company Horatum Erste GmbH was merged with Capital Stage Solar IPP GmbH.

Details on non-wholly owned subsidiaries which include significant non-controlling interests

The following table includes details on non-wholly owned subsidiaries which include significant non-controlling interests. Intra-Group transactions have not been removed from the specified amount.

Subsidiaries	Equity interests and share of voting rights of non-controlling shares in %		Profit or loss attributed to non-controlling interests in TEUR		Cumulative non-controlling interests in TEUR	
	31.12.2019	31.12.2018	2019	2018	31.12.2019	31.12.2018
Solarpark Brandenburg (Havel) GmbH	49.00	49.00	953	753	6,883	6,085
Parco Eolico Monte Vitalba S.r.l.	15.00	15.00	11	2	467	595
Solaire Ille SARL	15.00	15.00	66	-23	129	64
Centrale Photovoltaique SauS 06 SARL	15.00	15.00	66	5	138	71
CPV Sun 20 SARL	15.00	15.00	-30	31	-18	13
CPV Sun 21 SARL	15.00	15.00	13	40	40	27
CPV Sun 24 SARL	15.00	15.00	-13	62	-20	-8
CPV Bach SARL	15.00	15.00	-49	26	-45	4
CPV Entoublanc SARL	15.00	15.00	-19	-23	-67	-48
Norhede-Hjortmose Vindkraft I/S	18.50	18.60	134	39	1,980	2,253
Zonnepark Budel B.V.	19.99	19.99	186	-278	118	123
Zonnepark Zierikzee B.V.	10.00	0.00	5	0	468	0
Other immaterial subsidiaries			-43	-76	-65	-34
Total amount of non-controlling interests			**1,280**	**558**	**10,009**	**9,145**

Condensed financial information relating to subsidiaries in which the Group holds significant non-controlling interests is provided below. The condensed financial information corresponds to the amounts before intra-Group eliminations.

Solarpark Brandenburg (Havel) GmbH, Germany	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	3,753	3,402
Non-current assets	32,461	34,354
Current liabilities	2,116	2,620
Non-current liabilities	23,057	25,725
Net assets	11,040	9,412
Carrying amount of non-controlling interests	6,883	6,085
	2019	**2018**
Revenue	5,193	5,562
Annual earnings	1,946	1,536
Total comprehensive income	1,946	1,536
Profit or loss attributable to non-controlling interests	953	753
	2019	**2018**
Dividends paid to non-controlling interests	155	629
Cash flow from operating activities	3,261	4,946
Cash flow from investing activities	0	-3
Cash flow from financing activities	-3,141	-3,763
Net change in cash and cash equivalents	**120**	**1,180**

Parco Eolico Monte Vitalba S.r.l., Italy	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	418	1,385
Non-current assets	4,314	4,506
Current liabilities	154	533
Non-current liabilities	1,485	1,412
Net assets	3,093	3,946
Carrying amount of non-controlling interests	467	595
	2019	**2018**
Revenue	733	1,695
Annual earnings	70	14
Total comprehensive income	70	14
Profit or loss attributable to non-controlling interests	11	2
	2019	**2018**
Dividends paid to non-controlling interests	139	90
Cash flow from operating activities	741	1,422
Cash flow from financing activities	-1,096	-1,701
Net change in cash and cash equivalents	**-355**	**-279**

Solaire Ille SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	1,037	1,410
Non-current assets	11,885	11,375
Current liabilities	3,024	3,471
Non-current liabilities	9,034	8,888
Net assets	863	425
Carrying amount of non-controlling interests	129	64
	2019	**2018**
Revenue	1,589	1,494
Annual earnings	438	-152
Total comprehensive income	438	-152
Profit or loss attributable to non-controlling interests	66	-23
	2019	**2018**
Cash flow from operating activities	1,142	1,125
Cash flow from financing activities	-1,126	-1,377
Net change in cash and cash equivalents	**16**	**-252**

Centrale Photovoltaique SauS 06 SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	1,124	1,086
Non-current assets	12,799	12,417
Current liabilities	3,560	3,583
Non-current liabilities	9,445	9,443
Net assets	919	477
Carrying amount of non-controlling interests	138	71
	2019	**2018**
Revenue	1,588	1,435
Annual earnings	442	34
Total comprehensive income	442	34
Profit or loss attributable to non-controlling interests	66	5
	2019	**2018**
Cash flow from operating activities	1,059	1,100
Cash flow from investing activities	-211	0
Cash flow from financing activities	-730	-1,411
Net change in cash and cash equivalents	**118**	**-311**

CPV Sun 20 SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	697	915
Non-current assets	7,349	7,196
Current liabilities	1,655	1,556
Non-current liabilities	6,509	6,470
Net assets	-118	85
Carrying amount of non-controlling interests	-18	13
	2019	**2018**
Revenue	832	816
Annual earnings	-203	207
Total comprehensive income	-203	207
Profit or loss attributable to non-controlling interests	-30	31
	2019	**2018**
Cash flow from operating activities	313	1,056
Cash flow from investing activities	0	-206
Cash flow from financing activities	-556	-1,141
Net change in cash and cash equivalents	**-243**	**-291**

CPV Sun 21 SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	1,115	914
Non-current assets	9,507	9,448
Current liabilities	2,186	2,044
Non-current liabilities	8,169	8,134
Net assets	267	183
Carrying amount of non-controlling interests	40	27
	2019	**2018**
Revenue	1,080	1,038
Annual earnings	84	265
Total comprehensive income	84	265
Profit or loss attributable to non-controlling interests	13	40
	2019	**2018**
Cash flow from operating activities	927	795
Cash flow from investing activities	-22	-914
Cash flow from financing activities	-700	-386
Net change in cash and cash equivalents	**206**	**-505**

CPV Sun 24 SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	1,352	1,326
Non-current assets	15,572	15,491
Current liabilities	3,571	3,379
Non-current liabilities	13,486	13,488
Net assets	-134	-50
Carrying amount of non-controlling interests	-20	-8
	2019	**2018**
Revenue	1,738	1,656
Annual earnings	-84	411
Total comprehensive income	-84	411
Profit or loss attributable to non-controlling interests	-13	62
	2019	**2018**
Cash flow from operating activities	1,057	2,323
Cash flow from investing activities	-2	-559
Cash flow from financing activities	-1,149	-2,408
Net change in cash and cash equivalents	**-94**	**-644**

CPV Bach SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	828	1,077
Non-current assets	9,384	9,293
Current liabilities	2,046	1,958
Non-current liabilities	8,463	8,386
Net assets	-297	27
Carrying amount of non-controlling interests	-45	4
	2019	**2018**
Revenue	1,060	988
Annual earnings	-324	174
Total comprehensive income	-324	174
Profit or loss attributable to non-controlling interests	-49	26
	2019	**2018**
Cash flow from operating activities	956	517
Cash flow from investing activities	-55	-1,858
Cash flow from financing activities	-607	1,317
Net change in cash and cash equivalents	**293**	**-23**

CPV Entoublanc SARL, France	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	814	1,583
Non-current assets	9,817	9,501
Current liabilities	2,223	2,572
Non-current liabilities	8,856	8,833
Net assets	-448	-321
Carrying amount of non-controlling interests	-67	-48
	2019	**2018**
Revenue	1,043	573
Annual earnings	-127	-155
Total comprehensive income	-127	-155
Profit or loss attributable to non-controlling interests	-19	-23
	2019	**2018**
Cash flow from operating activities	340	524
Cash flow from investing activities	-71	-882
Cash flow from financing activities	-1,015	1,276
Net change in cash and cash equivalents	**-745**	**918**

Norhede-Hjortmose Vindkraft I/S, Denmark

	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	406	1,804
Non-current assets	11,382	12,702
Current liabilities	143	1,328
Non-current liabilities	986	1,062
Net assets	10,659	12,116
Carrying amount of non-controlling interests	1,980	2,253
	2019	**2018**
Revenue	2,166	751
Annual earnings	722	210
Total comprehensive income	717	191
Profit or loss attributable to non-controlling interests	134	39
Comprehensive income attributable to non-controlling interests	133	36
	2019	**2018**
Dividends paid to non-controlling interests	438	123
Cash flow from operating activities	901	1,725
Cash flow from investing activities	0	543
Cash flow from financing activities	-2,356	-663
Net change in cash and cash equivalents	**-1,455**	**1,606**

Zonnepark Budel B.V., Netherlands

	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	2,003	5,833
Non-current assets	47,353	47,352
Current liabilities	11,957	16,872
Non-current liabilities	36,801	35,691
Net assets	598	622
Carrying amount of non-controlling interests	118	123
	2019	**2018**
Revenue	5,108	71
Annual earnings	930	-1,391
Total comprehensive income	-25	-1,391
Profit or loss attributable to non-controlling interests	186	-278
	-5	-278
	2019	**2018**
Cash flow from operating activities	3,536	-5,018
Cash flow from investing activities	1,541	-22,032
Cash flow from financing activities	-5,555	28,375
Net change in cash and cash equivalents	**-477**	**1,325**

Zonnepark Zierikzee B.V., Netherlands	31.12.2019 in TEUR	31.12.2018 in TEUR
Current assets	898	0
Non-current assets	16,731	0
Current liabilities	2,263	0
Non-current liabilities	10,686	0
Net assets	4,680	0
Carrying amount of non-controlling interests	468	0
	2019	**2018**
Revenue	1,496	0
Annual earnings	53	0
Total comprehensive income	53	0
Profit or loss attributable to non-controlling interests	5	0
	2019	**2018**
Cash flow from operating activities	1,107	0
Cash flow from investing activities	-530	0
Cash flow from financing activities	-187	0
Net change in cash and cash equivalents	**390**	**0**

Reference is made to the list of shareholdings in section 18 of the notes.

4.2 Business combinations

The purchase price allocations used for first-time consolidation of Energiepark Debstedt 2 RE GmbH & Co. WP KG and Envacis Nordbrise A/S are only provisional, as events may arise in some cases after the purchase price allocations that would lead to a subsequent adjustment within one year after the acquisition. Changes are particularly likely to arise through the valuation of intangible assets, property, plant and equipment and financial liabilities. Furthermore, the temporary nature of the two purchase price allocations is due to the fact that the technical assessments and the corresponding final version of the planning calculations that form the basis for the valuation of intangible assets are not yet complete.

The acquisition of existing solar parks and wind parks as well as those still under construction is one of the business activities of the Group in addition to the operation of installations. This aspect of business activities is therefore the main reason for the acquisitions.

Business combinations in the 2019 financial year

Zonnepark Zierikzee B.V. – PV Parks segment

In TEUR	Carrying amount before PPA	Fair value according to preliminiary PPA
Intangible assets	0	5,873
Property, plant and equipment	8,456	8,457
Right-of-use assets IFRS 16	0	1,607
Current assets	798	798
Cash and cash equivalents	1,330	1,330
Liquid assets with restrictions on disposition	192	192
Liabilities and provisions	10,818	11,319
Lease liabilities IFRS 16	0	1,107
Deferred tax assets	0	103
Deferred tax liabilities	0	1,307
Identified acquired net assets	**-41**	**4,627**
Determining the amount of the difference		
Purchase price for 90 % of shares		1,536
Purchase price for acquired financial liabilities		1,452
Total purchase price		**2,988**
Identified acquired net assets (90 %)		4,165
Non-controlling interests (10 %)		463
Acquired financial liabilities (shareholder loans)		1,452
Badwill		**-2,629**
Net cash outflow from the acquisition		1,658

This transaction refers to the 90 % acquisition of a solar park in the Zeeland province of the Netherlands. The park was consolidated for the first time as of 09 January 2019. The business combination was carried out by applying the purchase (partial goodwill) method. The value of the revalued equity capital as of the date of initial consolidation was TEUR 4,627. The current receivables assumed as a result of the transaction, which are made up of tax receivables, have a fair value of TEUR 798. The best estimate, carried out on the acquisition date, of the anticipated unrecoverable portion of the contractual cash flows was TEUR 0. Moreover, there were no contingent assets or liabilities. The incidental transaction costs were TEUR 118. Pursuant to the option contained in IFRS 3.19, non-controlling interests are measured at the corresponding proportion of the identified net assets of the company. Revenue of TEUR 1,496 and profit of TEUR 53 have been recognised from the acquired entity since the date of initial consolidation. Had the company been included in the Group since the beginning of 2019, projections would not have had a material impact on revenue or consolidated earnings. The purchase price for the shares acquired and a shareholder loan assumed was TEUR 2,988 and was paid entirely in cash.

Energiepark Debstedt 2 RE GmbH & Co. WP DE KG – Wind Parks segment

In TEUR	Carrying amount before PPA	Fair value according to preliminiary PPA
Intangible assets	0	2,349
Property, plant and equipment	7,109	6,993
Right-of-use assets IFRS 16	0	975
Cash and cash equivalents	5	5
Liabilities and provisions	8,161	9,051
Lease liabilities IFRS 16	0	736
Deferred tax assets	0	195
Deferred tax liabilities	0	550
Identified acquired net assets	**-1,048**	**179**
Determining the amount of the difference		
Purchase price for acquired shares		1
Purchase price for acquired financial liabilities		1,877
Total purchase price		**1,878**
Identified acquired net assets		179
Acquired financial liabilities (shareholder loans)		1,877
Badwill		**-179**
Net cash outflow from the acquisition		1,873

This transaction refers to the 51 % acquisition of a German wind park near Bremerhaven. The remaining 49 % of shares with a fair value of EUR 245 have been owned by Energiepark Debstedt GmbH & Co. RE WP KG since 2017, which has now taken over the remaining 51 % and subsequently merged Energiepark Debstedt 2 GmbH & Co. RE WP KG with Energiepark Debstedt GmbH & Co. RE WP KG. The park was consolidated for the first time as of 17 September 2019. The business combination was carried out by applying the purchase (partial goodwill) method. The value of the revalued equity capital as of the date of initial consolidation was TEUR 179. The best estimate, carried out on the acquisition date, of the anticipated unrecoverable portion of the contractual cash flows was TEUR 0. Moreover, there were no contingent assets or liabilities. The incidental transaction costs totalled TEUR 5 and were accounted for directly in current expenses for the period. Due to the addition of the newly acquired Energiepark Debstedt 2 GmbH & Co. RE WP KG to Energiepark Debstedt GmbH & Co. RE WP KG, which is already consolidated in the Group, the profit and loss items cannot be shown separately from the latter. For the period prior to initial consolidation, the acquired company reported revenues of TEUR 289 and a loss in the amount of TEUR 274. The purchase price for the shares acquired and a shareholder loan assumed was TEUR 1,878 and was paid entirely in cash.

Encavis Nordbrise A/S – Wind Parks segment

In TEUR	Carrying amount before PPA	Fair value according to preliminiary PPA
Intangible assets	0	6,090
Property, plant and equipment	98,044	101,130
Right-of-use assets IFRS 16	0	5,163
Other receivables	254	120
Current assets	1,930	1,930
Cash and cash equivalents	343	343
Liquid assets with restrictions on disposition	83	83
Liabilities and provisions	49,392	53,306
Deferred tax assets	0	861
Deferred tax liabilities	9,193	12,079
Identified acquired net assets	**42,070**	**50,336**
Determining the amount of the difference		
Purchase price for acquired shares		56,818
Purchase price for acquired financial liabilities		0
Total purchase price		**56,818**
Identified acquired net assets		50,336
Acquired financial liabilities (shareholder loans)		0
Badwill		**6,482**
Net cash outflow from the acquisition		56,475

The transaction involves the 100 % acquisition of a wind park in Denmark. The park was consolidated for the first time as of 20 December 2019. The business combination was carried out by applying the purchase (partial goodwill) method. The value of the revalued equity capital as of the date of initial consolidation was TEUR 50,336. The current receivables assumed as a result of the transaction have a fair value of TEUR 1,930. The best estimate, carried out on the acquisition date, of the anticipated unrecoverable portion of the contractual cash flows was TEUR 0. Moreover, there were no contingent assets or liabilities. The incidental transaction costs were TEUR 472. Revenue of TEUR 0 and profit of TEUR 0 have been recognised from the acquired entity since the date of initial consolidation. Had the company been consolidated since the beginning of 2019, projections show that the consolidated financial statements would have reflected additional revenue of TEUR 11,725 and a profit of TEUR 874 from this company. The goodwill amounts to TEUR 6,482 and results from the comparatively low valuation of intangible assets due to the relatively short terms of the electricity feed-in contracts. No tax deductibility is expected for the goodwill. The purchase price for the shares acquired was TEUR 56,818 and was paid entirely in cash.

Finalisation of the purchase price allocation for the companies Solarpark Boizenburg I GmbH & Co. KG and Solarpark Boizenburg II GmbH & Co. KG

During the valuation period as per IFRS 3.45, the company adjusted the purchase price allocation due to the now finalised measurement of the intangible assets. The main changes to the provisional price allocation and the figures presented in the 2018 annual report are a decrease in intangible assets of TEUR 1,054 and an increase in deferred tax assets of TEUR 301. This resulted in a reduction in badwill of TEUR 753.

Reasons for the realisation of badwill

The badwill was largely realised through the benefits that Encavis boasts compared to other potential buyers. In particular, these include very good liquidity and the associated opportunity to repay the seller’s existing interim financing promptly.

Business combinations often require participation in a public sale process whereby the purchase price is significantly influenced by the bids made by competitors. However, the Group acquisitions result only from exclusive negotiations with the seller, which has a significant influence on the realisation of badwill. In addition, public structured sales processes take longer than exclusive negotiations. Many sellers prefer the quick and foreseeable completion of the transaction with Encavis – where closing, i.e. purchase price payment, rapidly follows signature of the contract – to a long, protracted structured sales process. This is because, at the end of it, although the purchaser is often the highest bidder, they are frequently unknown and possibly not able to pay immediately and ensure prompt closing.

Another aspect in the generation of badwill is the discount that can be obtained when a portfolio of assets is acquired. This discount when a portfolio is sold compared to individual sales reflects the greater speed of the sale and the resulting savings in staff, administration and transaction costs that would occur if selling each of the assets individually.

A large number of solar parks and wind parks are presented to the Group for scrutiny each year. As part of a clearly defined filtering process, the most attractive projects are selected from these offers in the short term and scrutinised more closely. Many years of experience and knowledgeable employees mean the Group is in a position to review and carry out acquisitions in a very short period of time. As the business relationships go back a long way in some cases, the sellers also have a high degree of trust in Encavis. Experience shows that this filtering process leads to approximately eight to ten transactions during the year. Since several solar parks and wind parks can be acquired in a single transaction, this corresponds to the acquisition of around 20 installations per year.

Overall impact of the business combinations on the Group result

To the extent that they can be allocated separately, the consolidated income contains profit of TEUR 53 generated by the companies newly included in the consolidated financial statements between 1 January and 31 December 2019. To the extent that it can be allocated separately, revenue contains TEUR 1,496 from subsidiaries consolidated for the first time in the financial year. According to estimates, had all business combinations been effected as of 1 January 2019, then Group revenue (if determinable) as of 31 December 2019 would have increased by TEUR 13,220 and consolidated earnings (if determinable) would have risen by TEUR 927.

For the 2019 financial year in total, business combinations and adjustments of provisional purchase price allocations result in a negative difference of TEUR 2,055 (previous year: TEUR 6,424) and goodwill of TEUR 6,482.

Business combinations and other acquisitions after the balance sheet date

The scope of consolidation of Encavis did not change between 1 January 2020 and the date of publication of this annual report.

Business combinations in the previous year

In the 2018 financial year, the following companies were added to the scope of consolidation as a result of business combinations:

In Germany	Abroad
Energiepark Hürth-Barbarahof WP HB GmbH & Co. KG	Norhede-Hjortmose Vind 12 ApS (including participating interest in Norhede-Hjortmose Vind 12 K/S)
Energiepark Odisheim GmbH & Co. WPODI KG	Norhede-Hjortmose Vind 19 I/S
Solarpark Boizenburg I GmbH & Co. KG und Solarpark Boizenburg II GmbH & Co. KG	Norhede-Hjortmose Vindkraft I/S
	Windenergieanlagen Rindum Enge 1 und 5 (asset Deal)
	Windenergieanlagen Rindum Enge 2 und 3 (asset Deal)

Acquisition of subsidiaries that do not meet the definition of a business

In the financial year, Encavis did not acquire any subsidiaries that did not meet the definition of a business within the meaning of IFRS 3 at the time of acquisition and thus to not fall within the scope of IFRS 3.

Encavis continues to expand its pipeline in Ireland. To this end, project rights already acquired in 2018 were transferred to the self-founded company Toolestown Solar DAC, based in Ireland.

4.3 Disposals of subsidiaries and participating interests

Majority-preserving reduction of the share capital by 49 % for six companies (Wind Parks segment)

On 28 May 2019, Encavis disposed of shareholdings in the amount of 49 % respectively in the five park companies Energiepark Breitendeich RE WP BD GmbH & Co. KG, Energiepark Passow WP Briest III GmbH & Co. KG, Energiepark Debstedt GmbH & Co. RE WP DE KG, Energiepark Lunestedt GmbH & Co. WP HEE KG and Energiepark Lunestedt GmbH & Co. WP LUN KG, as well as the company Energiekontor Windstrom GmbH & Co. UW Lunestedt, to the Luxembourg special fund of an institutional investor. The disposal was carried out without effect on the status of control over the subsidiaries. The inflow of funds from the majority-preserving reduction of the share capital is recognised in the cash flow from financing activities and amounts to TEUR 24,855, of which a total of TEUR 5,916 is attributable to the acquisition of shares; non-current liabilities to non-controlling shareholders have been recognised in the corresponding amount. Additionally, a total of loan and interest receivables in the amount of TEUR 18,939 was transferred to the buyer as part of the transaction.

4.4 Significant restrictions

Pursuant to IFRS 12.13, CSG IPP GmbH is subject to the following significant restrictions that result from the mezzanine capital contract with Gothaer Lebensversicherung AG (hereinafter “Gothaer”). Investments in connection with the mezzanine capital are subject to various investment criteria that are determined by a committee comprising equal numbers of representatives of Encavis and Gothaer. Furthermore, during the term of the mezzanine capital contract, the shares in CSG IPP GmbH must not be pledged or encumbered with other rights and no cash-pooling contracts are permitted to exist. This does not include contracts between CSG IPP GmbH and the subsidiaries of CSG IPP GmbH. Material measures such as the dissolution or liquidation of CSG IPP GmbH require a unanimous decision by the committee. If Encavis intends to sell its interest in CSG IPP GmbH, Gothaer has a right of first refusal. Furthermore, the mezzanine capital contract stipulates narrowly defined rules on the liquidity available for distribution. The carrying amount of the assets of CSG IPP GmbH as of the balance sheet date is TEUR 214,347 (previous year: TEUR 216,610) and the carrying amount of the liabilities is TEUR 202,218 (previous year: TEUR 209,598). The carrying amount of the assets of CSG IPP GmbH in the consolidated financial statements as of the balance sheet date is TEUR 15,843 (previous year: TEUR 22,933) and the carrying amount of the liabilities is TEUR 156,307 (previous year: TEUR 161,976).

5 Notes to the consolidated statement of comprehensive income

5.1 Revenue

TEUR 273,822

Previous year: TEUR 248,785

The following table shows a breakdown of external revenue by the main geographical markets and the time of revenue recognition in order to illustrate the influence of economic factors on the type, amount, time and uncertainty of revenues and cash flows:

In TEUR

	PV Parks	Wind Parks	PV Service	Asset Management	Total
Main geographical markets					
Germany	69,370	39,815	159	10,423	119,767
(previous year)	(71,152)	(38,853)	(303)	(4,136)	(114,444)
Italy	61,620	733			62,353
(previous year)	(60,884)	(1,695)			(62,579)
France	38,884	7,312			46,196
(previous year)	(36,747)	(6,914)			(43,661)
United Kingdom	18,759				18,759
(previous year)	(17,584)				(17,584)
Austria		6,991			6,991
(previous year)		(5,682)			(5,682)
Denmark		8,264			8,264
(previous year)		(4,695)			(4,695)
Netherlands	11,492				11,492
(previous year)	(139)				(139)
Spain	0				0
(previous year)	(1)				(1)
Total	**200,125**	**63,115**	**159**	**10,423**	**273,822**
(previous year)	(186,507)	(57,839)	(303)	(4,136)	(248,785)
Date of revenue realisation					
Services provided over a certain period of time	**200,125**	**63,115**	**159**	**10,423**	**273,822**
(previous year)	(186,507)	(57,839)	(303)	(4,136)	(248,785)

5.2 Other income

TEUR 14,839

Previous year: TEUR 17,463

This item comprises:

Type of income in TEUR	2019	2018
Income from the initial consolidation of solar parks and wind parks	2,055	6,424
Non-period income	4,759	3,129
- of which from the reversal of provisions	*476*	*1,236*
Income from the reversal of deferred accrual items (government grants)	2,255	2,166
Other income	5,770	5,744
Total	**14,839**	**17,463**

Income from the initial consolidation of the wind and solar parks also includes adjustments to the provisional purchase price allocations within the measurement period in accordance with IFRS 3. In the course of the provisional purchase price allocation process, all acquired assets and liabilities were identified and their fair value determined.

5.3 Cost of materials

TEUR -2,136

Previous year: TEUR -1,756

This largely comprises the purchase of externally supplied electricity for the operation of the solar parks and wind parks in the amount of TEUR 1,737 (previous year: TEUR 1,630).

5.4 Personnel expenses

TEUR -16,997

Previous year: TEUR -13,306

Personnel expenses developed as follows:

In TEUR	2019	2018
Salaries	12,256	11,127
Social security contributions	1,304	1,392
Other personnel expenses	412	479
Personnel expenses from share-based payment	3,026	308
Total	**16,997**	**13,306**

In the 2019 financial year, there were an average of 123 employees in the Group (2018: 119 employees). The average number of employees is shown below broken down by company:

Average number of employees	2019	2018
Encavis AG	77	67
Stern Energy GmbH respectively Encavis Technical Services GmbH	10	10
Encavis Asset Management AG	26	40
Encavis GmbH	11	0
TC Wind Management GmbH	0	3
Total	**123**	**119**

Salaries also include expenses for employee bonuses and other payments. A breakdown of Management report remuneration is included in the remuneration report in the management report.

Personnel expenses from the share option programmes (see section 6.12 of the notes) of TEUR 3,026 (previous year: TEUR 308) were recognised in the consolidated earnings in the 2019 financial year.

In the 2019 financial year, payments of the employer's shares of statutory German pension insurance contributions amounted to TEUR 696 (previous year: TEUR 536).

5.5 Other expenses

TEUR -53,427

Previous year: TEUR -55,860

This item comprises:

Type of expense in TEUR	2019	2018
Costs for solar and wind parks	36,643	40,167
Due diligence and transaction costs	955	1,774
Legal and consulting fees	1,997	1,302
Operating expenses	9,345	9,333
Impairment for expected credit losses	2,555	88
Rent and cost of premises	361	968
Financial statement preparation and audit costs	816	780
Supervisory Board remuneration	389	390
Publications and Annual General Meeting	140	251
Investor relations and designated sponsoring	99	160
Other	128	648
Total	**53,427**	**55,860**

Other expenses are primarily comprised of costs for the operation of the parks, acquisition and administration, stock exchange listing costs, costs for legal and tax advice as well as auditing and general administrative costs such as travel expenses, insurance, advertising costs, telecommunications, vehicle costs and Supervisory Board remuneration. The line item for rent and costs of premises decreased in the financial year as a result of the first-time application of IFRS 16 as of 1 January 2019. The following table shows a detailed overview of the costs for solar parks and wind parks.

Costs for solar parks and wind parks can be broken down as follows:

Costs of solar and wind parks in TEUR	2019	2018
Technical and commercial management	9,925	12,523
Commercial lease	626	8,219
Repairs and maintenance	10,730	5,689
Other tax expenses for parks	2,986	2,578
Insurance	2,389	2,201
Legal and consulting fees	1,701	1,719
Fees, incidental costs and allowable expenses	1,078	1,302
Alarm and security costs	457	381
Other	6,752	5,555
Total	**36,643**	**40,167**

The sharp decline in lease expenses in 2019 is due to the first-time application of IFRS 16 as of 1 January 2019.

5.6 Depreciation and amortisation

TEUR -124,674

Previous year: TEUR -123,770

This item comprises:

Depreciation and amortisation in TEUR	2019	2018
Scheduled amortisation of intangible assets	47,462	46,297
- of which on electricity feed-in contracts	*46,276*	*45,280*
Scheduled depreciation of property, plant and equipment	77,213	65,168
- of which on energy generation installations	*75,626*	*64,647*
Impairment of goodwill of the cash-generating unit “PV United Kingdom” and corresponding currency effects	0	12,305
Total	**124,674**	**123,770**

The sharp rise in depreciation and amortisation on property, plant and equipment in 2019 is primarily due to the additional capitalisation of rights of use in connection with the first-time application of IFRS 16 as of 1 January 2019. In total, depreciation of leased assets amount to TEUR 8,937 in the 2019 financial year (previous year: TEUR 2,109).

5.7 Financial result

TEUR -40,775

Previous year: TEUR -51,803

This item comprises:

In TEUR	2019	2018
Interest and other similar income	21,200	14,691
Income from participating interests	21	35
Earnings attributable to non-controlling interests	3,550	58
Financial income	**24,771**	**14,784**
Interest and other similar expenses	-61,375	-65,375
Earnings attributable to non-controlling interests	-1,093	-1,202
Financial expenses	**-62,468**	**-66,577**
Earnings from financial assets accounted for using the equity method	**-3,078**	**-11**
Total	**-40,775**	**-51,803**

Interest and other similar income includes income from the valuation of derivative financial instruments in the amount of TEUR 1,056 (previous year: TEUR 2,655) and income from the continuous valuation of financial liabilities within the scope of business combinations in the amount of TEUR 11,485 (previous year: TEUR 8,916). The line item for interest and similar expenses also includes the compounding effects of lease liabilities additionally recognised as liabilities due to the first-time application of IFRS 16. In total, the interest cost from the accretion of lease liabilities amounts to TEUR 6,651 (previous year: TEUR 2,600). The financial result also comprises net income from foreign currency translation of TEUR 4,302 (previous year: net losses of TEUR 535). The measurement of non-current financial assets at fair value through profit or loss resulted in net income of TEUR 153 in the 2019 financial year (previous year: net loss of TEUR 62). The result of financial assets accounted for using the equity method is used to adjust the originally recognised carrying amounts with an effect on profit or loss. The transfer to the corresponding loans to associated companies recognised in profit or loss is also shown here. Please refer to note 6.4 for more further details.

5.8 Income taxes

TEUR -21,257

Previous year: TEUR -8,975

The reconciliation of expected to actual expenses for taxes on income can be seen in the following table:

in TEUR	2019	2018
Earnings before taxes (EBT)	50,651	19,754
Expected taxes on income (32.28 %; previous year: 32.28 %)	**-16,303**	**-6,376**
Differences due to different local tax rates and tax rate changes	1,216	3,311
Taxes relating to other periods	-3,657	7,891
Effects from tax-free income	1,270	2,679
Effects from non-tax-deductible operating expenses	-3,102	-1,514
Effects due to the use or impairment of loss carry-forwards	54	-6,525
Tax effects from the depreciation of goodwill	0	-2,824
Effects of trade tax additions and deductions	-521	-2,567
Other	-214	-3,050
Taxes on income	**-21,257**	**-8,975**

With a current tax liability of TEUR 16,196 (previous year: TEUR 10,739) and deferred tax expenses of TEUR 5,061 (previous year: tax income of TEUR 1,763), total tax expense for 2019 recognised in consolidated earnings amounts to TEUR 21,257 (previous year: TEUR 8,975).

Deferred taxes recognised in other comprehensive income amount to TEUR 2,455 (previous year: TEUR –270). They result from the effective part of the change in the fair value of derivative financial instruments used in cash flow hedges.

For the hybrid equity raised via Encavis Finance B.V. in accordance with IFRS, calculated income taxes on the tax-deductible interest expense of TEUR 1,125 (previous year: TEUR 1,022) were recognised directly in equity.

The company audit that began in 2018 for the Encavis Group was almost completely concluded in 2019. The provision of TEUR 250 for other taxes, which was formed in the previous year in an adequate amount, was reversed in light of the findings of the audit. No significant audit findings were made for the ongoing audits of individual subsidiaries, so that no provisions for income taxes were formed. The completed and ongoing audits have not given rise to any reason to change the risk provision for further open assessment years.

5.9 Other comprehensive income

TEUR -73,832

Previous year: TEUR 733

Other comprehensive income is mainly comprised of the hedge reserve of TEUR -10,476 (previous year: TEUR 1,206), changes in value from the equity method, which are recognised directly in equity (TEUR -65,769; previous year: TEUR 0) and currency translation differences of TEUR -51 (previous year: TEUR -140) from the translation of subsidiaries managed in foreign currencies. The changes in value from the equity method result primarily from power purchase agreements of associates, the changes in value of which are recognised directly in the equity of the associates as a derivative in accordance with IFRS 9 and are therefore also reported here in the consolidated financial statements.

Amounts recognised in equity will be reclassified in full to consolidated earnings once the corresponding hedged items have expired. In the 2019 financial year, TEUR 1 was reclassified from the currency translation reserve to consolidated earnings.

The corresponding deferred tax effects amount to TEUR 2,455 (previous year: TEUR -270). There are currently no items in the Encavis Group that cannot be reclassified to profit or loss.

In TEUR	Amount before taxes	Tax effect	Amount after taxes
Items that can be reclassified to profit or loss			
Currency translation differences	-51	0	-51
(previous year)	(-140)	(0)	(-140)
Hedging of cash flows – effective part of the change in fair value	-10,476	2,456	-8,020
(previous year)	(1,206)	(-276)	(930)
Cost of hedging measures	8	-1	7
(previous year)	(-34)	(6)	(-28)
Changes in value from the equity method recorded directly in equity	-65,769	0	-65,769
(previous year)	(0)	(0)	(0)
Reclassifications	1	0	1
(previous year)	(-29)	(0)	(-29)
Total change	**-76,287**	**2,455**	**-73,832**
(previous year)	**(1,003)**	**(-270)**	**(733)**

6 Notes to the consolidated balance sheet

6.1 Intangible assets

TEUR 547,168

Previous year: TEUR 579,950

Changes to intangible assets are as follows:

In TEUR	Other intangible assets	Electricity feed-in contracts/project rights	Total
Acquisition cost			
As of 01.01.2018	14,029	694,480	708,509
Additions	622	0	622
Changes in the scope of consolidation	0	16,323	16,323
Currency translation	-1	-228	-229
As of 31.12.2018	**14,650**	**710,575**	**725,225**
Depreciation and amortisation			
As of 01.01.2018	1,880	97,148	99,028
Additions	1,017	45,280	46,297
Currency translation	0	-49	-49
As of 31.12.2018	**2,897**	**142,378**	**145,275**
Carrying amount as of 31.12.2018	**11,753**	**568,197**	**579,950**
Acquisition cost			
As of 01.01.2019	14,650	710,575	725,225
Additions	405	0	405
Changes in the scope of consolidation	0	13,257	13,257
Disposals	-2	0	-2
Transfers	-106	106	0
Currency translation	5	1,367	1,372
As of 31.12.2019	**14,952**	**725,305**	**740,257**
Depreciation and amortisation			
As of 01.01.2019	2,897	142,378	145,275
Additions	1,186	46,276	47,462
Disposals	-2	0	-2
Currency translation	0	353	353
As of 31.12.2019	**4,081**	**189,007**	**193,088**
Carrying amount as of 31.12.2018	11,753	568,197	579,950
Carrying amount as of 31.12.2019	**10,871**	**536,298**	**547,168**

The collateral offered is described in section 3.12 of the notes. There are no contractual obligations to acquire intangible assets.

6.2 Goodwill

TEUR 26,569

Previous year: TEUR 19,989

The goodwill as of the balance sheet date is mainly derived from the acquisition of CHORUS Clean Energy AG and its subsidiaries, as well as the acquisition of Encavis Technical Service GmbH and several solar park portfolios in England and wind parks in Denmark.

As of the reporting date, the following groups of cash-generating units accounted for a significant portion of goodwill:

	31.12.2019	30/09/2019	
	Goodwill in TEUR *(previous year)*	Before-Tax-WACC in % *(previous year)*	After-Tax-WACC in % *(previous year)*
PV Germany	1.674 *(1.674)*	3,84 *(5,02)*	2,81 *(3,58)*
PV Italy	1.073 *(1.073)*	4,76 *(5,65)*	3,39 *(4,22)*
PV United Kingdom	2.972 *(2.875)*	4,35 *(5,14)*	3,64 *(4,19)*
Wind Germany	570 *(570)*	3,88 *(5,12)*	2,81 *(3,58)*
Nordbrise*	6.482 *(-)*	-	-
Wind France	2.445 *(2.445)*	3,86 *(4,79)*	3,02 *(3,82)*
Wind Austria	231 *(231)*	3,65 *(4,71)*	2,92 *(3,68)*
PV Service	1.481 *(1.481)*	3,19 *(4,70)*	2,81 *(3,58)*
Asset Management	9.640 *(9.640)*	3,61 *(4,96)*	2,81 *(3,58)*
Total	**26.569 *(19.989)***		

* The goodwill of the cash-generating unit Nordbrise was added with the acquisition of the companies as of 20 December 2019. No impairment test was carried out for this goodwill due to the proximity in time to the balance sheet date.

As required by IAS 36, goodwill is tested for impairment once a year. This is based on groups of cash-generating units (CGU). For goodwill, these groups are the operating segments, subdivided by country.

The sum of carrying amounts in each group of cash-generating units is compared to the recoverable amount in the impairment tests. The recoverable amount is the value in use, which is calculated from discounted future cash flows. The expected cash flows are reduced by the amount of income tax and discounted based on a capitalised interest rate after taxes. The capital asset pricing model is used to determine the capitalised interest rate from the average weighted average cost of capital (WACC). The detailed plan approved by the Encavis AG Management Board forms the basis for these cash flow forecasts, which take internal historical data into account. The detailed forecast period generally covers three years, but may extend to four or five years in exceptional cases if detailed forecasts are available. After the conclusion of the detailed planning period, as was the case in the previous year, a growth rate of 1.0 % is applied. The cash flow forecasts are most sensitive to the assumed long-term growth rate and the cost of capital.

The review was carried out on 30 September 2019 and confirmed the recoverability of all capitalised goodwill on the basis of groups of cash-generating units. In the period from 30 September 2019 to 31 December 2019, there were no indications that the valuation would have been materially affected.

Two sensitivity analyses were carried out for each group of cash-generating units in addition to this test. A scenario without growth rate was assumed for each group of cash-generating units during the first sensitivity analysis. The capitalised interest rate was increased by 0.5 percentage points for the second sensitivity analysis. If this would have any effects, they are shown in the following table:

	Scenario: Growth rate of 0 %		Scenario: Increase in capitalised interest rate (0.5 basis points)	
	Impairment in TEUR	Threshold for the growth rate above which impairment occurs	Impairment in TEUR	Threshold within the increase in the interest rate above which impairment occurs
Wind Germany	-10,981	0.09 %	-	-
Wind France	-7,598	0.35 %	-	-

6.3 Property, plant and equipment

TEUR 1,749,657

Previous year: TEUR 1,548,639

Changes to property, plant and equipment are as follows:

In TEUR	Installations under construction	Power generation installations	Other property, plant and equipment	Total
Acquisition cost				
As of 01.01.2018	21,144	1,627,076	2,445	1,650,665
Additions	55,092	20,914	620	76,626
Changes in the scope of consolidation	15,580	54,826	1,394	71,800
Disposals	0	-7	-1	-8
Changes due to fair value measurement	0	2,746	0	2,746
Transfers	-90,766	90,766	0	0
Transition of asset retirement scheme	0	8,661	0	8,661
Currency translation	-7	-1,295	-2	-1,304
As of 31.12.2018	**1,044**	**1,803,687**	**4,456**	**1,809,187**
Depreciation and amortisation				
As of 01.01.2018	0	194,755	742	195,497
Additions	0	64,647	521	65,168
Currency translation	0	-117	0	-117
As of 31.12.2018	**0**	**259,285**	**1,263**	**260,548**
Carrying amount as of 31.12.2018	**1,044**	**1,544,402**	**3,193**	**1,548,639**

In TEUR	Installations under construction	Power generation installations	Other property, plant and equipment	Total
Acquisition cost				
As of 01.01.2019	1,044	1,803,687	4,456	1,809,187
Additions	272	6,172	817	7,261
Changes in the scope of consolidation	0	124,324	0	124,324
Disposals	0	-2	-234	-236
Changes due to fair value measurement	0	5,243	0	5,243
Transfers	-77	77	0	0
Effects from the first-time application of IFRS 16	0	127,286	6,791	134,077
Change from revaluation under IFRS 16	0	656	105	761
Currency translation	0	7,642	0	7,642
As of 31.12.2019	**1,239**	**2,075,085**	**11,935**	**2,088,259**
Depreciation and amortisation				
As of 01.01.2019	0	259,285	1,263	260,548
Additions	0	75,626	1,587	77,213
Disposals	0	-1	-37	-38
Currency translation	0	878	0	878
As of 31.12.2019	**0**	**335,788**	**2,814**	**338,601**
Carrying amount as of 31.12.2018	1,044	1,544,402	3,193	1,548,639
Carrying amount as of 31.12.2019	**1,239**	**1,739,297**	**9,121**	**1,749,657**

Land and rights of use for leases are reported in one item together with the energy generation installations. Rights of use for buildings and cars are contained in the item for other property, plant and equipment. Further details on rights of use can be found in section 6.16. The category for changes due to fair value measurement includes the further development of capitalised asset retirement costs. The change from revaluation under IFRS 16 comprises reassessments and modifications of capitalised rights of use, in particular the indexation of leases.

Property, plant and equipment includes power generation installations, installations under construction and other property, plant and equipment amounting to TEUR 1,564,588 (previous year: TEUR 1,506,313) as collateral for existing financing. There are no contractual obligations to purchase property, plant and equipment and no material non-current assets have been disposed of.

6.4 Financial assets accounted for using the equity method

TEUR 9,590

Previous year: TEUR 14,514

During the financial year, the associates developed as follows: The equity method must be used for shares in associates.

In TEUR	CHORUS IPP Europe GmbH	Gnannenweiler Windnetz GmbH & Co. KG	Pexapark AG	Genia Extremadura Solar S.L.	Cabrera Energia Solar S.L.	Stern Energy S.p.A.	Total
As of 01.01.2019	167	124	3,022	11,200	0	0	**14,514**
Addition/acquisition	0	0	0	13,000	13	6,446	**19,459**
Distribution	-14	0	0	0	0	0	**-14**
Attributed result for the period	0	-10	-310	-816	-13	172	**-977**
Attributed other comprehensive income	0	0	0	-23,384	0	-7	**-23,391**
As of 31.12.2019	**153**	**114**	**2,712**	**0**	**0**	**6,611**	**9,590**

As of the balance sheet date, Encavis holds all shares of CHORUS IPP Europe GmbH, registered in Neubiberg, Germany. The company is not fully consolidated but classified as an associate despite the majority interest because most of the returns from the investment are received by an external third party via interest on mezzanine capital. In addition to the shares in CHORUS IPP Europe GmbH, Encavis holds mezzanine capital in and also provides services for the company. The investment serves as a means to expand the Group's asset management business by taking over management of the portfolio of solar parks and wind parks held. Quantitative information on the business relationship can be found in section 11 of the notes.

As of the balance sheet date, Encavis held 20 % of the shares in Gnannenweiler Windnetz GmbH & Co. KG. The company serves various energy installations as a substation and is used jointly by them. Due to the significant influence of Encavis, the equity method is used.

At the end of 2018, Encavis acquired 18.16 % of shares in the young Swiss company Pexapark. Significant influence is assumed on the basis of the amount of shares held and the co-determination rights conferred by a seat on the company's administrative board.

On 9 October 2018, Encavis acquired a solar park under construction near the Spanish city of Talayuela (Genia Extremadura Solar S.L.). With an 80 % holding, Encavis holds the majority of the shares in the company but has no control over the company prior to commissioning due to the contractual arrangements. Therefore, the company is accounted for as an associated company using the equity method until it is put into operation. The same applies for the Spanish Cabrera Energia Solar S.L., which was acquired during the financial year for TEUR 13. The construction progress of Genia Extremadura Solar S.L. resulted in further payments into the company in 2019. Both solar parks in Spain are mainly financed by long-term loans from the Encavis Group. In particular, the recognition of the negative market values of the private-sector power purchase agreements (PPAs) concluded for both associates during the year under review has an impact on other comprehensive income, which is added to the carrying amount of the investment without affecting profit or loss. The carrying amounts of the investments were both reduced to TEUR 0 due to the allocation of earnings in the financial year, and there was also a reduction in the corresponding loans to which the allocations of earnings (with no effect on income or through profit or loss) are transferred after the carrying amounts of the shares in associates have been used up.

On 20 June 2019, Encavis acquired a 30 % shareholding in the Italian company Stern Energy S.p.A. for TEUR 6,446. Due to its significant influence on the company and the existing ties between Encavis and Stern Energy S.p.A., the participating interest is reported as an associate in accordance with the equity method. The investment is intended to strengthen the PV Service segment as well as lay the foundation for the cooperation of the two groups in the field of technical operations management.

6.5 Financial assets

TEUR 104,830

Previous year: TEUR 6,474

Changes to financial assets are as follows:

In TEUR	Participating interests	Securities	Loans to affiliates	Other loans	Total
Acquisition cost					
As of 01.01.2018	5,074	1,751	4,840	309	11,975
Additions/acquisitions	547	0	0	291	838
Changes in the scope of consolidation	68	0	0	0	68
Disposals/payments	-1,230	0	-3,840	-321	-5,391
Change in fair value measurement/ECL	598	-660	-36	-14	-113
As of 31.12.2018	**5,056**	**1,092**	**964**	**265**	**7,378**
Depreciation and amortisation					
As of 01.01.2018	904	0	0	0	904
As of 31.12.2018	**904**	**0**	**0**	**0**	**904**
Carrying amount as of 31.12.2018	**4,153**	**1,092**	**964**	**265**	**6,474**
Acquisition cost					
As of 01.01.2019	5,056	1,092	964	265	7,378
Additions/acquisitions	151	0	147,409	0	147,560
Disposals/payments	-1,021	-175	-1,143	0	-2,339
Additions from the equity method	0	0	-44,484	0	-44,484
Change in fair value measurement/ECL	-138	291	-2,534	0	-2,381
As of 31.12.2019	**4,048**	**1,208**	**100,212**	**265**	**105,733**
Depreciation and amortisation					
As of 01.01.2019	904	0	0	0	904
As of 31.12.2019	**904**	**0**	**0**	**0**	**904**
Carrying amount as of 31.12.2018	4,153	1,092	964	265	6,474
Carrying amount as of 31.12.2019	**3,144**	**1,208**	**100,212**	**265**	**104,830**

The non-current financial assets of the Encavis Group are divided into participating interests and securities. The participating interests include investments in four investment funds in the renewable energy sector in the form of limited partnerships that are registered in the United Kingdom and in the Cayman Islands: CleanTech Europe I L.P., London, United Kingdom (“Zouk I”), CleanTech Europe II L.P., London, United Kingdom (“Zouk II”), Hudson Clean Energy Partners (Cayman) L.P., Cayman Islands (“Hudson”), and European Renewable Energy Fund I L.P., London, United Kingdom (“Platina”), totalling TEUR 2,277 (previous year: TEUR 3,462). The decrease is primarily the result of the capital repayments received by Encavis during the financial year. Additionally, miscellaneous other equity investments totalling TEUR 199 as of 31 December 2019 (previous year: TEUR 184) are also reported here. The equity investments include investments in non-listed shares which are not traded on an active market. Encavis also holds 4.95 % of the shares in an Irish development fund to support the development of the market segment in the amount of TEUR 266 (previous year:

TEUR 130). The reduction in the shareholding results from dilution effects. The shares in CHORUS Infrastructure Fund S.A. SICAV-SIF in the amount of TEUR 403 (previous year: TEUR 377) are also included in the investments.

The securities recognised in non-current assets contain mezzanine capital of CHORUS IPP Europe GmbH, Neubiberg, in the amount of TEUR 1,208 (previous year: TEUR 1,092). As of the balance sheet date, Encavis does not intend to dispose of any of these investments.

Mezzanine capital held and investments are classified as at fair value through profit or loss (FVPL) in accordance with IFRS 9. They do not meet the criteria for measurement at amortised cost, as the cash flows from this do not only represent interest and principal payments. In the 2019 financial year, net gains from changes in the fair value of these investments amounting to TEUR 153 (previous year: losses of TEUR 62) were recognised in consolidated income. Of this amount, TEUR 584 is recognised under financial income and TEUR -431 under financial expenses.

Financial assets also include loans to associates in the amount of TEUR 100,212 (previous year: TEUR 964) and other loans in the amount of TEUR 265 (previous year: TEUR 265). In the financial year, loans were extended to the Spanish project companies Genia Extremadura Solar S.L. and Cabrera Energia Solar S.L., which are classified as associates, for further project financing (TEUR 144,379). Deferred interest is also reported in this item. Allocated comprehensive income has fully absorbed the carrying amounts of the corresponding equity investments in these associates as of 31 December 2019. Remaining earnings allocations were consequently transferred to the loans and reduced these by TEUR 42,377 through other comprehensive income and by TEUR 2,106 through the financial result.

The Group estimates the credit risks for loans granted to be low, in principle unchanged since initial recognition, which is why a provision for losses on receivables was formed for these items in the amount of the expected 12-month losses on receivables in the amount of TEUR 2,583 (previous year: TEUR 50).

6.6 Other receivables (non-current)

TEUR 3,650

Previous year: TEUR 19,518

This item comprises:

In TEUR	2019	2018
Non-current encroachment easements and advance payments for leases	0	15,547
Derivatives with positive fair values	971	2,006
Other non-current receivables	2,679	1,965
Total	**3,650**	**19,518**

The decrease in non-current encroachment easements and advance payments for leases is due to the first-time application of IFRS 16. At the time of the transition to IFRS 16 as of 1 January 2019, all previous advance payments for leases were recognised in the balance sheet as rights of use.

6.7 Deferred taxes

Deferred taxes are generally recognised for the foreign companies in the Group at the respective company's individual tax rate. For a portion of the German companies, a weighted tax rate of 29.01 % was used for the calculation of deferred taxes. The expected Group tax rate is 32.28 % and corresponds to the tax rate of the Group parent company Encavis AG, consisting of the corporation tax rate of 15 %, the solidarity surcharge of 5.5 % on the corporation tax rate and a trade tax rate of 16.4 %.

Deferred taxes from the use of tax loss carry-forwards are to be capitalised to the extent that it is probable that income can be offset against existing loss carry-forwards.

The Group's provisional tax loss carry-forwards as of 31 December 2019 came to TEUR 126,857 (previous year: TEUR 136,715) in corporation tax and TEUR 60,052 (previous year: TEUR 60,586) in German trade tax and other comparable local taxes in other countries. Of this, totals of TEUR 57,103 (previous year: TEUR 57,602) in corporation tax and TEUR

41,077 (previous year: TEUR 44,549) in German trade tax and other comparable local taxes in other countries will likely not be used within a reasonable period. Therefore, no deferred tax assets have been recognised for these amounts. As a result, interest carry-forwards amounted to TEUR 34,328 as of 31 December 2019 (previous year: TEUR 39,778). As utilisation is uncertain at the present time both in terms of amount and reason, no deferred taxes were recognised on the interest carry-forwards existing as of 31 December 2019.

Deferred tax assets and liabilities arise due to valuation differences in relation to the following balance sheet items:

Deferred taxes

	2019		2018		
	Asset in TEUR	Liabilities in TEUR	Asset in TEUR	Liabilities in TEUR	Change
Fixed assets	43,089	232,766	46,875	231,243	-5,309
Current assets	10,970	1,233	7,540	1,276	3,473
Liabilities	30,091	14,499	44,117	2,021	-26,503
Liabilities (asset surplus under IFRS 16)	14,070				14,070
Tax loss carry-forwards	18,672		19,369		-697
Interest carry-forwards			268		-268
Total	**116,892**	**248,498**	**118,169**	**234,540**	**-15,235**
of which recognised directly in equity					-2,455
of which from currency translation not recognised in the income statement					-254
of which from business combinations					12,883
Change recognised in profit or loss in 2019					**-5,061**

The total change in deferred taxes differs from the deferred taxes recognised in consolidated earnings by TEUR 10,173 (previous year: TEUR 3,481). It primarily concerns the direct recognition in equity of deferred taxes from the first-time consolidation of the companies acquired in the financial year.

Deferred tax assets are primarily deferred tax assets for wind and photovoltaic installations (TEUR 38,272; previous year: TEUR 40,671) and for liabilities (TEUR 44,161; previous year: TEUR 44,117).

Deferred tax liabilities are primarily deferred tax liabilities on electricity feed-in contracts (TEUR 139,599; previous year: TEUR 146,575) and on wind or solar installations (TEUR 35,087; previous year: TEUR 75,183).

In total, deferred tax assets increased by TEUR 1,236 and deferred tax liabilities by TEUR 14,119 due to corporate acquisitions.

Tax loss carry-forwards decreased compared to 2018. Deferred tax assets on tax loss carry-forwards also declined (decrease from TEUR 19,369 to TEUR 18,672).

Due to the application of IFRS 16, deferred tax assets of TEUR 57,219 and deferred tax liabilities of TEUR 43,149 were calculated. After offsetting, there is a surplus of assets of TEUR 14,070.

No deferred taxes are recognised on temporary differences of TEUR 8,143 (previous year: TEUR 9,289) in connection with shares in Group companies, as the reversal can be controlled by the Group and no disposals are planned in the foreseeable future.

6.8 Inventories

TEUR 412

Previous year: TEUR 422

Inventories are primarily commodities and spare parts.

6.9 Trade receivables

TEUR 45,283

Previous year: TEUR 36,178

In TEUR	2019	2018
Trade receivables (gross)	45,450	36,349
Impairments	-167	-170
Net result	**45,283**	**36,178**

Trade receivables are amounts owed by government or private purchasers or other customers for goods sold or services rendered in the ordinary course of business. They are generally due within 30 to 60 days, depending on the country, and are therefore classified as current. Trade receivables are initially recognised at the amount of the unconditional consideration. No significant financing components are included for Encavis. The Group holds trade receivables in order to collect the contractual cash flows and subsequently measures them at amortised cost using the effective interest method. Details of the Group's impairment methods and the calculation of the impairments and other risks to which the Group is exposed are disclosures in section 8 of the notes under the section for credit risks. Impairment losses on trade receivables reduced over the course of the year from TEUR 170 to TEUR 167. This decline is mainly attributable to the development of the underlying yield curves. Encavis has not currently entered into any agreements on the transfer of receivables (factoring).

Of the trade receivables, TEUR 45,450 (previous year: TEUR 36,349) were provided as collateral. This consists of the assignment of the various companies' rights to payment of the electricity feed-in tariff and the assignment of payment and compensation claims vis-à-vis third parties from any direct marketing contracts.

6.10 Other current assets

TEUR 33,404

Previous year: TEUR 52,721

Other current assets break down as follows:

In TEUR	2019	2018
Non-financial assets	5,340	9,714
Receivables from income taxes	15,703	29,269
Other current receivables	12,361	13,738
Total	**33,404**	**52,721**

The non-financial assets comprise primarily VAT receivables.

Income tax receivables include TEUR 4,392 (previous year: TEUR 3,976) in corporation tax receivables, TEUR 1,134 (previous year: TEUR 3,027) in trade tax receivables and TEUR 10,177 (previous year: TEUR 22,266) in capital gains tax receivables.

Other current receivables are mainly deferred receivables in the amount of TEUR 2,756 (previous year: TEUR 5,184), sureties amounting to TEUR 1,807 (previous year TEUR 1,791) a reservation fee and current repayment claims totalling TEUR 3,804 (previous year: TEUR 980), as well as other assets and receivables. The financial assets included here, which are measured at amortised cost, were written down accordingly in the amount of TEUR 51 (previous year: TEUR 26). As the Group has continuously regarded the default risks for these items as low since initial recognition, a risk provision was formed in the amount of the expected 12-month losses on receivables.

6.11 Liquid funds

TEUR 222,481

Previous year: TEUR 252,491

The liquid funds item comprises the following:

In TEUR	2019	2018
Cash and cash equivalents	164,501	175,564
of which overdraft facilities	*3,305*	*4,032*
of which cash and cash equivalents in the cash flow statement	*161,196*	*171,533*
Restricted liquid funds	57,980	76,927
Total	**222,481**	**252,491**

Liquid funds are composed entirely of cash on hand and bank balances. They include debt service and project reserves, which serve as collateral for the solar parks and wind parks with the lending banks and can only be used in consultation with the lending banks (TEUR 54,734; previous year: TEUR 69,228) and, to a lesser extent, restricted liquid funds held at Encavis AG and other subsidiaries (TEUR 3,246; previous year: TEUR 7,699). In accordance with IAS 7, cash funds are composed of non-restricted cash and cash equivalents.

6.12 Equity

TEUR 722,713

Previous year: TEUR 687,057

Changes to equity are reported in the consolidated statement of changes in equity.

The fully paid-up share capital of Encavis AG amounted to TEUR 137,039 (previous year: TEUR 129,487) as of 31 December 2019, divided into 137,039,147 (previous year: 129,487,340) no-par-value bearer shares with a nominal value of EUR 1.00 per share.

Authorised Capital 2017

A resolution of the annual shareholders' meeting on 18 May 2017 with the approval of the Supervisory Board authorised the Management Board to increase the share capital in the period up until 17 May 2022 by up to EUR 63,261,830.00 by issuing a total of 63,261,830 new no-par-value bearer shares against cash and non-cash contributions on one or more occasions ("Authorised Capital 2017"). Shareholders' subscription rights are excluded. The Management Board is entitled to exclude shareholders' subscription rights in certain cases with the approval of the Supervisory Board. Authorised Capital 2017 totalled EUR 63,261,830.00 as of 31 December 2017. In order to offset dividend entitlements, the Encavis AG Management Board decided to make partial use of Authorised Capital 2017 with the consent of the Supervisory Board and increase the company's share capital by EUR 1,185,126.00 through the issue of 1,185,126 new no-par-value bearer shares with profit entitlement starting on 1 January 2018. Implementation of the capital increase was entered in the commercial register of the Hamburg district court on 14 June 2018 (HRB 63197). Authorised Capital 2017 totalled EUR 62,076,704.00 as of 31 December 2018.

In 2019, the Management Board of Encavis AG also resolved – with the approval of the Supervisory Board – to increase the share capital of the company by EUR 2,010,807.00 by issuing 2,010,807 new no-par-value bearer shares with entitlement to dividends from 1 January 2019 to offset dividend entitlements through the partial utilisation of the Authorised Capital 2017. Implementation of the capital increase was entered in the commercial register of the Hamburg district court on 21 June 2019 (HRB 63197). Authorised Capital 2017 then totalled EUR 60,065,897.00.

On 11 December 2019, the Management Board of Encavis AG resolved – with the approval of the Supervisory Board – to make further use of Authorised Capital 2017 by increasing the company's share capital in exchange for cash contributions by up to 4.21 %. The share capital of Encavis AG was thus increased from EUR 131,498,147.00 to EUR 137,039,147.00 using a portion of the existing Authorised Capital 2017 through the issue of 5,541,000 new bearer shares with a proportional amount of the share capital of EUR 1.00 per share. Authorised Capital 2017 now totals EUR 54,524,897.00 as of 31 December 2019.

Contingent capital

By virtue of the authorising resolution of the Annual General Meeting on 18 May 2017, the share capital of Encavis AG has been increased by up to EUR 25,304,730.00 through the issue of up to 25,304,730 new no-par-value bearer shares with a nominal value of EUR 1.00 per share (Contingent Capital 2017).

The contingent capital increase will only be implemented if the holders of bonds issued or guaranteed before 17 May 2022 by the company, or a wholly owned direct or indirect holding of the company, as per authorisation resolution of the Annual General Meeting on 18 May 2017, exercise their option or conversion rights, or, if they are required to convert, fulfil their obligation to convert, or, if the company exercises its option to grant shares in the company as full or partial payment of cash due if not settled in cash, or own shares are used to service the debt. With the consent of the Supervisory Board, the Management Board may, as far as permitted by law, determine that new shares participate in profits in a different proportion from that defined in section 60, paragraph 2 of the Stock Corporation Act (*Aktiengesetz* – AktG). Contingent Capital 2017 totals EUR 25,304,730.00 as of 31 December 2019.

By resolution of the Annual General Meeting of Encavis AG on 20 June 2012, share capital of the company was conditionally increased by up to EUR 2,320,000.00 through the issue of up to 2,320,000 no-par-value bearer shares ("Contingent Capital III"). By resolution of the Annual General Meeting on 18 May 2017, Contingent Capital III was reduced to EUR 640,000.00. Contingent Capital III serves to secure subscription rights from share options. With the consent of the Supervisory Board, the Management Board was authorised by the Annual General Meeting on 20 June 2012, pursuant to the specific option conditions laid down in the 2012 member share option programme (SOP 2012), to grant up to 2,320,000 share options on company shares by 19 June 2017 (inclusive) to selected executives and other key employees of the company, whereby each share option confers the right to acquire one share in the company. From the 2012 share option programme, 50,000 warrants were exercised pursuant to the specific option conditions and converted into a total of 50,000 no-par-value shares in the company – with a nominal value of EUR 50,000.00 in total – from Contingent Capital III, which was approved by the Annual General Meeting on 20 June 2012. Implementation of the capital increase was entered in the commercial register of the Hamburg district court on 12 February 2019 (HRB 63197).

Following the partial expiration of individual tranches under SOP 2012 in the 2018 and 2019 financial years, the Supervisory Board resolved at its meeting on 25 September 2019 to make a settlement offer to the holders of share options issued by the Supervisory Board to a member of the company's Management Board and to employees of the company under SOP 2012 in 2015. The effective date of the settlement offer was 1 October 2019. All entitled holders accepted the settlement offer. A total of 275,000 no-par-value shares were settled under SOP 2012.

Contingent Capital 2017 now only totals EUR 150,000.00 as of 31 December 2019. This value corresponds to the remaining open tranche under SOP 2012 that can be exercised in 2020 after a corresponding vesting period and is held by an entitled holder.

Furthermore, share capital is conditionally increased by up to EUR 19,000,000.00 through the issue of up to 19,000,000 new no-par-value bearer shares (Contingent Capital 2018). The contingent capital increase will only be implemented to the extent that holders of conversion rights or warrants attached to warrant bonds, convertible bonds, mezzanine capital and/or profit-linked bonds (or a combination of these instruments) issued before 7 May 2023 by the company or its direct or indirect wholly owned affiliates on the basis of the resolution passed by the Annual General Meeting on 8 May 2018 (known collectively as the "bonds") make use of their conversion rights or warrants, or if the holders or creditors of the corresponding bonds issued before 7 May 2023 by the company or its indirect or direct wholly owned affiliates on the basis of the resolution passed at the Annual General Meeting on 8 May 2018 meet their obligation to convert their bonds or exercise their warrants. Contingent Capital 2018 totals EUR 19,000,000.00 as of 31 December 2019.

Capital reserves

The change of TEUR 55,769 in capital reserves is primarily a result of the capital increase carried out in 2019 in order to compensate for dividend claims as well as an additional capital increase in December 2019 (a total of TEUR 52,730). Associated issue costs (TEUR 1,293) were offset against the capital reserve without impacting income. In addition, the premium was recognised in the capital reserve as part of the increase in the hybrid bond (TEUR 7,553). This was offset by the additional settlement payment to existing shareholders of the former CHORUS Clean Energy AG resolved by the court in December 2019 together with costs attributable to the transaction (TEUR 2,618) and the compensation in cash (TEUR 603) of two tranches from the 2012 share option programme against the capital reserve.

Other reserves
The currency translation adjustment item of TEUR 961 (previous year: TEUR 1,010) mainly relates to the translation of British pounds sterling and Danish kroner from the respective subsidiaries into euros as of the balance sheet date.

In addition to the currency translation reserve, other reserves also contain hedge reserves (including the corresponding deferred tax effects) in the amount of TEUR -10,529 (previous year: TEUR -2,700) as well as cost of hedging measures in the amount of TEUR –22 (previous year: TEUR –28). In the financial year, other reserves include, for the first time, reserves in connection with the equity method, which primarily result from valuation effects in the associated Spanish project companies that do not affect profit or loss (TEUR -65,769). Following the transition to IFRS 9, the reserves for the valuation of available-for-sale financial assets, including the resulting deferred taxes and the associated differences from currency translation, were reclassified to retained earnings at the beginning of 2018.

The hedge reserve comprises gains or losses from the effective portion of cash flow hedges arising from changes in the fair value of the hedges. The cumulative gain or loss from changes in the fair value of the hedging transactions, which was recognised in the reserve from hedges, is only transferred to the statement of comprehensive income if the underlying hedged item affects the statement of comprehensive income. A cumulative gain or loss from changes in the fair value of hedging instruments in the amount of TEUR 4,135 (previous year: TEUR 3,486) was transferred to the statement of comprehensive income in the reporting period.

Net earnings
Consolidated net earnings comprise the following:

In TEUR	31.12.2019	31.12.2018
Consolidated earnings after non-controlling interests	22,189	5,113
Retained profit	41,200	63,737
Adjustment of retained profit (IFRS 9)	0	-456
Other items recognised directly in equity	1,118	1,022
Dividend distributions	-31,077	-28,215
Consolidated net earnings	**33,430**	**41,200**

At the Encavis AG annual shareholders' meeting held on 15 May 2019 it was resolved that a dividend of EUR 0.24 per entitled share would be paid out.

Equity attributable to non-controlling interests
The holdings of non-controlling interests in the amount of TEUR 10,009 (previous year: TEUR 9,145) primarily relate to the following companies: Solarpark Brandenburg (Havel) GmbH, Solaire Ille SARL, Centrale Photovoltaique SauS 06 SARL, Norhede-Hjortmose Vindkraft I/S and the Zierikzee solar park in the Netherlands, which was acquired in 2019.

Hybrid capital investors portion
On 6 September 2017, Encavis AG placed a perpetual subordinate bond with time-limited conversion rights into ordinary bearer shares in the amount of TEUR 97,300 via its Dutch financing subsidiary Encavis Finance B.V. (formerly Finance B.V.). The issue and value date of the hybrid convertible bond was 13 September 2017.

There is no fixed deadline for repayment of the hybrid convertible bond. The hybrid convertible bond carries the option to be converted by the investor(s) into fully paid new and/or existing ordinary bearer shares of the company ("ordinary shares") up to the tenth trading day before 13 September 2023 (the "first redemption date"). The initial conversion price was set at EUR 7.5943, a premium of 25.0 % on the volume-weighted average price of the Encavis share in the XETRA trading system on the Frankfurt Stock Exchange between start and completion of the placement. The conversion price may be adjusted up to the first redemption date in accordance with the contractually agreed conditions. The investor(s) lose(s) the conversion right from the first redemption date, and the bond automatically becomes a perpetual bond without redemption date.

The coupon for the hybrid convertible bond will be 5.25 % p.a. from the settlement date until the first redemption date. After the first redemption date, and after that at five-year intervals, provided the hybrid convertible bond is not redeemed or converted, the interest rate for the hybrid convertible bond will be fixed at 1,100 basis points above the five-year euro swap rate applicable on the reporting date. The interest is payable every six months in arrears. Subject to certain requirements, Encavis may decide to defer any scheduled partial or total payment of the interest. Such non-payment of interest does not constitute default or a breach of any other obligation.

The hybrid convertible bond will be issued at 100 % of its par value and may be redeemed by Encavis at 100 % of its par value together with all accrued and outstanding interest and all outstanding retroactive interest. This option will be available to Encavis for the first time on the first redemption date and then on every subsequent interest payment date. Encavis will have the option to carry out a mandatory conversion of the hybrid convertible bond at any time on or after 4 October 2021 and before the first redemption date. Notice can only be given of the premature mandatory conversion if the share price corresponds to 130 % of the conversion price, or exceeds this amount, for a certain period of time.

Since Encavis AG is not contractually obliged to redeem the nominal value or to pay the interest to the investors of the hybrid convertible bond, the instrument was classified as an equity instrument in accordance with IAS 32. The amount initially recognised in equity is not remeasured. In previous years, costs associated with the bond issue totalled TEUR 3,358 and were offset against equity without impacting income.

On 5 September 2019, the hybrid convertible bond was successfully nominally increased by TEUR 53,000. The issue at a price of 114.25 % of its nominal value resulted in a premium of TEUR 7,553, which was offset against the Group's capital reserves without affecting profit or loss. The issue and value date of the new hybrid convertible bond is 13 September 2019. The initial conversion price was set at EUR 7.2779, a premium of 25.0 % on the volume-weighted average price of the Encavis share in the XETRA trading system on the Frankfurt Stock Exchange between start and completion of the placement. Otherwise, the same terms and conditions apply as for the originally issued bond. Costs associated with the new bond issue totalled TEUR 696 and were also offset against equity without impacting income.

In the financial year under review, TEUR 5,925 (previous year: TEUR 5,108) of the earnings contribution for the hybrid bondholders was recorded and TEUR 5,108 (previous year: TEUR 5,108) was distributed to them.

Capital management

The objective of capital management is to ensure that the Group is able to meet its financial obligations. The Group's long-term goal is to increase its corporate value. The Group actively manages its capital structure according to general economic conditions. In order to maintain or to adjust its capital structure, the Group can opt to, for example, adjust dividend payments to shareholders, pay back capital to shareholders or issue new shares. As of the balance sheet date, the equity ratio of the Group was 25.27 % (previous year: 25.94 %). Without the recognition of the derivatives for the PPAs concluded in 2019 at the level of the Spanish investments, the equity ratio would be 26.94 % in 2019.

The table below discloses the equity, the equity ratio and cash and cash equivalents.

	31.12.2019	31.12.2018
Equity in TEUR	722,713	687,057
Equity ratio in %	25.27	25.94
Liquid funds in TEUR	222,481	252,491

All covenants in the Encavis Group were fulfilled for the 2018 financial year. There are currently no indications that the covenants for the 2019 financial year will not be able to be met.

6.13 Share option plan

In order to enable Encavis AG to grant share options as a remuneration component with a long-term incentive effect, the Encavis AG Annual General Meeting on 31 May 2007 resolved to increase the company's share capital by up to EUR 2,520,000.00 through issuing up to 2,252,000 no-par-value bearer shares ("Contingent Capital I"). The purpose of Contingent Capital I is to secure subscription rights arising from share options issued by Encavis AG under the 2007 share option programme (SOP 2007) in the period between 1 June 2007 and 30 May 2012, based on the authorisation of the 31 May 2007 Annual General Meeting. Beneficiaries are Management Board members, selected senior staff and other Encavis AG key personnel. All share options from SOP 2007 expired or were exercised as of the balance sheet date.

Following expiry of SOP 2007, a new share option programme (SOP 2012 – equity-settled) was initiated and Contingent Capital III created at the Annual General Meeting on 20 June 2012.

Warrants were offered in every year between 2008 and 2016. Each option entitles the holder to one Encavis AG no-par-value bearer share with voting rights. The option holder is free to exercise their options one at a time or all at once.

In order to serve their purpose as a long-term incentive, subscription rights arising from share options may only be exercised for the first time after a vesting period. The vesting period under SOP 2012 is four years. The subscription price (strike price) for both programmes equates to the arithmetic mean of the closing prices for the Encavis share in the XETRA trading system on the Frankfurt Stock Exchange (or in a comparable successor system) over the five trading days prior to the granting of the subscription rights. A prerequisite for exercising a subscription right is the successful achievement of the performance target. Under SOP 2012, the price for the Encavis share in the XETRA trading system on the Frankfurt Stock Exchange (or in a comparable successor system) must exceed the strike price by at least 30 per cent over the ten trading days preceding the date the subscription right is exercised. The period defined as the relevant exercise period is the period in which the subscription rights in question may be exercised for the first time due to the performance target having been reached or exceeded.

Share option programme 2012 (SOP 2012)
On 21 March 2013, 26 June 2014, 27 January 2015, 31 March 2015, 21 April 2015 and 31 March 2016, the following share options were granted under the share option programme for 2012:

Year of allocation	2016	2015	2015
Exercise period	01.04.2020 to 31.03.2023	22.04.2019 to 21.04.2022	01.04.2019 to 31.03.2022
Share price at time of issue	7.33 EUR	6.51 EUR	6.10 EUR
Strike price	7.24 EUR	6.49 EUR	6.08 EUR
Performance hurdle at issue	9.41 EUR	8.44 EUR	7.91 EUR
Number of options offered and accepted	180,000	150,000	580,000
Number of shares on 01.01.2019	150,000	0	225,000
Number of options exercised	0	0	0
Number of options settled	0	0	125,000
Number of options expired	0	0	100,000
Number of shares on 31.12.2019	150,000	0	0
Exercisable as of 31.12.2019	0	0	0

Year of allocation	2015	2014	2013
Exercise period	28.01.2019 to 27.01.2022	27.06.2018 to 26.06.2021	22.03.2017 to 21.03.2020
Share price at time of issue	4.90 EUR	3.70 EUR	3.78 EUR
Strike price	4.92 EUR	3.74 EUR	3.81 EUR
Performance hurdle at issue	6.40 EUR	4.86 EUR	4.95 EUR
Number of options offered and accepted	150,000	250,000	600,000
Number of shares on 01.01.2019	150,000	0	0
Number of options exercised	0	0	0
Number of options settled	150,000	0	0
Number of options expired	0	0	0
Number of shares on 31.12.2019	0	0	0
Exercisable as of 31.12.2019	0	0	0

No options were exercised in the 2019 financial year. In the reporting period, 100,000 options expired, of which 100,000 were held by employees. A total of 275,000 options were settled for cash in 2019, 125,000 of which are attributable to employees and 150,000 to the Management Board. As of the reporting date, there were a total of 150,000 options outstanding (previous year: 525,000), of which 150,000 were held by Management Board members. The tranches from SOP 2012, which still had a balance as of the balance sheet date, are vested until April 2020. No further options from SOP 2012 are therefore exercisable as of the balance sheet date.

In accordance with IFRS 2, the share options were recognised at fair value in the balance sheet, whereby the fair value is to be distributed as personnel expenses over the vesting period. The warrants must therefore be measured on issue using a suitable model. The capital market features of the warrants must be included in the measurement. Non-capital market features, such as the vesting period, are to be reflected in expected employee turnover. The total value arrived at on the basis of the option's value and the estimated number of options still exercisable at the end of the vesting period must be distributed pro rata over the vesting period and recognised in the statement of comprehensive income as personnel expenses. Expected employee turnover is based on the turnover in recent years. In accordance with IFRS 2, the options from SOP 2012 settled for cash in the financial year were offset against the Group's capital reserve at the time of acceptance by the participants without no effect on profit or loss, whereby the reserves accumulated during the vesting period were also transferred to the capital reserves.

No options from SOP 2012 were issued during the 2019 financial year.

From the 2012 share option programme, TEUR 44 (previous year: TEUR 122) was recognised in the statement of comprehensive income in the year 2019. In addition, other operating income in the amount of TEUR 75 (previous year: TEUR 19) was recognised as a result of the termination of option holders' employment. In subsequent years, the programme is still to entail recognition of personnel expenses of a further TEUR 9 (previous year: TEUR 58).

Share option programme 2017 (SOP 2017)

SOP 2017 is a programme that is designed as an annually recurring long-term remuneration component based on the overall performance of the Encavis share in terms of framework and objectives. SOP 2017, unlike its predecessor SOP 2012, is cash-settled. An allotment amount defined by the Supervisory Board is converted into virtual share options known as share appreciation rights (SARs). Beneficiaries are Management Board members, selected senior staff and other key personnel of the Encavis Group.

The amount of the variable component was calculated based on the 2017 share option programme (SOP), which entered into force on 1 July 2017. The grant date for employees, however, was 6 November 2017 and for Management Board members 13 December 2017. A total of 837,500 SARs were granted in the 2017 financial year; 437,500 SARs are allocated to Management Board members and 400,000 to employees.

The aim of SOP 2017 is to secure long-term loyalty of the executives and senior management to Encavis AG. The SARs may be exercised for the first time after a vesting period of three years from 1 July 2017. After that, they can be exercised at half-year intervals within the two years following the three-year waiting period. A prerequisite for exercising a SAR is the successful achievement of the respective goal. To achieve the target within SOP 2017, the overall performance of the Encavis share within the XETRA trading system (or in a comparable successor system) on the Frankfurt Stock Exchange must exceed the basic price by at least 30 per cent (strike price) on the day on which the SAR is exercised, as measured by the interim rise and the dividends paid since issue of the SAR. The basic price is the arithmetic average of the daily closing price of the Encavis share performance index within the XETRA trading system on the Frankfurt Stock Exchange (or in a comparable successor system) half a year before the plan takes effect. For each SAR assigned, a claim to payment of the difference between the strike price and the basic price accrues. The maximum payment amount is three times the difference between the strike price and the basic price. In the event of a Management Board member or employee leaving the company of their own accord, or having their employment terminated for good cause, the programme rules stipulate that any SARs granted will be forfeited in whole or in part.

Liability for SARs is measured at fair value as of the grant date and all subsequent balance sheet dates until the SARs have been either exercised or they expire. SARs issued in 2017 were measured on the basis of a Monte Carlo simulation.

No SARs from SOP 2017 were exercised during the 2019 financial year. A total of 33,333 SARs for employees expired and 66,667 SARs were settled within the scope of employment termination. As of 31 December 2019, there are still a total of 533,333 SARs, of which 325,000 are attributable to the Management Board. As of the balance sheet date, the carrying amount recognised for settling SARs from SOP 2017 amounted to TEUR 1,842 (previous year: TEUR 146). From SOP 2017, TEUR 1,718 (previous year: TEUR 180) was recognised in the statement of comprehensive income in the 2019 financial year.

Share option programme 2018 (SOP 2018)

Analogous to SOP 2017, an additional share option programme with similar conditions was established in 2018. The amount of the variable component was calculated based on the 2018 share option programme (SOP), which entered into force on 1 July 2018. The grant date for employees, however, was 14 December 2018 and for Management Board members 12 December 2018. A total of 912,000 SARs were granted in the 2018 financial year; 375,000 SARs are allocated to Management Board members and 537,000 to employees. The vesting period for SOP 2018 began on 1 July 2018. Apart from this, the conditions correspond to those of SOP 2017, which were explained in the previous section.

No SARs from SOP 2018 were exercised during the 2019 financial year. A total of 37,500 SARs expired and 96,500 SARs were settled within the scope of employment termination. As of 31 December 2019, there are still a total of 778,000 SARs, of which 375,000 are attributable to the Management Board. As of the balance sheet date, the carrying amount recognised for settling SARs from SOP 2018 amounted to TEUR 1,076 (previous year: TEUR 7). From SOP 2018, TEUR 1,070 (previous year: TEUR 7) was recognised in the statement of comprehensive income in the 2019 financial year.

Share option programme 2019 (SOP 2019)

Analogous to SOP 2017 and SOP 2018, an additional share option programme with similar conditions was established in the financial year. The amount of the variable component was calculated based on the 2019 share option programme (SOP), which entered into force on 1 July 2019. The grant date for employees, however, was 08 October 2019 and for Management Board members 25 September 2019. A total of 740,235 SARs were granted in the 2019 financial year; 224,140 SARs are allocated to Management Board members and 516,095 to employees. The vesting period for SOP 2019 began on 01 July 2019. Apart from this, the conditions correspond to those of SOP 2017, which were explained in the previous section.

No SARs from SOP 2019 were exercised during the 2019 financial year and none were settled or expired. As of the balance sheet date, the carrying amount recognised for settling SARs from SOP 2019 amounted to TEUR 194 (previous year: TEUR 0). From SOP 2019, TEUR 194 (previous year: TEUR 0) was recognised in the statement of comprehensive income in the 2019 financial year.

For all three tranches of the share option programmes for 2017 to 2019, a liability of TEUR 3,112 (previous year: TEUR 153) was recognised as of the balance sheet date. During the 2019 financial year, total expenses in the amount of TEUR 2,982 (previous year: TEUR 187) were recognised in the statement of comprehensive income.

6.14 Liabilities to non-controlling shareholders

TEUR 43,093

Previous year: TEUR 22,404

Liabilities to non-controlling interests are comprised as follows:

Liabilities to non-controlling shareholders in TEUR

	31.12.2019		31.12.2018	
	Non-current	Current	Non-current	Current
Income attributable to non-controlling interests	16,386	2,971	0	17,140
Loans (incl. Interest) from non-controlling interests	23,737	0	5,264	0
Total	**40,122**	**2,971**	**5,264**	**17,140**

Income attributable to non-controlling interests increased, in particular due to the sale of 49 % of shares in a German wind park portfolio. In accordance with the underlying partnership agreements, the claims are generally reported as non-current. The current portion of TEUR 2,971 relates to CHORUS CleanTech GmbH & Co. Solarpark Bitterfeld KG, because the remaining third-party shareholdings were acquired by Encavis in February 2020. The loans from non-controlling interest also increased considerably due to the sale of the 49 % share of the wind park portfolio.

6.15 Financial liabilities

TEUR 1,561,726

Previous year: TEUR 1,524,022

Financial liabilities are comprised of the following items:

Financial liabilities in TEUR

	31.12.2019		31.12.2018	
	Non-current	Current	Non-current	Current
Liabilities to banks and other loans	1,015,900	185,194	1,067,885	160,725
Liabilities from contingent considerations	604	0	596	775
Liabilities from mezzanine capital	150,000	6,000	150,000	9,846
Liabilities from listed notes	35,662	3,129	35,820	3,074
Liabilities from debenture bonds	133,101	613	73,017	0
Derivatives with negative fair value	31,522	0	22,283	0
Total	**1,366,789**	**194,937**	**1,349,602**	**174,420**

6.16 Leases

Encavis leases include leases of both movable assets (e.g. company cars, photocopiers) and immovable property (e.g. office space, land, power generation installations). The fixed basic term of the contracts is usually three years for company cars, four years for photocopiers, eight to 41 years for land, five to 13 years for buildings and 18 to 22 years for power generation installations.

A number of the leases also include termination and extension options to ensure maximum flexibility in the use of the underlying assets. Encavis assesses at its own discretion whether the exercise of the option is probable by considering all relevant factors that provide an economic incentive to exercise the option. Changes in terms of maturity from extension or termination options are only taken into account if it is sufficiently certain that they will be exercised. In the event of subsequent material events or changes in circumstances that have an impact on the assessment, the term will be reassessed if Encavis has control over this. Extension options are a significant component at Encavis, in particular within the context of leases. These were largely taken into account when determining the term of the leases. This is due to the fact that the planned operating life of the power generation installations erected on the land often exceeds the basic rental period and that exercising the option therefore makes economic sense.

With regard to the leased power generation installations, the Encavis Group has the option to acquire them at a fixed price at the end of the contractually agreed period. The exercise of these options is not sufficiently certain, so they were not taken into account for the lease liabilities.

Many lease agreements contain variable lease payments. On the one hand, these are payments linked to indexes (such as the consumer price index) which are taken into account in the lease liability in the amount of the current indexed amount to be paid (i.e. without estimates of the future index development). In addition, some lease agreements for land contain variable lease payments depending on the electricity income received or comparable earnings figures. Such payment terms are used primarily to minimise fixed costs. Fully revenue-dependent payments are not included in the lease liability, but are recognised in the period in which they are incurred in the statement of comprehensive income.

The leased assets themselves serve as collateral for the lessor. In some cases, rental collateral has also been agreed as part of the rental agreements. Apart from this, the contracts do not contain any additional collateral. Furthermore, the lease agreements for power generation installations are linked to compliance with covenants.

The following table provides an overview of the capitalised rights of use per asset class as of 31 December 2019:

Right of use in TEUR	31.12.2019	01.01.2019
Land	171,052	164,833
Buildings	5,806	6,590
Power generation installations	37,398	39,129
Vehicles	88	201
Total	**214,343**	**210,753**

The additions to the rights of use in the 2019 financial year amounted to TEUR 7,762 and arose primarily from company acquisitions.

As of 31 December 2019, lease liabilities are comprised as follows:

Lease liabilities in TEUR	31.12.2019	01.01.2019
Non-current	178,092	187,151
Current	10,860	8,923
Total	**188,952**	**196,074**

In the 2019 financial year, the following amounts relating to leases were recognised in the consolidated statement of comprehensive income:

Amounts recognised in consolidated statement of comprehensive income in TEUR	01.01. – 31.12.2019
Depreciation of right of use	8,937
of which for land	*5,975*
of which for buildings	*701*
of which for power generation installations	*2,129*
of which for vehicles	*132*
Interest expenses from the accretion of leases	6,651
Expenses in connection with short-term leases	58
Expenses in connection with leases for low-value assets	21
Variable lease payments	441
Total	**16,107**

Cash outflows resulting from leases (including variable lease payments and payments for short-term leases and leases for low-value assets) totalled TEUR 15,251 in the 2019 financial year.

6.17 Provisions

TEUR 60,033

Previous year: TEUR 46,347

Provisions are comprised as follows:

Provisions in TEUR	31.12.2019		31.12.2018	
	Non-current	Current	Non-current	Current
Provisions for asset retirement obligations	49,171	0	39,572	0
Provisions for personnel expenses	1,217	5,101	152	2,967
Other provisions	0	4,545	0	3,656
Total	**50,388**	**9,646**	**39,724**	**6,623**

The provisions for asset retirement obligations include the estimated cost for the demolition and clearing of an asset and restoring the site on which it is located. When measuring asset retirement obligations, there are minor uncertainties that relate exclusively to the amount of the provision. This results from the fact that the due dates of asset retirement for the power generation installations are fixed by the residual term of the lease, which lies between a range of 10.25 and 27.75 years. In determining the actual asset retirement costs, an average inflation rate of 2 % has been assumed (previous year: 1.5 %). Provisions are accreted to their present value on an annual basis. The expenses from accretion in the 2019 financial year were TEUR 189 (previous year: TEUR 391).

The provisions for personnel expenses largely comprise employee bonuses and bonuses for the Management Board, as well as share-based payment. Other provisions contain a number of minor single items. The corresponding outflows are expected within one year for the most part.

Changes in provisions were as follows:

Schedule of provisions in TEUR	As of 01.01.2019	Used	Additions	Reversals	Changes in consolidated companies, currency adjustments, unwinding discounts, reclassifications	As of 31.12.2019
Provisions for asset retirement obligations	39,572	0	0	0	9,599	49,171
Provisions for personnel expenses	3,119	-2,514	6,170	-458	0	6,318
Other provisions	3,656	-2,477	3,710	-419	75	4,545
Total	**46,347**	**-4,991**	**9,880**	**-877**	**9,674**	**60,033**

6.18 Trade payables

TEUR 10,738

Previous year: TEUR 16,784

Trade payables are comprised as follows:

Trade payables in TEUR	31.12.2019	31.12.2018
Invoices received from suppliers	8,208	14,511
Accrued supplier invoices	2,530	2,273
Total	**10,738**	**16,784**

6.19 Other liabilities

TEUR 24,186

Previous year: TEUR 37,214

Other liabilities are attributable to the following items:

Other liabilities in TEUR	31.12.2019		31.12.2018	
	Non-current	Current	Non-current	Current
Income tax liabilities	0	7,681	0	7,694
Other tax liabilities	0	2,352	0	11,613
Liabilities from personnel and employee benefits	0	37	0	17
Deferred accruals (interest rate advantage)	6,707	2,126	8,413	2,213
Other	1,238	4,046	2,351	4,913
Total	**7,945**	**16,241**	**10,764**	**26,450**

The accrued expense and deferred income largely relate to the advantage from subsidised loans from the KfW Group at an interest rate below the market rate.

Other information

7 Segment reporting

During the reporting year, the focus of the Encavis Group's business activities did not change significantly from the previous year and remains on the operation and development of solar parks and wind parks. The Group's reportable segments are PV Parks, PV Service, Wind Parks and Asset Management, as well as the non-reportable segment Administration. Additional information on the companies consolidated for the first time as well as deconsolidated companies can be found in section 4 of the notes.

From the 2019 financial year, management has decided to further align the presentation of segment reporting with the internal reporting system. The segment report in the 2019 annual report therefore does not contain all the information published in the 2018 annual report.

PV Parks
The PV Parks segment comprises the solar parks in the United Kingdom, Germany, France, Italy, the Netherlands, Spain and Ireland, any holding companies and the transactions of Encavis AG and Encavis GmbH assigned to this segment.

This segment's main business activity is the production of electricity. The segment's revenue comes mainly from either the feed-in tariffs paid by the various local providers, long-term purchase agreements with private companies and the market premiums paid for the direct marketing of electricity on the energy markets.

PV Service
The PV Service segment consists of Encavis Technical Services GmbH and Stern Energy GmbH, which was established in the financial year, as well as the transactions of Encavis AG assigned to this segment. The principal business activities of the segment are the technical and commercial operation of both the Group's and external solar park installations. The revenue generated by this segment mainly comes from plant operation charges.

Wind Parks
The Wind Parks segment includes all the wind parks in Germany, Italy, France, Austria and Denmark and the associated holding companies, as well as the transactions of Encavis AG and Encavis GmbH assigned to this segment.

This segment's main business activity is the production of electricity. The segment's revenue comes mainly from either the feed-in tariffs paid by the various local providers or the market premiums paid for the direct marketing of electricity on the energy markets.

Asset Management

The Asset Management segment includes those activities undertaken by Encavis GmbH relating to the asset management field and other companies assigned to this field, in particular Encavis Asset Management AG.

The main activities of this segment are commercial services for the managed portfolio of assets in third-party ownership as well as consulting services. These include setting up funds for professional investors and customised and structured systems for these groups of investors in the field of renewable energies. Following the structuring of these portfolios, Encavis provides asset management services for institutional funds and other investment vehicles of professional investors and the operating companies owned by them.

Administration

The Group-wide activities of Encavis AG and Encavis GmbH are described in detail in the Administration segment. This segment also includes Encavis Finance B.V. as well as Encavis Renewables Beteiligungs GmbH, Encavis Real Estate GmbH and Encavis Grundstück Beteiligungs GmbH, which was founded in the financial year under review.

Reclassifications

Because the Administration segment has a pure cost centre function and generates its income almost exclusively through Group allocations, it does not represent a separate business segment according to IFRS 8.6. As a result, unlike in the previous year, the aforementioned segment is shown under other companies and Group functions in the segment reporting.

Segment reporting is generally carried out in accordance with the recognition and measurement methods used in the consolidated financial statements, adjusted for purely valuation-related, non-cash effects. Segment reporting is based on internal reporting by operating KPIs.

Transactions within the segments are executed on the same conditions as with third parties.

The following table contains information about the business segments of the Group for the 2019 and 2018 financial years:

In TEUR	Wind Parks	PV Parks	PV Services	Asset Management
Revenue	63,115	200,124	4,669	11,612
(previous year)	(57,839)	(186,507)	(4,457)	(4,140)
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	51,825	167,310	1,477	5,646
(previous year)	(41,531)	(152,152)	(1,637)	(-1,026)
EBITDA margin (%)	82%	84%	32%	49%
(previous year)	(72%)	(82%)	(37%)	(-25%)
Depreciation and amortisation	-21,447	-62,416	-48	-600
(previous year)	(-17,727)	(-54,610)	(-50)	(-671)
Earnings before interest and taxes (EBIT)	30,378	104,894	1,429	5,046
(previous year)	(23,804)	(97,542)	(1,587)	(-1,697)

In TEUR	Total of reportable operating segments	Other companies and Group functions	Reconciliation	Total
Revenue	279,520	2	-5,700	273,822
(previous year)	(252,944)	(0)	(-4,159)	(248,785)
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	226,258	-8,600	-32	217,626
(previous year)	(194,294)	(-7,235)	(-169)	(186,890)
EBITDA margin (%)	81%	-	1%	79%
(previous year)	(77%)	-	(4%)	(75%)
Depreciation and amortisation	-84,511	-900	15	-85,396
(previous year)	(-73,058)	(-165)	(15)	(-73,208)
Earnings before interest and taxes (EBIT)	141,747	-9,499	-17	132,231
(previous year)	(121,236)	(-7,401)	(-154)	(113,682)

The timing of the recognition of the revenue presented in the segment reporting is carried out in relation to the period.

Revenue with third parties is distributed to the individual operating segments as follows:

Revenue by segment	In TEUR	Share in %
PV Parks		
2019	200,124	73.1
(previous year)	(186,507)	(75.0)
Wind Parks		
2019	63,115	23.0
(previous year)	(57,839)	(23.2)
Asset Management		
2019	10,423	3.8
(previous year)	(4,136)	(1.7)
PV Service		
2019	158	0.0
(previous year)	(303)	(0.0)
Administration		
2019	2	0.0
(previous year)	(0)	(0.0)
Total		
2019	**273,822**	**100.0**
(previous year)	**(248,785)**	**(100.0)**

The Encavis Group is not dependent on major customers pursuant to IFRS 8.34.

The primary assets (intangible assets and property, plant and equipment) are divided among the individual regions as follows:

Revenue and non-current assets by region

	Revenue in TEUR	Share in %	Non-current assets in TEUR	Share in %
Denmark				
2019	8,264	3.0	164,213	7.1
(previous year)	(4,695)	(1.9)	(55,982)	(2.6)
Germany				
2019	119,768	43.7	971,880	42.3
(previous year)	(114,444)	(46.0)	(939,391)	(44.1)
France				
2019	46,196	16.9	392,179	17.1
(previous year)	(43,661)	(17.5)	(394,289)	(18.5)
United Kingdom				
2019	18,759	6.9	157,717	6.9
(previous year)	(17,584)	(7.1)	(145,570)	(6.8)
Ireland				
2019	0	0.0	1,002	0.0
(previous year)	(0)	(0.0)	(967)	(0.0)
Italy				
2019	62,353	22.8	443,216	19.3
(previous year)	(62,579)	(25.2)	(452,614)	(21.3)
Netherlands				
2019	11,492	4.2	106,416	4.6
(previous year)	(139)	(0.0)	(81,964)	(3.9)
Austria				
2019	6,990	2.6	60,204	2.6
(previous year)	(5,682)	(2.3)	(57,812)	(2.7)
Spain				
2018	0	0.0	0	0.0
(previous year)	(1)	(0.0)	(0)	(0.0)
Total				
2019	**273,822**	100.0	**2,296,826**	100.0
(previous year)	**(248,785)**	(100.0)	**(2,128,589)**	(100.0)

Reconciliation of adjusted operating EBITDA

Adjusted operating EBITDA is reconciled to earnings before taxes on income (EBT) as follows:

In TEUR	Notes	2019	2018
Adjusted operating EBITDA		**217,626**	**186,890**
Income resulting from the disposal of financial assets and other non-operating income		1	41
Other non-cash income (mainly gains from business combinations [badwill], reversal of the interest advantage from subsidised loans [government grants] and non-cash income from other periods)		1,373	8,612
Other non-operating expenses		-2,856	-96
Share-based remuneration (non-cash)		-44	-122
Earnings before interest, taxes, depreciation and amortisation (EBITDA)		**216,101**	**195,326**
Depreciation and amortisation	5.6	-124,674	-123,770
Financial result	5.7	-40,775	-51,803
Earnings before taxes on income (EBT)		**50,652**	**19,754**

In order to reconcile adjusted operating EBIT to earnings before taxes on income (EBT), in addition to the adjustments stated in the reconciliation statement, the amortisation of intangible assets acquired in the course of business combinations (electricity feed-in contracts) as well as goodwill in the amount of TEUR 46,228 (previous year: TEUR 57,516) and the subsequent measurement of disclosed hidden reserves and liabilities from step-ups for property, plant and equipment acquired in the course of business combinations in the amount of TEUR -6,951 (previous year: TEUR -6,955) must be taken into account. In order to reconcile adjusted operating EBT to earnings before taxes on income (EBT), other non-cash interest and similar expenses and income (mainly from currency translation effects, effective interest rate calculation, swap valuation and interest expense from subsidised loans) in the amount of TEUR -14,828 (previous year: TEUR -5,127) must be taken into account, as well as the adjustments stated in the reconciliation statement and the above-mentioned adjustments.

8 Additional disclosures related to financial assets and liabilities

Carrying amounts, recognised amounts and fair value according to classes and valuation categories under IFRS 9

Classes of financial instruments in TEUR		Carrying amount under IFRS 9					
	Measurement category under IFRS 9*	Carrying amount as at 30.12.2019 (31.12.2018)	Amortised cost	Fair value not recognised through profit or loss	Fair value recognised through profit or loss	Carrying amount under IAS 28	Fair value as of 31.12.2019 (31.12.2018)
Financial assets							
Non-current financial assets	FVPL	4,353			4,353		4,353
(31.12.2018)		(5,245)			(5,245)		(5,245)
Financial assets accounted for using the equity method	n/a	9,590				9,590	9,590
(31.12.2018)		(14,514)				(14,514)	(14,514)
Current receivables from contingent considerations	FVPL	135			135		135
(31.12.2018)		(0)			(0)		(0)
Current receivables from contingent considerations	FVPL	0			0		0
(31.12.2018)		(305)			(305)		(305)
Trade receivables	AC	45,283	45,283				45,283
(31.12.2018)		(36,178)	(36,178)				(36,178)
Other current receivables	AC	7,383	7,383				7,383
(31.12.2018)		(6,129)	(6,129)				(6,129)
Loans to associates and other loans	AC	100,477	100,477				100,477
(31.12.2018)		(1,229)	(1,229)				(1,229)
Liquid assets	AC	222,481	222,481				222,481
(31.12.2018)		(252,491)	(252,491)				(252,491)
Derivative financial assets							
Derivatives in a hedging relationship	FVOCI	971		971			971
(31.12.2018)		(2,006)		(2,006)			(2,006)

* FVPL: fair value through profit or loss; AC: amortised cost (financial assets/liabilities recognised at amortised cost); FVOCI: derivative financial instruments measured as part of hedging relationships (presented in other non-current receivables and/or non-current financial liabilities). Non-current assets, loans to associates and other loans have been aggregated and presented under the line item for financial assets in the balance sheet. In comparison to the balance sheet, financial liabilities are shown separately in the following categories: financial liabilities, liabilities from contingent consideration, other financial liabilities, derivatives with a hedging relationship and derivatives without a hedging relationship.

Classes of financial instruments in TEUR		Carrying amount under IFRS 9					
	Measurement category under IFRS 9*	Carrying amount as at 30.06.2019 (31.12.2018)	Amortised cost	Fair value not recognised through profit or loss	Fair value recognised through profit or loss	Carrying amount under IFRS 16 (IAS 17)	Fair value as at 31.12.2019 (31.12.2018)
Financial liabilities							
Trade payables	AC	10,738	10,738				10,738
(31.12.2018)		(16,784)	(16,784)				(16,784)
Financial liabilities	AC	1,529,112	1,529,112				1,681,034
(31.12.2018)		(1,499,651)	(1,499,651)				(1,595,363)
Lease liabilities**	n/a	188,952				188,952	-
(31.12.2018)		(80,697)				(80,697)	(80,036)
Liabilities to non-controlling shareholders	AC	43,093	43,093				43,093
(31.12.2018)		(22,404)	(22,404)				(22,404)
Non-current liabilities from contingent considerations	FVPL	604			604		604
(31.12.2018)		(596)			(596)		(596)
Current liabilities from contingent considerations	FVPL	0			0		0
(31.12.2018)		(775)			(775)		(775)
Other financial liabilities	AC	488	488				488
(31.12.2018)		(717)	(717)				(717)
Derivative financial liabilities							
Derivatives in a hedging relationship	FVOCI	28,776		28,776			28,776
(31.12.2018)		(19,644)		(19,644)			(19,644)
Derivatives not in a hedging relationship	FVPL	2,745			2,745		2,745
(31.12.2018)		(2,639)			(2,639)		(2,639)
Of which aggregated by valuation categories as per IFRS 9							
Financial assets measured at amortised cost	AC	375,625	375,625				375,625
(31.12.2018)		(296,028)	(296,028)				(296,028)
Financial assets measured at fair value through profit or loss	FVPL	4,488			4,488		4,488
(31.12.2018)		(5,550)			(5,550)		(5,550)
Financial liabilities measured at amortised cost	AC	1,583,432	1,583,432				1,735,354
(31.12.2018)		(1,539,556)	(1,539,556)				(1,635,268)
Financial liabilities measured at fair value through profit or loss	FVPL	3,350			3,350		3,350
(31.12.2018)		(4,010)			(4,010)		(4,010)

** As part of the allocation of receivables and liabilities from contingent consideration to the FVPL category (previously: n.a.), the information on the aggregated measurement categories in accordance with IFRS 9 were also adjusted for the previous year, although this is only a change in the form of presentation.

*** The relief provision of IFRS 7.29 was applied to the disclosures on the fair values of lease liabilities. The values under this line item as of 31 December 2018 only contain liabilities from finance leases pursuant to IAS 17.

Fair value hierarchy

Fair value hierarchy 31.12.2019 (31.12.2018) in TEUR	Level 1	Level 2	Level 3
Assets			
Non-current financial assets			4,353
(previous year)			(5,245)
Non-current receivables from contingent considerations			135
(previous year)			(0)
Current receivables from contingent considerations			0
(previous year)			(305)
Derivative financial assets:			
Derivatives in a hedging relationship		971	
(previous year)		(2,006)	
Liabilities			
Non-current liabilities from contingent considerations			604
(previous year)			(596)
Current liabilities from contingent considerations			0
(previous year)			(775)
Derivative financial liabilities:			
Derivatives in a hedging relationship		28,776	
(previous year)		(19,644)	
Derivatives not in a hedging relationship		2,745	
(previous year)		(2,639)	

Interest rate and currency hedges are measured using market-yield and foreign exchange (FX) forward curves on the basis of recognised mathematical models (present value calculations). The market values recognised in the balance sheet thus correspond to level 2 of the IFRS 13 fair value hierarchy.

The receivables from contingent considerations as well as the financial investments and liabilities from contingent considerations carried at fair value in the consolidated financial statements are based on level 3 information and input factors.

Changes between levels occurred in neither the current nor previous financial year.

The following table shows the level of the fair value hierarchy to which the measurement of fair value has been assigned in its entirety for each class of asset and liability not measured at fair value in the balance sheet and for which fair value does not approximate the carrying amount.

Fair value hierarchy 31.12.2019 (31.12.2018) in TEUR	Level 1	Level 2	Level 3
Liabilities			
Financial liabilities at amortised cost			
Financial liabilities		1,681,034	
(previous year)		(1,595,363)	
Leasing liabilities		-	
(previous year)		(80,036)	

The following tables show the valuation methods that were used to determine fair values.

Financial instruments measured at fair value

Type	Valuation method	Significant, unobservable input factors
Non-current financial assets: Investment funds	The financial investments are measured using one of the following methods or a combination of more than one of the following methods: acquisition cost of the most recent financial investments, measurement criteria within the industry, currently received offers, contractual obligations. The relative weighting of each measurement method reflects an assessment of the suitability of each measurement method for the respective non-realised financial investment.	Risk premium The estimated fair value of the financial investments available for sale would increase (decrease) if the risk premium were lower (higher).
Non-current financial assets: Mezzanine capital	Discounted cash flows: The fair values are determined using the future expected cash flows discounted using the standard observable market data of the corresponding interest structure curves.	Expected distributions The estimated fair value of the mezzanine capital would increase (decrease) if the distributions would be higher (lower) and/or would be made at an earlier (later) date.
Interest rate swaps	Discounted cash flows: The fair values are determined using the future expected cash flows discounted using the standard observable market data of the corresponding interest structure curves.	Not applicable
Receivables from contingent considerations	Discounted cash flows on the basis of contractually fixed mechanisms	Date of the addition of the other wind parks The estimated fair value of the receivables from contingent consideration would increase (decrease) if the additional wind parks were added at an earlier (later) date.
Liabilities from contingent considerations	Discounted cash flows on the basis of contractually fixed mechanisms	Performance of the installations The estimated fair value of liabilities from contingent consideration would increase (decrease) if the solar park's performance were higher (lower).

Financial instruments not measured at fair value

Type	Valuation method	Significant, unobservable input factors
Financial liabilities	Discounted cash flows: The fair values are determined using the future expected cash flows discounted with equivalent terms using the standard observable market interest rates and taking an appropriate risk premium into account.	Not applicable

For financial instruments with short-term maturities, including cash and cash equivalents, trade receivables, trade payables and other current receivables and current liabilities, it is assumed that their fair values approximate their carrying amounts. The relief provision of IFRS 7.29 was applied to the disclosures relating to the fair values of lease liabilities, on the basis of which the fair value was not determined.

The following overview shows a detailed reconciliation of assets and liabilities in level 3 regularly measured at fair value.

In TEUR	2019	2018
Non-current financial assets		
As of 01.01	5,245	5,825
Purchases (including additions)	151	314
Reclassification from the equity method	0	388
Sales (including disposals)	-1,196	-1,220
Unrealised profit (+)/loss (-) in consolidated earnings	153	-62
As of 31.12	**4,353**	**5,245**
Non-current liabilities from contingent considerations		
As of 01.01	596	0
Purchases (including additions)	0	592
Unrealised profit (-)/loss (+) in consolidated earnings	8	4
As of 31.12	**604**	**596**
Current liabilities from contingent considerations		
As of 01.01	775	79
Purchases (including additions)	0	775
Sales (including disposals)	-665	-56
Realised profit (-)/loss (+) in consolidated earnings	-110	-21
Unrealised profit (-)/loss (+) in consolidated earnings	0	-2
As of 31.12	**0**	**775**
Non-current receivables from contingent considerations		
As of 01.01	0	301
Reclassifications due to maturity	135	-305
Unrealised profit (+)/loss (-) in consolidated earnings	0	4
As of 31.12	**135**	**0**
Current receivables from contingent considerations		
As of 01.01	305	552
Sales (including disposals)	0	-552
Maturity of reclassifications	-135	305
Unrealised profit (+)/loss (-) in consolidated earnings	-170	0
As of 31.12	**0**	**305**

The non-current earn-out liability was recognised with the acquisition of the solar park in Boizenburg during the 2018 financial year. The payment is mainly related to the performance of the park after planned repairs. During the financial year, the liability was compounded by TEUR 8.

In the course of the asset deals for Rindum Enge 1 and 5 as well as 2 and 3 in 2018, agreements on contingent consideration were concluded. Due to a noise reduction measure, the wind turbines ran in a reduced operating mode. Contractually agreed technical adjustments to the wind turbines achieved an increase in production, which resulted in an increase in the purchase price. Following a corresponding evaluation, an additional payment of TEUR 665 (translated) was made; the remaining amount was derecognised through profit or loss.

The current earn-out receivable from the acquisition of the wind park UGE Markendorf Eins GmbH & Co. KG Umweltgerechte Energie in the 2017 financial year was written down to TEUR 135 following a thorough review and reclassified to non-current earn-out receivables, because payment is not expected within the 2020 financial year.

The following table shows the net gains and losses from financial instruments taken into account in the statement of comprehensive income, as per IFRS 9 and broken down by valuation category:

In TEUR	Measurement category	Effect on net income from interest, dividends	Effect on net income from the subsequent valuation of the fair value	Effect on net income from the subsequent valuation of impairment	The subsequent valuation of the fair value with no effect on net income	Net result
Financial assets measured at their amortised cost	AC	3,043		-2,106	-42,377	-41,440
(previous year)		(54)			(0)	(54)
Financial instruments measured at fair value through profit or loss*	FVPL		-25			-25
(previous year)			(-58)			(-58)
Ineffective portion of derivatives in a hedging relationship (financial liabilities)	FVPL		-157			-157
(previous year)			(-343)			(-343)
Derivatives not in a hedging relationship (financial liabilities)	FVPL		-42			-42
(previous year)			(-953)			(-953)
Financial liabilities measured at their amortised cost	AC	-38,722		0		-38,722
(previous year)		(-48,000)		(624)		(-47,376)
2019		-35,679	-224	-2,106	-42,377	-80,386
(previous year)		(-47,946)	(-1,354)	(624)	(0)	(-48,676)

* As part of the allocation of receivables and liabilities from contingent consideration to the FVPL category (previously: n.a.), the disclosures for the net gains and losses from financial instruments recognised in the statement of comprehensive income were also adjusted for the previous year in accordance with IFRS 9, although this is only a change in the presentation of the tables of financial instruments and not a change in the figures per se.

The net gains and losses from financial instruments, taking IFRS 9 into account, comprise valuation results, the recognition and reversal of impairment losses and interest and all other effects on profit or loss from financial instruments. Income components of the net income from financial instruments are usually recorded in the financial result. The effects recognised in the category “Financial assets measured at amortised cost” as not affecting profit or loss from the allocation of other comprehensive income represent the remaining earnings allocations transferred to the loans within the scope of the equity valuation, which reduced these by TEUR 42,377 via other comprehensive income. There was also a reduction through profit or loss via the result of financial assets accounted for using the equity method in the amount of TEUR 2,106. The item “Derivatives not in a hedging relationship (financial liabilities)” contains earnings from instruments which are not designated as hedging instruments as part of a hedge relationship in accordance with IFRS 9. The item “Ineffective portion of derivatives in a hedging relationship (financial liabilities)” includes the effects through profit or loss from the ineffective portion of the financial instruments, which are designated hedging instruments pursuant to IFRS 9, the measurement of forward exchange contracts and the effects on profit or loss for financial instruments from the hedge reserve that are no longer effective, recycled in OCI. Net gain or loss for this item does not contain any interest or dividend income.

The following interest income and interest expenses originate from financial instruments not measured at fair value through profit or loss:

In TEUR	2019	2018
Interest income	14,524	9,061
Interest expenses	-58,469	-57,927
Total	**-43,945**	**-48,866**

Not included, in particular, are interest income and interest expenses from derivatives and interest income and interest expenses from assets and liabilities outside of the scope of IFRS 7. In accordance with IFRS 7.20 (b), interest expenses include interest expenses in connection with IFRS 16, as the lease liabilities are classified as financial liabilities not measured at fair value through profit or loss.

Interest rate swaps

The fair value of interest rate swaps on the balance sheet date is determined by discounting future cash flows using the yield curves on the balance sheet date and the credit risk associated with the contracts.

As of the balance sheet date, the Group held a total of 97 (31 December 2018: 96) interest rates swaps, under which the Group receives interest at a variable rate and pays interest at a fixed rate. As a general rule, these are amortising interest rate swaps, whose nominal volume is reduced at regular, defined intervals. The following table shows the nominal volumes as of the balance sheet date, the average (volume-weighted) fixed interest rate and the fair value. It differentiates between interest rate swaps that are part of an effective hedging relationship pursuant to IFRS 9 and those that are not.

In TEUR	31.12.2019	31.12.2018
Nominal volume	**442,540**	**454,015**
of which in a hedging relationship	*391,873*	*401,185*
of which not in a hedging relationship	*50,667*	*52,830*
Average interest rate in %	2.17	2.26
Average remaining term in years	9.32	9.89
Fair value	**-30,487**	**-20,277**
of which in a hedging relationship	*-27,806*	*-17,638*
of which not in a hedging relationship	*-2,681*	*-2,639*

The following table provides information on the nominal volume of hedging instruments:

In TEUR	Remaining term			Total nominal volume	Total nominal volume	Average interest rate
	Up to one year	One to five years	Over five years	31.12.2019	31.12.2018	31/12/2019
Hedging interest and currency risk						
Interest rate and currency swaps (GBP)	0	0	22,026	22,026	25,406	4.84%
Hedging interest risk						
Interest rate swaps	0	15,939	353,908	369,847	375,779	1.96%
Hedging currency risk						
Forward exchange contracts (GBP)	964	0	0	964	0	-

The following table contains information on hedging instruments as part of cash flow hedges:

In TEUR	Carrying amount	Balance sheet item	Change in fair value to determine ineffectiveness	Nominal volume
	31.12.2019	31.12.2019	31.12.2019	31.12.2019
Hedging interest and currency risk				
Interest rate and currency swaps				
Derivative assets	971	Other receivables	263	15,893
Derivative liabilities	-235	Non-current financial liabilities	-232	6133
Hedging interest risk				
Interest rate swaps				
Derivative assets	0	Other receivables	-2	182
Derivative liabilities	-28,542	Non-current financial liabilities	-12,346	369,665

The following table contains information on profit and loss from cash flow hedges (CFH):

In TEUR				Reclassifications from hedge reserves to the income statement		
	Profit or loss from CFH recognised in equity	Ineffectiveness recognised in the income statement	Item in the statement of comprehensive income in which the recorded ineffectiveness is included	Due to premature termination CFH	Due to the realisation of the hedged item in the income statement	Item in the statement of comprehensive income in which the reclassification is included
	31.12.2019	31.12.2019	31.12.2019	31.12.2019	31.12.2019	31.12.2019
Hedging interest and currency risk	1,004	-312	Financial expenses/ financial income	0	0	Financial expenses/ financial income
Hedging interest risk	9,207	195	Financial expenses/ financial income	24	4,135	Financial expenses/ financial income

The market value of swaps that are not in a hedging relationship was recognised as expenses of TEUR 42 through profit or loss (previous year: TEUR 952).

The following table shows the hedged items for cash flow hedges:

In TEUR	Change in value for the period of the hedged item to determine ineffectiveness	Status of hedge reserve and currency reserve for active cash flow hedges	Status of hedge reserve and currency reserve for terminated cash flow hedges
	31.12.2019	31.12.2019	31.12.2019
Hedging interest and currency risk			
Designated components	-335	284	
Non-designated components		-27	
Hedging interest risk			
Designated components	19,281	-14,521	260
Non-designated components			

Principles of risk management

With regard to its financial assets and liabilities and planned transactions, Encavis is mainly exposed to risk from interest rate changes. The aim of financial risk management is to limit this market risk by means of ongoing activities. Derivative hedging instruments are used to this end, depending on the risk assessment. In order to minimise default risk, interest rate hedging instruments are only concluded with renowned banks with corresponding credit ratings. As a general rule, only risks that impact the Group’s cash flow are hedged. At the end of the reporting period, no risk concentrations are seen for the Group’s companies.

Interest rate risk

Interest rate risk is the risk that a financial instrument’s fair value or future cash flows will fluctuate due to changes in market interest rates. In addition to acquisition financing, the risk of fluctuations comes largely from the financing for individual items if this financing has a floating rate of interest. If the market interest rate level for the variable-rate loans not hedged by a swap had been 100 basis points higher as of 31 December 2019, earnings before taxes on income (EBT) would have been TEUR 24 higher (previous year: TEUR 85). If the market interest rate level had been 100 basis points lower as of 31 December 2019, earnings before taxes on income (EBT) would have been TEUR 24 lower (previous year: TEUR 85).

For the other financing transactions, unconditional interest rate hedges are in place in the form of interest rate swaps over the entire nominal volume, resulting in only marginal fluctuations in the current statement of comprehensive income. However, a change in market expectations regarding interest rates causes a change in the valuation of gains and losses expected from the interest rate hedge, which – if the derivatives are part of an effective hedging relationship – is assumed to solely impact the hedging reserve. For derivatives not in a hedging relationship pursuant to IFRS 9, the change in expectations accordingly directly impacts earnings.

Interest rate risks are shown by means of sensitivity analyses pursuant to IFRS 7. If market interest rates as of 31 December 2019 had been 100 basis points higher, earnings before taxes would have been TEUR 3,746 (previous year: TEUR 8,734) higher and the hedge reserve in equity before taxes would have been TEUR 15,580 (previous year: TEUR 11,521) higher. If market interest rates as of 31 December 2019 had been 100 basis points lower, earnings before taxes would have been TEUR 3,379 (previous year: TEUR 8,485) lower and the hedge reserve in equity before taxes would have been TEUR 17,940 (previous year: TEUR 13,466) lower. This is due to the fact that an increase (decrease) in the market interest rate level as of the balance sheet date reduces (increases) net cash outflows from the interest rate hedging instruments over the entire duration of the interest rate swaps and thus increases (decreases) their present value.

As part of hedging relationships with interest rate swaps or cross-currency interest rate swaps, the IBOR reform exposes the Encavis Group to uncertainties regarding the timing and the amount of the IBOR-based cash flows or the hedged risk of the underlying transaction or hedging instrument. The Group makes use of the simplifications associated with the amendments to the standard – irrespective of the remaining term of the hedged items and hedging instruments included in the hedging relationship – for all hedging relationships affected by the aforementioned uncertainties arising from the IBOR reform. The uncertainties relate to the GBP LIBOR reference rate. For cash flow hedges in which risks from changes in future cash flows are hedged, the uncertainty relates to the highly probable expectation of hedged future variable cash flows. The anticipated effects of the IBOR reform are continuously assessed, and necessary measures are initiated in good time. By adapting systems and processes, the measures are intended to ensure that the reference interest rates replaced by the IBOR reform can be replaced by the new reference interest rates in a timely manner. The SONIA reference interest rate is currently the focus of attention in the Encavis Group due to the advanced level of market acceptance and the significance of the transactions concerned.

For the GBP LIBOR, the nominal amounts of hedging instruments exposed to the uncertainties from the IBOR reform described above are TEUR 60,806.

Exchange rate risk

The company has issued loans to its British and Danish subsidiaries and project companies in British pounds and Danish kroner respectively. The loans are, as a general rule, subject to exchange rate fluctuations between the British pound or Danish krone and the euro. The resulting risks from exchange rate fluctuations are presented by means of a foreign currency sensitivity analysis pursuant to IFRS 7. As the Danish krone is subject to the European exchange rate mechanism (ERM II) and has thus been pegged to the euro since its introduction on 1 January 1999, no sensitivity analysis is performed for the Danish krone. If the euro were to rise by 10 per cent against the British pound, annual earnings and shareholders’ equity would fall by TEUR 7,348 (previous year: TEUR 5,533). This is due to the fact that, from a Group perspective, the existing receivables are to be adjusted by the currency translation loss. If the euro were to fall by 10 per cent against the British pound, annual earnings and shareholders’ equity would increase by TEUR 8,981 (previous year: TEUR 6,762).

The exchange rate risk associated with interest and principal payments made by British subsidiaries in the Group’s functional currency (euro) is hedged by means combined interest rate and currency swaps. The risks are hedged with the aim of minimising the volatility of interest and principal payments. No further material exchange rate risks pursuant to IFRS 7 exist currently in the Encavis Group.

Credit risk

Credit risk describes the risk that counterparties are unable to meet their obligations as contractually agreed. The receivables from solar parks and wind parks are primarily trade receivables from the sale of the kilowatt-hours produced. In nearly all the markets in which the Encavis Group operates, the purchase of the electricity produced, which is based on contractually defined remuneration rates, is regulated and safeguarded by law. As a result of its entry into the market in the United Kingdom and Denmark, the Group also has trade receivables whose counterparties are not exclusively semi-public grid companies or comparable organisations, but private companies. The Group is not, however, exposed to any significant default risk because the companies are renowned companies with a good or very good credit rating.

Trade receivables are exclusively current receivables which are generally settled within 30 to 60 days depending on the country. The maximum default risk is limited to the carrying amounts of the corresponding trade receivables and other receivables. Upon initial recognition of trade receivables and other receivables, the Group recognises impairment losses using the expected credit loss model. In addition, in the event that there is objective evidence of impairment, impairment losses are recognised on a case-by-case basis. Evidence of this nature exists if the invoices for the kilowatt-hours produced, which are generally prepared by the buyer, are not prepared or not paid within the agreed periods. In addition, further objective indications such as insolvency cases are continuously monitored. In the event of either of these events becoming overdue, the corresponding items will be examined again in detail and, if necessary, an additional impairment will be formed. In the reporting period, the default rate for trade receivables was 0 per cent (previous year: 0 per cent).

In detail, the following items are affected by impairments:

Trade receivables

The Group applies the simplified impairment model of IFRS 9 for trade receivables in accordance with the standard. This is based on the so-called lifetime expected loss.

In order to determine the expected credit defaults, trade receivables have been combined into largely homogeneous groups with similar characteristics with regard to their estimated credit risks. In particular, there was a separation between governmental and semi-public buyers, which account for the majority of buyers in the electricity production sector, and private buyers. The Encavis Group has private buyers mainly in the Asset Management segment and, to a lesser extent, also in the electricity buyers segment.

In the 2019 financial year, impairments of trade receivables decreased by TEUR 3 to TEUR 167.

Loans to associates and other loans as well as other current receivables

In principle, the Group estimates the credit risks for loans granted and other current receivables to be low, which is why a provision for losses on receivables was formed for these items in the amount of the expected 12-month losses on receivables. The risk provision amounted TEUR 2,585 as of the reporting date (previous year: TEUR 76). The significant year-on-year increase is mainly due to the higher value of loans to associates in connection with the Spanish solar projects. Due to the negative other effects on earnings in these projects, which are reported as associates, the corresponding allocations taken into account were also reflected in the carrying amounts of the loans. Because these are purely valuation effects, the Group does not see any need for impairments to these loans.

Material estimation uncertainties and accounting judgements

Impairment losses on financial assets are based on estimates of loan defaults and expected default rates. The Group exercises its discretion in making this assessment. Even minor deviations in the valuation parameters used for calculation can lead to material deviations in the calculation, particularly due to the amount of trade receivables.

Changes in impairments during the financial year under review

The closing balance sheet value of the impairments on trade receivables, as well as on loans and other current receivables, is reconciled to the opening balance sheet value of the impairments as follows and is continued until the end of the financial year:

In TEUR	Trade receivables		Other loans and current receivables	
	2019	2018	2019	2018
1 January	170	0	76	0
Amounts restated via the opening balance sheet value of retained earnings	0	95	0	62
Opening balance sheet value of the impairments on 1 January	170	95	76	62
Change in impairments of credit losses recognised in profit or loss for the financial year under review	-3	75	2,509	14
31 December	**167**	**170**	**2,585**	**76**

There were no amounts written off as unrecoverable or utilisation of the impairments made in the financial year under review. The changes in the impairments recognised result exclusively from the fluctuation in the receivables portfolio between the beginning of the year and the end of the year as well as from the development of the underlying interest rate parameters for the individual country portfolios.

The maximum credit risk for the Encavis Group is therefore measured on the basis of the carrying amount of trade receivables and other loans and receivables, all of which are measured at amortised cost and are therefore subject to the impairment model. Financial assets measured at fair value through profit or loss are also subject to a full credit risk. Due to the recognition at market value, no impairment model is applied to these, but rather a valuation based on other market parameters. The Encavis Group does not currently hold any collateral that would mitigate the aforementioned credit risks.

The derecognition of financial assets measured at amortised cost did not result in any material amounts being recognised in the consolidated statement of comprehensive income.

If an increased number of credit defaults occur in the Group's financial assets, the classification of the credit risk would be adjusted. This was not necessary as of the balance sheet date. A bundling of credit risks is not evident in the Group due to the diversification across different country markets and customers.

The following table shows the gross carrying amounts of financial assets by rating class. There are currently no loan commitments or financial guarantees. The loans to associates included in this item were reduced by TEUR 44,484 from TEUR 144,236 to TEUR 99,752 due to the attribution of other results and results from the equity method.

In TEUR	Level 1 12-month ECL	Level 2 Total-term ECL (not impaired)	Level 3 Total-term ECL (impaired)	Simplified approach Total-term ECL	Level 4 Acquired/ granted impaired assets
Credit risk rating grade 1 Receivables not at risk of default	109,560			45,450	
Credit risk rating grade 2 Impaired receivables					
Credit risk rating grade 3 Defaulted receivables					
Total	**109,560**			**45,450**	
(previous year)	(3,951)			(36,349)	

Liquidity risk

Liquidity risk describes the risk that the Group is unable to meet its obligations as they fall due. The financial liabilities did not pose any liquidity risk since, as of the balance sheet date, the Group held cash and cash equivalents of TEUR 164,501 (previous year: TEUR 175,564). The Group also receives ongoing cash flows from the solar parks and wind parks; there is a high degree of certainty that these cash flows can be expected to continue and they are ample to service the interest payments, principal repayments and financial liabilities. Ultimately, the Management Board is responsible for liquidity risk management. The Management Board has established an appropriate approach for managing short-, medium- and long-term financing and liquidity requirements. The Group manages liquidity risks by holding suitable reserves and through constant monitoring of forecast and actual cash flows, as well as matching the maturity profiles of financial assets and liabilities.

IFRS 7 also requires a maturity analysis for derivative and non-derivative financial liabilities. The following maturity analysis shows how the non-discounted cash flows in connection with the liabilities as of 31 December 2019 (31 December 2018) influence the Group's future liquidity situation.

Type of liability in TEUR	Carrying amount as of 31.12.2019 (31.12.2018)	Remaining term of up to one year	Remaining term of one to five years	Remaining term of more than five years
Non-derivative financial liabilities				
Trade payables	10,738	10,738	0	0
(previous year)	(16,784)	(16,784)	(0)	(0)
Financial liabilities	1,529,112	277,263	664,848	917,695
(previous year)	(1,499,651)	(179,535)	(660,455)	(917,193)
Lease liabilities	188,952	16,343	65,419	170,134
(previous year)[1]	(80,697)	(8,451)	(33,711)	(48,362)
Liabilities to non-controlling shareholders	43,093	2,971	0	40,122
(previous year)	(22,404)	(17,140)	(0)	(5,264)
Liabilities from contingent considerations	(604)	(0)	(604)	(0)
(previous year)	(1,371)	(775)	(596)	(0)
Other financial liabilities	(488)	(488)	(0)	(0)
(previous year)	(717)	(717)	(0)	(0)
Derivative financial liabilities				
Interest rate derivatives in a hedging ralationship	28,776	3,191	15,217	13,064
(previous year)	(19,644)	(3,524)	(12,245)	(7,422)
Interest rate derivatives not in a hedging relationship	2,681	1,401	3,122	450
(previous year)	(2,639)	(1,409)	(3,626)	(203)
Forward exchange contracts	64	64	0	0
(previous year)	(0)	(0)	(0)	(0)

[1] The values in this line item from 2018 only relate to liabilities from finance leases pursuant to IAS 17.

The approach when calculating the amounts was generally as follows:

If the contractual partner can demand a payment at various dates, the liability is recognised at the earliest due date. Interest payments made on financial instruments with floating interest rates are calculated on the basis of forward interest rates. The cash flows of the lease liabilities comprise their non-discounted interest payments and principal repayments. Part of the liabilities to non-controlling interests may become due at any time as a result of a termination right with compensation claim and are therefore partially classified as current liabilities. In the case of the derivative financial instruments, the non-discounted net payments are shown.

9 Notes to the consolidated cash flow statement

The cash flow statement is presented as a separate statement.

The cash flow statement shows the changes in the Encavis Group's cash funds. Cash funds comprise cash and cash equivalents that are not subject to any restrictions. The cash flow statement was prepared in accordance with IAS 7 and classifies the changes to liquid assets into cash flows from operating, investing and financing activities. The cash flow from ongoing operating activities is presented using the indirect method.

Liquid funds are composed entirely of cash on hand and bank balances. This includes reserves for debt servicing and projects of TEUR 57,980 (previous year: TEUR 76,927), which serve as collateral for the lending banks of the solar parks and wind parks and can only be used in agreement with the lending banks for the respective company, and, to a lesser extent, restricted liquid funds at Encavis AG and other Group companies.

Reconciliation of the movement of liabilities to cash flows from financing activities

As of 1 January 2017, changes in liabilities arising from financing activities, including changes arising from cash flows and non-cash changes, are evaluated. The classification as a component of the cash flow from financing activities is a definitive criterion for cash flow. The following table shows the reconciliation of the opening balances to the closing balances of the balance sheet items.

In TEUR	Non-current financial liabilities	Current financial liabilities	Leasing liabilities	Cash flow hedges with positive market value	Liabilities to non-controlling interests	Total
Balance sheet as of 01.01.2019	1,349,602	170,389	80,697	2,006	22,404	1,625,097
Effect from first time application of IFRS 16			115,377			115,377
Balance sheet as of 01.01.2019 (adjusted)	1,349,602	170,389	196,074	2,006	22,404	1,740,474
(01.01.2018)	(1,284,199)	(113,591)	(87,190)	(1,553)	(20,496)	(1,507,029)
Loan proceeds	116,151	4,074	0	0	12	120,237
(previous year)	(155,223)	(56,373)			(240)	(211,836)
Loan repayments	-121,790	-24,079	0		-286	-146,155
(previous year)	(-105,791)	(-23,026)	(0)		(-212)	(-129,029)
Repayment of lease liabilities			-10,230			-10,230
(previous year)			(-4,942)			(-4,942)
Interest paid	0	-52,671	-4,783		-1,001	-58,455
(previous year)	(-314)	(-46,047)	(-2,600)		(-168)	(-49,129)
Payments to non-controlling interests					-1,180	-1,180
(previous year)					(-1,390)	(-1,390)
Payments received from the sale of shares without change of control					24,855	24,855
(previous year)					(0)	(0)
Change in cash flows	-5,640	-72,676	-15,013		22,400	-70,929
(previous year)	(49,119)	(-12,701)	(-7,542)		(-1,531)	(27,345)
Acquisition	22,350	41,241	1,842		164	65,596
(previous year)	(30,147)	(10,543)	(0)		(2,337)	(43,027)
Foreign exchange rate change	3,525	362	432	113		4,432
(previous year)	(-910)	(-85)	(0)	(-17)		(-1,011)
Changes in fair values	8,558			-1,084		7,474
(previous year)	(522)			(470)		(992)
Reclassifications	-5,123	5,123				0
(previous year)	(-8,024)	(8,024)				(0)
Interest expenses		47,746	6,651		645	55,042
(previous year)		(51,113)	(2,600)		(274)	(53,987)
Additions from lease liabilities			16			16
(previous year)			(0)			(0)
Disposals of lease liabilities			-201			-201
(previous year)			(0)			(0)
Modifications and reassessments of lease liabilities			759			759
(previous year)			(0)			(0)
Measurement and other effects	-6,483	-552	-1,607		-2,519	-11,161
(previous year)	(-5,451)	(-97)	(-1,551)		(828)	(-6,272)
Non-cash change	22,827	93,919	7,892	-971	-1,710	121,957
(previous year)	(16,284)	(69,498)	(1,049)	(453)	(3,439)	(90,723)
Balance as of 31.12.2019	1,366,789	191,632	188,952	1,035	43,093	1,791,501
(31.12.2018)	(1,349,602)	(170,389)	(80,697)	(2,006)	(22,404)	(1,625,097)

The sum of the cash flows (loan proceeds, loan repayments, repayment of lease liabilities, interest paid, dividends paid to non-controlling interests, payments received from the sale of shares without change of control) shows the corresponding components from the consolidated cash flow statement's cash flow from financing activities. As with the separate disclosure of the repayment of lease liabilities, this item is also presented separately. In order to improve comparability, the repayments from 2018, which were presented under IAS 17 in the loan repayments item, were also shown separately as repayments of lease liabilities. In the 2019 financial year, TEUR 732 (previous year: TEUR 842) was allocated as a distribution to non-controlling interests in equity, which is why the dividends paid to non-controlling interests differ from the cash flow from financing activities by this amount. The non-cash changes in liabilities were broken down into changes from acquisitions, exchange rate changes, changes in fair value, reclassifications, interest expenses and other valuation effects not subsumed in other categories. Due to the first-time application of IFRS 16, the presentation in the non-cash section was also expanded in 2019 to include additions, disposals, modifications and reassessments of lease liabilities. Additionally, the carrying amounts of lease liabilities as of 1 January 2019 were adjusted for the effect of the first-time application of IFRS 16 in the amount of TEUR 115,377. Unlike the balance sheet item, current financial liabilities do not contain any current accounts of banks because they are not for financing purposes.

10 Contingent liabilities and other obligations

The Encavis Group has numerous office rental contracts, leases and lease agreements for photocopiers and company cars, which are classified as operating leases under IAS 17 until 31 December 2018 and have not been recognised in the balance sheet.

With the first-time application of IFRS 16 as of 1 January 2019, rights of use and lease liabilities were recognised in the balance sheet for a large proportion of these agreements. Exceptions to this are short-term leases, leases for low-value underlying assets and variable, revenue-dependent lease payments. Further details can be found in chapters 2, 3.24 and 6.16.

The off-balance-sheet obligations as of 31 December 2019 have therefore decreased compared to 31 December 2018 and are as follows:

Type of obligation	Other obligations of up to one year In TEUR	Other obligations of one to five years In TEUR	Other obligations of more than five years In TEUR
Rental agreements	0	0	0
(previous year)	(759)	(3,187)	(3,287)
Leases	8	15	0
(previous year)	(126)	(80)	(0)
Commercial leases	0	0	0
(previous year)	(6,858)	(28,067)	(126,103)

Variable, revenue-dependent lease payments are not included in the presentation of off-balance-sheet obligations.

As of 31 December 2019, there are contingent liabilities in the amount of TEUR 218 resulting from rental guarantees (previous year: TEUR 218), of which TEUR 218 has already been deposited.

Furthermore, Encavis AG has provided guarantees for two French, two Dutch and two Spanish subsidiaries, which are also affiliates or associates, in the total amount of TEUR 7,273 (previous year: TEUR 4,799), of which TEUR 294 has already been deposited for these guarantees. In addition, Encavis AG has issued so-called letters of comfort for a total of 13 Italian subsidiaries to secure asset retirement obligations and tax liabilities totalling approximately TEUR 1,347 (previous year: TEUR 1,272). Due to the economic situation of these companies, claims associated with these guarantees and letters of comfort are not expected.

Encavis AG is the writer of a put option that grants the option owner the right to tender 100 per cent of the shares of a holding company for solar parks and wind parks as well as any loan receivables from this holding company to Encavis AG. As of the balance sheet date, this value amounts to TEUR 0. In connection with this business relationship, Encavis AG is liable for the liabilities vis-à-vis third parties up to maximum amount of TEUR 20,000. This agreement and thus the liability entered into is currently being dissolved.

As part of the issue of the hybrid convertible bond, payment guarantees to the creditors of the bonds of Encavis Finance B.V., Amsterdam, Netherlands, existed as of the balance sheet date covering a total amount of TEUR 157,853. In our opinion, Encavis Finance B.V. is likely to be able to meet the underlying liabilities. In light of this, claims associated with these guarantees are not expected.

Furthermore, Encavis AG has assumed a so-called parent company guarantee up to a maximum amount of TEUR 100,000 for obligations arising from the EPC contract for Spanish project companies which, from Encavis' perspective, represent associates. Due to the good economic situation of the companies, claims associated with this guarantee are not expected.

11 Related parties

In the course of normal business, the parent company Encavis AG maintains relationships with subsidiaries and with other related companies (associates and companies with the same staff in key positions) and individuals (majority shareholders and members of the Supervisory Board and Management Board as well as their relatives).

Transactions with individuals in key positions in management

The remuneration presented in line with IAS 24 for management in key positions within the Group contains the remuneration for active members of the Management Board and Supervisory Board.

The active members of the Management Board and Supervisory Board were remunerated as follows:

Remuneration in TEUR	2019	2018
Short-term employee benefits	2,247	2,026
Long-term employee benefits (share-based payments)	1,727	95
Total remuneration	**3,974**	**2,121**

The statement of share-based payments includes the expenses recorded in the financial year for the share option programmes SOP 2012, SOP 2017, SOP 2018 and SOP 2019. The provision for share-based payment transactions with cash settlement for the members of the Management Board amounts to TEUR 1,753 (previous year: TEUR 64).

Associates

Transactions with associates are carried out under the same conditions as those with independent business partners. Outstanding items at the end of the year are unsecured and (with the exception of loans) interest-free, and settlement is made in cash. No guarantees were provided to or by related parties with regard to receivables or liabilities.

In TEUR	Services provided (incl. interest)	Services received	Receivables	Liabilities	Loans issued (incl. interest)
Cabrera Energia Solar S.L.	2,157				79,869
CHORUS IPP Europe GmbH	666		139		
Genia Extremadura Solar S.L.	902				67,397
Gnannenweiler Windnetz GmbH & Co. KG		40			
Pexapark AG		152		8	
Stern Energy SpA*		663		121	
Total	**3,725**	**855**	**139**	**129**	**147,266**
(previous year)	(257)	(46)	(102)	(4)	(1,000)

* Because the participating interest in Stern Energy S.p.A. was acquired on 20 June 2019, only transactions after this date will be reported.

On 15 February 2019, Encavis founded Cabrera Energia Solar S.L., which is headquartered in Valencia, Spain.

The participating interest in Stern Energy S.p.A., which is headquartered in Parma, Italy, was acquired on 20 June 2019.

On 20 September 2019, Encavis acquired the remaining shares of Energiepark Debstedt 2 RE WP DE GmbH & Co. KG, which was previously reported under associates and which was subsequently merged with Energiepark Debstedt GmbH & Co. RE WP KG.

During the financial year, the Group received TEUR 19 from dividends from CHORUS IPP Europe GmbH and TEUR 175 from mezzanine capital held.

Joint arrangements

The participating interest in Richelbach Solar GbR in the amount of TEUR 120 as of 31 December 2019 (previous year: TEUR 120) is classified as a joint operation pursuant to IFRS 11 due to the contractually agreed co-determination rights of the two participating solar parks. All decisions must be made unanimously. The shareholders only have joint power of disposal over the relevant activities, which are exclusively aimed at providing the infrastructure for the solar parks. Encavis recognises its interest in the joint operation through the recognition of its share in the assets, liabilities, income and expenses in accordance with its contractually assumed rights and obligations.

Other related companies and individuals

As of the reporting date, rental contracts at arm's-length terms exist with B&L Holzhafen West GmbH & Co. KG, a company allocated to Supervisory Board members Albert Büll and Dr Cornelius Liedtke, for office space for Encavis AG. In the 2019 financial year, the sum of the transactions with B&L Holzhafen West GmbH & Co. KG amounts to TEUR 752 (previous year: TEUR 599). As of the balance sheet date, there were no outstanding balances from transactions with B&L Holzhafen West GmbH & Co. KG.

For the company Encavis GmbH, there is a rental agreement regarding the Asset Management segment's office space in Neubiberg with PELABA Vermögensverwaltungs GmbH & Co. KG, a company related to Supervisory Board member Peter Heidecker. The rental agreement has a fixed term until the end of 2019 and renews automatically by one year each year unless either of the parties terminates it with a notice period of six months. The contract thus runs until at least the end of 2020. The monthly rent is based on customary market conditions. In the 2019 financial year, the sum of the transactions with PELABA Vermögensverwaltung GmbH & Co. KG amounts to TEUR 142 (previous year: TEUR 157). As of the balance sheet date, there were no outstanding balances from transactions with PELABA Vermögensverwaltungs GmbH & Co. KG.

12 Earnings per share

The weighted average number of ordinary shares used in calculating the diluted earnings per share is calculated from the weighted average number of ordinary shares used in calculating the basic earnings per share, as derived below. The potential shares from the hybrid convertible bond issued are not taken into account in the calculation of diluted earnings per share due to the protection against dilution within the meaning of IAS 33.41.

	31.12.2019	31.12.2018
Weighted average number of ordinary shares from the calculation of the undiluted earnings per share	131,052,531	129,040,364
Shares assumed to have been issued for no consideration:		
Number of employee options	69,044	48,262
Weighted average number of ordinary shares used for the calculation of diluted earnings per share	131,121,575	129,088,626
Earnings per share from continuing operations, undiluted (EUR)	0.17	0.04
Earnings per share from continuing operations, diluted (EUR)	0.17	0.04

13 Management Board

The total remuneration granted to members of the Management Board in the financial year amounted to TEUR 2,490 (previous year: TEUR 1,910).

Details of their membership in other supervisory and advisory boards		
Dr Dierk Paskert	The Mobility House AG, Zurich	Member of the Administrative Board
	Pexapark AG, Zurich	Member of the Administrative Board
	Encavis Asset Management AG, Neubiberg	Member of the Supervisory Board
Dr Christoph Husmann	Encavis Asset Management AG, Neubiberg	Chairman of the Supervisory Board

All disclosures for the active members of the Management Board, individualised disclosures and further details on the remuneration system are contained in the remuneration report in the management report.

14 Supervisory Board

The following changes to the composition of the Supervisory Board were made in the financial year:

Professor Klaus-Dieter Maubach resigned his position on the Supervisory Board of Encavis AG effective on 15 May 2019. Dr Marcus Schenck was elected as his successor.

Members of the Supervisory Board of Encavis AG		
Chairman	Dr Manfred Krüper	Independent management consultant
Deputy chairman	Alexander Stuhlmann	Independent management consultant
Other members	Dr Cornelius Liedtke	Partner in the Büll & Liedtke Group
	Albert Büll	Partner in the Büll & Liedtke Group
	Professor Fritz Vahrenholt	Independent management consultant
	Christine Scheel	Independent management consultant
	Peter Heidecker	Businessman
	Dr Henning Kreke	Entrepreneur
	Dr Marcus Schenck	Partner at Perella Weinberg Partners

Details of their membership in other supervisory and advisory boards		
Dr Manfred Krüper	Power Plus Communications AG, Mannheim	Chairman of the Supervisory Board
	EQT Partners Beteiligungsberatung GmbH, München	Senior advisor
	EEW Energy from Waste GmbH, Helmstedt	Member of the Supervisory Board
Alexander Stuhlmann	Euro-Aviation Versicherungs-AG, Hamburg	Chairman of the Supervisory Board
	Ernst Russ AG, Hamburg	Chairman of the Supervisory Board
	GEV Gesellschaft für Entwicklung und Vermarktung AG, Hamburg	Chairman of the Supervisory Board
	Frank Beteiligungsgesellschaft mbH, Hamburg	Chairman of the Advisory Board
	Siedlungsbaugesellschaft Hermann und Paul Frank mbH & Co. KG, Hamburg	Chairman of the Advisory Board
	bauhaus wohnkonzept gmbh, Hamburg	Chairman of the Advisory Board
	C.E. Danger GmbH & Co. KG, Hamburg	Member of the Advisory Board
	M.M. Warburg & CO Hypothekenbank AG, Hamburg	Member of the Supervisory Board
Dr Cornelius Liedtke	BRUSS Sealing Systems GmbH, Hoisdorf	Member of the Advisory Board
	SUMTEQ GmbH, Cologne	Member of the Advisory Board
Albert Büll	BRUSS Sealing Systems GmbH, Hoisdorf	Member of the Advisory Board
	noventic GmbH, Hamburg	Chairman of the Advisory Board
Professor Fritz Vahrenholt	Aurubis AG, Hamburg	Chairman of the Supervisory Board
	Innogy Venture Capital GmbH, Essen (until July 2019)	Member of the Investment Committee
Christine Scheel	NATURSTROM AG, Düsseldorf (until 27th July 2019)	Member of the Supervisory Board
	Barmenia Versicherungsgruppe, Wuppertal	Member of the Advisory Board
Peter Heidecker	Auszeit Hotel & Resort AG, Munich	Chairman of the Supervisory Board
Dr Henning Kreke	Deutsche EuroShop AG, Hamburg	Member of the Supervisory Board
	Douglas GmbH, Düsseldorf	Chairman of the Supervisory Board
	Thalia Bücher GmbH, Hagen	Member of the Supervisory Board
	Perma-Tec GmbH & Co. KG, Euerdorf	Member of the Advisory Board
	Günter Püschmann GmbH & Co. KG, Wuppertal	Member of the Advisory Board
	CON-PRO Industrie-Service GmbH & Co. KG, Peine	Member of the Advisory Board
	Ferdinand Bilstein GmbH & Co. KG, Enneptal	Member of the Advisory Board
	noventic GmbH, Hamburg	Member of the Advisory Board
Dr. Marcus Schenck (since 15th Mai 2019)	EQT Infrastructure, Stockholm, Schweden	Member of the Independent Advisory Council

15 Corporate governance

The declaration of compliance with the German Corporate Governance Code pursuant to section 161 of the German Stock Corporation Act (*Aktiengesetz* – AktG) has been made and is permanently available to shareholders on the company website.

16 Auditor fees and services

PricewaterhouseCoopers Gesellschaft mit beschränkter Haftung, Wirtschaftsprüfungsgesellschaft (PwC), a member of the German Wirtschaftsprüferkammer (chamber of public accountants – WPK) in Berlin, has acted as the company's auditor since the 2016 financial year. The undersigned auditors are Mr Claus Brandt and Mr Martin Zucker, who have signed the audit of the company's financial statements for the fourth consecutive time.

The total fees for the auditor in the 2019 financial year can be broken down as follows:

In TEUR	2019	2018
Auditing services	601	553
of which for the previous year	*50*	*85*
Other services	163	0
Total	**764**	**553**

The fees for auditing services include, in particular, fees for the statutory audit of the annual and consolidated financial statements and those of the Group subsidiaries included in the consolidated financial statements, the review of accounts in the context of the implementation of new accounting rules as well as fees for other auditing services.

Other services primarily concern audit-related consulting services for process optimisation with regard to taxes.

17 Events after the balance sheet date

Between the balance sheet date of 31 December 2019 and the preparation of the annual and consolidated financial statements for 2019, the general situation regarding the Encavis Group's business activities did not change significantly from the circumstances described in the following.

Encavis AG plans to double its own generation capacity by 2025

On the basis of detailed planning and internal measures, as well as comprehensive market analyses, the Management Board of Encavis AG has decided on a strategic growth plan for the next six years.

This strategic outlook through the year 2025 is based on a growth initiative as well as packages of measures aimed at further increasing efficiency:

6) Investments in ready-to-build wind and solar parks as well as securing projects in earlier phases of development in coordination with the five current strategic development partners while maintaining a long-term equity ratio for the Group of more than 24 %; no capital measure is planned as a part of this plan.

7) Disposal of minority interests in wind and individual selected solar parks of up to 49 % to free up liquidity for investments in additional wind and solar parks.

8) Reduction and optimisation of costs related to the operation and maintenance of solar parks.

9) Optimisation/refinancing of SPV project financing.

10) Introduction of Group-wide cash pooling, including all single entities.

The megatrend of protecting the climate and the environment has become one of the greatest challenges of our time. No other topic is discussed so intensively and controversially worldwide. The share of electricity from renewable sources in Germany is now around 40 % and the EU Commission, under its new president, is adopting a "Green Deal" which is to make Europe the first climate-neutral continent by 2050.

On the basis of forecast figures for 2019, the >> Fast Forward 2025 growth strategy of the Encavis Group focuses on the following target values for the year 2025:

- Doubling the company's own contractually secured generation capacity from 1.7 to 3.4 GW
- Increasing the weather-adjusted revenue (wa) from EUR 260 million to EUR 440 million
- Increasing the weather-adjusted operating EBITDA (wa) from EUR 210 million to EUR 330 million
- A margin of the weather-adjusted operating EBITDA (wa) of 75 %
- Increasing the operating earnings per share (EPS) (wa) from EUR 0.40 to EUR 0.70

The corresponding compound annual growth rates (CAGR) for the next six years until 2025 are evidence of the ambitious strategic measures of the Encavis Group:

- Capacity growth of 12 % CAGR
- Revenue growth (wa) of 9 % CAGR
- Operating EBITDA growth (wa) of 8 % CAGR
- Growth in operating earnings per share (wa) of 10 % CAGR

To date, this basis case of the >> Fast Forward 2025 Encavis growth strategy has not taken any opportunities for growth into account which may arise from inorganic growth via mergers and acquisition transactions and potential equity transactions. Opportunities which could arise from profitable business models in association with future battery storage capacities at the wind and solar parks are also not taken into consideration. A possible expansion into regions outside of Europe offers further potential for growth.

Encavis Asset Management: New subscriptions enable investments of more than EUR 300 million

In the fourth quarter of 2019, Encavis Asset Management AG invested in more than 173 MW in wind and solar installations in Europe for institutional investors.

On the one hand, additional building societies and cooperative banks made extensive investments in the special fund Encavis Infrastructure II Renewables Europe II, which is exclusively sold by BayernLB. Due to the market price model developed and tested specifically for financial institutions, this fund is particularly attractive for this group of investors for risk management in accordance with the minimum requirements. The special fund is managed by HANSAINVEST Lux S.A.

The new funds were used to acquire eight renewable energy parks over a short period of time: two wind parks in Germany (Brandenburg) with a total generation capacity of 22 MW as well as solar parks in Mecklenburg-West Pomerania, Brandenburg and Bavaria with a generation capacity totalling 81 MW. Additionally, four solar parks in the Netherlands with a total generation capacity of 53 MW were acquired. The current fund portfolio of Encavis Infrastructure II Renewables Europe II is therefore comprised of seven installations in Germany and four in the Netherlands and will be supplemented with further investments in Europe.

On the other hand, a renowned insurance company has considerably increased its current commitment level to its Encavis special fund. The BayWa r.e. wind park in Fürstkogel was recently acquired using a portion of these funds. This wind park in Austria has a nominal output of some 17 MW and is situated in a mountainous location in the Austrian state of Styria.

Scope Ratings confirms its investment-grade issuer rating of BBB- with stable outlook for Encavis AG

Encavis AG has again been evaluated by the rating agency Scope Ratings in an updated analysis confirming the Encavis issuer rating in the investment-grade range (BBB-); the outlook for the rating is stable. Scope has updated both the rating and the financial outlook of Encavis AG. The update underscores the previous BBB-/“stable outlook”/S-2 issuer rating of Encavis AG and its financing subsidiary Encavis Finance B.V. as well as the BBB- rating for the unsecured bonds and the BB rating for subordinated hybrid liabilities such as the hybrid convertible bond.

The issuer rating of BBB-/“stable outlook” is largely supported by the company’s secure business model, both through the priority feed-in of generated electricity under availability-based remuneration systems (FIT) and through risk mitigation through long-term power purchase agreements (PPAs). The company’s >> Fast Forward 2025 growth strategy, which provides for a doubling of capacity to 3.4 GW by 2025, is expected to further stabilise the business profile as an independent power producer by reducing the incremental effects of certain generation installations or regions.

18 Full ownership list pursuant to section 313, paragraph 2, of the HGB

As of 31 December 2019, the Group is comprised of Encavis AG and the following consolidated entities:

Company	Registered office	Share in %
Fully consolidated Group companies		
Alameda S.r.l.	Bolzano, Italy	100.00
ARSAC 4 S.A.S.	Paris, France	100.00
ARSAC 7 S.A.S.	Paris, France	100.00
Asperg Erste Solar GmbH	Halle (Saale), Germany	100.00
Asperg Fünfte Solar GmbH	Halle (Saale), Germany	100.00
Asperg Sechste Solar GmbH	Halle (Saale), Germany	100.00
Asperg Zweite Solar GmbH	Halle (Saale), Germany	100.00
Atlantis Energy di CHORUS Solar Italia Centrale 5. S.r.l. & Co. S.a.s.	Bruneck, Italy	100.00
Ballinaclough Solar DAC[1)]	Dublin, Ireland	75.00
BOREAS Windfeld Greußen GmbH & Co. KG	Greußen, Germany	71.40
Bypass Nurseries LSPV Ltd.	London, United Kingdom	100.00
Cagli Solar di CHORUS Solar Italia Centrale 5. S.r.l. & Co. S.a.s.	Bruneck, Italy	100.00
Capital Stage Caddington Ltd.	London, United Kingdom	100.00
Capital Stage Caddington II Ltd.	London, United Kingdom	100.00
Capital Stage Cullompton Ltd.	London, United Kingdom	100.00
Capital Stage Hall Farm Ltd.	Edinburgh, United Kingdom	100.00
Capital Stage Investments Ltd.	Dublin, Ireland	75.00
Capital Stage Ireland GP Ltd.	Dublin, Ireland	100.00
Capital Stage Manor Farm Ltd.	London, United Kingdom	100.00
Capital Stage Solar IPP GmbH	Hamburg, Germany	100.00
Capital Stage Tonedale 1 Ltd.	Exeter, United Kingdom	100.00
Capital Stage Tonedale 2 Ltd.	Exeter, United Kingdom	100.00
Capital Stage Tonedale LLP	Exeter, United Kingdom	100.00
Capital Stage Venezia Beteiligungs GmbH	Hamburg, Germany	100.00
Capital Stage Wind Beteiligungs GmbH	Hamburg, Germany	100.00
Capital Stage Wind IPP GmbH	Hamburg, Germany	100.00
Casette S.r.l.	Bolzano, Italy	100.00
Centrale Eolienne de Bihy SARL	Vern-sur-Seiche, France	100.00
Centrale Fotovoltaica Camporota S.r.l.	Bolzano, Italy	100.00
Centrale Fotovoltaica Santa Maria in Piana S.r.l.	Bolzano, Italy	100.00
Centrale Fotovoltaica Treia 1 S.a.s. di Progetto Marche S.r.l.	Bolzano, Italy	100.00
Centrale Photovoltaique SauS 06 SARL	Pérols, France	85.00
CHORUS CleanTech 1. Fonds Invest GmbH	Neubiberg, Germany	100.00
CHORUS CleanTech 2. Fonds Invest GmbH	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solardach Betze KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Bitterfeld KG	Neubiberg, Germany	36.00
CHORUS CleanTech GmbH & Co. Solarpark Bockelwitz KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Burgheim KG	Neubiberg, Germany	100.00

Company	Registered office	Share in %
CHORUS CleanTech GmbH & Co. Solarpark Denkendorf KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Eisleben KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Gardelegen KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Greiz KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Gut Werchau KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Kemating KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Neuenhagen KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Pasewalk KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Richelbach KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Rietschen KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Rüdersdorf KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Ruhland KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Scheibenberg KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Vilseck KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarpark Warrenzin KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Solarparks Niederbayern KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Windpark Hellberge KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Windpark Ruhlkirchen KG	Neubiberg, Germany	100.00
CHORUS CleanTech GmbH & Co. Windpark Stolzenhain KG	Neubiberg, Germany	100.00
CHORUS CleanTech Management GmbH	Neubiberg, Germany	100.00
CHORUS Energieanlagen GmbH	Neubiberg, Germany	100.00
CHORUS Solar 3. S.r.l. & Co. S.a.s. 2	Bruneck, Italy	100.00
CHORUS Solar 3. S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Casarano S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Foggia 2 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 3 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 4 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 5 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 6 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 7 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 8 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Foggia 9 S.r.l.[2)]	Bruneck, Italy	100.00
CHORUS Solar Italia Centrale 5. S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Matino S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Nardò S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Ternavasso Due S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Ternavasso Uno S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Torino Due S.r.l.	Bruneck, Italy	100.00
CHORUS Solar Torino Uno S.r.l.	Bruneck, Italy	100.00
CHORUS Wind Amöneburg GmbH & Co. KG	Neubiberg, Germany	100.00
CHORUS Wind Appeln GmbH & Co. KG	Neubiberg, Germany	100.00
CHORUS Wind Hürth GmbH & Co. KG	Neubiberg, Germany	100.00
Clawdd Ddu Farm Ltd.	London, United Kingdom	100.00
Collecchio Energy S.r.l.	Bruneck, Italy	100.00
Communal le Court S.A.S.	Paris, France	100.00
CPV Bach SARL	Pérols, France	85.00

Company	Registered office	Share in %
CPV Entoublanc SARL	Pérols, France	85.00
CPV Sun 20 SARL	Pérols, France	85.00
CPV Sun 21 SARL	Pérols, France	85.00
CPV Sun 24 SARL	Pérols, France	85.00
Creevy Solar Farm DAC	Dublin, Ireland	75.00
CS Solarpark Bad Endbach GmbH	Halle (Saale), Germany	100.00
CSG IPP GmbH	Hamburg, Germany	100.00
Data Trust GmbH	Neubiberg, Germany	100.00
De-Stern 1 S.r.l.	Bolzano, Italy	100.00
De-Stern 4 S.r.l.	Bolzano, Italy	100.00
De-Stern 10 S.r.l.	Bolzano, Italy	100.00
De-Stern 15 S.r.l.	Bolzano, Italy	100.00
DMH Treuhand Vermögensverwaltung GmbH	Neubiberg, Germany	100.00
ENCAVIS AM Advisor GmbH	Neubiberg, Germany	100.00
ENCAVIS AM Capital GmbH	Neubiberg, Germany	100.00
ENCAVIS AM Invest GmbH	Neubiberg, Germany	100.00
ENCAVIS AM Management GmbH	Neubiberg, Germany	100.00
ENCAVIS AM Services GmbH	Neubiberg, Germany	100.00
Encavis Asset Management AG[2)]	Neubiberg, Germany	100.00
Encavis Finance B.V.	Rotterdam, Netherlands	100.00
Encavis GmbH[2)]	Neubiberg, Germany	100.00
Encavis Grundstück Beteiligungs GmbH[1)]	Hamburg, Germany	100.00
Encavis Hispania S.L.[1)]	Valencia, Spain	100.00
Encavis Iberia GmbH	Hamburg, Germany	100.00
ENCAVIS Infrastructure S.à r.l.	Grevenmacher, Luxembourg	100.00
Encavis Nordbrise A/S[1)]	Copenhagen, Danmark	100.00
Encavis Real Estate GmbH	Hamburg, Germany	100.00
Encavis Renewables Beteiligungs GmbH	Hamburg, Germany	100.00
Encavis Technical Services GmbH	Halle (Saale), Germany	100.00
Encavis Wind Danmark ApS	Roskilde, Danmark	100.00
Encavis Windinvest GmbH[2)]	Neubiberg, Germany	100.00
Energia & Sviluppo S.r.l.	Bruneck, Italy	100.00
Énergie Solaire Biscaya S.A.S.	Paris, France	100.00
Energiekontor Windstrom GmbH & Co. UW Lunestedt KG[3)]	Bremerhaven, Germany	51.00
Energiepark Breitendeich RE WP BD GmbH & Co. KG[3)]	Bremerhaven, Germany	51.00
Energiepark Debstedt GmbH & Co. RE WP KG[3)]	Bremerhaven, Germany	51.00
Energiepark Grevenbroich RE WP GRE GmbH & Co. KG	Bremerhaven, Germany	100.00
Energiepark Hürth-Barbarahof WP HB GmbH & Co. KG	Bremerhaven, Germany	100.00
Energiepark Lunestedt GmbH & Co. WP HEE KG[3)]	Bremerhaven, Germany	51.00
Energiepark Lunestedt GmbH & Co. WP LUN KG[3)]	Bremerhaven, Germany	51.00
Energiepark Odisheim GmbH & Co. WP ODI KG	Bremerhaven, Germany	100.00
Energiepark Passow WP Briest III GmbH & Co. KG[3)]	Bremerhaven, Germany	51.00
Enerstroom 1 B.V.	Pijnacker, Netherlands	100.00
Enerstroom 2 B.V.	Pijnacker, Netherlands	100.00
Fano Solar 1 S.r.l.	Bolzano, Italy	100.00
Fano Solar 2 S.r.l.	Bolzano, Italy	100.00

Company	Registered office	Share in %
Ferme Eolienne de Maisontiers-Tessonniere S.A.S.	Schiltigheim, France	100.00
Ferme Eolienne de Marsais 1 S.A.S.	Schiltigheim, France	100.00
Ferme Eolienne de Marsais 2 S.A.S.	Schiltigheim, France	100.00
Foxburrow Farm Solar Farm Ltd.	London, United Kingdom	100.00
Garrymore Solar Farm DAC	Dublin, Ireland	75.00
GE.FIN Energy Oria Division S.r.l.	Bolzano, Italy	100.00
Gosfield Solar Ltd.	London, United Kingdom	100.00
Green Energy 010 GmbH & Co. KG	Neubiberg, Germany	100.00
Green Energy 018 GmbH & Co. KG	Neubiberg, Germany	100.00
Grid Essence UK Ltd.	London, United Kingdom	100.00
Haut Lande SARL	Paris, France	100.00
Infrastruktur Amöneburg-Roßdorf GmbH & Co. KG	Wörrstadt, Germany	71.43
IOW Solar Ltd.	London, United Kingdom	100.00
Krumbach Photovoltaik GmbH	Halle (Saale), Germany	100.00
Krumbach Zwei Photovoltaik GmbH	Halle (Saale), Germany	100.00
La Gouardoune Centrale Solaire SARL	Paris, France	100.00
La Rocca Energy di CHORUS Solar 3. S.r.l. & Co. S.a.s.	Bruneck, Italy	100.00
Labraise Sud SARL	Paris, France	100.00
Lagravette S.A.S.	Paris, France	100.00
Le Communal Est Ouest SARL	Paris, France	100.00
Le Lame S.r.l.	Bruneck, Italy	100.00
Lux Energy S.r.l.	Bruneck, Italy	100.00
Mainscourt Solar DAC	Dublin, Ireland	75.00
Martinstown Solar Farm DAC	Dublin, Ireland	75.00
Mermaid Solar Holding Aps[1)]	Ringkøbing, Danmark	100.00
MonSolar IQ Ltd.	London, United Kingdom	100.00
MTS4 S.r.l.	Bolzano, Italy	100.00
Norhede-Hjortmose Vind 12 ApS	Ringkøbing, Denmark	100.00
Norhede-Hjortmose Vindkraft I/S[2)]	Ringkøbing, Denmark	81.50
Notaresco Solar S.r.l.	Bolzano, Italy	100.00
Oetzi S.r.l.	Bolzano, Italy	100.00
Parco Eolico Monte Vitalba S.r.l.	Bolzano, Italy	85.00
Pfeffenhausen-Egglhausen Photovoltaik GmbH	Halle (Saale), Germany	100.00
Piemonte Eguzki 2 S.r.l.	Bolzano, Italy	100.00
Piemonte Eguzki 6 S.r.l.	Bolzano, Italy	100.00
Polesine Energy 1 S.r.l.	Bolzano, Italy	100.00
Polesine Energy 2 S.r.l.	Bolzano, Italy	100.00
Progetto Marche S.r.l.	Bolzano, Italy	100.00
REM Renewable Energy Management GmbH	Neubiberg, Germany	100.00
Ribaforada 3 S.r.l.	Bolzano, Italy	100.00
Ribaforada 7 S.r.l.	Bolzano, Italy	100.00
Rodbourne Solar Ltd.	London, United Kingdom	100.00
San Giuliano Energy S.r.l.	Bruneck, Italy	100.00
San Martino S.r.l.	Bruneck, Italy	100.00
Sant'Omero Solar S.r.l.	Bolzano, Italy	100.00
Société Centrale Photovoltaique d'Avon les Roches S.A.S.	Paris, France	100.00

Company	Registered office	Share in %
Solaire Ille SARL	Pérols, France	85.00
Solar Energy S.r.l.	Bolzano, Italy	100.00
Solar Farm FC1 S.r.l.	Bolzano, Italy	100.00
Solar Farm FC3 S.r.l.	Bolzano, Italy	100.00
Solarpark Bad Harzburg GmbH	Halle (Saale), Germany	100.00
Solarpark Boizenburg I GmbH & Co. KG	Boizenburg, Germany	100.00
Solarpark Brandenburg (Havel) GmbH	Halle (Saale), Germany	51.00
Solarpark Gelchsheim GmbH & Co. KG	Neubiberg, Germany	100.00
Solarpark Glebitzsch GmbH	Halle (Saale), Germany	100.00
Solarpark Gnannenweiler GmbH & Co. KG	Reußenköge, Germany	56.80
Solarpark Golpa GmbH & Co. KG	Reußenköge, Germany	100.00
Solarpark Lettewitz GmbH	Halle (Saale), Germany	100.00
Solarpark Lochau GmbH	Halle (Saale), Germany	100.00
Solarpark Neuhausen GmbH	Halle (Saale), Germany	100.00
Solarpark PVA GmbH	Halle (Saale), Germany	100.00
Solarpark Ramin GmbH	Halle (Saale), Germany	100.00
Solarpark Rassnitz GmbH	Halle (Saale), Germany	100.00
Solarpark Roitzsch GmbH	Halle (Saale), Germany	100.00
Solarpark Staig GmbH & Co. KG	Reußenköge, Germany	75.70
Sowerby Lodge Ltd	Exeter, United Kingdom	100.00
SP 07 S.r.l.	Bolzano, Italy	100.00
SP 09 S.r.l.	Bolzano, Italy	100.00
SP 10 S.r.l.	Bolzano, Italy	100.00
SP 11 S.r.l.	Bolzano, Italy	100.00
SP 13 S.r.l.	Bolzano, Italy	100.00
SP 14 S.r.l.	Bolzano, Italy	100.00
Stern Energy GmbH[1)]	Halle (Saale), Germany	100.00
Sun Time Renewable Energy di CHORUS Solar 3. S.r.l. & Co. S.a.s.	Bruneck, Italy	100.00
TC Wind Management GmbH	Neubiberg, Germany	100.00
Thöringswerder GmbH & Co. KG[1)]	Hamburg, Germany	100.00
Todderstaffe Solar Ltd.	London, United Kingdom	100.00
Toolestown Solar DAC[1)]	Dublin, Ireland	75.00
Treia 1 Holding S.r.l.	Bolzano, Italy	100.00
Treponti di CHORUS Solar 3. S.r.l. & Co. S.a.s.	Bruneck, Italy	100.00
Trequite Farm Ltd.	London, United Kingdom	100.00
Trequite Freehold Ltd.	London, United Kingdom	100.00
Trewidland Farm Ltd.	London, United Kingdom	100.00
UGE Malterhausen GmbH & Co. KG Umweltgerechte Energie	Meissen, Germany	100.00
UGE Markendorf Eins GmbH & Co. KG Umweltgerechte Energie	Meissen, Germany	100.00
UVG Umspannwerk Verwaltungsgesellschaft mbH	Neubiberg, Germany	100.00
Vallone S.r.l.	Bolzano, Italy	100.00
Windkraft Kirchheilingen IV GmbH & Co. KG	Kirchheilingen, Germany	50.99
Windkraft Olbersleben II GmbH & Co. KG	Olbersleben, Germany	74.90
Windkraft Sohland GmbH & Co. KG	Reichenbach, Germany	74.30
Windpark Breberen GmbH	Neubiberg, Germany	100.00
Windpark Dahme - Wahlsdorf 3 GmbH & Co. KG	Schönefeld, Germany	100.00

Company	Registered office	Share in %
Windpark Gauaschach GmbH	Hamburg, Germany	100.00
Windpark Herrenstein GmbH	Vienna, Austria	100.00
Windpark Lairg Management GmbH	Neubiberg, Germany	100.00
Windpark Lairg Services GmbH	Neubiberg, Germany	100.00
Windpark Lairg Verwaltungs GmbH	Neubiberg, Germany	100.00
Windpark Pongratzer Kogel GmbH	Vienna, Austria	100.00
Windpark Zagersdorf GmbH	Vienna, Austria	100.00
Wisbridge Solar Ltd.	London, United Kingdom	100.00
Witches Solar Ltd.	London, United Kingdom	100.00
Zonnepark Budel B.V.	Helmond, Netherlands	80.01
Zonnepark Zierikzee B.V.[1)]	Zierikzee, Netherlands	90.00
Joint arrangements		
Richelbach Solar GbR	Neubiberg, Germany	60.00
Associates		
Cabrera Energia Solar S.L.[1)]	Valencia, Spain	80.00
CHORUS IPP Europe GmbH	Neubiberg, Germany	100.00
Genia Extremadura Solar S.L.	Valencia, Spain	80.00
Gnannenweiler Windnetz GmbH & Co. KG	Bopfingen, Germany	20.00
Pexapark AG	Schlieren, Switzerland	18.16
Stern Energy S.p.A.[1)]	Parma, Italy	30.00
Non-consolidated Group companies		
Chesterlake Ltd.[3)]	Dublin, Ireland	100.00

1) Initial consolidation or acquisition of shares in the 2019 financial year.

2) Company renamed/changed legal form in the 2019 financial year.

3) Change in the shareholding ratio in the 2019 financial year.

4) Because of the overall insignificance for the consolidated financial statements, this entity was not consolidated.

Further disclosures in accordance with section 313, paragraph 2 (4), of the HGB

Company	Equity 2018 in EUR	Share in %	Result 2018 in EUR
CHORUS IPP Europe Verwaltungs GmbH, Neubiberg	18,218.21	100.00	-3,940.70
DE Stern 8 Srl, Parma, Italien	1,009,359.00	30.00	-162,955.00
DE Stern 11 Srl, Parma, Italien	1,867,602.00	24.00	382,166.00
DE Stern 14 Srl, Parma, Italien	1,989,172.00	24.00	304,078.00
Desarrollos Empresariales Luanda S.L.U., Valencia, Spanien	-15,859.60	80.00	-9,738.14
Enne Pi Studio FV. 9 S.r.l., Bozen, Italien	150,922.00	100.00	52,832.00
GER – ENERGIES GLOBALES S.A.R.L., Lille, Frankreich	234,730.00	100.00	17,872.00
Griffin Develops S.L.U., Valencia, Spanien	-6,110.88	80.00	-3,083.22
Narges Develops S.L.U., Valencia, Spanien	-16,051.61	80.00	-9,758.38
Navid Enterprise S.L.U., Valencia, Spanien	-15,833.31	80.00	-9,508.69
Neftis Business S.L.U., Valencia, Spanien	-16,144.72	80.00	-9,784.94
Parc Eolien de Fresnes-en-Saulnois S.A.S., Lille, Frankreich	-6,562,864.00	100.00	352,314.00
Pexapark (UK) LTD, London, Großbritannien	-153,516.65	18.16	-154,104.34
SASU Sun Premier France S.A.S., Lille, Frankreich	-5,973,016.00	100.00	-663,867.00
SEFEOSC S.A.S., Lille, Frankreich	-1,651,316.00	100.00	558,629.00
Société d'Exploitation du Parc Eolien de Talizat Rezentières S.A.S., Lille, France	1,847,154.00	100.00	378,146.00
Société d'Exploitation du Parc Eolien Fond Gerome S.A.R.L., Lille, France	-1,640,861.00	100.00	471,372.00
Société d'Exploitation du Parc Eolien le mont d'Hezecques S.A.R.L., Lille, France	-1,877,197.00	100.00	603,091.00
Stern Energy Ltd., London, Großbritannien	339,288.90	30.00	331,050.78
UW Schäcksdorf GmbH & Co. KG, Breklum	-13,755.00	37.50	-715.68
Wind Hacksta AB, Uppsala, Schweden	213,472.00	100.00	74,613.00
Wind POL 1 Holding Ltd., Bramhall, Großbritannien	-3,946,991.07	100.00	-148,118.24
Wind POL 2 Holding Ltd., Bramhall, Großbritannien	-71,161.26	100.00	-29,774.33
Wind Port of Liverpool, Bramhall, Großbritannien	-1,879,653.27	100.00	104,074.99
Windpark Kaseldorf GmbH & Co. KG, Neubiberg	-954,927.54	100.00	165,564.79

The equity interests are equal to the share of voting rights.

19 Notification requirements

In the period from 01 January 2019 to 18 March 2020, Encavis AG, Hamburg, Germany, received the following notifications pursuant to section 40, paragraph 1, of the German Securities Trading Act (WpHG):

Encavis AG was notified in a letter dated 13 December 2019 pursuant to section 33(1) of the WpHG that the share of the voting rights in Encavis AG held by Albert Büll, Germany, exceeded the threshold of 25 per cent of the voting rights on 12 December 2019 due to a pooling agreement and, from this date, was 27.70 per cent (which corresponds to 36,425,703 voting rights). Attributed voting rights were held through the following company, whose share of the voting rights in Encavis AG was 3 per cent or more: AMCO Service GmbH, Hamburg, Germany.

Encavis AG was notified in a letter dated 13 December 2019 pursuant to section 33(1) of the WpHG that the share of the voting rights in Encavis AG held by Elke Liedtke, Germany, exceeded the threshold of 25 per cent of the voting rights on 12 December 2019 due to a pooling agreement and, from this date, was 27.70 per cent (which corresponds to 36,425,703 voting rights). Attributed voting rights were held through the following company, whose share of the voting rights in Encavis AG was 3 per cent or more: Dr. Liedtke Vermögensverwaltung GmbH, Hamburg, Germany.

Encavis AG was notified in a letter dated 13 December 2019 pursuant to section 33(1) of the WpHG that the share of the voting rights in Encavis AG held by Dr Cornelius Liedtke, Germany, exceeded the threshold of 25 per cent of the voting rights on 12 December 2019 due to a pooling agreement and, from this date, was 27.70 per cent (which corresponds to 36,425,703 voting rights). Attributed voting rights were held through the following company, whose share of the voting rights in Encavis AG was 3 per cent or more: Dr. Liedtke Vermögensverwaltung GmbH, Hamburg, Germany.

Encavis AG was notified in a letter dated 19 December 2019 pursuant to section 33(1) of the WpHG that the share of the voting rights in Encavis AG held by BayernInvest Kapitalverwaltungsgesellschaft mbH, Germany, exceeded the threshold of 3 per cent of the voting rights on 13 December 2019 and, from this date, was 4.04 per cent (5,541,000 voting rights). The party obligated to notify is neither controlled nor does the party obligated to notify control other companies that hold voting rights in Encavis AG or to which voting rights in Encavis AG are attributed.

With regard to the reporting thresholds for voting shares (3, 5, 10, 15, 20, 25, 30, 50 and 75 per cent) in accordance with section 33 et seq. of the WpHG, on 10 February 2020 the pool of AMCO Service GmbH and Dr. Liedtke Vermögensverwaltungsgesellschaft GmbH held more than 25 per cent, and Lobelia Beteiligungsgesellschaft, PELABA Anlagenverwaltungs GmbH & Co. KG and BayernInvest Kapitalverwaltungsgesellschaft mbH each held more than 3 per cent of the voting rights in Encavis AG.

20 Date of approval for publication

These consolidated financial statements were approved for publication by resolution of the Management Board of Encavis AG on 19 March 2020.

Independent auditor's report

To Encavis AG, Hamburg

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

Audit Opinions

We have audited the consolidated financial statements of Encavis AG, Hamburg, and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019, and the consolidated statement of comprehensive income, consolidated statement of profit or loss, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January to 31 December 2019 and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of Encavis AG, which is combined with the Company's management report for the financial year from 1 January to 31 December 2019. In accordance with the German legal requirements, we have not audited the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB ["Handelsgesetzbuch": German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at 31 December 2019, and of its financial performance for the financial year from 1 January to 31 December 2019, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from 1 January to 31 December 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

1 Accounting treatment of deferred taxes

❷ Financial instruments – Accounting treatment of hedging transactions

❸ Business combinations

❹ Impact of the initial application of IFRS 16 on lease accounting

Our presentation of these key audit matters has been structured in each case as follows:

① Matter and issue

② Audit approach and findings

③ Reference to further information

Hereinafter we present the key audit matters:

❶ **Accounting treatment of deferred taxes**

① After netting, deferred tax assets amounting to EUR 116.9 million and deferred tax liabilities of EUR 248.5 million are reported in the Company's consolidated financial statements. These items were recognized to the extent that the executive directors consider it probable that taxable profit will be available in the foreseeable future which will enable the deductible temporary differences, unused tax losses and interest carryforwards to be utilized. For this purpose, insofar as sufficient deferred tax liabilities are not available, future taxable profits are projected on the basis of the adopted business plan. No deferred tax assets were recognized in respect of unused tax losses amounting in total to EUR 41.1 million for trade tax and EUR 57.1 million for corporate income tax and interest carryforwards amounting to EUR 34.3 million, since it is not probable that they will be utilized for tax purposes by means of offset against taxable profits. From our point of view, the accounting treatment of deferred taxes was of particular significance in the context of our audit, as it depends to a large extent on the estimates and assumptions made by the executive directors and is therefore subject to uncertainties. In particular, the large number of foreign subsidiaries acquired in previous years and in the reporting year led to temporary differences arising from acquisition accounting. The recognition of the corresponding deferred taxes requires in particular an assessment of the specific features of the respective national tax laws.

② As part of our audit and with the assistance of our internal specialists from Capital Markets & Accounting Advisory Services, among other things we assessed the internal processes and controls for recording tax matters, as well as the methodology used for the determination, accounting treatment and measurement of deferred taxes. We also assessed the recoverability of the deferred tax assets relating to deductible temporary differences, unused tax losses and interest carryforwards on the basis of internal forecasts of the respective subsidiaries' future earnings situation, and evaluated the appropriateness of the underlying estimates and assumptions. With regard to the deferred taxes of foreign subsidiaries, we increasingly involved our internal specialists from the respective countries. Based on our audit procedures, we were able to satisfy ourselves that the estimates and assumptions made by the executive directors are substantiated and sufficiently documented.

③ The Company's disclosures relating to deferred taxes are contained in sections 3.14, 5.8 and 6.7 of the notes to the consolidated financial statements.

❷ **Financial instruments – Accounting treatment of hedging transactions**

① The companies of the Encavis Group and entities included in the consolidated financial statements using the equity method enter into a number of different derivative financial instruments to hedge against currency, price and interest rate risk arising in the ordinary course of business. The hedging policy defined by the executive directors serves as the basis for these transactions and is documented in the respective internal guidelines of the Encavis Group. Currency risk mainly arises from financing denominated in foreign currency. Interest rate hedges are entered into for the purpose of avoiding exposure to variable interest rates. Furthermore, two long-term electricity purchase agreements were entered into at the level of the equity-accounted entities in 2019 to hedge against price fluctuations on the electricity spot market. Derivative financial instruments are recognized at fair value as of the balance sheet date. The positive fair values of all derivative financial instruments used for hedging purposes and included in a hedging relationship in accordance with IFRS 9 amount to EUR 1.0 million as of the balance sheet date, and the negative fair values amount to EUR -28.8 million. The fair value changes are recognized in other comprehensive income over the duration of the hedging relationship until such time as the hedged expected future cash flows are recognized in profit or loss (effective portion). As of the balance sheet date, the cash flow hedge reserve amounted to EUR -10.5 million and the cash flow hedge reserve at the equity-accounted entities amounted to EUR -65.8 million. Given the highly complex nature and large number of hedging transactions as well as the potential impact on earnings resulting from the accounting treatment and measurement, in our view these matters were of particular significance in the context of our audit.

② As a part of our audit and with the assistance of our internal specialists from Corporate Treasury Solutions, among other things we assessed the contractual and financial bases and the accounting treatment of the effects on equity and profit or loss arising from the various hedging transactions. Together with these specialists, we assessed, among other things, the established internal control system with regard to derivative financial instruments, including the internal activities to monitor compliance with the hedging policy. Furthermore, for the purpose of evaluating the fair value measurement of derivative financial instruments, we also assessed the calculation methods on the basis of market data and the underlying data used. With respect to the hedging of expected cash flows, we mainly assessed the prospective effectiveness test, the estimate of expected future hedge effectiveness, and the determination of hedge ineffectiveness. We obtained bank confirmations as of the balance sheet date for the purpose of assessing the completeness of the hedging instruments and the correctness of the fair values of currency and interest rate derivatives. Based on our audit procedures, we were able to satisfy ourselves that the estimates and assumptions made by the executive directors are substantiated and sufficiently documented.

③ The Company's disclosures relating to hedging transactions are contained in section 8 of the notes to the consolidated financial statements.

❸ **Business combinations**

① A total of three business combinations were accounted for in financial year 2019. The purchase price for the acquisitions totaled EUR 61.7 million. The assets acquired and liabilities assumed are generally recognized at their acquisition-date fair value. After taking into account the attributable share of the net assets acquired of EUR 54.7 million, the positive goodwill amounts in total to EUR 6.5 million and a negative goodwill from these business combinations amounts in total to EUR 2.8 million in the financial year. In view of the material overall impact in terms of amount that these acquisitions have on the assets, liabilities, financial position and financial performance of the Encavis Group, and given the complexity of the underlying contractual agreements as well as the measurement and the associated estimation uncertainties connected with the acquisitions, these were of particular significance in the context of our audit.

② As part of our audit of the accounting treatment of the acquisitions and with the assistance of our internal specialists from Valuation & Strategy, we initially inspected and assessed the respective contractual agreements of the acquisitions. At the same time, among other things we reconciled the purchase prices paid by the Encavis Group as consideration for the shares and assets received with the supporting documentation for the payments made, as provided to us. We assessed the opening balance sheet figures underlying the aforementioned acquisitions. We assessed the calculated fair values (e.g., fair values of feed-in rights) by reconciling the material planning assumptions and the parameters used with management. We also used checklists to establish whether the requirements set out in IFRS 3 for disclosures in the notes had been complied with in full. Based on the audit procedures performed, both those presented and others, and taking into consideration the information available, we were able to satisfy ourselves that the acquisition of the respective shares is appropriately presented.

③ The Company's disclosures relating to the corporate transactions are contained in section 4.2 of the notes to the consolidated financial statements.

❹ **Impact of the initial application of IFRS 16 on lease accounting**

① In the Company's consolidated financial statements right-of-use assets of EUR 214.3 million and lease liabilities of EUR 189.0 million are reported as of the balance sheet date. The lease liabilities represent 6.6 % of total assets. The initial application of the new accounting standard on leases (IFRS 16) had material effects on the carrying amounts in the opening balance sheet and subsequent measurement in the financial year. The Company transitioned to IFRS 16 using the modified retrospective approach. The comparative information for prior-year periods was not restated. Due to the large volume of leases and transactions resulting from them, the Company has established processes and controls for the complete and accurate recording of leases. Initial application also necessitated the implementation of a centralized IT system to report leases. The new IFRS 16 requires that the executive directors make estimates and judgments for certain areas, which were assessed for appropriateness in the context of our audit. This applies in particular to estimates regarding the exercise of options impacting the term of the lease. Against this background and due to the complexity of the new requirements of IFRS 16, lease accounting was of particular significance in the context of our audit.

② As part of our audit and with the assistance of our internal specialists, we assessed, among other things, the appropriateness and effectiveness of the processes and controls established by the Group to record leases. This also applies to the implementation of the centralized IT system to report leases and to the required modifications and integration of existing systems in order to process the transactions.

In addition, as part of our audit and with the assistance of our internal specialists we assessed the impact of the initial application of IFRS 16. We verified the implementation work and considered the design of the processes set up to report the transactions in accordance with IFRS 16 and of the IT systems in place to support the implementation of the new requirements. We inspected the lease agreements on a test basis, verified the identification of performance components and assessed whether these were fully and accurately recorded in the centralized system newly implemented to report leases. In particular, we interviewed Company employees and inspected the appropriate evidence to assess the estimates regarding the exercise of options impacting the lease term. We were able to satisfy ourselves that the systems and processes put in place and adapted to IFRS 16, and the controls, are appropriate. Furthermore, we verified that the estimates and assumptions made by the executive directors are sufficiently documented and substantiated to ensure that leases are appropriately accounted for in accordance with IFRS 16 as applied for the first time.

③ The Company's disclosures on lease accounting as well as the impact of the initial application of IFRS 16 are contained in 2, 3.4, 3.24, 6.3 and 6.16 of the notes to the consolidated financial statements.

Other Information

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section “CORPORATE GOVERNANCE DECLARATION“ of the group management report.
- the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code (with the exception of the remuneration report).

The other information comprises further the remaining parts of the annual report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor’s report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

OTHER LEGAL AND REGULATORY REQUIREMENTS

Further Information pursuant to Article 10 of the EU Audit Regulation

We were elected as group auditor by the annual general meeting on 15 May 2019. We were engaged by the supervisory board on 13 July 2019. We have been the group auditor of the Encavis AG, Hamburg, without interruption since the financial year 2016.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Claus Brandt.

Hamburg, 19 March 2020

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Claus Brandt
Wirtschaftsprüfer
(German Public Auditor)

ppa. Martin Zucker
Wirtschaftsprüfer
(German Public Auditor)

Assurance of the legal representatives

We declare that, to the best of our knowledge and according to the applicable accounting standards, the annual financial statements and consolidated financial statements give a true and fair view of the financial position, financial performance and net assets of the company and the Group, and that the combined management report and the Group management report include a fair review of the course of business, including the business result, and the situation of the company and the Group and suitably present the principal opportunities and risks associated with the expected development of the company and the Group.

Hamburg, March 2020

Encavis AG

Management Board

Dr Dierk Paskert

CEO

Dr Christoph Husmann

CFO

Glossary

Abbreviations and terms from the energy sector	
EEG	*Erneuerbare-Energien-Gesetz* – German renewable energy act
FIT	Feed-in tariff
GW	Gigawatt – unit of power
IPP	Independent power producer
kW	Kilowatt – unit of power
kWh	Kilowatt-hour – unit for measuring electricity and amount of energy
kWp	Kilowatt peak – nominal output of an energy installation
MW	Megawatt – unit of power
MWh	Megawatt-hour – unit for measuring electricity and amount of energy
Onshore	Wind parks built on land for the generation of electricity
PPA	Power purchase agreement – private purchase contract for electricity
PV	Photovoltaic – energy acquired from the sun
REN21	Renewable Energy Policy Network for the 21st Century – political network in the field of renewable energies
SPE	SolarPower Europe – union of the European solar industry
TW	Terawatt – unit of power
TWh	Terawatt-hour – unit for measuring electricity and amount of energy

Abbreviations and terms from the financial and business sectors	
AC	Amortised cost – category under IFRS 9 in which financial assets are measured at amortised cost
AfS	Available for sale – category under IAS 39 for financial assets held for sale
AktG	*Aktiengesetz* – German Stock Corporation Act
SOP	Share option programme (regulation of share-based remuneration)
Badwill	Negative goodwill – if the purchase price for a company acquired for consideration is less than the value of the assets after deduction of the liabilities, the difference is to be recognised as income
GDP	Gross domestic product – economic output of a country
Cash flow	Economic measurement that represents the net inflow of liquid funds during a given period
CDS	Credit default swap – instruments used to hedge a potential default by a borrower
CFH	Cash flow hedges – instruments for hedging cash flows
CGU	Cash-generating unit – the smallest identifiable group of assets that generates cash inflows that are largely independent of those from other assets
CSI 300	China Securities Index 300 – Chinese stock index
DAX	*Deutscher Aktienindex* – German stock index
DCGK	*Deutscher Corporate Governance Kodex* – German corporate governance code
GAS	German Accounting Standards
Due diligence	Careful examination of a company as part of an acquisition
EAT	Earnings after taxes – a key performance indicator
EBIT	Earnings before interest and taxes – a key performance indicator
EBITDA	Earnings before interest, taxes, depreciation and amortisation – a key performance indicator; EBITDA is calculated as EBIT plus depreciation and amortisation recognised in profit or loss, and less reversals of impairment losses on intangible assets and property, plant and equipment recognised in profit or loss

EBT	Earnings before taxes on income – a key performance indicator
ECL model	Expected credit loss model – impairment model based on expected credit losses
EPC	Engineering, Procurement and Construction
EPS	Earnings per share – measurement of the profitability of a company
ESG	Environmental social governance – focus on the environment, social issues and corporate governance
ECB	European Central Bank
FAHfT	Financial assets held for trading – category under IAS 39 for financial assets held for trading and measured at fair value through profit or loss
FTSE 100 Index	Financial Times Stock Exchange Index – British stock index
FVOCI	Fair value through other comprehensive income – category under IFRS 9 in which financial assets are measured at fair value through other comprehensive income
FVPL	Fair value through profit and loss - category under IFRS 9 in which financial assets are measured at fair value through profit or loss
FX	Foreign exchange – foreign currency
Goodwill	Positive goodwill – if the purchase price for a company acquired for consideration is more than the value of the assets after deduction of the liabilities, the positive difference is to be capitalised as goodwill
Green Bond	Debt security which must meet clearly defined requirements with regard to the investment objects (ESG criteria)
HASPAX	Hamburg stock index
HGB	*Handelsgesetzbuch* – German Commercial Code
HtM	Held to maturity – category under IAS 39 for financial investments held to maturity
IASB	International Accounting Standards Board – independent private-sector body that develops and adopts the IFRS
IFRS	International Financial Reporting Standards – international accounting standards to be applied by capital-market-oriented companies in the European Union
IFRS IC	IFRS Interpretations Committee – body that develops and published interpretations of the IFRS
IRR	Internal rate of return – key figure for measuring the return on an investment
ISIF	Ireland Strategic Investment Fund – an Irish government fund
IMF	International Monetary Fund
L&R	Loans and receivables – category for loans and receivables under IAS 39
MISE	Ministry of Economic Development in Italy
OCI	Other comprehensive income – a component of equity in which certain expenses/income are recognised directly in equity
ÖkoDAX	Stock index for the renewable energy sector
Operating	In the Encavis Group, “operating” refers to all key figures that do not contain any IFRS-related valuation effects
PPA	Power purchase agreement – private purchase contract for electricity
PPA	Purchase price allocation – when a newly acquired company is included in the consolidated financial statements for the first time, the purchase price is allocated to the individual assets and liabilities
PPVX	Photon Photovoltaic Stock Index
ROE	Return on equity – key figure used to measure the operating return on equity of an investment
SAR	Share appreciation rights – virtual share options
SDAX	Small-cap DAX
TEUR	Thousands of euros
WACC	Weighted average cost of capital
WpHG	*Wertpapierhandelsgesetz* – German Securities Trading Act

ENCAVIS

Encavis AG financial calendar

Date	Financial event
2020	
19 March 2020	Annual Report 2019
13 May 2020	Annual shareholders' meeting – Hamburg, Germany
19 May 2020	Goldman Sachs Utilities Conference: Heading to Net Zero – London, United Kingdom
20 May 2020	Berenberg Conference USA 2020 – Tarrytown NY, USA
27 May 2020	Interim statement for Q1/first three months of 2020
9 June 2020	DIRK Conference 2020 – Frankfurt am Main, Germany
11 to 12 June 2020	Crédit Mutuel-CIC Conference – Market Solutions Forum by ESN – Paris, France
18 June 2020	Quirin Champions Conference 2020 – Frankfurt am Main, Germany
18 June 2020	Natixis/ODDO BHF Renewables Conference – Paris, France
24 June 2020	Raiffeisen Bank International Bond Conference SSD – Frankfurt am Main, Germany
18 to 19 August 2020	Bankhaus Lampe German Conference 2020 – Baden-Baden, Germany
26 August 2020	Interim financial report for Q2/first half of 2020
2 to 3 September 2020	Commerzbank sector conference – Frankfurt am Main, Germany
9 to 10 September 2020	Stifel Cross Sector Insight Conference – London, United Kingdom
12 September 2020	Interest payment on the 2018 Green Schuldschein bond
13 September 2020	Interest payment on hybrid convertible bond
21 to 22 September 2020	German Corporate Conference 2020 (Berenberg and Goldman Sachs) – Munich, Germany
21 to 22 September 2020	Jefferies Equity-Linked Conference 2020 – London, United Kingdom
14 October 2020	Jefferies European Mid-Cap Industrial Forum 2020 – London, United Kingdom
16 November 2020	Interim statement for Q3/first nine months of 2020
16 to 18 November 2020	German Equity Forum (Deutsche Börse) – Frankfurt am Main, Germany
24 November 2020	DZ Bank Equity Conference – Frankfurt am Main, Germany
11 December 2020	Interest payment on 2015 debenture bond

Encavis AG
Große Elbstraße 59
22767 Hamburg, Germany
T +49 (40) 3785 620
F +49 (40) 3785 62 129
info@encavis.com

Encavis Asset Management AG
Professor-Messerschmitt-Straße 3
85579 Neubiberg, Germany
T +49 (89) 44230 600
F +49 (89) 44230 6011
assetmanagement@encavis-am.com

www.encavis.com