Sustainable Growth
25 Years of PCC

PCC Group
Annual Report 2018

25 YEARS PCC
Established 1993

PCC SE

PCC at a glance

Key financials of the PCC Group per IFRS		2018	2017
Consolidated statement of income			
Sales	€m	**779.2**	683.2
Gross profit	€m	**232.8**	202.8
EBITDA*	€m	**105.3**	73.8
EBIT*	€m	**68.9**	41.0
EBT*	€m	**41.5**	13.6
Net result	€m	**37.5**	8.7
Consolidated balance sheet			
Total assets	€m	**1,178.4**	1,057.3
Non-current assets	€m	**916.0**	792.6
Current assets	€m	**259.6**	261.8
Equity	€m	**150.4**	139.1
Non-current provisions and liabilities	€m	**745.9**	658.2
Current provisions and liabilities	€m	**281.3**	259.2
Key Group indicators			
Equity ratio*	%	**12.8**	13.2
ROCE*	%	**7.6**	5.0
Gross cash flow	€m	**111.8**	60.3
Capital expenditures	€m	**168.6**	101.4
Employees at home and abroad (as of Dec. 31)		**3,476**	3,389
Consolidated sales by segment			
Polyols segment	€m	**145.4**	145.4
Surfactants segment	€m	**124.5**	120.5
Chlorine segment	€m	**155.5**	100.9
Specialty Chemicals segment	€m	**222.1**	199.3
Consumer Products segment	€m	**21.3**	21.8
Energy segment	€m	**12.3**	11.8
Logistics segment	€m	**88.7**	75.2
Holding/Projects segment	€m	**9.5**	8.4
Total sales	€m	**779.2**	683.2
Consolidated sales by region			
Germany	€m	**176.0**	145.2
Poland	€m	**287.5**	248.1
Other EU Member States	€m	**191.1**	157.6
Other Europe	€m	**37.1**	48.6
USA	€m	**20.9**	17.6
Asia	€m	**37.5**	36.7
Other Regions	€m	**29.1**	29.3
Total sales	€m	**779.2**	683.2

Rounding differences possible.
* For explanations and definitions, see page 7.

The segments of the PCC Group

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The segments of the PCC Group

Polyols

Polyols form the basis of polyurethane (PU) foam materials that serve a wide range of applications in many industries and sectors. Examples include our iPoltec® foam technology for the furniture and mattress industries and our PU foam systems – in both panel and spray form – for the effective thermal insulation of buildings.

Polyols segment	2018	2017
Sales [1]	**€ 145.4 m**	€ 145.4 m
EBITDA [2]	**€ 7.2 m**	€ 15.6 m
Capital expenditures [2]	**€ 8.5 m**	€ 10.1 m
Employees	**247**	242

Surfactants

Offering multiple effects in foaming, wetting, emulsifying and cleaning, surfactants are primary ingredients in many functional liquids and care products. In toothpastes and shampoos they generate the foaming and cleaning action, while in laundry and home care products they serve to dislodge dirt and grease from fibers and hard surfaces.

Surfactants segment	2018	2017
Sales [1]	**€ 124.5 m**	€ 120.5 m
EBITDA [2]	**€ 10.2 m**	€ 9.9 m
Capital expenditures [2]	**€ 4.8 m**	€ 3.5 m
Employees	**289**	279

Chlorine

Chlorine is one of the most important feedstocks of the chemicals industry, and its downstream products are key ingredients in our everyday lives. They can be found, for example, in water treatment, in the petrochemicals industry and in food production. Ultra-pure monochloroacetic acid (MCAA) also forms part of our product portfolio.

Chlorine segment	2018	2017
Sales [1]	**€ 155.5 m**	€ 100.9 m
EBITDA [2]	**€ 67.6 m**	€ 32.0 m
Capital expenditures [2]	**€ 32.8 m**	€ 23.1 m
Employees	**384**	409

Specialty Chemicals

This is our biggest-selling segment. Its products include phosphorus-based flame retardants, plasticizers and stabilizers, additives for hydraulic oils, and admixtures such as superplasticizers to improve the flowability of fresh concrete. The biggest business in the segment is our traditional commodity trading unit.

Specialty Chemicals segment	2018	2017
Sales [1]	**€ 222.1 m**	€ 199.3 m
EBITDA [2]	**€ 9.3 m**	€ 8.4 m
Capital expenditures [2]	**€ 9.2 m**	€ 6.8 m
Employees	**393**	360

Rounding differences possible.
1 Net external 2 Including consolidation adjustments

Consumer Products

Our range of fast-moving consumer goods encompasses household and industrial cleaners, laundry detergents and personal care products – including a portfolio distributed under Polish brandnames such as "ROKO", "Flo" and "Brilless Premium". Likewise allocated to this segment is our matches and firelighters production unit.

Consumer Products segment	2018	2017
Sales [1]	**€ 21.3 m**	€ 21.8 m
EBITDA [2]	**€ −5.6 m**	€ −3.7 m
Capital expenditures [2]	**€ 0.4 m**	€ 0.6 m
Employees	**431**	537

Energy

Within the Conventional Energies business unit of this segment we operate modern power plants primarily for the supply of electricity for our own production. Within the Renewable Energies business unit we are building and operating several environmentally sound small hydropower plants in North Macedonia and Bosnia and Herzegovina.

Energy segment	2018	2017
Sales [1]	**€ 12.3 m**	€ 11.8 m
EBITDA [2]	**€ 4.3 m**	€ 7.2 m
Capital expenditures [2]	**€ 8.0 m**	€ 9.3 m
Employees	**178**	186

Logistics

We are a leading provider of container transport services in Poland where we operate five wholly owned intermodal terminals. Our block train service routes extend from Poland through Germany and on to the Netherlands and Belgium. Our tanker fleet specializes in the road haulage of liquid chemicals. And in Russia we maintain a fleet of railway freight cars.

Logistics segment	2018	2017
Sales [1]	**€ 88.7 m**	€ 75.2 m
EBITDA [2]	**€ 11.0 m**	€ 7.7 m
Capital expenditures [2]	**€ 3.9 m**	€ 2.3 m
Employees	**509**	465

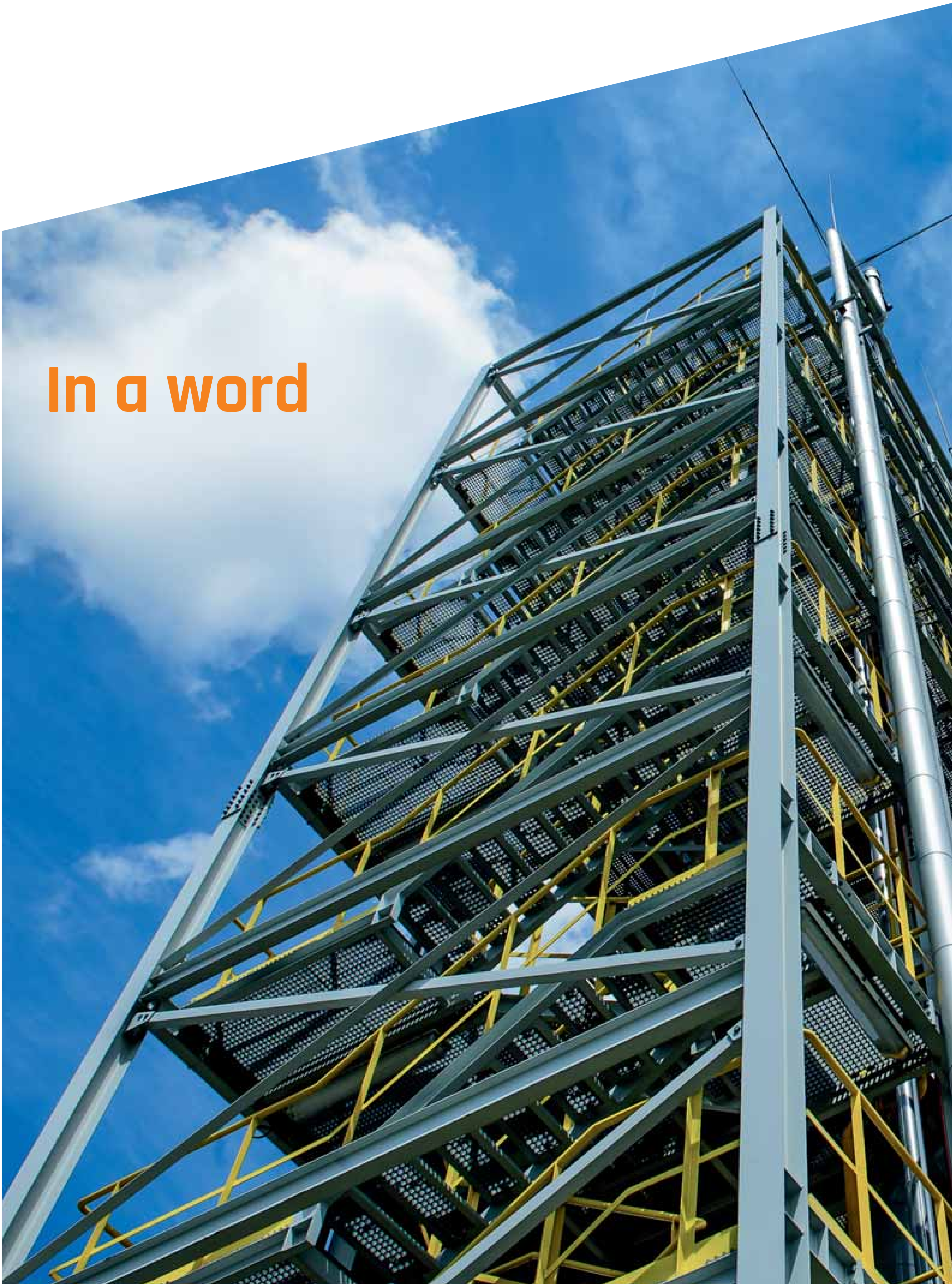
Holding / Projects

In this segment we plan and develop future-aligned projects such as our ultra-modern and environmentally compatible production plant for silicon metal, which we took into service in Iceland in 2018. In addition, the holding company also provides corporate services to the Group entities in fields such as finance, R&D and IT.

Holding / Projects segment	2018	2017
Sales [1]	**€ 9.5 m**	€ 8.4 m
EBITDA [2]	**€ 1.3 m**	€ −3.3 m
Capital expenditures [2]	**€ 100.9 m**	€ 45.8 m
Employees	**1,045**	911

Rounding differences possible.
1 Net external 2 Including consolidation adjustments

In a word



Sustainable growth is at the heart of our Group strategy. We are convinced that our desire for economic success and our commitment to create environmental and social benefits are mutually dependent and even mutually synergistic. In Iceland, for example, we have just commissioned a silicon metal production plant that counts among the most modern in the world. We satisfy our entire power requirement there from renewable sources such as geothermal energy. We also pursue all other investments on the basis of environmentally compatible, energy-saving and thus economically efficient technologies – especially in our chemical-producing segments. Innovations from our laboratories are rendered economically viable by helping to make products in many industries more durable, safer and more environmentally compatible. Thus, in the good 25 years since our establishment in 1993, we have continued to create sustainable enterprise value.

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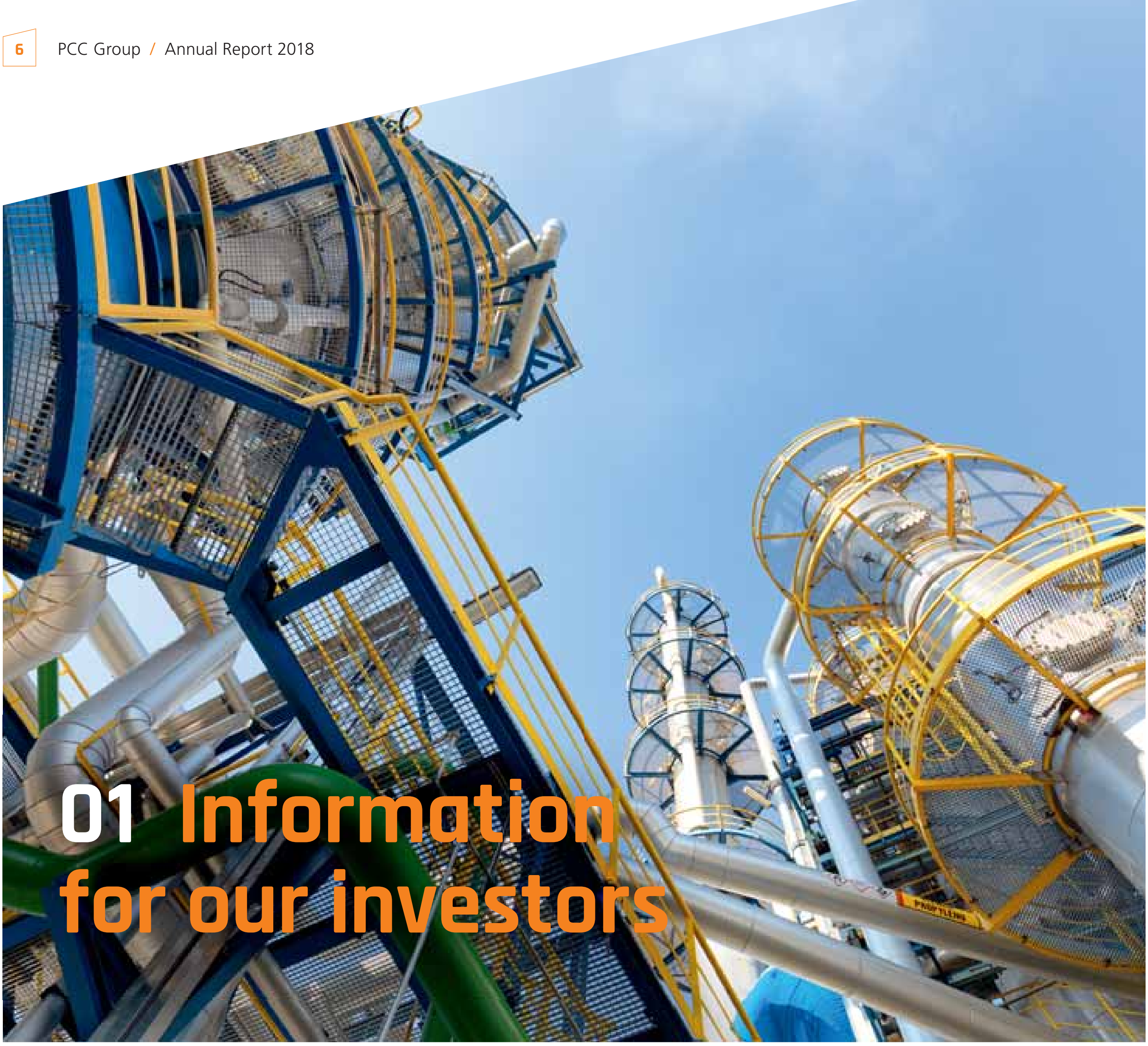


01 Information for our investors

The PCC Group continued on its growth trajectory in 2018, with earnings also increasing significantly. Group sales rose year on year by 14.1 % to € 779.2 million. The primary growth driver was the general persistence of a robust set of trading conditions. The PCC Group generated gross profit of € 232.8 million, an increase of 14.8 %. Earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA) improved by 42.7 % to € 105.3 million. And consolidated earnings before taxes (EBT) actually tripled year on year to € 41.5 million.

Development of selected Group indicators

Key financials of the PCC Group per IFRS		2018	2017	Absolute change	Relative change
Sales	**€ m**	**779.2**	683.2	96.0	14.1 %
Polyols segment	€ m	145.4	145.4	0.0	0.0 %
Surfactants segment	€ m	124.5	120.5	3.9	3.3 %
Chlorine segment	€ m	155.5	100.9	54.6	54.1 %
Specialty Chemicals segment	€ m	222.1	199.3	22.8	11.5 %
Consumer Products segment	€ m	21.3	21.8	−0.5	−2.4 %
Energy segment	€ m	12.3	11.8	0.5	4.4 %
Logistics segment	€ m	88.7	75.2	13.5	18.0 %
Holding/Projects segment	€ m	9.5	8.4	1.2	13.8 %
Gross profit	€ m	232.8	202.8	30.0	14.8 %
EBITDA [1]	€ m	105.3	73.8	31.5	42.7 %
EBIT [2]	€ m	68.9	41.0	27.9	68.1 %
EBT [3]	€ m	41.5	13.6	27.9	205.0 %
Net result	€ m	37.5	8.7	28.8	332.8 %
Gross cash flow [4]	€ m	111.8	60.3	51.5	85.5 %
ROCE [5]	%	7.6	5.0	2.6 [9]	50.8 %
Net debt [6]	€ m	756.7	632.9	123.8	19.6 %
Net debt/EBITDA		7.2	8.6	1.4	16.2 %
Group equity	**€ m**	**150.4**	139.1	11.3	8.1 %
Equity ratio [7]	%	12.8	13.2	−0.4 [9]	−3.0 %
Return on equity [8]	%	25.9	6.3	19.6 [9]	309.8 %
Capital expenditures	**€ m**	**168.6**	101.4	67.1	66.2 %
Employees (Dec. 31)		**3,476**	3,389	87	2.6 %
Germany		155	128	27	21.1 %
International		3,321	3,261	60	1.8 %

Rounding differences possible.

1 EBITDA (Earnings before Interest and other financial items, Taxes, Depreciation and Amortization)
2 EBIT (Earnings before Interest and other financial items and Taxes) = Operating profit = EBITDA – Depreciation and amortization
3 EBT (Earnings before Taxes) = EBIT – Interest and other financial items
4 Gross cash flow = Net result adjusted for non-cash income and expenses
5 ROCE (Return on Capital Employed) = EBIT/(Average equity + Average interest-bearing borrowings)
6 Net debt = Interest-bearing borrowings – Liquid funds – Other current securities
7 Equity ratio = Equity capital/Total assets
8 Return on equity = Net result for the year/Average equity
9 Change in percentage points

Preface by the Chairman of the Administrative Board of PCC SE

Dear Customers,
Business Partners and Investors,
Colleagues, Employees,
Ladies and Gentlemen,

I am delighted to present to you herewith the annual report of PCC SE for fiscal 2018, marking the 25th anniversary of our group of companies. Last year we succeeded in significantly increasing Group sales to € 779.2 million, a 14.1 % improvement on the 2017 figure. We benefited from the still largely prevailing high average price level for chemical commodities and were also able to again increase our sales volumes versus the previous year. The primary growth driver was the general persistence of a robust set of trading conditions. In some areas of business, local special effects also had a beneficial influence on sales and earnings development. Added to this, the continuing focus of our portfolio companies on higher-value products, together with the now completed modernization and expansion investments – for example within the Chlorine segment – also contributed to this positive performance.

Fiscal 2018 saw us remain resolutely faithful to our long-term strategy. Our capital expenditures for the year amounted to € 168.6 million, significantly above the corresponding figure for the previous year of around € 100 million. This increase is essentially due to project delays, including at our silicon metal plant in Iceland, as a result of which corresponding investment amounts were postponed to fiscal 2018. New investments are of course also planned for 2019 and some of them are already being implemented, particularly in our Chemicals division and in the Intermodal Transport business unit. These should result in further growth in the coming years. Our first priority remains to achieve a continual, sustainable increase in our enterprise value. As of December 31, 2018, the valuation of our share portfolio totaled around € 960 million.

Significant improvement in net earnings

The fiscal year under review saw gross profit increase to over € 230 million, representing growth of 14.8 %. Earnings before interest, tax and other financial items, depreciation and amortization (EBITDA) exhibited an even higher increase, rising by 42.7 % from € 73.8 million to € 105.3 million. Earnings before taxes (EBT) amounted to € 41.5 million, three times the prior-year figure of € 13.6 million.

Once again, the Chemicals division with its segments Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products was our main revenue generator in 2018. Due to the aforementioned high commodity price levels prevailing and further increased sales volumes, it was also this division that – in absolute terms – recorded the highest rate of growth within the Group: Taking all segments into account, divisional sales increased by € 80.9 million to € 668.7 million, representing growth of 13.8 %. The Logistics division also grew, with revenues rising substantially by some 18.0 % to € 88.7 million, a plus of € 13.5 million. Sales at the Energy division remained flat at their prior-year level.

»Our continued focus on higher-value products together with the now completed modernization and expansion investments – especially within the Chlorine segment – were major contributors to our growth.«

Waldemar Preussner
Chairman of the Administrative Board of PCC SE

The Chemicals division made by far the largest contribution on the earnings side in 2018, driven once again by the successful business performance of the Chlorine segment. Here, the corresponding business unit of our largest subsidiary PCC Rokita SA was able to benefit from, among other things, the consistently high price levels prevailing for, in particular, the co-product sodium hydroxide monohydrate that is generated during chlorine manufacture. In addition, the MCAA business unit (producer of monochloroacetic acid), through which we have significantly extended the value chain of our Chlorine segment, posted a substantial improvement in performance compared to the previous year. In particular, the ongoing optimization of the production process and of certain input factors is persistently paying dividends. And the Surfactants segment achieved the highest sales volumes in its history in 2018. As a result, sales and earnings were again appreciably higher than in the previous year. This is all the more gratifying given that deliveries to PCC Exol SA, among others, of the strategically important raw material ethylene oxide were severely disrupted in the fourth quarter of 2018 due to scheduled shutdowns at several suppliers. The Polyols and Specialty Chemicals segments also made positive contributions to earnings. By contrast, the Consumer Products segment again remained in deficit throughout 2018

The Logistics division continued to be dominated by PCC Intermodal S.A. during 2018. This affiliate was again able to significantly increase the number of container handling operations year on year. In particular, the operating rate of the train connections offered by PCC Intermodal S.A. within Poland increased considerably and utilization of the German-Polish corridor also showed an upward trend. On the cost side, the increasing use of our own locomotives has also paid dividends. For 2019, this affiliate therefore plans to purchase additional locomotives and expand its container terminals. Encouragingly, the Polish government has already granted PCC Intermodal S.A. substantial subsidies for this purpose as of 2018.

In the Energy division, the Conventional Energies business unit with the power plant of PCC Rokita SA and the combined electricity and heat utility PCC Energetyka Blachownia Sp. z o.o. remained the strongest contributor to results. Within the Renewable Energies business unit, the number of small hydropower plants in operation in 2018 remained unchanged at five. Completion of the sixth power plant was delayed beyond the turn of the year and is now scheduled for the first half of 2019.

In the Holding/Projects division, the main focus remained on our Icelandic project, the silicon metal production plant of PCC BakkiSilicon hf. Ignition of the two electric arc furnaces at the end of April and in August 2018 respectively marked the onset of the commissioning phase of the plant and thus attainment of an important milestone for this project. However, there are still problems at the periphery of the furnaces: with the raw material supply, with the handling of the end products and with the dedusting system; meaning that the transition to regular operational service has not yet taken place. We are currently working hard in implementing solutions to these problems. That said, silicon metal is already being produced and supplied to a variety of customers. By contrast, the commissioning of our dimethyl ether (DME) production plant in Russia, built in unison with a Russian joint venture partner in the Tula region, went far more smoothly. This plant was started up in December and by the end of the year had already produced DME of the desired quality, enabling us to begin qualifying the output for potential customers. In the meantime, the first sales have also now been transacted.

Expectations for 2019

As in previous years, the PCC Group strategy will continue in 2019 to be aligned to the sustainable growth of our affiliates and associates in conjunction with a continuous increase in their respective enterprise values. As a predominantly long-term investor, the holding company PCC SE will continue to support its Group companies in expanding their particular strengths while also further optimizing and diversifying its investment portfolio. The capital projects completed last year will contribute to consolidated earnings for the full year for the first time in 2019, with additional growth coming from the further optimization of our production facilities, including our MCAA plant. For the Polyols segment, on the other hand, we anticipate somewhat weaker results than in 2018. Our margins have come under severe pressure here, partly due to the expansion in global polyether polyols supply volumes following the commissioning of a 300,000 metric ton plant in Saudi Arabia. The performance of the other operations in this segment, namely the Polyester Polyols, Polyurethane (PU) Systems and Insulation business units, is expected to improve in 2019 compared to the previous year. In the case of the new production plants for silicon metal and DME, on the other hand, start-up losses are likely in the near term. The burden of depreciation, amortization and interest expenses is also set to increase further. Seen as a whole, therefore, while we anticipate posting a positive earnings result in 2019, this is likely to be below the fiscal 2018 figure.

A word of thanks

As is the case every year, I would like to extend my special thanks to you, our employees. Once again I note with pride and delight your commitment, your motivation and your creativity as the drivers of our shared prospects for a sustainable and profitable future for PCC. My Administrative Board colleagues, the Group management and I are very much aware that your immense dedication remains the essential basis for our successful business development going forward.

I must also extend my gratitude to you, our several thousand investors. For our success is also founded on the confidence and commitment shown to us by you as our esteemed and highly valued financial backers. By subscribing to our bonds, a large number of you have supported our progress over many years. Indeed, many of you have accompanied us on our journey since our first bond issuance in October 1998 – now more than 20 years ago. The trust you place in us means we bear a great responsibility, of which we are constantly conscious. Hence we intend to continue dedicating our efforts to justifying the faith shown by you in us as your reliable partner.

I trust that PCC SE will remain a beneficiary of your confidence and that you will further support us as we pursue our long-term investment policy aimed at steadily developing our Group, increasing the enterprise value of our affiliates and portfolio companies, and thus creating new wealth.

Duisburg, May 2019

Waldemar Preussner
Chairman of the Administrative Board of PCC SE

Corporate bodies

Administrative Board and Managing Directors of PCC SE

Waldemar Preussner

Chairman of the Administrative Board of PCC SE

In 1993, Waldemar Preussner (60) established the company Petro Carbo Chem Rohstoffhandelsgesellschaft mbH (today: PCC Trade & Services GmbH) in response to market liberalization in Eastern Europe. The company remains at the core of the PCC Group. 1998 saw the carve-out of the holding company PCC AG, and in 2007 its corporate form was changed to that of a European corporation (Societas Europaea, SE). Waldemar Preussner is the sole shareholder of PCC SE and Chairman of its Administrative Board. He also holds a number of supervisory board mandates within the PCC Group.

Ulrike Warnecke

Managing Director of PCC SE

Ulrike Warnecke (56) has held a number of directorships with PCC since the company was first established. As a Managing Director of the holding company, PCC SE, she is primarily responsible for Finance, Human Resources and Public Relations. Her operational responsibilities extend to the segments Specialty Chemicals and Consumer Products. Among other positions held, she is also the Managing Director of our most important trading company, PCC Trade & Services GmbH, Vice Chairwoman of the Supervisory Board of PCC Consumer Products S.A. and a member of the Supervisory Board of PCC BakkiSilicon hf.

The Administrative Board of PCC SE is made up of three members:
- Waldemar Preussner, Dipl.-Volkswirt (Chairman)
- Dr. rer. oec. (BY) Alfred Pelzer (Vice Chairman)
- Reinhard Quint

PCC SE is headed by its two Managing Directors:
- Ulrike Warnecke
- Dr. rer. oec. (BY) Alfred Pelzer

Dr. rer. oec. (BY) Alfred Pelzer

Vice Chairman of the Administrative Board and Managing Director of PCC SE

Dr. rer. oec. (BY) Alfred Pelzer (59) has been in managerial positions with PCC since 1995. In 2007, he was appointed Vice Chairman of the Administrative Board of PCC SE. He is also a Managing Director of PCC SE with primary responsibility for chemical production, logistics, sales and distribution. He holds a number of supervisory board mandates within the PCC Group, including at PCC Rokita SA, PCC Exol SA, PCC MCAA Sp. z o.o., PCC Synteza S.A. and PCC Intermodal S.A.

Reinhard Quint

Member of the Administrative Board of PCC SE

Reinhard Quint (76) began supporting PCC in an advisory, non-executive role in 2002. Since the transformation of the Group in 2007 into a European corporation (Societas Europaea, SE), he has been a member of the Administrative Board of PCC SE. He is also a member of the Corporate Development Council of Duisburger Hafen AG. Prior to that he was for many years Chairman of ThyssenKrupp Services AG (known today as ThyssenKrupp Materials International GmbH), Essen.

The Direktinvest unit of PCC SE

PCC bonds: An essential instrument in financing our growth since 1998

As the parent and holding company of the PCC Group, PCC SE finances itself through a combination of equity funds and borrowings, with – in particular – the issuance of corporate bonds (bearer debentures) having been adopted as an essential financing instrument. This allows us to react quickly to new market or investment opportunities, enabling us to both flexibly finance business purchases and drive the organic growth of our Group without undue reliance on the banks. Moving forward, the issuance of bonds – primarily to a wide circle of private investors, but also to institutional investors – is set to remain a central component of our financing strategy. At the same time, we are broadening our funding base through targeted project and loan financing.

PCC is one of Germany's most experienced SMEs in the placement of corporate securities: Since our first foray on October 1, 1998, we have – as of December 31, 2018 – issued 65 bonds and one profit participation certificate. Of these instruments, we have – again as of the reporting date – redeemed 46 bonds and the profit participation certificate, with all the interest payments duly made and debt servicing requirements satisfied to schedule.

The relatively small bearer debenture issuance volumes in amounts up to € 40 million provide us with the flexibility necessary to cover our financing requirements. Plus, the distribution of our liabilities across a comparatively large number of small issuances also reduces the risk of sudden burdens impacting on our financial metrics; we thus benefit from a balanced process of fund inflows and repayment out-

PCC SE bonds per December 31, 2018

PCC. Direktinvest

ISIN	Fixed coupon p. a.	Start of tenor	End of tenor	Listing	Nominal value in €k as of Dec. 31, 2018
DE000A13R5K3	6.50 %	Oct. 15, 2014	Jan. 1, 2019	Frankfurt	13,749
DE000A11QFD1	6.75 %	May 15, 2014	Apr. 1, 2019	Frankfurt	8,909
DE000A2AAY93	3.00 %	Oct. 17, 2016	Jul. 1, 2019	Frankfurt	22,581
DE000A13R7S2	6.25 %	Dec. 1, 2014	Oct. 1, 2019	Frankfurt	20,000
DE000A2E4ZZ4	3.00 %	Jul. 1, 2017	Feb. 1, 2020	Frankfurt	7,481
DE000A14KJ35	6.00 %	May 1, 2015	Apr. 1, 2020	Frankfurt	18,218
DE000A2NBFU2	2.00 %	Oct. 1, 2018	May 1, 2020	–[1]	1,690
DE000A2E4HH0	3.00 %	Oct. 1, 2017	Jul. 1, 2020	Frankfurt	19,210
DE000A162AP6	5.00 %	Oct. 1, 2015	Oct. 1, 2020	Frankfurt	25,000
DE000A2E4Z04	4.00 %	Jul. 1, 2017	Apr. 1, 2021	Frankfurt	19,927
DE000A2AAY85	4.00 %	Oct. 17, 2016	Jul. 1, 2021	Frankfurt	23,187
DE000A13SH30	6.75 %	Dec. 1, 2014	Oct. 1, 2021	Frankfurt	19,890
DE000A2G9HY2	3.00 %	Apr. 1, 2018	Feb. 1, 2022	Frankfurt	9,588
DE000A14KJ43	6.50 %	May 1, 2015	Apr. 1, 2022	Frankfurt	16,181
DE000A2GSSY5	4.00 %	Oct. 1, 2017	Jul. 1, 2022	Frankfurt	24,968
DE000A162AQ4	6.00 %	Oct. 1, 2015	Oct. 1, 2022	Frankfurt	24,860
DE000A2G8670	4.00 %	Jan. 1, 2018	Apr. 1, 2023	Frankfurt	19,140
DE000A2LQZH9	4.00 %	Jul. 1, 2018	Oct. 1, 2023	Frankfurt	28,783
DE000A2NBFT4	4.00 %	Oct. 1, 2018	Apr. 1, 2024	Frankfurt	20,293

1 Due to shortness of tenor, not included in the open market of the Frankfurt Stock Exchange.

flows. In keeping with our conservative business philosophy, we only generate funds through our security issuances to the extent needed by PCC SE as a growth-led investor to promote the further development of the Group.

PCC SE securities in circulation

As of December 31, 2018, there were a total of 19 bonds in circulation, representing a combined nominal volume of around € 343.7 million. The profit participation certificate (ISIN DE000A0MZC31) with a volume of € 11.0 million was terminated with ordinary notice to December 31, 2017 and duly redeemed as of January 1, 2018. After the balance sheet date, the 6.50 % bond ISIN DE000A13R5K3 with a placed volume of € 13.8 million was repaid at maturity on January 1, 2019. There were three new issuances in 2019 up to April 1: On January 1, 2019, the 4.00 % bond ISIN DE000A2NBJL3 was issued with a tenor of five-and-a-half years (issue volume up to € 25 million); on March 1, 2019 the 3.00 % bond ISIN DE000A2TSTW0 was issued with a tenor of four years (issue volume up to € 15 million); and on April 1, 2019 the 2.00 % bond ISIN DE000A2TR422 was issued with a tenor of under two years (issue volume up to € 5 million). As with all PCC securities, coupon interest is paid quarterly. The bonds of PCC SE currently available for subscription can be found on the internet at www.pcc-direktinvest.eu.

PCC SE bond maturities 2018

PCC. Direktinvest

ISIN	Fixed coupon p. a.	Start of tenor	End of tenor	Listing	Redemption volume in € k
DE000A1TM979	7.00 %	Jul. 1, 2013	Apr. 1, 2018	Frankfurt	15,654
DE000A2AAVL7	3.50 %	May 1, 2016	Jul. 1, 2018	Frankfurt	8,908
DE000A2GSDP5	2.00 %	Aug. 1, 2017	Aug. 1, 2018	– [1]	2,619
DE000A1YCSY4	7.00 %	Dec. 1, 2013	Oct. 1, 2018	Frankfurt	19,996

Redemption of profit participation certificate 2018 [2]

PCC. Direktinvest

ISIN	Fixed coupon p. a.	Start of tenor	End of tenor	Listing	Redemption volume in € k
DE000A0MZC31	8.75 %	Oct. 1, 2007	Jan. 1, 2018	Frankfurt	10,997

1 Due to shortness of tenor, not included in the open market of the Frankfurt Stock Exchange.

2 PCC SE terminated the 2007 PCC bearer profit participation certificate (ISIN DE000A0MZC31) with ordinary notice to December 31, 2017 in accordance with Section 5 of the Terms and Conditions for Profit Participation Certificates in the amount of 100 % of the nominal value.

1 PCC Investors' Day at Group HQ, the PCC Villa: Some 1,000 to 1,500 of our investors regularly attend this informative event.

2 Investors' Day serves as a platform for the Group Management to present news on current business developments and our investment projects.

3 We also encounter keen participation at our PCC Information Evenings, which we hold annually in the fourth quarter in several major cities.

Credible, transparent financial information for our investors

We consistently publish relevant, current corporate and financial data relating to PCC in a prompt and transparent fashion. All such information can be found at any time on the internet under the PCC. Direktinvest section of www.pcc.eu and also at www.pcc-financialdata.eu. The certified consolidated financial statements of the PCC Group, which we publish each year in the form of an annual report, are also available to you for downloading in PDF form from an online archive. This contains all the annual reports since that published for fiscal 2003, and also all the quarterly reports that have regularly appeared since 2001. The PCC. Direktinvest section on www.pcc.eu also contains information relating to new security issuances and bonds currently in circulation.

The traditional PCC Investors' Day in Duisburg: Enabling investors to engage in discussion with members of our Group management

Each year, PCC SE invites its financial backers to its traditional Investors' Day at the PCC Villa, the Group headquarters in Duisburg-Homberg. On this festive occasion, which usually takes place in early summer, we offer our guests an opportunity to talk personally with our management on recent business performance, strategy and PCC's current and planned investment projects. Over the years, between 1,000 and 1,500 of our investors have regularly availed themselves of this chance to interact directly with the Chairman of the Administrative Board, Waldemar Preussner, and the Managing Directors, Ulrike Warnecke and Dr. Alfred Pelzer, and also with the decision-makers and product managers of the German Group companies.

PCC Information Evenings: Direct dialog with investors and stakeholders around Germany

Complementary to the Investors' Day, during the fourth quarter of each year, we invite investors and stakeholders to attend the PCC Information Evenings held in various cities across Germany, thus providing a further opportunity for direct dialog with these interested parties. During these events, members of the senior management present both PCC as a conglomerate group and PCC SE as a bond issuer, and make themselves available for direct discussions both during the open Q&A session and at the subsequent get-together.

PCC affiliates listed in Poland

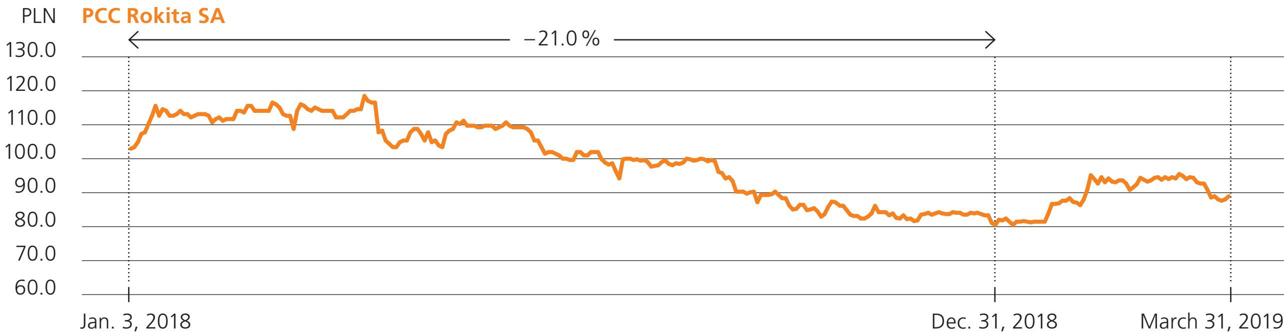
Capitalized share value of the PCC companies listed on the Warsaw Stock Exchange at € 436 million

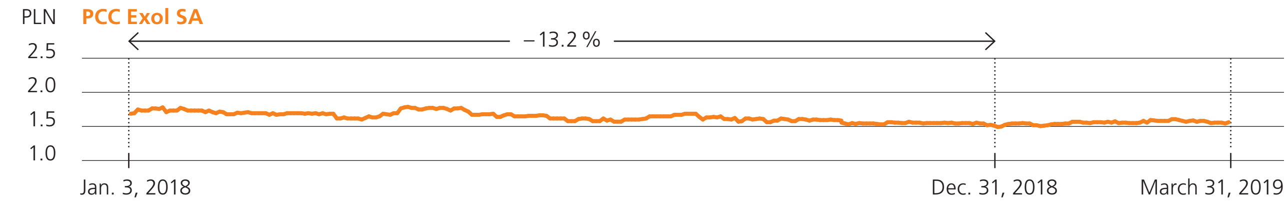
Two PCC Group companies – PCC Rokita SA and PCC Exol SA – are listed on the Warsaw Stock Exchange (GPW). The market value of the shares held by PCC SE in these affiliates was € 368.2 million as of December 31, 2018. Their joint market capitalization per the reporting date amounted to the equivalent of € 436.3 million. In the previous year, the market value of all listed PCC companies was € 614.9 million, with PCC Intermodal S.A., which was delisted from the Warsaw Stock Exchange in September 2018 (see page 18), still included.

PCC SE holds a significant majority in each of the two listed subsidiaries as their strategic investor. The main advantages of stock exchange listings are transparent market prices, a strengthened equity base for the companies involved and the possibility of financing future investments through additional equity measures.

PCC SE last successfully floated its largest chemicals company, PCC Rokita SA, on the stock exchange in June 2014. As of December 31, 2018, the closing price for shares in PCC Rokita SA (PLPCCRK00076) was PLN 81.40, representing a decrease of 21.0 % year on year. The market capitalization figure at the end of the year was thus the equivalent of € 375.7 million. The share price has risen again slightly in the course of the current fiscal year. As of March 31, 2019, the closing price was PLN 88.00, almost 2.5 times the original issue price of PLN 33.16. PCC SE holds 84.16 % of the shares in PCC Rokita SA.

Price performance of PCC shares on the Warsaw stock exchange (GPW)





In the case of surfactants manufacturer PCC Exol SA (PLPCCEX00010), successful development of its operating performance has not been reflected in the share price, due to the very small number of shares in free float. At PLN 1.51, the closing price as of December 31, 2018 was 13.2 % below that of the previous year. As a result, the market capitalization value declined to the equivalent of €60.6 million. The share price has risen again slightly in the course of the current fiscal year. As of March 31, 2019, the closing price was PLN 1.57, 4.0 % above the closing price for year-end 2018. PCC SE holds 85.82 % of the shares in PCC Exol SA.

In addition to PCC Rokita SA and PCC Exol SA, PCC Intermodal S.A. was also listed on the Warsaw Stock Exchange with a minority package until September 2018. However, we obtained its delisting in 2018, as we intend to implement an ambitious investment program at this affiliate in the coming years. Particularly with regard to the financing and realization of the planned investments, we feel that we will be more successful in a stock market-neutral environment – possibly with the collaboration of a strategic partner.

In the course of 2018, there were therefore changes in the shareholdings of PCC SE: In the second quarter of 2018, PCC SE acquired a 5.53 % stake in PCC Intermodal S.A. from minority shareholders as part of a squeeze-out procedure under Polish capital market law. Together with the minority shareholder Hupac Ltd and the two members of the Management Board of PCC Intermodal S.A., PCC SE thus acquired 100 % of the voting rights in PCC Intermodal S.A. with effect from March 8, 2018. A corresponding shareholder agreement had been concluded with the aforementioned co-shareholders in advance. In June 2018, PCC SE acquired the shares of Hupac Ltd and since then has held 98.40 % of the capital and 98.87 % of the voting rights in PCC Intermodal S.A. The remaining shares and voting rights continue to be held by the Management Board of the company. In the meantime, the Group subsidiary has also been delisted from the Warsaw Stock Exchange GPW, pursuant to the corresponding decision of the Polish Financial Supervisory Authority (PFSA) of August 21, 2018. This decision was confirmed by the GPW on September 11, 2018.

Chemicals complex of PCC Rokita SA in Brzeg Dolny: At the end of March 2019, the closing price of its shares was more than 2.5 times the original issue price of the IPO in 2014.

Financial reporting at PCC SE in accordance with IFRS

PCC SE is the holding company of the PCC Group. Its operational focus is on the sustainable management and growth-aligned optimization of its investment portfolio comprising majority and minority shareholdings. One of our primary objectives in this regard is to create and continuously increase enterprise value.

The consolidated financial statements of the PCC Group are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted and endorsed within the European Union (EU). The following condensed financial information relating to PCC SE has likewise been prepared in accordance with IFRS. The IFRS financial statements of PCC SE differ from the financial statements prepared according to the German Commercial Code (HGB, aka German GAAP) primarily in the valuation of financial assets. Two investments of PCC SE are listed on stock exchanges from which regular market prices are available. These form the basis for determining their fair value. In the case of investments for which there are no market prices publicly available, the valuation basis is provided either by recent transactions or valuation models. Changes in the valuation of investments are recognized per IFRS in equity under other comprehensive income.

PCC SE statement of comprehensive income per IFRS Figures in € k	**2018**	2017
Result from investments and affiliated companies[1]	**36,898**	33,541
Other operating income	**7,816**	10,605
Other operating expenses	**12,211**	11,738
Depreciation and amortization	**825**	906
Interest result, net	**−8,576**	−11,507
Other financial income (+), expenses (–)	**−1,716**	−3,313
Earnings before taxes (EBT)	**21,385**	**16,682**
Taxes on income	**−206**	769
Net result	**21,591**	**15,913**
Fair value measurement of financial assets[2]	**3,845**	234,927
Deferred taxes recognized in OCI[3]	**−1,154**	−70,478
Total income and expenses recognized in equity	**2,692**	**164,449**
Total comprehensive income	**24,283**	**180,362**

1 Result from investments and affiliated companies contains book gains/losses from disposal of financial assets, dividends, changes in investments accounted for using the equity method, and impairments.

2 In accordance with IFRS 9, all financial investments have been classified as fair value through other comprehensive income (FVtOCI). Two subsidiaries and a further participation were measured at Level 1 in fiscal 2018 on the basis of stock market prices. All other subsidiaries were measured at Level 3 based on valuation models due to the lack of relevant market prices or recent transactions. In the previous year, all financial investments were classified as available for sale (AfS) in accordance with IAS 39.

3 OCI (Other Comprehensive Income)

PCC SE's net financial liabilities increased year on year from €270.3 million to €310.0 million. The equity ratio per the IFRS financial statements shown here is almost unchanged from the previous year at 49.7 %. The primary assets of PCC SE are non-current financial investments in the form of participating interests and shares. The amount disclosed under investments accounted for using the equity method remained unchanged versus prior year.

PCC SE balance sheet per IFRS Figures in €k	**Dec. 31, 2018**	Dec. 31, 2017
Assets		
Non-current assets	**1,095,685**	1,034,620
Intangible assets	308	356
Property, plant and equipment	9,865	10,404
Investments accounted for using the equity method	37	37
Non-current financial assets	1,085,475	1,023,823
Current assets	**58,916**	69,676
Trade accounts receivable	11,197	7,666
Other receivables and other assets	6,791	7,290
Current financial assets	18,366	20,097
Cash and cash equivalents	22,562	34,622
Assets held for sale	2,291	2,291
Total assets	**1,156,892**	1,106,587
Equity and liabilities		
Equity	**574,402**	551,672
Non-current provisions and liabilities	**521,470**	486,361
Deferred tax liabilities	223,428	222,520
Non-current financial liabilities	298,042	263,841
Current provisions and liabilities	**60,315**	67,789
Other provisions	836	617
Trade accounts payable	2,121	1,197
Current financial liabilities	52,865	61,213
Other liabilities	4,493	4,762
Liabilities related to assets held for sale	705	765
Total equity and liabilities	**1,156,892**	1,106,587

The table below shows the fair values of the investment portfolio of PCC SE. In all, the investment portfolio of PCC SE comprising subsidiaries, associates, joint ventures and shareholdings had a fair value of €955.7 million as of December 31, 2018 (previous year: €936.6 million). Of this figure, €368.2 million (38.5 %) is accounted for by shares held by PCC SE in the two listed subsidiaries, PCC Rokita SA and PCC Exol SA.

Fair values of PCC SE's investment portfolio Figures in €k	**Dec. 31, 2018**	Dec. 31, 2017	Absolute change	Relative change
Stock-exchange listed investments [1]	**368,168**	**514,666**	**–146,497**	**–28.5 %**
PCC Rokita SA	**316,201**	412,023	–95,822	–23.3 %
PCC Exol SA	**51,967**	61,666	–9,699	–15.7 %
PCC Intermodal S.A. [2]	–	40,976	–40,976	n.a.
Stock-exchange listed participations [1]	**876**	**6,886**	**–6,011**	**–87.3 %**
S.C. Oltchim S.A.	**876**	6,886	–6,011	–87.3 %
Non-listed investments	**586,666**	**415,039**	**171,628**	**41.4 %**
PCC Intermodal S.A. [2]	**159,810**	–	159,810	n.a.
PCC BakkiSilicon hf.	**134,668**	127,580	7,088	5.6 %
PCC MCAA Sp. z o.o.	**79,101**	93,901	–14,800	–15.8 %
PCC Trade & Services GmbH	**57,248**	55,325	1,923	3.5 %
PCC Consumer Products S.A.	**38,977**	38,977	–	–
ZAO PCC Rail	**32,665**	23,953	8,711	36.4 %
PCC Synteza S.A.	**19,970**	24,365	–4,395	–18.0 %
PCC Silicium S.A.	**19,503**	13,157	6,346	48.2%
PCC Energetyka Blachownia Sp. z o.o.	**7,455**	7,455	–	–
PCC IT S.A.	**7,100**	3,003	4,096	136.4 %
PCC MORAVA-CHEM s.r.o.	**3,244**	5,815	–2,571	–44.2 %
PCC Seaview Residences ehf.	**2,838**	2,592	246	9.5 %
distripark GmbH	**2,450**	2,450	–	–
PCC Prodex GmbH	**2,406**	1,956	450	23.0 %
distripark.com Sp. z o.o.	**1,050**	279	771	276.3 %
Other investments	**18,183**	14,231	3,952	27.8 %
Total	**955,711**	**936,591**	**19,120**	**2.0 %**

1 Relates exclusively to the shares specifically held by PCC SE as of the reporting date, translated to euro as of that date if quoted in a foreign currency.

2 Effective September 11, 2018, PCC Intermodal S.A. was delisted from the Warsaw Stock Exchange. Accordingly, the fair value as of December 31, 2018 was measured using the model approach for unlisted investments.

Our new silicon metal production plant in Iceland was commissioned in 2018 after a construction period of around three years.

25 years of PCC – milestones in our company's history

25 YEARS PCC Established 1993

20 YEARS PCC Bonds First issue 1998

Founded a quarter of a century ago in Duisburg, PCC is today a strong European corporation with around 3,500 employees at 41 sites in 18 countries. Since October 1993, PCC and its subsidiaries in the PCC Group have succeeded in taking a whole series of impressive development steps that have opened up new markets. This has resulted in a steady increase in enterprise value with new wealth being consistently created.

Leap into independence – the establishment of PCC

Waldemar Preussner founds Petro Carbo Chem Rohstoffhandelsgesellschaft mbH (PCC GmbH) in 1993 as an international trading house for petrochemical, carbon-based and natural gas-related commodities. Already an experienced commodities trader, he recognizes the new opportunities arising in Eastern Europe as market liberalization there unfolds. Waldemar Preussner is today the sole shareholder of PCC SE and Chairman of its Administrative Board. The founding company is still an important member of the PCC Group as our largest trading entity. Since 2014, it has been operating under the name PCC Trade & Services GmbH. Its headquarters have remained in Duisburg-Homberg since it was first established.

PETRO CARBO CHEM GMBH

1993

PCC GmbH has a successful start to its first year in business

With sales equating to € 59.4 million in its first fiscal year, the commodity trading company makes a successful start to its business existence. PCC GmbH opens its doors on January 1, 1994. Ulrike Warnecke, today a Managing Director of PCC SE, has been part of the team since the company was founded the previous year. Dr. rer. oec. (BY) Alfred Pelzer, today also a Managing Director and Vice Chairman of the Administrative Board of PCC SE, joins PCC in 1995.

1994

1998

First corporate security issued by PCC

PCC AG places its first bond. This makes PCC AG one of the first SMEs in Germany to issue bonds through its own direct sales channel. To this day, over 20 years later, this remains PCC's main source of funding as a flexible financing instrument allowing independence from banks. PCC AG had been previously established in 1998 through a carve-out from PCC GmbH. The company headquarters is the PCC Villa, also in Duisburg's Homberg district.

Diversification of the PCC Group begins

PCC AG acquires around 45 % of the Polish logistics company Sped-Kol Blachownia, which has a fleet of 700 tank trucks and its own cleaning and repair facilities – the Logistics division is created. In 2001, PCC increases its shareholding to over 97 %. And in the energy sector, PCC GmbH receives a trading license from the Leipzig Electricity Exchange. Admissions to other European electricity exchanges follow in the ensuing years.

2000

2002

PCC Rokita – a visionary acquisition

PCC AG acquires 33 % of the shares in the Polish chemicals group Rokita SA. The company located in the Lower Silesian town of Brzeg Dolny about 40 kilometers northwest of Wrocław produces inorganic and organic chemicals for the paper, detergent, textile, cosmetics and pharmaceutical industries. In the years that follow, today's PCC Rokita SA develops into the strongest entity in the PCC Group – especially as a major producer of polyols and chlorine.

Logistics division further expanded

PCC acquires a stake in a Polish logistics company: KP Szczakowa S.A., later to become PCC Rail S.A., is at this time already one of Poland's largest non-state railway companies, with around 100 of its own locomotives and 3,600 railway freight cars. Its market position undergoes further expansion in the course of the years that follow. In the Chemicals division, PCC increases its stake in PCC Rokita SA to 50.32 %. Further increases follow until, in 2010, the shareholding reaches 100 %.

2003

2006

Expansion abroad

PCC makes its first investment in the USA: Today's PCC Chemax, Inc., based in Piedmont (South Carolina), produces specialty chemicals aligned to the needs of, for example, oil producers **(1)**. In Poland, PCC Rokita SA commissions its third production line for polyether polyols, doubling its capacity to more than 60,000 metric tons per year **(2)**. In October, PCC Rokita SA is honored with the "Lower Silesian Griffin" business award **(3)** – a host of other awards are set to follow. In the Logistics division, ten companies from Poland, Germany and the Czech Republic are placed under the management of PCC Rail S.A. and form the "PCC Logistics" subgroup of companies.

1

2

3

Change of legal form to Societas Europaea

PCC AG becomes PCC SE, and thus a European corporation (Societas Europaea). Its conversion to an SE is intended to underline the European identity of the corporate grouping. PCC founder Waldemar Preussner has always regarded Europe as the "home market of PCC". This is now also reflected in the SE legal form.

2007

2008

Expansion of surfactant production

PCC Rokita SA takes a second sulfonation plant (1) into service, thus tripling its production capacity for anionic surfactants to 40,000 metric tons per year. Today, the Surfactants segment belongs to PCC Exol SA. The new EC-3 combined heat and power (CHP) plant on the PCC Rokita SA site supplies clean energy for both the production facility and the locality. Already ensuring a significant reduction in emissions, the cogeneration plant undergoes further upgrading in the years that follow. This also benefits the town of Brzeg Dolny in which around 80 % of households are fed with district heat from its turbines. In December, PCC Rokita SA sells its 90 % stake in its subsidiary Rokita-Agro S.A., a manufacturer of crop protection products, to an Israeli investor.


1

Exceptional divestment success

PCC SE sells its Polish rail activities, the "PCC Logistics" subgroup of companies, to Deutsche Bahn AG, German Rail **(1)**. This divestment marks the greatest success of PCC's investment portfolio management to date. The container logistics company PCC Intermodal S.A., on the other hand, remains part of the PCC Group. PCC acquires a quartzite quarry in Poland **(2)**. It is destined to supply the raw material base for the future silicon metal plant in Iceland, which will go into operation in 2018. Within the Energy division, PCC starts generating energy from renewable sources: The first PCC small hydropower plant is hooked up to the grid in Bosnia and Herzegovina.

1


2

2009

2010

PCC Rokita acquisition completed

PCC Rokita SA is now wholly owned by PCC: Following share purchases in 2002 and 2003 and further stake increases thereafter, PCC SE eventually also acquires the remaining minority shareholdings and becomes the sole proprietor of the Polish chemicals group, which is then successfully floated on the Warsaw Stock Exchange by PCC SE in 2014. In 2010, PCC SE also acquires 100 % of the shares in today's PCC Prodex Sp. z o.o., a polyurethane system house specializing in foam systems for thermal and acoustic insulation. In the same year, PCC Rokita SA embarks on implementing a technological switch in chlorine production with the commissioning of the new membrane electrolysis plant 1 (completion: 2015).

Innovation by PCC

PCC Rokita SA successfully positions its foam technology iPoltec® ("Intelligent Polyurethane Technology") in the marketplace. In 2011, one million mattress cores will already be produced with this innovative technology. In the same year, PCC Exol SA commissions a second ethoxylation plant **(1)**, thus further expanding its surfactant capacities.

Within the Energy division, PCC sells off its German electricity and gas distribution business. Instead of expending resources on its energy trading activities, PCC now concentrates on its own power plants, primarily to supply its in-company production facilities.

In the Logistics division, PCC Intermodal S.A. opens the Kutno container terminal, the first modern logistics and transshipment center in central Poland **(2)**. The handling capacity is 100,000 TEU (unit of measurement for 20-foot ISO containers) and will more than double to 250,000 TEU by 2015.

In the Holding/Projects segment, PCC SE begins project planning for the construction of a modern silicon metal production plant in Iceland. Construction will start in 2015.

1

2

2011

2012

PCC floats subsidiary on the stock exchange

PCC Exol SA is listed on the Warsaw Stock Exchange. As the majority shareholder, PCC SE remains the strategic investor of the surfactant producer. Also in the Chemicals division, PCC Rokita SA starts up its fourth production line for polyols. The annual capacity across all four plants is now 100,000 metric tons. In the Logistics division, PCC Intermodal S.A. becomes the operator of the transshipment terminal in Frankfurt (Oder). In the Holding/Projects segment, PCC SE launches a joint venture project in Russia for the production of high-purity, aerosol-grade dimethyl ether (DME).

Expansion of the PCC container terminals

PCC Intermodal S.A. begins expanding its combined transport terminals in Kutno **(1)** and Brzeg Dolny. At the Kutno terminal, transshipment capacity will be more than doubled by 2015. In the Energy division, a new small hydropower plant in North Macedonia is hooked up to the grid. Three further plants there are completed by 2014. These four are officially registered as climate protection projects by the UN climate protection authority UNFCCC. In the Chemicals division, PCC SE sells 24.5 million of its shares (8.26 % of the voting rights) in PCC Exol SA to an investment fund. The proceeds per share are 2.3 times higher than the book value.

1

2013

2014

PCC Rokita is floated on the stock exchange

PCC SE floats a minority stake in PCC Rokita SA (1) on the Warsaw Stock Exchange. Despite the difficult market environment, the private investor tranche is heavily oversubscribed with huge institutional interest. The share price will more than double within the next four years. In the Chemicals division, the Polish subsidiary PCC Prodex Sp. z o.o. in Germany receives approval for its PU roof spray foam. In the Energy division, the European Bank for Reconstruction and Development (EBRD) rewards the successful commissioning of PCC's first three small hydroelectric power plants in North Macedonia **(2)** with a payment award.

1

2

Technology switch in the Chlorine segment

PCC Rokita SA completes the technology switch in chlorine production to the environmentally compatible membrane process **(1)**. This reduces annual CO_2 emissions by 750 kg per metric ton of caustic soda solution (sodium hydroxide) produced. In Iceland, the major construction site of the state-of-the-art and environmentally sound silicon metal production plant is officially opened on September 17, marking transition of the investment project to the build phase. Investment volume: around € 265 million. In the Polyols segment, PCC Rokita SA establishes a joint venture in Thailand **(2)** to develop the markets of Southeast Asia, China and India. By 2018, PCC Rokita SA will have acquired a total of 50 % of the shares in IRPC Polyol Company Ltd.


1

2

2015

2016

Chlorine value chain extended

The new production plant for the manufacture of ultra-pure monochloroacetic acid (MCAA) in Brzeg Dolny is completed. Production capacity: 42,000 metric tons per year. With the chlorine required for production manufactured by us "in-house", this significantly extends PCC's chlorine value chain. December sees PCC Rokita SA included in the RESPECT sustainability index on the Warsaw Stock Exchange for the first time. PCC Rokita SA will again be included in this index in subsequent years.

Building work starts on our DME project

Construction of our production plant for high-purity, aerosol-grade dimethyl ether (DME) in the Tula region of Russia commences in April. The plant, built by PCC in a joint venture with our long-term Russian partner, the chemicals group JSC Shchekinoazot, goes into service at the end of 2018. DME is mainly used in the cosmetics industry as an environmentally compatible propellant for hair styling products, and in the production of polyurethane construction foam. PCC Rokita SA builds a fifth production line for polyether polyols, increasing related annual capacity to 110,000 metric tons.

2017

2018

Iceland project completed

Construction by Group subsidiary PCC BakkiSilicon hf. of our state-of-the-art silicon metal production plant (1+2) near the small town of Húsavík in northern Iceland is completed at the start of 2018. Commissioning commences on April 30, 2018. May 11 sees the first melt of liquid silicon metal tapped from the furnace complex. The plant is one of the most advanced and most environmentally compatible of its kind in the world: Silicon metal production is power-intensive, hence the plant is supplied exclusively from renewable sources, predominantly geothermal energy. The DME plant in Russia goes into service in December.


1


2

02 The strategy of PCC

PCC SE is an investor aligned to the long term. As a multi-investment enterprise, PCC SE has a diversified portfolio of Group companies primarily active in the production of chemical commodities, specialty chemicals and silicon metal. It also has major interests in the field of container logistics. Through ongoing investment, we continue to develop and expand our business areas, enabling us to exploit the growth opportunities available in our global markets.

The new production plant for polyester polyols in Brzeg Dolny serves to strengthen the market position of our Polyols segment (the photo shows the plant's tank farm).

Group strategy

At the core of our Group strategy is a commitment to ensuring the sustainable growth of the companies in our broadly diversified investment portfolio. It is our goal to continuously increase their and our enterprise value and thus to create new wealth as we move forward.

The Group parent and holding company PCC SE is a predominantly long-term investor and, as such, endeavors to continuously strengthen the market position of the PCC companies through targeted investments. We develop new businesses and product areas with energetic determination – tempered by risk-awareness – as and when opportunity arises. We develop new market segments related to our existing expertise and drive growth with both project investments and new acquisitions, concentrating especially on lucrative subsectors.

Since its establishment a good 25 years ago, PCC SE has thus succeeded in forming an international group of companies linked by internal synergies. The vast majority of our affiliates – including our traditional commodity trading entity – are active in the chemicals sector, operating in a broadly diversified array of business areas under the auspices of the five segments Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products. We also pursue activities covered by our Logistics division – predominantly in the field of container transshipment – and by our Energy division. We are continuously expanding these segments and divisions through our ongoing investment activities, enabling us to exploit new growth potential in our increasingly globalized markets.

PCC companies are already among the leading suppliers of a number of products and applications in certain regions. One such is our largest subsidiary, PCC Rokita SA, which is the most important polyols producer in Eastern Europe. And PCC Exol SA is one of the most advanced producers of surfactants in Central and Eastern Europe. With our investments, we are concentrating in particular on modernizing and expanding our capacities. Examples of this from recent years include the construction of new polyols production lines, the technology switch of our chlor-alkali electrolysis operation to the modern and environmentally compatible membrane process, and the expansion and modernization of several container terminals in the Logistics division.

At the same time, we also systematically develop new business and product areas. At the end of 2016, for example, we commissioned a new production plant for ultra-pure monochloroacetic acid (MCAA) in Poland, thus significantly extending the value chain of our Chlorine segment. And in 2018, we completed two major investment projects destined to open up new market segments: In Iceland, we commissioned a state-of-the-art and environmentally compatible silicon metal plant in which we use the raw material quartzite obtained from our own quarry in Poland. This project has been our investment focus in recent years. Most of the silicon

1 **PCC Rokita SA uses environmentally compatible membrane technology for chlorine production (photo: part of the membrane electrolysis facility).**

2 **The production plant for ultra-pure monochloroacetic acid (MCAA) in Brzeg Dolny significantly extends our chlorine value chain.**

metal has already been sold in advance, mainly to German industrial customers. And in December 2018, we also took into service a production plant for high-purity, aerosol-grade dimethyl ether (DME) in Russia to serve the DME market in Central and Eastern Europe.

We only enter such new fields of activity if we thoroughly understand the business and the risks involved. In all projects, we carefully consider the current market situation before committing any resources and determine the profit potential through conservative, risk-based analyses. We are consistently focused on sustainable growth potential and the continuity of expected cash flows.

In addition to project investments, we also intend to boost growth in the future through targeted acquisitions. We focus in particular on positioning ourselves in less competitive sub-markets and market niches.

The majority of our sites and investment projects are located in Europe, particularly in the growing economies of Central, Eastern and Southeast Europe. In addition, we continued to internationalize our activities by investing in the United States, Southeast Asia, Iceland and West Africa. We are intensifying this process, for example, by expanding the business activities of the Polyols segment in Thailand. By successively purchasing shares in our joint venture partner there in 2017 and 2018, we have continued our expansion in the fast-growing Asian chemicals market.

Our pro-active investment portfolio management approach also entails the disposal of investments if this allows us to generate attractive earnings and the funds released can be invested in the expansion or development of other core activities. The holding company will also divest operations and entities if they no longer generate satisfactory returns or fail to offer attractive development potential.

The divisions, segments and business units of the PCC Group

Divisions	**Chemicals**					**Energy**	**Logistics**	**Holding / Projects**
Segments	Polyols	Surfactants	Chlorine	Specialty Chemicals	Consumer Products	Energy	Logistics	Holding/ Projects
Business units	– Polyols – Polyurethane Systems	– Anionic Surfactants – Non-ionic Surfactants – Betaines (Amphoteric Surfactants)	– Chlorine – MCAA – Other Chlorine Downstream Products	– Phosphorus and Naphthalene Derivatives – Alkylphenols – Commodity Trading – Quartzite	– Household and Industrial Cleaners, Detergents and Personal Care Products – Matches and Firelighters	– Renewable Energies – Conventional Energies	– Intermodal Transport – Road Haulage – Rail Transport	– Portfolio Management – Projects – Services

We finance investments through a combination of equity and debt capital, with the issuance of bonds in particular being an essential and ever-present option. As PCC started issuing bearer bonds independently back in October 1998, we can boast over two decades of experience in this field. That made us one of the first SME bond issuers in Germany and has enabled us to establish a sustainable instrument for bank-independent and flexible corporate financing. Since then, the funds we received as a result have been used in particular to finance company acquisitions and investments in expansion and modernization. The regular placement of bonds with comparatively small issue volumes of up to €40 million enables us to respond swiftly to market changes and take advantage of growth opportunities.

We are also continuously improving our internal business processes, our performance culture and our flexibility. In pursuing our strategic alignment, we have set ourselves clear sustainability targets that include economic, ecological and social aspects with equal weighting (see also our Sustainability Report in the Management Report starting on page 81). Through value-led and sustainable growth, we underpin both the trust of our investors and the fairness-based partnership relationship we enjoy with all our stakeholders, from our employees, customers and suppliers to the residents of our site locations. We consistently combine this holistic approach to sustainability with acute quality and cost awareness. In this way, we can properly take the interests of all stakeholder groups into account while driving the development of new added value.

Of all our stakeholder groups, one stands out: that of our approximately 3,500 employees. They are a critical factor for success and our most important asset. We encourage their commitment and willingness to develop their own skills and expertise, and we offer them scope to work under their own initiative on a results-led basis, together with opportunity to take on responsibility. We offer our people task-aligned preparation as they take up new duties, and personalized continuous professional training as further tools in the promotion of their personal development. We attach great importance to cultural and professional diversity in our personnel management so as to benefit from mutual exchange across national borders and further boost our success in the various markets in which we operate.

For us, therefore, leadership means not just defining sustainable, profitable targets and developing suitable strategies and concepts to attain them; it also means motivating employees to work with management to achieve common goals. And even though management may assume overall responsibility for the business of PCC, individual initiative and creativity on the part of our people is specifically encouraged to the fullest extent possible. Our employees are granted decision-making authority on the basis of "as much managerial supervision as necessary, as much individual responsibility as possible". The principles underlying this approach are provided by our Basic Values and our Code of Ethics and Conduct, which can be found at www.pcc.eu. Each employee of the PCC Group acknowledges these values and our code with their signature.

1 Our approximately 3,500 employees are a critical success factor and our most important asset – and therefore also our most important stakeholder group.

2 **The production capacity of the MCAA plant is to be expanded in the medium term from the current 50,000 metric tons to up to 100,000 metric tons per year.**

3 **The expanded propylene oxide plant of PCC Rokita SA at the Brzeg Dolny site currently has an annual production capacity of 48,000 metric tons.**

The strategy of the Group divisions

The Chemicals division with its segments Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products

The strategic focus of our Chemicals division, by far the largest in the Group, is primarily on further consolidating and, wherever possible, extending its market-leading positions in Poland and in Central and Eastern Europe. In this division, we are concentrating our investments on expanding our existing sites, especially our largest chemical site located in Brzeg Dolny in Poland's Lower Silesia region. Step by step, we are also driving forward our international reach.

In the Polyols and Surfactants segments in particular, we are promoting the development of higher-value specialty products for customer-specific applications and system solutions. We now have five production lines for the manufacture of polyether polyols, which are used to produce cold-cure foams and also intermediate products for the manufacture of further polyol types. To expand its product portfolio, PCC Rokita subsidiary PCC PU Sp. z o.o. has also established a production plant for polyester polyols, which are used in the manufacture of applications such as specialty insulation products and elastomers. We are also pursuing our internationalization strategy in the Polyols segment: In 2017, the joint venture Elpis Sp. z o.o., established by PCC Rokita SA and PCC Exol SA, acquired 100 % of the shares in the Malaysian company PCC Oxyalkylates Malaysia Sdn. Bhd. effective March 2018. This project company is considering a potential investment in a joint production site with PETRONAS Chemicals Group in Malaysia. And in a move in Thailand representing a further important step toward expansion in Asia, 2017 and 2018 saw PCC Rokita SA acquire a total of 50 % of the shares in IRPC Polyol Company Ltd., Bangkok, a joint venture with the Thai petrochemical group IRPC Public Company Ltd.

Another example of our investment strategy in recent years was the construction of a production plant for the manufacture of ultra-pure monochloroacetic acid (MCAA) as part of the Chlorine segment. The facility was commissioned at the end of 2016 and has significantly extended our value chain, as the chlorine we produce ourselves serves as its primary feedstock. MCAA is used as an intermediate product, primarily in the manufacture of personal care products and in the agricultural, food and pharmaceutical industries. The plant thus also enables backward integration, as MCAA is used as an input for the betaine production of our Surfactants segment.

1

2

In the case of investments in the current sites of the Chemicals division, the modernization and expansion of existing plants, always aligned to future-oriented environmental and economic standards, are just as important as the construction of new production facilities. For example, the switchover of our chlorine production technology to the environmentally compatible membrane process, which was completed in 2015, has significantly increased energy efficiency and thus made an appreciable contribution to the financial performance of the Chlorine segment.

Currently still assigned to the Specialty Chemicals segment is PCC's original core business, that of trading in petrochemical and carbon-based commodities, in which we boast more than 25 years of expertise. PCC Trade & Services GmbH, our largest trading company, is the biggest contributor to segment sales. Its trading portfolio comprises solid fuels such as coke breeze, coke fines and anthracite in small-grain fractions, as well as chemical commodities, especially coke plant by-products such as crude tar and crude benzene. In addition to this trading operation, one of the core tasks of this business unit is to support our production companies in both their procurement and their sales markets.

Among the manufacturing entities of the Specialty Chemicals segment, one of the investment focal points lies in the Phosphorus and Naphthalene Derivatives business unit with particular emphasis on the production of flame retardants and plasticizers.

The PCC Consumer Products subgroup in the Consumer Products segment is targeting future growth through the increased development of its own brands together with further expansion of its business activities in the Eastern European markets and in the direction of Asia (especially China). As these ventures develop, the subgroup should find itself back on track and heading for success.

Energy division

Operations in the Energy division are aligned primarily to the construction and operation of power plants. The strategic focus here is on the development, planning, implementation and also the sale of projects, particularly in the Renewable Energies business unit. Our Group subsidiary PCC DEG Renewables GmbH, a joint venture with KfW subsidiary DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, operates as a project company. So far, we have commissioned one small hydroelectric power plant in Bosnia and Herzegovina and four in North Macedonia, where construction of a further power plant began in 2017. This brings us closer to our goal of operating a portfolio of power plants that could possibly be sold as a block to a strategic investor. The largest contributions to sales and earnings in this division are made by the Conventional Energies business unit with the combined heat and power plant of PCC Rokita SA in Brzeg Dolny, which has been further modernized in recent years, and the Polish electricity and heat utility PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle.

1 In recent years we have equipped our combined heat and power plant at the Brzeg Dolny chemicals site with state-of-the-art electrostatic precipitators.

2 The PCC container terminal in Kutno is today one of Poland's most modern combined transport terminals. Its annual transshipment capacity was significantly increased in 2015.

3 The PCC terminal in Gliwice has also recently been significantly expanded. The location is convenient as two trans-European transport corridors intersect in the vicinity.

Logistics division

The largest company in the Logistics division is PCC Intermodal S.A. based in Gdynia, Poland. This Group subsidiary offers intermodal container transshipment services on road and rail both within Poland and from the major seaports of Rotterdam, Antwerp, Hamburg and Bremerhaven to Poland and vice versa. In 2016, the company also launched a direct service between Germany's industrialized Ruhr conurbation and central Poland. PCC Intermodal S.A.'s growth focus is on the further expansion of this route network and the expansion and optimization of its – to date – five combined transportation terminals. The construction of a sixth terminal near Gdynia is likewise in the planning pipeline. Since 2017, PCC Intermodal S.A. has also been increasingly using its own locomotives for the traction of its container block trains, with a view to generating cost advantages versus the competition. The PCC Group also operates in the international market for hazardous goods transport services with the road haulage company PCC Autochem Sp. z o.o., Brzeg Dolny, and is active in the Russian rail transport market with its own freight car fleet operated by its affiliate ZAO PCC Rail, Moscow.

Holding/Projects division

In the Holding/Projects division, which in addition to the holding company PCC SE also includes other entities and business units from the areas of IT and research and development, we manage projects as they pass through their development, planning, construction and commissioning phases. One such is the new silicon metal production plant in Iceland: In the north of the island, we have built one of the most advanced and environmentally compatible facilities of its kind in the world. An important objective of this project, which accounts for an investment volume of around €265 million, is to significantly extend our value chain, as the quartzite required as the feedstock for the plant is shipped in from the Group-owned quarry in Zagórze, Poland. The construction work began in June 2015 and the commissioning of the facility, which has an annual capacity of over 32,000 metric tons of silicon metal, took place in 2018.

A further project of the Holding/Projects division relates to the construction of a plant for the production of high-purity, aerosol-grade dimethyl ether (DME) by the joint venture OOO DME Aerosol, Pervomaysky (Russia), entered into with our long-standing Russian partner JSC Shchekinoazot. The plant is located on the latter's production site in the Tula region, some 200 kilometers south of Moscow. DME is mainly used as an odorless and environmentally compatible propellant. Commissioning of the plant with an annual capacity of 20,000 metric tons took place in December 2018.

03 Investments

2018 saw the PCC Group successfully commence production in respect of two multi-year investment projects: We commissioned our state-of-the-art and environmentally compatible silicon metal plant in Iceland. And we started production of high-purity dimethyl ether (DME) in Russia as of December. The modernization and expansion investments of previous years made a significant contribution to growth in 2018. New investments are planned for 2019, some of which are already being implemented, particularly in the Chemicals division and in our container logistics arm. These should result in further growth in the coming years.

Panorama view of our new silicon metal production plant in Iceland: The plant with an annual capacity of 32,000 metric tons of silicon metal has been designed as one the most advanced and environmentally compatible in the world.

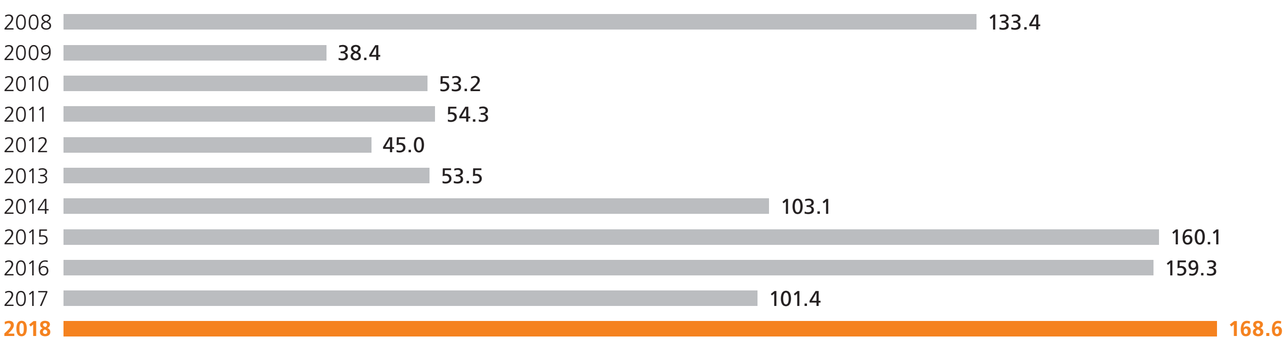
PCC investments

We continued resolutely pursuing our long-term investment strategy in 2018. Group-wide capital expenditures amounted to € 168.6 million, well above the previous year's € 101.4 million. This increase is due in particular to project delays at our silicon metal plant in Iceland, as a result of which corresponding investment amounts were postponed to fiscal 2018. By far the largest share of the investment volume (around 95 %) was accounted for by property, plant and equipment, especially the silicon metal project in the Holding/Projects division, and the expansion of the membrane electrolysis plant in the Chlorine segment.

As in previous years, we also succeeded in completing or decisively advancing a number of long-term investment projects in 2018. For example, we commissioned our state-of-the-art and environmentally compatible silicon metal plant in Iceland. The two electric arc furnaces were ignited in April and August respectively. Due to problems with the supply of raw materials, the end product handling system and the dust extraction facility, the start of regular operations is still on hold, but silicon metal has already been produced in the plant and delivered to various customers. As a second large-scale investment project, we completed our production plant for high-purity, aerosol-grade dimethyl ether (DME) in Russia last year. Operation of this plant, which we built together with a Russian joint venture partner in the Tula region, started in December and it has already produced DME of the desired quality.

In the Chemicals division, we continued to concentrate on modernizing and expanding our manufacturing facilities and building new production lines. One focus in 2018 was the Chlorine segment, which continues to exhibit dynamic growth. PCC Rokita SA installed two new electrolyzers in its membrane electrolysis plant at our primary chemicals site in Brzeg Dolny. In the Polyols segment, we boosted progress in our international expansion by increasing our stake in our Thai joint venture partner. In the Logistics division, we invested in the purchase of locomotives and made progress in planning the expansion of our container terminals. And in the Energy segment, we expect our sixth small hydropower plant, which is currently under construction, to be completed in the first half of 2019. In the following, we provide more detail on investment projects completed in 2018 and those in progress.

Capital expenditures of the PCC Group in € million



1 In 2018, we continued to invest in process optimization at our MCAA production facility and also increased annual capacity from 42,000 to 50,000 metric tons.

2 In December 2018, we commissioned our new dimethyl ether (DME) plant in Russia (Tula region). Capacity: 20,000 metric tons per year.

3 With two new electrolyzers commissioned in mid-2018, we were able to significantly increase the capacity of our chlor-alkali electrolysis facilities.

Investments in the Chemicals division

Polyols segment

Expansion investments in the Polyols business unit

PCC Rokita SA has more than 40 years of experience in polyols production and now boasts five production lines for polyether polyols at its Brzeg Dolny site. This has increased total rated capacity to 110,000 metric tons of polyether polyols per year (measured on the basis of standard polyols). In addition, its subsidiary PCC PU Sp. z o.o. commissioned a polyester polyol plant at the same site in 2017 with an annual capacity of 12,000 metric tons.

In the past ten years in particular, the variety of applications for polyols has developed apace. They are in demand for the furniture industry and mattress manufacturing and also for construction applications. PCC Rokita SA is one of the leading manufacturers of polyether polyols in Eastern Europe and to date the only such producer in Poland.

2018 saw the start of construction of a pilot plant to also enable production of different polyols in small batches of well below a ton. Thus, PCC Rokita SA will be able to produce proper samples for customers, which is not feasible in large reactors. It will also be possible in the future to produce specialties for applications where only a few hundred kilograms are required. The plant is scheduled for completion in the third quarter of 2019. PCC Rokita SA is thus also focusing resolutely on the production of higher-value polyols.

PCC Rokita SA increases stake in Thai polyols producer

In the Polyols segment, we have also been investing more heavily in internationalization since 2015, especially in the fast-growing Asian chemicals market. 2017 and 2018 saw an important step taken in this direction with the acquisition of a total of 50 % of the shares in the Thai polyols and polyurethanes producer IRPC Polyol Company Ltd., headquartered in Bangkok.

Surfactants segment

Expansion investments in surfactant production

PCC Exol SA has continued to modernize and expand its surfactant production facilities over recent years. In addition to an increase in capacity, the investments encompass construction of two plants for the manufacture of specialty products, a facility for the manufacture of high molecular weight ethoxylates is to be built by 2020, and a further plant for the production of glycinates is planned for 2019.

PCC Exol SA currently has a total annual capacity of 117,000 metric tons of surfactants produced at two sites in Poland: two sulfonation plants, one ethoxylation plant and the new betaine plant at the Brzeg Dolny site and one ethoxylation plant at the Płock site. PCC Exol SA also has a production facility for specialty surfactants in Piedmont (South Carolina) operated by its US subsidiary PCC Chemax, Inc.

1 PCC's largest chemicals site is located near the small Lower Silesian town of Brzeg Dolny – a prime location in terms of our investment focus.

2 The successful technology switch in the chloralkali electrolysis process at PCC Rokita SA saves 750 kg CO_2 per metric ton of sodium hydroxide solution produced.

Chlorine segment

Capacity expansion in chlorine production

Following the modernization and expansion investments made in previous years, PCC Rokita SA started its next phase of capacity expansion in 2017 by ordering two further electrolyzers. Electrolyzers VI and VII were duly delivered at the beginning of 2018 and commissioned in mid-2018. In order to be able to utilize the full capacity of all seven electrolyzers, the ancillary facilities were likewise upgraded in parallel. Having been completed at the beginning of 2019, the plant now has a capacity of 209,000 metric tons of chlorine and 236,000 metric tons of sodium hydroxide per year. A further increase in production capacity is planned for the coming years.

On completion of the switch in chlorine production technology to the more environmentally compatible membrane process in 2015, we have cut carbon emissions by a total of 750 kilograms of CO_2 per metric ton of sodium hydroxide produced. This saving is a direct result of the considerably higher energy efficiency of this modern technology.

In addition, we invested in the construction of a new plant for liquefying chlorine gas in 2017. Chlorine is discharged in gaseous form from the electrolyzers and is then cooled, dried, cleaned and compressed. With the commissioning of this new chlorine liquefaction plant at the end of the first quarter of 2018, the previous facility was shut down.

209,000

metric tons of chlorine

Current annual capacity of chlorine production after expansion of the membrane electrolysis process in 2018/2019. This also resulted in an increase in sodium hydroxide production capacity to 236,000 metric tons.

2

Expansion of the propylene oxide plant

Over the last few years in the Chlorine segment, PCC Rokita SA has further invested in expanding the capacity of its propylene oxide plant and in various process optimization measures. Propylene oxide (PO) is required for the production of polyols. The expansion of our PO production – together with existing supply contracts with long-term partners – will therefore make a significant contribution to securing our raw material base for future growth in the Polyols segment. The current annual capacity is 48,000 metric tons.

Process optimization and expansion of the MCAA plant

Last year saw PCC MCAA Sp. z o.o., Brzeg Dolny – part of the MCAA business unit of the Chlorine segment – further invest in process optimization. This has significantly improved the efficiency of the MCAA plant while also increasing capacity from 42,000 to 50,000 metric tons of ultra-pure MCAA per year to meet growing customer demand and further improve competitiveness. The medium-term goal is to expand MCAA production at the Brzeg Dolny site to up to 100,000 metric tons per year.

50,000

metric tons of MCAA

Current annual capacity of our production facility for ultra-pure monochloroacetic acid. Expansion to up to 100,000 metric tons is planned over the medium term.

Specialty Chemicals segment

Investments in the processing plant serving our quartzite quarry

Over the past two years, PCC Silicium S.A. has invested in a processing and sorting plant designed to supply our new silicon metal production facility in Iceland with quartzite rock of the requisite high grade. By 2018, a new facility had been installed for washing the rock under high pressure, as had an optical sorter that employs LED technology to identify the quartzite pieces suitable for silicon metal production and, at the same time, divert lower-grade material.

Quartzite from our quarry has been used in our silicon metal plant in Iceland since the latter was commissioned at the end of April 2018. The logistical effort involved in transporting the rock from Poland to Iceland by train and ship is more than compensated for by the availability there of cheap and, above all, green electricity for the particularly energy-intensive silicon metal production process.

Start-ups in the Specialty Chemicals segment

The Germany-based start-ups PCC Specialties GmbH, Kamp-Lintfort, and PolyU GmbH, Essen, which were founded at the end of 2017, are also managed under the Specialty Chemicals segment. The two subsidiaries focus on research and development and the sale of specialty chemicals for customer-specific applications. In 2018, both start-ups were still in their developmental phase.

1 PCC Specialties GmbH in Kamp-Lintfort, Germany, develops and sells specialty chemical products for various industries worldwide.

2 PolyU GmbH develops and distributes from its Essen site innovative polyurethane systems for custom applications.

3 In 2018 we commissioned a modernized desulfurization facility at our combined heat and power plant in Brzeg Dolny. This has enabled us to significantly reduce sulfur dioxide emissions to levels well below those required by the EU standard.

4 We are currently building our fifth small hydropower plant at the Kriva Reka ("meandering river") site in North Macedonia, making it our sixth such facility in total.

Investments in the Energy division

Modernization of the combined heat and power plant at the Brzeg Dolny site

The cogeneration plant EC-3 operated by PCC Rokita SA at our site in Brzeg Dolny supplies not only electricity and process steam to PCC's own chemical production facilities but also district heating to the majority of households in the town of Brzeg Dolny. We manage this modern combined heat and power (CHP) plant under our Conventional Energies business unit.

Its upgraded desulfurization plant was successfully commissioned at the beginning of 2018. As a result, we have significantly reduced sulfur dioxide emissions and are well below the limit value of the European Industrial Emissions Directive, which has been in force in Poland since the beginning of last year.

In recent years, the filter system of the combined heat and power plant has also been modernized through the installation of two electrostatic precipitators.

Construction of the Kriva Reka small hydropower plant

The hydropower plant project at the Kriva Reka ("meandering river") site is our fifth in North Macedonia and our sixth in total. Construction began in October 2017 after our local project company, PCC NEW HYDRO DOOEL Skopje, a subsidiary of PCC DEG Renewables GmbH, successfully completed approval procedures and an extensive planning phase, culminating many years of perseverance – we had acquired the concession for this small hydropower plant back in September 2012. We submitted the development plan to the North Macedonian government in January 2014 and, on its approval, began work on acquiring the land rights.

The intake structure of the plant has now been completed, with the focus of the work turning to two further primary work packages on the construction site: In addition to the concrete work for the powerhouse, almost 90 % of the five kilometer penstock pipeline has been laid to date. The work is scheduled for completion in the first half of 2019.

With an installed capacity of around 1.6 MW, the generator is expected to produce around 6.94 million kWh of electricity per year, making this the largest of our six small hydropower plants in Southeast Europe. The Kriva Reka power plant will save about 6,500 metric tons of CO_2 on an annual average – as calculated in comparison to the CO_2 emissions of the regional electricity supply network.

About half of the project financing is being provided by the North Macedonian ProCredit Bank AD, Skopje.

1 The container terminals of PCC Intermodal S.A. have been greatly expanded in recent years, significantly increasing their transshipment capacity (photo shows the PCC terminal in Gliwice).

Investments in the Logistics division

Investments in the Intermodal Transport business unit

In the past fiscal year, PCC Intermodal S.A., which dominates the Logistics division of PCC, focused its investments on the expansion of its vehicle fleet and machine park, in particular through the purchase of locomotives. Since April 2018, PCC Intermodal S.A. has been operating its own track section in accordance with the railway license granted to it for this purpose. By the end of the year under review, the trains operated by PCC Intermodal S.A. had covered more than 500,000 kilometers. At the end of 2018, ten locomotives (four shunting locomotives and six electric locomotives) were already in operation under their own license. PCC Intermodal S.A. has its own combined transportation terminals in Frankfurt (Oder), Brzeg Dolny, Gliwice and Kutno, together with a depot in Kolbuszowa. The four terminals have been modernized and substantially expanded in recent years.

The company also has a major project in the planning phase for the hinterland of Gdansk Bay. A 60 hectare freight transport center is to be built there with an annual handling capacity of over 1 million TEU (unit of measurement for 20-foot standard containers).

Investments in the Holding/ Projects division

Construction and commissioning of a silicon metal production plant in Iceland

Last year, under the management of our subsidiary PCC BakkiSilicon hf., we completed construction of our state-of-the-art silicon metal production plant near Húsavík in northern Iceland, with trial operations then ensuing. This major project with an investment volume of around €265 million has thus been successfully realized – even though regular operations have yet to commence. The first consignments of silicon metal have already been shipped out to various customers. Under full load, the plant will produce at least 32,000 metric tons of silicon metal per year.

The total build time for the facility was around three years. Following several years of planning, we inaugurated the construction site in September 2015 in the presence of Icelandic government representatives. The construction work thereafter proceeded largely to plan. Preparations for cold commissioning began in late summer 2017, and in November 2017, the first delivery of quartzite, which PCC BakkiSilicon hf. procures from PCC Silicium S.A. in Poland, reached the port of Húsavík. This coincided with the arrival of the electrodes for the electric arc furnaces and of logs from Finland. Delays occurred at the end of December 2017 preventing the start of hot commissioning that was scheduled for around this time.

The commissioning phase finally started with a delay of around six months on April 30, 2018, after the plant constructor had completed work on the complex dust extraction system, a measure designed to ensure, for example, the maintenance of good air quality in the surrounding area. An arc was initially struck between the electrodes of the first of the two smelting furnaces. Thereafter the temperature was continuously raised, with the furnace then receiving its mixed charge of quartzite, low-ash coal, wood chip and limestone. Eleven days later, on May 11, 2018, the furnace had finally reached its operating temperature of 2,000 degrees Celsius and the first tap of liquid silicon metal took place, marking the official start of production. The second furnace was eventually also started up on August 31, 2018. Since that time, both furnaces have been operating at normal load.

Due to the extreme nature, even for northern Iceland, of the prevailing weather, it was not possible to maintain continuous production during the recent winter months. Difficulties also arose, inter alia, in the supply of raw materials and in the sorting and packing of finished products. In coordination with the plant constructor, our operating team has been working hard to find a sustainable solution. However, final acceptance and the associated official handover of the keys to the plant have not yet taken place, as the dust extraction system is not working satisfactorily and will not permit full-load operations. The plant constructor is currently performing various technical modifications to the dust extraction system, after which regular operational service under full load can commence. We estimate that this will occur in the course of the second half of 2019.

The new plant obtains its key feedstock quartzite primarily from a quarry owned and operated by Group subsidiary PCC Silicium S.A. in Zagórze, Poland. This means we are not dependent on third parties for the supply of this essential raw material. And the ensuing logistical costs resulting from

2 Our silicon metal plant is terraced and therefore not visible from the close-by town of Húsavík.

3 The liquid silicon metal comes out of the furnace at a temperature of 2,000 degrees Celsius and is then poured from the ladle into molds.

4 The official production start of our silicon metal plant took place on May 11, 2018 with the first tapping operation.


1

transport by rail and ship to Iceland are more than compensated for by the advantages of electricity procurement. The production process is very energy-intensive, which is why Iceland with its rich renewable (primarily geothermal) generating resources and relatively favorable electricity costs is such an ideal location. Back in March 2014, PCC BakkiSilicon hf. concluded a power purchase agreement (PPA) with Iceland's biggest energy utility, Landsvirkjun. The favorable terms negotiated are guaranteed for 15 years and the contract includes an extension option. During the first phase of operation, the plant will be supplied with 58 MW. A new geothermal energy source 25 kilometers from Húsavík is being developed by Landsvirkjun with construction of a 90 MW power plant that will serve the entire new industrial area, of which our silicon metal plant forms the nucleus.

Silicon metal is a major industrial raw material. It is used, for example, in the production of silicones and silanes, the end products of which include sealing compounds. Silicon metal is also essential in the production of high-strength aluminum alloys, such as those used in the automotive industry, and in its refined form it serves as a primary input material for photovoltaic modules. Worldwide, some 3 million metric tons of silicon metal are produced annually, primarily in China. According to federal statistics from 2016, Germany consumes around 200,000 metric tons of this semi-metal per year, but produces only 30,000 tons for its domestic market. With its annual capacity of 32,000 metric tons and with most of its production contracted in advance to German industrial customers, this plant of PCC BakkiSilicon hf. is therefore destined to make a significant contribution to securing raw material supplies to the parent company's home country. It is for this reason that the German government supported the construction of our silicon metal plant with a loan guarantee. The project likewise received state aid from the Icelandic government. The investment outlay was largely covered by a loan from KfW IPEX-Bank headquartered in Frankfurt am Main. Icelandic investors contributed about a quarter of the funding.

The new silicon metal production facility is designed as one of the most climate-friendly and environmentally compatible in the world. With the plant being powered exclusively by harnessing Iceland's regenerative geothermal resources, greenhouse gas emissions are lower by around two-thirds on average as compared to other such facilities around the world. On average, the CO_2 emissions of the five most important producer countries China, Brazil, the USA, France and Norway are almost three times higher than those of the PCC plant; compared to the average emissions of these countries, the PCC production facility in Iceland thus saves 9.65 metric tons of CO_2 per metric ton of silicon metal – a drastic reduction. This was the conclusion of a PCC-commissioned study carried out by the Faculty of Energy Systems and Energy Economics at the Ruhr University Bochum led by Prof. Dr.-Ing. H.-J. Wagner.

We also designed the plant layout with the focus on environmental compatibility. The buildings are terraced and cannot be seen from the town. And the dust generated during silicon metal production is, as mentioned, to be almost completely removed from the ambient air by high-performance filter systems installed in the PCC plant. Acutely conscious of our responsibility toward our employees, the local population and the environment, we will only start regular operations under full load once the dust extraction system is guaranteed to function under all operating conditions.

1 Aerial shot of the new silicon metal plant. To the right of the picture is the new access road and tunnel connecting the plant to the port of Húsavík.

2 Located in the Tula region of Russia, our new plant for high-purity, aerosol-grade dimethyl ether (DME) went into service at the end of 2018.

Investments in Icelandic real estate

The silicon metal plant has created around 120 direct new jobs and many more at various service providers and suppliers in the area. Our presence in Iceland is thus helping to drive an economic upturn in a region in northern Iceland that has not yet experienced any industrial development of note. PCC SE has also invested in the construction of homes in order to offer new employees locally an attractive living environment. The developer is the Icelandic subsidiary PCC Seaview Residences ehf., Húsavík. The first duplex houses became occupied in March 2018. In the meantime, all eleven residential buildings and thus 22 duplex units have been completed, with all already occupied. In total, PCC SE has created almost 2,300 m^2 of residential rental space.

Taken as a whole, therefore, not only is the Icelandic project economically efficient on the production side, it also boasts exceptional sustainability credentials in both the ecological and the societal sense.

Construction and commissioning of a production plant for dimethyl ether in Russia

The joint venture OOO DME Aerosol, Pervomaysky (Russia), owned by PCC SE and its long-standing Russian partner, the chemicals group JSC Shchekinoazot, has constructed a plant for the production of high-purity, aerosol-grade dimethyl ether (DME). DME is mainly used in the cosmetics industry as an odorless and environmentally sound propellant for such things as hairstyling products and also for the manufacture of polyurethane foam for the construction industry. The aim of the 50/50 joint venture is to develop the Eastern European market. The plant, which has a rated annual capacity of 20,000 metric tons, has been built on the site of our joint venture partner about 200 kilometers south of Moscow in the Tula region. The modern methanol plants already in place there guarantee a secure raw material base for the new DME production facility.

Construction of the Russian plant began in April 2017, with the structural steelwork well underway by August 2017. Further progress in the project was also made through the 2017/2018 winter months: Almost all the apparatus and equipment was installed, with work on providing the hook-up piping for the plant also having commenced. The steel constructions for the pipe bridges were completed and all the trays of the DME distillation column were installed, enabling the column to be finished by April 2018.

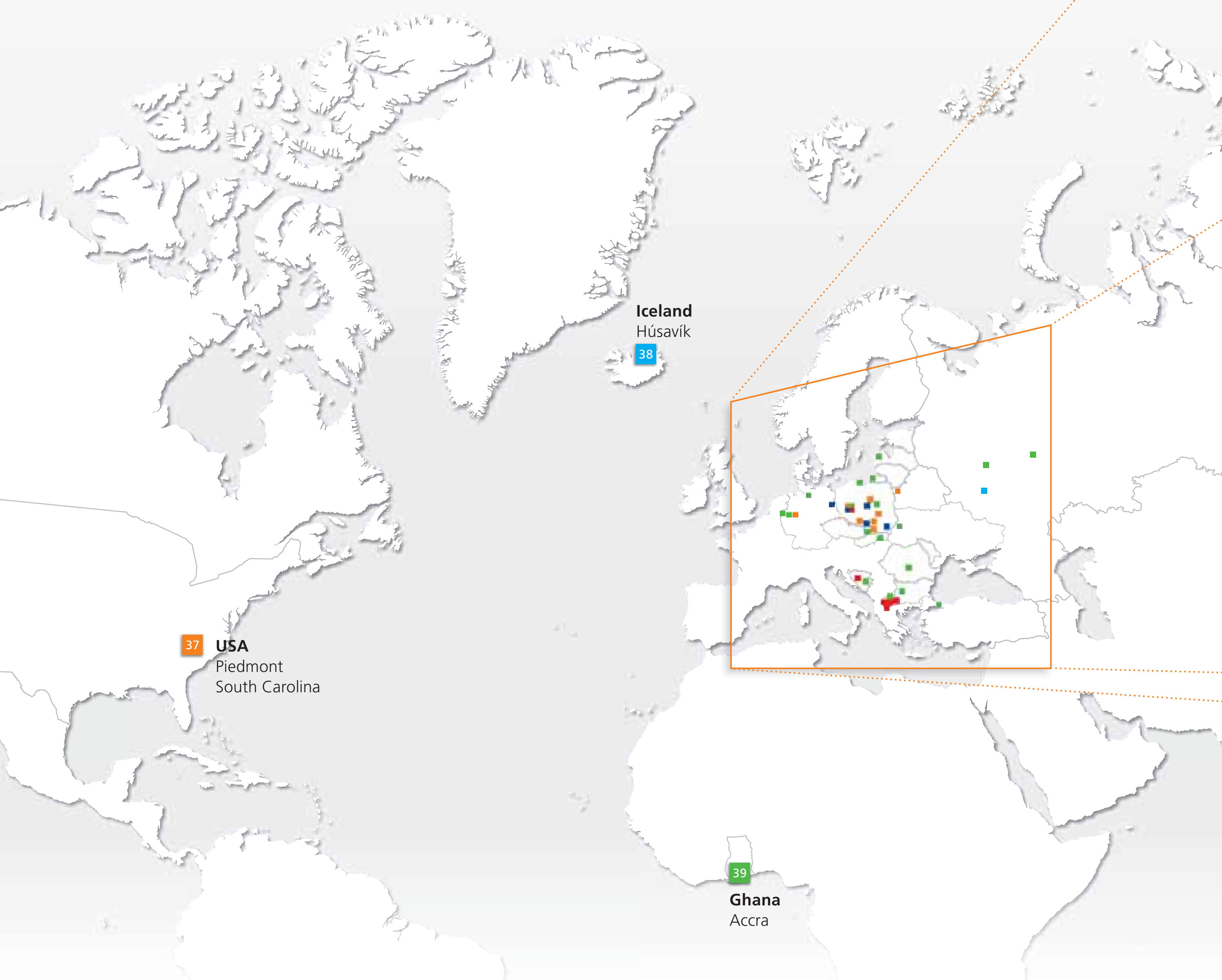
All the other plant components were then added from May onward. The plant was finished in November and was ready for commissioning at the beginning of December 2018. The work was then quickly and successfully completed just before the December holiday period, with the plant already operating stably and producing DME of the required quality by December 17. In fact, we achieve an even higher purity grade than originally specified.

By the end of 2018, significant quantities of DME had already been produced in the expected quality, with the qualification process for potential customers likewise having begun. In the meantime, the first deliveries are now being made to customers for whom qualification has been successfully completed.

The final proving test is scheduled for mid-May 2019, in which not only product quantity (plant capacity) but also raw material and energy consumption will be examined.

PCC Group sites

3,476 employees – 41 sites – 18 countries
The Group companies of PCC are currently active at 41 sites in 18 countries (status as of December 31, 2018). Most of our 3,476 employees work in Europe. However, the PCC Group is also represented in America, Asia and Africa.



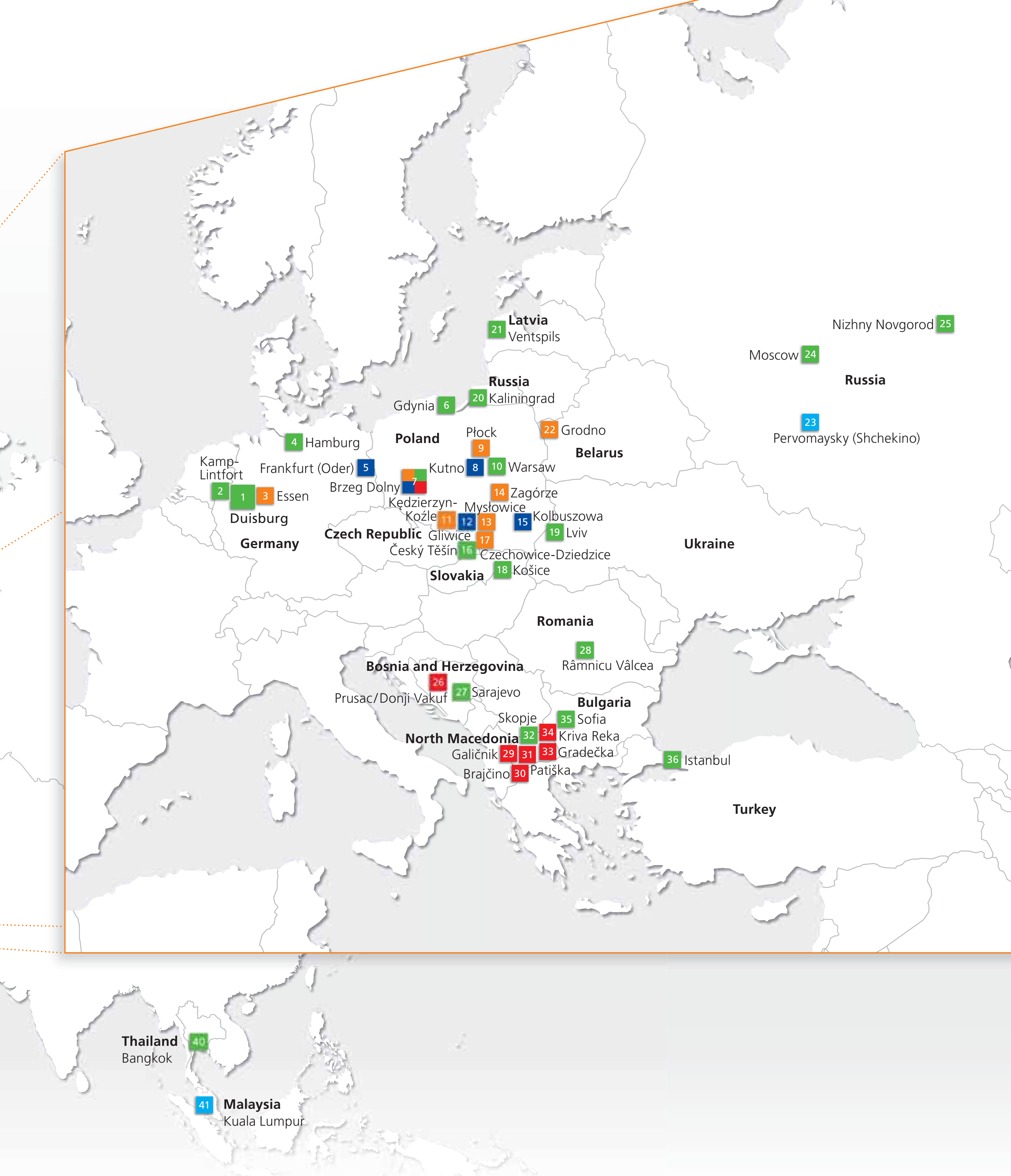
Trading / Sales and distribution / Administration

1 Duisburg (Group headquarters)

All the sites indicated in green are trading companies, sales, distribution and administration units or regional offices.

Chemicals production sites

- 3 Essen (DE)
- 7 Brzeg Dolny (PL)
- 9 Płock (PL)
- 11 Kędzierzyn-Koźle (PL)
- 13 Mysłowice (PL)
- 14 Zagórze (PL)
- 17 Czechowice-Dziedzice (PL)
- 22 Grodno (BY)
- 37 Piedmont, South Carolina (USA)



Power plants

- 7 Brzeg Dolny (PL)
- 26 Prusac/Donji Vakuf (BA)
- 29 Galičnik (MK)
- 30 Brajčino (MK)
- 31 Patiška (MK)
- 33 Gradečka (MK)
- 34 Kriva Reka (MK) – under construction

Container terminals

- 5 Frankfurt (Oder) (DE)
- 7 Brzeg Dolny (PL)
- 8 Kutno (PL)
- 12 Gliwice (PL)
- 15 Kolbuszowa (depot) (PL)

Projects

- 23 Pervomaysky (Shchekino) (RU)
- 38 Húsavík (IS)
- 41 Kuala Lumpur (MY)

The structure of the PCC Group

Aside from the holding company PCC SE, the PCC Group comprises a total of 82 subsidiaries and affiliates in Germany and abroad. The fully consolidated entities of the individual segments are shown on this double page (status as of December 31, 2018). For a detailed schedule of shareholdings, please refer to Note (43) to the consolidated financial statements at the back of this report.

Polyols segment

Polyols business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.16 %)

PCC Prodex Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

PCC Prodex GmbH
Essen (Germany)
(100 %)

PCC PU Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

PCC Therm Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

PCC Bulgaria EOOD
Sofia (Bulgaria)
(100 %)

IRPC Polyol Company Ltd.*
Bangkok (Thailand)
(50 %)

PCC Insulations GmbH
Duisburg (Germany)
(100 %)

Surfactants segment

PCC Exol SA
Brzeg Dolny (Poland)
(85.82 %)

PCC Chemax, Inc.
Piedmont, SC (USA)
(100 %)

PCC Exol Kimya Sanayi ve Ticaret Limited Şirketi
Istanbul (Turkey)
(100 %)

Chlorine segment

Chlorine business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.16 %)

MCAA SE
Brzeg Dolny (Poland)
(100 %)

PCC MCAA Sp. z o.o.
Brzeg Dolny (Poland)
(97.30 %)

Specialty Chemicals segment

Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.16 %)

PCC Synteza S.A.
Kędzierzyn-Koźle (Poland)
(100 %)

PCC Silicium S.A.
Zagórze (Poland)
(99.99 %)

PCC Specialties GmbH
Kamp-Lintfort (Germany)
(100 %)

PolyU GmbH
Essen (Germany)
(100%)

Commodity Trading business unit

PCC Trade & Services GmbH
Duisburg (Germany)
(100 %)

PCC MORAVA-CHEM s.r.o.
Český Těšín (Czech Republic)
(100 %)

NOVOBALT terminal

AO Novobalt Terminal
Kaliningrad (Russia)
(100 %)

EURO URETHANE

S.C. EURO Urethane S.R.L.
Râmnicu Vâlcea (Romania)
(58.72 %)

* Joint venture consolidated using the equity method

PCC SE, holding company of the PCC Group, Duisburg (Germany)

Consumer Products segment

PCC Consumer Products S.A.
Brzeg Dolny (Poland)
(100 %)

PCC Consumer Products Kosmet Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

Kosmet Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

OOO PCC Consumer Products Navigator
Grodno (Belarus)
(100 %)

OOO PCC Consumer Products
Moscow (Russia)
(100 %)

PCC Consumer Products Czechowice S.A.
Czechowice-Dziedzice (Poland) (99.74 %)

PCC Packaging Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

Energy segment

Energy business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.16 %)

PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle (Poland) (84.46 %)

PCC DEG Renewables GmbH
Duisburg (Germany)
(60 %)

GRID BH d.o.o.
Sarajevo (Bosnia and Herzegovina) (85.62 %)

PCC HYDRO DOOEL Skopje,
Skopje (North Macedonia)
(100 %)

PCC Izvorsko EOOD
Sofia (Bulgaria)
(100 %)

NOVI Energii OOD
Sofia (Bulgaria)
(60 %)

PCC NEW HYDRO DOOEL Skopje, Skopje (North Macedonia) (100 %)

Logistics segment

PCC Intermodal S.A.
Gdynia (Poland)
(98.40 %)

PCC Intermodal GmbH
Duisburg (Germany)
(100 %)

PCC Autochem Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

ZAO PCC Rail
Moscow (Russia)
(100 %)

Holding / Projects segment

Headquarters business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.16 %)

PCC IT S.A.
Brzeg Dolny (Poland)
(100 %)

PCC Apakor Sp. z o.o.
Brzeg Dolny (Poland)
(99.59%)

distripark.com Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

distripark GmbH
Kamp-Lintfort (Germany) (100 %)

Ekologistyka Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

LabMatic Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

ChemiPark Technologiczny Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

Aqua Łososiowice Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

Projects business unit

PCC BakkiSilicon hf.
Húsavík (Iceland)
(86.50 %)

PCC Seaview Residences ehf.
Húsavík (Iceland)
(100 %)

OOO DME Aerosol *
Pervomaysky (Russia)
(50 %)

Elpis Sp. z o.o.
Brzeg Dolny (Poland)
(100 %)

PCC Oxyalkylates Malaysia Sdn. Bhd.
Kuala Lumpur (Malaysia)
(100 %)

CATCH66 GmbH
Duisburg (Germany)
(100 %)

* Joint venture consolidated using the equity method

04 Group management report

The Group management views the development of our net assets, financial position and results of operations in fiscal 2018 as positive overall, due in particular to the improved earning power exhibited. Apart from the delay of our silicon metal project in Iceland, a number of further important milestones in the long-term improvement of our earnings position and in growing our enterprise value were reached in 2018.

The MCAA business unit has been successful in gaining market share since the commissioning of our MCAA system at the end of 2016. With good customer response already apparent, we plan to expand our annual capacity from currently 50,000 metric tons to up to 100,000 metric tons over the medium term.

Organization of the PCC Group

The PCC Group has around 3,500 employees working at 41 sites in 18 countries. Our investment portfolio is divided into eight segments. The seven segments Polyols, Surfactants, Chlorine, Specialty Chemicals, Consumer Products, Energy and Logistics are assigned full operational responsibility.

Our international companies and entities control 19 business units allocated to these segments. The eighth segment, Holding/Projects, comprising our parent and holding company PCC SE together with other companies and entities, is primarily responsible for providing corporate services in the fields of finance, business development, IT, environmental protection, site infrastructure management, research & development and engineering & technology. Also managed under this segment are PCC BakkiSilicon hf. (silicon metal project in Iceland), OOO DME Aerosol (dimethyl ether project in Russia) and a number of smaller project companies.

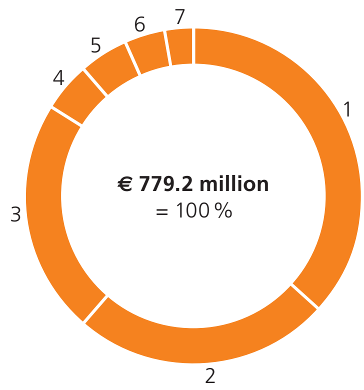
The divisions, segments and business units of the PCC Group

Divisions	**Chemicals**					**Energy**	**Logistics**	**Holding/ Projects**
Segments	Polyols	Surfactants	Chlorine	Specialty Chemicals	Consumer Products	Energy	Logistics	Holding/ Projects
Business units	– Polyols – Polyurethane Systems	– Anionic Surfactants – Non-ionic Surfactants – Betaines (Amphoteric Surfactants)	– Chlorine – MCAA – Other Chlorine Downstream Products	– Phosphorus and Naphthalene Derivatives – Alkylphenols – Commodity Trading – Quartzite	– Household and Industrial Cleaners, Detergents and Personal Care Products – Matches and Firelighters	– Renewable Energies – Conventional Energies	– Intermodal Transport – Road Haulage – Rail Transport	– Portfolio Management – Projects – Services

The Group strategy of PCC is aligned to sustainable business investments and operational development, with the aim, in particular, of generating further enterprise value. As a growth-led investor predominantly aligned to the long term, the holding company PCC SE supports its portfolio of affiliated businesses in their entrepreneurial development and in the expansion of their various specific strengths. The existing investment portfolio is subject to a regime of proactive management and continual optimization. Group policy encompasses not only ongoing scrutiny of further projects and acquisitions with the objective of competence-related diversification into new market segments, but also engagement in non-core activities that we develop to a certain degree of market maturity and then offer for sale. Overall, this approach is intended to create the basis for further sustainable growth going forward.

For the purpose of our financial communication, we pool our business activities within seven regions: Germany, Poland, Other EU Member States, Other Europe, USA, Asia, and Other Regions. In fiscal 2018, we generated 22.6 % (previous year: 21.3 %) of our sales with customers in Germany, with 36.9 % attributable to customers in Poland (previous year: 36.3 %). Including PCC SE, the consolidated financial statements of the PCC Group for 2018 cover a scope of 52 fully consolidated entities. There are also two joint ventures accounted for using the equity method.

Sales by region 2018 in %



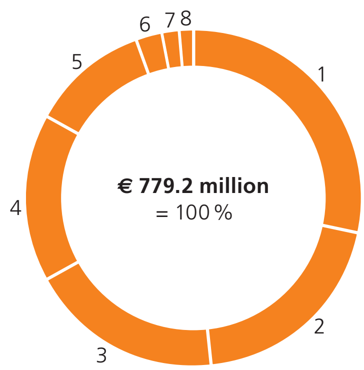
1	Poland	**36.9 %**
2	Other EU Member States	**24.5 %**
3	Germany	**22.6 %**
4	Asia	**4.8 %**
5	Other Europe	**4.8 %**
6	Other Regions	**3.7 %**
7	USA	**2.7 %**

Core business activities

Consolidated sales in fiscal 2018 amounted to € 779.2 million. Compared to the previous year (€ 683.2 million) this represents an increase of € 96.0 million or 14.1 %, exceeding our revenue expectations for the period. Aside from increased sales volumes, the – at least predominantly – high average price levels still prevailing for chemical commodities were once again a major factor. The main driver of this development remained the continued robustness of economic activity. With an increase of € 80.9 million, the segments of the Chemicals division were responsible for by far the largest share of sales growth. Accounting for 85.8 % (previous year: 86.0 %), this division remained the main contributor to Group revenues. The Logistics segment generated around 11.4 % of consolidated sales (previous year: 11.0 %). It recorded an 18.0 % increase in sales to € 88.7 million, mainly as a result of a further significant year-on-year improvement in the performance of PCC Intermodal S.A., Gdynia (Poland). Sales in the Energy segment rose by € 0.5 million to € 12.3 million. And revenues in the Holding/Projects segment grew by € 1.2 million to around € 9.5 million.

Business development in the individual Group segments again varied greatly, as the following detailed analysis shows.

Sales by segment 2018 in %



1	Specialty Chemicals	**28.5 %**
2	Chlorine	**20.0 %**
3	Polyols	**18.7 %**
4	Surfactants	**16.0 %**
5	Logistics	**11.4 %**
6	Consumer Products	**2.7 %**
7	Energy	**1.6 %**
8	Holding/Projects	**1.2 %**

Business performance by segment

Polyols

Polyols are basic feedstocks used in the production of polyurethane (PU) foams and PU systems that have a wide range of applications in a large number of industries. PU flexible foams are used, among other things, in the manufacture of high-comfort mattresses. Rigid foams are employed in the refrigeration industry for insulation purposes and in the construction industry as sealing foam. Applications for PU systems include thermal insulation and block systems incorporating thermal insulation panels, PU adhesives for mining, and polishing discs for the automotive industry.

The Polyols segment comprises the Polyols and Polyurethane Systems business units. Managed under this segment are the corresponding Polyols business unit of PCC Rokita SA, Brzeg Dolny (Poland), with its polyether polyols, and PCC PU Sp. z o.o., Brzeg Dolny, of which the production plant for polyester polyols went into service in 2017. The two system houses PCC Prodex Sp. z o.o., Brzeg Dolny, and PCC Prodex GmbH, Essen, are likewise managed under the Polyols segment, as is PCC Insulations GmbH, Duisburg, which was formed in 2018. In the interests of more efficient management, all portfolio companies involved in the production and sale of insulation and other building materials have been brought together under the umbrella of PCC Insulations GmbH as a new intermediate holding company. PCC Therm Sp. z o.o., Brzeg Dolny, and PCC Bulgaria EOOD (formerly PCC Energia EOOD), Sofia (Bulgaria), as well as the corresponding business unit of the Czech company PCC Morava-Chem s.r.o., Český Těšín, also count among these reassigned entities. As of 2018, the businesses of these affiliates were still in their developmental phase. The Polyols segment is completed by the Thai company IRPC Polyol Company Ltd. of Bangkok, in which PCC Rokita SA holds a 50 % stake. Since the previous year, this associate has been accounted for using the equity method. The number of employees in the Polyols segment at the end of the fiscal year was 247 (previous year: 242).

The Polyols segment generated sales of € 145.4 million in fiscal 2018, which – although flat versus previous year (€ 145.4 million) – was below our expectations. The share of Group sales declined to 18.7 % (previous year: 21.3 %). Business development, especially in the polyether polyols domain, came under pressure as from the second quarter of 2018. The sharp rise in the price of toluene diisocyanate (TDI), the most important component of flexible foam for foam mattresses alongside polyether polyols, also caused prices for such mattresses to rise significantly. As a result, many suppliers reverted to spring mattresses, leading to the demand for polyols for the production of mattress foams to significantly decline. At the same time, the commissioning of a new polyether polyols production facility in Saudi Arabia substantially increased the global supply of these feedstocks, with a corresponding impact on selling prices and margins.

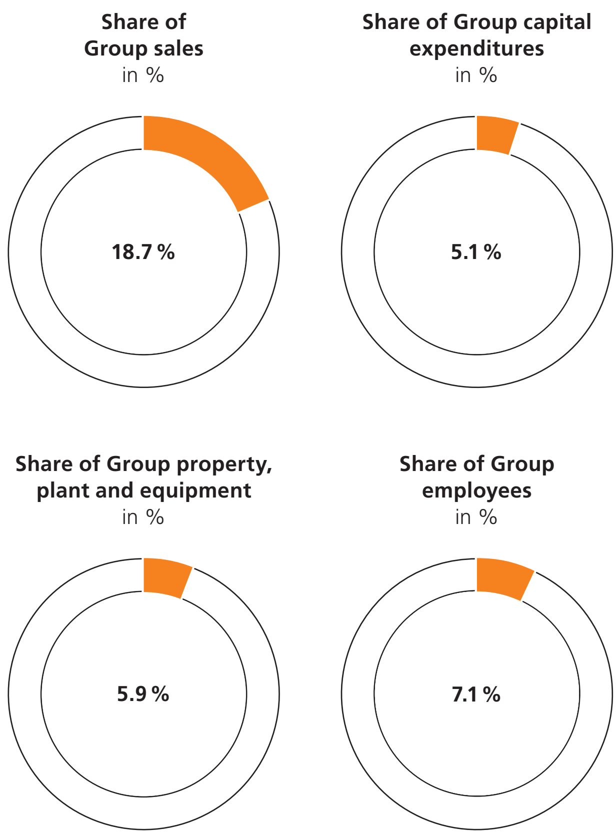
Sales in 2018 at the Polyurethane Systems business unit developed more slowly than expected. Here, too, the still very high prices for isocyanates, at least at the beginning of the year, had a negative impact. Ultimately this meant that the turnaround envisaged for 2018 was achieved neither in Poland nor in Germany. Gratifyingly, PCC Prodex GmbH, Essen, was able to land a major contract at the end of the year ensuring the regular production of polishing discs under its own Plasthan® brand. With the purchase of a further milling machine for forming polishing discs, the efficiency of this facility should improve significantly in 2019.

Polyols segment Figures in € m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**145.4**	145.4	0.0	0.0 %
Sales to other PCC segments	**25.3**	17.2	8.2	47.7 %
Total sales of the segment (total operating performance)	**170.7**	162.5	8.2	5.1 %
EBITDA	**7.2**	15.6	–8.5	–54.0 %
Property, plant and equipment	**50.0**	47.4	2.6	5.5 %
Capital expenditures on intangible assets and property, plant and equipment	**8.5**	10.1	–1.6	–15.5 %
Employees (at Dec. 31)	**247**	242	5	2.1 %

Despite this challenging market environment, the Polyols segment once again made a positive contribution to Group earnings in 2018, although this was significantly lower than in the previous year.

We will continue to systematically diversify and expand the product portfolio of the Polyols business unit in the future, with the proportion of higher-value specialty polyols continuing to rise. Geographic expansion is also to be further promoted, especially in the Asian market, which continues to exhibit dynamic growth. In 2018, PCC Rokita SA increased its stake in a Thai polyols producer to 50 %, thus reaching another important milestone in the establishment of sites outside Poland.

Key facts and figures for the Polyols segment 2018



Surfactants

Surfactants – or surface-active agents – have an extremely wide range of applications. They reduce the surface tension of a liquid or the interfacial tension between, for example, a solid surface and a liquid. The actions they produce include foaming, wetting, emulsifying and cleaning. Surfactants are basic components of laundry and home care cleaners and detergents, other cleaning agents, and personal care products. They are also used, for example, in the textile and agrochemical industries as well as in the production of lubricants, paints, coatings and plastics.

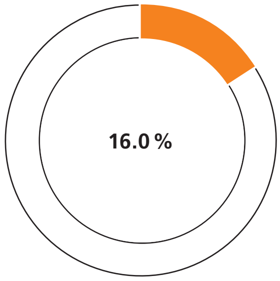
Surfactants segment Figures in €m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**124.5**	120.5	3.9	3.3 %
Sales to other PCC segments	**26.7**	27.1	−0.4	−1.5 %
Total sales of the segment (total operating performance)	**151.2**	147.7	3.5	2.4 %
EBITDA	**10.2**	9.9	0.3	3.3 %
Property, plant and equipment	**42.4**	42.1	0.3	0.8 %
Capital expenditures on intangible assets and property, plant and equipment	**4.8**	3.5	1.3	38.4 %
Employees (at Dec. 31)	**289**	279	10	3.6 %

The Surfactants segment is divided into the business units Anionic Surfactants, Non-ionic Surfactants and Betaines (Amphoteric Surfactants). The segment includes PCC Exol SA, Brzeg Dolny, its Turkish sales company in Istanbul and PCC Chemax, Inc. in Piedmont (South Carolina, USA). In 2018, this segment generated sales amounting to € 124.5 million. Compared to the previous year, this represents an increase of € 3.9 million or 3.3 %. The share of total PCC Group sales contributed by this segment also declined slightly to 16.0 % (previous year: 17.6 %). The number of employees was 289 (previous year: 279).

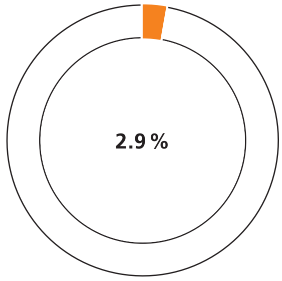
PCC Exol SA, which achieved the highest sales volumes in its history in 2018, continues to dominate the segment. As a result, sales and earnings also once again improved compared to the (already clearly positive) prior-year figures. This was achieved despite the fact that PCC Exol SA's supply of the input material ethylene oxide was adversely affected, especially in the fourth quarter of 2018, by maintenance-related plant shutdowns at several ethylene oxide producers, including its main supplier. Although these scheduled shutdowns had been announced well in advance, they ultimately took longer than originally expected and led to temporary supply bottlenecks for this strategically important raw material for the production of surfactants. Despite these challenges, once again PCC Exol SA and the Surfactants segment as a whole were able to close fiscal 2018 successfully with results above the level of the previous year. The other portfolio companies managed under this segment likewise made positive contributions to earnings.

Key facts and figures for the Surfactants segment 2018

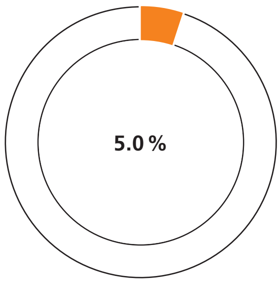
Share of Group sales
in %



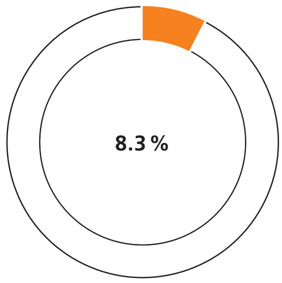
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



As in the case of the Polyols segment, the PCC Group is pursuing a strategy of increasing internationalization in the Surfactants segment, particularly in the Asian market. Together with PCC Rokita SA, PCC Exol SA established the joint venture Elpis Sp. z o.o., Brzeg Dolny, in Poland back in 2017. The object of this joint venture is to advance a production project in Malaysia in collaboration with the Petronas Chemicals Group. In the meantime, Elpis Sp. z o.o. has formed a project company, namely PCC Oxyalkylates Malaysia Sdn. Bhd. of Kuala Lumpur, which was included in the scope of consolidation of PCC SE under the Holding/Projects segment for the first time in 2018. Going forward, this project will be developed and implemented by PCC SE. To this end, a purchase agreement for 100 % of the shares in the aforementioned project company was concluded with Elpis Sp. z o.o. effective March 22, 2019.

Chlorine

Chlorine is one of the most important and most-produced raw materials used in the chemical industry. Within our Group, it is used, among other things, for the manufacture of propylene oxide for our polyols production, and as a feedstock for the manufacture of both monochloroacetic acid (MCAA) and phosphorus derivatives. Chlorine is also employed as a disinfectant and, like various chlorine co-products and derivatives, is also used in water management and petrochemistry.

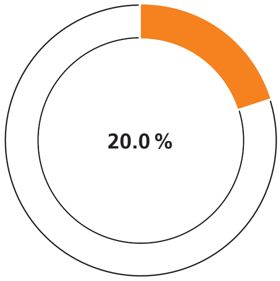
The Chlorine segment is divided into three business units: Chlorine, MCAA and Other Chlorine Downstream Products. This segment includes the corresponding Chlorine business unit of PCC Rokita SA, plus MCAA SE and PCC MCAA Sp. z o.o., all located in Brzeg Dolny. Sales in this segment increased by 54.1 % compared to the previous year, to € 155.5 million. As a result, the share of Group sales rose from 14.8 % to 20.0 %. As of year-end, the segment had a payroll of 384 employees (previous year: 409).

On the earnings side, too, both the comparable figures for the previous year and our expectations for 2018 were significantly exceeded. This applies in particular to the Chlorine business unit, which benefited from, among other things, the continued high price level prevailing for the co-product caustic soda/sodium hydroxide that results from chlorine production. In particular, prices for sodium hydroxide accelerated further in the course of the year, boosted by, for example, production interruptions suffered by several European competitors. As a result, the Chlorine business unit of PCC Rokita SA closed fiscal 2018 in clearly positive territory and was once again the main earnings driver among all the business units of the PCC Group.

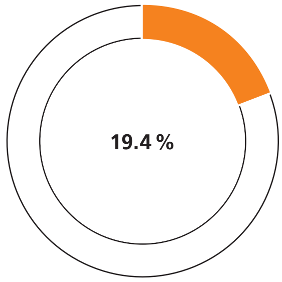
The MCAA business unit again saw its sales volumes increase in 2018. At the same time, the production process and its input factors were further optimized, leading to a significant improvement in earnings generated by this business. The chlorine value chain of the PCC Group was significantly extended with the commissioning of the MCAA plant in 2016. In the long term, this plant will contribute to a further substantial improvement in profitability within the Chlorine segment.

Key facts and figures for the Chlorine segment 2018

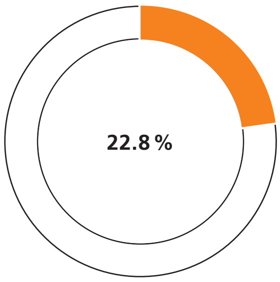
Share of Group sales
in %



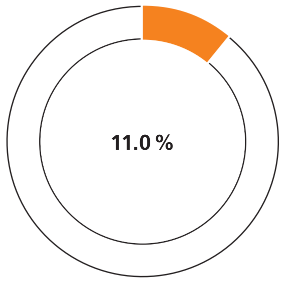
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



Chlorine segment Figures in € m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**155.5**	100.9	54.6	54.1 %
Sales to other PCC segments	**74.0**	68.8	5.2	7.6 %
Total sales of the segment (total operating performance)	**229.4**	169.6	59.8	35.2 %
EBITDA	**67.6**	32.0	35.6	> 100 %
Property, plant and equipment	**193.3**	179.3	14.0	7.8 %
Capital expenditures on intangible assets and property, plant and equipment	**32.8**	23.1	9.7	42.0 %
Employees (at Dec. 31)	**384**	409	−25	−6.1 %

Specialty Chemicals

The product range of the Specialty Chemicals segment is particularly broad: Our manufactures range from phosphorus-based flame retardants, plasticizers and stabilizers to additives for hydraulic oils and admixtures formulated to improve the application properties of fresh concrete. The traditional commodity trading business of the PCC Group and our quartzite quarry in Poland have also remained part of this segment to date.

The Specialty Chemicals segment comprises the Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA, the alkylphenol manufacturer PCC Synteza S.A., Kędzierzyn-Koźle (Poland), and the following companies: PCC Trade & Services GmbH, Duisburg (Germany), PCC Morava-Chem s.r.o., Český Těšín (Czech Republic), AO Novobalt Terminal, Kaliningrad (Russia), PCC Silicium S.A., Zagórze (Poland), and S.C. Euro-Urethane S.R.L., Râmnicu Vâlcea (Romania). The Germany-based start-ups PCC Specialties GmbH, Kamp-Lintfort, and PolyU GmbH, Essen, which were founded in the previous year, are also managed under this segment. The latter portfolio companies, which focus on the development of specialty chemicals for customer-specific applications, were still in their developmental phase in 2018. Overall, the Specialty Chemicals segment generated sales of € 222.1 million in the past fiscal year. The previous year's figure of € 199.3 million was thus exceeded by 11.5 %. This segment therefore remained the Group's strongest in terms of sales. The number of employees at the end of the fiscal year rose to 393 (previous year: 360).

Once again, PCC Trade & Services GmbH was the main sales driver in the Specialty Chemicals segment in 2018. Due to the continuing robustness of economic activity, this affiliate was able to significantly expand sales compared to the previous year. The largest increases were recorded in coke and anthracite trading. Added to this, the average prices for chemical commodities remained high during a major part of the year. It was not until the end of the year that a clearly negative price trend set in, with the curve reversing yet again at the beginning of the second quarter of 2019. As a result of these developments, PCC Trade & Services GmbH was able to close the 2018 financial year with a successful set of figures that outstripped our expectations. The commodity trading activities of PCC Morava-Chem s.r.o. likewise showed positive developments – after slight losses in the previous year – with our expectations exceeded. The positive development of both affiliates continued beyond the turn of the year.

In a repeat of the previous year, the alkylphenol producer PCC Synteza S.A. and the Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA again closed fiscal 2018 in successfully positive territory with figures exceeding our expectations. In the aforementioned business unit, rising demand for phosphorus-based flame retardants in particular had a positive impact on sales and earnings. New customers were also acquired by the Naphthalene Derivatives business, giving rise to positive, better-than-expected year-end figures. This gratifying trend also continued beyond the turn of the year and is destined to be further boosted by the development of specialty chemicals in collaboration with the new German subsidiaries of PCC SE. Additional growth is also expected to be generated by the further expansion of alternative production facilities at PCC Synteza S.A. in cooperation with PCC Rokita SA.

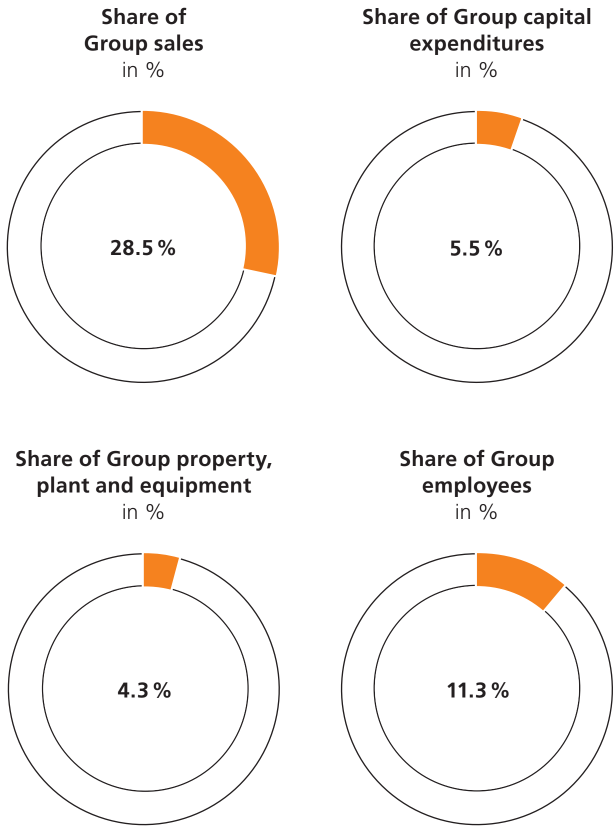
Despite the delays in the silicon metal project of PCC BakkiSilicon hf., Húsavik (Iceland), PCC Silicium S.A. was able to achieve a turnaround and post a slightly positive earnings result in fiscal 2018. This affiliate benefited in particular from the significant increase in sales to customers in the ferroalloy industry of quartzite grades that are not suitable for silicon metal production. In addition, a Polish construction company was acquired in 2018 as a customer for a large portion of the overburden resulting from quartzite mining, leading to considerable savings on the cost side. The first quartzite deliveries to Iceland were also made. In 2019, these are

Specialty Chemicals segment Figures in € m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**222.1**	199.3	22.8	11.5 %
Sales to other PCC segments	**27.0**	22.0	5.0	22.8 %
Total sales of the segment (total operating performance)	**249.1**	221.3	27.9	12.6 %
EBITDA	**9.3**	8.4	0.9	11.0 %
Property, plant and equipment	**36.3**	31.4	4.9	15.7 %
Capital expenditures on intangible assets and property, plant and equipment	**9.2**	6.8	2.4	35.7 %
Employees (at Dec. 31)	**393**	360	33	9.2 %

expected to increase significantly and, together with ongoing deliveries to the ferroalloy industry, form a stable basis for the future growth of PCC Silicium S.A. The investments for the extraction and processing of quartzite grades destined for Iceland were completed in 2018. The financing for these was provided by PCC SE.

The Specialty Chemicals segment also includes S.C. Euro-Urethane S.R.L., the future of which remains strongly dependent on the further development of our second Romanian investment, S.C. Oltchim S.A., Râmnicu Vâlcea, (32.34 % stake held by PCC SE), which is also a shareholder in S.C. Euro-Urethane S.R.L. S.C. Oltchim S.A., has been in regulated insolvency proceedings under Romanian law since 2013, in the course of which a restructuring plan was adopted in April 2015. The company was granted a total of 48 months to implement the plan. In addition, the overall debt was cut in 2015 and S.C. Oltchim S.A. resumed production of polyols and oxo-alcohols, as well as other chemical commodities. In the course of the above-mentioned insolvency proceedings, the company's assets were divided into a total of nine packages, which were then offered to potential investors as part of a privatization procedure. According to publicly available information, six of these packages have now been sold and the proceeds distributed to the creditors of S.C. Oltchim S.A. Whether further buyers can be found for the remaining assets in the short term is questionable. In addition – again according to information in the public domain – the aforementioned debt "haircut" in 2018 was adjudged by the EU Commission to constitute unauthorized state aid, causing the measure to be reversed. The debt burden of S.C. Oltchim S.A. has thus increased again. Although the company's shares continue to be traded on the Romanian stock exchange, it is expected that S.C. Oltchim S.A. will file for insolvency in the second quarter of 2019 after the expiry of the aforementioned 48-month period. It remains to be seen what consequences this will have in respect of the possible utilization of the liquid funds and other assets still available at S.C. Euro-Urethane S.R.L.

Key facts and figures for the Specialty Chemicals segment 2018



Consumer Products

In the Consumer Products segment, our focus is on the production of household cleaners, detergents and personal care products. Private label products are manufactured for well-known discounters and retail chains, although the focus is increasingly shifting toward PCC's own brands. Detergents and cleaning agents for industrial applications are likewise manufactured for supply to cleaning companies, hotels and restaurants, the food industry, agricultural interests and similar. The segment's product portfolio also includes matches and firelighters.

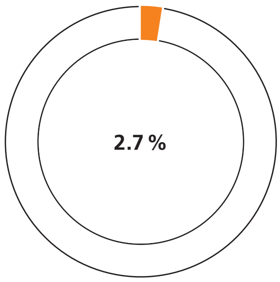
The segment is managed by PCC Consumer Products S.A., Brzeg Dolny. With sales in this segment coming in at €21.3 million for the fiscal year, there was at least no major decline versus the previous year (€21.8 million). The share of Group sales nevertheless fell to 2.7 % (previous year: 3.2 %). As of the end of the past fiscal year, this segment employed 431 people (previous year: 537).

Again in 2018, developments in the Consumer Products segment were dominated by the performance of PCC Consumer Products Kosmet Sp. z o.o. ("PCC CP Kosmet"), Brzeg Dolny, which manufactures household cleaners, detergents and personal care products. Although this affiliate was able to stabilize its sales in 2018, earnings were again below the prior-year level, falling far short of our expectations for the period. The gap created by the now almost complete "disappearance" of what was once PCC CP Kosmet's biggest customer has still not been filled. This customer started its own production operation in 2015 and has since successively reduced its purchases from PCC CP Kosmet. Although PCC CP Kosmet was again able to acquire new customers in Poland in 2018 and – after lengthy negotiations – also ship out a first wave of deliveries for the Chinese market, this still comes no way near to compensating for the loss of its former major customer. Its own labels, redesigned in 2018, also showed less progress in terms of sales development than had been hoped. Despite the restructuring process meanwhile initiated by PCC SE at PCC CP Kosmet, this affiliate was unable to avoid closing fiscal 2018 with another clear net loss. The other investments of the PCC Consumer Products subgroup in Belarus and Russia, and the matches factory PCC Consumer Products Czechowice S.A., Czechowice-Dziedzice (Poland), also failed to meet sales and earnings expectations in 2018 and reported losses at the end of the year. These, however, remained of subordinate relevance.

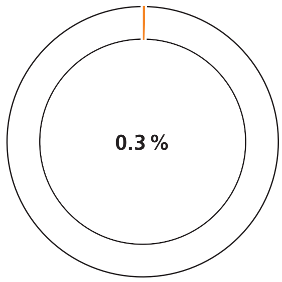
PCC SE continues to expect its FMCG activities to recover in the long term. The further development of business in the Eastern European markets and expansion into Asia (especially China), together with greater focus on the development of our own labels, are expected to lead to new growth in the Consumer Products segment going forward. This applies not only to PCC CP Kosmet, but also to the matches factory in Czechowice-Dziedzice. PCC SE made liquid funds available to both affiliates in 2018 in the form of loans, and further boosts to capital (also in the form of loans) have already been earmarked for both 2019 and 2020. These are intended to cover the losses incurred together with the liquidity requirements for the planned realignment of PCC CP Kosmet's business activities. Several smaller investments at the matches factory are to be funded through these loans, which should lead to a significant increase in the efficiency of this affiliate over the course of 2019. The aforementioned measures are expected to lead to a turnaround in the Consumer Products segment in the coming years.

Key facts and figures for the Consumer Products segment 2018

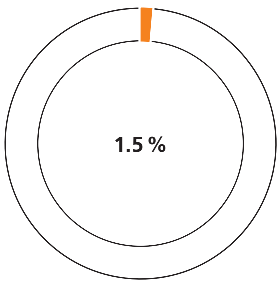
Share of Group sales
in %



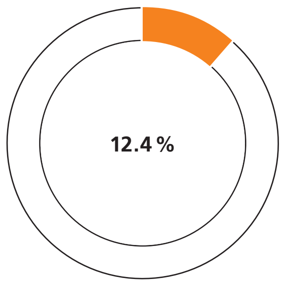
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



Consumer Products segment Figures in € m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**21.3**	21.8	–0.5	–2.4 %
Sales to other PCC segments	**1.2**	0.5	0.7	> 100 %
Total sales of the segment (total operating performance)	**22.5**	22.3	0.2	0.9 %
EBITDA	**–5.6**	–3.7	–1.8	–49.1 %
Property, plant and equipment	**12.5**	13.8	–1.3	–9.7 %
Capital expenditures on intangible assets and property, plant and equipment	**0.4**	0.6	–0.1	–25.4 %
Employees (at Dec. 31)	**431**	537	–106	–19.7 %

Energy

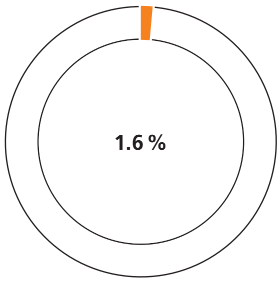
The Energy segment (equivalent to the Energy division) comprises two business units: Conventional Energies, which in particular supplies our major chemicals site in Poland with electricity and process steam, and Renewable Energies, within which we plan, engineer and operate small hydroelectric power plants in Southeast Europe. So far, we have connected five of these environmentally friendly power-generating facilities to their respective grids.

On the Conventional Energies side of this segment, we manage the corresponding Energy business of PCC Rokita SA, and also PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle (Poland). PCC DEG Renewables GmbH, Duisburg, including its subsidiaries in Bosnia and Herzegovina, North Macedonia and Bulgaria, is also incorporated within the Energy segment. In the past fiscal year, the affiliates in this segment generated sales of € 12.3 million (previous year: € 11.8 million). The number of employees at year-end was 178 (previous year: 186).

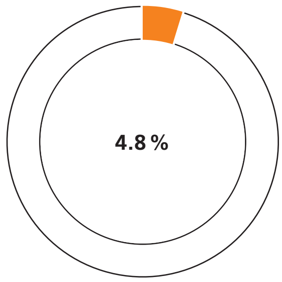
The main contributor to sales and earnings in this segment remained the Conventional Energies business unit with PCC Energetyka Blachownia Sp. z o.o., a utility company operating in the energy and heat supply sector, and the Energy business unit of PCC Rokita SA. The activities of the latter include securing a reliable power supply to our Brzeg Dolny site through its own power station.

Key facts and figures for the Energy segment 2018

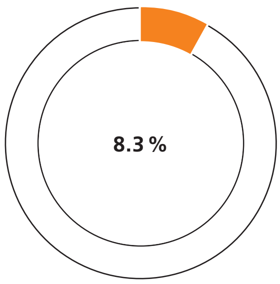
Share of Group sales
in %



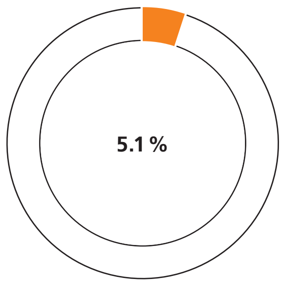
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



Managed under the Renewable Energies field, the number of small hydroelectric power plants in operation at the end of 2018 remained at five. One of these is in Bosnia and Herzegovina, with four in North Macedonia. The construction of another power plant in North Macedonia, which began in 2017, was delayed during 2018 and should now be completed in the first half of 2019. For the remaining three sites in Bosnia and Herzegovina, however, there are still some permits that have to be obtained. As before, there appears to be no end in sight to this lengthy process. The sale of the two portfolios in the respective countries, which PCC SE and its joint venture partner DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne, are striving to achieve, is also proving difficult due to their small scale. At least in 2018, the power plants in operation were able to benefit from the favorable hydrology prevailing in the re-

Energy segment Figures in € m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**12.3**	11.8	0.5	4.4 %
Sales to other PCC segments	**20.4**	19.4	1.0	4.9 %
Total sales of the segment (total operating performance)	**32.7**	31.2	1.5	4.7 %
EBITDA	**4.3**	7.2	–2.9	–40.9 %
Property, plant and equipment	**70.3**	66.7	3.6	5.4 %
Capital expenditures on intangible assets and property, plant and equipment	**8.0**	9.3	–1.3	–14.0 %
Employees (at Dec. 31)	**178**	186	–8	–4.3 %

gion. As a result, earnings developed better than expected, with the generation of relatively stable cash flows continuing. In addition, there are commitments in hydropower and wind power projects in Bulgaria that are currently "on hold" because neither the political nor the economic conditions for implementation are conducive to their pursuit. We are therefore awaiting further developments.

Logistics

The Logistics segment (equivalent to the Logistics division) is divided into three business units: Intermodal Transport, Road Haulage and Rail Transport. PCC is one of Poland's leading providers of container transport services. The logistics network based on several wholly owned container terminals extends from Eastern Europe to the Benelux countries. PCC's tanker fleet specializes in the Europe-wide road haulage of liquid chemicals. In Russia, PCC maintains a fleet of broad-gauge rail freight cars.

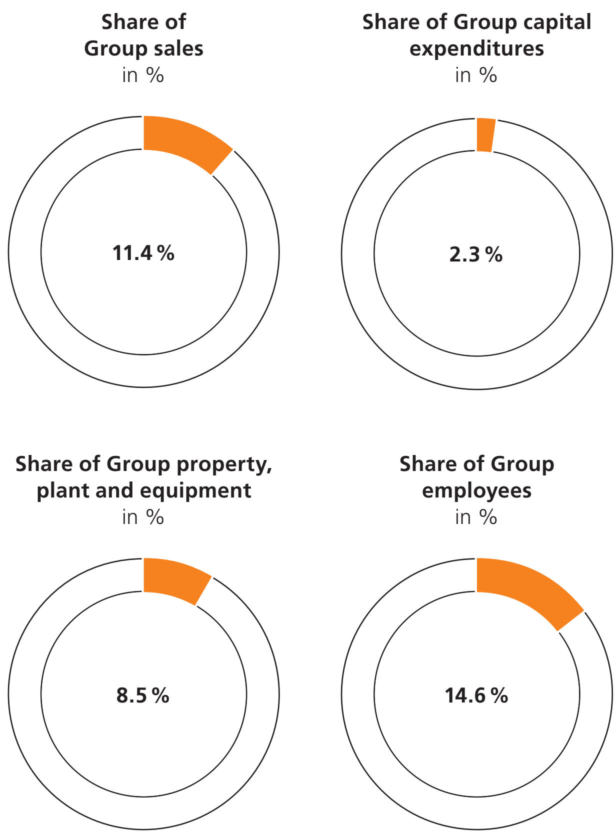
The Logistics segment includes the Polish company PCC Intermodal S.A., Gdynia, and its German subsidiary PCC Intermodal GmbH, Duisburg, as well as PCC Autochem Sp. z o.o., Brzeg Dolny, and, in Russia, ZAO PCC Rail, Moscow. The Logistics segment generated revenues of €88.7 million in 2018, 18.0 % more than the previous year's €75.2 million. The number of employees at the end of the fiscal year was 509 (previous year: 465).

The Logistics segment was again dominated in 2018 by PCC Intermodal S.A., the portfolio of which includes regular combined transport services both within Poland and on international routes to and from Rotterdam, Hamburg and Duisburg, among others. Together with the main co-shareholder and – as one of the minority shareholders of the company – the management board of PCC Intermodal S.A., PCC SE decided at the beginning of 2018 to pursue a squeeze-out of the remaining smaller shareholders in accordance with Polish capital market law, a move that was successfully concluded in March 2018. In June 2018, PCC SE also took over the shares of the previous main co-shareholder and initiated the delisting of PCC Intermodal S.A. from the Warsaw Stock Exchange, finalized in September 2018. This has given PCC SE greater independence with regard to its future expansion plans for PCC Intermodal S.A. The business performance of this affiliate was far more successful in 2018 than in the previous year. The number of containers handled grew significantly, with – in particular – the operating rate of the train services offered by PCC Intermodal S.A. within Poland showing a substantial increase. Utilization of the German-Polish corridor also exhibited an upward trend, with PCC Intermodal S.A. benefiting from, among other things, the withdrawal of a competitor from this market segment. On the cost side, the increasing use of owned locomotives has also paid dividends. PCC Intermodal S.A. thus succeeded in significantly improving its overall performance year on year and in exceeding our expectations in terms of both sales and earnings. As a result, it was also possible to reduce the interest burden in respect of the debt financing package currently in place. For 2019, PCC Intermodal S.A. plans to purchase further locomotives and further develop its existing container terminals. These expansion investments will be financed in part by grants from the European Union allocated to Poland for the expansion of its infrastructure. PCC Intermodal S.A. has already received the corresponding commitment from the Polish state. The construction of further terminals is also planned in the long term. This is intended to create the basis for the solid future growth of PCC Intermodal S.A., which should in turn lead to a further increase in earnings at this affiliate in the coming years. PCC SE will support this process in 2019 by providing more liquidity through a capital increase.

Logistics segment Figures in €m	2018	2017	Absolute change	Relative change
Net external sales, consolidated	**88.7**	75.2	13.5	18.0 %
Sales to other PCC segments	**13.6**	13.1	0.5	4.1 %
Total sales of the segment (total operating performance)	**102.3**	88.3	14.1	15.9 %
EBITDA	**11.0**	7.7	3.3	42.0 %
Property, plant and equipment	**71.8**	75.1	−3.2	−4.3 %
Capital expenditures on intangible assets and property, plant and equipment	**3.9**	2.3	1.6	68.2 %
Employees (at Dec. 31)	**509**	465	44	9.5 %

The tanker haulage company PCC Autochem Sp. z o.o. also significantly improved its performance compared to the previous year and closed fiscal 2018 with a positive result. The same applies to the Russian freight car operator ZAO PCC Rail. As a result of the still robust Russian economy and the associated further increase in freight car tariffs, the revenue and operating results of this investment were again significantly higher than in the previous year. Our expectations were likewise well exceeded. And overall, too, ZAO PCC Rail was able to close fiscal 2018 in positive earnings territory. In the previous year, by contrast, negative exchange rate effects resulting from the closing-date valuation of the euro loans granted by PCC SE led to recognition of a loss. These loans had been granted to ZAO PCC Rail for investments in its freight car fleet. Thanks to further positive cash flows, ZAO PCC Rail was again able to repay a portion of these loans in 2018. Another series of quarterly redemption payments is planned for 2019. 550 of the nearly 600 freight cars of ZAO PCC Rail continue to be hired out to a subsidiary of Russian Railways. The remainder of the cars are with a long-term customer. Given the prevailing freight car hire situation, business development at ZAO PCC Rail should remain positive in 2019, at least at the operational level. In any event, the railways are set to remain the main source of transport in Russia for the foreseeable future.

Key facts and figures for the Logistics segment 2018



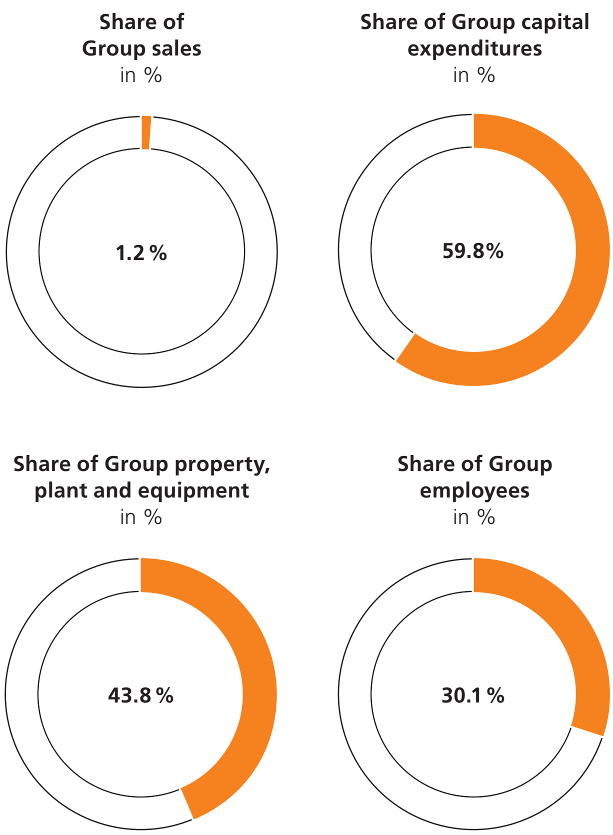
Holding / Projects

The Holding / Projects segment provides centralized and cross-segment services for the Group companies, including in the areas of finance, marketing and public relations, law, information technology, research and development, and repair and maintenance. In addition, projects of the PCC Group are managed in their developmental phase within this segment, as in the case of the silicon metal production plant in Iceland and the dimethyl ether facility in Russia.

In addition to the Group holding company PCC SE, the Holding / Projects segment includes the following portfolio

Holding / Projects segment (incl. consolidation) Figures in € m	**2018**	2017	Absolute change	Relative change
Net external sales, consolidated	**9.5**	8.4	1.2	13.8 %
Sales to other PCC segments	**44.6**	38.5	6.1	15.9 %
Total sales of the segment (total operating performance)	**54.1**	46.9	7.3	15.6 %
EBITDA	**1.3**	−3.3	4.7	> 100 %
Property, plant and equipment	**371.6**	272.8	98.8	36.2 %
Capital expenditures on intangible assets and property, plant and equipment	**100.9**	45.8	55.1	> 100 %
Employees (at Dec. 31)	**1,045**	911	134	14.7 %

Key facts and figures for the Holding / Projects segment 2018



companies: PCC IT S.A., PCC Apakor Sp. z o.o., LabMatic Sp. z o.o. and Ekologistyka Sp. z o.o., all of which are based in Brzeg Dolny. These affiliates, supplemented by the Headquarters business unit of PCC Rokita SA, are primarily involved in the provision of cross-company and intra-Group services. Also consolidated within this segment is distripark.com Sp. z o.o., Brzeg Dolny, a joint subsidiary of PCC Rokita SA and PCC SE. Products of the PCC Group and, since 2017, products of third-party suppliers, are marketed directly to smaller customers (B2B) via the internet platform of this portfolio company. Through distripark GmbH, Kamp-Lintfort, this activity was also expanded to the German market in 2017. The liquidity of both start-ups was supported in 2018 by further loans from their parent companies, an approach that will continue in 2019.

In addition, the two project companies of PCC SE, the Icelandic entity PCC BakkiSilicon hf. and the Russian joint venture OOO DME Aerosol, Pervomaysky, are incorporated within the Holding / Projects segment. The latter associate is accounted for using the equity method. The commissioning of the 20,000 metric ton production plant for high-purity, aerosol-grade dimethyl ether (DME), which we built together with a long-standing Russian partner in the Tula region, took place in December 2018. By the end of the year, the first batches of DME had already been produced in the expected quality, with the qualification process for potential customers likewise having begun. This project is partly financed by a Russian bank.

In the state-of-the-art silicon metal plant of PCC BakkiSilicon hf., which has a total capacity of 32,000 metric tons, the first of the two electric arc furnaces was started up on April 30, 2018. The second furnace was ignited in August 2018. Since then, the furnaces themselves have largely been operating stably. However, some adjustments still need to be made to the raw material supply and the handling of the finished products, with more major modifications required for the flue gas treatment section of the dust extraction system. Final takeover of the plant by PCC BakkiSilicon hf. has therefore not yet taken place. Nevertheless, silicon metal has already been produced, with the first material qualification procedures having been completed with a number of major customers. PCC SE now envisages that the plant will be put into regular service in the course of the second half of 2019.

Through PCC Seaview Residences ehf., Húsavik (Iceland), PCC SE has also been investing since 2017 in the construction of apartments for employees of PCC BakkiSilicon hf. This company is likewise consolidated in the Holding / Projects segment. The company Elpis Sp. z o.o., which was jointly founded by PCC Rokita SA and PCC Exol SA for the development of planned activities in Malaysia, and its Malaysian project company PCC Oxyalkylates Malaysia Sdn. Bhd., Kuala Lumpur, also belong to this segment. The latter company was included in the scope of consolidation of PCC SE for the first time in 2018.

Earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA) of the Holding / Projects segment amounted to €1.3 million in the past fiscal year and were thus a significant improvement on the previous year's figure of €–3.3 million. However, this result includes a positive one-off effect in the amount of €9.7 million resulting from the penalties received by PCC BakkiSilicon hf. for the delay in the hand-over of its silicon metal plant. It is worth noting that only a portion of the losses resulting from the delay can be compensated by such default penalties. The number of employees at the segment as of the end of the fiscal year was 1,045 (previous year: 911).

Business development and financial performance

Development of selected Group indicators

Key financials of the PCC Group per IFRS		2018	2017	Absolute change	Relative change
Sales	**€m**	**779.2**	683.2	96.0	14.1 %
Polyols segment	€m	145.4	145.4	0.0	0.0 %
Surfactants segment	€m	124.5	120.5	3.9	3.3 %
Chlorine segment	€m	155.5	100.9	54.6	54.1 %
Specialty Chemicals segment	€m	222.1	199.3	22.8	11.5 %
Consumer Products segment	€m	21.3	21.8	−0.5	−2.4 %
Energy segment	€m	12.3	11.8	0.5	4.4 %
Logistics segment	€m	88.7	75.2	13.5	18.0 %
Holding/Projects segment	€m	9.5	8.4	1.2	13.8 %
Gross profit	€m	232.8	202.8	30.0	14.8 %
EBITDA [1]	€m	105.3	73.8	31.5	42.7 %
EBIT [2]	€m	68.9	41.0	27.9	68.1 %
EBT [3]	€m	41.5	13.6	27.9	205.0 %
Net result	€m	37.5	8.7	28.8	332.8 %
Gross cash flow [4]	€m	111.8	60.3	51.5	85.5 %
ROCE [5]	%	7.6	5.0	2.6 [9]	50.8 %
Net debt [6]	€m	756.7	632.9	123.8	19.6 %
Net debt/EBITDA		7.2	8.6	1.4	16.2 %
Group equity	**€m**	**150.4**	139.1	11.3	8.1 %
Equity ratio [7]	%	12.8	13.2	−0.4 [9]	−3.0 %
Return on equity [8]	%	25.9	6.3	19.6 [9]	309.8 %
Capital expenditures	**€m**	**168.6**	101.4	67.1	66.2 %
Employees (Dec. 31)		**3,476**	3,389	87	2.6 %
Germany		155	128	27	21.1 %
International		3,321	3,261	60	1.8 %

Rounding differences possible.

1 EBITDA (Earnings before Interest and other financial items, Taxes, Depreciation and Amortization)
2 EBIT (Earnings before Interest and other financial items, and Taxes) = Operating profit = EBITDA – Depreciation and amortization
3 EBT (Earnings before Taxes) = EBIT – Interest and other financial items
4 Gross cash flow = Net result adjusted for non-cash income and expenses
5 ROCE (Return on Capital Employed) = EBIT/(Average equity + Average interest-bearing borrowings)
6 Net debt = Interest-bearing borrowings – Liquid funds – Other current securities
7 Equity ratio = Equity capital/Total assets
8 Return on equity = Net result for the year/Average equity
9 Change in percentage points

Results of operations

Overall, the PCC Group ended fiscal 2018 with earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA) at € 105.3 million, significantly above (by € 31.5 million or 42.7 %) the prior-year figure of € 73.8 million. It should be noted that this includes the special effect of contractual default penalties in the amount of € 9.7 million, which were realized due to delays in the handover of the silicon metal plant in Iceland. Consolidated sales improved by € 96.0 million year on year to € 779.2 million, representing growth of 14.1 %, with increased sales volumes and the continuing high average price levels for chemical commodities as the primary drivers. The segments of the Chemicals division accounted for the largest share of sales growth with an increase of € 80.9 million. The Logistics segment achieved an increase in sales of € 13.5 million. With an increase of € 0.5 million compared to the previous year, the Energy segment saw its revenue levels remain virtually constant. Sales in 2018 were unaffected by changes in the scope of consolidation.

For most of the PCC companies, the euro is not the functional currency. Consequently, exchange rate effects in the translation of sales and earnings figures have an impact on the consolidated income statement. On the basis of unchanged exchange rates compared to the previous year, PCC Group sales would have been € 780.9 million, an increase of € 1.7 million or 0.2 %. The devaluation of the Polish złoty, the US dollar and the Russian ruble were the primary factors in this development.

In 2018, the PCC Group increased its gross profit by around € 30.0 million or 14.8 % to € 232.8 million (previous year: € 202.8 million). The share of total PCC Group sales remained almost constant at 29.9 % (previous year: 29.7 %). The main driver of this development was once again the continued robustness of economic activity. The strategy of increasingly focusing on higher-value products and specialty chemicals in selected business areas exerted a promotional effect in this regard. Added to this were local one-off items, particularly in the Chlorine segment. Countervailing effects resulted from temporary bottlenecks in the supply of raw materials due to scheduled plant shutdowns at several suppliers. In addition, business development in the Polyols segment became clouded in the course of the year, partly due to increased competitive pressure from a new market participant.

Compared to the previous year, personnel expenses increased by 23.1 % from € 68.6 million to € 84.5 million. The causes for this include a substantial increase in wage levels in Poland. The number of employees in the Group also rose – by 2.6 % from 3,389 to 3,476 as of the reporting date. Most of this increase was attributable to the Holding/Projects segment. Due to the continued growth of the PCC Group, several of its subsidiaries had to expand their payroll in 2018. In addition there was the further increase in personnel for the silicon metal plant in Iceland. The number of employees in the Intermodal Transport segment also increased as a result of expansion. By contrast, the Consumer Products segment's payroll decreased sharply as a result of the restructuring measures initiated in 2018. In regional terms, 73 new vacancies were filled in the Other Europe region and 27 in Germany, while Poland experienced a decline of 13 jobs.

At € 19.6 million, other operating income was € 10.2 million up on the prior-year figure of € 9.4 million. This increase is mainly due to the default penalties of € 9.7 million received by PCC BakkiSilicon hf. in connection with the delayed handover of the silicon metal plant in Iceland.

New products and the further development of existing customer solutions are continuously being researched in the segments of the Chemicals division. Cross-company project teams are also formed for this purpose. In the past fiscal year, the PCC Group spent € 4.5 million on research and development (R&D), once again increasing its annual commitment to this domain (previous year: € 3.5 million). In addition, two new companies based in Germany commenced operations in 2018 with the aim of further developing existing products and devising completely new solutions for customer-specific applications. The aim is to expand the PCC Group's product portfolio in the Specialty Chemicals segment over the long term.

Capital expenditures totaled € 168.6 million in 2018, € 67.1 million or 66.2 % above the prior-year level of € 101.4 million. By far the largest portion of this amount was attributable to the Holding/Projects segment, and in particular to the silicon metal production plant in Iceland. Also worthy of particular mention are ongoing replacement and expansion investments, as well as projects in the Polyols and Chlorine segments. In addition, € 10.2 million was invested in the associate OOO DME Aerosol for construction of its dimethyl ether plant in Russia (previous year: € 7.3 million).

Due to the delays that have occurred, revenues from the silicon metal plant are not expected to start flowing until some time in 2019. The same timescale applies to the DME plant. The investments completed in the Polyols and Chlorine segments in 2018 should make positive contributions to sales, gross profit and the earnings metrics of the PCC Group throughout 2019. At the same time, all completed investments can be expected to lead to an increase in depreciation, amortization and interest expense in the consolidated statement of income. In the case of uncompleted investments, however, expenses incurred will continue to be capitalized. In the balance sheet, these effects are reflected as of the 2018 reporting date in the increase in both non-current assets and non-current financial liabilities. Depreciation and amortization rose by 10.9 % from € 32.8 million to € 36.4 million in the past fiscal year.

Interest and similar expenses result from both liabilities from bonds and liabilities to banks. In the year under review, these expenses decreased slightly, by 3.5 % from € 26.3 million to € 25.4 million. Both PCC SE and other Group companies were able to finance their activities at better interest rates than in the previous year. The weighted interest rate of all interest-bearing liabilities decreased from 5.14 % to 5.03 %. However, financial liabilities increased further in the wake of the capital expenditures made. Interest accruing on the creation of a qualifying asset is capitalized during the construction period.

Gains and losses arising from foreign exchange/currency translation differences are recognized under financial result. In fiscal 2018, these produced a net effect of € – 3.8 million (previous year: € – 3.3 million).

Compared to the previous year, earnings before taxes (EBT) improved by € 27.9 million from € 13.6 million to € 41.5 million. As with EBITDA, the special effect arising from the receipt of default penalties amounting to € 9.7 million is also reflected in this figure.

Total comprehensive income of the PCC Group rose from € 14.1 million to € 27.4 million.

Net assets

Total assets increased compared to the previous year by € 121.1 million or 11.5 % to € 1,178.4 million, with the significant increase in non-current assets a particular factor in this growth. Intangible assets rose by € 6.0 million to € 41.2 million. A substantially more significant increase was recorded in property, plant and equipment: The total here grew by 16.4 % from € 119.7 million to € 848.1 million, primarily as a result of the aforementioned investment program embarked upon by the PCC Group. By far the largest portion of these capital expenditures related to the construction of the silicon metal plant in Iceland, the initial commissioning of which took place in 2018. In addition, replacement and expansion investments were made at the PCC Rokita SA site in Brzeg Dolny (Polyols and Chlorine segments) and also at PCC Intermodal S.A.

Assets pertaining to associates accounted for using the equity method decreased year on year by around € 0.3 million to € 1.2 million. This item relates primarily to the Thai joint venture shares in IRPC Polyol Company Ltd., Bangkok. The joint venture OOO DME Aerosol, which is responsible for the development, construction and operation of our dimethyl ether plant, has a balance sheet value of zero due to losses – commonly incurred by project companies at this stage – being currently higher than the carrying amount of this investment. PCC SE and the joint venture partner share 30 % of the total investment volume. The remaining 70 % is being financed by a Russian bank.

The decrease in non-current financial assets by € 6.6 million to € 2.1 million is mainly due to the change in the fair value of the block of shares held by PCC SE in the Romanian company S.C. Oltchim S.A. The reason for this is the expected insolvency of the company in the second quarter of 2019, as ascertained from information in the public domain.

Current assets decreased slightly to € 259.6 million (previous year: € 261.8 million). Inventories increased by € 11.8 million from € 61.4 million to € 73.2 million, countervailed by a decline in cash and cash equivalents of € 15.0 million from € 78.1 million to € 63.1 million. Trade accounts receivable, on the other hand, remained virtually flat versus prior year at € 81.6 million (€ 80.5 million). The change in other receivables and other assets was marginal from € 41.0 million to € 40.5 million.

At € 2.8 million, assets held for sale remained unchanged year on year. The targeted sell-off of an investment property originally anticipated for 2018 failed to materialize in the course of the past fiscal year, but is expected to take place in the second quarter of 2019.

Financial position

Total equity of the PCC Group increased by € 11.3 million to € 150.4 million. Revenue reserves/other reserves rose by € 23.4 million to € 122.3 million. On the other hand, minority interests decreased by € 1.9 million to € 43.5 million. Other comprehensive income fell by € 10.2 million from € – 10.2 million to € – 20.4 million. This was mainly due to the € 5.9 million decrease in currency translation differences from € – 15.2 million to € – 21.0 million and the fair value measurement of financial assets, both being recognized directly in equity. The latter had an impact of € – 4.2 million on equity as of the reporting date. Conversely, the remeasurement of defined-benefit pension obligations resulted in no material change compared to the previous year. The equity ratio decreased from 13.2 % to 12.8 % due to balance sheet expansion.

Long-term investments are financed with long-term borrowings. Non-current provisions and liabilities increased by € 87.6 million to € 745.9 million in 2018, with deferred tax liabilities decreasing by € 1.9 million to € 7.6 million. Non-current financial liabilities rose by € 89.2 million to € 690.8 million, due primarily to the increase in bank liabilities for financing investments. There was also an increase in bond liabilities. At € 42.4 million, other liabilities remained at the level of the previous year (€ 42.8 million).

Of the bond liabilities in existence, PCC SE redeemed in full and on maturity a total of four during 2018: bond ISIN DE000A1TM979 in the amount of €15.7 million on April 1, ISIN DE000A2AAVL7 in the amount of €8.9 million on July 1, bond ISIN DE000A2GSDP5 in the amount of €2.6 million on August 1 and bond ISIN DE000A1YCSY4 in the amount of €20.0 million on October 1. This resulted in a total repayment volume of €47.2 million for 2018. In addition, a profit participation certificate issue in the amount of €11.0 million was redeemed as of 1 January 2018. At the same time, a total of five new bonds with coupon rates between 2.0 % and 4.0 % p.a. and a variety of maturities and tenors were issued in the course of 2018. The nominal issue volume placed by the end of the year totaled €79.5 million. These funds were used for further investments in existing portfolio companies, for ongoing projects, and also, in part, for the refinancing of the liabilities due in 2018. Aside from PCC SE, the bonds of which are denominated in euros, other Group companies also issue bonds. Those issued by PCC Rokita SA and PCC Exol SA in Poland, denominated in złoty, had a value of €85.4 million as of year-end 2018 (previous year: €77.1 million). The bond issued in US dollars by the equity partner in the Icelandic project company increased in value from €63.8 million to €72.6 million year on year due to the change in the US dollar and the capitalization of interest.

Current provisions and liabilities increased by €22.2 million to €281.3 million. Within this, trade accounts payable rose by €3.4 million to €84.6 million. By far the largest part of the increase in provisions and liabilities relates to financial liabilities, which grew by €19.6 million to €128.3 million. This includes liabilities from bonds, which rose by €28.5 million to €75.7 million. This can be explained, among other things, by the higher redemption volume by PCC SE scheduled for 2019 (€65.2 million compared to €47.2 million in fiscal 2018). Redemption in full of the profit participation certificate issued by PCC SE in the amount of €11.0 million had a countervailing effect. Other liabilities decreased by €3.7 million to around €54.0 million.

Provisions for pensions and similar obligations and other provisions rose by €3.9 million to €17.7 million (previous year: €13.8 million).

Figures in €k	Dec. 31, 2018	Dec. 31, 2017
Cash and cash equivalents	63,119	78,072
Financial liabilities	819,821	710,928
Net financial liabilities	**756,703**	**632,856**

The net debt of the PCC Group rose from €632.9 million to €756.7 million in fiscal 2018. In particular, non-current financial liabilities increased due to the high level of capital expenditures implemented. At the same time, cash and cash equivalents decreased. However, due to the significant growth in earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA) compared to the previous year, the ratio of net debt to EBITDA improved from 8.6 to 7.2 in the year under review. As a result of the ongoing high investment volume for 2019 and 2020 and the expected low increases in EBITDA over the same period, we currently expect to attain our goal of improving this figure to below 5.0 only over the longer term (beyond 2021).

Seen overall, the Group management views the development of our net assets, financial position and results of operations in fiscal 2018 as positive, due in particular to the improved earning power exhibited. Although expectations indicated in the prior-year reports were not fulfilled in all areas, some business units nevertheless ended fiscal 2018 better than anticipated. Setting aside the delay of our silicon metal project in Iceland, a number of further important milestones for the long-term improvement of our earnings position and growing our enterprise value were also reached in 2018.

PCC SE – Condensed report per HGB (German Commercial Code)

By way of supplement to the report relating to the PCC Group, we hereby submit in the following an appraisal of the performance and development of PCC SE, parent company of the PCC Group headquartered in Duisburg, Germany. At the core of the business activities undertaken by PCC SE is a commitment to the long-term engagement in and development of its portfolio business investments. One of our primary objectives in this regard is to create and continuously increase enterprise value. As a growth-led investor with a predominantly long-term view, PCC SE supports its affiliates and portfolio companies in their development and in the expansion of their particular strengths. Aside from actively managing our investment portfolio, our main tasks include the strategic stewardship and control of our affiliated companies at home and abroad. A further focus lies on cross-group financing activities together with market observation and advisory services, with the purpose of further developing our group of companies through competence-related diversification. We focus in particular on positioning ourselves in less competitive submarkets and market niches. We concentrate our investments primarily in the higher-growth regions of Eastern and Southeast Europe, and – more recently – also in Asia.

The annual financial statements of PCC SE are prepared in accordance with the German Commercial Code (HGB, the German GAAP). The consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted and endorsed within the European Union (EU). This results in differences in the measurement and recognition principles applied, relating primarily to intangible assets, provisions, financial instruments, leasing transactions and deferred taxes.

The costs incurred in connection with the holding company function of PCC SE were allocated to these affiliates in fiscal 2018 under the service cost recharge agreement newly concluded with them. PCC SE also continued to charge license fees to all subsidiaries included in the scope of consolidation on the basis of existing royalty agreements. As in previous years, these were calculated using a revenue-based formula. Exempted from this rule are affiliates which, in 2018, did not generate any appreciable external sales or which have not yet adopted the PCC logo in their company style. Also exempted are affiliates of which the business operations were discontinued and which are now in the process of merely being wound down.

Business development and financial performance of PCC SE

Revenues of PCC SE increased in fiscal 2018 by €2.0 million from €4.7 million to €6.7 million. This is partly due to the increase in revenue-based license fees included in this figure as a result of significantly higher sales recorded by affiliates compared to the previous year, and partly to the amounts recovered for the first time under the new service cost recharge agreement. Revenue was also once again generated in 2018 in the form of rental income from company-owned properties, from the chartering-out of the company airplane and from the leasing of employees. These revenues were offset by expenses for purchased services, personnel and travel expenses, and legal and consulting costs.

At €3.3 million, total other operating income was significantly lower than the prior-year figure of €7.9 million. Worthy of note in this comparison is the fact that, in the previous year, income of €5.8 million (of which €5.0 million was attributable to ZAO PCC Rail, Moscow) had been generated from the write-up of financial assets. Adjusted for this exceptional item, other income in the previous year amounted to €2.1 million, including income from exchange rate differences in the amount of €1.8 million. This line item increased by €0.3 million to €2.1 million in 2018. Fiscal 2018 also saw income of €0.7 million from the repayment of a loan by PCC Bulgaria EOOD that had previously been written off.

On the cost side, personnel expenses remained constant at €5.2 million, despite the increase in the number of employees. This is mainly because most of the new employees did not start work until toward the end of 2018, and the fact that the bonus payments to the Managing Directors decreased in reflection of the lower level of consolidated net income generated in 2017 compared to 2016. Other operating expenses also decreased – by €1.6 million to €10.6 million. The main reason for this was the €1.3 million decrease, from €4.9 million to €3.6 million, in losses from exchange rate differences. In addition, expenses in respect of bonds also declined by €0.5 million to €0.7 million. Legal and consulting costs developed in the opposite direction, rising by around €0.5 million to €2.9 million, partly due to the commissioning of the DME plant, which was supported by external consultants serving PCC SE, and also new projects embarked upon by PCC SE. Other expense increases included costs arising from the maintenance of IT software and hardware.

Condensed statement of income of PCC SE per HGB (German Commercial Code) Figures in € k	**2018**	2017
Sales revenue	**6,722**	4,689
Other operating income	**3,345**	7,862
Purchased goods and services	**–396**	–508
Personnel expenses	**–5,241**	–5,239
Depreciation and amortization	**–781**	–788
Other operating expenses	**–10,560**	–12,158
Income from investments	**37,674**	34,842
Interest and similar income	**7,933**	6,139
Write-downs of financial assets	**–10,441**	–792
Interest and similar expenses	**–16,509**	–17,647
Taxes on income	**358**	–417
Income after taxes	**12,102**	**15,984**
Other taxes	**–133**	–299
Net income	**11,969**	**15,685**

At € 0.8 million, depreciation and amortization remained unchanged year on year.

Income from investments in portfolio companies increased by € 2.9 million to € 37.7 million in 2018. Once again, by far the largest share in this total was attributable to PCC Rokita SA. PCC Exol SA and PCC Energetyka Blachownia Sp. z o.o. also contributed to this line item, as did, for the first time, PCC Synteza S.A.

Interest income, again – as in the previous year – generated predominantly by affiliated companies, rose by € 1.8 million to € 7.9 million. Write-downs of financial investments amounted to € 10.4 million (previous year: € 0.8 million). This was mainly due to the impairment of the carrying amount of S.C. Oltchim S.A. as of the balance sheet date (€ 9.7 million) due to its anticipated insolvency in the second quarter of 2019.

Interest expenses decreased by € 1.1 million year on year to € 16.5 million, although liabilities from bonds amounted to € 343.2 million at the reporting date, € 39.6 million higher than the corresponding figure for the previous year of € 303.6 million. The explanation lies in the fact that the average interest rate for these bonds declined compared to the previous year. In addition, a profit participation certificate issue in the amount of € 11.0 million was redeemed in full as of January 1, 2018. The interest rate payable on this profit participation certificate was 8.75 %.

As a result of these various developments, net income came in at around € 12.0 million in fiscal 2018 (previous year: € 15.7 million).

Taking into account the distribution to the shareholder of PCC SE in 2018 from retained earnings, the aforementioned net income for the year led to the equity shown on the balance sheet rising from € 62.4 million to € 72.5 million. At the same time, liabilities increased by € 26.1 million from € 331.3 million to € 357.4 million, due primarily to the aforementioned increase of € 39.6 million in liabilities from bonds. Redemption in full of the profit participation certificate in the amount of € 11.0 million had a countervailing effect. In addition, liabilities to affiliated companies decreased from € 3.6 million to € 0.9 million. Liabilities to banks decreased from € 1.9 million to € 0.8 million, mainly because the remaining mortgage on the Duisburg company building was repaid in September. The net result of these developments was an increase in the balance sheet total to € 430.8 million (previous year: € 394.6 million). Nevertheless, the equity ratio improved marginally from 15.8 % to 16.8 % due to the increase in the equity total.

Liabilities from bonds amounted to € 343.2 million (previous year: € 303.6 million). In addition, there was an amount of € 5.0 million in liabilities from bonds still reported under liabilities to affiliated companies (previous year: € 3.8 million). In the course of 2018, four bonds with a total volume of € 47.2 million were repaid in full on maturity.

Condensed balance sheet of PCC SE per HGB (German Commercial Code) Figures in € k	Dec. 31, 2018	Dec. 31, 2017
Intangible assets	308	356
Property, plant and equipment	12,839	13,334
Financial investments	359,271	311,540
Receivables and other assets	35,374	34,507
Securities	–	–
Cash on hand and credit balances at banks	22,562	34,622
Prepaid expenses and deferred charges	185	177
Deferred tax assets	256	101
Assets	**430,795**	**394,637**
Equity	72,528	62,409
Provisions	871	712
Bond liabilities	343,155	303,585
Bank liabilities	794	1,899
Trade accounts payable	385	238
Liabilities to affiliated companies	943	3,609
Other liabilities	12,120	10,984
Profit participation certificate	–	10,997
Deferred tax liabilities	0	203
Equity and liabilities	**430,795**	**394,637**

At the same time, a total of five new bonds offering different coupon rates (between 2.0 % and 4.0 % p.a.) were issued in the course of 2018 with varying maturities leading to tenors ranging from May 1, 2020 to April 1, 2024. The funds generated from the new issuances were used for further investments in existing portfolio companies and ongoing projects, and also, in part, for the refinancing of the liabilities falling due in 2018.

On the assets side of the balance sheet, non-current assets increased from € 325.2 million to € 372.4 million. The main reasons for this were the increase in shareholdings in affiliated companies from € 211.7 million to € 226.8 million and the rise in loans to affiliated companies from € 87.0 million to € 126.0 million. Loans to enterprises in which participations are held likewise increased from € 2.4 million to € 5.9 million. Receivables from affiliated companies increased by € 4.1 million to € 17.5 million. At the same time, however, other assets decreased by € 3.4 million to € 6.1 million. Overall, receivables and other current assets therefore increased by € 0.9 million from € 34.5 million to € 35.4 million. Bank balances amounted to € 22.6 million on the reporting date (previous year: € 34.6 million).

Cash flow from operating activities improved from € 21.9 million to € 37.2 million, despite the significantly lower net income for the year. One of the main reasons for this development is the considerably higher impairment charge on financial assets of € 10.4 million (previous year: € 0.8 million). Sundry other assets decreased by € 3.2 million. In the previous year, there had been an increase in this item of € 3.1 million.

Seen overall, management views the development of our net assets, financial position and results of operations in fiscal 2018 as satisfactory. Although net income for the year was lower than in the previous year, the main reason for this was the write-down of the carrying value of the Oltchim shares in the amount of € 9.7 million. Adjusted for this one-time impairment, earnings improved significantly compared to the previous year. Expectations for fiscal 2018 were likewise exceeded. And apart from the delay in relation to our silicon metal project in Iceland, a number of further important milestones for the long-term improvement of our earnings position and growing our enterprise value were again reached in 2018.

Opportunities for and risks to future development

The increasing focus of our portfolio companies on higher-grade products and the planned diversification with respect to sales markets will, in the view of management, be the primary source of opportunity for the future growth of the PCC Group. Added to this are further modernization and expansion investments through which our market position in the individual segments is to be further extended.

Aside from general economic risks, there are also political risks in the form of the Russia-Ukraine conflict, which lie outside our control. However, the impact on the operating business of our portfolio companies from this conflict remains negligible. The situation could change, however, if the EU were to extend its economic sanctions against Russia, or if Russia were to impose corresponding export restrictions or other sanctions that specifically affect the business of a PCC company. At the time of preparation of this management report, however, such eventualities appear to be unlikely.

In the trade conflict between China and the USA, there are currently signs of a rapprochement between the two sides, the sustainability of which is, however, yet to be proven. The possibility of a further deterioration in trade relations and the associated adverse effects this would have on global economic growth cannot currently be ruled out. Negative impact, particularly on economic growth in Europe and thus on the main sales market of PCC SE's affiliates, could also result from Brexit – the UK's anticipated exit from the European Union. It remains to be seen what consequences this will have for the future development of the PCC Group.

Other indirect factors that could affect the performance of our affiliates and thus their dividend payments to PCC SE include price change and credit or default risks. The latter should be eliminated as far as possible through the conclusion of commercial credit insurance policies by our portfolio companies. Price change risks are minimized through the conclusion of back-to-back transactions, through price formulas and/or through the use of price hedging instruments.

In addition, both PCC SE and the operationally active affiliates are exposed to the risk of changes in interest rates and foreign exchange parities. However, these again can be at least partially eliminated by hedging transactions. The foreign exchange rate and foreign currency risk encountered in the PCC Group should be significantly reduced once the euro has been introduced into Poland as its official currency. This is, however, unlikely to happen in the near future.

Our affiliates in the Chemicals division are, in particular, also exposed to the risk of rising environmental protection costs in the wake of increasingly stringent waste, effluent and other pan-European environmental regulations. Investment requirements possibly resulting from these could, in the future, have a negative effect on the earnings position of this division and thus also on the dividend flows from the portfolio companies concerned to PCC SE. The same applies to possible additional charges arising in the future in connection with the EU's REACH Regulation (covering the registration, evaluation and authorization of chemicals). The utilization of further potential for savings may, however, compensate to some extent for any additional costs incurred.

In our financial planning, we continue to anticipate regular liquidity inflows arising from the issuance of corporate bonds. Obstacles that may arise within the SME bonds market segment could possibly – at least temporarily – lead to liquidity bottlenecks. Consequently, work is continuing to replace some of the liquidity loans granted to subsidiaries by bank loans. Moreover, any new large-scale projects will only be implemented if appropriate project financing can be obtained for them. In addition to corporate bonds, the development of alternative sources of financing at the institutional level is also to be considered over the longer term. However, the latter will require the satisfaction of certain prerequisites, including a significant reduction in our debt ratio, and we will be increasingly focusing on this objective as we move forward.

Internal control system and risk management in relation to the Group accounting process

The consolidated financial statements of PCC SE as of December 31, 2018 have been prepared in accordance with the provisions of the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB) and the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) as applicable on the closing date and as adopted in the European Union (EU), and in supplementary compliance with the statutory disclosure requirements specified in Section 315e (1) HGB (German Commercial Code).

The consolidated financial statements are prepared within the PCC Group in a multi-stage process using standardized consolidation software supplied by IDL GmbH Mitte. The pre-consolidated financial statements of individual subsidiaries, duly audited by their own auditors, are incorporated by PCC SE within the consolidated financial statements. Responsibility for advice and support with respect to the consolidation system, for the consolidation chart of accounts standardized across the Group, and for implementation of the consolidation adjustments, lies with PCC SE. The companies incorporated within the consolidated financial statements are required to abide by standard accounting and financial reporting guidelines. These also specify the recognition and valuation principles to be applied in compliance with the provisions of IFRS.

All the companies included in the consolidated financial statements are provided with a binding, uniform calendar of due dates for the preparation of their financial statements and completion of the associated audits. Automated and manual checks and controls are integrated at every stage of the process. Procedural rules ensure that all business transactions and the preparation of the annual financial statements are recorded, processed and documented in full, promptly, accurately and with correct period allocation. Before final submission to PCC SE, a quality-assuring review process is performed within the subsidiaries of the PCC Group by their own executive bodies or with direct involvement of their management. This internal procedure concludes with a formal written confirmation of the system's effectiveness, together with a signed release of the financial statements of the individual companies and related information for incorporation in the consolidated financial statements.

Internal control system and risk management in relation to the ongoing control of affiliates

PCC SE controls its affiliates on the basis of a rolling three-year planning regime, with the budget for the current fiscal year being reviewed twice annually. Any necessary adjustments are documented in Forecast I or Forecast II, as the case may be. However, the original budget remains the point of reference for the ongoing monthly reporting of the individual companies. The binding submission dates for budget planning, Forecast I and Forecast II, and also the individual monthly reports, are communicated and agreed for the following 12 months at the end of each fiscal year on the basis of a Group-wide reporting calendar.

The current performance of the individual affiliates is the subject of regular review meetings. These are attended not only by members of the Group financial control and performance management teams but also by members of the associated departments of the individual affiliates/business units and the senior management of PCC SE, together with the management or business unit director of each individual entity. The Managing Directors and the members of the Administrative Board of PCC SE also perform supervisory board duties at various affiliates. Both within these oversight bodies and in the aforementioned review meetings, any deviations from budget at the affiliates/business units are discussed and countermeasures considered. The implementation of the latter is the responsibility of the local management in each case.

Aided by a treasury information platform available throughout the organization, PCC SE also continuously reviews developments in relation to the liquidity situation and exposure to foreign exchange fluctuations within the Group. Aside from weekly cash flow reports, the Group Controlling department also prepares a rolling six-month liquidity plan – updated at the beginning of each month – on the basis of the data and information submitted. Liquidity planning at PCC SE is performed by senior management with a 24-month horizon in respect of loan financing. The information is then made available to the Administrative Board. Fluctuations in liquidity and temporary cash requirements in the individual entities and segments can thus be quickly identified and then resolved within the Group.

Sustainability report / Non-financial report

The "Sustainability report / Non-financial report" is a voluntary section that contains information pursuant to Sections 289b to 289e HGB (German Commercial Code) and Sections 315b and 315c HGB. In compliance with Section 317 (2) sentence 4 HGB, it is not subject of the audit.

We safeguard our future as a company and contribute to securing the continued viability of our social fabric through sustainable development and responsible social and environmental activities. The pursuit of sustainability is thus a core component of our long-term strategy. For the Group holding company PCC SE, sustainability in the economic sense means ensuring that the management and optimization of its international investment portfolio are consistently aligned to enhancing the existing enterprise value of the PCC Group and to creating new wealth. Above all, this core task incumbent upon PCC SE means ensuring responsible governance geared to reducing exposure to business risks.

The economic component of sustainability goes hand in hand with other aspects: for example, the protection of the environment and natural resources or responsible action in the social domain. We attach particular importance to credible and transparent communication with all PCC stakeholders. Our growth should not restrict the opportunities available to future generations; it should instead contribute to opening up new possibilities for them. Economic success and responsibility for the creation also of ecological and social benefit are inextricably linked. This holistic understanding of sustainable development is the basis of our value-driven Group-wide growth strategy.

On the following pages we present the components of the Sustainability Report of the PCC Group:

- **Brief description of the business model**
- **Corporate social responsibility at PCC**
- **Sustainability in the PCC Group companies**
- **Non-financial report**

Brief description of the business model

Headquartered in Duisburg, Germany, PCC SE is an investor focused on the long term. As a multi-investment enterprise, PCC has a diversified portfolio of Group companies primarily active in the production of chemical commodities, specialty chemicals and silicon metal. It also has major interests in the field of container logistics. PCC was founded in 1993 by Waldemar Preussner, who, as its sole shareholder, is today Chairman of the Administrative Board of PCC SE.

With around 3,500 employees in 18 countries, the PCC Group generated consolidated sales amounting to € 779.2 million in 2018, around 14.1 % more than in the previous year. The majority of these revenues, 85.8 %, was generated by the five segments of the Chemicals division – Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products – operating primarily at sites in Central and Eastern Europe, and above all in Poland. In the same period, PCC's earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA) came in at € 105.3 million. Group capital expenditures in 2018 totaled € 168.6 million, arising mainly from the construction of our state-of-the-art and environmentally compatible silicon metal plant in Iceland and the further expansion in our chemical production activities.

The Group strategy of PCC is aligned to sustainable business investments and operational development, with the aim, in particular, of generating further enterprise value. As a growth-led investor predominantly aligned to the long term, the holding company PCC SE supports its portfolio of affiliated businesses in their entrepreneurial development and in the expansion of their various specific strengths. The existing investment portfolio is subject to a regime of proactive management and continual optimization. Group policy encompasses not only ongoing scrutiny of further projects and acquisitions with the objective of competence-related diversification into new market segments, but also engagement in non-core activities that we develop, possibly only to a certain degree of market maturity, and then offer for sale. Overall, this approach is intended to create the basis for further sustainable growth going forward.

The largest site of the PCC Group is located in the small Polish town of Brzeg Dolny, about 40 kilometers northwest of Wrocław. There, PCC manufactures chemicals such as polyols, chlorine, chlorine by-products and downstream derivatives, surfactants and resin additives for the automotive, furniture, detergent and plastics industries. As an example, the proprietary polyol Rokopol iPol® is the primary component in the production of cold-cure foam for particularly comfortable mattresses. The Chemicals division as a whole is the main source of sales and earnings for our Group. In addition, our container logistics connect European destinations, partly via our own transshipment terminals, and in the Energy segment we operate a number of modern power plants. Within the Holding/Projects segment, 2018 saw us provisionally commission our silicon metal plant in Iceland and complete our DME plant in Russia.

Corporate social responsibility at PCC

Our sense of CSR or corporate citizenship forms the foundation of our sustainability strategy. For us, CSR means assuming ethical responsibility for sustainable business practices that are fair, economically effective and environmentally sound, and in this way giving due and responsible consideration to the concerns of all stakeholders reliant on or affected by our Group. We have anchored the specific commitment of the PCC Group to responsible interaction with society in special guidelines for those areas in which the interests of the respective stakeholders come into contact with our own. One example of this is our Code of Ethics. This is binding for all employees in the Group and stipulates, among other things, the rules of fairness and reliability that apply in our dealings with colleagues and with our business partners.

As an international conglomerate operating in many different markets, PCC maintains in some cases very close relationships with a wide variety of interest groups: Aside from our employees from various cultures, these include our customers, suppliers and other business partners, the residents neighboring our 41 locations in 18 countries, the private subscribers to our bonds, institutional investors and banks, not to mention government and public institutions such as regulatory authorities or universities.

We engage in regular dialog with our stakeholders – a process that helps us meet their expectations and find the right responses to emerging trends in our markets and in society. Examples of our approach include the information evenings for investors and stakeholders that are arranged annually in several German cities, and the Investors' Day, always held in early summer, to which PCC SE invites its direct investors to our Group headquarters in Duisburg-Homberg. Our two Group companies PCC Rokita SA and PCC Exol SA, both listed on the Warsaw Stock Exchange (GPW), also jointly organize an annual Investors' Day, as well as various information events, some in collaboration with Wrocław University of Science and Technology.

However, the principle of open and transparent communication with all stakeholders is only one aspect of our commitment to social responsibility. In practice, CSR at PCC means, for example, that we do not tolerate corruption, that we guarantee the safety of our employees in the workplace and that we always comply with environmental regulations. We make socially accepted standards our own, thereby underpinning them further. As a conscientious corporate citizen, we are also committed to adhering to standards that go beyond those generally accepted: for example, in the resolute support of environmental protection initiatives.

The holding company PCC SE assumes responsibility for strategic positions and mission statements in Group-wide areas such as transparency in communication with our bond subscribers. Meanwhile, the individual PCC Group companies serve as the actual drivers of the dialog with diverse interest groups at our different sites.

PCC's sustainability policy:

- PCC SE and all companies of the PCC Group are committed to an ethical and sustainable approach in all business activities.
- All actions are based on the principles of the worldwide Responsible Care® initiative. This represents the efforts of the chemical industry to continuously improve environmental protection and occupational health and safety – irrespective of legal requirements.
- PCC strives for a corporate culture in which continuous improvement, sustainable competitiveness and outstanding performance are in line with ethical standards.
- PCC assumes ethical responsibility for sustainable, economically effective, ecological and fair business practices.
- The Group's social responsibility is an integral part of the corporate philosophy.
- All employees of the PCC Group are trained according to their function, authority and qualifications to assume the responsibilities incumbent upon them.
- Our sustainability strategy is implemented in practice by the individual PCC companies in our Group segments, i.e. our five Chemicals segments and the Logistics, Energy and Holding/Projects segments.

Sustainability in the PCC Group companies

The recent history of our two largest chemical companies, PCC Rokita SA and PCC Exol SA – both of which are committed to CSR and count among the most advanced enterprises in their industry, both within Poland and beyond – exemplifies how sustainability is successfully implemented through our PCC Group affiliates. PCC Rokita SA is the main sales and earnings generator of the PCC Group and is one of Poland's biggest chemical manufacturers. PCC Rokita SA is also the largest chemical producer in Lower Silesia. Through substantial investments in the modernization and expansion of production capacities, we have not only formed with PCC Rokita SA a flourishing chemical subgroup over the last decade and a half, we have also created what is now also an important economic factor for the region, for example as a major and multi-award-winning employer. PCC Rokita SA also supplies large parts of the nearby town of Brzeg Dolny with environmentally friendly district heat through its modern cogeneration plant.

At the end of last year and for the third time in a row, PCC Rokita SA was included in the RESPECT sustainability index as one of only 31 companies – only two of them from the chemical industry – among the nearly 500 companies listed on the Warsaw Stock Exchange. So far, this is the only index of its kind in Central and Eastern Europe. In 2017, PCC Rokita SA was recognized with the "Klony" award by the Polish Bank Ochrony Środowiska (Bank for Environmental Protection) in the category "Significant Environmental Benefit", in particular for the complete switchover of its chlorine production operation to the environmentally friendly membrane process. In recent years, PCC Rokita SA has also received several awards in recognition of its economic importance for the region. In 2018, for example, the Polish weekly newspaper Wprost named PCC Rokita SA an "Eagle of the Polish Economy".

And the other companies of PCC are also extending their commitment to sustainability, above all PCC Exol SA, the surfactants manufacturer of our Group. Working on its own initiative, PCC Exol SA has adopted a pioneering role in CSR reporting and sustainable surfactant production, both within our organization and beyond. Within the framework of its sustainability reports, our subsidiary regularly conducts interviews with representatives from its social and business environment, the results of which are used in the evaluation and orientation of its sustainability commitment. PCC Exol SA has received several awards for this initiative. In 2018, for example, the Group company was one of the winners of the "CSR Silver Leaf" accolade presented by the weekly magazine Polityka, and was honored by the business newspaper Puls Biznesu as a "Super-Ethical Company". PCC Exol SA also received several awards for its sustained economic success. In 2018, the monthly journal Polish Market, for example, once again awarded it the title "Grand Pearl of the Polish Economy" for its leading position among the country's particularly fast-growing companies.

An important product group of PCC Exol SA is that of feedstocks for the cosmetics industry. In addition to economic and ecological aspects, one of the most important criteria governing the qualification of suppliers of cosmetic raw materials is compliance with the system of Good Manufacturing Practices (GMP) as certified by the European Federation for Cosmetic Ingredients (EFfCI). PCC Exol SA is the first company in Poland to implement and successfully register this system. One of the most important requirements for the approval of suppliers by international cosmetics and detergent manufacturers is the reporting of environmental impacts within the framework of the Carbon Disclosure Project (CDP). PCC Exol SA's goal here is to reduce CO_2 emissions by 15 % between 2015 and 2020. And the company has developed and implemented an energy management system with a view to achieving this target.

Taken as a whole, our five PCC Chemicals segments exemplify the sustainability commitment of the individual PCC production units. They continue to increase the efficiency of their production facilities, they introduce increasingly advanced and environmentally friendly technologies, and their chemical innovations improve the quality of products that many people use in their everyday lives. In this way, the Chemicals division not only ensures its long-term business success, but also contributes to the protection of resources, the climate and our natural environment. In our companies, we also explicitly promote the social engagement of our employees.

The companies in our Chemicals segments Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products pursue sustainability in the first instance in what they produce. The intensive work of scientists and researchers in the chemical industry, including in PCC laboratories, is increasingly focused on developing new product concepts that offer commercial promise while at the same time contributing to products in many industries becoming more durable, safer and more environmentally acceptable. As a rapidly growing chemicals producer, PCC is part of a key industry of the 21st century. For example, the innovative chemical substances used by our chemical companies ensure that hydraulic oils need to be changed less frequently and that houses can be thermally insulated more effectively; they enable the production of more dermatologically sound cosmetics, and of comfortable foams that are also virtually emission-free and exceptionally flame-retarding. Our ambition is that our chemistry should not only be creative and innovative, but also sustainable.

We further pursue sustainability in the manner in which we produce our chemical products and applications. We are conserving the planet's limited raw material resources by ensuring their increasingly efficient use; for example, in Ghana, West Africa, we are developing a sustainable supply chain for palm kernel oil as an input material for our surfactant production. Rather than being harvested on large plantations, the kernels needed for our palm kernel oil production are collected from small farmers in the region. And we are protecting our climate by further improving the efficacy of our emission avoidance technology. By completely switching our chlorine production to energy-efficient and environmentally acceptable membrane technology, for example, we have – since 2015 – been able to cut emissions by 750 kilograms of CO_2 per metric ton of sodium hydroxide produced, compared to the conventional amalgam process. Our production meets high environmental standards and we often satisfy new requirements long before they come into force. For example, with the technology switch in chlorine production, we were almost three years ahead of new EU regulations.

Initiatives and certifications
The goal of firmly anchoring sustainability in all companies of the PCC Group is also served by the involvement of PCC units in a large number of certification procedures, in the signing of public agreements and in membership of initiatives. Several awards and high ratings in sustainability rankings, especially in the case of our production companies PCC Exol SA, PCC Rokita SA, PCC Synteza S.A. and PCC Consumer Products Kosmet Sp. z o.o. ("PCC CP Kosmet") serve to strengthen our strategic alignment in this regard. For example, three of our companies have been awarded a "Gold" certificate in the renowned EcoVadis sustainability ranking: PCC Exol SA, PCC Synteza S.A. and PCC CP Kosmet thus count among the companies with the best international ratings. PCC Rokita SA and PCC MCAA Sp. z o.o. each attained Silver status.

Documenting and communicating sustainability to the outside world also raises awareness within our Group of its importance. It encourages beneficial interaction with "like-minded" companies and enables us to benchmark our progress in comparison to our competitors. And we are enthusiastically involved in initiatives to promote sustainable chemistry. Because this is also how we secure our future – very much in our own interest as well as that of the wider community. The main certifications and initiatives are each assigned to the five sustainability aspects indicated in the following.

Non-financial report

In compliance with Germany's CSR Directive Implementation Act (CSR-RUG) adopted on April 19, 2017, the PCC Group has published annually since fiscal 2017 a voluntary non-financial report pursuant to Sections 315b and 315c in conjunction with Sections 289c to 289e of the German Commercial Code (HGB). PCC SE presents its non-financial report as an integral part of the annual Group management report. Unless otherwise stated, the performance indicators relate to the companies included in the scope of consolidation. No adjustments are made in respect of the previous year to reflect changes in the scope of consolidation in the year under review.

This non-financial report is based on the requirements of the German Sustainability Code (DNK) and summarizes the key facts on the five aspects specified, namely environmental issues, employee issues, respect for human rights, social issues and the fight against corruption and bribery.

In addition, the general section of this non-financial report describes measures and initiatives of the PCC Group and individual companies that demonstrate our Group's multifaceted commitment to our social responsibility as a corporate citizen.

Below you will find key non-financial metrics of the PCC Group relating to the five sustainability aspects mentioned, plus corresponding policy guidelines, risks and mitigation measures, and also our related goals. Our approach here is to present the PCC Group as a whole and refrain from mentioning individual affiliates.

1. Environmental issues

Environmental issues in connection with our business activities affect in particular the interests of the residents around our sites and other local communities. Here we are committed to complying with all applicable regulations, rules and standards with regard to environmental protection and, in addition, to pursuing all investments on the basis of advanced, environmentally compatible, yet efficient and, in particular, energy-saving technologies. In addition to the safety of our employees, the preservation of the environment takes top priority for us. We therefore protect it, for example, through the responsible use of raw materials and the reduction of energy consumption and greenhouse gases.

PCC policy in relation to environmental issues
The great importance we attach to environmental protection in the PCC Group has a decisive influence on the choice of manufacturing processes and products, as well as informing our commitment to sustainability and safety. This is also written in our Code of Ethics, which is binding for the entire PCC Group.

We implement all our investment projects using modern, environmentally acceptable and thus also energy-saving and economically efficient technologies.

PCC strives to minimize raw material and energy consumption in its production processes and continuously analyzes possibilities for improving working methods, manufacturing operations and products. Our aim here is to ensure that these are safe and acceptable to employees, customers, the public and other stakeholders.

Every employee is jointly responsible for the protection of people and the environment in his or her working domain. The laws, regulations and internal guidelines on environmental protection, health, plant safety and occupational safety must be strictly observed at all times. Every line manager and supervisor is obliged to instruct, supervise and support his or her employees in the exercise of this responsibility.

The commercial exploitation of natural resources such as air, water and geological materials may generally only take place within the framework of a previously granted permit. The same applies to the construction and operation of production facilities as well as their modification or expansion. Any unauthorized release of substances must be avoided.

Waste must be disposed of in accordance with statutory regulations. If third parties are involved for this purpose, it must be ensured that they also comply with prevailing environmental regulations and the corresponding specifications of PCC.

Measures

PCC's business activities, and particularly our chemical production operations, exert an effect on the environment. Significant environmental impacts include emissions of air pollutants, consumption of raw materials and feedstocks, handling of hazardous substances, usage of water and energy, wastewater pollution, waste disposal, accidents and noise emissions.

The companies of the PCC Group continuously combat these impacts firstly by analyzing all areas and activities that could have an adverse effect on the environment and the efficient use of resources. In doing so, PCC carefully takes into account the information provided by all interest groups, in particular local residents. This immediate dialog with stakeholders at the local level is among the tasks and duties assigned to the respective Group companies.

Secondly, to conserve the environment and resources, we in the PCC Group pursue all our investment projects on the basis of advanced, environmentally compatible technologies that are both energy-saving and economically efficient. This relates above all to our manufacturing operations and particularly to our Chemicals division. One example of this is the switchover of our chlorine production technology to the environmentally acceptable membrane electrolysis process, which was completed in 2015. This energy-efficient technology has enabled us to significantly reduce electricity consumption by around 30 % and thus also substantially reduce CO_2 emissions: Compared to the conventional amalgam process, we save 750 kilograms of CO_2 per metric ton of sodium hydroxide produced. This technology switch has also meant that mercury, which had previously been used for chlorine electrolysis, has been completely eliminated from the production cycle. Another example is our silicon metal production plant in Iceland, which was provisionally commissioned in 2018: It has been designed as one of the most advanced in the world, in both economic and environmental terms. The plant's power requirement is entirely covered by renewable energy sources – above all the use of geothermal energy – and the installation of state-of-the-art electrostatic precipitators means the facility operates virtually free of dust emissions.

The mainstay of our Logistics segment is our intermodal container transshipment business, an operation that efficiently combines environmentally friendly rail and flexible road transport. Compared to pure road transport, our combined intermodal capability in 2018 enabled emissions savings of 190,892 metric tons of CO_2-equivalent (previous year: 158,836 metric tons of CO_2-equivalent), with a total output of 2,272.5 million ton-kilometers (previous year: 2,020.4 million ton-kilometers). These CO_2 equivalents take into account the greenhouse gases CO_2, CH_4 and N_2O, with the calculation based on data from the Federal Environment Agency dated 13 November 2018 for the reference year 2017 (source: Transport Emission Model TREMOD 5.82).

In the Energy segment, we have in recent years reduced dust emissions from 50 to 20 milligrams per cubic meter by installing modern electrostatic precipitators at our combined heat and power plant located at the Brzeg Dolny chemical site. As a result, the plant is operating even more significantly below the current limit value of 100 mg/m^3 applicable in Poland than it did before. In the Renewable Energies business unit, our focus is on the construction and operation of small hydropower plants, regarded as particularly environmentally compatible due to their relatively low impact on nature. Five of these units, four in North Macedonia and one in Bosnia and Herzegovina, have so far been connected to the grid, enabling CO_2 emission savings averaging over 22,500 metric tons per year (multi-year mean value) – calculated in comparison to the CO_2 emissions of the regional electricity supply. A sixth small hydroelectric power station is currently under construction. The four hydropower plants in North Macedonia were officially registered by the UNFCCC back in 2013 as climate protection projects under the Kyoto Protocol.

Numerous certifications, the signing of public agreements and membership of initiatives document PCC's commitment to environmental issues:

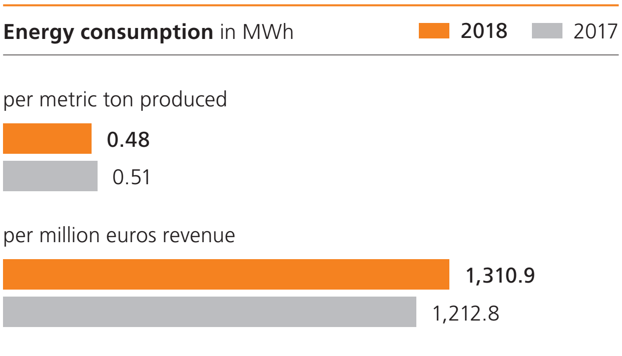
Certifications and initiatives in relation to environmental issues

Certification / Initiative	Company
Certification of environmental management systems to ISO 14001:2015	– PCC Rokita SA – PCC Exol SA – PCC Consumer Products Kosmet Sp. z o.o. (PCC CP Kosmet) – LabAnalityka Sp. z o.o. – PCC MCAA Sp. z o.o. – LabMatic Sp. z o.o. – PCC Autochem Sp. z o.o.
Certification of quality management systems to ISO 9001:2015	– PCC Rokita SA – PCC Exol SA – PCC CP Kosmet – LabAnalityka Sp. z o.o. – LabMatic Sp. z o.o. – PCC MCAA Sp. z o.o. – PCC Autochem Sp. z o.o.
Certification of energy management systems to ISO 50001:2011	– PCC Rokita SA – PCC Exol SA – PCC CP Kosmet
Certification in Good Manufacturing Practice (EFfCI)	– PCC Exol SA
Certification in Good Manufacturing Practices – Cosmetics – to ISO 22716	– PCC CP Kosmet
BRC production standards certificate issued by the British Retail Consortium	– PCC CP Kosmet
Membership of the global chemistry industry initiative Responsible Care®	– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A. – PCC CP Kosmet
Inclusion in the Global Compact of the United Nations	– PCC Exol SA
Listing in the RESPECT sustainability index of the Warsaw Stock Exchange	– PCC Rokita SA
Certified member of the Roundtable on Sustainable Palm Oil	– PCC Exol SA

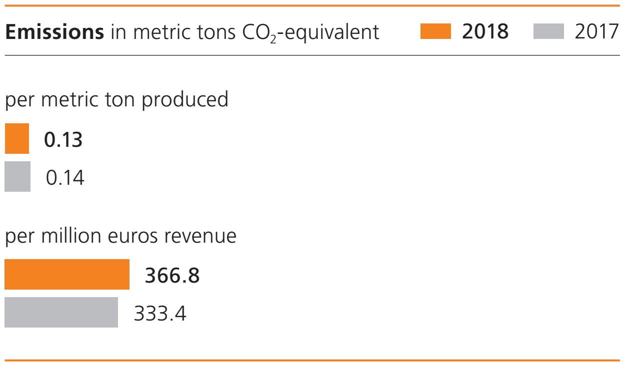
Certification / Initiative	Company
"Gold Status" rating of the sustainability platform for CSR reporting, EcoVadis (2018)	– PCC Synteza S.A. – PCC CP Kosmet
"Silver Status" rating of the sustainability platform for CSR reporting, EcoVadis (2018)	– PCC MCAA Sp. z o.o.
"Gold Status" rating of the sustainability platform for CSR reporting, EcoVadis (2017)	– PCC Exol SA
"Silver Status" rating of the sustainability platform for CSR reporting, EcoVadis (2017)	– PCC Rokita SA
Membership of the European Chemical Industry Council, CEFIC, covering the safe usage of surfactants	– PCC Exol SA
Membership of the European Committee of Organic Surfactants and their Intermediates	– PCC Exol SA
Product certifications through Ecocert according to the cosmetics standard COSMOS: Ecocert Cosmetics	– PCC Exol SA
Product certifications through Ecocert according to the cosmetics standard COSMOS: Ecocert Cosmos	– PCC Exol SA
Participation in the Carbon Disclosure Project aligned to combating climate change	– PCC Exol SA
Inclusion in the "Green Chemistry Cluster" (Poland) for the promotion of sustainable innovation	– PCC Rokita SA
Member of the initiative "Charter for Sustainable Cleaning" of the A.I.S.E.	– PCC CP Kosmet

Performance indicators
The PCC Group determines the performance indicators relevant to its business activities on an annual basis. In addition to emissions of greenhouse gases (GHG) in the definition of Scope 1, these include both energy consumption and water usage within the environmental domain. Scope 1 defines greenhouse gas emissions arising directly from our own assets or those controlled by PCC companies. In the case of energy consumption, all energy sources are recorded together, i.e. electricity, gas, heat, steam, fuel oil, gasoline and diesel, without any distinction being made in the data record. The water usage data relate to both water for the production process and wastewater. Similarly, we do not differentiate as to whether usage, consumption or emissions are due to the manufacture of a saleable end product or to internal further processing.

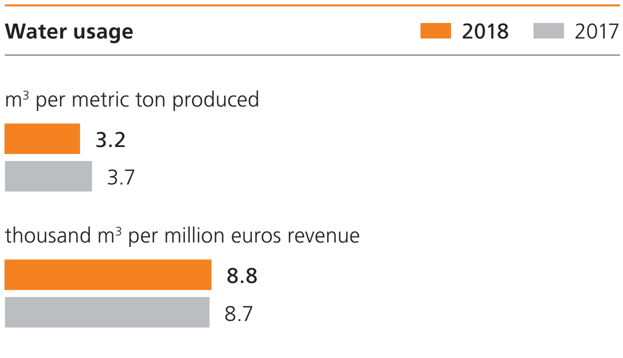
In 2018, the specific energy consumption of our affiliates in the segments of the Chemicals division amounted to 0.48 MWh per metric ton produced, a slight improvement of 5.5 % on the previous year's figure of 0.51 MWh. Total energy consumption amounted to 1,021,476 MWh (previous year: 828,551 MWh). Of this, 163,302 MWh or 16.0 % (previous year: 55,568 MWh or 6.7 %) was generated from renewable energy sources. Specific energy consumption in relation to sales revenue amounted to 1,310.9 MWh per million euros (previous year: 1,212.8 MWh).



Absolute greenhouse gas emissions rose by 25.5 % in 2018 versus the previous year, from 227,795 metric tons to 285,798 metric tons of CO_2-equivalent. Most of the greenhouse gas emissions were again attributable to carbon dioxide (CO_2). Specifically, i.e. per metric ton produced, greenhouse gas emissions were reduced year on year by 3.8 % to 0.13 metric tons of CO_2 (previous year: 0.14 metric tons of CO_2). In relation to sales revenue, greenhouse gas emissions amounted to 366.8 metric tons of CO_2 per million euros (previous year: 333.4 metric tons of CO_2).



Water usage and wastewater generation are mainly due to the manufacturing process of our affiliates in the Chemicals division. Absolute water usage in 2018 was 6,838,000 m³ (previous year: 5,935,000 m³). Related to the volumes produced in the business areas indicated, specific water usage amounted to 3.2 m³ per metric ton produced, representing a decrease of 11.7 %. In relation to sales revenue, water usage amounted to 8,800 m³ per million euros (previous year: 8,700 m³).



Goals
In the long term, the PCC Group aims to reduce specific consumption, particularly of energy and water. At the same time, the proportion of energy supplied from renewable sources is to be increased, while specific emissions of greenhouse gases are to be further reduced.

Our new silicon-metal production plant in Iceland will make a major contribution to reducing specific greenhouse gas emissions after taking into account those arising from the use of externally generated electricity, which are included in Scope 2. Despite the increase in absolute emissions, it will be possible to further reduce specific emissions, as CO_2 emissions from the Icelandic plant are well below the global average of comparable facilities. In addition to the high level of plant efficiency, this is due in particular to the exclusive use of electricity from renewable sources such as geothermal energy to power production.

2. Employee issues

Under the heading of employee issues, the first priority is always that of ensuring personnel safety. We invest in technical safety and training so as to continuously improve occupational health and safety not only within the PCC companies but also along the value chain. We regularly review compliance with our safety, health and environmental standards. Our continued investment in modern production facilities makes a significant contribution to occupational safety.

In addition, we also promote the individual development of our employees. We offer our employees scope to work under their own initiative on a results-led basis, together with opportunity to take on responsibility. They are thus given decision-making powers, with employee initiative and creativity also being specifically encouraged within the scope of each individual's potential. We support our people in their personal development, offering them task-aligned preparation as they take up new duties, and personalized continuous professional training. In our human resources management, we attach great importance to diversity, i.e. the promotion of cultural and professional variety. Discrimination of all kinds is not tolerated within the organization. And the regulations requiring the equal treatment of men and women are binding.

PCC policy in relation to employee issues
In its Code of Ethics, PCC recognizes the four basic principles of the International Labour Organization (ILO). These are:

- Freedom of association and the right to collective bargaining
- Rejection of forced labor
- Rejection of child labor
- Rejection of discrimination in employment and occupation

This means that all employees have the right to fair, polite and respectful treatment. PCC does not tolerate any discrimination or harassment of employees. Specifically, discrimination or harassment on the grounds of descent, race, religion, origin, gender, disability, age, marital status, sexual orientation, political opinions or membership of trade unions or political parties is prohibited at PCC.

Aside from the protection of the environment, the safety of our employees has top priority. PCC is therefore committed to ensuring a safe working environment at all times. In the event of an accident or malfunction, PCC takes the appropriate measures to avert, mitigate and repair the damage as quickly and effectively as possible and informs the relevant authorities.

The provisions on equality between men and women must be complied with. The equality imperative encompasses in particular areas such as task allocation, pay, training, professional development and promotion. All forms of sexual harassment in the workplace are prohibited. Sexual harassment is defined as any conduct with a sexual connotation which is undesirable to the person concerned and degrades his or her dignity.

Bullying as the deliberate exclusion and humiliation of an employee is not tolerated. Bullying is defined as systematic, persistent or repeated hostile behavior with the purpose of isolating a person at the workplace, within the workforce or even from the workplace.

PCC shall take all reasonable measures to prevent discriminatory conduct and harassment. All employees are called upon to report any discrimination or harassment in their working environment to their supervisor, the human resources department or the compliance officer.

Measures
Within the PCC Group, there are risks to employees with regard to occupational health and safety, particularly in the manufacturing PCC companies. We are actively working to create a safe working environment for our people, continuously improving working conditions by using advanced technologies and investing in modern production facilities. For example, the complete technological switchover of our chlorine production to the modern membrane process has completely eliminated mercury from the production operation, significantly improving workplace quality in the facilities concerned.

We ensure that all employees enjoy equal opportunities in every dimension for their professional development, in relation to access to further training and in terms of their promotion opportunities. In the PCC Group, we invest heavily in the training and continuous professional development of employees. Last year alone, time spent on such measures equated to 70,692 hours (previous year: 107,246 hours). The decline in the number of training and CPD hours is mainly due to the elevated training requirements of the new employees of PCC BakkiSilicon hf. in Iceland in 2017 prior to the commissioning of the silicon metal plant. Occupational health and safety is invariably given high priority in the training agenda. As a result, we were able to reduce work-related accidents with incapacity of more than one day to 42 in 2018 (previous year: 43). The number of sick days due to occupational accidents was reduced Group-wide to 1,371 (previous year: 1,718). As a result, the number of sick days due to accidents at work per employee fell to an average of 0.39 (previous year: 0.51).

We reward the commitment of our people appropriately and respect all employee rights of freedom of organization and co-determination. We reject all forms of discrimination. Backed up by insights revealed in personal discussions, the relatively high average period of service with the PCC Group of around nine years appears to indicate a certain degree of employee satisfaction. The average age of almost 40 years is evidence that we make use of the expertise of older employees while also providing entry opportunities for young people. We thus embrace diversity, promoting good team performance through a mix of complementary skills and experience. The companies of the PCC Group support their employees through flexible working time models. The scope on offer ranges from working time accounts, part-time contracts and early retirement arrangements, to home office agreements. We encourage open communication between employees and with our stakeholders. PCC's commitment to employee issues is evidenced by numerous certifications, the signing of public agreements and membership of initiatives:

Certifications and initiatives in relation to employee issues

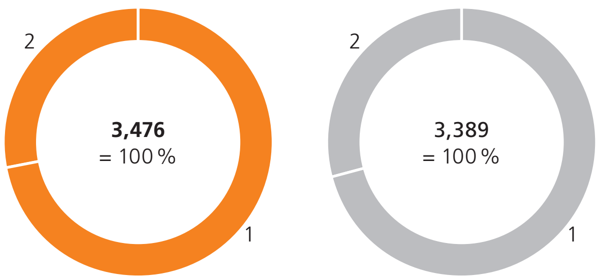
Certification / Initiative	Company
Certification according to the occupational health and safety management system assessment specification OHSAS 18001:2007	– PCC Rokita SA – PCC Exol SA – PCC CP Kosmet
Certification in Good Manufacturing Practices – Cosmetics – to ISO 22716	– PCC CP Kosmet
Certification in Good Manufacturing Practice (EFfCI)	– PCC Exol SA
BRC production standards certificate issued by the British Retail Consortium	– PCC CP Kosmet
Membership of the global chemistry industry initiative Responsible Care®	– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A. – PCC CP Kosmet
Inclusion in the Global Compact of the United Nations	– PCC Exol SA
Membership of the European Chemical Industry Council, CEFIC, covering the safe usage of surfactants	– PCC Exol SA

Certification / Initiative	Company
Membership of the European Committee of Organic Surfactants and their Intermediates	– PCC Exol SA
Certified member of the Roundtable on Sustainable Palm Oil	– PCC Exol SA
"Gold Status" rating of the sustainability platform for CSR reporting, EcoVadis (2018)	– PCC Synteza S.A. – PCC CP Kosmet
"Silver Status" rating of the sustainability platform for CSR reporting, EcoVadis (2018)	– PCC MCAA Sp. z o.o.
"Gold Status" rating of the sustainability platform for CSR reporting, EcoVadis (2017)	– PCC Exol SA
"Silver Status" rating of the sustainability platform for CSR reporting, EcoVadis (2017)	– PCC Rokita SA
Signatory of the "Diversity Charter" promoting employee diversity in companies and combating discrimination	– PCC Rokita SA – PCC Exol SA

Performance indicators

The PCC Group is an internationally active conglomeration, as is reflected not only in the worldwide sale and distribution of products and services, but also in the diversity of our employees. Around the world we employ people from 31 nations (previous year: 28). Due to our extensive investments, particularly in new regions, the number of employees is also steadily rising. In the past year alone, it increased by 2.6 % to 3,476. This growth in employee numbers can be seen across almost all divisions and segments. The proportion of women in this total amounts to 27.8 % (previous year: 29.0 %).

Employees across the Group in % ■ 2018 ■ 2017



	2018		2017
1 Male	**72.2 %**	1 Male	71.0 %
2 Female	**27.8 %**	2 Female	29.0 %

In the first and second management levels of our subsidiaries, the number of female executives more than tripled, with the proportion of women in management rising as a result to 25.9 % in the year under review (previous year: 16.8 %).

Employees in years ■ 2018 ■ 2017

Goals

PCC has set itself the goal of continuously raising the standards of health and safety for the Group's employees, with a special focus on our new sites. We continue to pay particular attention to accident prevention and health protection at the workplace, as well as to health-related prevention measures. Beyond a safe, pleasant working environment based on mutual appreciation, it is a central goal of PCC to offer all employees opportunities for ongoing development, for example through targeted training. In addition, there are to be further improvements in family/career compatibility, one of the aims being to increase the proportion of women at all levels of the Group.

3. Respect for human rights

Within its sphere of influence, PCC respects and supports the protection of international human rights in accordance with the UN Charter of Human Rights. Violations of human rights are not tolerated and are duly sanctioned upon detection and confirmation. This is underlined in particular by PCC Exol SA's inclusion in the United Nations Global Compact. PCC fully recognizes fundamental rights under the UN Charter of Human Rights.

Measures

Both PCC SE and the companies in our investment portfolio are actively committed to respecting human rights. This is documented in particular by our participation in a number of initiatives.

Initiatives to promote respect for human rights

Initiatives		Company
Membership of the global chemistry industry initiative Responsible Care®		– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A. – PCC CP Kosmet
Inclusion in the Global Compact of the United Nations		– PCC Exol SA
Signatory of the "Diversity Charter" promoting employee diversity in companies and combating discrimination		– PCC Rokita SA – PCC Exol SA

Performance indicators

As in the previous year, no violations of human rights were reported in 2018 in either the companies of the PCC Group or the holding company. Any potentially reported violation would be investigated by the Group management and sanctioned upon confirmation.

Goals

PCC is committed to fully prioritizing respect for human rights now and into the future. The respect for human rights enshrined in the Code of Ethics of the PCC Group is binding on all executive bodies, managers and employees in all PCC companies. This applies in particular, but not exclusively, to new locations in regions in which PCC has not yet been commercially active. PCC believes that monitoring of compliance with human rights must be intensified at such places.

4. Social issues

At PCC, business activity is closely linked to social responsibility. In the social sphere, we take into account not only the interests of the residents neighboring PCC sites, but also those of the general public. Our Group companies are members of international organizations in the field of CSR and implement corresponding programs. PCC SE and its subsidiaries promote social initiatives and institutions. We also support our employees in their social volunteering work and we actively engage in dialog with local communities. Our social responsibility remit includes cooperation with universities and other educational institutions as well as providing support to sport and culture.

Sponsorship money is only granted on the legal basis applicable in each case. This also requires the approval of the senior management of PCC SE or the executive board or management of the respective Group companies. Cash payments and other financial contributions to politicians, political parties, political associations or other political organizations are strictly prohibited.

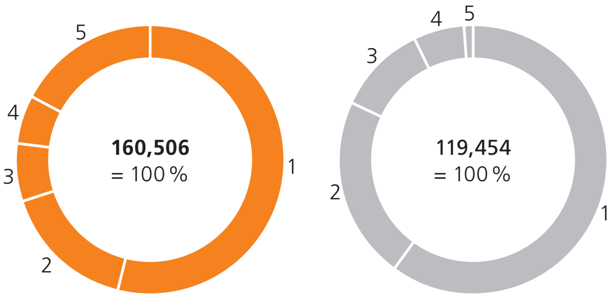
Performance indicators

The companies of the PCC Group have different stakeholders. The following value added statement shows that the largest portion of the total output generated in the Group has flowed back to our most important stakeholders, our employees. €87.1 million, or 54.3 % of value added in the 2018 reporting year, went to employees in the form of wages and salaries, employer-paid benefits for social security, pension benefits and sundry other benefits.

Distribution of value added Figures in €k	**2018**	2017
Value added	**160,506**	119,454
Distribution		
Employees	**87,086**	71,467
State	**10,540**	13,025
Investors/Lenders	**25,366**	26,295
Minority shareholders	**9,959**	7,245
Retained earnings	**27,554**	1,423

The state received 6.6 % of the value added of the PCC Group in the form of tax payments such as corporate income taxes or property taxes. Our investors, subscribers to bonds and also minority shareholders in participations received through interest payments or dividends €35.3 million or 22.0 % of the value added. The value added retained in the company is available for investments in future growth.

Distribution of value added in % 2018 2017



	2018		2017
1	Employees	**54.3 %**	59.8 %
2	Investors/Lenders	**15.8 %**	22.0 %
3	State	**6.6 %**	10.9 %
4	Minority shareholders	**6.2 %**	6.1 %
5	Retained earnings	**17.2 %**	1.2 %

Achievements related to social issues

PCC SE and its subsidiaries are involved in social causes, for example as patrons of children's homes, and at our Group headquarters in Duisburg, for example, we support the homeless relief charity "Gemeinsam gegen Kälte Duisburg e.V." In Tanzania, we have been involved in recent years with the aid organization AOHM Amani Orphans' Home Mbigili for AIDS orphans, sponsoring the construction of a house and financing study scholarships. We also sponsor local and regional sports and cultural events. For example, we are the name sponsor of the PCC Stadium in Duisburg-Homberg near our Group headquarters and are the main sponsor of the tier-five (Oberliga) soccer club VfB Homberg e.V., which is based there. Employees of our chemical plants in Poland are regularly involved in social initiatives, for example in support of orphanages, and our US subsidiary PCC Chemax, Inc. has long been a partner of an aid organization for children with disabilities in Piedmont, South Carolina. As of year-end 2018, the PCC Group currently supports 52 projects (previous year: 67).

Goals

PCC has set itself the goal of continuing to drive value creation within the Group for the benefit of all interest groups. We strive to augment our commitment to our social responsibilities through the increasing involvement of our Group companies in international organizations and initiatives in the field of CSR, and are implementing corresponding programs in pace with this effort. We also want to further expand our involvement at a non-business level, for example in the form of cooperation with universities and other educational institutions.

5. Combating bribery and corruption

PCC does not tolerate any form of active or passive corruption, extortion or bribery. This is written in the PCC Code of Ethics, which is binding on all employees of the PCC Group.

Measures
Business relations with suppliers and partners are to be conducted exclusively according to objective factual and commercial criteria. Personal interests have no role to play in such transactions. The prohibition on receiving or giving gifts applies not only to direct financial considerations, but also to other benefits which could jeopardize the commercial independence of either party. Complementary to the relevant tax regulations and approval obligations, PCC has a strict policy in place governing the granting and acceptance of benefits, gifts or invitations. Adherence to this policy must be assured at all times.

Performance indicators
In order to ensure compliance with statutory provisions and the objectives that exist in this domain, all measures aligned to preventing and sanctioning corruption are only approved once all the bodies responsible have conducted their own thorough examinations.

As in the previous year, the number of significant fines and penalties for non-compliance with laws and regulations was zero.

Anti-corruption initiatives

Initiatives	Company
Inclusion in the Global Compact of the United Nations	– PCC Exol SA
Membership of the global chemistry industry initiative Responsible Care®	– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A. – PCC CP Kosmet

Goals
PCC will continue to take uncompromising action against bribery and corruption on the basis of its zero-tolerance strategy. Our goal is to ensure that the Group remains untainted by cases of this nature.

Events after the balance sheet date

Bond WKN A13R5K3 with a placed volume of €13.7 million was redeemed in full as of January 1, 2019. It was issued on October 15, 2014, with a coupon of 6.5 % p.a.

Bond WKN A11QFD1 with a placed volume of €8.9 million was redeemed in full as of April 1, 2019. It was issued on May 15, 2014, with a coupon of 6.75 % p.a.

Effective March 22, 2019, Elpis Sp. z o.o. and PCC SE concluded a share purchase agreement for 100 % of the voting rights in PCC Oxyalkylates Sdn. Bhd., Kuala Lumpur (Malaysia). This project company is considering a potential investment in a joint production site with PETRONAS Chemicals Group in Kerteh, Terengganu Province, Malaysia.

Outlook for 2019

The focus of the PCC Group in fiscal 2019 will once again be on its predominantly long-term strategy of portfolio company investment and development. The core activities and competitiveness of the Group will likewise continue to be further enhanced through capital expenditures going forward. Green-field and brown-field projects will also be given due consideration as opportunities arise. The two current major projects, namely the silicon metal production plant in Iceland, the commissioning of which began in 2018, and the DME plant in Russia, which was completed in December 2018, will contribute to the Group's growth in the coming years. Moreover, the strategy of proactive investment portfolio management accompanied by ongoing portfolio optimization measures is likewise to be continued. The long-term objective remains to continuously increase our enterprise value.

In view of the positive business development of, in particular, PCC Rokita SA and also the majority of the other affiliated companies of PCC SE in 2018, dividend payments to PCC SE in 2019 should be on a par with those received in the previous year. By far the greatest contribution will again be made by PCC Rokita SA. Gains from the disposal of portfolio companies or other "one-offs" have not been taken into account in this forecast.

The current budget for 2019 to 2021, prepared for the operating businesses of the Group companies and affiliates in the fourth quarter of 2018, provides for an increase in sales revenue in 2019 of some 10 % to 15 %. At Group level, the assumption is that earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA) will be at the level of 2018. Once again, the Chlorine segment will make the largest contribution, with expectations that it will roughly match the good figures of the previous year. Significant earnings growth is expected in the Intermodal Transport business unit. And the Polyols and Surfactants segments should at least slightly exceed their positive prior-year figures. However, due to the difficult market situation currently prevailing, the Polyols segment will once again fall well short of its strong performance of 2017. In the Specialty Chemicals segment, on the other hand, a slight decline in earnings compared with the previous year is expected. This will mainly result from lower margins in the Commodity Trading business managed under the Specialty Chemicals segment (due to expected lower average commodity price levels). In addition, the start-ups in this segment are again likely to show a deficit in 2019. The Consumer Products segment is also expected to continue trading at a loss in 2019. However, due in particular to the improvement in the economic situation at PCC Consumer Products Kosmet Sp. z o.o. expected in 2019, the deficits incurred should be significantly lower than in the previous year. Overall, therefore, consolidated EBITDA can nevertheless be expected to match the level of 2018. Consolidated earnings before taxes (EBT), on the other hand, will probably fall significantly short of the corresponding prior-year figure, declining to the single-digit (positive) million range, mainly as a result of the further increase in the burden of depreciation and interest on the recently completed investment projects. In addition, the affiliate PCC BakkiSilicon hf. is expected to post start-up losses once it commences regular operations in 2019, with this situation likely to continue through the following year as well. For OOO DME Aerosol, which commenced operations at the end of 2018, positive results are already expected as from 2020.

Subject to positive or at least stable economic development in the coming years, the total earnings curve should rise again in 2020, with contributions coming from, in particular, the Polyols, Surfactants and Specialty Chemicals segments and also the Intermodal Transport business unit. From today's perspective, however, it will not be possible to achieve more significant earnings growth until fiscal 2021. By then, we should have seen a steady improvement in the economic situation of the new silicon metal production plant. And the Consumer Goods segment is expected to turn around in 2021 as a result of the restructuring measures now initiated. Increasing earnings should also be forthcoming in the Intermodal Transport business unit, due in part to further growth in terminal handling volumes and the increased use of our own locomotives. Positive effects on the earnings development of PCC SE are anticipated in the following years in the form of increasing dividend payments. For the years 2020 and 2021, however, PCC SE anticipates provisionally declining earnings from dividends. As a result of these developments, the indebtedness of both PCC SE and the PCC Group will initially continue to increase, at least over the short term. However, the PCC Group's long-term goal remains to improve its debt ratio to below 5.0 %.

The main revenue and earnings generator in fiscal 2019 will again be the Chemicals division, followed at some significant distance by the Logistics division. We anticipate that the operating rate within the Chemicals division will largely be comparable with that maintained in 2018. Sales volumes are expected to increase further, partly due to the year-round operation of the two new electrolyzers in the Chlorine segment. In addition, PCC BakkiSilicon hf. will begin contributing to the sales volumes (and revenues) of the PCC Group once it completes acceptance of the silicon metal plant and regular operations have commenced. Despite the expected overall lower average commodity price levels compared to those of fiscal 2018, further sales growth is thus expected in all segments. We also anticipate an increase in earnings for the majority of the segments year on year. However, the anticipated start-up losses of the silicon metal plant can be expected to burden consolidated earnings. The start-ups incorporated in 2017, which are still in the process of getting established as they focus on the development of specialty products for customer-specific applications, will still be operating at a loss. As already mentioned, losses are also expected for the Consumer Products segment in 2019, although to a much lesser extent than in previous years.

Revenues in the Logistics segment are likely to increase by around 10 % in fiscal 2019, with the intermodal transport business contributing the lion's share. Due to the existing order situation and the continuing robustness of economic activity in Europe, business development should be above the level of the previous year. The tanker haulage business and the freight car operator ZAO PCC Rail should also be able to exceed their prior-year results. In the case of ZAO PCC Rail, however, this presupposes a certain degree of stability in the Russian currency.

The Energy segment will continue to be dominated by project development in the course of 2019 and will remain of minor significance for both Group sales and Group earnings.

The strategy of proactive investment portfolio management and ongoing portfolio optimization will continue to be rigorously pursued in 2019 and beyond. As part of this approach, activities that are not regarded as part of our core business will be gradually divested, with sustainable growth and a continuous improvement in our enterprise value remaining the key criteria guiding our corporate decision-making.

Duisburg, April 29, 2019

PCC SE

Ulrike Warnecke
Managing Director

Dr. rer. oec. (BY) Alfred Pelzer
Managing Director

05 Consolidated financial statements

Total assets increased compared to the previous year by € 121.1 million or 11.5 % to € 1,178.4 million. Property, plant and equipment rose by € 119.7 million or 16.4 % to € 848.1 million, primarily as a result of the extensive investment program embarked upon by the PCC Group. Construction of the silicon metal plant in Iceland and investments at both PCC Rokita SA and PCC Intermodal S.A. were major contributors in this regard.

The Chlorine segment is a focal point of our investment activities, having been the subject of a technology switch and expansion in chlorine production, as well as construction of an MCAA plant.

Independent Auditor's Report*

To PCC SE, Duisburg

Audit Opinions

We have audited the consolidated financial statements of PCC SE, Duisburg, and its subsidiaries (the Group), which comprise the consolidated balance sheet as at 31 December 2018, the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the financial year from 1 January 2018 to 31 December 2018, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of PCC SE, Duisburg, for the financial year from 1 January 2018 to 31 December 2018. In accordance with the German legal requirements, we have not audited the content of the section "Sustainability report/Non-financial report" included in the group management report on a voluntary basis.

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 section 315e 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 2018 and of its financial performance for the financial year from 1 January 2018 to 31 December 2018, 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 the section "Sustainability report/Non-financial report" included in the group management report on a voluntary basis.

Pursuant to section 322 paragraph 3 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 section 317 HGB and 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 German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. 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.

* Note: This document is a convenience translation of the German original. The original German language document is the authoritative version.

Other Information

The managing directors are responsible for the other information. The other information comprises:

- the non-audited parts of the group management report listed in the "Audit Opinions" section of our auditor's report and
- the remaining parts of the annual report, with the exception of the audited consolidated financial statements and audited parts of the 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 audited parts of the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Managing Directors and the Administrative Board for the Consolidated Financial Statements and the Group Management Report

The managing 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 section 315e paragraph 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 managing 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 managing 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 managing 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 managing 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 administrative 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 section 317 HGB 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 managing directors and the reasonableness of estimates made by the managing directors and related disclosures.

- Conclude on the appropriateness of the managing 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 section 315e paragraph 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 managing directors in the group management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by the managing 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.

Düsseldorf, 6 May 2019

Warth & Klein Grant Thornton AG
Wirtschaftsprüfungsgesellschaft (Auditors)

Achim Krichel	Marianne Reck
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Consolidated balance sheet

Assets in € k	(Note)	Dec. 31, 2018	Dec. 31, 2017
Non-current assets		**915,963**	792,631
Intangible assets	(19)	**41,219**	35,202
Property, plant and equipment	(20)	**848,145**	728,434
Investment property	(21)	**874**	959
Investments accounted for using the equity method	(12)	**1,207**	1,466
Non-current financial investments	(22)	**2,141**	8,790
Other non-current financial assets	(23)	**17,120**	12,009
Income tax receivables		**–**	–
Deferred tax assets	(33)	**3,997**	4,020
Other receivables and other assets	(26)	**1,259**	1,752
Current assets		**259,620**	261,820
Inventories	(24)	**73,195**	61,443
Trade accounts receivable	(25)	**81,621**	80,489
Other receivables and other assets	(26)	**40,452**	41,008
Income tax receivables		**1,233**	809
Cash and cash equivalents	(37)	**63,119**	78,072
Assets held for sale		**2,795**	2,844
Assets held for sale	(20)	2,795	2,844
Total assets		**1,178,377**	1,057,296

Equity and liabilities in €k	(Note)	Dec. 31, 2018	Dec. 31, 2017
Equity	(27)	**150,447**	139,135
Subscribed capital		5,000	5,000
Capital reserve		56	56
Revenue reserves/Other reserves		122,294	98,944
Other equity items/OCI		–20,392	–10,242
Minority interests	(28)	43,490	45,378
Non-current provisions and liabilities		**745,854**	658,237
Provisions for pensions and similar obligations	(29)	676	605
Other provisions	(30)	4,367	3,800
Deferred tax liabilities	(33)	7,571	9,449
Financial liabilities	(31)	690,807	601,587
Other liabilities	(32)	42,433	42,796
Current provisions and liabilities		**281,327**	259,159
Provisions for pensions and similar obligations	(29)	82	95
Other provisions	(30)	12,566	9,253
Current tax liabilities		1,868	2,331
Trade accounts payable		84,597	81,166
Financial liabilities	(31)	128,256	108,641
Other liabilities	(32)	53,958	57,673
Liabilities associated with assets held for sale		**748**	765
Liabilities associated with assets held for sale	(20)	748	765
Total equity and liabilities		**1,178,377**	1,057,296

Consolidated statement of income

Figures in €k	(Note)	2018	2017
Sales revenue	(6)	**779,230**	683,181
Change in inventory of finished products and work in progress		5,067	4,141
Other internal costs capitalized	(7)	8,463	4,780
Purchased goods and services	(8)	559,911	489,285
Personnel expenses	(9)	84,475	68,606
Other operating income	(10)	19,622	9,388
Other operating expenses	(11)	60,905	69,265
Income from investments accounted for using the equity method	(12)	–1,761	–507
Earnings before interest and other financial items, taxes, depreciation and amortization (EBITDA)	(39)	**105,330**	73,827
Depreciation and amortization	(13)	36,400	32,832
Operating profit from continuing operations (EBIT)	(39)	**68,930**	40,996
Interest and similar income	(14)	1,877	2,112
Interest and similar expenses	(14)	25,366	26,295
Currency translation result	(15)	–3,833	–3,263
Other financial income		–	148
Other financial expenses		97	86
Earnings before taxes from continuing operations (EBT)	(17)	**41,512**	13,611
Taxes on income	(16)	3,998	4,944
Net result for the year		**37,513**	8,667
Net result attributable to Group		27,554	1,423
Net result attributable to minority interests		9,959	7,245

Consolidated statement of comprehensive income

Figures in € k	2018	2017
Net result for the year	**37,513**	8,667
Income and expenses recognized in equity for future recycling through profit or loss	**–10,089**	5,469
Exchange differences on translation of foreign operations	–5,873	7,351
Fair value measurement of financial assets	–6,013	–2,637
Fair value measurement of cash flow hedges	–6	12
Deferred taxes on items for future recycling through profit or loss	1,803	744
Income and expenses recognized in equity not for future recycling through profit or loss	**–63**	–71
Remeasurement of defined benefit pension plans	–61	–71
Other changes not for future recycling through profit or loss	–13	–14
Deferred taxes on items not for future recycling through profit or loss	11	14
Total income and expenses recognized in equity	**–10,153**	5,398
Total comprehensive income	**27,361**	14,066
Share of comprehensive income attributable to Group	17,404	5,582
Share of comprehensive income attributable to minority interests	9,956	8,484

Consolidated statement of changes in equity

Figures in €k	Subscribed capital	Capital reserve	Revenue reserves/ Other reserves	Other equity items/OCI	Equity attributable to Group	Minority interests	Total Group equity
Jan. 1, 2017	5,000	56	100,424	–14,401	**91,079**	43,970	**135,049**
Dividends paid	–	–	–1,850	–	**–1,850**	–6,452	–8,302
Changes in consolidation scope and other consolidation effects	–	–	–1,053	–	**–1,053**	–625	–1,678
Net result for the year	–	–	1,423	–	**1,423**	7,245	8,667
Other comprehensive income	–	–	–	4,159	**4,159**	1,239	5,398
– Currency translation differences	–	–	–	6,104	**6,104**	1,247	7,351
– Remeasurement of defined benefit pension plans	–	–	–	–64	**–64**	–8	–71
– Fair value measurement of financial assets	–	–	–	–2,637	**–2,637**	–	–2,637
– Fair value measurement of cash flow hedges	–	–	–	12	**12**	–	12
– Other changes not for future recycling through profit or loss	–	–	–	–14	**–14**	–	–14
– Deferred taxes recognized in OCI	–	–	–	758	**758**	–	758
Dec. 31, 2017	5,000	56	98,944	–10,242	**93,757**	45,378	**139,135**

Figures in €k	Subscribed capital	Capital reserve	Revenue reserves/ Other reserves	Other equity items/OCI	Equity attributable to Group	Minority interests	Total Group equity
Jan. 1, 2018 before adoption of IFRS 9 and IFRS 15	5,000	56	98,944	−10,242	**93,757**	45,378	**139,135**
First-time adoption of IFRS 9 Jan. 1, 2018	–	–	−29	–	**−29**	−4	**−33**
First-time adoption of IFRS 15 Jan. 1, 2018	–	–	16	–	**16**	3	**19**
Jan. 1, 2018 after adoption of IFRS 9 and IFRS 15	5,000	56	98,931	−10,242	**93,745**	45,377	**139,121**
Dividends paid	–	–	−1,850	–	**−1,850**	−6,896	**−8,746**
Changes in consolidation scope and other consolidation effects	–	–	−2,342	–	**−2,342**	−4,947	**−7,289**
Net result for the year	–	–	27,554	–	**27,554**	9,959	**37,513**
Other comprehensive income	–	–	–	−10,150	**−10,150**	−3	**−10,153**
– Currency translation differences	–	–	–	−5,873	**−5,873**	–	**−5,873**
– Remeasurement of defined benefit pension plans	–	–	–	−57	**−57**	−4	**−61**
– Fair value measurement of financial assets	–	–	–	−6,013	**−6,013**	–	**−6,013**
– Fair value measurement of cash flow hedges	–	–	–	−6	**−6**	–	**−6**
– Other changes not for future recycling through profit or loss	–	–	–	−13	**−13**	–	**−13**
– Deferred taxes recognized in OCI	–	–	–	1,813	**1,813**	1	**1,814**
Dec. 31, 2018	5,000	56	122,294	−20,392	**106,957**	43,490	**150,447**

Consolidated statement of cash flows

Figures in € k	(Note)	2018	2017
Net result for the year		**37,513**	**8,667**
Depreciation and amortization		36,400	32,832
Write-downs of financial investments		4	3
Income (–), expense (+) from income tax		3,998	4,944
Income (–), expense (+) from interest		23,489	24,183
Change in provisions for pensions and other provisions		3,939	–2,289
Interest received		231	213
Income taxes paid		–4,973	–6,556
Increase (+), decrease (–) in value adjustments for receivables and other assets		172	84
Gains (–), losses (+) from disposal of non-current assets		–290	–357
Write-ups of intangible assets and property, plant and equipment		–31	–1,022
Result from investments accounted for using the equity method		1,761	507
Other non-cash gains (–), expenses (+)		9,614	–922
Gross cash flow		**111,828**	**60,286**
Increase (–), decrease (+) in inventories		–11,752	–15,835
Increase (–), decrease (+) in trade accounts receivable		–1,341	–13,478
Increase (–), decrease (+) in accounts receivable from affiliated companies		–65	204
Increase (–), decrease (+) in other assets		784	–12,617
Increase (+), decrease (–) in trade accounts payable		3,334	18,908
Increase (+), decrease (–) in accounts payable to affiliated companies		75	35
Increase (+), decrease (–) in other liabilities		–6,414	21,593
Cash flow from operating activities		**96,450**	**59,097**
Proceeds from disposal of intangible assets		18	255
Proceeds from disposal of property, plant and equipment		2,280	1,282
Proceeds from disposal of investment property		–	124
Proceeds from disposal of non-current financial investments		363	655
Proceeds from disposal of other non-current financial assets		60	28
Capital expenditures on intangible assets		–8,773	–3,565
Capital expenditures on property, plant and equipment		–140,721	–86,561
Capital expenditures on investments accounted for using the equity method		–1,474	–2,201
Capital expenditures on non-current financial investments		–	–18
Capital expenditures on other non-current financial assets		–4,002	–1,923
Capital expenditures on the acquisition of consolidated subsidiaries and other business units		–	–193
Cash flow from investing activities		**–152,249**	**–92,119**

CONTINUED

Figures in €k	(Note)	2018	2017
Dividends paid to shareholder and owner		–1,850	–1,850
Dividends paid to minority interests		–6,896	–6,452
Payments for redemption of profit participation certificates		–10,997	–
Proceeds from issuance of bonds		97,047	126,020
Payments for redemption of bonds		–47,177	–74,164
Proceeds from banks		133,712	42,179
Payments to banks		–77,862	–26,182
Payments in respect of finance lease liabilities		–3,884	–3,535
Proceeds from the partial disposal of shares in a subsidiary without loss of control		–	5
Payments for the partial acquisition of shares in a subsidiary without gain of control		–10,447	–2,804
Interest paid		–29,812	–27,188
Cash flow from financing activities		**41,834**	**26,030**
Changes in cash and cash equivalents due to cash transactions		–13,966	–6,993
Changes in cash and cash equivalents due to foreign exchange rates		–987	996
Changes in cash and cash equivalents due to changes in consolidation scope		–	100
Cash and cash equivalents at the beginning of the period		78,072	83,969
Cash and cash equivalents at the end of the period	(37)	**63,119**	**78,072**

Notes to the consolidated financial statements

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Summary of the main accounting and valuation principles

(1) General disclosures

PCC Societas Europaea (PCC SE) is a non-listed corporation under European law headquartered in Duisburg and the parent company of the PCC Group. Its address is Moerser Str. 149, 47198 Duisburg, Germany. PCC SE is recorded in the Commercial Register of Duisburg District Court under reference HRB 19088.

The consolidated financial statements of PCC SE as of December 31, 2018 have been prepared in accordance with the provisions of the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB) and the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) as applicable on the closing date and as adopted in the European Union (EU), and in supplementary compliance with the statutory disclosure requirements specified in Section 315e (3) HGB in conjunction with Section 315e (1) HGB (German Commercial Code).

Assets, liabilities and all other balance sheet items are recognized and measured in accordance with those IFRSs applicable and mandatory as of December 31, 2018.

The closing date for preparation of the consolidated financial statements was December 31, 2018, coinciding with the closing date for the annual financial statements of PCC SE. The Group's fiscal year corresponds to the calendar year.

The annual and subgroup financial statements of the subsidiaries included in the consolidation are also prepared to this closing date. The financial statements of PCC SE and the consolidated subsidiaries are prepared in accordance with uniform accounting and valuation principles.

The currency employed in the preparation of the consolidated financial statements is the euro. The reporting currency is the euro. Unless otherwise indicated, all amounts are given in thousand euros (€ k), with the consequence that rounding differences are possible.

Individual items of the balance sheet and the statement of income of the PCC Group have, in part, been aggregated in order to improve clarity of presentation. These items are explained in the notes. The total cost approach (classification of expenses by nature) has also been retained unchanged in the consolidated statement of income.

The PCC Group presents current and non-current assets and also current and non-current liabilities as separate classification groups in the balance sheet in accordance with IAS 1.60, with further subdivision according to their respective useful lives/maturities/tenors being additionally provided where appropriate in these notes to the consolidated financial statements as of December 31, 2018.

The Managing Directors of PCC SE finalized these financial statements in their meeting of April 29, 2019, whereupon they were presented to the Administrative Board for examination and approval, and then released for publication.

(2) Changes in accounting policy; standards and interpretations for which application is not yet mandatory

Mandatory standards and interpretations applied for the first time

The following standards and interpretations, or changes thereto, were applied for the first time as mandatory in preparation of the consolidated financial statements as of December 31, 2018.

Standard / Interpretation	Mandatory first-time adoption per IASB as of	Mandatory first-time adoption in the EU as of
IFRS 15 "Revenue from Contracts with Customers"	January 1, 2018	January 1, 2018
IFRS 9 "Financial Instruments"	January 1, 2018	January 1, 2018
Amendments to IFRS 15 "Revenue from Contracts with Customers": Clarifications	January 1, 2018	January 1, 2018
Amendments to IFRS 2 "Share-based Payment": Classification and Valuation of Share-based Payment Transactions	January 1, 2018	January 1, 2018
Amendments to IFRS 4 "Insurance Contracts": Applying IFRS 9 "Financial Instruments" with IFRS 4 "Insurance Contracts"	January 1, 2018	January 1, 2018
Amendments to IFRS 1 "First-time Adoption of International Financial Reporting Standards": Annual Improvements Project Cycle 2014–2016	January 1, 2018	January 1, 2018
Amendments to IAS 28 "Investments in Associates and Joint Ventures": Annual Improvements Project Cycle 2014–2016	January 1, 2018	January 1, 2018
Amendments to IAS 40 "Investment Property": Transfers of Investment Property	January 1, 2018	January 1, 2018
IFRIC 22 "Foreign Currency Transactions and Advance Consideration"	January 1, 2018	January 1, 2018

With the exception of IFRS 9 and IFRS 15, the accounting standards to be applied for the first time as listed in the table have not had any material impact on the consolidated financial statements of PCC SE. The effects of the first-time adoption of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers" and the related clarifications are explained below.

IFRS 9 "Financial Instruments"

IFRS 9 "Financial Instruments" was adopted by the European Union (EU) in November 2016 and replaces IAS 39 "Financial Instruments: Recognition and Measurement". Adoption of the new standard is mandatory as of fiscal years beginning on or after January 1, 2018. IFRS 9 contains new rules on the classification and measurement of financial assets and on the recognition of impairment losses on financial assets, together with revised rules on hedge accounting. The central requirements can be summarized as follows:

– The classification and measurement of financial assets is based on three categories per IFRS 9 with different valuation criteria and different models for the recognition of changes in value: (1) "measured at amortized cost", (2) "measured at fair value through profit or loss", and (3) "measured at fair value through other comprehensive income". Categorization is performed as a function both of the contractual cash flows emanating from the instrument and of the business model by which the instrument is managed.

– IFRS 9 provides a three-stage model for the recognition of impairment losses. Once a financial instrument is acquired, expected losses for the next twelve months are immediately recognized (Stage 1). If the credit risk increases significantly, risk allowances equating to the full lifetime expected credit losses are recognized (Stage 2). If there is objective evidence of impairment, the incurred loss must be recognized in respect of the individual asset (Stage 3). For certain financial instruments, such as trade accounts receivable, a simplified two-stage procedure is used to determine impairment.

– IFRS 9 also contains new requirements for the application of hedge accounting to improve the presentation of an entity's risk management activities.

The PCC Group applied IFRS 9 for the first time in accordance with the modified retrospective method without restating comparative information from previous periods; such prior-period disclosures continue to be presented in accordance with IAS 39. Effects from the first-time application of the new impairment rules were recognized in equity under revenue reserves as of January 1, 2018 in the amount of € 32.8 k. Trade accounts receivable decreased by € 34.7 k.

The following table shows the effects of the transition from IAS 39 to IFRS 9 on the carrying amounts as of December 31, 2017 by category of financial instrument:

Figures in €k	Measurement category per IAS 39 [1]	Carrying value Dec. 31, 2017	Transition	Carrying value Jan. 1, 2018	Measurement category per IFRS 9 [1]
Financial assets					
Non-current financial assets	FAHfT	330	–	**330**	FVtPL
Non-current financial assets	AfS	8,461	–	**8,461**	FVtOCI
Other non-current financial assets	LaR	12,009	–	**12,009**	FAaC
Trade accounts receivable	LaR	80,489	−35	**80,454**	FAaC
Receivables from affiliates	LaR	588	–	**588**	FAaC
Receivables from associates	LaR	11,559	–	**11,559**	FAaC
Other financial assets	FAHfT	3	–	**3**	FVtPL
Other financial assets	LaR	3,812	–	**3,812**	FAaC
Cash and cash equivalents	–	78,072	–	**78,072**	–
Total		**195,321**	**−35**	**195,286**	
Financial liabilities					
Bond liabilities	FLaC	444,511	–	**444,511**	FLaC
Profit participation certificates	FLaC	10,997	–	**10,997**	FLaC
Liabilities to banks	FLaC	245,326	–	**245,326**	FLaC
Finance lease liabilities	–	9,395	–	**9,395**	–
Other financial liabilities	FLaC	1,485	–	**1,485**	FLaC
Other financial liabilities	FLHfT	5	–	**5**	FVtPL
Trade accounts payable	FLaC	81,342	–	**81,342**	FLaC
Total		**793,061**	**–**	**793,061**	

1 FAHfT = Financial assets held for trading; AfS = Available for sale; LaR = Loans and receivables; FLaC = Financial liabilities measured at amortized cost; FLHfT = Financial liabilities held for trading; FAaC = Financial assets measured at amortized cost; FVtPL = Fair value through profit or loss; FVtOCI = Fair value through other comprehensive income.

IFRS 15 "Revenue from Contracts with Customers"

The new IFRS 15 "Revenue from Contracts with Customers" was endorsed by the EU in September 2016 and is effective for annual periods beginning on or after January 1, 2018. IFRS 15 replaces IAS 18 "Revenue" and IAS 11 "Construction Contracts" and the related interpretations. IFRS 15 requires revenue to be measured at the amount of consideration the entity expects to receive for the performance of the contract. Revenue is recognized when the customer obtains control of the agreed goods and services either at a time or over a period of time and can derive benefit from them. The transfer of opportunities and risks is therefore no longer the only determinant for the recognition of sales revenues. IFRS 15 was applied by the PCC Group for the first time on January 1, 2018 using the modified retrospective method. In accordance with the transitional provisions, only contracts which had not yet been fulfilled at the time of initial adoption have been taken into account for the transition. The cumulative effect of € 19.1 k from first-time adoption was recognized directly in equity under revenue reserves as of January 1, 2018. Information relating to the comparative period has not been restated.

In comparison to the rules applicable prior to the introduction of IFRS 9 and IFRS 15 and the corresponding interpretations, the following adjustments have been made to the relevant balance sheet items:

Figures in € k	Dec. 31, 2017	Effect of IFRS 9	Effect of IFRS 15	**Jan. 1, 2018**
Non-current assets	792,631	2	–	**792,633**
of which deferred tax assets	4,020	2	–	**4,022**
Current assets	261,820	–35	24	**261,809**
of which trade accounts receivable	80,489	–35	–113	**80,341**
of which other receivables and other assets	41,008	–	137	**41,144**
Assets held for sale	2,844	–	–	**2,844**
Total assets	**1,057,296**	**–33**	**24**	**1,057,286**
Equity	139,135	–33	19	**139,121**
of which revenue reserves	98,944	–33	19	**98,930**
Non-current liabilities	658,237	–	4	**658,242**
of which deferred tax liabilities	9,449	–	4	**9,453**
Current liabilities	259,159	–	0	**259,159**
of which other provisions	9,253	–	–845	**8,407**
of which trade accounts payable	81,166	–	–21	**81,144**
of which other liabilities	57,673	–	867	**58,540**
Liabilities associated with assets held for sale	765	–	–	**765**
Total equity and liabilities	**1,057,296**	**–33**	**24**	**1,057,286**

Standards and interpretations for which application is not yet mandatory

The IASB has published standards and interpretations and/or amendments thereto listed in the following which are not yet mandatory as of fiscal 2018. Some of these standards and interpretations have not yet come into force and/or have not yet been endorsed or adopted by the EU, and have therefore not been applied by the PCC Group.

Standard / Interpretation	Mandatory first-time adoption per IASB as of	Mandatory first-time adoption in the EU as of
IFRS 16 "Leases"	January 1, 2019	January 1, 2019
Amendments to IFRS 9 "Financial Instruments": Prepayment Features with Negative Compensation	January 1, 2019	January 1, 2019
IFRIC 23 "Uncertainty Over Income Tax Treatments"	January 1, 2019	January 1, 2019
Amendments to IAS 19 "Employee Benefits": Plan Amendment, Curtailment or Settlement	January 1, 2019	January 1, 2019
Amendments to IAS 28 "Investments in Associates and Joint Ventures": Long-term Interests in Associates and Joint Ventures	January 1, 2019	January 1, 2019
Annual Improvements Project Cycle 2015–2017	January 1, 2019	January 1, 2019
Amendments to References to the 2018 Conceptual Framework in IFRS Standards	January 1, 2020	Not yet known
Amendments to IFRS 3 "Business Combinations": Clarification of the Definition of a Business	January 1, 2020	Not yet known
Amendments to IAS 1 "Presentation of Financial Statements": Amendments to the Definition of "Material"	January 1, 2020	Not yet known
Amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors": Amendments to the Definition of "Material"	January 1, 2020	Not yet known
IFRS 17 "Insurance Contracts"	January 1, 2021	Not yet known
IFRS 14 "Regulatory Deferral Accounts"	January 1, 2016	Not adopted by the EU

The PCC Group is currently determining the extent to which new, not yet mandatory standards and interpretations will influence the consolidated financial statements. Unless otherwise indicated below, the current expectation is that the standards and interpretations listed above that are not yet mandatory will not have a material impact on the consolidated financial statements.

IFRS 16 "Leases"

In January 2016, the IASB published the new standard IFRS 16 "Leases". IFRS 16 establishes principles for the recognition and measurement, disclosure and notes required in respect of leases. The objective is to ensure that lessees and lessors provide relevant information with respect to the effects of leasing transactions. At the same time, the previous accounting model according to IAS 17, in which leases were classified as operating or financial, was discarded in favor of a uniform lease accounting concept in keeping with the concept of control. Adoption into European law took place in October 2017. Application of IFRS 16 "Leases" becomes mandatory as of fiscal years starting on or after January 1, 2019. For the lessee, the standard provides for a single accounting model. In the case of the lessee, it means that all assets and liabilities arising from a lease agreement must be disclosed in the balance sheet where the term exceeds 12 months, or where the asset concerned is not classed as minor (option). For accounting purposes, the lessor continues to distinguish between finance and rental lease agreements (finance or operating leases).

The transition to IFRS 16 in the PCC Group is based on the modified retrospective method without restating the previous year's figures, which continue to be presented in accordance with the previous provisions of IAS 17. All contractually agreed lease payments to the lessor are included in the valuation of lease liabilities. Payments for lease and any non-lease components (e.g. payments for maintenance or repair costs) are not separated. Contractually agreed extension, purchase and cancelation options require discretionary decisions. Lease payments arising from extension and purchase options are included in the valuation if their exercise is sufficiently certain, based on current knowledge. Lease payments are discounted at the PCC Group's marginal borrowing rate of 5.03 % as of January 1, 2019, and the present values thus determined have been recognized as lease liabilities in the amount of € 30.4 million. The carrying amount of the rights of use corresponds to the carrying amount of the lease liabilities. In subsequent measurement, the rights of use are amortized on a straight-line basis and the lease liabilities are amortized using the effective interest method. For fiscal 2019, an effect on EBITDA of approximately €6.3 million and on net income of approximately €–1.0 million is expected.

The PCC Group has elected to exclude intangible assets from the scope of IFRS 16. In addition, short-term leases with a term of less than one year and leases in which the underlying asset is of low value continue to be expensed on a straight-line basis in accordance with exemption regulations.

(3) Scope of consolidation

The consolidated annual financial statements of the PCC Group cover PCC SE and all material subsidiaries. Subsidiaries not responsible for material business operations and regarded individually and in aggregate as being immaterial in terms of portraying a true and fair view of the net assets, financial position, results of operations and cash flows of the Group, have been omitted from the consolidation process and are therefore not reflected in the consolidated annual financial statements.

For a detailed schedule of shareholdings in accordance with Section 313 (2) HGB (German Commercial Code), please refer to Note (43).

Fully consolidated subsidiaries	**Germany**	**Abroad**
Jan. 1, 2017	**5**	**38**
– Additions	2	3
– Disposals/Mergers	–	–
Jan. 1, 2018	**7**	**41**
– Additions	2	1
– Disposals/Mergers	–	–
Consolidated subsidiaries as of Dec. 31, 2018	**9**	**42**

There were three additions to the scope of consolidation in fiscal 2018. Of these, PCC Insulations GmbH, Duisburg, has been allocated to the Polyols segment. This entity was newly established in fiscal 2018 and operates as an intermediate holding company for the production and distribution of insulation and other building materials, for which purpose it holds and manages participations in affiliates at home and abroad having the same business object.

The joint venture Elpis Sp. z o.o. established in the previous year by PCC Rokita SA and PCC Exol SA acquired all shares in PCC Oxyalkylates Sdn. Bhd., Kuala Lumpur (Malaysia), as of March 8, 2018. This local project company allocated to the Holding/Projects segment is considering a potential investment in a joint production site with PETRONAS Chemicals Group in Kerteh, Terengganu Province, Malaysia.

CATCH66 GmbH, Duisburg, was newly established in fiscal 2018 and is likewise allocated to the Holding/Projects segment. The company imports and distributes food, in particular fish and fish products.

None of the above companies fall under the scope of IFRS 3.

(4) Consolidation methods

The consolidated financial statements of the PCC Group include the individual financial statements of PCC SE and of all material domestic and foreign subsidiaries over which PCC SE has control, these having been prepared on the basis of uniform accounting policies.

Subsidiaries are fully consolidated from the time of acquisition. The time of acquisition is defined as the time at which the parent company acquires control over these Group entities. Subsidiaries remain included in the consolidated financial statements until they are no longer under the control of the parent company.

The acquisition of subsidiaries is accounted for using the purchase method. The consideration transferred in the course of a business combination is measured at fair value. This is determined from the total of the fair values of the assets transferred at the time of acquisition less the liabilities assumed from the previous owners of the acquired entity, and the equity instruments issued by the Group in exchange for control of the acquiree. Transaction costs associated with business combinations are expensed against income on incurrence.

The purchase price is distributed between the acquired assets and liabilities on first-time consolidation. If this distribution results in a positive difference between the acquisition costs and the acquired pro rata net assets, the amount of said difference is capitalized as goodwill. In the event that a negative difference is identified, this is immediately recognized as income. Any goodwill recognized is subjected to an impairment test at least once a year. For more details, please refer to Note (19).

All intercompany receivables and payables and intra-Group income and expenses are eliminated on consolidation. Intercompany results are, where material, also eliminated.

Participating interests in associated companies and joint arrangements, i.e. those entities accounted for using the equity method, are recognized at cost in the consolidated balance sheet. In subsequent periods, the equity value approach is updated in accordance with the proportionate annual result generated and the dividends received. Any difference arising on initial consolidation is taken into account in the equity valuation. At each balance sheet date, the Group investigates whether there are indications that an impairment loss needs to be recognized with respect to the shares in an associated company or a joint venture. In such a case, the difference between the carrying amount and the expected net realizable value is recognized as an impairment loss in the consolidated statement of income under income from investments accounted for using the equity method.

(5) Explanatory notes to the accounting and valuation principles

Property, plant and equipment
Property, plant and equipment are recognized at cost less accumulated scheduled depreciation and accumulated impairment charges, in accordance with IAS 16. Costs for repairs and maintenance of property, plant and equipment are immediately expensed. Regular maintenance of major plant or the replacement of major components is capitalized where additional future benefits are anticipated. The scheduled straight-line depreciation amounts are based on the following useful lives:

in years	2018	2017
Buildings and structures	5–88	5–75
Plant and machinery	3–38	3–38
Other facilities, factory and office equipment	1–30	1–29

An item of property, plant and equipment is derecognized either on disposal or when the further use of the asset is no longer expected to generate any economic benefit. The gains or losses arising from asset derecognition are determined as the difference between the net proceeds and the carrying amount of the asset, and recognized through profit or loss in the period in which the asset is derecognized. Value write-ups arising from impairment reversals are recognized in other operating income.

The residual values, useful lives and depreciation methods are regularly reviewed and, where required, adapted at the end of each fiscal year.

Investment property
Investment property, i.e. real estate held for the purpose of generating rental income or value increase, is capitalized at cost. Value write-ups are recognized under other operating income, write-downs/impairments are recognized under depreciation.

Assets in this category are accounted for using the acquisition cost model and subjected to scheduled depreciation over a useful life of 35 years.

Intangible assets
Acquired intangible assets are recognized at cost less accumulated amortization and accumulated impairment charges. Where the prerequisites for capitalization of internally generated intangible assets are satisfied, such assets are duly recognized. Intangible assets capitalized are generally amortized using the straight-line method over their estimated useful lives ranging between three and 35 years, and relate essentially to concessions for the operation of technical facilities. The intangible assets capitalized within the Group – other than goodwill – have limited useful lives.

Research and development expenses are accounted for in accordance with IAS 38 "Intangible Assets". Research costs are expensed on incurrence. Development expenses may be capitalized under certain circumstances (see IAS 38.57), depending on the possible outcome of the associated development activities. Development expenses of a project qualify for capitalization where the project is technically feasible, resulting in the generating of internal benefits, or allowing the sale of an asset, and both the intention and the funds exist to complete said asset and to utilize or sell it. Assessment of this possible outcome necessitates material assumptions by the management involved. Moreover, the Group must verify that the expenditures to be allocated to the intangible asset during its development can be reliably calculated.

Inventories

Inventories are those assets consumed in the course of manufacturing, in the provision of services (raw materials and supplies) or in the process of production (work in progress), or which are intended for sale in the ordinary course of business (finished goods and merchandise). Initial recognition is at acquisition or production cost. The subsequent measurement of inventories is based on the first-in, first-out (FIFO) principle, or on the basis of the lower of average weighted cost and net realizable value, this latter being defined as the sales proceeds that can be achieved in the normal course of business, less any completion and distribution costs that may still be incurred.

Borrowing costs

Directly attributable borrowing costs incurred as part of the acquisition, construction or manufacture of a qualifying asset are capitalized as part of the cost of acquisition, construction or manufacture. They remain capitalized until the asset is ready for its envisaged use, with the relevant interest rate being duly applied. All other borrowing costs are expensed in the period in which they are incurred.

Financial instruments

Financial assets and financial liabilities are recognized in the consolidated balance sheet once PCC SE or one of its subsidiaries becomes a party to a financial instrument. Financial assets are derecognized once the contractual rights to cash flows from the financial assets expire or the financial assets are transferred to another party together with all material risks and opportunities. Financial liabilities are derecognized once the contractual obligations are settled, canceled or have expired. Regular-way purchases and sales of financial instruments are recognized as of the transaction date, that is to say the date on which the Group commits to the purchase or sale of the asset.

Classification and measurement of financial instruments per IFRS 9

In accordance with IFRS 9, financial assets and liabilities are classified into the following measurement categories based on their nature and their intended use:

(a) Financial instruments measured at amortized cost (AC)

Financial assets are classified in the AC category if they are held within the framework of a business model geared to the collection of contractual cash flows (strict business model condition). In addition, the asset value must be structured in such a way that it only leads to fixed-term cash flows that represent interest and principal payments on the outstanding nominal amount (cash flow condition). Financial liabilities are generally classified as AC unless they are financial instruments, derivatives or liabilities held exclusively for trading and for which the fair value option has been exercised. In the PCC Group, "Trade accounts receivable" and loans and receivables reported under either "Other receivables and other assets" or "Other financial assets" are all allocated to the AC measurement category. "Cash and cash equivalents" also fall under this measurement category. All financial liabilities, with the exception of derivatives that are measured at fair value through profit or loss, are also measured at amortized cost. Additions to financial assets and liabilities are measured at fair value, which generally corresponds to the nominal value of the receivable or the loan amount granted. Non-interest-bearing or low-interest long-term loans and receivables are carried at their present value. Transaction costs directly attributable to the acquisition or issue of financial assets and financial liabilities are added to the fair value of those financial assets or financial liabilities. Financial instruments in the AC category are subsequently measured at amortized cost using the effective interest method. Changes in value are recognized in the income statement.

(b) Financial assets measured at fair value through other comprehensive income (FVtOCI)

Financial assets are classified in the FVtOCI category if they are held in a business model both to collect contractually agreed cash flows and to make sales (moderated business model condition). In addition, the asset value must be structured in such a way that it only leads to fixed-term cash flows that represent interest and principal payments for a capital transfer (cash flow condition). Equity securities never fulfill the cash flow condition, but can be voluntarily measured at FVtOCI. In the PCC Group, shares in subsidiaries that are not fully consolidated for reasons of materiality are allocated to the FVtOCI measurement category. Assets that fall under this heading include shares in subsidiaries, associates and joint ventures which, for reasons of materiality, are not fully consolidated or are included in the consolidated financial statements using the equity method. In principle, financial liabilities cannot be allocated to the FVtOCI category. Initial recognition is at fair value, which in the majority of cases corresponds to the cost of acquisition. Transaction costs directly attributable to the acquisition or issue of financial assets are added to the fair value of those financial assets. Changes in the fair value are recognized directly in equity in subsequent measurement and only recognized in profit or loss on disposal (recycling). Conversely, amounts recognized from equity securities are reclassified directly to equity on disposal of the financial instrument (no recycling).

c) Financial instruments recognized at fair value through profit or loss (FVtPL)

All financial instruments that do not meet the entry requirements of the first two categories are generally assigned to the FVtPL category. This includes equity securities not voluntarily assigned to the FVtOCI category, plus derivatives and all other financial instruments held for trading. In addition, in certain cases the fair value option for the classification of financial instruments may be exercised voluntarily but irrevocably. Financial instruments in the FVtPL category are measured at fair value both initially and subsequently. Changes in value are recognized in the income statement. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities are immediately recognized through profit or loss.

Financial assets and liabilities are only offset and disclosed as a net amount in the balance sheet where there is a legal entitlement to do so and the intention is to settle on a net basis or to discharge the associated liability simultaneously with realization of the associated asset.

Impairment of financial assets

In the case of financial assets measured at amortized cost, an accounting provision for expected impairment is recognized in the balance sheet. For trade accounts receivable, expected default rates (Stage 2 of the impairment model) are determined on the basis of historical defaults and future estimates. Specific default rates are determined for the individual Group companies in order to take into account business model characteristics as well as the respective customer structure and the economic environment of the geographic region. Additional differentiation is made by classifying the receivables portfolio on the basis of the duration of overdue payments. If there are objective indications that trade accounts receivable or other financial assets measured at amortized cost are to be regarded as impaired, they are individually tested for impairment (Stage 3 of the impairment model). This is the case, for example, if insolvency proceedings have been opened against the debtor of a receivable or if there are other substantial indications of impairment, such as a significant deterioration in creditworthiness. The allowances are recorded via a value adjustment account on the asset side. The gross value and the allowance (value adjustment) are only derecognized when the receivable becomes uncollectible.

For reasons of materiality, no expected impairments are determined for contract assets or other financial assets.

Derivative financial instruments are initially recognized at fair value as of conclusion of the associated contract. Subsequent measurement is likewise at fair value as of the respective reporting date. The method for recognizing gains and losses depends on whether the derivative financial instrument is designated as a hedge and, if so, on the nature of the hedged item. The PCC Group designates certain derivative financial instruments either as a) a fair value hedge of a recognized asset or a recognized liability, or an unrecognized firm commitment (fair value hedge), b) a hedge against certain risks of fluctuating cash flows (cash flow hedge) associated with a recognized asset or a recognized liability or an expected future transaction with a high probability of occurrence, or c) as a hedge of a net investment in a foreign operation (net investment hedge). In the reporting year and also in the previous year, the PCC Group only had cash flow hedges to account for.

On conclusion of a transaction, the Group documents the hedge relationship between the hedging instrument and the main transaction, the purpose of the associated risk management and also the underlying strategy with respect to hedging transactions. Estimates are also documented both at the beginning of the hedging relationship and thereafter as to whether the derivatives used in the hedging relationship extensively compensate for changes in the fair value or the cash flows of the underlying transactions.

The effective portion of changes in the fair value of derivatives designated as cash flow hedges is recognized under other comprehensive income, with the ineffective portion being recognized directly through profit and loss. Amounts accrued under equity are recycled to profit or loss in the period in which the hedged underlying affects income.

In the event that a hedging contract expires, is sold or no longer fulfills the criteria for recognition as a hedge, the gain or loss accumulated in equity remains in equity and is only recycled to profit or loss once the originally hedged, future transaction takes place. If the future transaction is no longer expected to occur, the cumulative gains or losses in equity are immediately recycled to profit or loss.

Classification and measurement of financial instruments per IAS 39

The PCC Group adopted the rules of IFRS 9 in respect of financial instruments as of January 1, 2018. Information relating to the comparative period has not been restated. Per IAS 39, the financial instruments of the PCC Group were classified and measured as follows:

a) Financial assets recognized at fair value through profit or loss

Financial assets recognized at fair value through profit or loss are those held for trading or which have been designated as belonging to this category on first-time recognition. A financial asset is assigned to this category if it has essentially been acquired with a view to short-term resale. Derivatives likewise belong to this category where they are not qualified as hedges. Financial assets measured at fair value through profit or loss are recognized at their fair value. Any gain or loss arising from such measurement is added to or deducted from income.

b) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable cash flows that are not quoted on an active market. Financial assets assigned to this category are recognized in the balance sheet under "Trade accounts receivable", "Other receivables and other assets" and "Cash and cash equivalents". Loans and receivables are subsequently stated at amortized cost using the effective interest method. If there are objective indications of impairment, they are subjected to individual value adjustments. The assessment of the value adjustment requirement is based on experience with respect to the solvency of the customer, the age structure of the asset, days overdue, any existing insurance policies, and customer-specific risks.

c) Financial assets available for sale

Financial assets available for sale are non-derivative financial assets which do not fall into any of the other categories described. Essentially, they are measured at fair value determined on the basis of market quotations. Participating interests of which the fair value cannot be reliably determined are measured at cost and written down on impairment. In the case of such participating interests, the cost of acquisition represents the best estimate of the fair value. Assets that fall under this heading include shares in subsidiaries, associates and joint ventures which, for reasons of materiality, are not fully consolidated or are included in the consolidated financial statements using the equity method. There are generally no plans to sell these participating interests to any material degree.

Changes in the carrying amounts of monetary financial instruments denominated in a foreign currency within the category of "Financial assets available for sale" are recognized through profit or loss where such changes result from fluctuations in foreign exchange rates. Other changes in the carrying amount of financial assets available for sale are recognized under other comprehensive income. Interest gains arising from application of the effective interest method in respect of securities in the category "Available for sale" are recognized through profit or loss. Dividends payable on equity instruments available for sale are taken to income once the Group becomes legally entitled to payment. If financial assets classified as available for sale are sold or become impaired, the cumulative changes in fair value recognized in equity are recycled through the income statement.

Financial liabilities are categorized either at fair value through profit or loss or as other financial liabilities. The rules governing initial recognition and measurement and the treatment of transaction costs are similar to those applicable to financial assets. In the case of financial liabilities recognized at fair value through profit or loss, gains and losses arising from subsequent measurement in the following periods are taken to income. Other financial liabilities are measured in subsequent periods at amortized cost in accordance with the effective interest method.

Trade accounts receivable

Trade accounts receivable are recognized at amortized cost. Receivables sold within the framework of open factoring are derecognized at the time of purchase by the factor. Only the remaining pro rata amount that is not purchased continues to be reported under receivables. In silent factoring, the receivable is only derecognized at the time of payment by the factor. At the same time, a receivable from the factor is shown on a settlement account under other assets.

Cash and cash equivalents

Cash and cash equivalents encompass cash balances and checks, credit balances at banks with an original term of up to three months, and also highly liquid financial assets available at short notice. These items are recognized at amortized cost.

Trade accounts payable; overdrafts

Trade accounts payable, overdraft liabilities and other liabilities are recognized at their repayable or settlement amount.

Provisions

Provisions are recognized when a past event has given rise to a legal or constructive obligation to a third party that will probably result in an outflow of resources in the future and the amount of the obligation can be reliably estimated. Non-current provisions are recognized at the present value of the future outflow of resources and accrue interest over the period until the expected claim is made.

Taxes on income

The PCC Group recognizes deferred taxes in accordance with IAS 12 for differences between the carrying amounts of assets and liabilities in the balance sheet and their tax base. Deferred tax liabilities are essentially recognized on all taxable temporary differences, while deferred tax assets are only recognized where it is probable that taxable profits will be available to enable their realization. The carrying amount of deferred income tax assets is examined on each closing date and reduced to the extent that it is no longer probable that sufficient income will be available against which the deferred tax asset can be wholly or partially realized. Deferred income tax claims not recognized in an earlier period are reassessed at each closing date and recognized to the extent that it currently appears probable that future taxable profits will allow realization of the deferred tax asset.

Deferred tax liabilities and deferred tax assets are netted where there is a right to do so and where they involve the same tax authority.

Current taxes are calculated on the basis of the taxable income of the company for the reporting period. The tax rates applied for each company are those applicable as of the closing date.

Leases
Concluded lease contracts are treated in accordance with IAS 17 as either finance leases or operating leases. Where all material opportunities and risks are transferred to the Group as the lessee, the Group is also assigned economic ownership. In the case of contracts that qualify as operating leases, the current lease installments are immediately expensed. Assets held as finance leases are either capitalized at the present value of the minimum lease payments or the fair value of the leased item at the inception of the lease, whichever is the lower. In the event that change of ownership to the lessee at the end of the contractual period is not sufficiently ensured, these assets are either written down over the term of the lease or over their useful life, whichever period is shorter. A lease liability is also recognized in the corresponding amount. The periodic lease payments are divided into repayment and interest components. The repayment component reduces the liability, while the interest component is recognized as an interest expense.

Revenue recognition
The PCC Group generates its sales revenue pursuant to IFRS 15 mainly in the segments of the Chemicals division by selling its own chemical products and by trading in chemical commodities and products, and in the Logistics division by providing a comprehensive range of logistics and transport services. The Group also generates sales revenue in its Energy division through electricity generation and electricity trading on the basis of both conventional and renewable energy resources.

In the recognition of revenue, the Group follows the five-step model of IFRS 15:
1. Identification of contracts with a customer
2. Identification of distinct performance obligations
3. Determination of the transaction price
4. Allocation of the transaction price to the distinct performance obligations
5. Revenue recognition on fulfillment of the distinct performance obligations

Revenue is recognized net of sales tax or value-added tax, cash discounts, bonuses and rebates, either at the time or over the period in which the customer gains control of the agreed goods and/or services and is able to derive benefit from them. The majority of the performance obligations of the PCC Group are fulfilled at one and the same time. The relatively subordinate form of revenue recognition over a period of time occurs primarily in the Energy division in the sale of electricity and the provision of services. Essentially, the PCC Group's sales activities are not based on any material financing components. The average payment period is 14 days.

The Group recognizes contract liabilities for unfulfilled performance obligations with consideration already received from the customer, and reports this amount in the balance sheet under other liabilities. If, on the other hand, the Group meets a performance obligation, the claim for consideration in the Group is recognized as a contract asset in other receivables and other assets, unless this claim is linked solely to the passage of time.

Interest income is recognized pro rata temporis using the effective interest method. Dividend income is recognized once the right to collect payment arises.

Government grants and assistance
In accordance with IAS 20, government grants and assistance are recognized in the consolidated financial statements of the PCC Group as deferred income on the liabilities side, provided that there is reasonable assurance that the entity will comply with any conditions attached to the grant or assistance, and that the grant or assistance will be received. The release of this deferred income is effected through profit and loss under other operating income over the full period of depreciation assigned to the asset created.

Exploration for and evaluation of mineral resources
Expenditures on viable exploration wells and also for non-productive development wells are capitalized in accordance with IFRS 6. The expenditures are recognized through to exploitation as assets in course of construction. Once production begins on a positive find, the asset is reclassified to plant and machinery. The capitalized expenses are amortized over the maximum period of production as determined by expert appraisal. If annual investigation of the resources should result in a change in this lifetime estimate, the amortization period is adjusted accordingly. In the event of the find being determined as unviable in subsequent periods, the asset is written off by way of an unscheduled impairment.

Foreign currency translation
The consolidated financial statements have been prepared in euro, the functional currency of the parent company.

Each company within the Group determines its own functional currency. The items contained in the financial statements of the company concerned are measured using this functional currency. Foreign currency transactions are initially translated into the functional currency at the spot rate applicable on the transaction date.

Monetary assets and liabilities in a foreign currency are translated into the functional currency on each closing date using the spot rate applicable as of that date. All foreign exchange differences are recognized through profit or loss with the exception of translation differences arising from foreign currency loans where these are recognized as hedges of a net investment in a foreign operation. The latter are recognized directly in equity until the net investment is sold, and only on derecognition are they recycled through profit or loss. Deferred taxes arising from the translation differences of these foreign currency loans are likewise recognized directly in equity.

For entities for which the euro is not the functional currency, non-monetary items that are measured at historical cost in a foreign currency are translated at the rate prevailing on the date of the transaction. Non-monetary items measured at their fair value in a foreign currency are translated at the rate applicable at the time of ascertaining the fair value.

All assets and liabilities resulting from the acquisition of a foreign operation are recognized as assets and liabilities of that foreign operation and translated at the spot rate prevailing on the closing date.

For entities for which the euro is not the functional currency, the assets and liabilities of foreign operations are translated into euro as of the closing date. Income and expenses are translated at the weighted average rate for the fiscal year. The translation differences arising from this are recognized as a separate item in equity. The accumulated amount recognized for a foreign operation in equity is recycled through profit or loss on disposal of that foreign operation.

The exchange rates of the currencies of importance to the consolidated financial statements are indicated in the following table:

	Closing rate		Average rate	
Currency exchange rate for 1 €	**Dec. 31, 2018**	Dec. 31, 2017	**2018**	2017
Bosnian convertible mark (BAM)	**1.9558**	1.9558	**1.9558**	1.9558
Bulgarian lev (BGN)	**1.9558**	1.9558	**1.9558**	1.9558
Belarusian ruble (BYN)	**2.4734**	2.3553	**2.4054**	2.1783
Czech koruna (CZK)	**25.7240**	25.5350	**25.6470**	26.3260
Icelandic króna (ISK)	**133.2300**	125.0500	**127.7301**	120.5400
North Macedonian denar (MKD)	**61.4950**	61.4907	**61.5111**	61.5743
Malaysian ringgit (MYR)	**4.7317**	4.8536	**4.7634**	4.8527
Polish złoty (PLN)	**4.3014**	4.1770	**4.2615**	4.2570
Romanian leu (RON)	**4.6635**	4.6585	**4.6540**	4.5688
Russian ruble (RUB)	**79.7153**	69.3920	**74.0416**	65.9383
Ukrainian hryvnia (UAH)	**31.7141**	33.4954	**32.1289**	30.0475
Turkish lira (TRY)	**6.0588**	4.5464	**5.7077**	4.1206
Thai baht (THB)	**37.0520**	39.1210	**38.1644**	38.2960
US dollar (USD)	**1.1450**	1.1993	**1.1810**	1.1297

Use of assumptions and estimates

Preparation of the consolidated financial statements as of December 31, 2018 in compliance with IFRSs requires certain estimates and assumptions to be made by the management that influence the amounts attributed to recognized assets, liabilities, contingent receivables and contingent liabilities as of the reporting date, and also the income and expenses generated during the fiscal year. The main areas of application for assumptions and estimates are encountered in determining the useful lives of non-current assets, the recognition and measurement of other provisions and pension provisions, and also income tax. It is also necessary when determining goodwill impairment to assess the value-in-use of the cash-generating unit to which the goodwill is assigned. Calculation of the value-in-use requires an estimate of future cash flows from the cash-generating unit and also a suitable discount rate for determining the present value of those future cash flows. Estimates are based on empirical values and other assumptions considered appropriate under the given circumstances. They are continuously reviewed and may deviate from the actual values and figures that come to light. The carrying amounts of items affected by estimates can be found in the following notes and also in the balance sheet.

Notes to the individual items of the consolidated statement of income

(6) Sales revenue

Sales revenue in fiscal 2018 amounted to €779.2 million (previous year: €683.2 million). This includes €0.1 million in revenue from contract liabilities at the beginning of the reporting period. Of these revenues, €690.6 million came from the sale of goods and €88.7 million from the provision of services, the latter primarily in the form of transport services.

The predominant portion of revenues from the sale of goods relates to the manufacture and sale of chemical products, which are essentially realized at a specific point in time. In total, the point-in-time revenue recognition amounted to €754.9 million, with time-period revenue recognition at €24.3 million.

The following aggregated transaction prices relate to performance obligations under existing contracts that have not yet been settled or have only been partially settled as of December 31, 2018:

Figures in €k	2019	2020	2021 and thereafter
Expected revenue from contracts as of December 31, 2018	27	23	23

Group sales in the reporting segments are spread across various geographic markets. For more information, please refer to the Segment Report under Note (17).

(7) Other internal costs capitalized

The total of other internal costs capitalized essentially derives from manufacturing costs in respect of work or assets capitalized, with any material intercompany profits eliminated.

The total for this item increased in the year under review from €4.8 million to €8.5 million.

(8) Purchased goods and services

Figures in €k	2018	2017
Cost of raw materials, supplies and merchandise	445,702	403,972
Cost of external services	95,324	66,814
Transport and warehouse costs	18,885	18,500
Total purchased goods and services	**559,911**	**489,285**

The cost of purchased goods and services increased compared to the previous year by €70.6 million or 14.4 % to €559.9 million. This was mainly due to higher procurement prices for raw materials throughout the 2018 fiscal year and a further increase in capacity utilization in individual business segments. The worldwide supply of some raw materials was significantly scarcer, with a corresponding effect on prices ensuing. Temporary bottlenecks in the supply of raw materials due to scheduled plant shutdowns coinciding at several suppliers further accentuated this trend. The increase in expenses for purchased services was due to the Intermodal Transport business segment, and in particular to the increased number of containers transported. Moreover, outbound freight charges were reclassified from other operating expenses to expenses for purchased services. The impact amounted to €25.0 million; the previous year's figure has not been restated.

(9) Personnel expenses

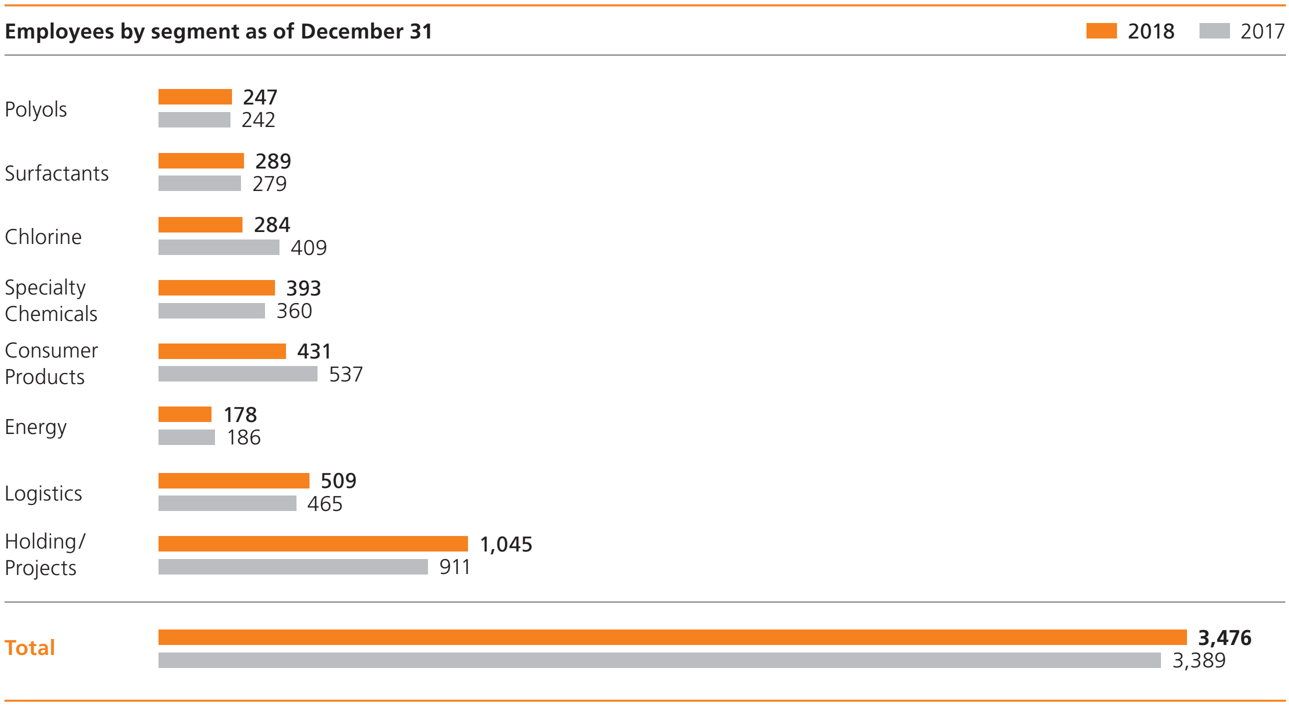
Figures in €k	2018	2017
Wages and salaries	70,521	57,391
Social security contributions	13,732	11,148
Pension costs	221	67
Total personnel expenses	**84,475**	**68,606**

Personnel expenses increased by €15.9 million or 23.1 % year on year to €84.5 million. This increase is primarily due to the growth in personnel numbers following capacity expansions across all segments. Continuing high wage pressures, particularly in Poland, also had a contributory effect. At 3,476 as of the end of 2018, the number of employees was 87 or 2.6 % higher than at the end of the previous year (3,389).

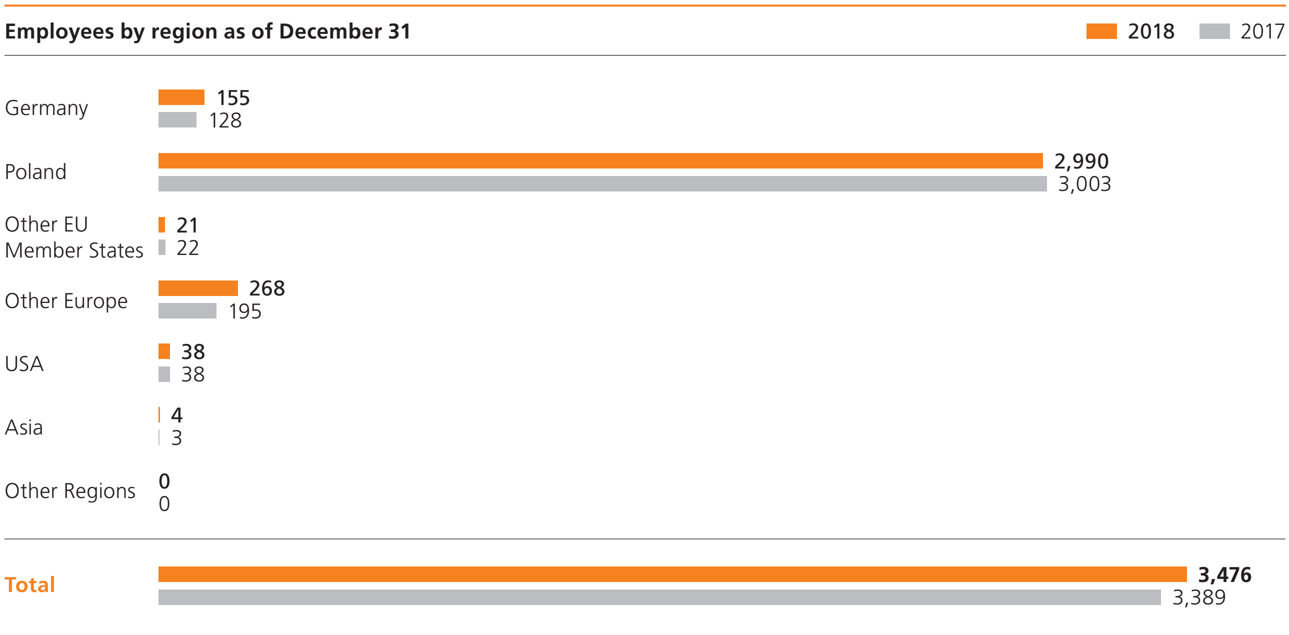
	Dec. 31, 2018	Dec. 31, 2017
Salaried employees	1,647	1,652
Waged employees	1,829	1,737
Total employees at year-end	**3,476**	**3,389**

The companies of the PCC Group employed an average of 3,460 people in 2018 (previous year: 3,207), an increase of 253 or 7.9 % versus prior year.

The following graphic shows the breakdown of the number of employees by Group segment as of the balance sheet date. The corporate service functions are allocated to the Holding/Projects segment. The silicon metal plant of PCC BakkiSilicon hf., Húsavík (Iceland), is also assigned to this segment.



The geographic distribution of employees as of the closing date was as follows:



(10) Other operating income

Figures in € k	2018	2017
Income from receipt of default penalty payments	9,695	–
Rental and similar income	570	541
Income on disposal of property, plant and equipment	302	375
Income from costs recharged	270	227
Income from the reversal of individual value adjustments and ECL on accounts receivable	265	678
Income from the reversal of other provisions	144	2,158
Insurance reimbursements	123	295
Income on disposal of financial assets	20	11
Income from write-ups on non-current assets	31	1,019
Sundry other operating income	8,202	4,084
Total other operating income	**19,622**	9,388

Other operating income rose by € 10.2 million from € 9.4 million to € 19.6 million in the year under review. This increase is mainly due to the receipt of contractual penalties in the amount of € 9.7 million resulting from the late commissioning by the plant constructor of the two furnaces of the silicon metal plant in Iceland. The contract for the turnkey handover of the plant also provides for further contractual penalties which are currently being examined. Any amounts over and above the penalties received for late commissioning have not yet been accounted for.

Income from the release of other provisions decreased by € 2.0 million to € 0.1 million, while income from write-ups on property, plant and equipment fell from € 1.0 million to € 0.0 million.

Income from the reversal of value adjustments and ECL allowances on receivables fell from € 0.7 million to € 0.3 million.

As in the previous year, other operating income comprises various individual items that are not in themselves material.

(11) Other operating expenses

Figures in €k	2018	2017
Maintenance and repair expenses	7,750	9,062
General business expenses	6,262	5,152
Legal, consultancy and auditing expenses	6,026	5,230
Other taxes	5,303	6,400
Travel and hospitality expenses	4,885	3,527
Insurance premiums	4,235	3,593
Rent and similar expenses	3,602	3,605
Non-wage personnel expenses	2,612	2,853
Marketing, selling and distribution expenses	2,002	2,237
Increase in individual value adjustments and ECL on accounts receivable	306	415
Losses on disposal of property, plant and equipment	32	29
Freight expenses	–	16,881
Sundry other operating expenses	17,890	10,280
Total other operating expenses	**60,905**	**69,265**

Other operating expenses decreased by €8.4 million or 12.1 % from €69.3 million to €60.9 million in fiscal 2018.

The biggest single item in the previous year was freight expenses at €16.9 million. As of the 2018 reporting year, outbound freight charges are allocated to cost of materials; the figure for the previous year has not been restated. Please refer to Note (8).

Other taxes include all tax expenses that are not taxes on income. Domestic and foreign taxes on income, and also deferred taxes, are separately disclosed in the tax result and explained under Note (16). In the past fiscal year, other taxes amounted to €5.3 million, €1.1 million below the previous year's figure of €6.4 million.

In general, other operating expenses have tracked the general development of costs arising from the business expansion that occurred in the year under review. Maintenance and repair expenses fell by €1.3 million from €9.1 million in the previous year to €7.8 million in the past fiscal year. These expenses were mainly attributable to the asset-intensive businesses of the Chemicals segments. Expenses for end-of-year accounting activities and consultancy charges rose slightly year on year by €0.8 million to €6.0 million. The increase in other operating expenses was mainly due to the costs associated with demolishing and dismantling the obsolete chlorine electrolysis plant.

Research and development expenses for the current reporting period came in at €4.5 million (previous year: €3.5 million).

(12) Income from investments accounted for using the equity method

Figures in € k	2018	2017
Equity value as of Jan. 1	**1,466**	
Changes in consolidation scope	–	2,201
Additions	1,474	–
Proportionate net profit/loss	–2,408	–728
Adjustments for negative value	647	222
Other changes	28	–229
Equity value as of Dec. 31	**1,207**	**1,466**

Because of losses allocated to OOO DME Aerosol, Pervomaysky (Russia), which exceed the equity value recognized, the equity method has been deferred in the case of this entity. The losses are to be carried in a subledger and will be initially offset against future income before any positive share of earnings is recognized in the consolidated statement of income. As of December 31, 2018, the accumulated losses amounted to € 0.9 million (previous year: € 0.4 million). This means that, in the year under review, losses amounting to € 0.6 million have not been recognized.

OOO DME Aerosol Figures in € k	2018	2017
Income statement		
Revenues	–	–
EBITDA	–222	–159
EBT	–1,503	–510
Net result	–1,294	–443
Balance sheet		
Non-current assets	19,372	10,979
Current assets	2,369	1,013
Non-current liabilities	19,936	10,639
Current liabilities	3,380	1,782

IRPC Polyol Company Ltd. Figures in € k	2018	2017
Income statement		
Revenues	21,118	22,993
EBITDA	–2,466	8,530
EBT	–2,673	–2,026
Net result	–3,523	–2,026
Balance sheet		
Non-current assets	4,670	5,463
Current assets	10,996	11,197
Non-current liabilities	135	990
Current liabilities	12,933	9,774

The additionally acquired shares in IRPC Polyol Company Ltd. of Bangkok (Thailand) were also consolidated as an acquisition in the past fiscal year. Proportionate losses for the fiscal year amounting to € 1.8 million were taken into account in the additions value of € 1.5 million recognized at the time of purchase.

The other changes relate to currency translation effects.

(13) Depreciation and amortization

The depreciation of property, plant and equipment increased due to the continuation of the extensive capital investment program of the PCC Group that has been put in train in recent years. In fiscal 2018, amortization of intangible assets and depreciation of property, plant and equipment amounted to €36.4 million, 10.9 % more than in the previous year.

Figures in €k	2018	2017
Amortization of intangible assets	1,965	1,890
Depreciation of property, plant and equipment	34,435	30,942
Total depreciation and amortization	**36,400**	**32,832**

Amortization of non-current intangible assets relates to industrial property rights and similar rights. There were no impairments of goodwill either in the reporting year or the previous year. For further information in relation to goodwill, please refer to Note (19). In fiscal 2018, unscheduled write-downs on intangible assets and on property, plant and equipment amounted to €1.2 million (previous year: €0.4 million). These mainly relate to impairment losses in the Chlorine segment and minor adjustments in other segments.

(14) Interest result

The result from interest income and interest expenses improved by 2.9 % from €–24.2 million in the previous year to €–23.5 million in fiscal 2018. The breakdown of the individual items reads as follows:

Figures in €k	2018	2017
Interest and similar income	**1,877**	**2,112**
Interest income from deposits	60	101
Interest income on bank balances	1,179	586
Interest income from discounting of non-current provisions	–	542
Interest income from discounting of non-current receivables	–	258
Derivative financial instruments	–	–
Interest income on intercompany loans	638	625
Interest and similar expenses	**25,366**	**26,295**
Interest payable on bonds	17,251	17,429
Interest payable on profit participation certificates	–	938
Interest payable on bank liabilities	6,944	7,184
Interest payable on factoring arrangements	151	200
Interest expense from discounting of non-current provisions	136	40
Interest expense component of finance lease payments	290	298
Derivative financial instruments	583	191
Interest expense on loans received from affiliates	10	14
Interest result	**–23,489**	**–24,183**

As in the previous year, the largest single item was interest payable on bonds, which remained almost flat year on year at € 17.3 million. Despite increased financial liabilities arising from the investment programs, both the parent company of the PCC Group and its subsidiaries benefited from the continued low interest rate environment for new issuances in the market. Several companies of the PCC Group issue bonds to finance investments and refinance maturing liabilities. Under Note (31) can be found a detailed breakdown of bond liabilities and their tenors.

Interest attributable to investment projects representing qualifying assets is capitalized during the construction phase in accordance with IAS 23. In the past fiscal year, interest expenses totaling € 17.1 million (previous year: € 12.1 million) were recognized on the assets side. The capitalization rate was 5.9 % (previous year: 4.3 %). The weighted interest rate across all interest-bearing liabilities in fiscal 2018 was 5.0 %, a decrease of 0.1 of a percentage point on the rate of 5.1 % prevailing in the previous year.

(15) Currency translation result

Figures in € k	2018	2017
Foreign exchange rate gains	31,722	11,475
Foreign exchange rate losses	35,555	14,738
Currency translation result	**–3,833**	**–3,263**

Gains and losses arising from foreign exchange/currency translation differences are recognized under financial result. Both expenses and income from currency translation increased year on year. The net effect on earnings was € –3.8 million, € 0.5 million below the prior-year figure of € –3.3 million.

(16) Taxes on income/Tax expense

Figures in € k	2018	2017
Current taxes on income, Germany	1,633	2,598
Current taxes on income, abroad	2,439	2,708
Current income tax expense	**4,072**	**5,306**
Deferred tax income (–)/expense (+)	–74	–362
Total taxes on income	**3,998**	**4,944**
Other taxes incl. VAT and other excise duties	5,303	6,400
Total tax expense	**9,301**	**11,344**

Taxes on income include the income taxes paid or owed in the individual countries, and also deferred taxes recognized through profit or loss. Taxes on income are comprised of municipal trade and corporate income taxes, the solidarity surcharge payable in Germany and the corresponding foreign taxes on income. Other taxes of € 5.3 million (previous year: € 6.4 million) include property taxes, wealth taxes and other comparable taxes. These are allocated to other operating expenses.

The effective tax rate of the PCC Group decreased from 36.3 % to 9.6 %. The differences between the corporate income tax rate of 30 % applicable in Germany for 2018, which remained unchanged versus the prior year, and the effective tax rate are indicated in the following reconciliation statement:

Figures in € k	2018	2017
Earnings before taxes (EBT)	**41,512**	**13,611**
Anticipated income tax burden at parent company	12,453	4,083
Effects of changes on income tax rates	1	– 131
Foreign tax rate differentials	6,248	3,534
Results from investments accounted for using the equity method	1,761	507
Non-taxable income	– 17,081	– 14,092
Non-deductible expenses	15,145	11,112
Deduction of losses for which deferred taxes have been provided	– 919	– 1,491
Deduction of losses for which deferred taxes have not been provided	– 544	– 2
Non-period-related taxes	– 133	851
Result in special economic zones	– 59,150	– 39,016
Permanent differences	– 28,853	25,514
Other effects	75,070	14,076
Effective income tax	**3,998**	**4,944**

Individual Group companies have tax losses that can be carried forward. The following indicates the timeframes in which these tax loss carry-forwards can be used and from which deferred tax assets are created. Compared to the previous year, the amount has decreased by € 0.2 million or 2.0 %. Tax loss carry-forwards from which no deferred tax assets have been created amount to € 125.8 million (previous year: € 131.1 million).

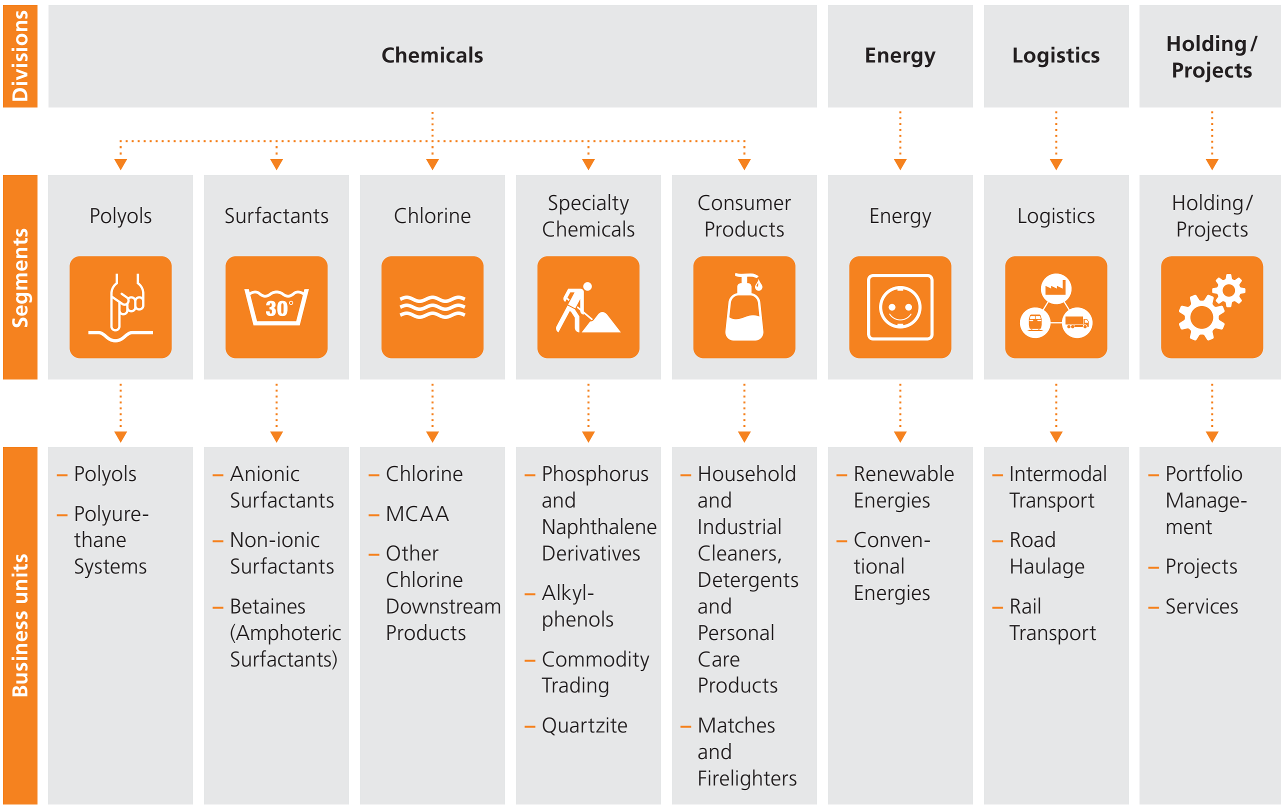
Figures in € k	Dec. 31, 2018	Dec. 31, 2017
Usable within:		
1 year	–	–
2 years	4	–
3 years	163	128
4 years	757	300
5 years and thereafter	2,321	1,192
Carried forward without restriction	5,998	7,811
Total usable tax losses carried forward	**9,244**	**9,431**

Segment report

(17) Business segment report

The PCC Group currently has some 3,500 employees working at 41 sites in 18 countries. The investment portfolio of PCC SE is divided into eight segments. The seven segments Polyols, Surfactants, Chlorine, Specialty Chemicals, Consumer Products, Energy and Logistics are assigned full operational responsibility. Allocated to these segments are 19 business units that are managed by the international companies and entities of PCC. The eighth segment, Holding/Projects, which in addition to the holding company PCC SE also includes other companies and entities, provides predominantly central Group services in the areas of finance, business development, information technology, environmental protection, site infrastructure management, research and development, engineering and technology, and maintenance and repair.

The divisions, segments and business units of the PCC Group



The assignment of the Group's businesses to the seven operational segments assists in the leverage of synergy effects and sharpens the profile of the individual operations. The adoption of this structure underscores the PCC Group's commitment to its strategy of active investment portfolio management and ongoing portfolio optimization. The management of the portfolio assets and affiliates together with examination of further acquisitions for the purpose of competence-related diversification into new market segments remains at the heart of Group policy. The underlying objective over the long term is to build a basis for sustainable growth and to continuously increase enterprise value.

The Polyols segment comprises the Polyols and Polyurethane Systems business units. Their products form the basis of PU foam materials used in a wide range of applications and a large number of industries – from the PCC foam technology iPoltec® for high-comfort mattresses to PU foam systems for the effective thermal insulation of buildings.

Pooled under the Surfactants segment are the business units Anionic Surfactants, Non-ionic Surfactants and Betaines (Amphoteric Surfactants). Because of their multiple effects in foaming, wetting, emulsifying and cleaning, surfactants are essential ingredients in many products: In toothpastes they generate the cleaning effect and foaming action, while in dishwashing products they ensure that dirt and grease are effectively dislodged from hard surfaces.

Chlorine marks the starting point in the value chain of many products manufactured by the other segments of the Chemicals division. For many people, it is also essential for everyday living: In swimming baths, for example, it serves as a disinfectant protecting bathers from germs. Produced nowadays by an environmentally compatible process, chlorine and chlorine downstream products manufactured by PCC are also used in water treatment and the petrochemical industry.

PCC's biggest single revenue generator is the Specialty Chemicals segment. Its products range from phosphorus-based flame retardants, plasticizers, stabilizers and lubricants to additives for hydraulic oils and admixtures formulated to improve the workability of fresh concrete. The Commodity Trading operation of the PCC Group is also currently allocated to this segment.

The Consumer Products segment encompasses the business unit Household & Industrial Cleaners, Detergents and Personal Care Products – with its own Polish brands such as "ROKO" and "Roko Eco". The Matches and Firelighters business unit also belongs to this segment.

Within the Energy segment, the main source of sales is the Conventional Energies business unit. This encompasses a cogenerating plant in Poland for supplying our own production facilities, and a regional Polish heat, power and steam utility. The focus of the second business unit in this segment, Renewable Energies, is on the development, construction and operation of, in particular, small hydropower plants. In North Macedonia, we have so far commissioned four of these environmentally friendly electricity generators, with one in Bosnia and Herzegovina also on stream.

The Logistics segment comprises the three business units Intermodal Transport, Road Haulage and Rail Transport. PCC is one of Poland's leading providers of container transport services. The logistics network extends from Eastern Europe to the Benelux countries, and the Group entities also operate several wholly owned terminals. Operating throughout Europe, the tanker fleet of PCC specializes in the road transport of liquid chemicals. In Russia, PCC maintains a fleet of broad-gauge railway freight cars.

The Holding/Projects segment provides corporate and interdivisional services to the Group companies in fields such as finance, information technology, research & development, and maintenance & infrastructure servicing. Also managed under this segment are PCC BakkiSilicon hf. (silicon metal plant in Iceland), OOO DME Aerosol (dimethyl ether plant in Russia) and a number of smaller project companies.

The valuation principles for the Group's segment report are based on the valuation principles used in preparation of the consolidated financial statements per IFRS. Group-internal transactions are essentially performed in accordance with the same arm-length principles as those involving third parties. According to IFRS 8, operating segments are components of an entity that engage in business activities from which they may earn revenues and incur expenses and whose operating results are regularly reviewed by the entity's chief operating decision-maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available. Information reported to the main decision-makers for the purpose of the allocation of resources to the operating segments of the Group, and also assessment of their financial performance, relates to the types of products manufactured or services provided.

Sales in fiscal 2018 totaled € 779.2 million, 14.1 % higher than the figure of € 683.2 million posted in 2017. This was the result not only of price effects but also increased volumes. At € 145.4 million, sales of the Polyols segment remained flat year on year. The Surfactants segment saw sales grow by 3.3 % to € 124.5 million. The strongest growth was recorded in the Chlorine segment, where sales rose by 54.1 % to € 155.5 million. Sales of the Specialty Chemicals segment also improved significantly year on year, by 11.5 % to € 222.1 million. Only in the Consumer Products segment, which is currently undergoing restructuring, did sales decline, this time with a decrease of 2.4 % to € 21.3 million.

In the Logistics segment, revenue increased by 18.0 % from € 75.2 million to € 88.7 million, attributable to the further increase in operating rates at the container terminals following their expansion and modernization in recent years.

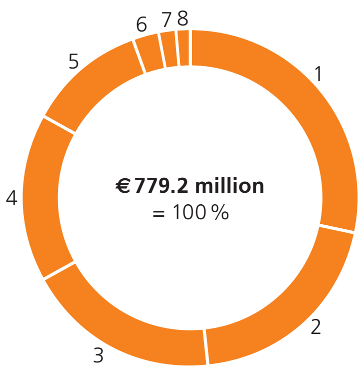
The Energy segment increased sales by 4.4 % to € 12.3 million.

With total sales of € 668.7 million (previous year: € 587.9 million) from the five segments Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products, the Chemicals division accounted for an almost unchanged 85.8 % (previous year: 86.0 %) of the Group's total output in fiscal 2018. The proportion of total Group sales generated by the Logistics segment increased slightly to 11.4 % (previous year: 11.0 %). The share accounted for by the Energy segment was largely unchanged at 1.6 % for the year under review. With sales at € 9.5 million (previous year: € 8.4 million), the proportion of total output attributable to the Holding/Projects segment remained flat at 1.2 %.

Figures in € k	2018	2017
EBITDA	**105,330**	73,827
Depreciation and amortization	36,400	32,832
Financial result	–27,419	–27,384
EBT	**41,512**	13,611

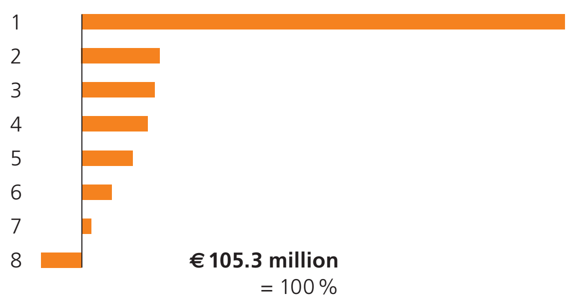
Business segment report Figures in €k	Polyols 2018	Polyols 2017	Surfactants 2018	Surfactants 2017	Chlorine 2018	Chlorine 2017	Specialty Chemicals 2018	Specialty Chemicals 2017
Sales per segment (total)	170,749	162,537	151,185	147,658	229,428	169,649	249,147	221,289
Sales with other PCC segments	25,345	17,158	26,716	27,123	73,956	68,756	27,012	21,996
Net external sales (consolidated)	145,404	145,379	124,469	120,535	155,472	100,893	222,135	199,293
Contribution to total revenue	18.7 %	21.3 %	16.0 %	17.6 %	20.0 %	14.8 %	28.5 %	29.2 %
EBITDA	7,193	15,647	10,243	9,916	67,561	32,010	9,321	8,395
EBITDA margin	4.9 %	10.8 %	8.2 %	8.2 %	43.5 %	31.7 %	4.2 %	4.2 %
EBIT	4,697	14,045	7,976	7,491	54,332	21,737	6,224	5,070
EBIT margin	3.2 %	9.7 %	6.4 %	6.2 %	34.9 %	21.5 %	2.8 %	2.5 %
Intangible assets	2,424	1,719	2,492	1,846	17,512	17,704	1,864	1,851
Property, plant and equipment	49,979	47,391	42,383	42,054	193,320	179,283	36,281	31,369
Financial liabilities	38,545	32,927	39,757	44,714	126,588	108,133	32,849	28,934
Capital expenditures on intangible assets and property, plant and equipment	8,517	10,080	4,818	3,482	32,771	23,078	9,220	6,796
Depreciation and amortization	2,496	1,602	2,267	2,426	13,229	10,273	3,096	3,325
Capital employed (average)	59,001	45,123	68,174	68,699	219,271	196,167	70,073	61,788
ROCE	8.0 %	31.1 %	11.7 %	10.9 %	24.8 %	11.1 %	8.9 %	8.2 %
Result from investments accounted for using the equity method	–1,761	–507	–	–	–	–	–	–
Employees at Dec. 31	247	242	289	279	384	409	393	360
Employees (annual average)	253	218	291	275	380	390	380	357

Sales by segment 2018 in %



1 Specialty Chemicals 28.5 %
2 Chlorine 20.0 %
3 Polyols 18.7 %
4 Surfactants 16.0 %
5 Logistics 11.4 %
6 Consumer Products 2.7 %
7 Energy 1.6 %
8 Holding/Projects 1.2 %

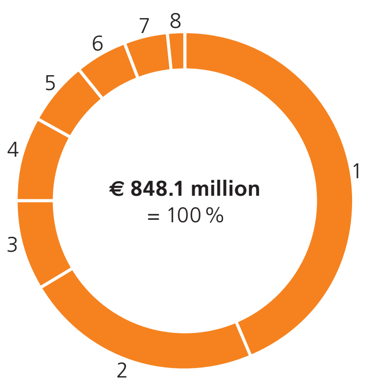
EBITDA by segment 2018 in %



1 Chlorine 64.1 %
2 Logistics 10.4 %
3 Surfactants 9.7 %
4 Specialty Chemicals 8.8 %
5 Polyols 6.8 %
6 Energy 4.0 %
7 Holding/Projects 1.3 %
8 Consumer Products –5.3 %

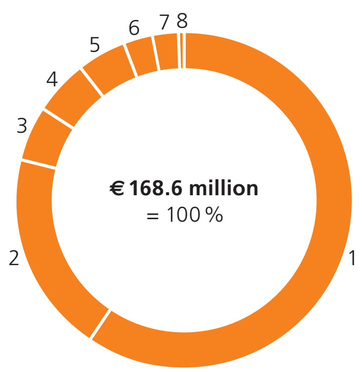
Consumer Products		Energy		Logistics		Holding / Projects		Consolidation		PCC Group	
2018	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
22,454	22,261	32,696	31,214	102,317	88,266	54,147	46,860	–	–	1,012,123	889,733
1,200	490	20,391	19,431	13,639	13,100	44,635	38,499	–	–	232,893	206,552
21,254	21,771	12,305	11,783	88,679	75,166	9,512	8,362	–	–	779,230	683,181
2.7 %	3.2 %	1.6 %	1.7 %	11.4 %	11.0 %	1.2 %	1.2 %	–	–	100.0 %	100.0 %
−5,568	−3,735	4,252	7,191	10,990	7,740	2,119	−4,093	−780	758	105,330	73,827
−26.2 %	−17.2 %	34.6 %	61.0 %	12.4 %	10.3 %	22.3 %	−49.0 %	–	–	13.5 %	10.8 %
−6,938	−5,167	1,122	3,306	6,692	3,336	−3,626	−9,243	−1,550	422	68,930	40,996
−32.6 %	−23.7 %	9.1 %	28.1 %	7.5 %	4.4 %	−38.1 %	−110.5 %	–	–	8.8 %	6.0 %
10	13	7,691	4,506	334	270	1,741	1,670	7,151	5,624	41,219	35,202
12,458	13,800	70,341	66,710	71,826	75,068	376,333	276,327	−4,777	−3,568	848,145	728,434
17,712	13,477	51,931	42,134	42,651	47,059	652,002	532,621	−182,971	−139,771	819,063	710,229
424	569	8,038	9,341	3,901	2,319	110,754	64,488	−9,871	−18,713	168,570	101,440
1,369	1,432	3,129	3,884	4,298	4,403	5,745	5,150	770	336	36,400	32,832
12,399	13,975	100,459	86,441	62,023	63,640	1,279,632	1,091,019	−960,866	−810,476	910,166	816,375
−56.0 %	−37.0 %	1.1 %	3.8 %	10.8 %	5.2 %	−0.3 %	−0.8 %	–	–	7.6 %	5.0 %
–	–	–	–	–	–	−647	−222	647	222	−1,761	−507
431	537	178	186	509	465	1,045	911	–	–	3,476	3,389
492	500	179	186	487	438	997	843	–	–	3,460	3,206

Property, plant and equipment by segment 2018 in %



1 Holding/Projects 43.8 %
2 Chlorine 22.8 %
3 Logistics 8.5 %
4 Energy 8.3 %
5 Polyols 5.9 %
6 Surfactants 5.0 %
7 Specialty Chemicals 4.3 %
8 Consumer Products 1.5 %

Capital expenditures by segment 2018 in %



1 Holding/Projects 59.8 %
2 Chlorine 19.4 %
3 Specialty Chemicals 5.5 %
4 Polyols 5.1 %
5 Energy 4.8 %
6 Surfactants 2.9 %
7 Logistics 2.3 %
8 Consumer Products 0.3 %

(18) Regional segment report

Figures in € k	Germany 2018	Germany 2017	Poland 2018	Poland 2017	Other EU Member States 2018	Other EU Member States 2017
Customer location						
Net external sales (consolidated)	176,042	145,225	287,503	248,085	191,074	157,627
Contribution to total revenue	22.6 %	21.3 %	36.9 %	36.3 %	24.5 %	23.1 %
Company location						
Net external sales (consolidated)	146,725	132,876	586,737	505,212	19,456	21,064
Contribution to total revenue	18.8 %	19.4 %	75.3 %	73.9 %	2.5 %	3.1 %
EBITDA	−4,446	−4,502	97,077	73,775	−241	9
EBITDA margin	−3.0 %	−3.4 %	16.5 %	14.6 %	−1.2 %	0.0 %
EBIT	−5,782	−5,910	65,203	44,869	−266	−14
EBIT margin	−3.9 %	−4.4 %	11.1 %	8.9 %	−1.4 %	−0.1 %
Intangible assets	544	787	30,415	25,608	128	128
Property, plant and equipment	12,055	12,544	504,155	483,378	4,195	3,944
Investment property	–	–	874	959	–	–
Financial liabilities	360,135	333,585	332,729	294,052	4,867	6,652
Capital expenditures on intangible assets and property, plant and equipment	17,835	18,476	71,854	63,924	279	239
Depreciation and amortization	1,337	1,408	31,874	28,906	25	23
Income from investments accounted for using the equity method	–	–	–	–	–	–
Employees at Dec. 31	155	128	2,990	3,003	21	22
Employees (annual average)	143	128	3,018	2,873	22	23

For the purpose of regular internal and external reporting, the business of the PCC Group is divided into seven regions (Germany, Poland, Other EU Member States, Other Europe, USA, Asia and Other Regions). In fiscal 2018, the Group generated 22.6 % of sales with customers in Germany (previous year: 21.3 %), while 36.9 % was accounted for by customers in Poland (previous year: 36.3 %).

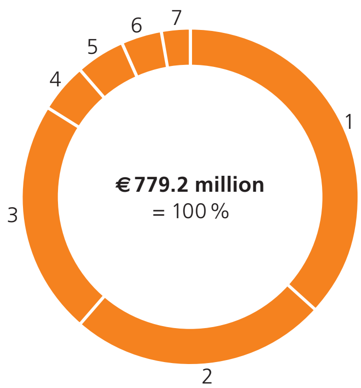
The PCC Group generated a total of 84.0 % of its sales with customers in the member states of the European Union (previous year: 80.6 %), the majority share being taken by Poland and Germany.

Based on company location, Poland accounted for net external sales of € 586.7 million (previous year: € 505.2 million), corresponding to around 75.3 % of the Group total (previous year: 73.9 %). Based on customer location, the figure for Poland was € 287.5 million (previous year: € 248.1 million) or around 36.9 % (previous year: 36.3 %). The sales figure in Germany increased from € 145.2 million to € 176.0 million by customer location, while there was an increase in revenues from € 132.9 million to € 146.7 million by location of company.

Capital expenditures totaled € 168.6 million (previous year: € 101.4 million). The largest share of this was accounted for by the regions Other Europe and Poland, primarily due to the construction of the silicon metal plant in Iceland, and – in the Chlorine segment – as a result of the expansion of the membrane electrolysis plant. Capital expenditures in Poland amounted to € 71.9 million (previous year: € 63.9 million) and in the region Other Europe the figure was € 88.4 million (previous year: € 37.4 million).

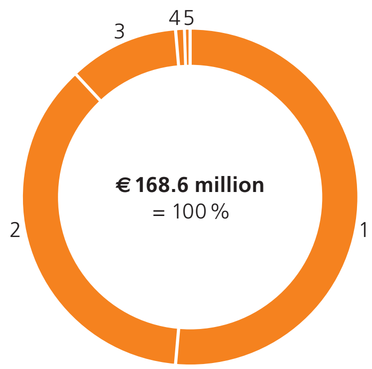
Other Europe 2018	Other Europe 2017	USA 2018	USA 2017	Asia 2018	Asia 2017	Other Regions 2018	Other Regions 2017	Consolidation 2018	Consolidation 2017	PCC Group 2018	PCC Group 2017
37,121	48,637	20,892	17,569	37,494	36,747	29,104	29,290	–	–	779,230	683,181
4.8 %	7.1 %	2.7 %	2.6 %	4.8 %	5.4 %	3.7 %	4.3 %	–	–	100.0 %	100.0 %
7,193	5,443	19,120	18,587			–	–	–	–	779,230	683,181
0.9 %	0.8 %	2.5 %	2.7 %	–	–	–	–	–	–	100.0 %	100.0 %
14,158	3,366	520	386	–959	37	–	–	–780	758	105,330	73,827
196.8 %	61.8 %	2.7 %	2.1 %	–	–	–	–	–	–	13.5 %	10.8 %
12,005	1,457	280	138	–960	35	–	–	–1,550	422	68,930	40,996
166.9 %	26.8 %	1.5 %	0.7 %	–	–	–	–	–	–	8.8 %	6.0 %
2,013	2,125	967	930			–	–	7,151	5,624	41,219	35,202
328,559	228,803	3,366	3,332	591	1	–	–	–4,777	–3,568	848,145	728,434
						–	–			874	959
303,146	214,855	1,087	855	71		–	–	–182,971	–139,771	819,063	710,229
88,371	37,423	101	91	1		–	–	–9,871	–18,713	168,570	101,440
2,153	1,909	240	248	1	1	–	–	770	336	36,400	32,832
–647	–222			–1,761	–507	–	–	647	222	–1,761	–507
268	195	38	38	4	3	0	0	–	–	3,476	3,389
235	143	39	38	3	3	0	0	–	–	3,460	3,206

Sales by region 2018 in %



1 Poland **36.9 %**
2 Other EU Member States **24.5 %**
3 Germany **22.6 %**
4 Asia **4.8 %**
5 Other Europe **4.8 %**
6 Other Regions **3.7 %**
7 USA **2.7 %**

Capital expenditures by region 2018 in %



1 Other Europe **52.4 %**
2 Poland **36.8 %**
3 Germany **10.6 %**
4 Other EU Member States **0.2 %**
5 USA **0.1 %**
6 Asia **0.0 %**
7 Other Regions **0.0 %**

Notes to the individual items of the consolidated balance sheet

(19) Intangible assets

Figures in €k	Industrial property rights and similar rights	Goodwill	Internally generated intangible assets	Advance payments	Total
Historical cost					
Jan. 1, 2018	23,222	8,732	9,007	1,890	**42,850**
Changes in consolidation scope	–	–	–	–	**–**
Additions	8,218	–	64	3,638	**11,920**
Disposals	847	–	–	66	**913**
Reclassifications	613	–	249	–74	**787**
Reclassified as held for sale	–	–	–	–	**–**
Currency translation differences	–472	80	–260	–54	**–707**
Dec. 31, 2018	**30,734**	**8,811**	**9,059**	**5,333**	**53,938**
Amortization					
Jan. 1, 2018	6,069	774	566	239	**7,648**
Changes in consolidation scope	–	–	–	–	**–**
Additions	5,478	–	364	32	**5,874**
Disposals	847	–	–	48	**895**
Write-downs	–	–	27	49	**76**
Reversal of write-downs	–	–	–	–	**–**
Reclassifications	–	–	–	82	**82**
Reclassified as held for sale	–	–	–	–	**–**
Currency translation differences	–75	37	–20	–8	**–66**
Dec. 31, 2018	**10,625**	**811**	**937**	**346**	**12,719**
Net book value on Dec. 31, 2018	**20,109**	**8,000**	**8,122**	**4,987**	**41,219**

Intangible assets comprise industrial property rights, licenses and similar rights, goodwill, internally generated and developed intangible assets, and advance payments for intangible assets.

The net book values for this class of assets increased in 2018 from €35.2 million to €41.2 million. The change mainly results from investments with the corresponding process licenses as well as various certificates. Assets were also reclassified from property, plant, and equipment to intangibles.

Impairment losses of €0.1 million were recognized in the year under review (previous year: €0) and can therefore be regarded as negligible in aggregate.

As of the reporting date, the value of intangible assets with disposal restrictions was €2.4 million (previous year: €2.9 million). Exploration and production activities are carried out by one subsidiary. At year-end, the associated net book value contained in the total for intangible assets amounted to €0.3 million (previous year: €0.3 million). No exploration activities occurred in the year under review. This undertaking is immaterial for the PCC Group, hence there is no separate reconciliation statement in this regard.

Figures in €k	Industrial property rights and similar rights	Goodwill	Internally generated intangible assets	Advance payments	Total
Historical cost					
Jan. 1, 2017	19,536	8,963	8,554	1,627	**38,680**
Changes in consolidation scope	5	–	–	–	**5**
Additions	2,726	–	–	849	**3,575**
Disposals	145	–	41	255	**441**
Reclassifications	403	–	16	–422	**–3**
Reclassified as held for sale	–	–	–	–	–
Currency translation differences	697	–231	478	91	**1,034**
Dec. 31, 2017	**23,222**	**8,732**	**9,007**	**1,890**	**42,850**
Amortization					
Jan. 1, 2017	4,488	881	198	199	**5,766**
Changes in consolidation scope	4	–	–	–	**4**
Additions	1,509	–	351	31	**1,890**
Disposals	145	–	–	–	**145**
Write-downs	–	–	–	–	–
Reversal of write-downs	–	–	–	–	–
Reclassifications	2	–	–	–2	–
Reclassified as held for sale	–	–	–	–	–
Currency translation differences	211	–107	18	12	**133**
Dec. 31, 2017	**6,069**	**774**	**566**	**239**	**7,648**
Net book value on Dec. 31, 2017	**17,153**	**7,957**	**8,441**	**1,651**	**35,202**

Goodwill

A debit differential that cannot be allocated to other assets on the first-time consolidation of subsidiaries is recognized in the consolidated balance sheet as goodwill. This goodwill does not undergo scheduled amortization; instead, it is subjected at least once a year to an impairment test in accordance with IFRS 3.

The adjacent chart shows all the goodwill recognized within the Group as of December 31, 2018. It also includes the goodwill assumed from the individual financial statements of the US company PCC Chemax, Inc., Piedmont (South Carolina). There were no additions/write-ups nor write-downs either in the year under review or in the previous year. The change in goodwill at PCC Chemax, Inc. results from a foreign exchange effect, as the goodwill is listed in the cash-generating currency of the company, that is to say US dollars.

Figures in €k	Dec. 31, 2018	Dec. 31, 2017
PCC Silicium S.A.	**2,615**	2,615
PCC Intermodal S.A.	**2,593**	2,593
PCC Rokita subgroup	**1,330**	1,330
PCC Chemax, Inc.	**948**	905
PCC Exol SA	**515**	515
Goodwill	**8,000**	**7,957**

The annual impairment tests were carried out in the fourth quarter of the fiscal year and were based on management-approved budgets for the three subsequent years. Using a perpetuity growth model, a terminal value was determined on the basis of the last budget year. The achievable amount was ascertained on the basis of value-in-use. As in the previous year, the growth rate assumed was 1.0 %. The planning assumptions derive from empirical values and estimates of the various business managements, taking into account centrally defined global positions such as exchange rates, estimates of economic development, market growth or commodity prices, for which purpose external sources were also consulted. The local tax rates assumed were, once again, 19.0 % in the case of the Polish cash-generating units, and 23.6 % in the case of the US cash-generating unit. The tax rates remained unchanged year on year. As in the previous year, the weighted average cost of capital (WACC) was determined on a regional basis. This was 7.16 % for Poland (previous year: 7.08 %) and 6.23 % for the USA (previous year: 6.43 %). Even taking into account a change in WACC of 10 %, there would be no impairment write-down requirement.

(20) Property, plant and equipment

Figures in €k	Land and buildings	Plant and machinery	Factory and office equipment	Advance payments and construction in progress	Total
Historical cost					
Jan. 1, 2018	170,584	347,219	150,648	278,618	**947,069**
Changes in consolidation scope	–	–	–	–	–
Additions	402	11,475	5,193	154,960	**172,030**
Disposals	43	3,225	501	576	**4,346**
Reclassifications	9,783	45,455	19,630	–75,660	**–792**
Reclassified as held for sale	–	59	–	–	**59**
Currency translation differences	–4,486	–11,108	–3,975	7,552	**–12,017**
Dec. 31, 2018	**176,240**	**389,874**	**170,995**	**364,894**	**1,102,002**
Depreciation					
Jan. 1, 2018	31,780	129,764	55,494	1,597	**218,635**
Changes in consolidation scope	–	–	–	–	–
Additions	5,104	27,998	10,225	–	**43,328**
Disposals	20	1,333	427	407	**2,186**
Impairment write-downs	–	1,138	–	105	**1,243**
Reversal of write-downs	–3	–16	–11	–1	**–31**
Reclassifications	3	1	–6	–82	**–83**
Reclassified as held for sale	–	29	–	–	**29**
Currency translation differences	–922	–4,554	–1,558	–41	**–7,076**
Dec. 31, 2018	**35,941**	**153,026**	**63,719**	**1,172**	**253,858**
Net book value on Dec. 31, 2018	**140,299**	**236,847**	**107,276**	**363,723**	**848,145**

The net book value of property, plant and equipment increased from € 728.4 million to € 848.1 million in the year under review as a result of the capital expenditures implemented by the PCC Group. Continued investments in the construction of a silicon metal plant in Iceland and in various production facilities in the Chemicals division represent the largest items in the past fiscal year.

Additions to property, plant and equipment amounted to € 172.0 million in fiscal 2018 (previous year: € 99.6 million). Of this figure, € 110.8 million (previous year: € 64.5 million) was invested in the Holding/Projects segment, under which – among others – the silicon metal plant in Iceland is managed, and € 32.8 million (previous year: € 23.1 million) in the Chlorine segment, under which the Chlorine business unit and the

MCAA plant are managed. In the latter segment, fiscal 2018 saw expansion in chlor-alkali electrolysis capacity.

Additions to depreciation of property, plant and equipment amounted to €43.3 million in the year under review (previous year: €30.4 million). The increase is primarily due to the completion of current investment projects.

In fiscal 2018, impairment losses amounting to an immaterial €1.2 million (prior year: €0.4 million) were recognized on property, plant and equipment for the Group. This related in particular to the €1.0 million change in value arising from the replacement of process components in the Chlorine segment. Impairment reversals totaled €31 k (previous year: €0.2 million), attributable to the Polyols and Chlorine segments.

Figures in €k	Land and buildings	Plant and machinery	Factory and office equipment	Advance payments and construction in progress	Total
Historical cost					
Jan. 1, 2017	159,767	315,306	137,495	242,346	**854,914**
Changes in consolidation scope	168	220	40	–	**427**
Additions	13	3,866	861	94,852	**99,592**
Disposals	230	12,171	2,757	17	**15,175**
Reclassifications	4,451	24,577	8,194	−37,193	**30**
Reclassified as held for sale	−681	–	−28	–	**−709**
Currency translation differences	7,096	15,421	6,844	−21,371	**7,990**
Dec. 31, 2017	**170,584**	**347,219**	**150,648**	**278,618**	**947,069**
Depreciation					
Jan. 1, 2017	26,094	115,737	49,433	1,303	**192,567**
Changes in consolidation scope	20	95	35	–	**150**
Additions	4,805	19,482	6,094	–	**30,381**
Disposals	134	11,448	2,605	–	**14,188**
Impairment write-downs	51	121	20	226	**418**
Reversal of write-downs	−49	−102	−29	–	**−180**
Reclassifications	−4	69	−59	–	**6**
Reclassified as held for sale	−169	–	−22	–	**−190**
Currency translation differences	1,166	5,809	2,629	68	**9,671**
Dec. 31, 2017	**31,780**	**129,764**	**55,494**	**1,597**	**218,635**
Net book value on Dec. 31, 2017	**138,804**	**217,455**	**95,154**	**277,021**	**728,434**

As of the 2018 balance sheet date, the value of individual items of property, plant and equipment with disposal restrictions amounted to €514.0 million (previous year: €414.0 million). These additionally serve as debt collateral. As of December 31, 2018, there were total investment obligations of €34.7 million (previous year: €67.0 million) relating to investments already contractually agreed but not yet completed. Furthermore, €0.1 million (previous year: €0.2 million) in insurance compensation attributable to property, plant and equipment was received in the past fiscal year.

Within the Holding/Projects segment, the holding company PCC SE decided in the fourth quarter of 2017 to sell its investment properties. The sale had not been completed by the balance sheet date of the year under review. A sale by the end of the second quarter of 2019 does, however, look highly likely. Hence, the reclassified investment property of PCC SE is still shown under "Assets held for sale" with a carrying amount of €2.3 million as of December 31, 2018. Liabilities directly related to these assets with a value of €0.8 million were reclassified to liabilities associated with assets held for sale.

(21) Investment property

Figures in €k	2018	2017
Historical cost		
Jan. 1	1,861	4,611
Changes in consolidation scope	–	–
Additions	–	–
Disposals	–	150
Reclassifications	5	–27
Reclassified as held for sale	–	–2,673
Currency translation differences	–54	100
Dec. 31	**1,811**	**1,861**
Depreciation		
Jan. 1	901	1,128
Changes in consolidation scope	–	–
Additions	61	142
Disposals	–	26
Impairment write-downs	–	–
Reversal of write-downs	–	–
Reclassifications	2	–6
Reclassified as held for sale	–	–382
Currency translation differences	–27	46
Dec. 31	**937**	**901**
Net book value	**874**	**959**

In fiscal 2018, the net book value of investment property amounted to €0.9 million (previous year: €1.0 million). No impairment losses were incurred in the year under review. As in the previous year, there were no additions in fiscal 2018. Assets that are returned to in-company use are classified as disposals. Investment properties designated for disposal have been reclassified as held for sale in the amount of €2.3 million. No reclassification took place in the year under review. In total, income of €0.5 million was generated with investment properties in the past financial year (previous year: €0.5 million). This was offset by expenses of €0.4 million (previous year: €0.4 million). All such investment properties are located in the Brzeg Dolny Chemical Park and are leased to third parties. Their fair value cannot, therefore, be reliably ascertained.

(22) Non-current financial assets

Classified under non-current financial assets are shares in affiliated companies which, for materiality reasons, are not consolidated, investments in other entities and also financial investment securities. Their value decreased by €6.6 million from €8.8 million to €2.1 million. The adjustment in the fair value of shares held in S.C. Oltchim S.A. amounted in 2018 to €–6.0 million (previous year: €–2.5 million).

(23) Other non-current financial assets

This balance sheet item includes loans to affiliated companies that are not consolidated for reasons of materiality, loans to enterprises in which participations are held, and other loans. On the balance sheet date, the total value under this heading amounted to € 17.1 million, € 5.1 million higher than the figure for the previous year (€ 12.0 million). This includes in particular loans to the joint venture OOO DME Aerosol in the amount of € 5.8 million (previous year: € 2.3 million).

(24) Inventories

Figures in € k	Dec. 31, 2018	Dec. 31, 2017
Raw materials and supplies	28,496	22,949
Work in progress	15,088	12,227
Finished products	14,655	9,965
Merchandise	8,977	9,592
Goods in transit	3,136	3,959
Advance payments	2,842	2,751
Total inventories	**73,195**	**61,443**

Inventories increased year on year from € 61.4 million at the end of 2017 to € 73.2 million as of the reporting date. This is mainly due to higher purchase prices for raw materials worldwide, together with an increase in procurement volumes.

In the 2018 reporting year, write-ups of € 0.1 million were made to previously impaired inventories due to increased marketability (previous year: € 0.2 million). Impairment losses amounted to € 0.7 million (previous year: € 0.3 million).

(25) Trade accounts receivable

Figures in € k	Dec. 31, 2018	Dec. 31, 2017
Trade accounts receivable	84,513	84,277
Expected credit losses (ECL) – Stage 1 and Stage 2	–203	–
Losses already incurred – Stage 3	–2,689	–3,789
Total trade accounts receivable	**81,621**	**80,489**

Trade accounts receivable as of December 31, 2018 all had a remaining term of up to one year in their full amount. Their value increased by € 1.1 million or 1.4 % year on year.

With the introduction of IFRS 9, the expected losses determined on the basis of the impairment model are recognized and reported separately. From January 1, 2018 to December 31, 2018, these fell insignificantly by € 17.5 k. Additions to Stage 3 value adjustments fell year on year from € 0.5 million to € 0.3 million. Overall, the Group has recognized Stage 2 and 3 value adjustments on trade accounts receivable in the amount of € 2.9 million, € 0.9 million less than in the previous year.

Figures in € k	2018	2017
Value adjustments per Jan. 1 (IAS 39)	**–3,789**	–4,039
Effects from first-time adoption of IFRS 9	–36	–
Value adjustments per Jan. 1 (IFRS 9)	**–3,826**	–4,039
Changes in consolidation scope	–	–9
Change in expected credit losses (Stage 1 and Stage 2)	17	–
Change in losses already incurred (Stage 3)	–60	236
Allowances used	918	146
Currency translation differences	58	–123
Other effects	–	–
Value adjustments per Dec. 31	**–2,892**	–3,789

The maturity structure of all non-impaired trade accounts receivable is shown below. Approximately 88.6 % of the Group's receivables were neither impaired nor overdue as of December 31, 2018 (previous year: 88.6 %). In addition, the default risks and the level of the expected credit losses (ECL) are shown over the remaining term of each age group.

Figures in € k	Gross value of trade accounts receivable	Expected default rate in %	Expected credit loss (ECL)
Not overdue	**72,307**	**0.0**	**–17**
Overdue	**12,206**	**1.5**	**–185**
up to 30 days	7,742	0.1	–5
30 to 60 days	1,175	0.3	–4
60 to 90 days	178	0.5	–1
90 to 120 days	168	8.1	–14
over 120 days	2,943	5.5	–162
Expected credit loss (ECL)			**–203**

Individual companies within the PCC Group use factoring as a receivables financing instrument. The volume of all receivables sold as of the balance sheet date amounted to € 12.2 million (previous year: € 16.2 million).

(26) Other receivables and other assets

Figures in €k	Dec. 31, 2018		Dec. 31, 2017	
	Non-current	Current	Non-current	Current
Accounts receivable from affiliated companies	–	653	–	588
Accounts receivable from associated companies	–	–	–	11,559
Accounts receivable from enterprises in which participating interests are held	–	11,526	–	–
Security deposits paid	–	378	–	2,980
Reimbursement claims for VAT and other duties	–	9,577	–	8,420
Receivables from employees	–	19	–	25
Insurance claims	–	1	–	1
Positive fair values on derivative financial instruments	–	2	–	3
Prepaid expenses and deferred charges	1,207	4,151	1,752	3,588
Loans to affiliated companies	–	1,432	–	832
Contract assets	53	807	–	–
Sundry other assets	–	11,907	–	13,012
Other receivables and other assets	**1,259**	**40,452**	**1,752**	**41,008**

Accounts receivable from affiliated companies as of December 31, 2018 all have a remaining term of up to one year in their full amount. They comprise accounts receivable from affiliated, non-consolidated companies. Further information is also provided in the section on related parties, see Note (38). These are largely loan receivables from project companies. Receivables from enterprises in which participating interests are held relate to loan receivables from an entity over which the PCC Group is unable to exercise control. The changes in the other items are essentially similar to those of the previous year. Newly incorporated are contract assets, identified and disclosed in accordance with IFRS 15. These amounted to € 0.9 million as of December 31, 2018.

As in the previous year, no impairment losses were recognized on other assets or on receivables from affiliated companies.

(27) Equity

The subscribed capital of PCC SE remained unchanged year on year. It amounts to € 5.0 million and is fully paid up. It is divided into 5 million individual share certificates with a par value of € 1 per share.

The items included under revenue reserves / other reserves as of December 31, 2018 are as follows:

Figures in €k	Dec. 31, 2018	Dec. 31, 2017
Revenue reserves, retained earnings, valuation reserves and debit differentials set off against revenue reserves	73,117	75,886
IFRS transition reserve	21,635	21,635
Share of net result attributable to Group	27,554	1,423
First-time adoption of IFRS 9 and IFRS 15	– 13	–
Total revenue reserves / other reserves	**122,294**	**98,944**

The minor effects of the transition to IFRS 9 and IFRS 15 are also shown. For further detailed information on this and on developments in equity in general, please refer to the consolidated statement of changes in equity which forms part of the consolidated financial statements contained herein.

Revenue reserves/other reserves comprise unappropriated earnings achieved in the reporting period by the subsidiaries included in the consolidated financial statements. The share of the net result from the previous year attributable to the Group in the amount of €5.6 million is disclosed in the revenue reserves as retained earnings. In fiscal 2018, the sole shareholder of PCC SE was paid out of retained earnings a dividend in the amount of €1.85 million (previous year: €1.85 million). This corresponds to an unchanged dividend per share amounting to €0.37 (previous year: €0.37). Recognized under other comprehensive income are differences arising from foreign currency translation. In the year under review, these reduced Group equity by €5.9 million to a total of €–21.0 million (previous year: €–15.2 million). Gains and losses recognized directly in equity without affecting income are shown in the following:

Figures in €k	Currency translation differences	Remeasurement of defined benefit pension plans	Fair value of financial assets	Fair value of cash flow hedges	Other changes	Total
Jan. 1, 2018	–15,164	–209	4,785	418	–72	–10,242
Changes	–5,873	–57	–6,013	–6	–13	–11,962
Reclassifications	–	–	–	–	–	–
Deferred taxes	–	9	1,803	–	–	1,813
Dec. 31, 2018	**–21,037**	**–257**	**575**	**411**	**–85**	**–20,392**

Figures in €k	Currency translation differences	Remeasurement of defined benefit pension plans	Fair value of financial assets	Fair value of cash flow hedges	Other changes	Total
Jan. 1, 2017	–21,268	–160	6,678	406	–58	–14,401
Changes	6,104	–64	–2,637	12	–14	3,401
Reclassifications	–	–	–	–	–	–
Deferred taxes	–	14	744	–	–	758
Dec. 31, 2017	**–15,164**	**–209**	**4,785**	**418**	**–72**	**–10,242**

(28) Minority interests

German and international minority shareholders hold non-controlling interests in various entities of the PCC Group. The share of minority interests in Group equity as of December 31, 2018 was €43.5 million, representing a decrease of around €1.9 million compared to year-end 2017.

Subsidiaries with material minority interests are active in various segments of the PCC Group. For details of company names, location of company head offices and share of capital in respect of subsidiaries with material minority interests, please consult the schedule of shareholdings provided under Note (43) drawn up in accordance with Section 313 (2) HGB (German Commercial Code).

	PCC Rokita subgroup		PCC DEG Renewables GmbH		PCC Exol SA	
Figures in €k	2018	2017	2018	2017	2018	2017
Balance sheet data						
Minority interests	30,183	28,575	9,280	8,924	2,712	2,528
Minority interests in %	15.84	15.84	40.00	40.00	14.17	14.17
Dividends paid to minority interests	6,284	5,592	–	–	527	758
Non-current assets	329,088	297,021	24,339	22,313	51,259	49,830
Current assets	90,090	86,047	489	740	37,150	39,597
Non-current liabilities	122,637	111,008	1,500	500	36,660	41,424
Current liabilities	105,996	91,682	129	244	32,827	30,376
Statement of income data						
Net result attributable to minority interests	8,586	7,187	356	5	711	604
Sales revenue	348,098	301,177	–	–	131,803	128,805
Net result	54,182	45,350	890	13	5,018	4,261
Comprehensive income	54,158	45,078	890	13	5,013	4,257

With the purchase of all shares in PCC Intermodal S.A. other than those held by that company's management, there are no longer any significant minority interests in this company.

No material restrictions have been imposed that go beyond the usual regulations under company law and contractual regulations.

(29) Provisions for pensions and similar obligations

The majority of employees in the Polish subsidiaries of the PCC Group are covered not only by the statutory pension scheme but also by one-off benefits under legally prescribed pension plans. Defined benefit pension plans are, as a rule, aligned to service time and remuneration. Payments made from defined benefit pension plans are generally granted on attainment of pensionable age or on invalidity or death. Defined contribution plans exist primarily in the form of the statutory pension insurance scheme in Germany and those schemes also applicable to foreign subsidiaries. In the case of employees of the German subsidiaries and the holding company, contributions can also be made to other defined contribution pension schemes in addition to the statutory pension scheme. Typical risk factors for defined benefit commitments are increasing life expectancies, changes in nominal interest rates and increases in inflation and salaries. The present value of the defined benefit obligation arising from a pension plan is determined on the basis of the best-possible estimate of the mortality of the recipient employees both during the employment relationship and after its termination. An increase in the life expectancy of the recipient employees and a decrease in bond interest rates both lead to an increase in the plan liability. In addition, the present value of the defined benefit obligation arising from a pension plan is determined on the basis of the future salaries of the recipient employees. Salary increases for employees benefiting from the plan lead to an increase in the plan liability.

Defined benefit plans are internally financed.

Provisions for pensions and similar obligations as of the reporting date of the year under review amounted to €0.8 million, representing an increase of €0.1 million over the prior-year figure. Of this, €0.7 million was classified as non-current provisions with a term of more than one year.

Figures in € k	2018	2017
Opening balance of pension obligations as of Jan. 1	**700**	**583**
Current service cost	64	53
Payments made	– 59	– 55
Interest expense	11	10
Actuarial gains/losses from changes in demographic assumptions	–	4
Actuarial gains/losses from experience adjustments	62	69
Currency translation differences	– 20	32
Other effects	–	3
Closing balance of pension obligations as of Dec. 31	**758**	**700**

A total of 2,966 employees of the PCC Group companies (previous year: 2,944) are covered by defined benefit plans, of which 72.2 % are male and 27.8 % are female. The average age at year-end 2018 was 41.3 years (previous year: 41.1 years).

As in the previous year, a uniform discount rate of 2.3 % has been applied in calculating pension obligations. The range adopted for the income trend was 2.0 % to 4.0 % (previous year: 2.0 % to 4.0 %). The Polish mortality table for 2017 published by the Central Office for Statistics, which serves as the basis for pension calculations, anticipates a life expectancy of 76.2 years (previous year: 76.5 years).

Changes in the key actuarial parameters would have the following effects on the amounts shown in respect of pension obligations:

	Increase by 0.25 %-points		Decrease by 0.25 %-points	
Figures in € k	2018	2017	2018	2017
Change in underlying discounting rate	– 12	– 29	27	4
Change in salary trend	27	4	– 12	– 29
Change in turnover rate	– 14	– 31	25	2

The above sensitivity analysis may not be representative for the actual change in the defined benefit obligation, as it can be regarded as improbable that deviations from the assumptions made would occur in isolation.

Included in the expense for fiscal 2018 is € 6.1 million representing employer contributions to the statutory pension scheme (previous year: € 5.1 million). In addition to the contributions to the statutory pension scheme, expenses for defined contribution pension plans in the amount of € 0.1 million are also included in the result for the current period (previous year: € 0.1 million).

Figures in € k	2018	2017
Expenses for defined benefit pension plans	201	53
Expenses for defined contribution pension plans	83	87
Total pension expenses recognized in result	**283**	**140**

(30) Other provisions

Figures in € k	Dec. 31, 2018		Dec. 31, 2017	
	Non-current	Current	Non-current	Current
Accruals for personnel expenses	4	6,743	–	4,547
Provisions for year-end accounting and audit expenses	–	488	–	417
Provisions for obligations to customers	–	152	–	1,790
Sundry other provisions	4,363	5,183	3,800	2,499
Total other provisions	**4,367**	**12,566**	3,800	9,253

Compared to the previous year, other provisions rose by €3.9 million to €16.9 million. Accruals for personnel expenses increased by €2.2 million, while provisions for obligations to customers decreased by €1.6 million. These latter essentially comprise rebates and compensation claims. Accruals for personnel expenses mainly relate to claims for bonus and vacation payments.

In addition to recultivation obligations at Polish subsidiaries – amounting to €2.8 million as of the reporting date (previous year: €3.4 million) – other non-current and current provisions also include provisions for energy certificates arising from the requirements of the Polish energy mix system. A shortage of energy from renewable sources in the production process must be offset either by the purchase of so-called green certificates or by compensation payments.

The following table shows the development in other provisions for fiscal 2018. Other changes include foreign exchange effects and changes in the consolidation scope.

Figures in € k	Jan. 1, 2018	Additions	Utilized	Released	Discounted	Other changes	Dec. 31, 2018
Accruals for personnel expenses	4,547	6,124	2,635	1,187	–	–103	6,747
Provisions for year-end accounting and audit expenses	417	453	322	55	–	–5	488
Provisions for obligations to customers	1,790	152	779	960	–	–52	152
Sundry other provisions	6,299	5,358	2,058	–	124	–178	9,546
Total other provisions	**13,053**	**12,088**	**5,793**	**2,201**	**124**	**–337**	**16,933**

(31) Financial liabilities

The financial liabilities of the PCC Group are comprised of non-current and current liabilities arising from bonds, amounts owed to banks, finance leases and amounts owed to affiliated companies.

The financial liabilities of the PCC Group had the following maturity profile as of the balance sheet date.

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	**Dec. 31, 2018**
Profit participation certificates	–	–	–	–
Bond liabilities	75,666	322,615	102,900	**501,180**
Bank liabilities	49,262	64,283	194,519	**308,063**
Finance lease liabilities	3,328	6,273	81	**9,682**
Negative fair value of derivatives	–	36	101	**137**
Total financial liabilities	**128,256**	**393,206**	**297,601**	**819,063**

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2017
Profit participation certificates	10,997	–	–	**10,997**
Bond liabilities	47,177	305,454	91,880	**444,511**
Bank liabilities	46,950	169,808	28,567	**245,326**
Finance lease liabilities	3,517	5,843	35	**9,395**
Total financial liabilities	**108,641**	**481,105**	**120,482**	**710,229**

The relevant factors when presenting the maturities of contractual cash flows from financial liabilities are interest payments and redemption of principal, and other payments in respect of derivative financial instruments. The following table shows non-discounted future cash flows. Derivatives are included on the basis of their net cash flows where they have negative fair values and thus represent liabilities. Derivatives with positive fair values are assets and are therefore not taken into account. Trade accounts payable are essentially non-interest-bearing and due within one year. The carrying amount of trade accounts payable therefore corresponds to the total of the future cash flows.

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2018
Profit participation certificates	–	–	–	–
Bond liabilities	82,852	396,079	93,840	572,772
Bank liabilities	69,094	148,887	191,619	409,600
Finance lease liabilities	3,542	6,507	84	10,133
Negative fair value of derivatives	–	36	101	137
Cash outflows from financial liabilities	**155,488**	**551,510**	**285,645**	**992,642**

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2017
Profit participation certificates	11,238	–	–	11,238
Bond liabilities	53,151	337,124	160,428	550,702
Bank liabilities	47,191	123,865	150,272	321,328
Finance lease liabilities	3,757	6,097	36	9,889
Cash outflows from financial liabilities	**115,336**	**467,085**	**310,736**	**893,157**

The profit participation certificates were redeemed as of January 1, 2018. Bank liabilities increased year on year by €62.7 million to €308.1 million. This is the result of the predominantly debt-financed capital expenditure program of the PCC Group. The spread of the financial liabilities between the individual segments is indicated in the segment report in Note (17).

Figures in €k	Dec. 31, 2018		Dec. 31, 2017	
	Non-current	Current	Non-current	Current
Profit participation certificates	–	–	–	10,997
Bond liabilities	425,515	75,666	397,334	47,177
Bank liabilities	258,802	49,262	198,375	46,950
Finance lease liabilities	6,354	3,328	5,878	3,517
Negative fair value of derivatives	137	–	–	–
Total financial liabilities	**690,807**	**128,256**	601,587	108,641

Secured credit lines within the PCC Group not utilized as of year-end amounted to €30.9 million (previous year: €23.6 million).

Figures in € k	Dec. 31, 2018	Dec. 31, 2017
Mortgages, land charges and similar liens	58,693	229,135
Assignment of claims on assets	296,916	70,988
Chattel mortgages	2,584	3,724
Other assignments	18,730	7,518
Collateral securities granted	**376,923**	**311,365**

The bank loans and also the finance leases disclosed under financial liabilities were secured in 2018 in their entirety by mortgages, land charges or similar liens, by the assignment of claims, by chattel mortgages on property, plant and equipment, or by other assignments. Overall, collateral securities granted increased from € 311.4 million to € 376.9 million as of the end of fiscal 2018, thus following a trend similar in magnitude to that of financial liabilities in general.

Bond liabilities result from the issuance of bonds by PCC SE and the foreign subsidiaries PCC Rokita SA and PCC Exol SA. The non-public bond of PCC BakkiSilicon hf. is a financing instrument of the co-shareholder in the project to build the silicon metal plant, which was completed in 2018.

Bonds from the PCC Group are issued in euros, Polish złotys and US dollars. The public bonds issued in euros (EUR) carry coupons between 2.0 % and 7.0 % p.a., while those in złotys (PLN) carry coupons ranging from 5.0 % to 5.5 % p.a. The following chart provides a tabular analysis of the bonds involved.

The bonds issued in złotys with a total face value of PLN 400.8 million (previous year: PLN 350.8 million) had a euro value of € 85.4 million as of the balance sheet date (previous year: € 77.1 million).

Figures in €k	Issue currency	Coupon	Issue volume	Dec. 31, 2018	Dec. 31, 2017
Issued by PCC SE					
DE000A162AP6	EUR	5.000 %	25,000	**25,000**	25,000
DE000A2LQZH9	EUR	4.000 %	30,000	**28,783**	–
DE000A2GSSY5	EUR	4.000 %	25,000	**24,968**	24,902
DE000A162AQ4	EUR	6.000 %	25,000	**24,860**	24,860
DE000A2AAY85	EUR	4.000 %	25,000	**23,187**	23,187
DE000A2AAY93	EUR	3.000 %	25,000	**22,081**	22,081
DE000A2NBFT4	EUR	4.000 %	25,000	**20,293**	–
DE000A13R7S2	EUR	6.250 %	20,000	**20,000**	20,000
DE000A2E4Z04	EUR	4.000 %	25,000	**19,927**	19,927
DE000A13SH30	EUR	6.750 %	20,000	**19,890**	19,890
DE000A2E4HH0	EUR	3.000 %	20,000	**19,210**	12,023
DE000A2G8670	EUR	4.000 %	25,000	**19,140**	–
DE000A14KJ35	EUR	6.000 %	40,000	**18,218**	18,218
DE000A14KJ43	EUR	6.500 %	35,000	**16,181**	16,181
DE000A13R5K3	EUR	6.500 %	20,000	**13,749**	13,749
DE000A2G9HY2	EUR	3.000 %	10,000	**9,588**	–
DE000A11QFD1	EUR	6.750 %	20,000	**8,909**	8,909
DE000A2E4ZZ4	EUR	3.000 %	20,000	**7,481**	7,481
DE000A2NBFU2	EUR	2.000 %	5,000	**1,690**	–
DE000A1YCSY4	EUR	7.000 %	20,000	**–**	19,996
DE000A1TM979	EUR	7.000 %	20,000	**–**	15,654
DE000A2AAVL7	EUR	3.500 %	15,000	**–**	8,908
DE000A2GSDP5	EUR	2.000 %	10,000	**–**	2,619
Issued by PCC BakkiSilicon hf.					
Private placement without ISIN	USD	8.500 %	62,000	**72,639**	63,848
Issued by PCC Exol SA					
PLPCCEX00044	PLN	5.500 %	25,000	**5,772**	5,921
PLPCCEX00051	PLN	5.500 %	25,000	**5,743**	5,896
PLPCCEX00036	PLN	5.500 %	20,000	**4,621**	4,741
Issued by PCC Rokita SA					
PLPCCRK00209	PLN	5.000 %	30,000	**6,883**	–
PLPCCRK00092	PLN	5.500 %	25,000	**5,794**	5,943
PLPCCRK00118	PLN	5.000 %	25,000	**5,768**	5,921
PLPCCRK00134	PLN	5.000 %	25,000	**5,750**	5,909
PLPCCRK00167	PLN	5.000 %	25,000	**5,749**	5,903
PLPCCRK00175	PLN	5.000 %	25,000	**5,743**	5,899
PLPCCRK00183	PLN	5.000 %	25,000	**5,740**	5,897
PLPCCRK00225	PLN	5.000 %	25,000	**5,732**	–
PLPCCRK00068	PLN	5.500 %	22,000	**5,108**	5,240
PLPCCRK00100	PLN	5.000 %	20,000	**4,626**	4,749
PLPCCRK00126	PLN	5.000 %	20,000	**4,607**	4,732
PLPCCRK00241	PLN	5.000 %	20,000	**4,584**	–
PLPCCRK00159	PLN	5.000 %	13,772	**3,168**	3,256
PLPCCRK00191	PLN	5.000 %	30,000	**–**	7,071
Total bond liabilities				**501,180**	444,511

(32) Other liabilities

Figures in € k	Dec. 31, 2018		Dec. 31, 2017	
	Non-current	Current	Non-current	Current
Deferred income	40,657	1,816	41,335	2,050
Income tax and similar taxes payable	–	2,647	–	2,186
Advance payments received	–	–	–	236
Social security contributions payable	–	3,076	–	2,752
Interest payment obligations	–	6,615	–	6,304
VAT, customs, excise and other duties payable	–	3,112	–	3,418
Accounts payable to employees	–	3,101	–	2,738
Accounts payable to affiliated companies	–	1,324	–	1,249
Liabilities arising from investments	1,696	11,474	1,276	17,898
Contract liabilities	–	1,541	–	–
Sundry other liabilities	80	19,255	186	18,843
Total other liabilities	**42,433**	**53,958**	42,796	57,673

Other liabilities decreased by € 4.1 million from € 100.5 million to € 96.4 million, with liabilities arising from capital expenditures declining in particular. These are liabilities for goods and services provided by third parties recognized in respect of investment projects as of the balance sheet date. Deferred income decreased from € 43.4 million in the previous year to € 42.5 million. This is mainly due to the fact that the amount of new grants provided for current investment projects was smaller than the amount amortized under this heading. In the 2018 reporting year, a total of € 1.6 million was released through profit or loss from deferred income from subsidies (previous year: € 1.8 million).

Liabilities from interest payment obligations mainly include interest on bonds due at the beginning of the following quarter. There was a slight increase in this item due to the rise in financial liabilities.

(33) Deferred taxes

Deferred taxes are recognized on temporary differences between the carrying amounts of assets, liabilities and accruals in the balance sheet and their tax base. The tax rate applied to German entities in this case is a uniform 30 %. For foreign entities, the relevant national tax rates are applied. The tax rate applied in calculating deferred taxes at the US subsidiary remained constant at 23.6 %. The tax rate for Turkey increased from 20.0 % to 22.0 %. However, this only had a minor impact on the PCC Group.

The distribution of deferred taxes among the various balance sheet items is shown in the following table. Within the PCC Group, deferred tax assets and liabilities are offset and disclosed as netted balances where they relate to the same tax jurisdiction and where there is an enforceable right to the offsetting of tax liabilities and tax receivables. For fiscal 2018, this gave rise to deferred tax assets of € 4.0 million (previous year: € 4.0 million) and deferred tax liabilities of € 7.6 million (previous year: € 9.4 million).

in %	2018	2017
Belarus	18.0	18.0
Bosnia and Herzegovina	10.0	10.0
Bulgaria	10.0	10.0
Czech Republic	19.0	19.0
Germany	30.0	30.0
Iceland	20.0	20.0
Malaysia	24.0	–
North Macedonia	10.0	10.0
Poland	19.0	19.0
Romania	16.0	16.0
Russia	20.0	20.0
Turkey	22.0	20.0
USA	23.6	23.6

	Deferred tax assets		Deferred tax liabilities	
Figures in €k	2018	2017	2018	2017
Intangible assets	10	12	251	218
Property, plant and equipment	755	1,100	12,595	11,873
Financial assets	225	183	–	–
Inventories	615	319	–	1
Receivables	311	202	65	62
Securities	–	–	–	203
Other assets	15	6	1	7
Pension provisions	126	116	–	–
Accruals	139	–	129	137
Other provisions	1,172	1,022	–	1
Liabilities	271	447	92	71
Other liabilities	472	533	–	56
Unused tax losses	1,721	1,836	4	3
Sundry deferred taxes	4,727	4,090	155	86
Amounts netted	–6,559	–5,847	–5,722	–3,268
Total deferred taxes	**3,997**	4,020	**7,571**	9,449

The table above shows the unnetted deferred taxes. Deferred taxes arising from consolidation adjustments amounted to around €4.2 k in 2018 (previous year: €4.2 k), and relate primarily to eliminated intercompany profits. Sundry deferred taxes include future tax benefits arising from activities in a special economic zone.

The deferred tax assets on unused tax losses carried forward decreased in the year under review by a total of €0.1 million. They were essentially applied in respect of profits generated.

(34) Additional disclosures relating to financial instruments

As an internationally active corporation, the PCC Group is exposed to financial risks in the course of its ordinary business operations. A major objective of the corporate policy is to generally restrict market, default and liquidity risks, both in order to secure enterprise value over the long term and also maintain the Group's earning power and thus extensively cushion the negative impact of fluctuations in cash flow and earnings.

The Group holding company and the individual subsidiaries cooperate in the management of interest rate and currency risks, and also default risks. Each individual operating unit is responsible for managing its own commodity or raw material price risks, while liquidity control is the responsibility of the holding company.

Market risks

Currency risks: Changes in exchange rates can lead to losses in the value of financial instruments and also to disadvantageous changes in future cash flows from planned transactions. Currency risks in respect of financial instruments result from the translation of financial receivables, loans, securities, cash sums and financial liabilities into the functional currency of the various companies as of the reporting date. Specifically, currency risks arise both on the purchase side through the procurement of commodities and raw materials, and on the selling side as a result of the sale of end products. A potential change in the Polish złoty of 10 % would affect the equity and annual net earnings of the Group to the tune of €0.6 million (previous year: €1.1 million). A change in the exchange rate of the US dollar of likewise 10 % would have an impact on these items of €0.2 million (previous year: €2.1 million).

Interest rate risks: These risks arise as a result of potential changes in the market interest rate, causing fluctuations in the fair value of financial instruments bearing a fixed interest rate, and fluctuations in interest payments in the case of financial instruments bearing floating interest rates. A potential change in interest rates of 100 basis points would affect the equity and annual net earnings of the Group to the tune of € 1.7 million (previous year: € 4.0 million).

Commodity price risks: These risks result from market price changes in relation to commodity purchases and sales, and also the purchase of electricity and gas. The general risk situation of the PCC Group is greatly affected by the availability and also the price-dependency of relevant raw materials, input products and intermediate products. Within this context, the dependency of important commodity prices on foreign exchange rates, market movements and, in particular, the oil price, is especially relevant. Price volatilities are smoothed out, for example, through the agreement of price escalator clauses with suppliers and customers. Moreover, commodity price risks are restricted by internationally aligned sourcing activities. Backward integration along the value chain or along the various production stages encountered in the segments of the Chemicals division provides for an additional, high degree of independence in the procurement of raw materials and commodities, thus reducing risk to a reasonable level. The Commodity Trading business in the Specialty Chemicals segment is exposed to major price fluctuations that can occur from time to time.

Default or credit risks

Default or credit risks arise when contractual partners are unable to meet their contractual obligations. Credit limits are granted based on the continuous monitoring of the creditworthiness of major debtors. Because of the international activity and the diversified customer structure of the PCC Group, there are no major regional or segment-specific clusters of default risks. In selecting short-term capital investments, various safeguarding criteria are taken into account (e.g. ratings, capital guarantees or protection afforded by deposit protection funds). Given the selection criteria applied and our regime of constantly monitoring our capital investments, the PCC Group does not envisage any unidentified default risk occurring in this domain. The financial asset amounts shown in the balance sheet essentially represent the maximum default risk.

Such risks are regularly monitored and analyzed within the framework of a receivables and credit management regime and also by a Working Capital Management unit with responsibility at both the operational and Group levels. In all, receivables from customers are secured in an amount of € 49.4 million (previous year: € 51.8 million). Financial assets that are neither overdue nor impaired are categorized as collectable in line with the creditworthiness of the debtor.

Liquidity risks

Liquidity risks result from cash flow fluctuations. Current liquidity is monitored and controlled by a treasury reporting system implemented across the Group based on an IT-supported solution ("Treasury Information Platform"). In medium- and long-term liquidity planning, liquidity risks are identified and managed at their inception on the basis of simulations of various scenarios.

Obstacles that may arise within the SME bonds market segment could possibly – at least temporarily – lead to liquidity bottlenecks. This risk is to be countered over the long term through the development of alternative financing sources at the institutional level. Preparations are also being made for the partial replacement of the liquidity loans granted to the affiliated companies by bank loans.

Subsidiaries use forward contracts to hedge transactions in foreign currencies. The nominal value of these contracts as of the balance sheet date was € –0.4 million (previous year: € 1.6 million). The fair value was recognized as an asset in the amount of € 2.0 k (previous year: liability of € 2.5 k).

Within the PCC Group, interest rate swaps and options are used in order to hedge interest rates and their long-term development. At year-end, the nominal value of existing derivatives amounted to € 153.3 million (previous year: € 37.7 million), with a fair value of € 6.8 million recognized as a liability as of the reporting date (previous year: asset of € 0.3 million).

Financial instruments by class and category

In the case of trade accounts receivable, receivables from affiliated companies or enterprises in which participations are held, as well as other financial assets, cash and cash equivalents, trade accounts payable and other liabilities, the carrying amounts are regarded as realistic estimates of their fair values due to the shortness of their remaining terms. Assets that are not quoted on an active market and for which the fair value cannot therefore be reliably determined, are measured at cost.

Individual liabilities arising from bonds issued by subsidiaries contain sales commission and are recognized in accordance with the effective interest method. The fair value indicated in this section corresponds to the market quotations.

The net gains and net losses from financial instruments comprise valuation results, the carrying amounts of premiums and discounts, the recognition and reversal of expenses arising from impairments, currency translation results, and interest, dividends and all other effects on income arising from financial instruments. Financial instruments measured at fair value through profit or loss exclusively comprise results from those that have not been designated as hedging instruments in a hedging arrangement to IFRS 9. Net gains and net losses on financial assets available for sale contain results arising from depreciation and amortization, write-ups, interest, dividends and reclassifications of valuation effects from equity to profit or loss on the sale of securities or investments.

Figures in € k	Carrying amounts Dec. 31, 2018	Categories[1]				Fair Value
		FAaC	FLaC	FVtOCI	FVtPL	
Financial assets						
Non-current financial investments	2,141	–	–	2,131	10	904
Other non-current financial assets	17,120	17,120	–	–	–	17,120
Trade accounts receivable	81,621	81,621	–	–	–	81,621
Receivables from affiliated companies	653	653	–	–	–	653
Receivables from enterprises in which participations are held	11,526	11,526	–	–	–	11,526
Other financial assets	2,619	2,617	–	–	2	2,619
Cash and cash equivalents	63,119	63,119	–	–	–	63,119
Financial liabilities						
Bond liabilities	501,180	–	501,180	–	–	502,464
Profit participation certificates	–	–	–	–	–	–
Bank liabilities	308,063	–	308,063	–	–	307,982
Finance lease liabilities	9,682	–	–	–	–	9,682
Other financial liabilities	2,864	–	2,864	–	–	2,864
Trade accounts payable	84,597	–	84,597	–	–	84,597

Figures in € k	Carrying amounts Dec. 31, 2017	Categories[1]				Fair Value
		FAHfT	AfS	LaR	FLaC	
Financial assets						
Non-current financial investments	8,790	330	8,461	–	–	7,216
Other non-current financial assets	12,009	–	–	12,009	–	12,009
Trade accounts receivable	80,489	–	–	80,489	–	80,489
Receivables from affiliated companies	588	–	–	588	–	588
Receivables from associated companies	11,559	–	–	11,559	–	11,559
Other financial assets	3,814	3	–	3,812	–	3,814
Cash and cash equivalents	78,072	–	–	–	–	78,072
Financial liabilities						
Bond liabilities	444,511	–	–	–	444,511	451,547
Profit participation certificates	10,997	–	–	–	10,997	10,997
Bank liabilities	245,326	–	–	–	245,326	260,044
Finance lease liabilities	9,395	–	–	–	–	10,884
Other financial liabilities	1,490	5	–	–	1,485	1,490
Trade accounts payable	81,342	–	–	–	81,342	81,342

1 FAHfT = Financial assets held for trading; AfS = Available for sale; LaR = Loans and receivables; FLaC = Financial liabilities measured at amortized cost; FLHfT = Financial liabilities held for trading; FAaC = Financial assets measured at amortized cost; FVtOCI = Fair value through OCI; FVtPL = Fair value through profit or loss

Figures in € k	2018
Financial assets measured at amortized cost (FAaC)	1,596
Financial liabilities measured at amortized cost (FLaC)	−55,062
Fair value through profit or loss (FVtPL)	−1,586
Fair value through OCI (FVtOCI)	–

Figures in € k	2017
Loans and receivables (LaR)	1,974
Available for sale (AfS)	−797
Financial instruments held for trading (FAHfT, FLHfT)	−388
Financial liabilities measured at amortized cost (FLaC)	−45,089

Financial assets and liabilities measured at fair value are indicated in the following table. These relate to shares that are valued on the basis of stock market prices (Level 1) and to derivatives. The fair value of derivative financial instruments is dependent on the development of the underlying market factors. The relevant fair values are determined and monitored at regular intervals. The fair value determined for all derivative financial instruments is the price that would be paid on the sale of the asset or on transfer of a liability in a standard arm's length transaction made on the valuation date between independent market participants.

Figures in € k	Level 1	Level 2	Level 3	Dec. 31, 2018
Financial assets measured at fair value through profit or loss	–	10	–	10
Financial assets measured at fair value through other comprehensive income	2,131	–	–	2,131

Figures in € k	Level 1	Level 2	Level 3	Dec. 31, 2017
Financial assets measured at fair value through profit or loss	–	332	–	332
Financial liabilities measured at fair value through profit or loss	–	5	–	5
Financial assets available for sale	6,886	–	–	6,886

Derivative financial instruments

The subsidiaries of the PCC Group use derivative financial instruments in order to hedge both interest rate and currency risks. The methods and assumptions underlying the valuation of the derivative financial instruments used can be summarized as follows: Currency transactions and swaps are measured individually by their forward rate or forward price as of the balance sheet date. The forward rates or prices are based as far as possible on market quotations, taking into account forward premiums and discounts where appropriate.

Figures in €k	Dec. 31, 2018		Dec. 31, 2017	
	Nominal value	Fair Value	Nominal value	Fair Value
Forward exchange contracts	–403	2	1,619	–2
Foreign currency interest rate swaps	124,522	6,902	–	–
Interest rate swaps	26,429	–133	35,364	280
Other derivatives (interest rate- or currency-based)	2,302	6	2,370	29
Derivative financial instruments	**152,850**	**6,777**	39,353	306

Cash flow hedges

A Polish subsidiary has taken out a loan in euros in order to hedge against future revenues in a foreign currency. The valuation adjustments as of the respective reporting dates during the term of this loan are recognized in other comprehensive income. Cash flows from this cash flow hedge are due in 2021. The fair value amounts to €0.4 million (previous year: €0.4 million). In the period under review, a change in value of €0.0 million (previous year: €0.0 million) was recognized in other comprehensive income.

(35) Leases

Figures in €k	2018	2017
Historical cost		
Jan. 1	25,460	25,376
Changes in consolidation scope	–	100
Additions	4,337	1,517
Disposals	5,240	2,467
Reclassifications	–	–
Reclassified as held for sale	–	–
Currency translation differences	–547	935
Dec. 31	**24,010**	**25,460**
Amortization		
Jan. 1	5,170	4,295
Changes in consolidation scope	–	14
Additions	1,944	1,863
Disposals	1,805	1,241
Impairment write-downs	–	–
Reversal of write-downs	–	–
Reclassifications	–	–
Reclassified as held for sale	–	–
Currency translation differences	–160	238
Dec. 31	**5,150**	**5,170**
Net book value	**18,861**	**20,290**

Included in property, plant and equipment are assets which are regarded as economic goods owned on the basis of finance leases. Some finance lease agreements contain purchase options. In 2018, as in the previous year, there were no material future minimum lease payments arising from subleasing agreements to offset lease liabilities.

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2018
Minimum finance lease payments	3,542	6,507	84	**10,133**
Discount	213	235	3	**451**
Present value	3,328	6,273	81	**9,682**

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2017
Minimum finance lease payments	3,749	6,105	36	**9,889**
Discount	232	261	1	**494**
Present value	3,517	5,843	35	**9,395**

In addition to its finance lease commitments, the PCC Group is also a lessee under operating lease agreements and rental agreements. The associated commitments arising from minimum lease payments amount to €55.9 million (previous year: €22.0 million). A corresponding maturity profile is provided in Note (36). The increase has essentially resulted from the classification of leasehold and usufruct rights as leases.

(36) Contingent liabilities and other financial commitments

Figures in €k	Dec. 31, 2018	Dec. 31, 2017
Contingent liabilities arising from sureties and debt guarantees	**143**	205
Other contingent liabilities	**21,246**	21,357
Total contingent liabilities	**21,388**	21,562

The contingent liabilities arising from sureties and debt guarantees are attributable to Polish subsidiaries. These are undertakings granted either to non-consolidated companies or to third parties. They relate to leases and obligations to government bodies. The change in other contingent liabilities results from the recognition of investment grants, some of which may still be subject to repayment if contractually agreed conditions are not met. The PCC Group's current estimates indicate that no claims will be made against any such items.

Obligations under operating leases, rental commitments and other financial commitments remained in existence as of December 31, 2018. There has been a decrease in investment commitments year on year. There were no other major financial commitments in 2018 to entities not included in the consolidated financial statements.

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2018
Operating lease commitments	7,199	15,698	30,976	**53,874**
Rental commitments	1,351	614	28	**1,993**
Investment commitments for intangible assets	–	–	–	**–**
Investment commitments for property, plant and equipment	34,700	–	–	**34,700**
Other commitments (incl. pending transactions)	118	–	–	**118**
Total financial commitments	**43,369**	**16,312**	**31,004**	**90,685**

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2017
Operating lease commitments	332	118	–	**450**
Rental commitments	6,059	4,567	10,968	**21,594**
Investment commitments for intangible assets	13	–	–	**13**
Investment commitments for property, plant and equipment	67,028	–	–	**67,028**
Other commitments (incl. pending transactions)	118	–	–	**118**
Total financial commitments	**73,550**	**4,685**	**10,968**	**89,203**

(37) Statement of cash flows and capital structure management

Statement of cash flows

The cash flow statement shows the changes in cash and cash equivalents that took place in the year under review and is drawn up in accordance with IAS 7.

The cash flows are broken down according to the headings "Cash flow from operating activities", "Cash flow from investing activities" and "Cash flow from financing activities".

Interest received and taxes paid on income are recognized as cash flow from operating activities. Interest paid is disclosed under cash flow from financing activities.

Dividends paid are a component of the financing activities category. Dividends paid within the Group from income attributable to the previous year are eliminated. Dividend payments to the shareholder of PCC SE and dividend payments to co-shareholders at subsidiaries are separately disclosed in cash flow from financing activities.

The financial funds equate to the total of cash and cash equivalents (cash in hand, credit balances at banks, and checks) shown in the balance sheet. In the event of changes in the scope of consolidation arising from the purchase or sale of entities (loss of control), the purchase price paid or received, less the financial funds acquired or sold, is recognized under cash flow from investing activities. If the acquisition or sale of shares in a subsidiary takes place without a change in status, such transactions are disclosed as financing activities.

The conclusion of a finance lease agreement essentially constitutes a non-cash transaction. Payments made for investments in property, plant and equipment are netted in the statement of cash flows against finance lease proceeds.

Cash and cash equivalents disclosed in the balance sheet include an amount for fiscal 2018 of € 13.9 million (previous year: € 23.9 million) in funds not freely available. These are almost entirely attributable to finance already provided for investment projects.

The following reconciliation statement shows changes in financial liabilities disclosed as cash inflows and outflows under cash flow from financing activities. The cash changes amounted to € 95.3 million in the year under review compared to € 65.8 million in the previous year.

Figures in € k	Jan. 1, 2018	Cash-effective changes	Non-cash changes: Changes in consolidation scope	Non-cash changes: Reclassifications	Non-cash changes: Currency translation differences	Non-cash changes: Interest accrued	Non-cash changes: Other changes	Dec. 31, 2018
Profit participation certificates	10,997	–10,997	–	–	–	–	–	–
Bond liabilities	444,511	49,870	–	–	799	5,763	238	501,180
Bank liabilities	245,326	55,849	–	–	1,998	4,899	–9	308,063
Finance lease liabilities	9,395	537	–	–	–117	–	–132	9,682
Negative fair value of derivatives	–	–	–	–	–	–	137	137
Financial liabilities	**710,229**	**95,259**	**–**	**–**	**2,680**	**10,662**	**233**	**819,063**

Figures in € k	Jan. 1, 2017	Cash-effective changes	Non-cash changes: Changes in consolidation scope	Non-cash changes: Reclassifications	Non-cash changes: Currency translation differences	Non-cash changes: Interest accrued	Non-cash changes: Other changes	Dec. 31, 2017
Profit participation certificates	11,076	–	–	–	–	–	–79	10,997
Bond liabilities	392,793	51,856	–	–	–5,313	5,002	173	444,511
Bank liabilities	232,090	15,997	–	–804	–5,693	3,587	148	245,326
Finance lease liabilities	11,072	–2,036	83	39	233	–	4	9,395
Financial liabilities to affiliated companies	23	–	–23	–	–	–	–	–
Financial liabilities	**647,054**	**65,817**	**60**	**–765**	**–10,773**	**8,589**	**246**	**710,229**

Capital structure management

The purpose of capital structure management is to remain financially flexible so that the business portfolio can be effectively further developed and strategic options can be seized. The object of the financial policy of the Group is to secure its liquidity and solvency, limit financial risks and optimize capital costs. The control metric adopted in this context is the Net debt/EBITDA ratio. In reflecting the relationship between net financial liabilities including current and non-current pension provisions, current and non-current financial liabilities, cash and cash equivalents and also current securities, as well as the EBITDA figure, this constitutes a dynamic indicator of indebtedness.

Figures in € k	Dec. 31, 2018	Dec. 31, 2017
– Cash and cash equivalents	63,119	78,072
+ Provisions for pensions	758	700
+ Profit participation certificates	–	10,997
+ Bond liabilities	501,180	444,511
+ Bank liabilities	308,063	245,326
+ Finance lease liabilities	9,682	9,395
+ Negative fair value of derivatives	137	–
Net financial liabilities	**756,703**	632,856

With a net debt of € 756.7 million (previous year: € 632.9 million) and a reported EBITDA figure of € 105.3 million (previous year: € 73.8 million), the Net debt/EBITDA ratio for the year under review is 7.2 (previous year: 8.6), representing an improvement of 1.4 points.

In financing agreements, individual subsidiaries are subject to external minimum capital requirements reflected in standard financial covenants. These include, for example, generally accepted market requirements relating to minimum equity ratios and also maximum levels of indebtedness. The need to comply with these financial covenants is also taken into account in preparing the annual budget for the following year.

According to the information provided by the consolidated entities for the preparation of the consolidated financial statements, there were four cases of failure to comply with such covenants in 2018. The covenant breach reported in the previous year was remedied in fiscal 2018 and no longer exists as of the reporting date. All new cases relate to typical financial ratios for loan agreements which subsidiaries failed to satisfy. To date, none of these breaches have given rise to material consequences. One bank has slightly increased the interest rate as contractually stipulated. Due to materiality considerations, no differences have arisen in the presentation of financial liabilities in these consolidated financial statements.

Other disclosures

(38) Related party disclosures

Balances and business transactions between PCC SE and incorporated subsidiaries regarded as related parties are eliminated as part of the consolidation process and have not been included in these notes and disclosures. Details regarding the business transactions between the PCC Group and other related parties are indicated in the following.

Other receivables and other assets include a claim against the sole shareholder of PCC SE in the amount of € 0.2 million (previous year: € 0.4 million). This receivable is short-term in nature and, as in the previous year, carries an interest rate of 6.0 % p.a.

As of the balance sheet date, December 31, 2018, the PCC Group has claims against affiliated entities not included in the consolidated financial statements for reasons of immateriality amounting to a total of € 7.2 million (previous year: € 5.8 million). These relate to loans, trade accounts receivable and current loan receivables. The Group-internal financing arrangements carry interest rates ranging between 5.3 % p.a. and 10.0 % p.a.

For compensation to Management Board members, please refer to the notes under the section Corporate Bodies (40).

For compensation of the Administrative Board, again please refer to the notes under Corporate Bodies (40).

Essentially, sales made to related parties, or purchases from related parties, are transacted at prevailing market prices. Open positions as of the end of the fiscal year are not secured, are non-interest-bearing and will be settled in cash. There are no guarantees covering receivables from related parties or payables to related parties. Claims relating to loan receivables exist against the affiliated company OOO DME Aerosol amounting to € 5.8 million as of the balance sheet date (previous year: € 2.3 million). As in the previous year, the interest rate charged is 10.0 % p.a. The loans were granted for the development and construction of a dimethyl ether plant on the production site of the joint venture partner. Overall, the loan commitment granted by PCC SE to the joint venture was increased to a nominal € 5.0 million in the year under review in order to cover the financing requirements resulting from delays in commissioning and in the start of regular operations.

Figures in € k	2018	2017
Sales with related parties		
Non-consolidated entities	1,774	1,703
Joint ventures	193	–
Associated companies	–	–
Receivables from related parties		
Non-consolidated entities	7,168	5,759
Joint ventures	5,812	2,282
Associated companies	–	11,559
Enterprises in which participations are held	11,526	–
Liabilities to related parties		
Non-consolidated entities	1,324	1,249
Joint ventures	–	–
Associated companies	–	–

(39) Alternative performance measures

The consolidated financial statements and the management report of the PCC Group are prepared in accordance with currently applicable accounting standards. In addition to the disclosures and key financial metrics required by these standards, the PCC Group uses and publishes alternative performance measures (APMs). These are not subject to the regulations of the accounting standards. The PCC Group determines and uses APMs in order to facilitate comparability of such metrics over time and within the international business environment. These performance measures are used both in the assessment of external third parties and also internally for the management and control of organizational units.

Determination of these performance measures is by addition, subtraction, multiplication or division of individual or several items in the consolidated balance sheet and the consolidated statement of income. The APMs are applied unchanged versus the previous period.

The PCC Group determines the following alternative performance measures:
- EBIT
- EBITDA
- Net debt
- Return on capital employed (ROCE)
- Capital employed
- Gross profit
- Gross margin

EBIT (Earnings before Interest and other financial items and Taxes) serves as a measure of operating profit without taking into account differing international taxation systems and differing financing structures. The PCC Group ascertains its figures as follows:

Figures in €k	2018	2017
Earnings before taxes (EBT)	41,512	13,611
+/– Interest and other financial items	–27,419	–27,384
= EBIT	**68,930**	**40,996**

EBITDA (Earnings before Interest and other financial items, Taxes, Depreciation and Amortization) provides an adjusted view of operating profit before financial items, free of differing depreciation and amortization methods and irrespective of variations in assessment. It is determined within the PCC Group as follows:

Figures in €k	2018	2017
EBIT	68,930	40,996
+/– Depreciation and amortization	36,400	32,832
= EBITDA	**105,330**	**73,827**

The EBIT margin and the EBITDA margin are relative metrics used by the PCC Group for internal management and control of its segments and for international comparison. The margins are calculated by determining the ratio of EBITDA or EBIT to sales revenues.

For usage and calculation of the net debt figure and also the relative metric in the form of the Net debt/EBITDA ratio, please refer to Note (37) and the explanations concerning capital structure management contained therein.

Return on capital employed (ROCE) reflects the ratio of EBIT to average capital employed. EBIT is profit or loss (operating result) before financial items (before financial result) and taxes. Capital employed is calculated from the carrying values of equity and debt capital used by the PCC Group.

Figures in €k	Dec. 31, 2018	Dec. 31, 2017
+ Equity	150,447	139,135
+ Current financial liabilities	128,256	108,641
+ Non-current financial liabilities	690,807	601,587
+ Provisions for pensions and similar obligations	758	700
= Capital employed	**970,269**	**850,063**
= Average capital employed	910,166	816,375

Figures in €k	2018	2017
Sales	779,230	683,181
+ Change in inventory of finished products and work in progress	5,067	4,141
+ Other internal costs capitalized	8,463	4,780
– Purchased goods and services	559,911	489,285
= Gross profit	**232,850**	**202,817**

Gross margin refers to gross profit as a ratio of sales.

(40) Corporate bodies

The corporate bodies of PCC SE are as follows:

Managing Directors:

- Ulrike Warnecke, Finance and Human Resources, Organization and Public Relations, Trading and Consumer Products
- Dr. rer. oec. (BY) Alfred Pelzer, Chemicals Production, Logistics and Sales

The Managing Directors received remunerations totaling € 720 k in fiscal 2018 (previous year: € 799 k), recorded in full as short-term employee benefits.

Administrative Board:

- Dipl. Volkswirt Waldemar Preussner, Chairman of the Administrative Board
- Dr. rer. oec. (BY) Alfred Pelzer, Vice Chairman of the Administrative Board, Managing Director of PCC SE
- Reinhard Quint, Member of the Administrative Board, Member of the Corporate Development Council of Duisburger Hafen AG, Duisburg, Germany

The Administrative Board received remunerations totaling € 145 k in fiscal 2018 (previous year: € 145 k), recorded in full as short-term employee benefits.

Annual General Meeting:

The Annual General Meeting of PCC SE took place on May 22, 2018. The consolidated financial statements and the Group management report for 2017 were both approved, as were the actions of the Managing Directors and the Administrative Board of PCC SE. Further, Warth & Klein Grant Thornton AG, Düsseldorf, was reappointed as auditor for fiscal 2018.

(41) Events after the balance sheet date

Bond WKN A13R5K3 with a placed volume of € 13.7 million was redeemed in full as of January 1, 2019. It was issued on October 15, 2014, with a coupon of 6.50 % p.a.

Bond WKN A11QFD1 with a placed volume of € 8.9 million was redeemed in full as of April 1, 2019. It was issued on May 15, 2014, with a coupon of 6.75 % p.a.

Effective March 22, 2019, Elpis Sp. z o.o. and PCC SE concluded a share purchase agreement for 100 % of the voting rights in PCC Oxyalkylates Sdn. Bhd., Kuala Lumpur (Malaysia). This project company is considering a potential investment in a joint production site with PETRONAS Chemicals Group in Kerteh, Terengganu Province, Malaysia.

(42) Miscellaneous

The PCC Group and the individual German companies were audited by Warth & Klein Grant Thornton AG, Düsseldorf, and their respective financial statements were given an unqualified opinion. The fee for audit services in respect of these companies and the Group amounted to € 186.9 k (previous year: € 171.7 k). The fee for other services performed in the course of fiscal 2018 was € 4.4 k (previous year: € 4.6 k). Charges for tax consultancy services amounted to € 0.0 k (previous year: € 0.0 k).

(43) Schedule of shareholdings in accordance with Section 313 (2) HGB

Name and head office of company	Segment	Currency	Exchange rate as of Dec. 31, 2018 1 euro =	PCC SE participating interest in % Direct	Indirect	2018	2017
Parent company							
PCC SE, Duisburg	Holding/Projects	EUR	1.0000	–	–	–	–
Fully consolidated subsidiaries							
Aqua Łososiowice Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00
AO NOVOBALT Terminal, Kaliningrad	Specialty Chemicals	RUB	79.7153	–	100.00	**100.00**	100.00
CATCH66, Duisburg	Holding/Projects	EUR	1.0000	100.00	–	**100.00**	–
ChemiPark Technologiczny Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00
distripark.com Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	48.98	51.02	**100.00**	100.00
distripark GmbH, Kamp-Lintfort	Holding/Projects	EUR	1.0000	100.00	–	**100.00**	100.00
Ekologistyka Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00
Elpis Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00
GRID BH d.o.o., Sarajevo	Energy	BAM	1.9558	–	85.62	**85.62**	85.62
Kosmet Sp. z o.o., Brzeg Dolny	Consumer Products	PLN	4.3014	–	100.00	**100.00**	100.00
LabMatic Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00
MCAA SE, Brzeg Dolny	Chlorine	PLN	4.3014	100.00	–	**100.00**	100.00
Novi Energii OOD, Sofia	Energy	BGN	1.9558	–	60.00	**60.00**	60.00
OOO PCC Consumer Products, Moscow	Consumer Products	RUB	79.7153	–	100.00	**100.00**	100.00
OOO PCC Consumer Products Navigator, Grodno	Consumer Products	BYN	2.4734	–	100.00	**100.00**	100.00
PCC Apakor Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	99.59	**99.59**	99.59
PCC Autochem Sp. z o.o., Brzeg Dolny	Logistics	PLN	4.3014	–	100.00	**100.00**	100.00
PCC BakkiSilicon hf., Húsavík	Holding/Projects	USD	1.1450	86.50	–	**86.50**	86.50
PCC Bulgaria EOOD (formerly PCC Energia EOOD), Sofia	Polyols	BGN	1.9558	100.00	–	**100.00**	100.00
PCC Chemax, Inc., Piedmont, SC	Surfactants	USD	1.1450	–	100.00	**100.00**	100.00
PCC Consumer Products Czechowice S.A., Czechowice-Dziedzice	Consumer Products	PLN	4.3014	–	99.74	**99.74**	99.74
PCC Consumer Products Kosmet Sp. z o.o., Brzeg Dolny	Consumer Products	PLN	4.3014	–	100.00	**100.00**	100.00
PCC Consumer Products S.A., Brzeg Dolny	Consumer Products	PLN	4.3014	100.00	–	**100.00**	100.00
PCC DEG Renewables GmbH, Duisburg	Energy	EUR	1.0000	60.00	–	**60.00**	60.00
PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle	Energy	PLN	4.3014	84.46	–	**84.46**	84.46
PCC EXOL Kimya Sanayi ve Ticaret Limited Şirketi, Istanbul	Surfactants	TRY	6.0588	–	100.00	**100.00**	100.00
PCC EXOL SA, Brzeg Dolny	Surfactants	PLN	4.3014	85.82	–	**85.82**	85.82
PCC HYDRO DOOEL Skopje, Skopje	Energy	MKD	61.4950	–	100.00	**100.00**	100.00
PCC Insulations GmbH, Duisburg	Polyols	EUR	1.0000	100.00	–	**100.00**	–
PCC Intermodal GmbH, Duisburg	Logistics	EUR	1.0000	–	100.00	**100.00**	100.00
PCC Intermodal S.A., Gdynia	Logistics	PLN	4.3014	98.40	–	**98.40**	76.62
PCC IT S.A., Brzeg Dolny	Holding/Projects	PLN	4.3014	100.00	–	**100.00**	100.00
PCC Izvorsko EOOD, Sofia	Energy	BGN	1.9558	–	100.00	**100.00**	100.00
PCC MCAA Sp. z o.o., Brzeg Dolny	Chlorine	PLN	4.3014	–	97.30	**97.30**	97.30
PCC MORAVA-CHEM s.r.o., Český Těšín	Specialty Chemicals	CZK	25.7240	98.00	2.00	**100.00**	100.00
PCC NEW HYDRO DOOEL Skopje, Skopje	Energy	MKD	61.4950	–	100.00	**100.00**	100.00
PCC Oxyalkylates Malaysia Sdn. Bhd., Kuala Lumpur	Holding/Projects	MYR	4.7317	–	100.00	**100.00**	100.00
PCC Packaging Sp. z o.o., Brzeg Dolny	Consumer Products	PLN	4.3014	–	100.00	**100.00**	100.00
PCC Prodex GmbH, Essen	Polyols	EUR	1.0000	100.00	–	**100.00**	100.00
PCC Prodex Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.3014	–	100.00	**100.00**	100.00
PCC PU Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.3014	–	100.00	**100.00**	100.00
PCC Rokita SA, Brzeg Dolny	Polyols, Chlorine, Specialty Chemicals, Energy, Holding	PLN	4.3014	84.16	–	**84.16**	84.16
PCC Seaview Residences ehf., Húsavík	Holding/Projects	ISK	133.2300	100.00	–	**100.00**	100.00
PCC Silicium S.A., Zagórze	Specialty Chemicals	PLN	4.3014	99.99	–	**99.99**	99.99
PCC Specialties GmbH, Kamp-Lintfort	Specialty Chemicals	EUR	1.0000	100.00	–	**100.00**	100.00
PCC Synteza S.A., Kędzierzyn-Koźle	Specialty Chemicals	PLN	4.3014	100.00	–	**100.00**	100.00
PCC Therm Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.3014	–	100.00	**100.00**	100.00
PCC Trade & Services GmbH, Duisburg	Specialty Chemicals	EUR	1.0000	100.00	–	**100.00**	100.00
PolyU GmbH, Essen	Specialty Chemicals	EUR	1.0000	100.00	–	**100.00**	100.00
S.C. Euro-Urethane S.R.L., Râmnicu Vâlcea	Specialty Chemicals	RON	4.6635	58.72	–	**58.72**	58.72
ZAO PCC Rail, Moscow	Logistics	RUB	79.7153	100.00	–	**100.00**	100.00

Name and head office of company	Segment	Currency	Exchange rate as of Dec. 31, 2018 1 euro =	PCC SE participating interest in % Direct	Indirect	2018	2017	Equity in local currency ('000)	Net result in local currency ('000)
Joint ventures consolidated using the equity method									
OOO DME Aerosol, Pervomaysky	Holding/Projects	RUB	79.7153	50.00	–	**50.00**	50.00	–148,114.2	–105,855.4
IRPC Polyol Company Ltd., Bangkok	Polyols	THB	39.1210	–	50.00	**50.00**	25.00	96,225.3	–134,434.9
Subsidiaries not consolidated due to immateriality									
Abwicklungsgesellschaft TEC artec valves GmbH & Co. KG, Oranienburg	Holding/Projects	EUR	1.0000	68.85	–	**68.85**	68.85	unknown	unknown
BiznesPark Rokita Sp. z o.o. i.L., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	1,198.4	–49.6
Chemia-Profex Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	25.3	–24.3
Chemia-Serwis Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	87.4	12.1
Chemi-Plan S.A., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	12.2	–15.6
CWB Partner Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	410.2	106.7
Fate Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	–23.8	–9.8
Gaia Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	–14.3	–6.0
GEKON S.A. i.L., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	unknown	unknown
Hebe Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	–25.1	–11.1
LabAnalityka Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	–164.5	–89.1
Locochem Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	–347.4	–36.7
LogoPort Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	45.1	24.0
New Better Industry Sp. z o.o., Brzeg Dolny	Chlorine	PLN	4.3014	–	100.00	**100.00**	100.00	–17.0	–8.4
Pack4Chem Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	100.00	**100.00**	100.00	–29.8	–155.9
PCC ABC Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.3014	–	100.00	**100.00**	100.00	–5.1	–8.2
PCC Envolt Sp. z o.o., Brzeg Dolny	Energy	PLN	4.3014	100.00	–	**100.00**	100.00	111.8	–3.8
PCC Exol Philippines Inc. i.L., Batangas	Surfactants	PHP	60.113	–	99.99	**99.99**	99.99	–1,272.1	–134.9
PCC Organic Oils Ghana Ltd., Accra	Surfactants	GHS	5.5131	100.00	–	**100.00**	100.00	–23,436.9	–8,540.2
PCC Power Sp. z o.o., Brzeg Dolny	Energy	PLN	4.3014	100.00	–	**100.00**	100.00	–336.3	–175.6
PCC Slovakia s.r.o., Košice	Specialty Chemicals	EUR	1.0000	–	100.00	**100.00**	100.00	58.5	–2.7
Technochem Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.3014	–	85.80	**85.80**	85.80	–8.6	–3.3
TzOW Petro Carbo Chem, Lviv	Specialty Chemicals	UAH	31.7141	92.32	–	**92.32**	92.32	6,732.7	–105.2
Valcea Chemicals S.R.L. i.L., Bucharest	Specialty Chemicals	RON	4.6635	–	100.00	**100.00**	100.00	12.1	–11.4
ZAO Exol, Nizhny Novgorod	Surfactants	RUB	79.7153	100.00	–	**100.00**	100.00	–3,945.3	–815.3
Associated companies not consolidated using the equity method due to immateriality									
S.C. Oltchim S.A., Râmnicu Vâlcea	Holding/Projects	RON	4.6635	32.34	–	**32.34**	32.34	–220,496.2*	6,741.0*
Joint ventures not consolidated using the equity method due to immateriality									
IRPC-PCC Company Ltd, Bangkok	Polyols	THB	39.1210	–	–	**–**	49.99	0.0	0.0
Participating interests in other companies									
Brama Pomorza Sp. z o.o., Gdańsk	Holding/Projects	PLN	4.3014	7.41	–	**7.41**	7.41	–1,889.8	–523.3
TRANSGAZ S.A., Rybnik	Holding/Projects	PLN	4.3014	9.64	–	**9.64**	9.64	unknown	unknown

* According to official information

Duisburg, April 29, 2019

PCC SE

Ulrike Warnecke
Managing Director

Dr. rer. oec. (BY) Alfred Pelzer
Managing Director

Glossary

Additives
Additives and admixtures are substances which, incorporated in formulations in very small quantities, optimize the properties and performance profile of products such as concrete, paints and plastics and/or facilitate their manufacture and processing.

Betaines
Amphoteric surfactants used in cosmetic products such as hair shampoos to optimize the skin compatibility of the anionic surfactants responsible for the cleaning effect of such products.

CDP
Abbreviation for Carbon Disclosure Project. The CDP is an international, non-commercial organization that discloses environmental data, in particular greenhouse gas emissions, on the basis of surveys of participating companies and municipalities. The CDP has the world's largest database of its kind.

Chlor-alkali electrolysis
Electrochemical process in which the base chemicals chlorine, caustic soda (sodium hydroxide) and hydrogen are generated.

CHP
Combined Heat and Power – used in reference to power plants designed to supply both electrical and thermal energy in a process known as "cogeneration". More fuel-efficient due to utilization of otherwise wasted heat. Produces less CO_2 (greenhouse gas) per unit energy output, therefore regarded as more climate-friendly.

Climate-protection project
In keeping with the provisions of the Kyoto Protocol, a climate-protection project contributes to the reduction of greenhouse gases. Through adoption of a "clean development mechanism", participating developing countries are also to be assisted not only in reducing their emissions but also generally in their pursuit of a sustainable mode of development. The small hydropower plant projects being implemented by PCC in the Balkans constitute an example of this kind of assistance.

CSR
Abbreviation for Corporate Social Responsibility, referring to the self-regulatory, responsible attitude of businesses towards all stakeholders and the social and ecological environment.

DME
Abbreviation for dimethyl ether; DME is a colorless, non-toxic, slightly narcotic and highly flammable gas which, in its high-purity aerosol quality grade, is used primarily as a propellant in, for example, hair sprays. DME is also employed in the manufacture of structural ↑PU foams.

EBIT
Abbreviation for Earnings Before Interest and other financial items and Taxes; ↑EBITDA less depreciation and amortization.

EBITDA
Abbreviation for Earnings Before Interest and other financial items, Taxes, Depreciation and Amortization.

EBT
Abbreviation for Earnings Before Taxes; ↑EBIT less interest and other financial items.

Equity method
The equity method is an accounting approach used in the recognition of investments in associates and joint ventures in consolidated financial statements. The carrying amount of the investment is adjusted in line with the development and share of the subject enterprise's equity attributable to the ownership interest.

Ethoxylation
Process for the manufacture of non-ionic ↑surfactants (ethoxylates; surface-active substances), which are major constituents of, in particular, detergents and cleaning products.

FSC®
Abbreviation for Forest Stewardship Council; an independent, non-profit, non-governmental organization which is represented in 80 countries. The mission of the FSC® is to promote the environmentally sound, socially responsible and economically viable management of forests.

Global Compact of the United Nations
The UN Global Compact is the world's largest initiative in the field of Corporate Social Responsibility (↑CSR). It is a principle-based framework for businesses, stating ten principles in the areas of human rights, labor, the environment and anti-corruption.

Intermodal transport
Combined transport (CT) involving the conveyance of goods, primarily in containers, which are transferred one or more times between different modes of carriage such as train, truck and ship.

Isocyanates
Highly reactive chemical esters of isocyanic acid. Compounds that contain two isocyanate groups are termed diisocyanates, and these react with ↑polyols to create polyurethanes (↑PU foams).

MCAA
Abbreviation for monochloroacetic acid, an intermediate product used primarily in the manufacture of personal care products, but also for applications in the agriculture, food and pharmaceutical industries.

Membrane process
Modern process in chlor-alkali electrolysis used in the manufacture of chlorine. The membrane process is more energy-efficient than, for example, the amalgam process, and functions without the use of mercury.

MW (megawatt)
Unit of measurement for electric power:
1 megawatt = 10^3 kilowatts
1 gigawatt = 10^6 kilowatts
1 terawatt = 10^9 kilowatts

Phosphorus derivatives
Substances manufactured from phosphorus, such as flame retardants and plasticizers.

Polyols
Organic compounds that contain several hydroxyl groups called polyalcohols (multivalent alcohols). Polyols are a basic feedstock used in the manufacture of both flexible and rigid ↑polyurethane (PU) foams such as are used in the production of furniture and mattresses and in the automotive industry.

PU foams
PU is the abbreviation for polyurethane (also abbreviated PUR), of which ↑polyols are a major constituent.

REACH
European regulation governing the registration, evaluation, authorization and restriction of chemicals.

Renewable energy
Also known as regenerative energy; term given to energy from sustainable sources such as solar energy, biomass, hydroelectric power, wind power and geothermal energy.

Responsible Care®
Global initiative of the chemicals industry aimed at continuously improving sustainability in terms of environmental protection, health and safety.

ROCE
Return On Capital Employed; ↑EBIT ÷ [Average equity + Average interest-bearing borrowings incl. pension provisions].

SE
Latin abbreviation: Societas Europaea; English: European Company.

Segment
Introduced on January 1, 2013 as a basic management unit of PCC (conversion to segment structure as a refinement of the former divisional structure). The Group is divided into eight segments: ↑Polyols, ↑Surfactants, Chlorine, Specialty Chemicals, Consumer Products, Energy, Logistics, and Holding/Projects.

Squeeze-out procedure
Procedure for the exclusion of minority (non-controlling) shareholders of a stock corporation with the aim of transferring the shares to the majority (controlling) shareholder. The prerequisite for this is that the majority shareholder exceeds a minimum shareholding stipulated by national capital market law, for example currently 95 % in Germany and 90 % in Poland.

Sulfonation
Process for the manufacture of anionic ↑surfactants (sulfonates; surface-active substances) which, because of their dermatological compatibility, are widely used in cosmetics and laundry/home care detergents.

Surfactants
Surface-active substances; ingredients in cosmetics, detergents, cleaning and cleansing products (↑Ethoxylation, ↑Sulfonation).

TEU
Abbreviation for Twenty-foot Equivalent Unit – unit of measurement for ISO standard containers; 1 TEU corresponds to a 20 foot ISO container.

Value chain
The sequential set of primary and support activities in a production process that an enterprise performs to turn inputs, e.g. raw materials, into value-added outputs, e.g. finished products, for its external customers.

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Duisburg, May 2019

This Annual Report is available in its original German version and as an English translation.

Both versions can be downloaded from www.pcc.eu.

Forward-looking statements

This Annual Report contains forward-looking statements which are based on the current estimates and assumptions made by the management with respect to future developments. The accuracy of such statements is subject to risks and uncertainties that lie outside the control and forecasting capability of PCC SE. Examples include changes in the market environment and underlying economic conditions, the behavior of other market participants, the success with which new acquisitions can be integrated, the realization of anticipated synergy effects, and the actions of governmental agencies. Should such factors of uncertainty or imponderables come into play, or if the assumptions upon which these statements are based prove to be incorrect, the ensuing events could differ materially from those explicitly indicated, implied in or inferred from these statements. PCC SE neither plans nor undertakes to update any forward-looking statements in respect of developments or events occurring in the future.

Technical discrepancies

For technical reasons (e.g. arising from the conversion of electronic formats), differences may occur between the information provided in this Annual Report and that contained in the accounting documents submitted for publication in the Federal gazette (Bundesanzeiger). In such cases, the version appearing in the Federal gazette is authoritative.

PCC on the internet

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www.pcc-financialdata.eu

PCC. Direktinvest
www.pcc-direktinvest.eu

Chemicals
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