PCC Group
Annual Report 2021

DELIVERING SUCCESS

PCC. Creating value together

PCC SE

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Gender advisory

For the sake of readability, this report may occasionally make reference to people using masculine or feminine pronouns. The neutral singular "they" and "them" may also be used. References to persons in general apply equally to all genders. All readers should feel equally addressed by the content of this report.

We thank you for your understanding.

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Letter from the CEO

Dr. Peter Wenzel
Chief Executive Officer
PCC SE

Ladies and Gentlemen:

2021 was one of the best fiscal years in PCC's almost 29-year history, despite the ongoing disruptions caused by the coronavirus pandemic. Consolidated sales of almost one billion euros and EBITDA at close to two hundred million euros are figures we can be proud of in relation to our company's ability to generate growth from within.

We owe this performance primarily to the exceptional commitment, competence and innovative strength of the more than three thousand employees within the PCC Group and, of course, to the loyalty and trust of our investors and co-investors and our many long-standing partners – our customers, suppliers and service providers. On behalf of the entire management of PCC SE, I would like to express my sincerest thanks to you all for the contributions you have made.

The success that we are now enjoying is also the result of a corporate strategy that has been consistently and continuously implemented with a view to long-term value enhancement. In the past decade, we have assigned over one billion euros to growth investments, the fruits of which we are now beginning to reap.

At € 980 million, Group sales in fiscal year 2021 were 37 % higher than in the previous year, driven mainly by high demand and the price development of our chemical products, supported by the commissioning of expansion investments and the successful restart of our silicon metal plant in Iceland. Consolidated earnings before interest, taxes, depreciation and amortization increased to € 198 million, up 136 % from 2020 and 100 % from the last pre-crisis year, 2019. Cash flow from operating activities of € 130 million and earnings before taxes of € 92 million in fiscal 2021 likewise constitute significant year-on-year improvements.

Once again in the past fiscal year, the Chemicals division made by far the largest contribution in terms of earnings generated. Almost all segments of this division closed 2021 with results well above the previous year and actually far better than forecasted. This applies in particular to the Polyols segment, which again outperformed an already very successful previous year thanks to sustained high demand, enabling it to surpass historically good earnings for the second year in succession. Earnings in the Surfactants segment were also significantly higher than the solid levels of the previous year, thanks in part to increasing demand for higher-value products for industrial applications, sales of which had been dampened in the previous year due to the pandemic. This also applies to the Chlorine segment, which was likewise able to benefit from rising demand in 2021 as a result of the economic upturn. Similarly, our largest logistics entity, PCC Intermodal SA, succeeded in making further headway in a difficult market environment, closing fiscal 2021 with a highly commendable set of figures and with results significantly up on the previous year.

Our capital expenditures in 2021 totaled € 111 million compared to a significantly lower – pandemic-related – total of € 67 million in the previous year. Our first priority remains to achieve a continual, responsibly managed and sustainable increase in our enterprise value. As of December 31, 2021, the valuation of our share portfolio was € 917 million.

The success we are now enjoying is the result of our corporate strategy. In the past decade, we have assigned over one billion euros to growth investments, the fruits of which we are now beginning to reap.

Dr. Peter Wenzel
Chief Executive Officer of PCC SE

In the coming years, we plan to significantly expand our investment activities, with green-field and brown-field projects as well as acquisitions expected to be part of the mix. One focus will be the systematic further development of our core businesses involving ethoxylates and polyols – hence the investment decision taken recently in this regard to significantly expand production capacities in Poland between now and 2024. Construction of the oxyalkylates plant of our new joint venture with PETRONAS Chemicals Group in Malaysia is also progressing to schedule, with expectations that the start-up of this facility planned for 2023 will open up Southeast Asia as another important market for us. Our goal is to develop PCC into a global player in this – for us – exceptionally important and successful business area. By securing an investment location with excellent infrastructure on the U.S. Gulf Coast, we have also created a platform for the planned expansion of our presence in North America.

Key to the sustainable success of our chemicals activities going forward will be the extension of our value chains in both directions: upstream by securing strategic raw materials through long-term supply contracts or investments in our own production facilities, and downstream by decoupling from volatile commodity markets through the consistent and effective further development of our products into application-related specialties. The construction of a new state-of-the-art research and development center with a floorspace area of over 6,000 square meters at our Brzeg Dolny site is expected to take us an important step forward in this undertaking.

We will also be pursuing this development strategy in our new Silicon & Derivatives segment established as of the beginning of 2022. With our planned investment in the production of biogenic reducing agents for silicon metal production, we are aiming to achieve both raw material self-sufficiency and real progress in our overarching goal of climate neutrality in our production chains. With the difficult start-up phase of our silicon metal production plant in Iceland behind us, it is now apparent that this too was a wise investment decision. We produce this raw material, very much a key input for electronic components, solar systems, batteries and many other innovative products, in close proximity to our customers in Europe and on the basis of 100 % renewable energies. High demand and the rise in energy costs at other production sites have brought a significant increase in the market price of silicon, as a result of which we are considering expanding the plant in Iceland.

In Malaysia, we are building a production plant for oxyalkylates in a joint venture with PETRONAS Chemicals Group. The construction work continues to progress to schedule. This photo shows the site as it looked in March 2022.

The silicon metal production facility of our Group subsidiary PCC BakkiSilicon hf. in Iceland exclusively uses for its plant operations electricity from renewable sources, such as geothermal energy, and is therefore particularly climate-friendly.

We are especially proud of a long-term partnership recently agreed with the Fraunhofer Institute for Solar Energy Systems ISE of Freiburg, Germany, covering the development of battery anode materials based on graphene-coated silicon nanoparticles. This is just one of several parallel development activities for silicon-based products especially aligned to battery and photovoltaic applications with their enormous growth potential.

The outstanding competitive advantages of intermodal container transport, especially in terms of sustainability, energy costs and speed, are becoming increasingly clear against the backdrop of current developments in Europe. We also plan to grow significantly in this promising future segment over the next few years with the construction of three new container handling terminals.

Our aim is to continue pursuing these projects and, indeed, the full range of our business activities, in line with a corporate culture geared to meeting our social responsibility through value-led, sustainable management.

"Creating value together" – with exceptional entrepreneurship coupled with reliability, trust and confidence, both within our organization and in all our stakeholder- and partner-facing activities – that is the PCC credo.

Sincerely yours,

Peter Wenzel
Chief Executive Officer of PCC SE

Corporate bodies

Executive Board and Supervisory Board of PCC SE

Fiscal 2021 brought a change in the governance structure of PCC SE. Comprising a Supervisory Board and an Executive Board, the new format replaces the previous system featuring an Administrative Board and Managing Directors. The two new bodies are strictly separate in terms of personnel. With this reorganization, which came into force on August 31, 2021, PCC SE is preparing long-term for a generational change in its Group management make-up. The new system is also intended to generally consolidate the corporate structure of PCC SE and strengthen its strategic focus on sustainability as the key issue of the future.

As of December 31, 2021, the Executive Board of PCC SE comprised the following three members:
- Dr. Peter Wenzel (CEO)
- Ulrike Warnecke
- Dr. rer. oec. (BY) Alfred Pelzer

And also as of December 31, 2021, the Supervisory Board of PCC SE comprised the following three members:
- Dipl.-Volkswirt Waldemar Preussner (Chairman)
- Dr. Hans-Josef Ritzert (Vice Chairman)
- Reinhard Quint

Executive Board of PCC SE

Dr. Peter Wenzel

Chief Executive Officer of PCC SE

Dr. Peter Wenzel (57) has held senior managerial positions at PCC since 2003. He was appointed Chief Executive Officer of PCC SE on August 31, 2021, with lead responsibility for Corporate and Project Development, and also Sustainability – a key issue of increasing strategic importance for the PCC Group. He further holds several other executive, management and supervisory board mandates within the PCC Group, for example as Managing Director of both PCC Chemicals GmbH and PCC Integrated Chemistries GmbH, and as a member of the supervisory boards of our Icelandic and Malaysian affiliates PCC BakkiSilicon hf. (Chair) and PCG PCC Oxyalkylates Sdn. Bhd.

Ulrike Warnecke

Member of the Executive Board of PCC SE

Ulrike Warnecke (59) has held a number of senior management positions within the PCC Group since PCC was first established. A Member of the Executive Board of PCC SE since August 31, 2021, she has lead responsibility for the corporate functions Finance, Human Resources and Public Relations – as was also the case in her previous role as Managing Director (between 2007 and 2021). Her operational responsibilities extend to the segments Specialty Chemicals and Consumer Products. Among other roles, she is also the Managing Director of our most important commodity 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.

Dr. rer. oec. (BY) Alfred Pelzer

Member of the Executive Board of PCC SE

Dr. rer. oec. (BY) Alfred Pelzer (62) has been in senior managerial positions with PCC since 1995. A member of the Executive Board of PCC SE since August 31, 2021, he has lead responsibility for the operational areas of Chemical Production, the main revenue generator of our Group, plus Logistics, Sales and Distribution – as was also the case in his previous twin roles as Managing Director and Vice Chairman of the Administrative Board (between 2007 and 2021). He holds a number of supervisory board mandates within the PCC Group, including at the chemical production companies PCC Rokita SA (Chair), PCC Exol SA, PCC MCAA Sp. z o.o. and PCC Synteza S.A. (Chair), plus PCC IT S.A. (Chair) and the logistics companies PCC Intermodal SA (Chair) and PCC Autochem Sp. z o.o. (Chair).

Supervisory Board of PCC SE

Waldemar Preussner

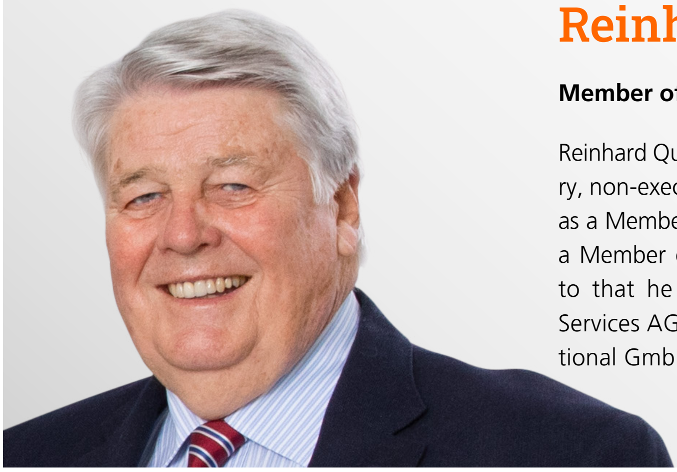
Chairman of the Supervisory Board of PCC SE

Utilizing his many years of experience in Eastern Europe to harness the opportunities arising there as a result of market liberalization, Waldemar Preussner (63) established in 1993 Petro Carbo Chem Rohstoffhandelsgesellschaft mbH (today: PCC Trade & Services GmbH), a company that remains at the core of the PCC Group. 1998 then 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 or SE). Waldemar Preussner is the sole shareholder and Chairman of the Supervisory Board of PCC SE, having chaired the Administrative Board until the new management structure came into force on August 31, 2021. He further holds a number of supervisory board mandates within the PCC Group.

Dr. Hans-Josef Ritzert

Vice Chairman of the Supervisory Board of PCC SE

Dr. Hans-Josef Ritzert (62) was appointed Vice Chairman of the Supervisory Board of PCC SE on August 31, 2021. Previously, Dr. Ritzert had been associated with the PCC Group as an adviser. Originally a chemist by profession, he has also served as Managing Director of Evonik Nutrition & Care GmbH and Head of the Evonik China organization. As well as continuing to work as a consultant, he currently holds various mandates outside PCC SE, including as a member of the supervisory board of Röhm AG.



Reinhard Quint

Member of the Supervisory Board of PCC SE

Reinhard Quint (79) began supporting the PCC Group in an advisory, non-executive role in 2002. Between 2007 and 2021 he served as a Member of the Administrative Board of PCC SE and has been a Member of its Supervisory Board since August 31, 2021. Prior to that he was, for many years, Chairman of ThyssenKrupp Services AG (known today as ThyssenKrupp Materials International GmbH) in Essen, Germany.

A word of welcome from the Chairman of the Supervisory Board

Ladies and Gentlemen:

This 2021 annual report details an exceptionally successful year for the PCC Group. As Chairman of the Supervisory Board, I would like to express my great appreciation and thanks – also on behalf of my Supervisory Board colleagues – to the management of PCC SE, to the management boards and managing directors of all our subsidiaries and, not least, to all our employees. My gratitude also goes to all our business partners and, of course, to all our investors, many of whom have continued to place their trust in PCC over many years. You have all made a major contribution to the success of the PCC Group.

You will see from the present annual report that our start to fiscal 2022 has been similarly positive. The first few months of the year also saw the PCC Group reach a number of important milestones in its drive for further sustainable growth. However, Russia's inconceivable attack on Ukraine, in particular, will continue to pose new challenges in the weeks and likely months ahead, creating head winds that we will all have to face together. The Supervisory Board of PCC SE believes that the company is well positioned to meet these challenges and will be pleased to continue to closely support PCC in its future progress.

Duisburg, April 2022

Kind regards,

Waldemar Preussner
Chairman of the Supervisory Board of PCC SE

The Direktinvest unit of PCC SE

PCC bonds – track-proven as a flexible, bank-independent financing instrument since 1998

PCC SE finances itself through a combination of equity funds and borrowings, with the issuance of corporate bonds (bearer debentures) having been adopted as an essential financing instrument. This allows us as the holding company of the PCC Group to respond 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 banks. The issuance of bonds to a wide circle of private and institutional investors will therefore remain a central element of our financing strategy going forward. At the same time, we are broadening our funding base through targeted project and loan financing.

PCC is one of Germany's most experienced issuers of corporate securities: Since the first issuance on October 1, 1998, we have – as of December 31, 2021 – issued a total of 82 bonds and one profit participation certificate. Of these instruments, we had redeemed 60 bonds and the profit participation certificate as of the reporting date, 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. At the same time, we benefit from a balanced process of fund inflows and repayment outflows without excessive peak burdens. In keeping with our conservative business philosophy, we only acquire funds through our security placements to the extent needed by PCC as a growth-led investor to promote the further development of the Group.

PCC SE bonds per December 31, 2021

PCC. Direktinvest

ISIN	Fixed coupon p.a.	Start of tenor	End of tenor	Listing	Nominal value in €k as of December 31, 2021
DE000A2G9HY2	3.00 %	04/01/2018	02/01/2022	Frankfurt	9,588
DE000A14KJ43	6.50 %	05/01/2015	04/01/2022	Frankfurt	16,181
DE000A254TD7	3.00 %	04/30/2020	05/01/2022	Frankfurt	14,631
DE000A2GSSY5	4.00 %	10/01/2017	07/01/2022	Frankfurt	24,968
DE000A162AQ4	6.00 %	10/01/2015	10/01/2022	Frankfurt	24,860
DE000A2TSTW0	3.00 %	03/01/2019	02/01/2023	Frankfurt	18,447
DE000A2G8670	4.00 %	01/01/2018	04/01/2023	Frankfurt	21,802
DE000A3H2VT6	3.00 %	11/02/2020	07/01/2023	Frankfurt	14,705
DE000A2LQZH9	4.00 %	07/01/2018	10/01/2023	Frankfurt	28,783
DE000A2YPFX3	3.00 %	12/02/2019	01/01/2024	Frankfurt	4,511
DE000A3E5MD5	3.00 %	07/01/2021	01/01/2024	Frankfurt	9,545
DE000A2NBFT4	4.00 %	10/01/2018	04/01/2024	Frankfurt	21,104
DE000A2NBJL3	4.00 %	01/01/2019	07/01/2024	Frankfurt	24,985
DE000A2TSEM3	4.00 %	07/01/2019	10/01/2024	Frankfurt	29,946
DE000A254TZ0	4.00 %	04/01/2020	12/01/2024	Frankfurt	34,503
DE000A2YN1K5	4.00 %	10/22/2019	02/01/2025	Frankfurt	29,133
DE000A3MQEM0	3.00 %	11/15/2021	04/01/2025	Frankfurt	2,336
DE000A2YPFY1	4.00 %	12/02/2019	07/01/2025	Frankfurt	23,818
DE000A3H2VU4	4.00 %	11/02/2020	10/01/2025	Frankfurt	29,653
DE000A3E5S42	4.00 %	05/17/2021	07/01/2026	Frankfurt	29,643
DE000A3MP4P9	4.00 %	10/01/2021	10/01/2026	Frankfurt	10,000
DE000A3MQEN8	4.00 %	11/15/2021	12/01/2026	Frankfurt	12,241

PCC SE securities in circulation

As of December 31, 2021, there were a total of 22 bonds in circulation, representing a combined nominal volume of around € 435.4 million. Subsequent to the reporting date, PCC SE redeemed the 3.00 % bullet bond ISIN DE000A2G9HY2 with a redemption volume of € 9.6 million on February 1, 2022, and the 6.50 % bullet bond ISIN DE000A14KJ43 with a redemption volume of € 16.2 million on April 1, 2022. The bonds of PCC SE currently available for subscription can be found on the internet at www.pcc-direktinvest.eu.

Credible, transparent financial information for our investors

We regularly publish relevant, current corporate and financial data relating to PCC in a prompt and consistently transparent fashion. All such information can be found on the internet under the PCC. Direktinvest section of www.pcc.eu and also at www.pcc-financialdata.eu. The audited annual financial statements of the PCC Group are likewise available there as PDF downloads – our online archive contains all annual reports since initial publication for the year 2003 and all quarterly reports since initial publication in 2001. The PCC. Direktinvest section on www.pcc.eu further contains information relating to new security issuances and bonds currently in circulation.

PCC Group management in direct dialog with our investors

Several times a year, the PCC Group management enters into direct personal dialog with the investment community. Every quarter, we hold an investor conference as an online webcast at which the Executive Board presents the latest quarterly report or annual report, explains current business developments, and participates in an interactive Q&A session with the audience. For safety reasons, we suspended our on-site face-to-face information events in 2020, and these have yet to resume. Prior to the outbreak of the coronavirus pandemic, we regularly held an annual Investors’ Day at our headquarters in Duisburg supplemented by a series of PCC Information Evenings across several major German cities aligned to investors and prospective bondholders.

PCC SE bond maturities 2021

PCC. Direktinvest

ISIN	Fixed coupon p.a.	Start of tenor	End of tenor	Listing	Redemption volume in € k
DE000A2E4Z04	4.00 %	07/01/2017	04/01/2021	Frankfurt	19,927
DE000A2AAY85	4.00 %	10/17/2016	07/01/2021	Frankfurt	23,687
DE000A13SH30	6.75 %	12/01/2014	10/01/2021	Frankfurt	19,890
DE000A2YPFD5	2.00 %	10/01/2019	12/01/2021	–[1]	4,600

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

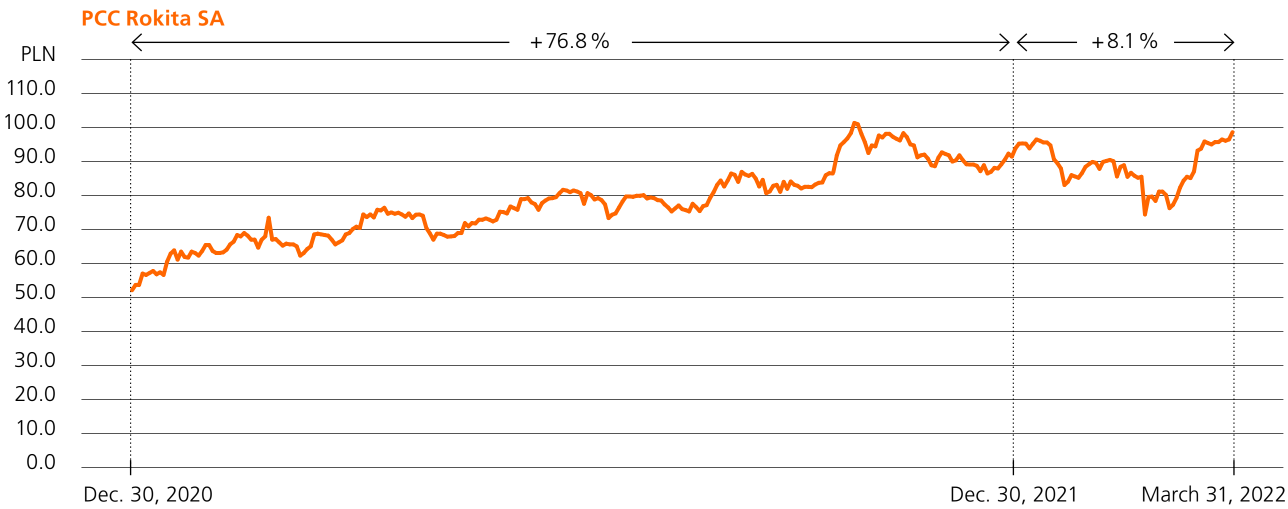
PCC affiliates listed in Poland

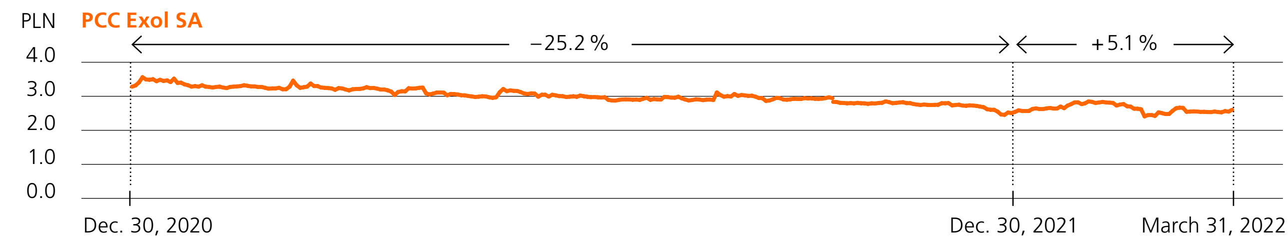
Capitalized share value of listed PCC companies at € 488.8 million

Two PCC Group companies – PCC Rokita SA and PCC Exol SA – are listed on the Warsaw Stock Exchange (GPW). As of the reporting date, December 31, 2021, the value of the share packages of these affiliates held indirectly by PCC SE through its subsidiaries amounted to a combined total of €414.1 million and was thus around 38.4 % higher than the market capitalized value of the previous year. The total market capitalization of these listed PCC affiliates per the reporting date amounted to the equivalent of €488.8 million, an increase of 39.5 % versus the previous year. As in 2020, stock markets in 2021 tracked the general economic trend in that they were again significantly impacted by various factors, most notably the ongoing coronavirus pandemic and the significant rise in inflation rates in key economies. Nonetheless, most of developed stock markets were either hitting or heading for new highs. The alternating good and bad news regarding the course of the pandemic, the general progress of the vaccination roll-out and anticipated related government responses in the form of contact restrictions or relaxations, gave rise to – in some cases – high levels of volatility. Central banks in industrialized countries, including the Polish central bank, supported international and local stock markets by continuing monetary easing, which in the euro area was a major factor sustaining both the multi-billion bond-buying program and the zero interest rate policy. Not until mid-December 2021 did the Polish central bank announce its intention to implement an interest rate hike cycle due to the sharp rise in inflation, with the first rise in rates coming one month later.

PCC holds a clear majority in the region of 85 % in each of its two listed subsidiaries. The main advantages of stock exchange listings are transparent company valuations, a strengthened equity base for the entities involved, and the possibility of financing future investments through further equity measures. Moreover, strategic minority investors or investment funds can participate in the two companies via the stock exchange.

Price performance of PCC shares on the Warsaw Stock Exchange (GPW)





As of the 2021 reporting date, the STOXX Europe 600 Chemicals sector index was up 9.7 % on the start of the year. The cumulative growth in market capitalization of the PCC subsidiaries was thus well above the index average in the past fiscal year.

PCC Rokita SA 2021 share price up 76.8 %

As of December 30, 2021, the closing price for shares in PCC Rokita SA (PLPCCRK00076) was PLN 91.60, representing an increase of 76.8 % year on year. The market capitalization figure at the end of the year was thus the equivalent of € 395.6 million. The share price has continued to rise in the course of the current fiscal year: As of March 31, 2022, the closing price was PLN 99.00, a further 8.1 % above the closing price for year-end 2021. PCC SE indirectly holds 84.17 % of the shares in PCC Rokita SA.

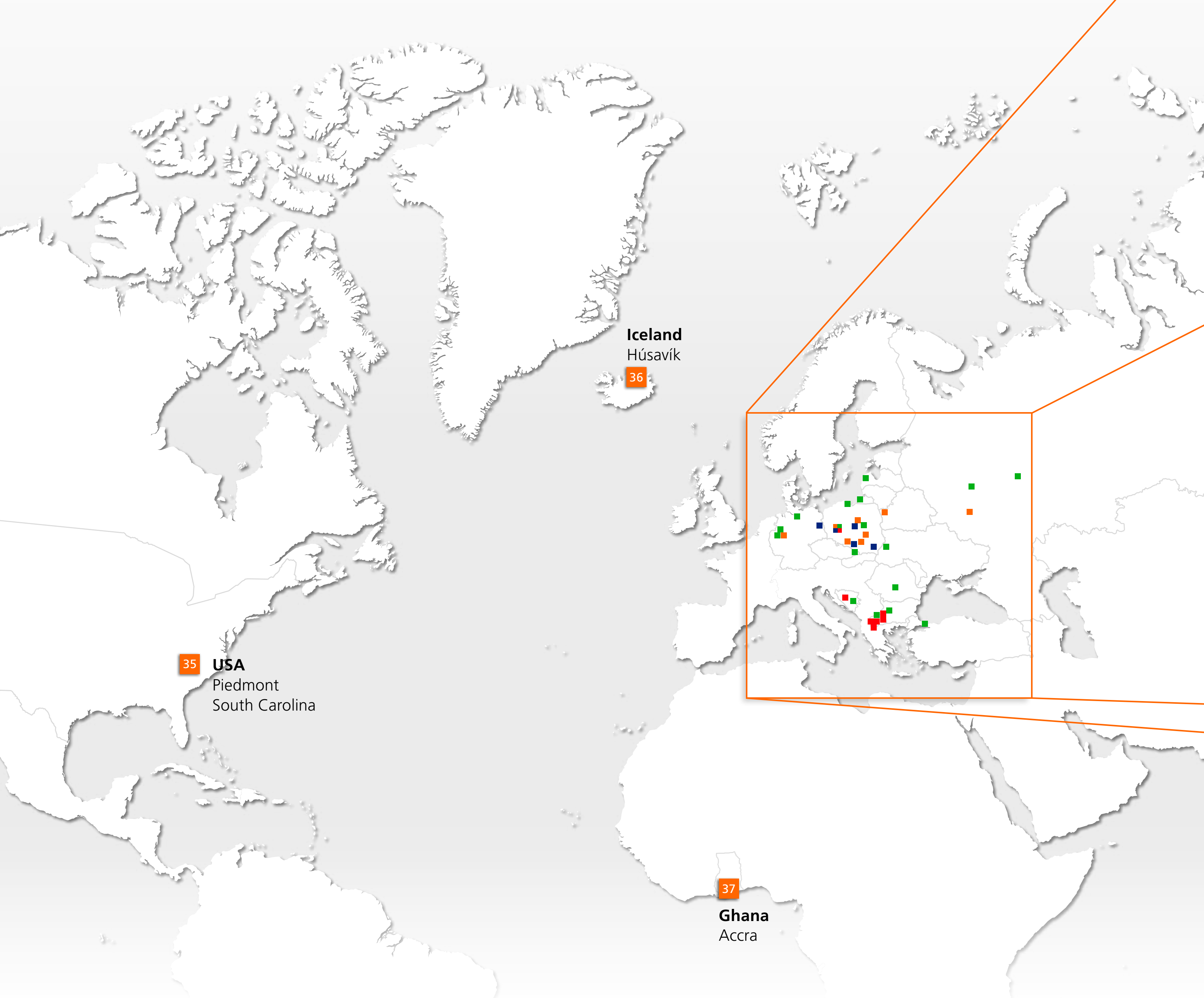
PCC Exol SA sees share price fall 25.2 % in 2021

The share price performance of PCC Exol SA (PLPCCEX00010) does not reflect the record results posted by this company in the year under review. 2020 had already shown how successful and resilient PCC Exol SA was in navigating its operating business through the crisis, with the surfactant manufacturer maintaining its upward progress through 2021. Nevertheless, the closing price as of December 30, 2021 was down 25.2 % year on year at PLN 2.47. The market capitalization value of PCC Exol SA thus declined to the equivalent of € 93.2 million. The current fiscal year has seen the share price recover slightly to PLN 2.60 as of March 31, 2022, 5.1 % above the 2021 closing price. PCC SE indirectly holds 87.04 % of the shares in PCC Exol SA.

PCC Rokita SA again made a significant contribution to Group earnings in 2021. Pictured here is the propylene oxide plant of this Group subsidiary at the PCC site in Brzeg Dolny.

PCC Group sites

3,311 employees – 39 sites – 17 countries
The Group companies of PCC are currently active at 39 sites in 17 countries (status as of December 31, 2021), with most of our 3,311 employees working in Europe. Beyond these frontiers, the PCC Group is also represented in North America, Asia and Africa.



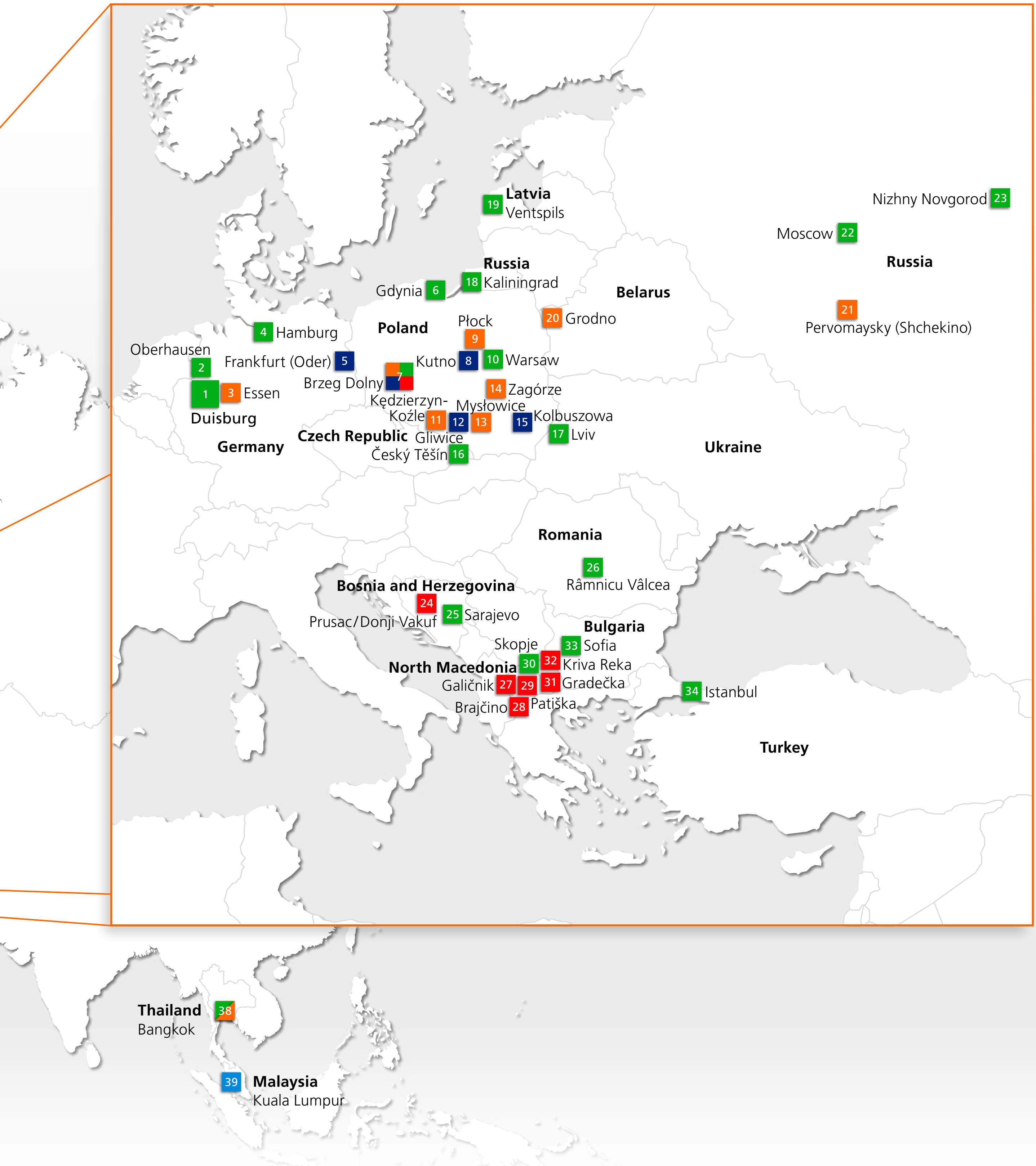
Trading / Sales and distribution / Administration

1 Duisburg (Group headquarters)

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

Production sites

- 3 Essen (DE)
- 7 Brzeg Dolny (PL)
- 9 Płock (PL)
- 11 Kędzierzyn-Koźle (PL)
- 13 Mysłowice (PL)
- 14 Zagórze (PL)
- 20 Grodno (BY)
- 21 Pervomaysky (Shchekino) (RU)
- 35 Piedmont, South Carolina (US)
- 36 Húsavík (IS)
- 37 Accra (GHA)
- 38 Bangkok (TH)



Power plants

- 7 Brzeg Dolny (PL)
- 24 Prusac/Donji Vakuf (BA)
- 27 Galičnik (MK)
- 28 Brajčino (MK)
- 29 Patiška (MK)
- 31 Gradečka (MK)
- 32 Kriva Reka (MK) – Trial operation

Container terminals

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

Projects

- 39 Kuala Lumpur (MY)

The structure of the PCC Group

Aside from the holding company PCC SE, the PCC Group comprises a total of 72 affiliates in Germany and abroad. The fully consolidated entities together with the joint ventures accounted for using the equity method are shown on this double page (status as of December 31, 2021). The percentages indicated for the companies in this segment-aligned presentation represent the shares held both directly and indirectly (via subsidiaries) by PCC SE. For a detailed schedule of shareholdings, please refer to Note (44) to the consolidated financial statements at the back of this report.

Polyols segment

Polyols business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.17 %)

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

PCC Prodex GmbH
Essen (Germany)
(100 %)

PolyU GmbH
Oberhausen (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)
(87.04 %)

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)
(84.17 %)

MCAA SE
Brzeg Dolny (Poland)
(100 %)

PCC MCAA Sp. z o.o.
Brzeg Dolny (Poland)
(98.88 %)

Specialty Chemicals segment

Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.17 %)

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

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

PCC Specialties GmbH
Oberhausen (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 %)

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

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

Energy segment

Energy business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.17 %)

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

PCC Renewables GmbH
Duisburg (Germany)
(100 %)

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

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

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

PCC Izvorsko EOOD
Sofia (Bulgaria)
(100 %)

Logistics segment

PCC Intermodal SA
Gdynia (Poland)
(98.80 %)

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

PCC Chemicals GmbH
Duisburg (Germany)
(100 %)

Headquarters business unit of PCC Rokita SA
Brzeg Dolny (Poland)
(84.17 %)

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 %)

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 Integrated Chemistries GmbH
Duisburg (Germany)
(100 %)

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 %)

PCG PCC Oxyalkylates Sdn. Bhd. *
Kuala Lumpur (Malaysia)
(50 %)

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

CATCH66 GmbH
Duisburg (Germany)
(100 %)

* Joint venture consolidated using the equity method

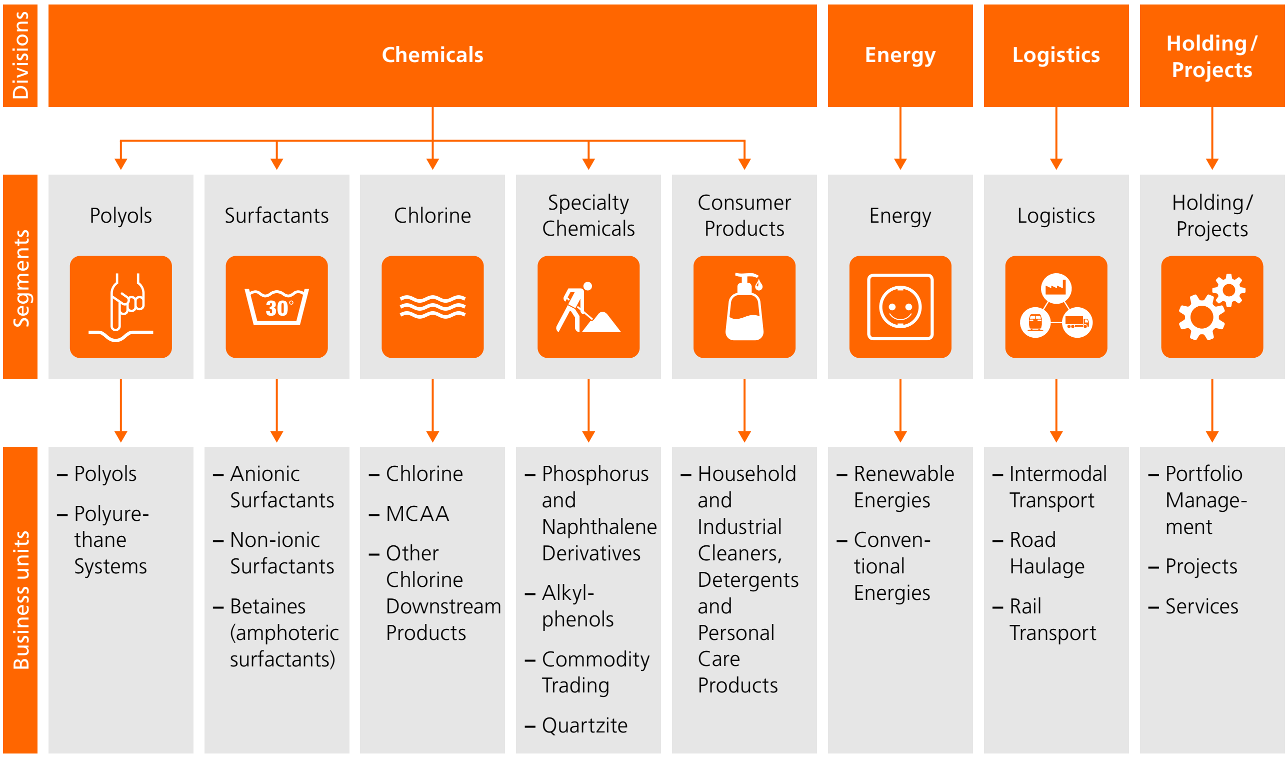
Group management report

The PCC Group closed fiscal 2021 as one of the best years in the company's history. Consolidated sales rose year on year by 36.7 % to € 979.6 million, boosted in particular by a steep rise in commodity price levels. At the EBITDA level, the PCC Group achieved earnings of € 197.5 million, an increase of 135.6 %, while at the operating level (EBIT), the result was € 125.3 million compared to € 11.3 million in the previous year.

Organization of the PCC Group

The PCC Group has some 3,300 employees working at 39 sites in 17 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. Allocated to these seven segments are a total of 18 business units that are managed by our international companies and entities. 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, engineering & technology and maintenance & repair. Also managed under this segment are PCC BakkiSilicon hf. (silicon metal production in Iceland), OOO DME Aerosol (dimethyl ether production in Russia), PCG PCC Oxyalkylates Sdn. Bhd. (oxyalkylates project in Malaysia, formerly PCC Oxyalkylates Malaysia Sdn. Bhd.) and a number of smaller project companies.

Divisions, segments and business units of the PCC Group

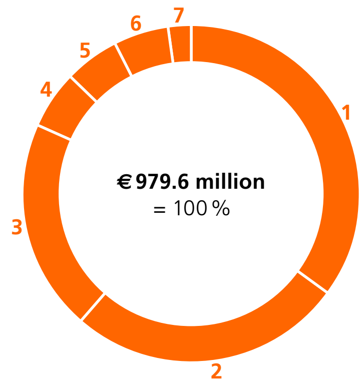


The group strategy of PCC is geared to sustainable corporate investment and business development, with the primary priority of generating and growing enterprise value. As a growth-led investor predominantly aligned to the long term, the holding company PCC SE supports its affiliated businesses in their 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. The Group's policy also focuses on the regular appraisal of further projects and acquisitions geared to both forward and backward integration. The aim is to diversify into new market segments in line with our expertise, while at the same time strengthening our raw material base. By contrast, non-core activities are only developed to a certain level of market maturity with a view to then offering them for sale. Our main objective remains the achievement over the long-term of further profitable growth for the PCC Group as a whole.

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 2021, we generated 20.3 % (previous year: 20.2 %) of our sales with customers in Germany, with 35.2 % attributable to customers in Poland (previous year: 37.4 %) and 26.2 % to customers in other EU member states (previous year: 24.4 %). Including PCC SE, the consolidated financial statements of the PCC Group for 2021 cover a scope of 49 fully consolidated entities. There are three joint ventures accounted for using the equity method.

Sales 2021 by region in %

1	Poland	**35.2 %**	4	Other Regions	**5.7 %**
2	Other EU Member States	**26.2 %**	5	Asia	**5.3 %**
3	Germany	**20.3 %**	6	Other Europe	**5.1 %**
			7	USA	**2.2 %**

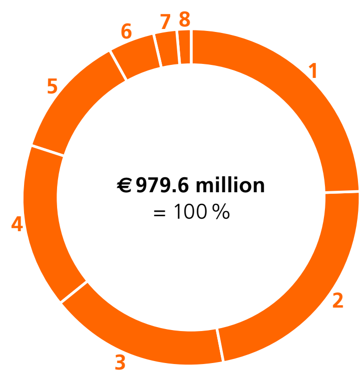


Core business activities

Consolidated sales in fiscal 2021 amounted to € 979.6 million, an increase of € 262.8 million or 36.7 % above the corresponding revenue figure of € 716.8 million for the previous year. The rate of growth was considerably higher than expected. The sharp rise in average selling prices for chemical feedstocks as a result of higher demand was one of the main reasons for this development. Sales of the Chemicals division rose by € 230.1 million or 39.7 %, thus somewhat outstripping the rate of revenue increase for the PCC Group as a whole. With € 809.1 million or 82.6 % of consolidated sales (previous year: 80.8 %), the Chemicals division remained the Group's primary source of revenues. Sales of the Logistics division increased by € 21.4 million or 22.3 % to € 117.3 million in fiscal 2021 (previous year: € 96.0 million). This division's share of Group sales decreased to 12.0 % (previous year: 13.4 %). Sales of the Energy segment rose by 7.2 % to € 12.2 million (previous year: € 11.4 million). The Holding/Projects segment reported an increase in sales of € 10.5 million to € 41.0 million (previous year: € 30.5 million). In percentage terms, the Polyols segment recorded the highest growth (66.1 %) within the PCC Group, and at 24.5 % (previous year: 20.2 %) also accounted for the largest share of Group sales. The main reason for the increase in revenues in the Holding/Projects segment was the higher sales figure posted by PCC BakkiSilicon hf., which restarted its two furnaces in April and July 2021 respectively and has since been producing at full capacity. In addition, there was a marked increase in selling prices for silicon metal in the second half of 2021. Business development in the individual Group segments again varied greatly, as the following detailed analysis shows.

Sales 2021 by segment in %

1	Polyols	**24.5 %**	5	Logistics	**12.0 %**
2	Specialty Chemicals	**22.5 %**	6	Holding/Projects	**4.2 %**
3	Chlorine	**17.4 %**	7	Consumer Products	**2.4 %**
4	Surfactants	**15.8 %**	8	Energy	**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. Flexible PU foams are used, among other things, in the manufacture of comfortable mattresses. Rigid PU foams are employed in the refrigeration industry for insulation purposes and in the construction industry as sealing foam. Special prepolymer foams are used, for instance, in the production of polishing discs for the automotive industry, while PU systems are employed e.g. in thermal insulation applications, in block constructions incorporating thermal insulation panels, and as polyurethane adhesives for mining applications.

The Polyols segment comprises the two business units Polyols and Polyurethane Systems. Managed under this segment are the corresponding business unit of PCC Rokita SA, Brzeg Dolny (Poland), i.e. its Polyols entity engaged in the production and sale of polyether polyols, and PCC PU Sp. z o.o., Brzeg Dolny, which focuses on the manufacture of polyester polyols. The Polyols segment also includes the specialty foam and polishing disc manufacturer PCC Prodex GmbH, Essen (Germany), and the systems house PCC Prodex Sp. z o.o., Brzeg Dolny (Poland), as well as the intermediate holding company PCC Insulations GmbH, Duisburg (Germany), under which all our activities relating to the production, sale and distribution of insulation and other building materials are pooled. PCC Therm Sp. z o.o., Brzeg Dolny, PCC Bulgaria EOOD, Sofia (Bulgaria), and the corresponding business unit of the Czech company PCC Morava-Chem s.r.o., Český Těšín, also count among the entities assigned to this segment. As of 2021, the business activities of these affiliates were still in their developmental phase, with the progression timeline somewhat shifted due to the advent of the coronavirus pandemic. This also applies to the activities of PolyU GmbH, Oberhausen (Germany), the focus of which is on the development of customer-specific specialty products. The Polyols segment is completed by the entity IRPC Polyol Company Ltd., Bangkok (Thailand), in which the PCC Group holds a 50 % stake through a joint venture entered into with the Thai entity IRPC Public Company Ltd. As an associate, IRPC Polyol Company Ltd. is accounted for using the equity method. The number of employees in the Polyols segment at year-end was 242 (previous year: 237).

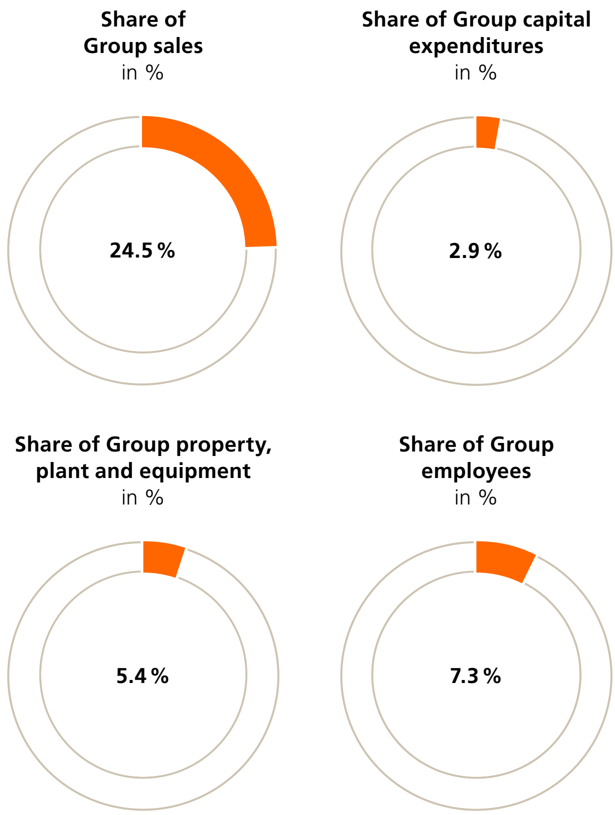
The Polyols segment generated sales of € 239.9 million in fiscal 2021, a rise of 66.1 % versus the previous year (€ 144.5 million). The share of Group sales increased to 24.5 % (previous year: 20.2 %). The Polyols segment thus overhauled the Specialty Chemicals segment (including Commodity Trading) as the highest revenue-generating segment of the PCC Group. Our sales expectations for 2021 were far surpassed. In terms of earnings, too, the Polyols segment closed fiscal 2021 significantly above the already exceptionally good prior-year level and far better than expected. This positive development was driven by the outstanding performance of the Polyether Polyols business which benefited primarily from continued high demand in the furniture and mattress industries. The selling prices for polyether polyols thus remained at a very high level throughout 2021, with temporary supply shortages in the first half of the year providing further impetus. These shortages resulted from a series of plant shutdowns at various competitors, some of which were due to routine maintenance requirements while others resulted from force-majeure incidents. Although the price curve for polyether polyols flattened from the middle of the year, the Polyols business unit was able to continue operating its five production lines at full capacity and thus achieve historically good annual results for the second year in succession.

Polyols segment Figures in € m	**2021**	2020	Absolute change	Relative change
Net external sales (consolidated)	**239.9**	144.5	95.4	66.1 %
Sales to other PCC segments	**65.3**	32.8	32.6	99.3 %
Total segment sales (total operating output)	**305.2**	177.2	128.0	72.2 %
EBITDA	**78.2**	23.9	54.3	> 100 %
Property, plant and equipment	**47.5**	49.4	– 1.8	– 3.7 %
Capital expenditures on intangible assets and property, plant and equipment	**3.2**	5.8	– 2.5	– 44.0 %
Employees at Dec. 31	**242**	237	5	2.1 %

The Polyester Polyols, Polyurethane Systems, Specialty Foam and Polishing Discs business areas also benefited from high demand in 2021 and significantly improved on their performance compared to the previous year. With the exception of the polyurethane systems house PCC Prodex Sp. z o.o., however, the affiliates operating in these areas remained in loss-making territory. This also applies to the PCC Insulations subgroup and thus to the Insulation and Other Building Materials business area, the expansion of which continued to be held back by the coronavirus pandemic. We nevertheless completed the development of our own insulating foam in 2021, thereafter applying for the necessary certification, which we expect to receive in the first half of 2022. The sales and earnings performance of the Thai joint venture IRPC Polyol Company Ltd. in 2021 was again positive and significantly above the level of the previous year. Here, too, the main reason was persistently high demand, particularly from the countries of Southeast Asia, and increasingly also from the Middle East and North Africa (MENA region).

We plan to continue diversifying and expanding the product portfolio of the Polyols segment in the future in order to strengthen its basis for success going forward. Among the points of focus in this regard will be the development of products for customer-specific applications. Geographic expansion is also to be further promoted, especially into the markets of Asia, which continue to exhibit dynamic growth. This applies not only to the Polyols segment, but also across all segments and core businesses of the Group. In fiscal 2021, the PCC Group achieved two further prospective milestones in this context: Together with our Malaysian joint venture partner, PETRONAS Chemicals Group Berhad (PCG), we took the final investment decision to construct a production plant for oxyalkylates (a group of chemicals comprising non-ionic surfactants and polyether polyols) through the joint project company PCG PCC Oxyalkylates Sdn. Bhd. We also secured the project financing from a major Malaysian bank. Work on the new facility in Malaysia started in the fourth quarter of 2021, with commissioning planned for the third quarter of 2023. PCG PCC Oxyalkylates Sdn. Bhd. will then be making its own contribution to further growth in the Polyols and Surfactants segments.

Key facts and figures for the Polyols segment 2021



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 detergents, cleaning agents and personal care products. They are also used, for example, in the textile and agrochemicals industries, as well as in the production of lubricants, paints, coatings, adhesives and plastics.

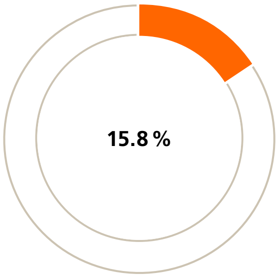
The Surfactants segment is divided into the business units Anionic Surfactants, Non-ionic Surfactants and Betaines (amphoteric surfactants). The segment includes PCC Exol SA, Brzeg Dolny, its Turkish sales company in Istanbul and PCC Chemax, Inc. in Piedmont, South Carolina (USA). In 2021, this segment generated sales amounting to € 155.1 million. Compared to the previous year (€ 123.1 million), this represents an increase of 26.0 %. Its share of total sales of the PCC Group decreased by 1.3 percentage points to 15.8 %. The number of employees at year-end was 315 (previous year: 296).

The dominant affiliate in this segment is PCC Exol SA, which once again improved on its performance in 2021 compared to an already exceptionally successful prior year. PCC Exol SA benefited in particular from increasing demand for specialty products for manufacturing applications following the sharp downturn in the previous year that resulted from the pandemic-related lockdown of entire industrial sectors. The increasing share of specialty products with higher margins in the manufacturing portfolio also paid dividends in other fields of application. In addition, a new reactor for the production of oxyalkylates was commissioned in mid-2021, increasing annual output capacity by 10,000 metric tons of high-quality specialty surfactants. Despite rising input purchase prices, including for the primary feedstocks ethylene oxide and fatty alcohols, PCC Exol SA – and with it the Surfactants segment as a whole – had another successful year in fiscal 2021, outperforming the previous year at all earnings levels. The other portfolio companies managed under this segment likewise made further positive contributions to earnings.

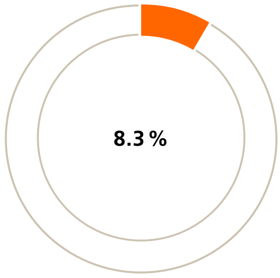
As in the case of the Polyols segment, the PCC Group also plans to further diversify its product portfolio in the Surfactants segment and thus to continuously expand the proportion of higher-value specialty products in its marketing mix. The idea is for sales to be increasingly application-oriented across all segments – boosted by the efforts of local managers – in both Western and Eastern Europe. Added to this, we aim to continue driving the further internationalization of our business base with particular focus on the Asian market, but also in the MENA region. By concluding a joint offtake agreement with their most important ethylene oxide provider, our subsidiaries PCC Exol SA and PCC Rokita SA have succeeded in securing the long-term supply of this essential feedstock. However, this agreement also requires a further expansion of production capacities on the part of PCC in the coming years, the utilization of which is to be secured in good time through progressive expansion of both our customer and our product portfolios.

Key facts and figures for the Surfactants segment 2021

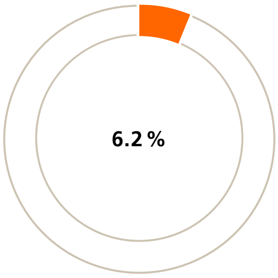
Share of Group sales
in %



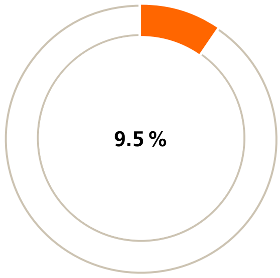
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



Surfactants segment Figures in € m	**2021**	2020	Absolute change	Relative change
Net external sales (consolidated)	**155.1**	123.1	32.0	26.0 %
Sales to other PCC segments	**37.2**	26.5	10.7	40.3 %
Total segment sales (total operating output)	**192.3**	149.6	42.7	28.5 %
EBITDA	**20.5**	15.7	4.8	30.6 %
Property, plant and equipment	**54.9**	50.4	4.5	9.0 %
Capital expenditures on intangible assets and property, plant and equipment	**9.3**	6.6	2.7	41.1 %
Employees at Dec. 31	**315**	296	19	6.4 %

Chlorine

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

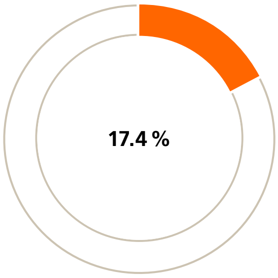
The Chlorine segment is divided into three business units: Chlorine, MCAA, and Other Chlorine Downstream Products. This segment includes the corresponding Chlorine business unit of PCC Rokita SA, plus MCAA SE and PCC MCAA Sp. z o.o., all located in Brzeg Dolny. Sales in this segment amounted to € 170.5 million in 2021, up 30.0 % versus the previous year (€ 131.2 million). The share of Group sales decreased to 17.4 % (previous year: 18.3 %). As of year-end, the segment had a payroll of 402 employees (previous year: 396).

The increase in sales was essentially due to rising demand for chlorine and the associated increase in volumes of the chlorine production by-products caustic soda flakes and caustic soda lye. Sales prices for these co-products initially remained at a comparatively low level, while prices for chlorine and chlorine downstream products such as monochlorobenzene and hydrochloric acid experienced a steady upward trajectory right from the start of the year. In the middle of the year, sales prices for caustic soda flakes and caustic soda lye also began to rise, with the trend accelerating rapidly as the year progressed, particularly in the case of the flakes, due to the lack of imports from China. This meant that the Chlorine business unit closed fiscal 2021 with a very successful set of figures and with sales and earnings substantially higher year on year.

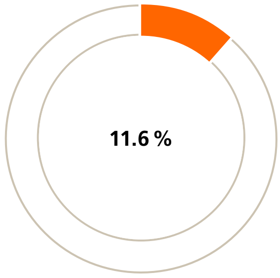
Sales and earnings of the MCAA business unit were likewise significantly up on prior year. Demand for monochloroacetic acid, which is used among other things for the production of skin-friendly surfactants (betaines), remained high throughout 2021. As a result of a lack of export volumes from China, sales of MCAA flakes to Turkey, the USA and even Australia were also significantly up. At the same time, the production process and its input factors were further optimized. Despite sharply rising prices for the second major MCAA feedstock acetic acid (a consequence of force-majeure-related production losses at several suppliers), PCC MCAA Sp. z o.o. likewise ended fiscal 2021 well in the black and appreciably better than expected.

Key facts and figures for the Chlorine segment 2021

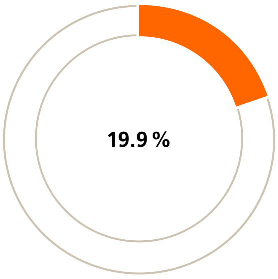
Share of Group sales
in %



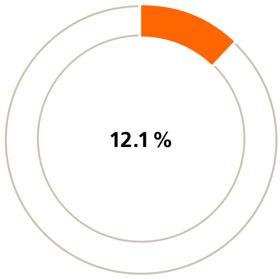
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



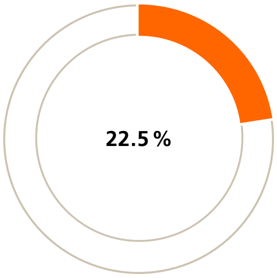
Chlorine segment Figures in € m	**2021**	**2020**	Absolute change	Relative change
Net external sales (consolidated)	**170.5**	131.2	39.3	30.0 %
Sales to other PCC segments	**108.6**	71.9	36.7	51.0 %
Total segment sales (total operating output)	**279.2**	203.2	76.0	37.4 %
EBITDA	**56.4**	38.9	17.5	44.9 %
Property, plant and equipment	**176.5**	183.6	−7.2	−3.9 %
Capital expenditures on intangible assets and property, plant and equipment	**12.8**	12.5	0.4	2.8 %
Employees at Dec. 31	**402**	396	6	1.5 %

Specialty Chemicals

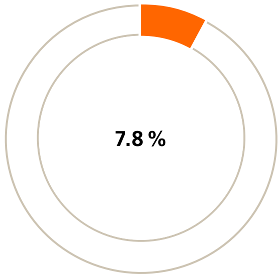
The portfolio of the Specialty Chemicals segment is particularly broad: Our manufactures range from phosphorus-based flame retardants, plasticizers and stabilizers, to additives for hydraulic oils and admixtures formulated to improve the working properties of fresh concrete. Our traditional commodity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

Key facts and figures for the Specialty Chemicals segment 2021

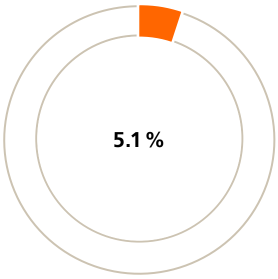
Share of Group sales
in %



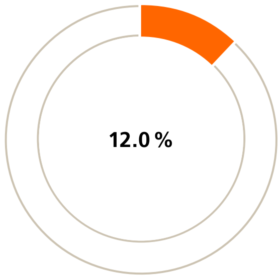
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



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), and PCC Silicium S.A., Zagórze (Poland). Also included in this segment are S.C. Euro-Urethane S.R.L., Râmnicu Vâlcea (Romania), and PCC Specialties GmbH, Oberhausen (Germany). The latter two companies did not conduct any form of business activity in 2021. Overall, the Specialty Chemicals segment generated sales of € 220.5 million in the reporting year, exceeding the previous year's figure of € 153.2 million by 43.9 %. This was mainly the result of the sharp rise in commodity prices driven by high demand. The number of employees at year-end increased slightly to 396 (previous year: 395).

Once again in 2021, PCC Trade & Services GmbH was the main sales driver in the Specialty Chemicals segment. This affiliate significantly improved both its sales and its positive operating result versus prior year, due primarily to the steep rise in demand for chemical feedstocks as well as for coke and anthracite, and the associated significant increase in average price levels. The positive trend also continued beyond the turn of the year. The commodity trading activities of PCC Morava-Chem s.r.o., on the other hand, again remained in deficit as a result of the now low level of business volume being handled. However, due to an exceptional gain, this affiliate was also able to close fiscal year 2021 with a positive result.

Alkylphenol manufacturer PCC Synteza S.A. and the Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA both closed fiscal 2021 in very positive territory with results significantly up on prior year. PCC Synteza S.A. benefited in particular from an unexpected major order for dodecylphenol in the first quarter of 2021: A customer, experiencing Brexit-related supply problems from its regular

Specialty Chemicals segment Figures in € m	**2021**	**2020**	Absolute change	Relative change
Net external sales (consolidated)	**220.5**	153.2	67.3	43.9 %
Sales to other PCC segments	**14.9**	8.2	6.7	82.3 %
Total segment sales (total operating output)	**235.4**	161.4	74.0	45.9 %
EBITDA	**23.9**	9.3	14.6	> 100 %
Property, plant and equipment	**45.4**	45.6	– 0.3	– 0.6 %
Capital expenditures on intangible assets and property, plant and equipment	**8.7**	7.5	1.2	15.4 %
Employees at Dec. 31	**396**	395	1	0.3 %

supplier in the UK, placed the majority of its dodecylphenol requirement for the first quarter with PCC Synteza S.A. Gratifyingly, we were also able to book further smaller-scale follow-up orders from this customer in the course of the year. At the Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA, the lack of imports of certain phosphorus-based flame retardants from China in particular had a positive impact on sales and earnings performance, with the selling prices for these phosphorus derivatives actually reaching historic highs at times through 2021. The encouraging performance of this business unit was boosted by increasing utilization of the additional capacity completed in the previous year, with high operating rates continuing through the turn of the year. The new plant is therefore set to contribute to further growth in this business unit in 2022. New growth opportunities should also arise for PCC Synteza S.A. in 2022 as a result of the development of specialty chemicals planned jointly with PCC Rokita SA and PolyU GmbH.

PCC Silicium S.A. likewise recorded significant sales and earnings growth in 2021, largely attributable to the resumption of quartzite deliveries to the silicon metal plant of PCC BakkiSilicon hf. in Iceland. In addition, sales of quartzite grades not suitable for silicon metal production to customers in the ferroalloy industry, and also sales of ballast for the construction of roads and railroad lines (a consequence of the large number of new infrastructure projects in the region), remained at a high level. As a result, PCC Silicium S.A. also ended fiscal 2021 in positive earnings territory.

Consumer Products

In the Consumer Products segment, our focus is on the production of household cleaners, disinfectants, sanitizers, detergents and personal care products. The affiliates in this segment manufacture both private-label products for well-known discounters and retail chains, and PCC's own brands. We also produce detergents and cleaning agents used in industrial applications for supply to professional cleaning companies, hotels and restaurants, the food industry, agricultural interests and similar.

The segment is managed by PCC Consumer Products S.A., Brzeg Dolny. Segment sales declined in the year under review by 14.5 % to €23.1 million (previous year: €27.0 million) and the share of Group sales fell to 2.4 % (previous year: 3.8 %). As of year-end 2021, the segment employed 199 people (previous year: 214).

Again in 2021, 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, disinfectants, sanitizers, detergents and personal care products. This affiliate was at least able in 2021 to maintain its sales level at that of the previous year. On the earnings side, however, PCC CP Kosmet remained well below its prior-year performance and once again slipped into the red. In 2020, as a result of the temporary surge in demand for hand sanitizers and antibacterial soaps, a notable six-figure profit was posted for the first time in years. Although 2021 saw a steady rise in sales to a major discounter, this did not fully compensate for the loss of this special effect from 2020. The situation was exacerbated by increases in raw material purchase prices, which in part could only be passed on to customers with a time lag. Encouragingly, sales by PCC CP Kosmet to its key customers picked up significantly toward the end of 2021. The second operating company in the Consumer Products segment in Poland, PET bottle manufacturer PCC Packaging Sp. z o.o., was merged with its previous main customer, PCC CP Kosmet, in fiscal 2021. This not only reduced administrative complexity but also helped to cut costs. Additional savings are to be achieved in 2022 through further automation of the production and filling pro-

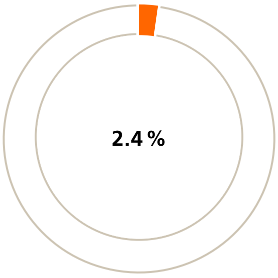
Consumer Products segment Figures in €m	**2021**	2020	Absolute change	Relative change
Net external sales (consolidated)	**23.1**	27.0	−3.9	−14.5 %
Sales to other PCC segments	**0.2**	2.0	−1.8	−91.8 %
Total segment sales (total operating output)	**23.2**	29.0	−5.7	−19.8 %
EBITDA	**−0.5**	5.7	−6.2	> 100 %
Property, plant and equipment	**6.3**	6.8	−0.5	−7.3 %
Capital expenditures on intangible assets and property, plant and equipment	**1.0**	0.4	0.6	> 100 %
Employees at Dec. 31	**199**	214	−15	−7.0 %

cesses. PCC CP Kosmet's focus on the expansion of its customer portfolio, the ongoing development of business in its Eastern European markets and also increased activity aligned to Western Europe are expected to lead to new growth in the Consumer Products segment in the coming years.

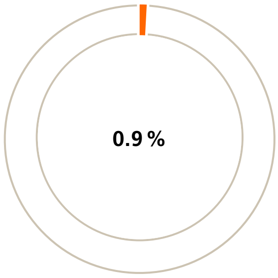
The remaining operating affiliates of PCC Consumer Products S.A. in Belarus and Russia remained (and remain) of minor relevance to the earnings position of this subgroup. The matches factory in Czechowice-Dziedzice, Poland, the liquidation of which was decided upon at the end of 2020, began monetizing its assets in 2021, with completion expected in 2022. It is anticipated that this will generate liquid funds for the repayment of legacy intra-Group debts of the matches factory, although the amounts involved have yet to be ascertained.

Key facts and figures for the Consumer Products segment 2021

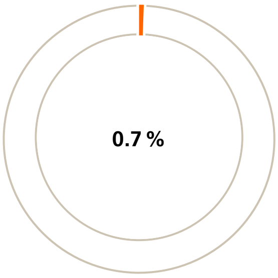
Share of Group sales
in %



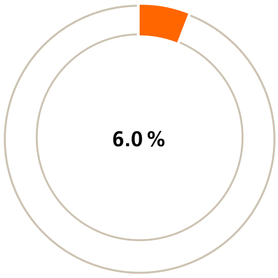
Share of Group capital expenditures
in %



Share of Group property, plant and equipment
in %



Share of Group employees
in %



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.

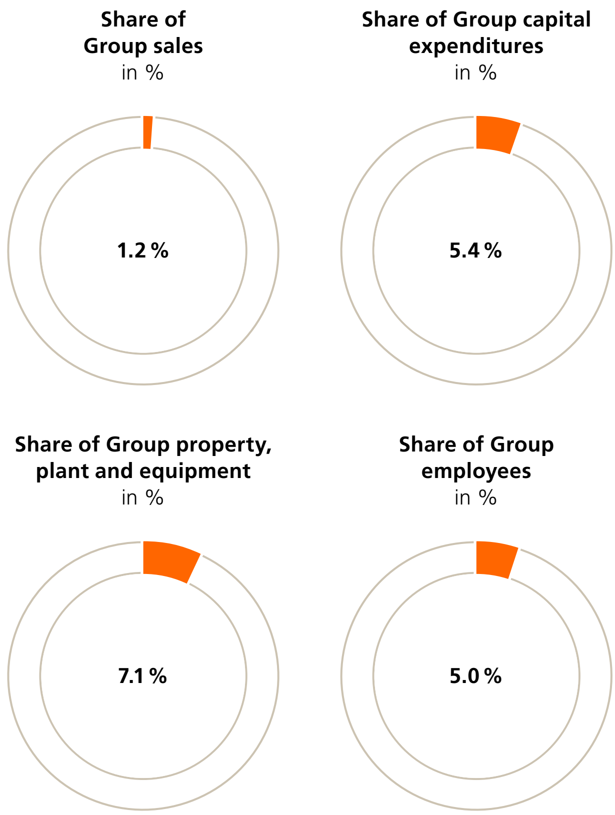
We manage within the Conventional Energies area of this segment the corresponding Energy business unit of PCC Rokita SA, and also PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle (Poland). PCC Renewables GmbH (formerly PCC DEG Renewables GmbH), Duisburg, including its subsidiaries in Bosnia and Herzegovina, North Macedonia and Bulgaria, is also incorporated within the Energy segment. In the past fiscal year, the affiliates managed within this segment generated sales of € 12.2 million (previous year: € 11.4 million). The number of employees at year-end was 167 (previous year: 170).

The main contributor to segment sales and earnings 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 providing a reliable supply of electricity and process steam to our Brzeg Dolny site through its own power plant.

Energy segment Figures in € m	**2021**	2020	Absolute change	Relative change
Net external sales (consolidated)	**12.2**	11.4	0.8	7.2 %
Sales to other PCC segments	**27.6**	23.9	3.7	15.6 %
Total segment sales (total operating output)	**39.8**	35.3	4.6	12.9 %
EBITDA	**−0.1**	−4.9	4.8	−97.8 %
Property, plant and equipment	**62.7**	60.6	2.1	3.5 %
Capital expenditures on intangible assets and property, plant and equipment	**6.0**	1.8	4.3	> 100 %
Employees at Dec. 31	**167**	170	−3	−1.8 %

There was a significant change in the Renewable Energies business unit in the past fiscal year: In September 2021, PCC SE acquired the 40 % stake in PCC Renewables GmbH held by DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne (Germany). The takeover took effect retrospectively as of the valuation date of December 31, 2019, which duly marked DEG's exercise of the put option to exit the joint venture. PCC SE now holds 100 % of the shares in PCC Renewables GmbH. Under the management of the Renewable Energies business unit, five small hydropower plants were in operation as of the end of 2021, one in Bosnia and Herzegovina and four in North Macedonia – where a further power plant also began trial operations in March 2020. The final commissioning has been delayed until 2022 due to renewed regulatory problems. Approvals are also still pending for a further three sites in Bosnia and Herzegovina, but there is still no sign of this lengthy process being concluded. The business performance of the power plants in operation in 2021 was slightly up on the previous year due to the hydrology of the region becoming somewhat more favorable. The affiliates there were therefore able to once again deliver relatively stable cash flows. The situation should improve further in 2022 with the final commissioning of North Macedonia's fifth power plant. We also assume that, in view of the general increase in energy demand and the current climate protection initiatives, PCC SE, as the now sole shareholder of PCC Renewables GmbH, will enjoy greater flexibility in terms of the potential utilization of the assets available here.

Key facts and figures for the Energy segment 2021



Logistics

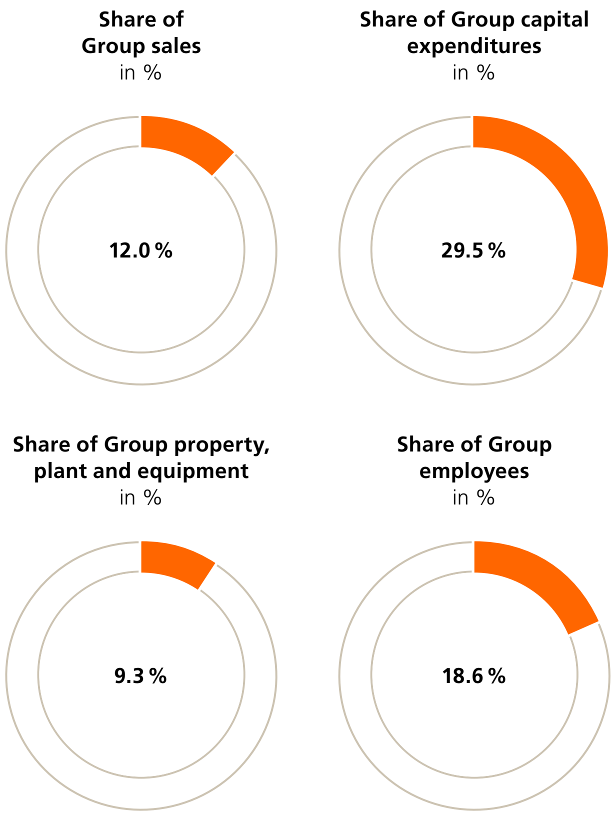
The Logistics segment (equivalent to the Logistics division) is divided into three business units: Intermodal Transport, Road Haulage and Rail Transport. PCC Intermodal SA is one of Poland's leading providers of container transport services. The logistics network based on several wholly owned container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

The Logistics segment includes the Polish company PCC Intermodal SA, 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. Sales in the Logistics segment amounted to € 117.3 million in fiscal 2021, up 22.3 % versus the previous year (€ 96.0 million). The number of employees as of the reporting date was 617 (previous year: 576).

The Logistics segment is dominated by PCC Intermodal SA, the portfolio of which includes regular combined transport services both within Poland and on international routes starting from Rotterdam, Hamburg and Duisburg, among others. Conditions in the international container market remained challenging in 2021. The global backlog of containers caused by the days-long blockade of the Suez Canal by a damaged container ship – a situation that was further exacerbated by, among other things, the pandemic-related temporary closure of a major Chinese container port in August – has remained a problem through the turn of the year. Moreover, there are not enough barges in Europe to transport the containers that have since become stockpiled in the ports, with further delays emanating from the many upgrade construction sites on the railroad tracks in Germany and Poland. Despite this difficult market environment, PCC Intermodal SA performed exceptionally well, closing 2021 with a highly successful set of figures and well up on the previous year. The Intermodal Transport business was also a focus of investment by the PCC Group in the reporting year. Important prerequisites for further growth were established in 2021 with the acquisition of additional locomotives and platforms and the ongoing expansion of our existing terminals. The construction of additional terminals should provide further support for business success in the long term – hence the continued pursuit in 2021 of just such a project south of the Polish seaports of Gdynia and Gdańsk. The land required for this undertaking has, for a number of years now, been in the ownership of a company in which PCC SE owns shares, thus providing PCC Intermodal SA with planning security in approaching such a major undertaking.

For most of last year, the road tanker haulage company PCC Autochem Sp. z o.o. continued to report positive business performance in line with our expectations. In November 2021, however, the tanker cleaning facility of this affiliate was largely destroyed by a major fire. Although the damage caused by the fire was covered by appropriate insurance policies (apart from the deductible), the resulting write-downs meant that PCC Autochem Sp. z o.o. was unable to avoid closing fiscal 2021 in deficit. Meanwhile, the business performance of the Russian rail freight car operator ZAO PCC Rail came in below an already weak prior-year level due to the initial frailty of the Russian economy in 2021 and the resultant low freight car leasing tariffs. As economic recovery progressed, however, tariffs increased significantly over the course of the year, enabling positive monthly results to be achieved at the operating level at least in the final phase of fiscal 2021. Due to positive foreign exchange rate effects, ZAO PCC Rail was nevertheless able to end the fiscal year under review slightly in the black overall, despite its rather weak performance level. As of the reporting date, freight car tariffs in Russia remained at a high level, with cars also in short supply. This scarcity resulted not only from the increase in goods traffic in the course of the economic recovery that took place in the second half of 2021, but also from the nationwide retirement of older freight cars with expiring operating licenses. Consequently, ZAO PCC Rail too had to dispose of a number of freight cars. At present, the company's fleet still comprises 370 freight cars, 316 of which are leased to Russia's largest rail freight operator. In any event, the railroads are set to remain the main source of transport in Russia for the foreseeable future.

Key facts and figures for the Logistics segment 2021



Logistics segment Figures in € m	**2021**	2020	Absolute change	Relative change
Net external sales (consolidated)	**117.3**	96.0	21.4	22.3 %
Sales to other PCC segments	**16.9**	13.4	3.6	26.5 %
Total segment sales (total operating output)	**134.3**	109.4	24.9	22.8 %
EBITDA	**23.3**	18.2	5.1	28.1 %
Property, plant and equipment	**82.4**	64.8	17.6	27.1 %
Capital expenditures on intangible assets and property, plant and equipment	**32.7**	10.0	22.7	> 100 %
Employees at Dec. 31	**617**	576	41	7.1 %

Holding / Projects

The Holding / Projects segment (equivalent to the Holding / Projects division) provides centralized and cross-segment services for the Group companies, including in the areas of finance, marketing and public relations, legal advice, 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, the dimethyl ether facility in Russia and the Malaysian project company PCG PCC Oxyalkylates Sdn. Bhd.

In addition to the Group holding company PCC SE, the Holding/Projects segment includes the following portfolio 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 (Poland). 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 also products of third-party suppliers are marketed directly to smaller customers (B2B) via the internet platform of this portfolio company. In the Holding/Projects segment, earnings before interest/financial result, taxes, depreciation and amortization (EBITDA) came in at €–4.1 million in the year under review. In the previous year, EBITDA stood at €–23.0 million, mainly due to the losses incurred by PCC BakkiSilicon hf. and the effect of consolidation procedures. The number of employees in this segment as of the reporting date was 973 (previous year: 892).

In addition, the project companies of PCC SE, namely the Icelandic entity PCC BakkiSilicon hf., Húsavík, the Russian joint venture OOO DME Aerosol, Pervomaysky, and the Malaysian joint venture PCG PCC Oxyalkylates Sdn. Bhd., Kuala Lumpur, are incorporated within the Holding/Projects segment. The two latter associates are accounted for using the equity method. The development of the Malaysian project company reached two prospective milestones in the past fiscal year: Together with our joint venture partner, PETRONAS Chemicals Group Berhad (PCG), one of Southeast Asia's leading producers of chemicals, we took the final investment decision to construct a planned production plant for oxyalkylates (special non-ionic surfactants and polyether polyols used in a wide spectrum of industrial applications) through the joint project company PCG PCC Oxyalkylates Sdn. Bhd. We also secured the project financing from a major Malaysian bank. Work on the new plant in Malaysia started in the fourth quarter of 2021, with commissioning planned for the third quarter of 2023. With its oxyalkylates production capacity, PCG PCC Oxyalkylates Sdn. Bhd. will then be making its own contribution to further growth in the Polyols and Surfactants segments.

The expansion of core businesses of the PCC Group in the high-growth region of Southeast Asia is to be pursued across all segments through this joint venture in the coming years.

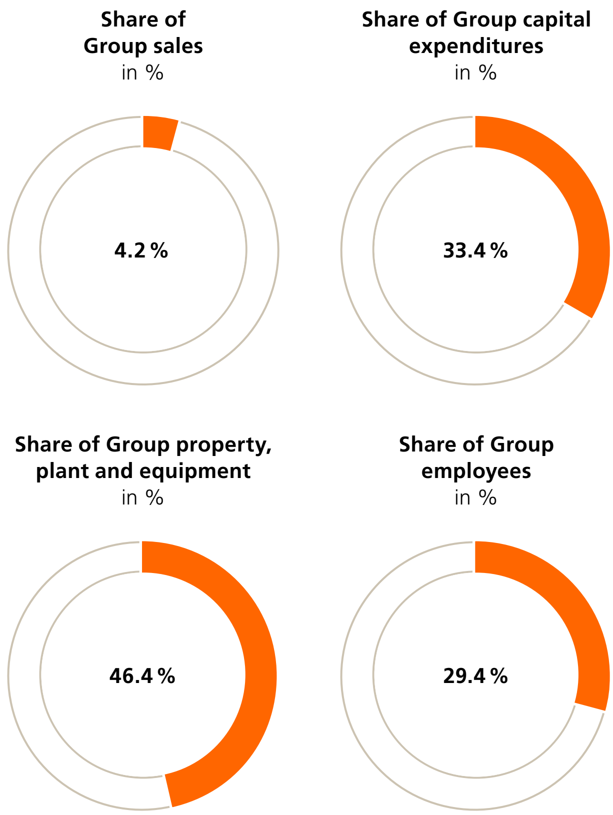
The second joint venture of PCC SE, OOO DME Aerosol, which we operate in harness with a Russian partner in the Tula region, also performed well in 2021. The company significantly increased its sales to existing customers year on year and also acquired a number of new customers in the course of the reporting period. As a result of increasing sales volumes, OOO DME Aerosol was able to implement a regime of continuous operation at its production plant for high-purity aerosol-grade dimethyl ether (DME), with a corresponding positive impact on the cost side ensuing. As a result, the company was – for the first time – also able to report a positive result at the operating level. A further increase in sales volumes is envisaged for fiscal 2022 as part of the budget planning prepared in the previous year, leading to ongoing, sustainable improvements in earnings at this joint venture.

Following several months of downtime attributable, among other things, to the pandemic, PCC BakkiSilicon hf. – opera-

Holding / Projects segment (incl. consolidation) Figures in €m	**2021**	2020	Absolute change	Relative change
Net external sales (consolidated)	**41.0**	30.5	10.5	34.4 %
Sales to other PCC segments	**54.3**	50.3	4.0	8.0 %
Total segment sales (total operating output)	**95.3**	80.7	14.5	18.0 %
EBITDA	**–4.1**	–23.0	18.9	82.2 %
Property, plant and equipment	**411.3**	395.7	15.6	3.9 %
Capital expenditures on intangible assets and property, plant and equipment	**37.1**	22.1	15.0	67.6 %
Employees at Dec. 31	**973**	892	81	9.1 %

tor of a silicon metal plant with a nominal annual capacity of 32,000 metric tons in Húsavík, Iceland – resumed production with the first of its two electric arc furnaces in April 2021. It then brought the second furnace back on stream in July 2021. Both furnaces have since continued to operate stably at almost full capacity in the production of high-grade silicon metal. At the same time, prices for silicon metal also rose rapidly in 2021, at times actually reaching a level more than five times that prevailing in November 2020. A major cause of this development was a reduction in export tonnages from China. As a result, PCC BakkiSilicon hf. even managed to ship some volumes bound for the Asian market. The sales and earnings performance of this company was therefore significantly up on the previous year and also much better than expected. Since September 2021, PCC BakkiSilicon hf. has been generating positive operating results on a monthly basis. Although the price curve for silicon metal flattened in the final weeks of the year under review, prices remained high as PCC BakkiSilicon hf. achieved a further surge in sales right at the beginning of January 2022. The company's focus for 2022 will be on the further diversification of its customer portfolio. In addition, it is planned to further optimize the production processes and reduce manufacturing cost per unit of output. Looking at the longer term, there are signs of further strong growth in demand for silicon metal, including from new areas of application such as the battery sector, and thus another significant improvement in the economic environment for this business. The discussions initiated in 2021 with all stakeholders regarding a restructuring of the financing of PCC BakkiSilicon hf. were successfully concluded at the beginning of April 2022. Among other things, this will also strengthen the equity base of PCC BakkiSilicon hf. An initial restructuring of the loan provided by KfW IPEX-Bank had already taken place back in 2020.

Key facts and figures for the Holding / Projects segment 2021



Business development and financial performance

Development of selected Group indicators

Key financials of the PCC Group per IFRS		**2021**	2020	Absolute change	Relative change
Sales	**€m**	**979.6**	**716.8**	**262.8**	**36.7 %**
Polyols segment	€m	**239.9**	144.5	95.4	66.1 %
Surfactants segment	€m	**155.1**	123.1	32.0	26.0 %
Chlorine segment	€m	**170.5**	131.2	39.3	30.0 %
Specialty Chemicals segment	€m	**220.5**	153.2	67.3	43.9 %
Consumer Products segment	€m	**23.1**	27.0	−3.9	−14.5 %
Energy segment	€m	**12.2**	11.4	0.8	7.2 %
Logistics segment	€m	**117.3**	96.0	21.4	22.3 %
Holding/Projects segment	€m	**41.0**	30.5	10.5	34.4 %
Gross profit	€m	**355.9**	216.5	139.5	64.4 %
EBITDA[1]	€m	**197.5**	83.8	113.7	> 100 %
EBIT[2]	€m	**125.3**	11.3	114.0	> 100 %
EBT[3]	€m	**91.7**	−38.4	130.2	> 100 %
Net result	€m	**75.4**	−39.9	115.3	> 100 %
Gross cash flow[4]	€m	**190.7**	85.9	104.8	> 100 %
ROCE[5]	%	**11.2**	1.1	10.1[9]	> 100 %
Net debt[6]	€m	**888.9**	858.8	30.1	3.5 %
Net debt/EBITDA		**4.5**	10.2	−5.7	−56.1 %
Group equity	**€m**	**144.6**	**74.8**	**69.7**	**93.2 %**
Equity ratio[7]	%	**10.4**	6.1	4.3[9]	69.9 %
Return on equity[8]	%	**51.6**	−35.9	87.5[9]	> 100 %
Capital expenditures	**€m**	**110.9**	**66.6**	**44.2**	**66.4 %**
Employees (Dec. 31)		**3,311**	**3,176**	**135**	**4.3 %**
Germany		**174**	165	9	5.5 %
International		**3,137**	3,011	126	4.2 %

Rounding differences possible.

1 EBITDA (Earnings before Interest/financial result, Taxes, Depreciation and Amortization)
2 EBIT (Earnings before Interest/financial result and Taxes) = Operating profit = EBITDA – Depreciation and amortization
3 EBT (Earnings before Taxes) = EBIT – Interest/financial result
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

Earnings position

Fiscal 2021 was heavily influenced by a reviving global economy, particularly in the markets of the European Union. Supply chain bottlenecks, force-majeure-related production stoppages at competitors, and international logistics backlogs also had an impact on economic development. Performance across almost all segments of the PCC Group was exceptionally positive, ultimately leading to one of the best net income results in the history of PCC. The coronavirus pandemic continued through the reporting year, peaking in terms of incidence with the Omicron wave in the fourth quarter of 2021. The vaccination campaigns launched in all European countries at the beginning of the past fiscal year initially led to a noticeable easing of the overall pandemic situation. The PCC Group also took advantage of the generally adequate supply of vaccines, offering vaccination opportunities to all employees at its national and international companies.

In particular, the high demand for chemical products underpinned the positive economic development of the majority of PCC companies. Commodities and raw materials were in short supply and volumes from Asia were in some cases massively reduced, with the result that prices rose to – in some cases – historic highs. Within the PCC Group, not all production capacities that had been shut down in the previous year due to the pandemic were immediately recommissioned. New capacity came on stream later than originally planned due to pandemic-related delays. Given the prevailing situation, the PCC Group decided, for instance, to restart the temporarily shut down silicon metal production facility in Iceland initially with just one furnace in the second quarter. The second furnace was reignited at the beginning of the third quarter. With maintenance work having been performed during the shutdown phase, both furnaces have since continued to operate with good level of stability in the production of a high-quality silicon metal product. Rising demand for silicon metal in a wide range of applications and reduced import volumes from China added further impetus to the positive price trend which peaked at a historic high in the fourth quarter.

The fundamental lack of large container ships for the transport of goods between Asia and Europe, as well as the partially blocked access to international seaports, led to a sharp increase in all logistics costs. While this had a negative impact on the business of the PCC Group, it also served to boost the results posted by our Logistics segment.

The PCC Group resumed its investment activities in fiscal 2021, having temporarily suspended them in the previous year – partly as a Covid-19 safeguarding measure.

Overall, the PCC Group ended fiscal 2021 with earnings before interest/financial result, taxes, depreciation and amortization (EBITDA) at €197.5 million, higher by €113.7 million or 135.6 % than the prior-year figure of €83.8 million. Consolidated sales in 2021 amounted to €979.6 million, an increase of €262.8 million or 36.7 % compared to the previous year's figure of €716.8 million. This sales performance was the result of both the sharp rise in commodity prices, as mentioned, and the recommencement of silicon metal production, likewise detailed above.

At €230.1 million, most of this increase in revenues was attributable to the segments of the Chemicals division, and predominantly to the Polyols segment. However, the Specialty Chemicals segment, which includes the Commodity Trading business of the PCC Group, and the Logistics segment also recorded strong sales growth. The Holding/Projects segment posted a rise in revenues of €10.5 million year on year. There were no material effects on sales arising from changes in the scope of consolidation in 2021.

For most of the PCC Group 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 statement of income. On the basis of unchanged exchange rates compared to the previous year, PCC Group sales would have been €1,008.0 million, an increase of €28.4 million or 2.9 % versus the reported figure. The differential derives from the exchange rate developments of the currencies of relevance to the PCC Group, primarily the Polish złoty and the US dollar.

The gross profit of the PCC Group also rose significantly in 2021, namely by 64.4 % to €355.9 million (previous year: €216.5 million), with gross margin increasing to 36.3 % (previous year: 30.2 %). Higher raw material costs on the purchasing side were passed on to the revenue side with a slight time lag. The increased energy costs for electricity and gas, particularly in the fourth quarter of 2021, were also – out of necessity – passed on through the value chain. Since the onset of the coronavirus pandemic in the second quarter of 2020, all commodity prices have seen high volatility. With continuing high inflation, ongoing supply chain problems and the war in Ukraine, it remains difficult to predict how the situation will develop going forward.

Compared to the previous year, personnel expenses increased by 14.9 % from €97.9 million to €112.5 million. The number of employees in the Group rose by 4.3 % from 3,176 to 3,311 as of the reporting date. At 9.1 %, a significant proportion of this increase was attributable to the Holding/Projects segment, where around 100 employees were again hired as part of the restart of production operations in

Iceland. The number of employees in the Logistics segment also increased on the back of business growth. Personnel numbers across the other segments of the PCC Group remained largely static. Looking at the regional breakdown, 74 new positions were created in the Other Europe region and there were 51 new jobs in Poland; in the Germany region, which also includes the holding company PCC SE, the change was plus nine.

At € 29.8 million, other operating income was € 5.7 million below the prior-year figure of € 35.4 million. This decline is mainly due to income from default penalties of € 14.2 million registered in the previous year.

Research and development work aimed at creating new products, processes and technologies, as well as at further improving existing customer solutions, remains ongoing 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 recognized expenditures of € 5.1 million for research and development (R&D), thus underlining its continuing high level of commitment in this area (previous year: € 10.4 million).

Capital expenditures totaled € 110.9 million in 2021, 66.4 % above the prior-year level of € 66.6 million. The advent of the coronavirus pandemic meant that the PCC Group had to scale back its growth and investment program to a minimum in 2020. Following renewed analysis of the investment measures, those projects of strategic importance were then reactivated or completed in the year under review. The capital expenditures implemented primarily involved the Logistics and Chlorine segments. Ongoing replacement investments were also pursued. In addition, fiscal 2021 saw € 25.0 million invested in the at-equity associate PCG PCC Oxyalkylates Sdn. Bhd. (formerly PCC Oxyalkylates Malaysia Sdn. Bhd.) for the development of its planned chemical facilities in Southeast Asia (previous year: € 2.8 million). This company was also able to successfully secure project financing in the year under review. All such investments are expected to contribute to future increases in sales and earnings. At the same time, capital expenditures inevitably bring an increase in depreciation, amortization and interest expense in the consolidated statement of income. In the case of still uncompleted investment projects, these expenses continue to be capitalized. In the balance sheet, these effects are reflected as of the 2021 reporting date in the increase in both non-current assets and non-current financial liabilities. Amortization of intangible assets, depreciation of property, plant and equipment, and depreciation of right-of-use assets remained virtually constant year on year at € 72.2 million (previous year: € 72.5 million).

Interest and similar expenses result from bond liabilities, liabilities to banks and lease liabilities. In the year under review, these expenses decreased by 4.6 % from € 37.1 million to € 35.4 million. Essentially, this decline is the result of more favorable financing and – in some cases – refinancing costs. Both the holding company and other Group companies were able to benefit from the still favorable market interest rate environment in 2021 and thus to finance or refinance their operations accordingly. The weighted interest rate of all interest-bearing liabilities remained unchanged year on year at 3.6 %. The value of financial liabilities as of year-end increased by a total of € 50.0 million or 5.4 % versus fiscal 2020. 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 2021, these produced a net effect of € 0.9 million (previous year: € –8.6 million). The effective tax rate of the PCC Group in the year under review amounted to 17.8 % (previous year: –3.9 %).

Compared to the previous year, earnings before taxes (EBT) increased by € 130.2 million from € –38.4 million to € 91.7 million. Total consolidated comprehensive income of the PCC Group increased from € –62.3 million to € 79.3 million, attributable to the aforementioned developments and also to currency translation effects recognized in equity of around € 4.2 million (previous year: € –22.4 million).

Net assets

Total assets rose in 2021 compared to the previous year by € 168.0 million or 13.7 % to € 1,392.2 million, with both current and non-current assets increasing. Intangible assets rose by € 7.1 million to € 44.5 million. The balance sheet value of property, plant and equipment, which derives from capital expenditure adjusted for depreciation and currency translation effects, increased by € 30.0 million or 3.5 % to a total of € 886.9 million. Right-of-use assets remained virtually unchanged at € 55.1 million, a decrease of € –0.3 million or –0.5 % (previous year: € 55.4 million).

Investments accounted for using the equity method increased by € 13.4 million compared to the previous year, largely reflecting the valuation of PCG PCC Oxyalkylates Sdn. Bhd., which was accounted for as an associate for the first time in the previous year. The change in value is mainly due to capital measures implemented in the reporting year and the pro rata allocation of earnings. This balance sheet item also includes the joint venture shares in the Thai entity IRPC Polyol Company Ltd. and our shares in the Russian joint venture OOO DME Aerosol. If accumulated losses exceed the equity valuation, the carrying amount is reduced to an amortized equity value of zero. As of year-end, this remained the case at OOO DME Aerosol.

Current assets amounted to € 346.9 million as of the reporting date (previous year: € 233.7 million), representing the largest increase in value across the balance sheet. Inventories showed a particularly strong increase of € 56.1 million from € 57.9 million to € 114.0 million. Trade accounts receivable rose by € 37.6 million to € 109.5 million. Both items reflect the sharp increase in commodity/raw material prices, both on the purchasing side and on the selling side. Other receivables and other assets fell from € 29.5 million to € 29.1 million as a result of loan repayments from enterprises in which participating interests are held, and the reduction in tax assets. Moving in the opposite direction, there was an increase in cash and cash equivalents of € 20.0 million or 27.1 % to € 93.8 million. Cash and cash equivalents disclosed in the balance sheet include an amount as of December 31, 2021 of € 2.2 million (previous year: € 11.5 million) in funds not freely available. These are almost entirely attributable to financing already earmarked for investment projects.

Financial position

Total equity of the PCC Group increased by € 69.7 million to € 144.6 million. This development is mainly due to the profit made in the past fiscal year and currency translation differences recognized in other comprehensive income. Revenue reserves/other reserves rose by € 61.5 million to € 138.5 million, mainly as a result of consolidated net income for the year. Minority interests increased by € 4.3 million to € 37.6 million. Other equity items likewise showed an improvement of € 3.9 million from € –40.5 million to € –36.6 million, mainly as a result of the aforementioned currency translation differences recognized in other comprehensive income. However, the remeasurement of defined-benefit pension obligations resulted in no material change compared to the previous year. The equity ratio rose from 6.1 % to 10.4 % as a result of the aforementioned effects.

Long-term investments are financed with long-term borrowings. Non-current provisions and liabilities rose by just 2.2 % in 2021, to € 893.4 million (previous year: € 874.5 million). Deferred tax liabilities increased to € 9.4 million (previous year: € 7.5 million). Non-current financial liabilities increased by 1.9 % to € 827.6 million compared to the figure for the previous year of € 812.0 million. Other liabilities increased by € 7.5 million or 17.9 % from € 41.8 million in the previous year to € 49.3 million in the year under review.

As regards bond liabilities, the holding company PCC SE repaid in full and on schedule a total of four bonds with an aggregate volume of € 65.6 million in the course of 2021 (previous year: € 79.4 million). The issue volume placed by the end of the year totaled € 63.4 million (previous year: € 73.6 million) spread over five new bond issuances. In the past fiscal year, these funds were used to partially refinance liabilities due in 2021, and also to finance capital expenditures and the restart of the silicon metal plant in Iceland. Aside from PCC SE, of which the bonds 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 € 53.9 million as of year-end 2021 (previous year: € 68.1 million). The US dollar-denominated bond issued by the Icelandic company PCC BakkiSilicon hf. increased in value from € 70.7 million to € 76.6 million as of year-end due to the appreciation of the US dollar against the euro. The value in US dollars remained the same year on year. Secured credit lines within the PCC Group not utilized as of the reporting date amounted to € 35.4 million (previous year: € 48.9 million).

Current provisions and liabilities increased by € 79.4 million to € 354.3 million, while trade accounts payable rose to € 100.6 million (previous year: € 87.3 million). Financial liabilities increased by € 34.4 million to € 154.1 million, mainly as a result of the maturity profile of the bond liabilities. Other liabilities rose by € 7.6 million to € 48.4 million. This increase was mainly due to a further rise in investment liabilities.

Provisions for pensions and similar obligations and other provisions rose by € 12.0 million to € 38.2 million (previous year: € 26.3 million).

Figures in € k	**Dec. 31, 2021**	Dec. 31, 2020
Cash and cash equivalents	**93,763**	73,745
Financial liabilities	**982,645**	932,555
Net debt	**888,882**	**858,810**

The net debt of the PCC Group increased in the fiscal year under review from €858.8 million to €888.9 million, with both financial liabilities and countervailing liquid funds at a higher level. Due to the significant growth in earnings before interest/financial result, taxes, depreciation and amortization (EBITDA) compared to the previous year, the leverage ratio representing net financial liabilities (net debt) to EBITDA nevertheless improved from 10.2 to 4.5 in the year under review. Our aim of improving this metric to below 5.0 had thus been achieved.

Seen overall, management views the development of our net assets, financial position and results of operations in fiscal 2021 as thoroughly satisfactory. Our core business activities in the Chemicals and Logistics segments emerged robustly from the crisis and were immediately able to respond to changing market conditions in order to maintain and even extend their respective competitive positions. The expectations documented in the previous year's reporting were thus met – and in some cases even surpassed – in almost all our business areas. Indeed, due to the events explained in detail above, the sales increase of 5 to 10 % forecasted in the previous year was significantly exceeded. The PCC Group was also able to beat the forecasted EBITDA increase of 15 to 20 % several times over. With the successful restart of production at the silicon metal plant in 2021, another major milestone was reached for the long-term improvement of our net assets, financial position and results of operations, thus promoting further growth in our enterprise value.

Opportunities for and risks to future development

The future economic performance of the PCC Group is highly dependent on the further development of the economy, not only in our main sales markets in Europe but also worldwide. The war in Ukraine and the uncertain progress of the coronavirus pandemic will also exert a major influence. For further details in this regard, please refer to the section entitled "Outlook for 2022 and beyond."

In addition to general economic risks, we have the war in Ukraine, the escalation of tensions with Belarus and the trade conflict between China and the USA also posing political risks beyond our control. The original forecast of the PCC Group for fiscal 2022 was based on a similarly high level of business development as that encountered in 2021. To date, this forecast has also been borne out. Nevertheless, the increasing severity of the war in Ukraine and the associated tightening of EU sanctions against Russia, not to mention the expansion of export restrictions on the part of the Russian government, could change the situation in the coming months. Due to the many current uncertainties, however, the financial impact on the PCC Group as a whole cannot be specifically estimated at present. Any changes in the sanctions will be carefully reviewed and taken into account accordingly in our risk assessment activities. We regard Russia's decision at the end of April 2022 to cease gas supplies to, among others, Poland as a very serious further escalation. At the moment, production is able to continue without restrictions. Our own energy supply system at the Brzeg Dolny site can continue operating through the use of coal.

Another challenge is posed by the "European Green Deal" and the "Fit for 55" package of measures adopted by the EU Commission in July 2021, implementation of which is intended to secure achievement of the European climate targets by 2055. For the European chemical industry, and thus also for large parts of the PCC Group, this means a far-reaching transformation of their production processes, changes that will entail considerable additional cost which as yet cannot be estimated with any degree of accuracy. This could also have a negative impact on the future dividend earnings of the Group holding company. At the same time, this transformation and the associated introduction of innovative processes, on the development of which the PCC Group is also working at several levels, will likely open up further growth opportunities going forward.

The business areas within the Chemicals segments are also exposed to the risk of rising environmental protection costs in the wake of increasingly stringent pan-European regulations relating to waste, effluent and other environmental phenomena. 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 income streams flowing from the portfolio companies concerned to the Group holding company. The same applies to possible additional charges arising in connection with the EU's REACH Regulation (covering the registration, evaluation and authorization of chemicals). REACH-like regulations are also currently being planned or are already being introduced by other countries. This applies to Russia, Turkey, the USA and some Asian countries, among others. It remains to be seen what consequences this will have for the future development of the PCC Group.

Particularly for the affiliates operating in the Chemicals division, there are also risks in the sourcing of strategically important raw materials. These can often only be obtained from just a few suppliers. Encouragingly, a long-term offtake agreement was concluded in 2021 with the most important vendor of the key feedstock ethylene oxide, although this will entail substantial expenditures on capacity on the PCC side in the coming years. In the long term, these investments will contribute to the further growth of our Chemicals division.

Other indirect factors that could affect the performance of our affiliates and thus their dividend payments to the Group holding company PCC SE include price change and credit or default risks. In particular, default risks, supply chain issues, and further increases in energy supply and transportation costs could escalate in the wake of prolonged war in Ukraine and a resurgent coronavirus pandemic. These risks should be effectively mitigated as far as possible through the conclusion of commercial credit insurance policies by our Group 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 by Poland as its official currency. This is, however, unlikely to happen in the near future.

Further risks may arise from changes in the legal or regulatory framework. For example, applicable tax law, including its administrative application, is subject to constant change. Future changes in the legal framework and differing interpretations of the law by the tax authorities or courts cannot be ruled out. This could result in higher tax charges for the companies of the PCC Group in Germany and abroad.

Negative effects may also result from subsequent changes in the assessment of state subsidies and similar aid measures and from any associated repayment claims. For example, the European Commission is currently examining whether the financial aid granted directly by the Polish government to PCC MCAA Sp. z o.o. in the years 2012 and 2013, equating to around € 16 million, is compatible with the EU regulations on state regional aid. The proceedings are directed against the Polish government and are being conducted in an open-ended manner. A negative decision by the EU Commission could, however, lead to said financial aid being clawed back, together with loss of the tax benefits additionally granted within this support framework. The occurrence of similar scenarios in the future can also not be ruled out.

Some Group companies find themselves confronted with growing asset obsolescence. This applies particularly to the production plant of PCC Synteza S.A. and the freight cars of ZAO PCC Rail. With further intensive use of these assets, the expenses for maintenance and servicing increase, as does the risk of accidents and production or service downtimes.

In our financial planning, we anticipate continuing, regular liquidity inflows arising in the future from the issuance of corporate bonds by the holding company. 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 the liquidity loans granted to subsidiaries by loans from local banks. Moreover, any new large-scale projects will only be implemented where 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 likewise to be considered over the longer term. The latter requires a stable level of indebtedness. Our aim in this regard is to constantly hit our target leverage ratio of below 5.0.

In addition to the financing risk, there are various other risks associated with projects during the planning and construction phase, such as technical risks, risks relating to property rights, and risks relating to licensing law. Furthermore, it cannot be ruled out that external market conditions may change during the implementation phase and that market developments may not pan out as originally expected. Despite the most careful of appraisals, an investment project may therefore be significantly delayed or generate a substantially lower return than projected. A complete failure of a project and thus a total loss of the capital invested by the Group holding company or one of its subsidiaries can likewise not be ruled out. Depending on the size of the project, this could have a significant negative impact on the liquidity situation of the respective company. Hence, the Group holding company will continue to seek project financing in the future based as far as possible on the viability of the respective project.

Last but not least, the PCC Group is also exposed to personnel risks. The possible departure of key personnel, including from management or from the field of research and development, and the associated possible loss of long-standing contacts, industry experience or know-how, for example, could have at least temporary negative effects on the continuation of business activities. Moreover, the considerable influence of the sole shareholder of PCC SE could, under certain circumstances, entail a higher risk of erroneous business decisions being taken than might be the case with a more widely diversified ownership structure. This risk was reduced by the change from a monistic to a dualistic board structure at the Group holding company in 2021, serving to strengthen the position of the holding company's operational management. Notwithstanding this reorganization, the sole shareholder, who is also Chairman of the Supervisory Board of PCC SE, remains in close and accessible proximity, thus maintaining the ability to react quickly and flexibly to new investment opportunities and to align activities in a timely fashion to the continued sustainable growth of the PCC Group.

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. In addition, there will be further investments in modernization and expansion, geared to both backward and forward integration. In this way, we aim both to further enhance our market positions in the individual segments and to increase the sustainability – and secure the future viability – of our business operations by investing in highly efficient and environmentally compatible production facilities. In the long term, the holding company PCC SE should benefit from the increased earnings expected from these investments in the form of improving dividends. Additional earnings potential could result from the sale of peripheral activities or marketable projects, portfolio entities and investments.

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

The consolidated financial statements of PCC SE as of December 31, 2021 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 the holding company 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 adhere to 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. Both automated and manual controls are integrated throughout the drafting and preparation 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 or subgroups 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 for 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 or business areas and the senior management of PCC SE, together with the management or business unit director of each individual entity. The members of the Executive Board and of the Supervisory 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 and business areas 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 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 undertaken by senior management with a 24-month horizon in respect of bond financing. The information is then made available to the Supervisory 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 excluded from the audit.

Sustainability is a core element of our long-term strategy; it is an essential component of our corporate philosophy and a major factor determining our actions. All companies of the PCC Group are committed to an ethical and sustainable approach to their business activities. We continually analyze all areas and activities that can contribute to better environmental protection or the more efficient use of natural resources. Through economic, social and environmental sustainability, we secure the future of our group of companies while at the same time contributing to the continued integrity and viability of our environment. Our growth should not restrict the opportunities available to future generations; it should instead contribute to opening up new possibilities for them.

Economic sustainability is achieved by the Group holding company PCC SE primarily through responsible and risk-aware corporate governance and a predominantly long-term approach to management of the investment portfolio. Our goal is to continuously and sustainably increase the value of this portfolio, with the economic component of sustainability going hand in hand with sustainability in the ecological and social senses. This holistic understanding of sustainable development is the basis of our value-driven Group-wide growth strategy. We have set the following general goals as our sustainability vision:

PCC's sustainability vision

PCC SE and the companies of the PCC Group are committed to their ecological and social responsibility. Our objective is to make a strong contribution to climate protection and sustainable development. To this end, we aim to halve the greenhouse gas emissions of our chemical manufacturing operations by 2030 compared to our 2020 levels (Scopes 1 and 2). We intend by then to have completely eliminated coal from our power generating activities. And we want to see our Group completely net-climate-neutral by 2050.

Explanations of the terminology used for Scopes 1 and 2 can be found on page 51.

How we intend to implement this sustainability vision in our business activities is reflected in our mission statement on sustainability:

PCC's sustainability mission statement

PCC is an innovative and rapidly expanding group of companies with extensive investment activities. In order to achieve our sustainability goals, we implement all our investment projects, particularly those relating to our manufacturing operations, using state-of-the-art, energy-efficient and resource-saving technologies aligned to an ever-decreasing carbon footprint. In addition, we continue to research and develop products that meet high sustainability standards and with usage profiles that offer reduced greenhouse gas emissions.

The Sustainability Report of the PCC Group is structured as follows:

- **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 a value-led investment holding company. We have a diversified portfolio of Group companies primarily active in the production of chemical feedstocks and specialty chemicals. We also have major interests in the field of container logistics. As a growth-oriented investor, PCC SE supports its portfolio companies in their entrepreneurial development and in the expansion of their various specific strengths.

PCC was founded in 1993 by Waldemar Preussner, who, today as its sole shareholder, is Chairman of the Supervisory Board of PCC SE. With around 3,300 employees in 17 countries, the Group posted consolidated sales of € 979.6 million in the fiscal year under review. The majority of these revenues, around 82.6 %, 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, mostly in Poland. In the same period, PCC's earnings before interest/financial result, taxes, depreciation and amortization (EBITDA) came in at € 197.5 million. Capital expenditures totaled € 110.9 million in 2021, significantly above the € 66.6 million recorded for the heavily pandemic-hit prior year.

The Group strategy of PCC is geared to sustainable corporate investment and business development, with the aim of generating and growing enterprise value. 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 the development of non-core activities, sometimes just to a certain degree of market maturity ready for selling on. Our primary goal is to create the basis for further sustainable growth going forward.

The largest site of the PCC Group is located in Poland, some 40 kilometers north-west of Wrocław in the small Polish town of Brzeg Dolny, the headquarters of our two largest chemical companies PCC Rokita SA and PCC Exol SA. There these entities produce chemicals such as polyols, chlorine, chlorine co- and downstream products, phosphorus derivatives and other specialty chemicals, plus a range of different surfactants. In addition, our container logistics subsidiary PCC Intermodal SA connects European destinations, partly via our own transshipment terminals, while in the Energy segment we operate a number of modern power plants. In the Holding/Projects segment, we pursue future-oriented projects, such as – currently – the construction of a production plant for specialty chemicals in Malaysia under the management of our joint venture PCG PCC Oxyalkylates Sdn. Bhd. formed together with PETRONAS Chemicals Group Berhad. This segment is also currently the home of our silicon metal plant, which our Group subsidiary PCC BakkiSilicon hf. in Iceland has been operating exclusively with green electricity from geothermal and hydropower since it was commissioned in 2018.

Corporate social responsibility at PCC

Our sense of corporate social responsibility (CSR) or corporate citizenship forms the foundation of our sustainability strategy. For us, corporate social responsibility means that we listen to and properly take into account the concerns of all stakeholders associated with our Group. We have anchored the specific commitment of the PCC Group to CSR in special guidelines for those areas in which the interests of the respective stakeholders intersect 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 group of companies 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 39 locations in 17 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 are in regular dialog with our stakeholders. For example, since last year we have been presenting our quarterly and annual reports live to our investors in interactive internet-based investor conferences which include a Q&A session. Thus, we have digitally expanded our communications to include online events, driven by the fact that, due to the coronavirus pandemic, we had to suspend our face-to-face gatherings in 2021 – such as our information evenings for investors and prospective bondholders, and our traditional annual Investors' Day. Our two Group companies listed on the Warsaw Stock Exchange, PCC Rokita SA and PCC Exol SA, also maintain direct communication with their stakeholders at various information events.

This is the basis for our socially responsible corporate activities, consistently conducted through open and transparent communication with all interested parties. Our CSR commitment includes rejecting all forms of corruption and discrimination; consistently respecting and promoting human rights; ensuring workplace safety for all our employees and fair working conditions at all our production sites; and complying with all environmental regulations. We take ownership of socially accepted standards, thereby underpinning them further. As part of our CSR, we also commit to compliance with standards that go beyond general norms, for example by having our production companies participate in environmental protection initiatives such as the Carbon Disclosure Project, the United Nations Global Compact or the chemical industry's Responsible Care® initiative.

The holding company PCC SE assumes responsibility for our strategic positioning and mission statements relating to Group-wide areas of importance, such as transparency in communication with our investors. 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 general and occupational health and safety – irrespective of legal requirements.
- PCC strives for a corporate culture in which continuous improvement, consistent competitiveness and outstanding performance are in line with the principles of sustainable development and our 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 our 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

Sustainability in the Chemicals division

Increasingly, the Group companies of our Chemicals segments – Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products – are placing sustainability at the center of their strategic focus, with their commitment strengthening year by year. They continue to improve the efficiency of their production facilities as they introduce ever more advanced and environmentally friendly technologies. Our chemical companies are conserving the planet's limited raw material resources by ensuring increasingly efficient consumption and placing more and more emphasis on the use of renewables.

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 ecological palm kernel oil production are collected from more than 400 small-hold farmers from various regions in southern Ghana.

The use of increasingly effective technologies avoids emissions, as in the case of our chlorine production systems, which we have been operating exclusively on the basis of energy-efficient and environmentally friendly membrane technology since 2015. With this we are able to save 750 kilograms of CO_2 per metric ton of caustic soda produced. And we were almost three years ahead of an amendment to the corresponding EU regulations when we first adopted this technology. This is an example of how our production meets high environmental standards and how we often comply with new regulations long before they come into force.

The companies of our Chemicals segments also pursue sustainability in what they produce. Their innovations render products that many people use in everyday life more durable, safer and more environmentally acceptable. For example, the innovative chemical substances used by the affiliates in the Chemicals division 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 free of VOCs (volatile organic compounds), as well as being exceptionally flame-retarding. Our ambition is that our chemistry should not only be creative and innovative but also sustainable.

Our chemical companies are underscoring this commitment with a new product portfolio of sustainable chemicals under the brand name GREENLINE™, a range that already boasts more than 250 products. PCC's portfolio of green chemicals includes high-quality compounds offering a wide spectrum of sustainability benefits – such as increasing the efficacy of laundry detergents at low temperatures and thus reducing energy consumption. Products from PCC bearing the "Passivbau" (= passive construction) label have been developed for particularly energy-efficient construction, such as the PU foams for thermal insulation in our Crossin® product line.

Within the GREENLINE™ portfolio, our chemical companies also produce and distribute chemicals under the Eco Products label specifically for the manufacture of organic and cosmetic products. And our products carrying the ECO mark meet the strict standards of the ECOCERT mark. This requires that products do not pose any threat to humans or the environment through their provenance, properties or production processes. Chemical feedstocks, additives and formulations of this group can be used for the production of finished products of the eco, organic or vegan type. In addition to chemical feedstocks such as the particularly skin-friendly betaines of the ROKAmina brand, the product range of the PCC Group also includes a number of organic consumer goods. An example of this is the CAMOLIN® line of body care products and cleansers based exclusively on natural ingredients.

The consistent and successful implementation of the principles of sustainability by the Group companies of PCC is exemplified by our two largest chemical companies, PCC Rokita SA and PCC Exol SA. They are among the most modern in their sector in Poland and Eastern Europe, and as such attach ever-increasing importance to CSR. PCC Rokita SA, one of Poland's biggest chemical manufacturers, is the main sales and earnings generator of the PCC Group. Through substantial investments in the modernization and expansion of production capacities, we have not only formed with PCC Rokita SA a flourishing chemical subgroup since acquiring a majority stake in the company in 2003, 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. In Poland, coal-fired heating of apartments still predominates, as was also the case in Brzeg Dolny prior to the advent of this more environmentally compatible system courtesy of PCC Rokita SA.

PCC Exol SA, one of the most advanced surfactants manufacturers in Central and Eastern Europe, is now playing a pioneering role in CSR. An important product group of PCC Exol SA is feedstocks for the cosmetics industry, and one of the key criteria for the qualification of suppliers to this sector is the Good Manufacturing Practice (GMP) award conferred by the European industry association EFfCI. PCC Exol SA is the first company in Poland to implement and register the GMP system. And the Group company also participates in reporting on environmental impacts as part of the Carbon Disclosure Project (CDP).

Sustainability in the Energy division

Sustainability is pursued within the Energy division in both the Conventional Energies and the Renewable Energies business units. In the Conventional Energies area, we have significantly reduced dust emissions from our combined heat and power plant at the Brzeg Dolny chemicals site in recent years. As mentioned, this cogeneration facility also supplies the majority of households in the town with environmentally friendly district heat. The Renewable Energies business unit focuses on the construction and operation of small hydropower plants, units that are recognized for their particular environmental compatibility due to their relatively low impact on nature.

Sustainability in the Logistics division

The mainstay of our Logistics segment is our intermodal container transshipment business. PCC Intermodal SA runs combined transport operations throughout Europe on the basis of five wholly owned container handling terminals in Poland and Germany, facilities that have been greatly expanded and modernized in recent years. It thus efficiently combines environmentally friendly rail and flexible road transport.

Sustainability in the Holding / Projects division

The assets and business activities managed within the Holding / Projects division include a production plant for silicon metal in Iceland, which commenced regular operations at the end of October 2019. It has been designed as one of the most environmentally compatible facilities of its type in the world. The plant's power requirement is entirely covered from renewable sources, primarily in the form of geothermal energy. State-of-the-art filtration systems mean the plant operates virtually free of dust emissions. The use of Iceland's geothermal resources cuts such emissions by around two-thirds on average, as compared to other silicon metal production facilities around the world. The plant therefore makes a major contribution to reducing global greenhouse gas pollution in the energy-intensive production of silicon metal.

Downstream products and certain applications of the silicon metal we produce also contribute directly to climate protection. For example, silicon metal as an innovative nano-anode material can significantly increase the performance of lithium-ion batteries, thus greatly improving a key component of a carbon-neutral economy through a significant increase in the charge radius of electric vehicles. It was to precisely this end that we launched a collaboration program with the Fraunhofer Institute for Solar Energy Systems ISE last year.

Initiatives and certifications

The goal of firmly anchoring sustainability in all companies of the PCC Group is also served by the involvement of PCC affiliates in a large number of certification procedures, the signing of public agreements and membership in initiatives. For example, our chemical companies PCC Rokita SA, PCC Exol SA and PCC Synteza S.A. all participate in the chemical industry's global Responsible Care® initiative. Our production companies have also received several awards for their sustainability and can point to high ratings and rankings in this domain. For example, two of our companies were awarded Gold certification in the renowned EcoVadis sustainability assessment: PCC Exol SA, which has held this certificate since 2017, and PCC MCAA Sp. z o.o. Meanwhile, PCC Rokita SA achieved Silver status in 2021, as it has in previous years since 2018. The commitment of the holding company PCC SE to sustainability is underscored by its participation in the Renewable Carbon Initiative.

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 – very much in our own interest as a further means of securing our future. The main certifications and initiatives are each assigned to the five sustainability aspects of non-financial reporting introduced in the following section.

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 HGB (German Commercial Code). 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 adjustments to 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 bribery and corruption.

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.

In the following we provide a report on the guidelines, risks, measures and goals as well as the key non-financial indicators for each of the five sustainability aspects mentioned. Our approach here is to present the PCC Group as a whole; hence we refrain from mentioning individual affiliates.

The following table summarizes all the performance indicators applicable to non-financial reporting at Group level.

Non-financial performance indicators of the PCC Group

Indicator	Unit	2021	2020	Absolute change	Relative change
Environmental indicators					
Greenhouse gas emissions (GHG Protocol)					
Direct emissions (Scope 1)	t ‘000 CO_2e	**414.8**	307.4	107.4	34.9 %
Indirect emissions (Scope 2), location-based	t ‘000 CO_2e	**440.5**	379.9	60.6	16.0 %
Indirect emissions (Scope 2), market-based	t ‘000 CO_2e	**329.4**	400.0	–70.6	–17.6 %
Indirect emissions (Scope 2), offset	t ‘000 CO_2e	**121.7**	2.3	119.4	> 100 %
Production	t ‘000[2]	**2,122.2**	2,038.1	84.1	4.1 %
Relative CO_2 emissions[1] (Scope 1)	t CO_2e/ t product	**0.20**	0.15	0.04	29.6 %
Energy					
Electricity consumption					
On the basis of fossil fuel sources	GWh	**512.2**	950.1	–437.9	–46.1 %
On the basis of renewable sources	GWh	**340.5**	187.0	153.5	82.1 %
Total	GWh	**852.7**	1,137.1	–284.4	–25.0 %
Relative electricity consumption	GWh/ t product	**0.40**	0.56	–0.16	–28.0 %
Share of renewable energy sources in electricity procurement	%	**39.9**	16.4	23.5[2]	>100 %
Energy sources					
Coke & coal	t ‘000	**154.6**	127.3	27.3	21.4 %
Natural gas	GWh	**1,368.0**	1,200.8	167.2	13.9 %
Mineral oil, gasoline, diesel	t ‘000	**0.5**	0.3	0.1	38.4 %
Biomass	t ‘000	**39.9**	25.6	14.4	56.1 %
Energy generation					
Electricity on the basis of fossil fuel sources	GWh	**98.4**	94.3	4.1	4.3 %
Electricity on the basis of renewable sources	GWh	**17.8**	10.1	7.7	76.1 %
Steam on the basis of fossil fuel sources	t ‘000	**475.2**	449.8	25.4	5.6 %
Heat on the basis of fossil fuel sources	GWh	**619.7**	599.3	20.4	3.4 %
Other environmental influences					
Water consumption	m^3 ‘000	**7,130.5**	6,351.6	779.0	12.3 %
Relative water consumption	m^3/t product	**3.4**	3.1	0.2	7.8 %

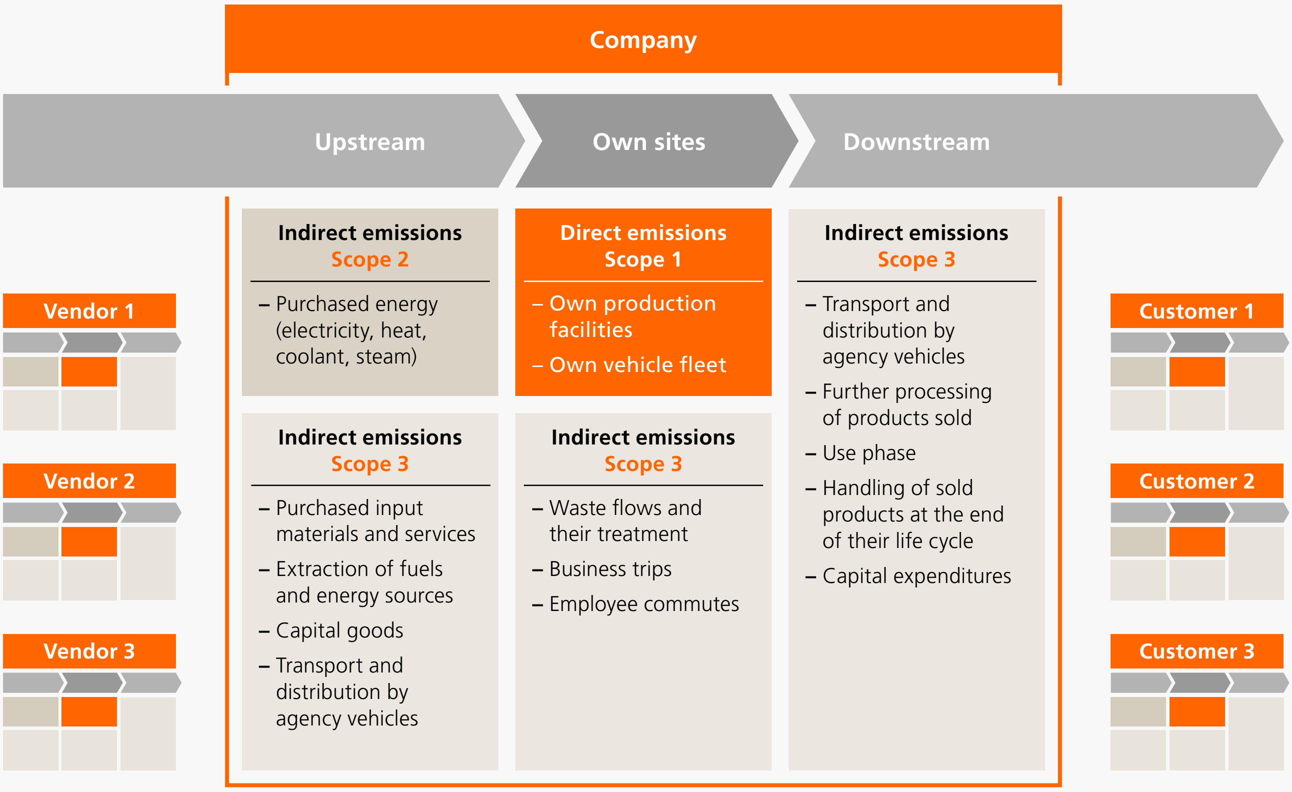
[1] Based on the total output of all products and intermediates
[2] Change in percentage points

CONTINUED

Indicator	Unit	2021	2020	Absolute change	Relative change
Social indicators					
Employees					
Employees, total	Persons	**3,311**	3,176	135	4.3 %
Proportion female	%	**27.2**	26.2	1.0[2]	3.8 %
Number of managerial positions[3]	Persons	**129**	123	6	4.9 %
Proportion female in managerial positions[3]	%	**19.4**	18.7	0.7[2]	3.6 %
Years of service in company	Years	**8.9**	8.4	0.4	4.9 %
Average age	Years	**39.6**	39.8	−0.2	−0.6 %
Number of nationalities		**27**	23	4	17.4 %
Occupational health and safety					
Training and professional development, absolute	Hours	**31,815.3**	32,968.7	−1,153.5	−3.5 %
Training and professional development, relative	Total hours/FTE	**9.6**	10.4	−0.8	−7.4 %
Employee absenteeism > 1 day		**64.0**	69.0	−5.0	−7.2 %
Lost-time injuries	Hours	**1,328.0**	1,320.0	8.0	0.6 %
Deaths		**0**	0	0	–
Alleged human rights violations		**0**	0	0	–
Anti-corruption measures					
Donation requests received		**0**	0	0	–
Total amount donated to political parties or their representatives	€k	**0.0**	0.0	0.0	–
Projects supported		**62**	83	−21	−25.3 %
Penalties and fines due to legal violations	€k	**0.0**	0.0	0.0	–
Business relationships rejected due to compliance violations		**0**	0	0	–
Business relationships terminated due to compliance violations		**0**	0	0	–
Value added and distribution					
Value added, total	**€k**	**255,552.7**	**117,278.9**	**138,273.8**	**> 100 %**
Employees	€k	**114,581.8**	100,767.8	13,814.0	13.7 %
State/Taxes	€k	**30,145.4**	19,309.2	10,836.2	56.1 %
Investors/Lenders	€k	**35,437.5**	37,130.1	−1,692.6	−4.6 %
Other shareholders	€k	**13,705.2**	−2,735.1	16,440.3	> 100 %
Consolidated net income for the year	€k	**61,682.8**	−37,193.1	98,875.9	> 100 %

[2] Change in percentage points
[3] First and second management levels

What do we mean when we talk about Scope 1, 2 and 3 emissions?



The classification of emissions according to different "scopes" (i.e. areas of application) has its roots in the Greenhouse Gas Protocol introduced by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). The GHG Protocol has become an international standard and is instrumental in harmonizing greenhouse gas balances and reporting. The classification into scopes serves in particular to make the reporting process more manageable, since emissions occur at a large number of points along the value chain and can be controlled to very different degrees by individual protagonists.

In the approach adopted, Scope 1 includes all emissions that are within a company's direct sphere of influence, for example emissions from its own production facilities or from company vehicles.

Scope 2 includes all emissions resulting from purchased energy in the form of electricity, heat, coolant or steam. Here, the reporting entity has no direct control, but can exert a relatively large influence, for example by choosing environmentally friendly energy suppliers.

All emissions occurring in upstream and downstream processes, as well as all emissions not directly related to energy consumption and production, are attributed to Scope 3. This includes a wide range of emission categories, such as all emissions attributable to the production of purchased raw/input materials, emissions from the transport of goods by third-party companies, business trips using means of transport that are not within the company's control, emissions from the disposal of waste streams by external disposal companies, or emissions from the further processing of goods sold. This diversity illustrates the complexities involved in recording and presenting all the emissions that a company contributes to. This is also one reason why Scope 3 emissions reporting is not mandatory under the GHG Protocol. Moreover, each company decides for itself which of the categories of these Scope 3 emissions it needs to publish, so a direct comparison between companies is not possible.

Due to the complexities and constraints described above, PCC SE has decided to include all Scope 1 and Scope 2 emissions in its reporting in accordance with the international reporting standard. We are making every effort to record and continuously reduce Scope 3 emissions in collaboration with our partners and stakeholders, and aim to also integrate these activities into our non-financial reporting as comprehensively as possible in the near future.

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. 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, efficient and, in particular, energy-saving technologies. In addition to the safety of our employees and local residents, the preservation of the environment is a top priority for us. Thus we endeavor to protect it, for example, through the responsible use of raw materials and the reduction of energy consumption and greenhouse gas emissions.

PCC policy in relation to environmental issues

1. The great importance we attach to environmental protection in the PCC Group has a decisive influence on our choice of manufacturing processes and products; it also greatly informs our commitment to sustainability and safety. This is likewise recorded in our Code of Ethics, which is binding on the entire PCC Group.

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

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

4. All employees are jointly responsible for the protection of people and the environment in their sphere of activity. 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, oversee 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 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 is forbidden.

5. 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, consumption of water and energy, wastewater pollution, waste disposal, accidents and noise emissions.

The companies of the PCC Group continuously combat these impacts by analyzing all areas and activities that could have an adverse effect on the environment and the efficient use of resources, at the same time carefully taking 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.

One example illustrating how we take environmental concerns into account in our investment projects comes from our silicon metal production plant in Iceland. The plant's power requirement is entirely covered by renewable sources, primarily in the form of geothermal energy. This has meant a drastic reduction in the CO_2 emissions otherwise associated with this type of production operation. And the dust generated during silicon metal production in our plant is almost completely removed from the ambient air by high-performance filter systems. An additional goal we have is to render overall plant operation CO_2-neutral. We aim to do this by capturing the carbon dioxide produced by the kind of chemical reactions involved in the production process in order to produce green methanol. This can contribute in particular to the decarbonization of shipping, which today still largely uses fossil fuels. We recently launched a partnership with the national Icelandic energy supplier Landsvirkjun with the aim of investigating the possibility of producing green methanol. According to sustainability certifications of green methanol already available on the market, it can save up to 90 % of greenhouse gas emissions compared to fossil-based methanol, as indicated by analyses performed by the sustainability certification provider ISCC, for example.

Another example of the importance of environmental considerations in our investment decisions is the technology switchover to the eco-friendly membrane electrolysis process implemented at our chlorine production facilities. This energy-efficient technology enabled us in 2015 to reduce electricity consumption by around 30 % and carbon emissions by 750 kilograms of CO_2 per metric ton of caustic soda produced.

The largest business within our Logistics segment is that of intermodal container transportation, an operation that efficiently combines environmentally friendly long-distance rail transport and flexible road haulage for the "final mile." Compared to pure road transport, our combined intermodal capability enabled emission savings of 383,535 metric tons of the greenhouse gas CO_2 in 2021 (previous year: 315,077 metric tons CO_2) for a total productive output of 3,088.0 million ton-kilometers (previous year: 2,536.9 million ton-kilometers). These calculations are based on data from the European Environment Agency of November 5, 2015 for the reference year 2014.

In the Energy segment, we have in recent years reduced dust emissions by installing modern electrostatic precipitators at our combined heat and power plant located at the Brzeg Dolny chemicals production site. 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. Six of these units, five in North Macedonia and one in Bosnia and Herzegovina, have so far been connected to the grid. The fifth power plant in North Macedonia is expected to enter regular operation with fixed feed-in tariffs in August 2022. Year after year, our power plants already in production enable significant CO_2 emission savings compared to the CO_2 emissions of the regular regional power supply.

Numerous certifications, the signing of public agreements and membership of initiatives document the commitment of PCC's affiliates 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 – LabAnalityka Sp. z o.o. – PCC MCAA Sp. z o.o. – PCC PU Sp. z o.o. – PCC Consumer Products Kosmet Sp. z o.o. (PCC CP Kosmet) – PCC Synteza S.A.
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. – PCC PU Sp. z o.o. – OOO DME Aerosol – PCC Prodex Sp. z o.o. – PCC Synteza S.A.
Certification of energy management systems to ISO 50001:2018	– PCC Rokita SA – PCC Exol SA – PCC CP Kosmet
Certification to ISO 17025:2018-02 General requirements for the competence of testing and calibration laboratories	– LabAnalityka Sp. z o.o.

Certification / Initiative	Company
Certification in Good Manufacturing Practice (EFfCI)	– PCC Exol SA
Certification in Good Manufacturing Practices – Cosmetics – to ISO 22716	– PCC CP Kosmet
IFS HPC certification of the safety and quality of products/processes of suppliers and manufacturers of household and personal hygiene chemical products	– PCC CP Kosmet
SQAS (Safety and Quality Assessment System) certifications for tank cleaning and transport services	– PCC Intermodal SA – PCC Autochem Sp. z o.o.
Authorised Economic Operator	– PCC Intermodal SA
Membership of the global chemical industry initiative Responsible Care®	– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A.
Participation in the Global Compact of the United Nations	– PCC Exol SA

Certifications and initiatives in relation to environmental issues (continued)

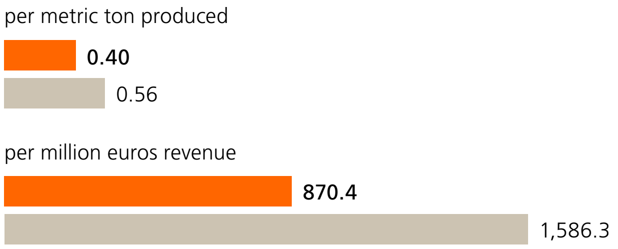
Certification / Initiative	Company
Certified member of the Roundtable on Sustainable Palm Oil	– PCC Exol SA – PCC CP Kosmet – PCC Organic Oils Ghana Ltd.
Participation in the Carbon Disclosure Project aligned to combating climate change	– PCC Exol SA
Member of the Renewable Carbon Initiative (RCI)	– PCC SE
Gold Status rating of the sustainability platform for CSR reporting, EcoVadis (2021)	– PCC Exol SA – PCC MCAA Sp. z o.o.
Silver Status rating of the sustainability platform for CSR reporting, EcoVadis (2022)	– 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 Cosmos	– PCC Exol SA
Organic Agriculture Europe product certification by Ecocert to EU Regulation EC 834/2007	– PCC Organic Oils Ghana Ltd.
Product certification by Ecocert to USDA NOP (National Organic Program)	– PCC Organic Oils Ghana Ltd.
Rainforest Alliance Certification	– PCC Organic Oils Ghana Ltd.
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 (see also explanations on page 51). In the case of energy consumption, all energy sources that are recorded individually, i.e. electricity, gas, heat, steam, fuel oil, gasoline and diesel, are added together without any distinction being made in the data record. The water consumption 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.

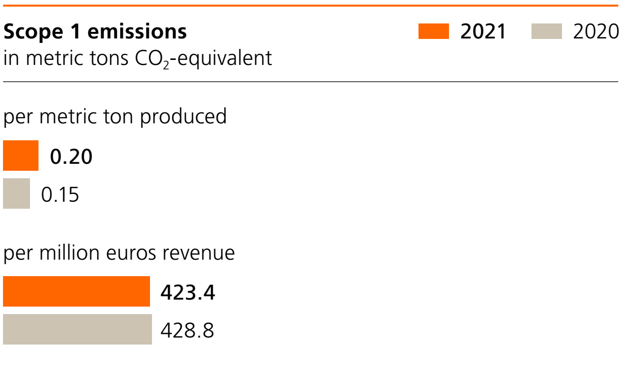
The electricity consumption of all the companies of the PCC Group taken together in 2021 was 852.7 GWh (previous year: 1,137.1 GWh). Of this, 340.5 GWh, or 39.9 %, was generated from renewable energy sources (previous year: 187.0 GWh, or 16.4 %). This percentage rose to a new high primarily due to the resumption of operations at our silicon metal plant in Iceland, which is supplied exclusively with green electricity (mainly from geothermal sources). In 2021, the specific energy consumption of our affiliates in the segments of the Chemicals division decreased versus the

Energy consumption in MWh ■ 2021 ■ 2020

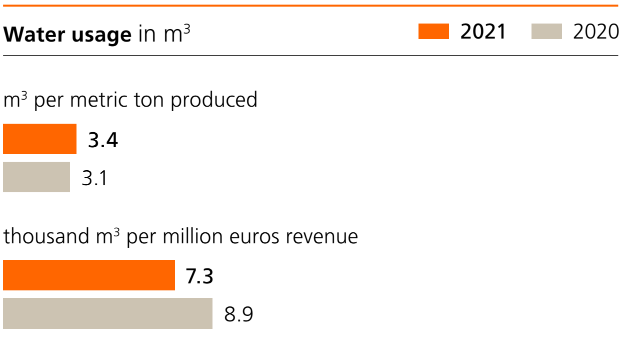


prior year by 28.0 % and amounted to 0.40 MWh per metric ton produced (previous year: 0.56 MWh). Specific electricity consumption in relation to sales revenue amounted to 870.4 MWh per million euros and was thus a significant 45.1 % below the level of the previous year (1,586.3 MWh).

Absolute greenhouse gas emissions in Scope 1 rose by 34.9 % in 2021 versus the previous year, to 414,800 metric tons of CO_2-equivalent (previous year: 307,400 metric tons). The increase is the result of the restart of silicon metal production in Iceland. As in previous years, most of the greenhouse gas emissions were attributable to carbon dioxide (CO_2). Specifically, i.e. per metric ton produced, greenhouse gas emissions increased year on year by 29.6 % to 0.20 metric tons of CO_2 (previous year: 0.15 metric tons of CO_2), also due to the resumption of silicon metal production, which generates CO_2 in the manufacturing process. In relation to sales revenue, greenhouse gas emissions amounted to 423.4 metric tons of CO_2 per million euros (previous year: 428.8 metric tons of CO_2).



Water consumption and wastewater generation at the portfolio companies of the PCC Group essentially arise in the manufacturing processes of our affiliates in the Chemicals division. Absolute water consumption increased by 12.3 % to 7,130,500 m³ in 2021 (previous year: 6,352,000 m³). Related to the volumes produced in the business areas indicated, specific water usage amounted to 3.4 m³ per metric ton produced, 7.8 % above the figure for the previous year of 3.1 m³. In relation to sales revenue, water consumption fell by 17.5 % year on year to 7,300 m³ per million euros (previous year: 8,900 m³/€ m).



Goals

In our aforementioned sustainability vision, PCC SE and the companies of the PCC Group acknowledge their ecological and social responsibility. Our objective is to make a strong contribution to climate protection and sustainable development. To this end, we aim to halve the greenhouse gas emissions of our chemicals manufacturing operations by 2030 compared to our 2020 levels (Scopes 1 and 2, see explanations on page 51). We intend by then to have completely eliminated coal from our power generating activities. And we want to see our Group completely net-climate-neutral by 2050. In addition, the PCC Group is striving in the long term to reduce specific consumption levels, particularly in relation to water usage. At the same time, the proportion of energy supplied from renewable sources is to be further increased.

Taking into account the greenhouse gas generated through the use of external electricity, which is included in Scope 2, our new silicon metal production plant in Iceland is a major contributor to reducing such emissions. Despite the increase in absolute emissions, it will be possible to further reduce specific volumes, as CO_2 emissions from the Icelandic plant are well below the global average for 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 in order 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.

Since the outbreak of the coronavirus pandemic, we have put in place additional specific safeguarding measures to ensure the health and safety of employees. Both at the Group holding company PCC SE and at its affiliates within the PCC Group, home office regulations and safety protocols for employees at the plants were developed and implemented at an early stage. Disinfectants, sanitizers and cleaning products from our own production were also made available to employees free of charge for home use. Required infrastructure, in particular to enable the implementation of home office solutions for a large number of employees, was created and acquired at short notice.

In addition, we also promote the individual development of our employees, even under the kind of exceptional circumstances presented to us during the pandemic. We offer our people scope to work under their own initiative on a results-led basis and opportunities 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 on their personal career journey, offering them task-aligned preparation as they take up new duties, and personalized continuous professional development. In our human resources management, we attach great importance to diversity, i.e. the promotion of cultural and professional variety. We have zero tolerance for discrimination of all kinds 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.

Together with protection of the environment, the safety and protection of our employees and of local residents are of the highest priority. PCC is therefore committed to ensuring safe working conditions at all times. This also and especially applies in exceptional situations such as a pandemic, for example through the fast and large-scale implementation of home office solutions. 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 employees is likewise 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.

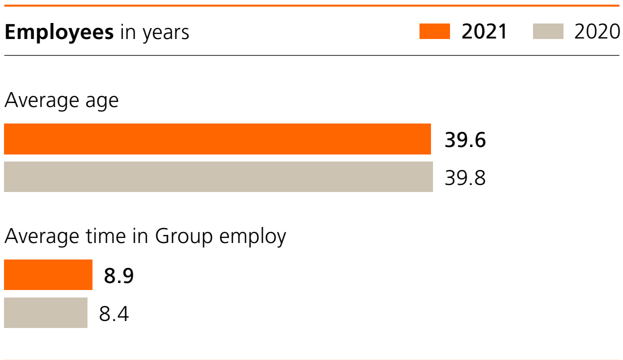
PCC will always take all reasonable measures to prevent discriminatory conduct and harassment. All employees are called upon to report any and all cases of discrimination or harassment in their working environment to their supervisor, the human resources department or the compliance officer.

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 totally 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, time spent on such measures equated to 31,815 hours (previous year: 32,969 hours). Occupational health and safety is invariably given high priority on the training agenda. Occupational accidents resulting in incapacity for work of more than one day amounted to 64 in 2021 (previous year: 69). The number of sick days due to occupational accidents remained virtually unchanged throughout the Group at 1,328 (previous year: 1,320). As a result, the number of sick days due to accidents at work per employee fell slightly to an average of 0.40 (previous year: 0.42).

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 8.9 years (previous year: 8.4 years) offers an indication of employee satisfaction. The average age of 39.6 years (previous year: 39.8 years) is evidence that we make use of the expertise of older employees while also providing entry opportunities for young people, thus encouraging diversity and 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, to the full extent possible, with our stakeholders.

PCC's commitment to employee issues is evidenced by numerous certifications, the signing of public agreements and membership of initiatives:



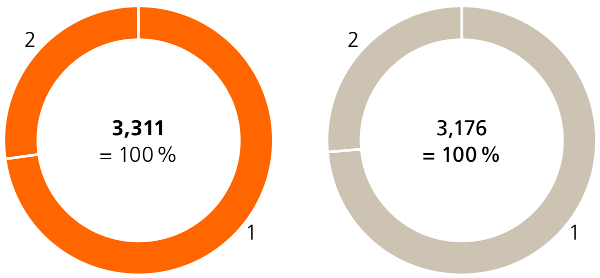
Certifications and initiatives in relation to employee issues

Certification / Initiative	Company
Certification of occupational health and safety management systems to ISO 45001:2018	– PCC Rokita SA – PCC Exol SA – PCC CP Kosmet – PCC MCAA Sp. z o.o. – PCC PU Sp. z o.o. – PCC Synteza S.A.
Certification in Good Manufacturing Practices – Cosmetics – to ISO 22716	– PCC CP Kosmet
Certification in Good Manufacturing Practice (EFfCI)	– PCC Exol SA
Membership of the global chemical industry initiative Responsible Care®	– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A.
Participation 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
Membership of the European Committee of Organic Surfactants and their Intermediates	– PCC Exol SA
Sedex Members' Ethical Trade Audit – Certification of sustainable and ethical behavior in business relationships	– PCC Exol SA
Certified member of the Roundtable on Sustainable Palm Oil	– PCC Exol SA – PCC CP Kosmet – PCC Organic Oils Ghana Ltd.
Gold Status rating of the sustainability platform for CSR reporting, EcoVadis (2021)	– PCC Exol SA – PCC MCAA Sp. z o.o.
Silver Status rating of the sustainability platform for CSR reporting, EcoVadis (2022)	– PCC Rokita SA
SQAS (Safety and Quality Assessment System) certifications for tank cleaning and transport services	– PCC Intermodal SA – PCC Autochem Sp. z o.o.
Authorised Economic Operator	– PCC Intermodal 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 had in our employ in fiscal 2021 people from 27 nations (previous year: 23). As a result of our extensive investments, particularly in new regions, the number of our employees has increased in recent years, including in 2021 – following a coronavirus-related decline in the previous year – by 4.3 % to 3,311 at year-end (previous year: 3,176). The proportion of women in this total increased to 27.2 % (previous year: 26.2 %).

Employees across the Group in % 2021 2020



1	Male	**72.8 %**		1	Male	73.8 %
2	Female	**27.2 %**		2	Female	26.2 %

The proportion of women in the first and second levels of management at our affiliates was 19.4 % in the year under review (previous year: 18.7 %).

Goals

PCC has set itself the goal of continuously raising the standards of health and safety for the Group's employees. We continue to pay particular attention to accident prevention and health protection at the workplace as well as to preventative healthcare measures. Beyond a safe, pleasant working environment based on mutual awareness and appreciation, it is a central objective 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

PCC respects the protection of international human rights in accordance with the UN Charter of Human Rights, recognizes them unreservedly and supports them within its sphere of influence. Violations of human rights are not tolerated and are duly sanctioned. This is underlined in particular by PCC Exol SA's membership of the United Nations Global Compact.

Overall, it can be seen that the sites of the PCC companies are predominantly located in countries with a positive human rights record, particularly in Europe. Swapping these sites for those with a poorer human rights record and possibly lower production costs is not an option for PCC SE, for the Group as a whole, nor for the individual PCC companies.

Measures

Both PCC SE and the companies in our investment portfolio are actively committed to respecting human rights, particularly in new regions in which the PCC Group has previously not been active. We ensure that the same human rights standards apply throughout the PCC Group, i.e. irrespective of location, as documented in particular by our participation in a number of initiatives.

Initiatives to promote respect for human rights

Initiative		Company
Membership of the global chemical industry initiative Responsible Care®		– PCC Rokita SA – PCC Exol SA – PCC Synteza S.A.
Participation 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 2021, either in the companies of the PCC Group or in 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 obligatory for all executive and supervisory 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 previously 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 Executive Board of PCC SE, or the executive board or senior management of the respective Group companies. Cash payments and other financial contributions to politicians, political parties, associations or other political organizations are strictly prohibited.

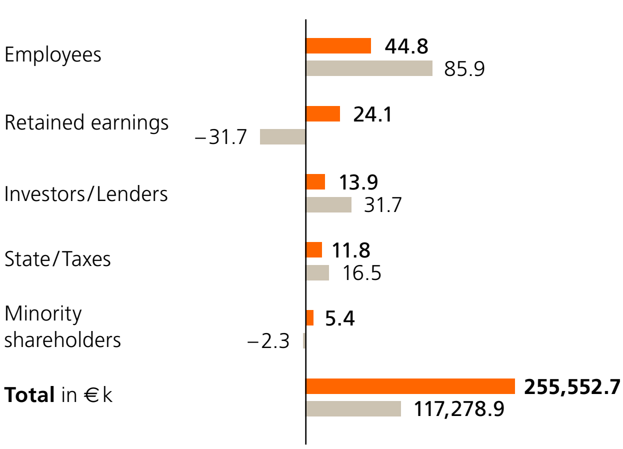
Performance indicators

The companies of the PCC Group have various 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, namely our employees. A total of €114.6 million, or 44.8 % of value added in the 2021 reporting year, went to employees in the form of wages and salaries, employer-paid benefits for social security, pension benefits and sundry other benefits (previous year: €100.8 million or 85.9 %).

The state received 11.8 % of the value added of the PCC Group in the form of tax payments such as corporate income taxes or property taxes in the amount of €30.1 million (previous year: €19.3 million or 16.5 %). Our investors, subscribers to bonds and also minority shareholders in affiliates received €35.4 million or 13.9 % of the value added through interest payments or dividends (previous year: €37.1 million or 31.7 %). Consolidated net income in fiscal 2021 contributed €61.7 million, or 24.1 %, to the value added retained in the company (previous year: €–37.1 million, or –31.7 %).

Distribution of value added Figures in €k	**2021**	2020
Value added	**255,552.7**	117,278.9
Distribution		
Employees	**114,581.8**	100,767.8
State/Taxes	**30,145.4**	19,309.2
Investors/Lenders	**35,437.5**	37,130.1
Minority shareholders	**13,705.2**	–2,735.1
Retained earnings	**61,682.8**	–37,193.1

Distribution of value added in %



Achievements related to social issues

PCC SE and its subsidiaries are directly involved in the local communities in which they operate. At our Group headquarters in Duisburg, for example, PCC SE has been supporting the homeless charity Gemeinsam gegen Kälte Duisburg e.V. ("Joint Action Against the Cold") for a number of years now. We also sponsor local and regional sports and cultural events. For example, the holding company is the name sponsor of the PCC Stadium in Duisburg-Homberg, located near our Group headquarters, and the main sponsor of VfB Homberg e.V., the regional soccer team based there. As of year-end 2021, the PCC Group was providing support to 62 projects (previous year: 83).

Goals

PCC has set itself the goal of continuing to drive value creation within the Group for the benefit of all stakeholders. 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 engagement 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. Our commitment in this regard is set out 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 consideration 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 related measures are only approved once all the bodies responsible have conducted their own thorough examinations. As in the previous year, the number of penalties and fines for non-compliance with laws and regulations was zero.

Also as in the previous year, there were no compliance violations in the reporting year leading to the rejection or termination of business relationships.

Anti-corruption initiatives

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

Goals

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

Events after the balance sheet date

The bond carrying the ISIN code DE000A2G9HY2 issued by PCC SE with a placed volume of € 9.6 million was redeemed in full as of February 1, 2022. It was issued on April 1, 2018 with a coupon of 3.0 % p.a.

The bond carrying the ISIN code DE000A14KJ43 issued by PCC SE with a placed volume of € 16.2 million was redeemed in full as of April 1, 2022. It was issued on May 1, 2015 with a coupon of 6.5 % p.a.

Effective April 7, 2022, PCC BakkiSilicon hf., Húsavík (Iceland), completed the restructuring of its financing and thus of all its financial liabilities. This had become necessary due to the pandemic-related downtime periods and the resultant change in the underlying economic conditions.

There is currently uncertainty with regard to the war in Ukraine and the resulting economic consequences. Political and regulatory measures may have a direct or indirect impact on the global economy and thus also on the business activities of the PCC Group. Close communications with our customers and suppliers in the region are currently enabling us to identify risks at an early stage and to act accordingly. However, the impact on business performance as a whole cannot be estimated with sufficient accuracy at present.

Outlook for 2022 and beyond

The focus of the PCC Group in fiscal 2022 will once again be on its predominantly long-term strategy of portfolio company investment and development. This will, as ever, include enhancing the core activities and competitiveness of the PCC Group through further capital expenditures. Green-field and brown-field projects will also be given due consideration as opportunities arise. This applies in particular with respect to the possible in-company production of strategically important raw materials. Beyond this, the future issues of sustainability and climate protection and the associated transformation of all production processes will increasingly come to the fore. This will inevitably bring further investments in highly efficient and environmentally friendly production facilities, which in turn will decisively strengthen the future viability of the PCC Group. Essentially, the strategy of proactive investment portfolio management accompanied by ongoing portfolio optimization measures is likewise to be continued in the coming years. The primary objective remains to continuously and securely increase our enterprise value.

The business performance of the PCC Group in 2022 will again be heavily dependent on future global economic trends. At present, forecasts emanating from both political sources and various banks and other institutions indicate that the economy will grow again in 2022. However, these prospects remain subject to high uncertainties regarding the further development of the coronavirus pandemic, the risk of inflation, and ongoing transportation and supply chain issues. Key variables requiring close observation remain the various international trade conflicts that remain, the war in Ukraine as a particular concern, and the future development of raw material and energy prices.

In its forecast published in early December 2021, the OECD predicted that global economic growth in 2022 would be lower than in 2021, with developments in individual countries varying considerably, depending on the vaccination status of their populations. The forecast for Europe as a whole also predicts a slow-down versus 2021, with growth expected to come in at 4.3 %. By contrast, the forecast for Germany, which according to the OECD is being particularly hard hit by supply chain issues at the moment, shows an upturn versus 2021 (to 4.6 %). This means that for the euro zone as a whole, i.e. for our most important sales market, economic output is still expected to increase by more than 4 %. The ifo Institute has recently downgraded its growth prospects for Germany; in mid-December it reduced its forecast for 2022 by 1.4 percentage points to 3.7 %, while upgrading it for the following year by 1.4 percentage points to 2.9 %. Other institutes and governmental sources now also expect the upturn in Germany to be delayed further due to the supply chain problems and a fourth or possibly even a fifth wave of coronavirus infections. This could also hold true for other European countries.

Globally, an import freeze on Russian oil and gas is also likely to have a negative impact on economic growth: The IMF, which has since reduced its January growth forecast by 0.8 percentage points to 3.6 %, expects global economic output to fall by a further 2 percentage points in the event of an oil and gas embargo, with inflation still on a sharp upward climb.

The current Group budget for 2022 to 2024, prepared for the operating businesses of the Group companies and affiliates in the period September through November 2021, provides for an increase in sales revenue in 2022 of 10 % to 15 %. At Group level, the assumption is that total earnings before interest/financial result, taxes, depreciation and amortization (EBITDA) will be at the level of 2021. With the exception of the conventional and renewable energies businesses, all segments are expected to make a positive contribution to results. PCC BakkiSilicon hf., which in all probability will – for the first time – be producing at full capacity throughout the year in 2022, expects by far the highest year-on-year earnings growth within the PCC Group. Significant expansion is also expected for the Surfactants segment, resulting from higher capacities and the increasing share of higher-margin products, particularly for industrial applications. Similarly, the Intermodal Transport business is expected to post a substantially improved performance as a result of further increases in transportation and handling volumes. We likewise expect the Chlorine segment as a whole to generate an increase in earnings, not least as a result of the anticipated further improvement in performance in the MCAA business unit. Earnings in the Chlorine business unit itself are expected to remain flat. However, in view of the current further increase in prices for chlorine co-products, this assumption based on current perspectives may prove to be too pessimistic. This also applies to the budget planning for the Polyols segment: The assumption here is that the market for polyether polyols will normalize, resulting in a decline in earnings that will almost cancel out any earnings growth in the aforementioned segments. In the Specialty Chemicals segment, the overall earnings trend is also expected to be downward. This applies both to the Commodity Trading business and to the Alkylphenols and Phosphorus & Naphthalene Derivatives business units, both of which benefited strongly from exceptional items and circumstances in 2021. For 2022, business is instead expected to develop positively to the usual extent. For the Consumer Products segment, the 2022 budget plan foresees an increase in earnings resulting from a likely improvement in the performance of PCC CP Kosmet. We also expect EBITDA to increase at the DME plant in Russia on the back of further volume growth. Overall, Group EBITDA could therefore match the high level of 2021.

In terms of consolidated earnings before tax (EBT), the corresponding prior-year figure is likely to be even slightly better than in 2021 due to the anticipated reduction in the interest burden. However, this is subject to changes on the global interest rate markets which cannot yet be conclusively predicted.

This analysis does not take into account the possible negative effects of a further intensification of the war in Ukraine, as these cannot be adequately assessed at present. This also applies to any possible resurgence of the coronavirus pandemic. Although the peak of the Omicron wave seems to be passing, experts are already warning of a possible new coronavirus wave in the fall and winter of 2022. Moreover, the occurrence of new virus variants that could be introduced into Europe from countries or continents with lower vaccination rates cannot be ruled out.

We expect certain expenses, including for energy and personnel, to rise over the next few years. Depreciation and amortization will also continue to increase as a result of further capital expenditures. Provided the economy continues to develop positively, earnings at the EBITDA and EBT levels should remain high in 2023, although declining somewhat year on year. The Group holding company PCC SE is therefore likely to receive dividend payments in the low to mid-double-digit million range beyond 2022, and we do not anticipate any significant change in the level of PCC SE indebtedness. Following a significant decline in the past fiscal year, net debt at Group level is expected to rise again from 2023 onward due to planned capital expenditures. However, with EBITDA expected to remain constant, it should be possible to keep the leverage ratio of the PCC Group below the target level of 5.0.

In 2022 and also in the years to follow, the focus of the PCC Group's activities will be on corporate investment and business development, complemented by our sustainability strategy, with operations and planning as ever predominantly aligned to the long-term perspective. One focus in this regard will in particular be on supporting PCC BakkiSilicon hf. in optimizing its production process and further improving both its earnings situation and financing structure. In cooperation with, among others, the Fraunhofer Institute for Solar Energy Systems ISE, alternative higher-value applications for silicon metal are also being investigated, including in lithium-ion batteries for electric vehicles, which could lead to further growth in the silicon metal sector over the long term.

In its Chemicals division, too, the PCC Group will continue to focus on the development of higher-value products for customer-specific applications, not only in the Specialty Chemicals segment but also in the Polyols and Surfactants segments. The PCC Group is likewise endeavoring to drive geographic expansion in respect of these two core business areas. With the project launch of PCG PCC Oxyalkylates Sdn. Bhd. in Malaysia in 2021, an important foundation has been laid in the emerging market of Southeast Asia. Moreover, the PCC Group will be considering further investment projects in the future, including in the USA, with a focus on both the backward and forward integration of current core business activities.

From 2022, we also intend to accommodate our increasing focus on application-related specialties across the board through the introduction of a new segment structure within the PCC Group. For example, due to the growing importance of applications involving silicon metal, we are creating the new Silicon & Derivatives segment. Business units will continue to be assigned to their respective product segments.

One of the essential prerequisites for the further growth of the PCC Group remains securing the long-term availability of raw material supplies. And the PCC Group achieved an important milestone in this regard with the conclusion of a long-term offtake contract for ethylene oxide, one of the key feedstocks used in our chemical production. Notwithstanding this development, further options will continue to be examined in Germany and abroad.

Beyond this, the issues of sustainability and climate protection – and the associated long-term transformation of all production processes – are destined to become core components of our business strategy, bringing them ever more to the fore. This will inevitably give rise to further investments in highly efficient and environmentally friendly production facilities, which in turn will decisively strengthen the future viability of the PCC Group.

Fundamentally, PCC SE will continue to adhere to its strategy of ongoing, proactive investment portfolio management and optimization. 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 increase in our enterprise value remaining the key criteria guiding our corporate decision-making.

Duisburg, April 28, 2022
PCC SE

Executive Board

Dr. Peter Wenzel

Ulrike Warnecke

Dr. rer. oec. (BY) Alfred Pelzer

Consolidated financial statements

Total assets of the PCC Group rose by € 168.0 million year on year to € 1,392.2 million. As a result of higher raw material prices, current assets, including inventories, rose by € 113.2 million to € 346.9 million. Property, plant and equipment increased by € 30.0 million to € 886.9 million, primarily due to the resumption in 2021 of certain investment projects that had been suspended in the previous year as a result of the pandemic.

Consolidated balance sheet

Figures in €k	(Note)	Dec. 31, 2021	Dec. 31, 2020
Assets			
Non-current assets		**1,045,338**	990,528
Intangible assets	(19)	44,518	37,464
Property, plant and equipment	(20)	886,900	856,872
Right-of-use assets	(21)	55,116	55,379
Investments accounted for using the equity method	(12)	15,573	2,164
Non-current financial investments	(23)	10,056	4,970
Other non-current financial assets	(24)	16,424	19,731
Deferred tax assets	(34)	16,399	13,522
Other receivables and other assets	(27)	352	426
Current assets		**346,898**	233,697
Inventories	(25)	114,046	57,948
Trade accounts receivable	(26)	109,547	71,967
Other receivables and other assets	(27)	29,079	29,503
Income tax receivables		462	533
Cash and cash equivalents	(38)	93,763	73,745
Total assets		**1,392,236**	1,224,225

Consolidated balance sheet

CONTINUED

Figures in €k	(Note)	Dec. 31, 2021	Dec. 31, 2020
Equity and liabilities			
Equity	(28)	**144,569**	74,824
Subscribed capital		5,000	5,000
Capital reserve		56	56
Revenue reserves/Other reserves		138,547	77,059
Other equity items/OCI		−36,597	−40,508
Minority interests	(29)	37,563	33,217
Non-current provisions and liabilities		**893,410**	874,519
Provisions for pensions and similar obligations	(30)	922	837
Other provisions	(31)	6,215	5,630
Current tax liabilities		–	6,685
Deferred tax liabilities	(34)	9,362	7,528
Financial liabilities	(32)	827,603	812,033
Other liabilities	(33)	49,309	41,807
Current provisions and liabilities		**354,256**	274,882
Provisions for pensions and similar obligations	(30)	51	58
Other provisions	(31)	31,024	19,726
Current tax liabilities		20,081	7,393
Trade accounts payable		100,586	87,265
Financial liabilities	(32)	154,069	119,628
Other liabilities	(33)	48,445	40,812
Total equity and liabilities		**1,392,236**	1,224,225

Consolidated statement of income

Figures in €k	(Note)	2021	2020
Sales revenue	(6)	**979,615**	716,809
Change in inventory of finished products and work in progress		29,696	–9,106
Other internal costs capitalized	(7)	8,796	8,910
Purchased goods and services	(8)	662,174	500,141
Personnel expenses	(9)	112,531	97,921
Other operating income	(10)	29,801	35,474
Other operating expenses	(11)	76,254	69,798
Result from investments accounted for using the equity method	(12)	560	–395
Earnings before interest / financial result, taxes, depreciation and amortization (EBITDA)	(40)	**197,510**	83,833
Depreciation and amortization	(13)	72,185	72,546
Operating profit (EBIT)	(40)	**125,325**	11,287
Interest and similar income	(14)	3,502	2,391
Interest and similar expenses	(14)	35,437	37,130
Currency translation result	(15)	923	–8,629
Other financial income		99	100
Other financial expenses		2,683	6,456
Earnings before taxes (EBT)	(17)	**91,728**	–38,436
Taxes on income	(16)	16,340	1,492
Net result		**75,388**	–39,928
Net result attributable to Group		61,683	–37,193
Net result attributable to minority interests		13,705	–2,735

Consolidated statement of comprehensive income

Figures in €k	2021	2020
Net result	**75,388**	−39,928
Income and expenses recognized in equity for future recycling through profit or loss	**3,945**	−22,455
Exchange differences on translation of foreign operations	4,165	−22,430
Fair value measurement of financial assets	–	−25
Fair value measurement of cash flow hedges	−221	–
Income and expenses recognized in equity not for future recycling through profit or loss	**−34**	40
Remeasurement of defined benefit pension plans	−40	55
Other changes not for future recycling through profit or loss	−1	−5
Deferred taxes on items not for future recycling through profit or loss	8	−9
Total income and expenses recognized in equity	**3,911**	−22,414
Total comprehensive income	**79,299**	−62,342
Share of comprehensive income attributable to Group	65,594	−59,611
Share of comprehensive income attributable to minority interests	13,705	−2,732

Consolidated statement of changes in equity

Figures in €k	Subscribed capital	Capital reserve	Revenue reserves/ Other reserves	Other equity items/OCI	Equity attribut-able to Group	Minority interests	Total Group equity
Jan. 1, 2020	5,000	56	119,977	−18,090	**106,943**	40,690	**147,633**
Dividends paid to shareholders	–	–	−3,150	–	**−3,150**	−2,640	**−5,790**
Changes in consolidation scope and other consolidation effects	–	–	−2,575	–	**−2,575**	−2,102	**−4,677**
Comprehensive income	–	–	−37,193	−22,418	−59,611	−2,732	**−62,342**
Net result	–	–	−37,193	–	−37,193	−2,735	−39,928
Other income and expenses recognized in consolidated equity	–	–	–	−22,418	−22,418	4	−22,414
– Currency translation differences	–	–	–	−22,430	−22,430	–	−22,430
– Remeasurement of defined benefit pension plans	–	–	–	52	52	4	55
– Fair value measurement of financial assets	–	–	–	−25	−25	–	−25
– Fair value measurement of cash flow hedges	–	–	–	–	–	–	–
– Other changes not for future recycling through profit or loss	–	–	–	−5	−5	–	−5
– Deferred taxes recognized in OCI	–	–	–	−9	−9	–	−9
Dec. 31, 2020	5,000	56	77,059	−40,508	**41,607**	33,217	**74,824**

Consolidated statement of changes in equity

CONTINUED

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, 2021	5,000	56	77,059	−40,508	**41,607**	33,217	**74,824**
Dividends paid to shareholders	–	–	−2,750	–	−2,750	−3,387	−6,137
Changes in consolidation scope and other consolidation effects	–	–	2,555	–	2,555	−5,972	−3,417
Comprehensive income	–	–	61,683	3,911	**65,594**	13,705	**79,299**
Net result	–	–	61,683	–	61,683	13,705	75,388
Other income and expenses recognized in consolidated equity	–	–	–	3,911	3,911	–	3,911
– Currency translation differences	–	–	–	4,165	4,165	–	4,165
– Remeasurement of defined benefit pension plans	–	–	–	−40	−40	–	−40
– Fair value measurement of financial assets	–	–	–	–	–	–	–
– Fair value measurement of cash flow hedges	–	–	–	−221	−221	–	−221
– Other changes not for future recycling through profit or loss	–	–	–	−1	−1	–	−1
– Deferred taxes recognized in OCI	–	–	–	8	8	–	8
Dec. 31, 2021	5,000	56	138,547	−36,597	**107,006**	37,562	**144,569**

Consolidated statement of cash flows

Figures in €k	(Note)	2021	2020
Net result		**75,388**	–39,928
Depreciation and amortization		72,185	72,546
Write-downs of financial investments		2,585	3,676
Expenses (+), income (–) from income tax		16,340	1,492
Expenses (+), income (–) from interest		31,935	34,739
Change in provisions for pensions and other provisions		11,962	5,497
Interest received		376	190
Income taxes paid		–10,404	–3,407
Increase (+), decrease (–) in individual value adjustments for receivables and other assets		1,032	118
Gains (–), losses (+) from disposal of non-current assets		–786	–7,003
Write-ups of intangible assets, property, plant and equipment and right-of-use assets		–161	–443
Result from investments accounted for using the equity method		–560	395
Other non-cash gains (–) and expenses (+)		–9,236	18,022
Gross cash flow		**190,658**	85,891
Increase (–), decrease (+) in inventories		–56,099	22,787
Increase (–), decrease (+) in trade accounts receivable		–38,612	8,602
Increase (–), decrease (+) in accounts receivable from affiliated companies		–239	–40
Increase (–), decrease (+) in other assets		–2,068	6,995
Increase (+), decrease (–) in trade accounts payable		13,398	3,570
Increase (+), decrease (–) in accounts payable to affiliated companies		383	–1,543
Increase (+), decrease (–) in other liabilities		22,512	–10,870
Cash flow from operating activities		**129,933**	115,392
Proceeds from disposal of intangible assets		–	5,962
Proceeds from disposal of property, plant and equipment		1,298	1,559
Proceeds from disposal of right-of-use assets		7,657	626
Proceeds from disposal of non-current financial investments		–	–1
Proceeds from disposal of other non-current financial assets		2	400
Proceeds from the sale of consolidated subsidiaries		–	2,917
Capital expenditures on intangible assets		–1,429	–1,405
Capital expenditures on property, plant and equipment		–68,122	–50,511
Capital expenditures on right-of-use assets		–1,379	–95
Capital expenditures on investments accounted for using the equity method		–12,849	–1,015
Capital expenditures on non-current financial investments		–20	–
Capital expenditures on other non-current financial assets		–3,321	–1,600
Cash flow from investing activities		**–78,163**	–43,162

Consolidated statement of cash flows

CONTINUED

Figures in €k	(Note)	2021	2020
Dividends paid to shareholder and owner		–2,750	–3,150
Dividends paid to minority interests		–3,387	–2,640
Proceeds from issuance of bonds		97,056	87,196
Payments for redemption of bonds		–79,477	–103,548
Proceeds from banks		47,692	56,032
Payments to banks		–44,868	–43,914
Payments in respect of leases		–14,562	–13,172
Payments for the partial acquisition of shares in a subsidiary without gain of control		–2,756	–2,636
Interest paid		–28,108	–30,017
Cash flow from financing activities		**–31,161**	–55,849
Changes in cash and cash equivalents due to cash transactions		20,608	16,382
Changes in cash and cash equivalents due to foreign exchange rates		–589	–2,676
Changes in cash and cash equivalents due to changes in consolidation scope		–	–451
Cash and cash equivalents at the beginning of the period		73,745	60,490
Cash and cash equivalents at the end of the period	(38)	**93,763**	73,745

Notes to the consolidated financial statements

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Other disclosures

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 have been prepared in accordance with the International Financial Reporting Standards (IFRSs) of the International Accounting Standards Board (IASB) and the interpretations of the IFRS Interpretations Committee (IFRS IC), where these were adopted by the European Commission for application in the EU as of the reporting date and where application was mandatory as of December 31, 2021. 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). The consolidated financial statements have been prepared on the basis of the going concern principle.

The closing date for preparation of the consolidated financial statements was December 31, 2021, 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 income statement of the PCC Group have, in part, been aggregated in order to improve clarity of presentation. These items are explained in the notes to the consolidated financial statements. The total cost approach (classification of expenses by nature) has been retained 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, 2021.

The Executive Board of PCC SE finalized these financial statements in their meeting of April 28, 2022, whereupon they were presented to the Supervisory Board for examination and approval, and then released for publication.

The consolidated financial statements of PCC SE are submitted for publication to the operator of the Federal Gazette (Bundesanzeiger).

(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 Phase 2 amendments to the IASB's Reference Rate Benchmark Reform project provide for relief in the presentation of changes to contractual cash flows and hedging relationships required by IBOR reform. They thus relate to the actual change of benchmark interest rates.

The amendments to IFRS 16 Leases grant the lessee the option of simplified accounting for concessions, such as the deferral of rental payments or rental discounts granted in connection with the coronavirus pandemic. The lessee may elect not to present the lease concession as a lease modification.

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.

Standards and interpretations to be applied for the first time Standard/Interpretation	Mandatory first-time adoption per IASB as of	Mandatory first-time adoption in the EU as of
Amendments to IFRS 4 Insurance Contracts: Postponement of IFRS 9 Implementation	January 1, 2021	January 1, 2021
Amendments to IFRS 9 Financial Instruments, IFRS 4 Insurance Contracts, IFRS 7 Financial Instruments – Disclosures, IFRS 16 Leases and IAS 39 Financial instruments – Recognition and Measurement: Interest Rate Benchmark Reform (Phase 2)	January 1, 2021	January 1, 2021
Amendments to IFRS 16 Leases: Covid-19-Related Rent Concessions after June 30, 2021	April 1, 2021	April 1, 2021

Standards and interpretations for which application is not yet mandatory

The IASB has published standards and interpretations and/or amendments thereto as listed in the following which are not yet mandatory as of fiscal 2021. Some of these standards and interpretations have not yet been adopted into EU law (endorsement mechanism), and have therefore not been applied by the PCC Group. The PCC Group is currently determining the extent to which new, not yet mandatory standards and interpretations will influence the consolidated financial statements. The current expectation is that the standards and interpretations listed as pending application will not have any material impact on the consolidated financial statements.

Standards and interpretations yet to be applied Standard/Interpretation	Mandatory first-time adoption per IASB as of	Mandatory first-time adoption in the EU as of
IFRS 17 Insurance Contracts	January 1, 2023	January 1, 2023
Amendments to IFRS 3 Business Combinations: Reference to the Conceptual Framework	January 1, 2022	January 1, 2022
Amendments to IAS 16 Property, Plant and Equipment: Proceeds Before Intended Use	January 1, 2022	January 1, 2022
Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts – Cost of Fulfilling a Contract	January 1, 2022	January 1, 2022
Annual Improvements Project Cycle 2018 – 2020	January 1, 2022	January 1, 2022

CONTINUED

Standards and interpretations yet to be applied Standard /Interpretation	Mandatory first-time adoption per IASB as of	Mandatory first-time adoption in the EU as of
Amendments to IAS 1 Presentation of Financial Statements and to IFRS Practice Statement 2: Disclosure of Accounting Policies	January 1, 2023	January 1, 2023
Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates	January 1, 2023	January 1, 2023
Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current	January 1, 2023	unknown
Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction	January 1, 2023	unknown
Amendments to IFRS 17 Insurance Contracts: First-time Adoption of IFRS 17 and IFRS 9 – Comparative Information	January 1, 2023	unknown
IFRS 14 Regulatory Deferral Accounts	January 1, 2016	no endorsement by EU

(3) Scope of consolidation

The consolidated financial statements of the PCC Group cover PCC SE and all material subsidiaries. Subsidiaries and associates regarded individually and in aggregate as being immaterial in terms of portraying a true and fair view of the net assets, financial position and results of operations of the Group have been omitted from the consolidation process and are recognized as financial investments in equity instruments. For a detailed schedule of shareholdings in accordance with Section 313 (2) HGB (German Commercial Code), please refer to Note (44).

Fully consolidated subsidiaries	**Domestic**	**Abroad**
Jan. 1, 2020	10	41
Additions	1	–
Disposals/Mergers	1	3
Jan. 1, 2021	10	38
Additions	–	1
Disposals/Mergers	–	1
Consolidated subsidiaries as of Dec. 31, 2021	**10**	**38**

In fiscal 2021, an addition to the scope of consolidation in the Holding/Projects segment resulted from the formation of PCC BD Sp. z o.o., Brzeg Dolny (Poland).

With the aim of reducing the administrative workload and thus cutting costs, PCC Packaging Sp. z o.o., Brzeg Dolny, was merged with PCC Consumer Products Kosmet Sp. z o.o., Brzeg Dolny, in fiscal 2021.

(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 can exercise control, these having been prepared on the basis of uniform accounting policies and valuation principles.

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 valuation 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 reporting 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 result from investments accounted for using the equity method.

(5) Explanatory notes to the accounting and valuation principles

Impact of the coronavirus pandemic on the accounting process

Fiscal 2021 was overshadowed by the ongoing coronavirus pandemic. The rising vaccination rate and easing of restrictions imposed as a result of the pandemic in the course of the second quarter led to an interim recovery in the global economy. Companies were able to return to normal operations and, generally, resume full-scale business activities. Government incentives provided an additional boost to the economy. In the second half of the year, another rise, steep in parts, in the number of infections and the associated restrictions dissipated this upward trend. The situation was compounded by persistent transport and supply bottlenecks and a number of extreme weather phenomena, which impacted economic development worldwide. The economic upturn in 2021 was therefore ultimately not quite as strong as had been forecasted at the end of 2020, but was nevertheless a key factor in the overall development of the past fiscal year.

In the PCC Group, too, the focus was on continuing the operating activities of the business units under the coronavirus restrictions and resuming activities that had been suspended in 2020 as part of Covid-19 safeguarding measures. These included in particular investments that had been deferred or postponed in the previous year. Capital expenditures increased from € 66.6 million in fiscal 2020 to € 110.9 million in fiscal 2021. As a result, new production capacities in the Surfactants segment for the manufacture of ethoxylates were duly completed and commissioned.

The impact of the pandemic on the diversified portfolio of business units within the PCC Group was very mixed. The chemicals business proved to be extremely robust overall thanks to high demand resulting in constantly high capacity utilization of production facilities and significant price increases for many chemical basestocks. The Chemicals division benefited in particular from the resurgence in demand, which had initially declined sharply in the previous year as a result of the Covid-19-related lockdown of entire industrial sectors. Average selling prices increased significantly compared to the previous year. Coupled with rising demand, this upward trend was boosted by partial supply shortfalls due to a lack of import volumes from China, as well as by weather-related production outages in the USA. On the raw material procurement front, however, price levels for input products for the PCC Group likewise increased. Nevertheless, the high level of demand prevailing meant that these price increases on the purchasing side could be largely passed on to our own customers, with a correspondingly positive impact on the earnings trend in the Chemicals division ensuing. This is also the main reason for the higher level of inventories and trade accounts receivable compared to the previous year.

Against a backdrop of massive price drops and with plant shutdowns on the part of customers, the silicon metal plant in Iceland resumed production at the beginning of the second quarter of 2021 following a shutdown of its own – implemented partly due to the pandemic. Silicon metal prices rose rapidly in 2021 and peaked at the beginning of the fourth quarter. Toward the end of the year, the selling prices declined again somewhat. However, lower global production capacities including reduced export volumes from China generally meant that developments remained favorable.

In the European market for polyether polyols, local plant shutdowns and force-majeure-related production interruptions meant our competitors suffered from capacity shortages. This meant that selling prices in 2021 were at a high level. The third quarter also saw a strong increase in selling prices for the chlorine co-products caustic soda lye and caustic soda flakes, with the upward trend further steepening in the fourth quarter of 2021. The rise in commodity prices and the increase in demand also stimulated sales in the trading business of the PCC Group.

Conditions in the intermodal transport business remained challenging in 2021. The main reasons for this were the blockade of the Suez Canal caused by a damaged container ship, and temporary closures of container ports due to the pandemic. Despite these disruptions to the market environment, the Intermodal Transport business unit of PCC performed outstandingly well.

Given the aforementioned ongoing material macroeconomic impact of the coronavirus pandemic, the Executive Board reviewed the expected credit loss (ECL) model in consideration of all relevant factors with regard to the assumptions and estimates made. As in the previous year, the PCC Group did not record any material bad debts in fiscal 2021. The activities of the PCC Group are not subject to any significant sector-specific risk, with customer default representing the main form of exposure. Consequently, the approach used to determine default risk in the event of expected future bad debts remained unchanged. The monitoring of trade accounts receivable is performed on an ongoing basis and with increasing robustness with regard to possible pandemic-related defaults.

The major business units of the PCC Group duly conducted impairment tests on their assets and goodwill either in the course of the fiscal year or in preparation of their annual financial statements. These tests were prompted by changes in the market environment, currency developments, and the associated updated budgetary and planning calculations. Overall, this did not result in any significant impairment requirement. The impairment losses recognized in the period under review amounted to € 4.5 million.

Beyond the effects mentioned above, there were no identifiable pandemic-related impacts on the net assets, financial position and results of operations of the PCC Group.

As the development of the coronavirus pandemic remains dynamic, the situation could lead to increased risks in terms of value creation and recoverability of asset values going forward. The uncertainty that continues to prevail in the global economy could put a strain on suppliers, customers and other business partners and, for example, lead to a disruption of supply chains, payment defaults or operational changes. The PCC Group will continue to carefully monitor the effects of the coronavirus pandemic. This also applies to the impact on inventories, trade accounts receivable and material assumptions relating to goodwill.

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	2021	2020
Buildings and structures	4–75	4–75
Plant and machinery	3–30	3–27
Other facilities, factory and office equipment	3–37	2–32

For information on the useful lives of assets under lease, please refer to Note (21).

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 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.

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 are generally amortized on a straight-line basis over their estimated useful lives. These range from two to 41 years. The intangible assets capitalized within the Group – other than goodwill – have limited useful lives. The intangible assets of the PCC Group relate essentially to concessions for the operation of technical facilities.

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, will result in the generating of internal benefits, or will allow 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, the latter being defined as the sales proceeds that can be achieved in the normal course of business, less any completion costs and costs to sell 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 initial cost. They remain capitalized until the asset is ready for its envisaged use, with the relevant cost-of-debt 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 rewards. 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 item concerned.

Classification and measurement of financial instruments per IFRS 9

In accordance with IFRS 9, financial assets and liabilities are classified according to 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 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-bearing non-current 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 must be structured in such a way that it only leads to fixed-term cash flows that represent interest and principal payments in respect of a capital transfer (cash flow condition). Equity instruments 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. This also includes investments in associated companies and joint arrangements accounted for 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 on subsequent measurement are recognized directly in equity and only recognized in profit or loss on disposal (recycling). Conversely, amounts recognized in respect of equity instruments on disposal of the financial instrument remain in equity (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 instruments 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 netted 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 credit losses (Stage 2 of the impairment model) are ascertained 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 days due basis. 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.

On conclusion of a transaction, the Group documents the hedge relationship between the hedging instrument and the hedged item, the risk management purpose 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 or 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.

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 repayment 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 where 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 and deferred tax assets are essentially recognized for all taxable temporary differences. Deferred tax assets are recognized on unused tax losses carried forward only to the extent that it is probable that taxable profit will be available against which such claims can be utilized. 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

Lease agreements are accounted for in accordance with IFRS 16 Leases. A lease exists if a contract entitles the holder to use an identified asset for a fixed period of time, and where a consideration is paid in return.

Leases in which PCC acts as lessee are accounted for using the rights-of-use model. For leases with a term of less than twelve months (short-term leases) and for low-value asset leases, the exemption per IFRS 16.5 is applied, thus eliminating recognition of the right-of-use asset and the lease liability in respect of such contracts. Instead, the payments are recognized as an expense in the statement of income on a straight-line basis.

All contractually agreed payment obligations are included in the valuation of lease liabilities. Application of the exemption allowed under IFRS 16.15 eliminates the need to distinguish between lease payments and any payments for non-lease components. Where it is not possible to determine the implicit interest rate, the existing payment obligations are discounted at the PCC Group's incremental borrowing rate, and the present value thus determined is recognized as a lease liability. The corresponding right-of-use asset is recognized in the same amount. Initial direct costs and advance payments made increase the acquisition value of the right-of-use asset, while lease incentives received reduce it. In subsequent measurement, the right-of-use asset is depreciated or amortized on a straight-line basis over the shorter of the lease term and the useful economic life of the underlying asset. The lease liability is rolled forward using the effective interest method.

Contractually defined renewal, purchase and termination options ensure future operational flexibility for PCC when entering into lease agreements, but also require discretionary decision-making. All current knowledge and future expectations that support the exercise or non-exercise of the options are taken into account when determining the lease term. If it can be assumed with reasonable certainty that the extension option will be exercised, the imputed term also includes such additional periods. Changes of term are considered where, over time, a change occurs in the assessment of the likelihood that the existing option will be exercised or not exercised.

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 also in the Logistics division by providing a comprehensive range of logistics and transport services. The Group likewise generates sales revenue in its Energy segment 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 segment 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 12 days.

The Group recognizes contract liabilities for unfulfilled performance obligations for which consideration has already been 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

Government grants per IAS 20 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, and that the grant will be received. The deferred income is released through profit or loss under other operating income over the full period of depreciation or amortization assigned to the asset created.

Exploration for and evaluation of mineral resources

Expenditures on viable exploration drilling operations and also for non-productive development wells are capitalized in accordance with IFRS 6. The expenditures are recognized through to exploration 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 depreciated 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 depreciation 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 impairment loss.

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 disposal 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 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, 2021**	Dec. 31, 2020	**2021**	2020
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)	**2.8826**	3.1680	**3.0050**	2.7758
Czech koruna (CZK)	**24.8580**	26.2420	**25.6400**	26.4550
Icelandic króna (ISK)	**147.6000**	156.1000	**150.1500**	154.5900
North Macedonian denar (MKD)	**61.6270**	61.6940	**61.6275**	61.6742
Malaysian ringgit (MYR)	**4.7184**	4.9340	**4.9015**	4.7959
Polish złoty (PLN)	**4.5969**	4.5597	**4.5652**	4.4430
Romanian leu (RON)	**4.9490**	4.8683	**4.9215**	4.8383
Russian ruble (RUB)	**85.3004**	91.4671	**87.1527**	82.7248
Thai baht (THB)	**37.6530**	36.7270	**37.8368**	35.7081
Turkish lira (TRY)	**15.2335**	9.1131	**10.5124**	8.0547
Ukrainian hryvnia (UAH)	**30.9226**	34.7396	**32.3009**	30.8013
US dollar (USD)	**1.1326**	1.2271	**1.1827**	1.1422

Use of assumptions and estimates

Preparation of the consolidated financial statements as of December 31, 2021 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 assets and contingent liabilities as of the reporting date, and also the income and expenses pertaining to 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 provisions for pensions, and also taxes on income. Estimates are likewise used in determining lease terms and in calculating the discount rate in accounting for leases. 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 continually 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 2021 amounted to € 979.6 million (previous year: € 716.8 million). This includes € 0.4 million (previous year: € 0.3 million) in revenue from contract liabilities at the beginning of the reporting period. Of these proceeds, € 862.8 million came from the sale of goods and € 116.8 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 € 961.4 million, with time-period revenue recognition at € 18.2 million. 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 decreased in the year under review from € 8.9 million to € 8.8 million.

(8) Purchased goods and services

Figures in € k	**2021**	2020
Cost of raw materials, supplies and merchandise	521,137	384,697
Cost of external services	116,209	96,970
Transport and warehouse costs	24,827	18,474
Total purchased goods and services	**662,174**	**500,141**

The cost of purchased goods and services increased compared to the previous year by € 162.0 million or 32.4 % to € 662.2 million. The main reason for this was the sharp rise in raw material prices, which reached historic highs, partly as a result of commodity scarcities. Volumes from Asia were massively reduced in some cases, with the situation exacerbated by shortages in the supply of raw materials additionally resulting from plant shutdowns and force-majeure-related production stoppages at suppliers, as well as international logistics blockades. At PCC, production capacities that had been shut down in the previous year due to the pandemic were also brought back on stream. Ongoing optimization of inputs, feedstock mix and production processes, and the associated reduction in raw material usage, had a positive effect.

(9) Personnel expenses

Figures in € k	2021	2020
Wages and salaries	95,436	81,681
Social security contributions	15,953	15,174
Pension costs	1,142	1,066
Total personnel expenses	**112,531**	**97,921**

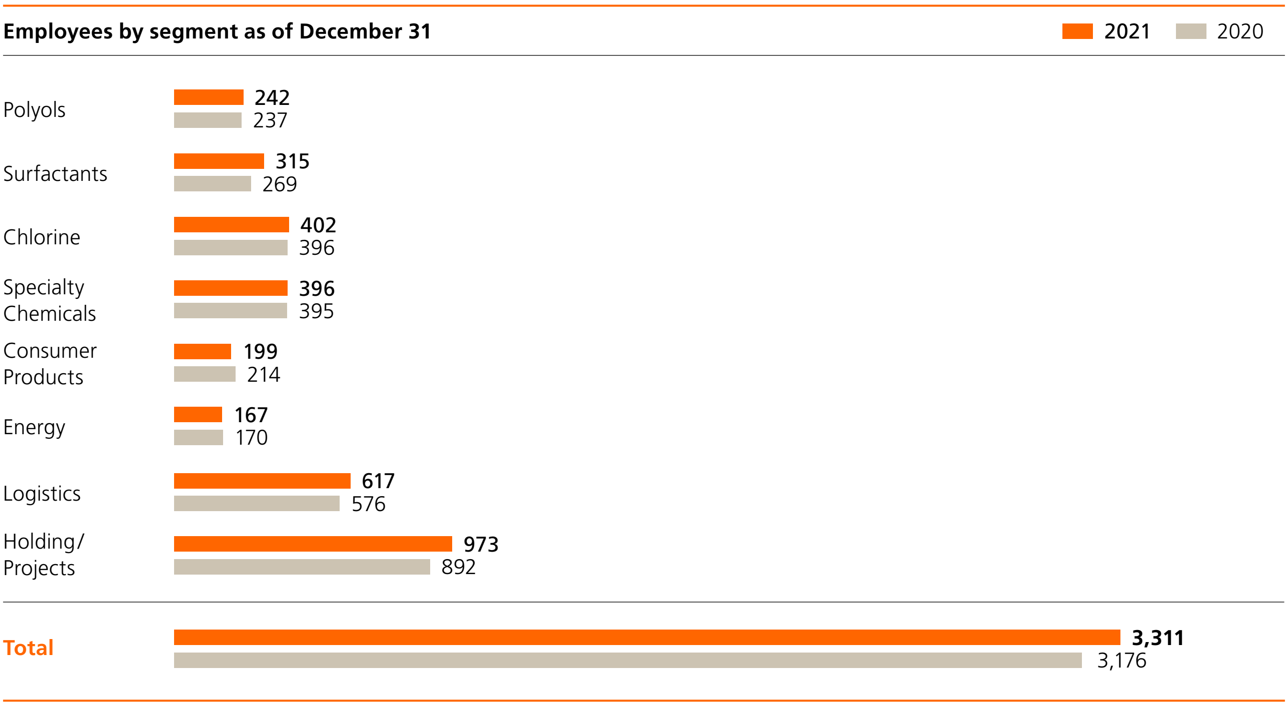
Personnel expenses rose by € 14.6 million or 14.9 % year on year, from € 97.9 million to € 112.5 million. This increase is primarily due to the growth in personnel numbers following capacity expansions – and particularly the restarting of production operations in Iceland. Continuing high wage pressures, particularly in Poland, exerted a further contributory effect. The number of employees rose by 4.3 % from 3,176 to 3,311 as of the reporting date.

	Dec. 31, 2021	Dec. 31, 2020
Salaried employees	1,683	1,447
Waged employees	1,628	1,729
Total employees at the year-end	**3,311**	**3,176**

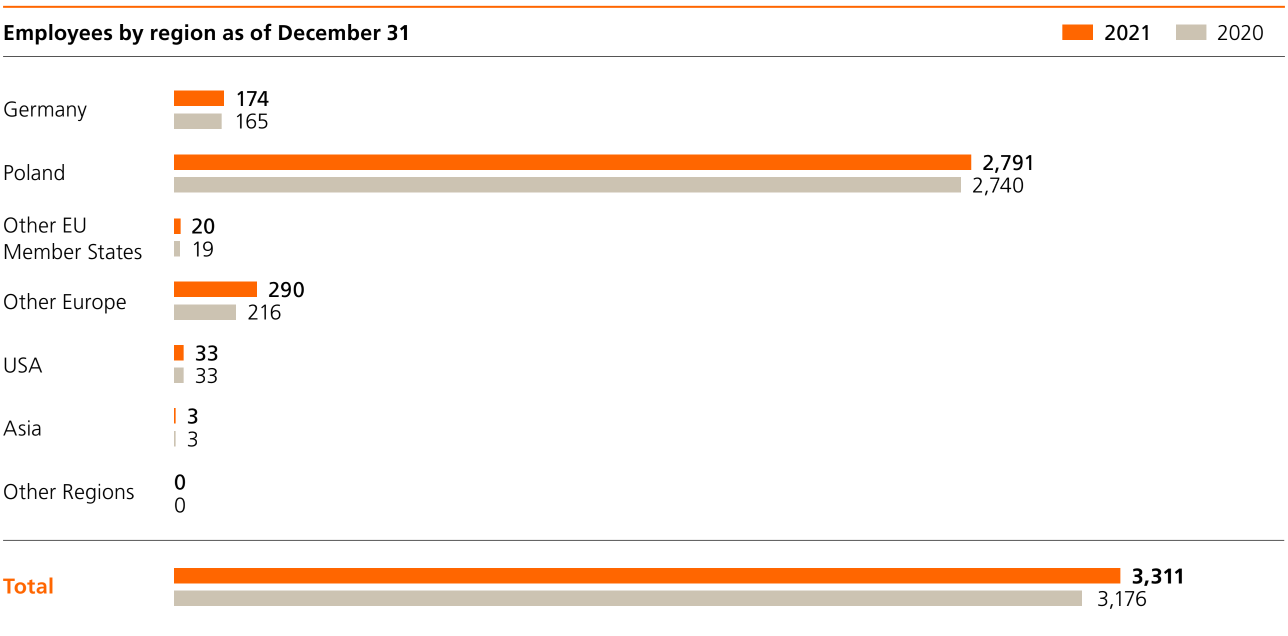
The companies of the PCC Group employed an average of 3,266 people in 2021 (previous year: 3,383), a decrease of 117 or 3.4 % versus prior year.

	2021	2020
Salaried employees	1,638	1,654
Waged employees	1,628	1,729
Total employees (annual average)	**3,266**	**3,383**

The following graphics show the breakdown of the number of employees by Group segment as of the reporting 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	2021	2020
Income from compensation related to carbon emission certificates	10,167	4,720
Income from waiver of purchase commitments	4,587	–
Income from sale of energy efficiency certificates	3,014	2,490
Insurance reimbursements	1,170	2,019
Income on disposal of property, plant and equipment	1,109	588
Income from contractual penalties	507	14,186
Income from costs recharged	440	91
Income from release of other provisions	379	848
Income from reversal of value adjustments and ECL on accounts receivable	262	104
Income from write-ups on property, plant and equipment	162	455
Rent and similar income	46	211
Income from derivatives	30	129
Income from deconsolidation	–	3,961
Sundry other operating income	7,929	5,672
Total other operating income	**29,801**	**35,474**

Other operating income declined by €5.7 million from €35.5 million in fiscal 2020 to €29.8 million in the year under review. The decrease is mainly attributable to non-recurring exceptional items in the previous year. One such relates to contractual penalties of €14.2 million that were collected in the previous year, of which €13.6 million alone related to compensation payments from warranty and settlement claims in connection with the delayed commissioning of the two furnaces of the silicon metal plant in Iceland. In addition, income of €4.0 million was generated in the previous year from the deconsolidation of two Group companies.

Countervailing the decline in total other operating income, compensation payments received in the fiscal year in connection with CO_2 allowance certificates increased. These were granted as compensation for price increases for CO_2 certificates by the Polish state in the amount of €10.2 million in fiscal 2021, whereas the amount paid in the previous year was just €4.7 million.

Income from the sale of energy efficiency certificates amounted to €3.0 million in the reporting year, which is likewise more than the previous year's figure of €2.5 million. These certificates were granted free of charge on application for particularly energy-saving investments. All the certificates not required to cover our own energy volumes were sold.

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	2021	2020
Maintenance and repair expenses	16,026	11,823
Legal, consultancy and audit expenses	7,205	7,315
Insurance premiums	6,521	6,517
Other taxes	6,102	6,233
General business expenses	6,079	6,696
Rent and similar expenses	4,090	2,730
Travel and hospitality expenses	2,746	2,437
Non-wage personnel expenses	2,051	2,847
Marketing, selling and distribution expenses	1,649	1,806
Losses on disposal of property, plant and equipment	319	109
Increase in individual value adjustments and ECL on accounts receivable	166	520
Sundry other operating expenses	23,300	20,764
Total other operating expenses	**76,254**	**69,798**

Other operating expenses increased by € 6.5 million or 9.3 % from € 69.8 million to € 76.3 million in fiscal 2021.

As in the previous year, the biggest single item was maintenance and repair expenses at € 16.0 million. The expenses were mainly attributable to the asset-intensive businesses of the Chemicals segments. 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 € 6.1 million, € 0.1 million below the previous year's figure of € 6.2 million.

As in the previous year, other operating expenses are comprised of various individual items that are not in themselves material.

Research and development expenses for the reporting period under review came in at € 5.1 million (previous year: € 10.4 million).

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

Figures in € k	2021	2020
Equity value as of Jan. 1	**2,164**	0
Changes in consolidation scope	–	1,588
Additions	12,849	1,015
Proportionate net profit/loss for the year	579	–3,665
Adjustment for negative value for the year	–	3,855
Reversal of negative value carried forward	–18	–585
Other changes	–1	–44
Equity value as of Dec. 31	**15,573**	2,164

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, 2021, the accumulated losses amounted to €4.9 million (previous year: €4.9 million). A marginal loss was reversed in the reporting year.

The equity valuation of IRPC Polyol Company Ltd., Bangkok (Thailand), was adjusted upward in the reporting year primarily by the positive pro rata net result of the company for the year and amounted to €1.6 million as of the reporting date (previous year: €0.6 million).

The equity valuation of PCG PCC Oxyalkylates Sdn. Bhd., Kuala Lumpur (Malaysia), was adjusted in the year under review to reflect in the main the capital increase implemented by the joint venture partners and the negative pro-rata net result of the company, and amounted to €14.0 million as of the reporting date. In the previous year, the company was still trading under the name PCC Oxyalkylates Malaysia Sdn. Bhd. and was recognized at an equity value of €1.6 million.

The other changes relate to currency translation effects.

	OOO DME Aerosol		IRPC Polyol Company Ltd.		PCG PCC Oxyalkylates Sdn. Bhd.	
Figures in € k	2021	2020	2021	2020	2021	2020
Income statement						
Sales revenue	7,768	3,303	44,720	29,853	–	–
EBITDA	2,041	596	2,506	1,350	–584	–239
EBT	–147	–8,572	1,889	382	–763	–396
Net result	–146	–7,711	2,066	382	–763	–399
Balance sheet						
Non-current assets	21,433	20,525	6,501	6,889	31,539	5,483
Current assets	1,836	703	24,168	14,562	18,731	122
Non-current liabilities	29,285	26,841	2,812	2,972	13,283	189
Current liabilities	3,191	3,008	24,440	17,121	7,811	1,120

(13) Depreciation and amortization

Figures in € k	2021	2020
Amortization of intangible assets	2,187	2,529
Depreciation of property, plant and equipment	57,294	57,392
Depreciation of right-of-use assets	12,704	12,625
Total depreciation and amortization	**72,185**	**72,546**

Depreciation and amortization amounted to € 72.2 million in the past fiscal year and thus remained virtually unchanged (previous year: € 72.5 million).

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 2021, impairment losses on intangible assets, property, plant and equipment and right-of-use assets amounted to € 4.5 million (previous year: € 2.6 million). A large part of this figure relates to replacement parts in the Chlorine segment and property, plant and equipment in the Logistics and Energy segments. In the previous year, impairment losses resulted primarily from the initiation of liquidation proceedings at the Polish matches factory and the associated remeasurement of assets at liquidation values.

(14) Interest result

The result from interest income and interest expenses improved by 8.1 % from €–34.7 million in the previous year to €–31.9 million in fiscal 2021. The breakdown of the individual items reads as follows:

Figures in €k	2021	2020
Interest and similar income	**3,502**	**2,391**
Interest income from deposits	0	10
Interest income on bank balances	1,768	1,744
Interest income from derivative financial instruments	840	–
Interest income on loans to affiliated companies	894	638
Interest and similar expenses	**35,437**	**37,130**
Interest expenses on bearer bonds	20,261	19,461
Interest expenses on bank liabilities	11,760	14,492
Interest expenses on factoring arrangements	91	162
Interest expenses from discounting of non-current provisions	176	317
Interest expenses on leases	1,360	1,939
Interest expenses from derivative financial instruments	1,787	746
Interest expenses on loans received from affiliated companies	1	12
Interest result	**–31,935**	**–34,739**

As in the previous year, the largest single item was interest payable on bonds which, at €20.3 million, was €0.8 million up on the prior-year figure. Both the parent company and several subsidiaries of the PCC Group issue bonds to finance investments and refinance maturing liabilities. Under Note (32) can be found a detailed breakdown of bond liabilities and their tenors.

Interest attributable to investment projects that represent qualifying assets is capitalized during the construction phase in accordance with IAS 23. In the past fiscal year, interest expenses totaling €1.9 million (previous year: €2.4 million) were recognized on the assets side. The financing cost rate was 4.5 % (previous year: 4.5 %). The weighted interest rate across all interest-bearing liabilities in the reporting year was 3.6 %, as it was in the previous year.

(15) Currency translation result

Figures in €k	2021	2020
Exchange rate gains	31,161	26,972
Exchange rate losses	30,238	35,600
Currency translation result	**923**	–8,629

Gains and losses arising from foreign exchange/currency translation differences are recognized under financial result. While gains from foreign currency translation increased by €4.2 million year on year to €31.2 million, losses from foreign currency translation decreased by €5.4 million to €30.2 million. On balance, this yielded a positive net effect on earnings of €0.9 million, €9.6 million above the prior-year figure of €–8.6 million.

(16) Taxes on income / Tax expense

Figures in €k	2021	2020
Current taxes on income, Germany	1,924	1,423
Current taxes on income, abroad	14,740	10,428
Current income tax expenses	**16,664**	**11,852**
Expenses (+)/income (–) from deferred taxes	–324	–10,360
Total taxes on income	**16,340**	**1,492**
Other taxes incl. VAT and other levies	6,102	6,233
Total tax expenses	**22,442**	**7,725**

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 €6.1 million (previous year: €6.2 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 in the year under review amounted to 17.8 % (previous year: −3.9 %). The differences between the corporate income tax rate of 30 % applicable in Germany for 2021, which remained unchanged versus the prior year, and the effective income tax figure are indicated in the following reconciliation statement:

Figures in €k	2021	2020
Earnings before taxes (EBT)	**91,728**	**−38,436**
Anticipated income tax burden at parent company	27,518	−11,531
Foreign tax rate differentials	9,899	−3,906
Results from investments accounted for using the equity method	−560	395
Non-taxable income	−19,164	−25,493
Non-deductible expenses	11,564	43,522
Deduction of losses for which deferred taxes have been provided	−338	−285
Deduction of losses for which deferred taxes have not been provided	−2,465	−4,798
Non-period-related taxes	−1,454	334
Result in special economic zones	−44,176	−7,689
Permanent differences	−2,812	−16,039
Other effects	38,327	26,983
Effective income tax	**16,340**	**1,492**

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. The amount increased by € 28.1 million compared to the previous year, mainly as a result of start-up losses incurred by the Icelandic company. Tax loss carry-forwards from which no deferred tax assets have been recognized amount to € 131.2 million (previous year: € 125.7 million) and are primarily attributable to the Group holding company.

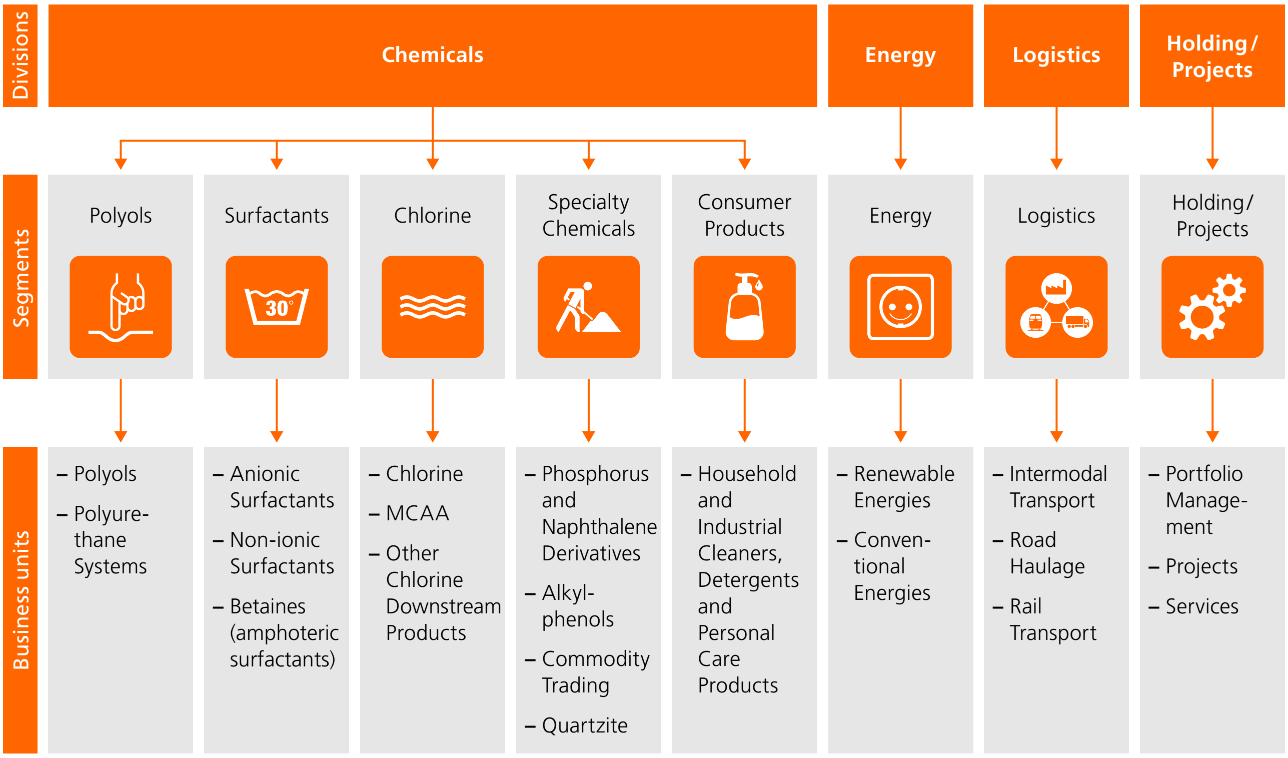
Figures in €k	Dec. 31, 2021	Dec. 31, 2020
Usable within:		
1 year	24	1,428
2 years	110	9
3 years	1,476	51
4 years	–	1,351
5 years and thereafter	113,985	84,785
Carried forward without restriction	6,021	5,938
Total usable tax losses carried forward	**121,616**	**93,562**

Segment report

(17) Business segment report

The PCC Group currently has some 3,300 employees working at 39 sites in 17 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 18 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. In the long term, this is intended to secure sustainable growth and continuously increase our 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 effective thermal and climate-friendly 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 PCC's 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 by the environmentally compatible membrane process, chlorine and downstream chlorine products manufactured by PCC are also used in water treatment and in the petrochemical industry.

Specialty Chemicals is a particularly broadly diversified segment. Its products range from phosphorus-based flame retardants, plasticizers, stabilizers and lubricants, to additives for hydraulic oils and admixtures and additives formulated to improve the workability of fresh concrete or give paints and coatings their gloss. The segment also includes the commodity trading activities of the PCC Group, and the quartzite quarry in Poland.

The Consumer Products segment comprises the Household Cleaners and Disinfectants, Industrial Cleaners, Laundry Detergents and Personal Care Products business unit with Polish company brands such as ROKO Professional and Flo.

Within the Energy segment, the main source of sales is the Conventional Energies business unit. This encompasses a co-generating plant in Poland for supplying our own production facilities, and a regional Polish combined 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. So far, PCC has commissioned five of these environmentally compatible electricity generators: one in Bosnia and Herzegovina and four in North Macedonia, where another is currently undergoing trial operations.

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. This intermodal network extends from Eastern Europe to the Benelux countries and also serves the new Silk Road to China and other Asian hubs on which transport volumes are increasing. Five Group-owned container terminals in Poland and Germany form the basis of our container logistics services. PCC's tanker fleet specializes in the Europe-wide road haulage of liquid chemicals. In Russia, PCC maintains a fleet of broad-gauge railroad freight cars.

The Holding/Projects segment provides corporate and inter-divisional 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 PCG PCC Oxyalkylates Sdn. Bhd. (planned ethoxylation and polyols production complex in Malaysia).

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 earn revenues and incur expenses, the operations of which can be clearly distinguished and for which the operating results are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. Information reported to the main decision-makers for the purpose of allocating resources to the operating segments of the Group and assessing their financial performance relates to the types of products manufactured and/or services provided.

Sales in fiscal 2021 totaled € 979.6 million, 36.7 % higher than the figure of € 716.8 million posted in the previous year. This was mainly due to a sharp rise in commodity prices and the restart of silicon metal production in Iceland. With the exception of Consumer Products, all segments contributed to this successful development. At € 239.9 million, sales of the Polyols segment were around 66.1 % up on the prior year. The Surfactants segment recorded a 26.0 % increase in sales to € 155.1 million. At € 170.5 million, sales of the Chlorine segment were around 30.0 % higher year on year. In the Specialty Chemicals segment, sales increased by 43.9 % to € 220.5 million. Only the Consumer Products segment recorded a decline in sales, with a decrease of – 14.5 % to € 23.1 million.

The business performance of the Logistics segment was also impacted by rising expenses. A fundamental shortage of container ships and the blockade of international seaports led to a sharp increase in logistics costs, from which the Logistics segment was able to benefit, increasing sales by 22.3 % year on year to € 117.3 million.

With sales totaling € 809.1 million (previous year: € 578.9 million) from the five segments Polyols, Surfactants, Chlorine, Specialty Chemicals and Consumer Products, the Chemicals division accounted for 82.6 % (previous year: 80.8 %) of Group revenues in fiscal 2021. The proportion of total Group sales generated by the Logistics segment decreased slightly to 12.0 % (previous year: 13.4 %). The share accounted for by the Energy segment amounted to 1.2 % for the year under review (previous year: 1.6 %). With sales of € 41.0 million (previous year: € 30.5 million), the proportion of total Group revenues attributable to the Holding/Projects segment amounted to 4.2 % (previous year: 4.3 %).

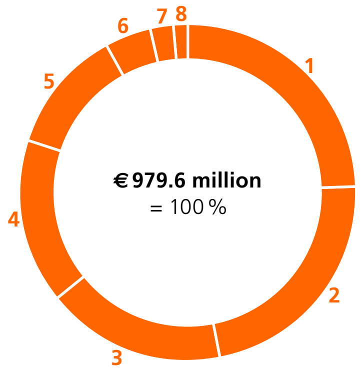
Figures in € k	2021	2020
EBITDA	**197,510**	83,833
Depreciation and amortization	72,185	72,546
Financial result	−33,597	−49,723
EBT	**91,728**	−38,436

Business segment report
Figures in € k

	Polyols		Surfactants		Chlorine		Specialty Chemicals	
	2021	2020	**2021**	2020	**2021**	2020	**2021**	2020
Sales per segment (total output)	**305,227**	177,230	**192,317**	149,621	**279,166**	203,154	**235,405**	161,385
Sales with other PCC segments	**65,344**	32,780	**37,245**	26,544	**108,640**	71,942	**14,886**	8,167
Net external sales (consolidated)	**239,883**	**144,450**	**155,072**	**123,077**	**170,526**	**131,212**	**220,520**	**153,219**
Contribution to total revenue	**24.5 %**	20.2 %	**15.8 %**	17.2 %	**17.4 %**	18.3 %	**22.5 %**	21.4 %
EBITDA	**78,214**	23,941	**20,466**	15,673	**56,364**	38,904	**23,884**	9,294
EBITDA margin	**32.6 %**	16.6 %	**13.2 %**	12.7 %	**33.1 %**	29.6 %	**10.8 %**	6.1 %
EBIT	**73,560**	19,265	**17,302**	13,044	**38,169**	19,587	**17,243**	3,840
EBIT margin	**30.7 %**	13.3 %	**11.2 %**	10.6 %	**22.4 %**	14.9 %	**7.8 %**	2.5 %
Intangible assets	**3,633**	3,388	**1,827**	1,493	**14,147**	15,035	**1,987**	2,267
Property, plant and equipment	**47,524**	49,369	**54,948**	50,400	**176,451**	183,638	**45,362**	45,619
Financial liabilities	**60,536**	46,692	**48,610**	46,944	**91,847**	110,482	**37,424**	36,777
Capital expenditures on intangible assets and property, plant and equipment	**3,223**	5,756	**9,255**	6,559	**12,850**	12,497	**8,701**	7,542
Depreciation and amortization	**4,654**	4,676	**3,164**	2,628	**18,195**	19,317	**6,641**	5,454
Capital Employed (average)	**80,538**	59,446	**71,082**	62,076	**219,413**	220,587	**78,279**	78,576
ROCE	**91.3 %**	32.4 %	**24.3 %**	21.0 %	**17.4 %**	8.9 %	**22.0 %**	4.9 %
Result from investments accounted for using the equity method	**1,033**	191	**–**	–	**–**	–	**–**	–
Employees at Dec. 31	**242**	237	**315**	296	**402**	396	**396**	395
Employees (annual average)	**238**	232	**307**	292	**396**	390	**394**	396

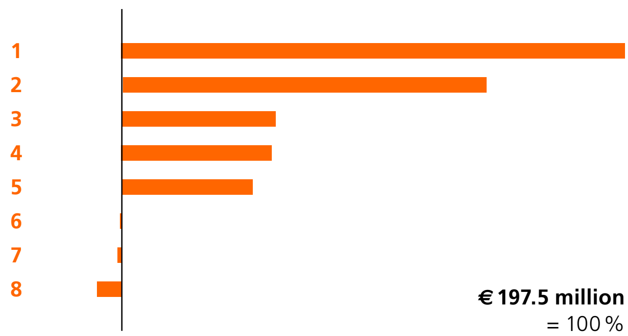
Sales 2021 by segment in %

1	Polyols	**24.5 %**	**5**	Logistics	**12.0 %**
2	Specialty Chemicals	**22.5 %**	**6**	Holding/Projects	**4.2 %**
3	Chlorine	**17.4 %**	**7**	Consumer Products	**2.4 %**
4	Surfactants	**15.8 %**	**8**	Energy	**1.2 %**



EBITDA 2021 by segment in %

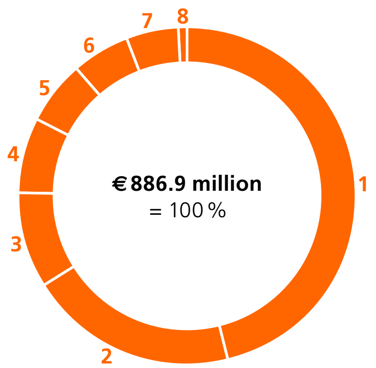
1	Polyols	**39.6 %**	**5**	Surfactants	**10.4 %**
2	Chlorine	**28.5 %**	**6**	Energy	**−0.1 %**
3	Specialty Chemicals	**12.1 %**	**7**	Consumer Products	**−0.3 %**
4	Logistics	**11.8 %**	**8**	Holding/Projects	**−2.0 %**



Consumer Products		Energy		Logistics		Holding/Projects		Consolidation effects		PCC Group	
2021	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
23,234	28,981	**39,839**	35,283	**134,280**	109,361	**95,268**	80,746	**–**	–	**1,304,736**	945,760
162	1,990	**27,624**	23,887	**16,936**	13,385	**54,283**	50,258	**–**	–	**325,120**	228,951
23,072	**26,991**	**12,215**	**11,397**	**117,343**	**95,976**	**40,985**	**30,487**	**–**	–	**979,615**	**716,809**
2.4 %	3.8 %	**1.2 %**	1.6 %	**12.0 %**	13.4 %	**4.2 %**	4.3 %	**–**	–	**100.0 %**	100.0 %
–528	5,707	**–108**	–4,907	**23,305**	18,213	**–401**	–25,304	**–3,686**	2,312	**197,510**	83,833
–2.3 %	21.1 %	**–0.9 %**	–43.1 %	**19.9 %**	19.0 %	**–1.0 %**	34.1 %	**–**	–	**20.2 %**	11.7 %
–1,360	2,892	**–4,243**	–8,414	**8,984**	6,360	**–21,972**	–47,394	**–2,358**	2,107	**125,325**	11,287
–5.9 %	10.7 %	**–34.7 %**	–73.8 %	**7.7 %**	6.6 %	**–53.6 %**	–38.3 %	**–**	–	**12.8 %**	1.6 %
2	3	**14,671**	6,943	**452**	435	**976**	926	**6,823**	6,974	**44,518**	37,464
6,308	6,803	**62,668**	60,571	**82,370**	64,791	**416,631**	398,804	**–5,362**	–3,124	**886,900**	856,872
27,045	24,494	**22,822**	27,525	**57,989**	51,308	**750,345**	702,148	**–114,946**	–114,708	**981,672**	931,661
965	353	**6,042**	1,777	**32,742**	10,003	**41,965**	43,598	**–4,883**	–21,473	**110,860**	66,612
832	2,815	**4,135**	3,506	**14,321**	11,853	**21,570**	22,090	**–1,328**	205	**72,185**	72,546
9,234	–577	**67,599**	76,076	**87,850**	85,816	**1,209,563**	1,113,794	**–756,261**	–639,957	**1,067,296**	1,055,836
–14.7 %	–501.1 %	**–6.3 %**	–11.1 %	**10.2 %**	7.4 %	**–1.8 %**	–1.0 %	**–**	–	**11.7 %**	1.1 %
–	–	**–**	–	**–**	–	**–73**	–3,855	**–18**	3,270	**941**	–395
199	214	**167**	170	**617**	576	**973**	892	**–**	–	**3,311**	3,176
206	332	**168**	173	**601**	574	**957**	993	**–**	–	**3,266**	3,383

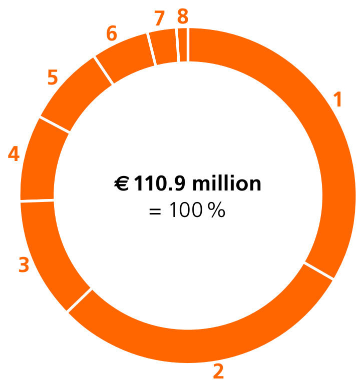
Property, plant and equipment 2021 by segment in %

1	Holding/Projects	**46.4 %**	5	Surfactants	**6.2 %**
2	Chlorine	**19.9 %**	6	Polyols	**5.4 %**
3	Logistics	**9.3 %**	7	Specialty Chemicals	**5.1 %**
4	Energy	**7.1 %**	8	Consumer Products	**0.7 %**



Capital expenditures 2021 by segment in %

1	Holding/Projects	**33.4 %**	5	Specialty Chemicals	**7.8 %**
2	Logistics	**29.5 %**	6	Energy	**5.4 %**
3	Chlorine	**11.6 %**	7	Polyols	**2.9 %**
4	Surfactants	**8.3 %**	8	Consumer Products	**0.9 %**



(18) Regional segment report

Figures in € k	Germany		Poland		Other EU Member States	
	2021	2020	**2021**	2020	**2021**	2020
Customer location						
Net external sales (consolidated)	**199,144**	144,544	**344,945**	267,880	**256,502**	175,072
Contribution to total revenue	**20.3 %**	20.2 %	**35.2 %**	37.4 %	**26.2 %**	24.4 %
Company location						
Net external sales (consolidated)	**142,872**	94,185	**740,627**	559,964	**8,830**	11,978
Contribution to total revenue	**14.6 %**	13.1 %	**75.6 %**	78.1 %	**0.9 %**	1.7 %
EBITDA	**–5,651**	–9,392	**189,496**	111,635	**183**	–437
EBITDA margin	**–4.0 %**	27.9 %	**25.6 %**	19.9 %	**2.1 %**	–3.6 %
EBIT	**–8,037**	–11,906	**136,947**	59,403	**144**	–569
EBIT margin	**–5.6 %**	25.3 %	**18.5 %**	10.6 %	**1.6 %**	–4.8 %
Intangible assets	**877**	789	**35,133**	28,250	**22**	82
Property, plant and equipment	**11,802**	10,544	**496,334**	487,063	**1,947**	3,450
Investment property	**–**	–	**–**	–	**–**	–
Financial liabilities	**452,791**	414,459	**313,910**	334,173	**1,873**	3,728
Capital expenditures on intangible assets and property, plant and equipment	**32,629**	32,395	**69,751**	51,159	**70**	304
Depreciation and amortization	**2,387**	2,514	**52,550**	52,232	**40**	132
Result from investments accounted for using the equity method	**–**	–	**–**	–	**–**	–
Employees at Dec. 31	**174**	165	**2,791**	2,740	**20**	19
Employees (annual average)	**170**	167	**2,756**	2,889	**20**	19

For the purpose of regular internal and external reporting, the business of the PCC Group is divided geographically into seven regions (Germany, Poland, Other EU Member States, Other Europe, USA, Asia and Other Regions). In fiscal 2021, the Group generated 20.3 % of sales with customers in Germany (previous year: 20.2 %), while 35.2 % was accounted for by customers in Poland (previous year: 37.4 %).

The PCC Group generated a total of 81.7 % of its sales with customers in the member states of the European Union (previous year: 82.0 %), the lion's share being taken by Poland and Germany.

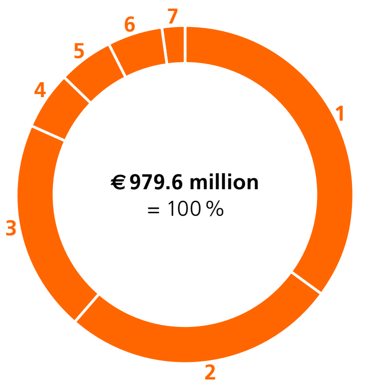
In fiscal 2021, Poland accounted for net external Group sales by company location of € 740.6 million (previous year: € 560.0 million), corresponding to around 75.6 % of the Group total (previous year: 78.1 %). Based on customer location, the figure for Poland was 35.2 % (previous year: 37.4 %) with total sales at € 344.9 million (previous year: € 267.9 million). The sales figure in Germany increased from € 144.5 million to € 199.1 million by customer location, while there was an increase in revenues from € 94.2 million to € 142.9 million by location of company.

Capital expenditures rose significantly year on year, with the total coming in at € 110.9 million (previous year: € 66.6 million). The advent of the coronavirus pandemic meant that the PCC Group had to scale back its growth and investment program to a minimum in 2020. Of the capital expenditures in 2021, the largest share was attributable to the Poland region, mainly aligned to ongoing investment activities to expand capacity together with optimization measures at the Brzeg Dolny chemical park. In addition, further investments were made in the vehicle fleet for intermodal transport operations. Capital expenditures in Poland amounted to € 69.8 million (previous year: € 51.2 million).

Other Europe		USA		Asia		Other Regions		Consolidation effects		PCC Group	
2021	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
50,130	34,114	**21,158**	22,556	**51,788**	36,013	**55,948**	36,630	**–**	–	**979,615**	716,809
5.1 %	4.8 %	**2.2 %**	3.1 %	**5.3 %**	5.0 %	**5.7 %**	5.1 %	**–**	–	**100.0 %**	100.0 %
46,431	26,125	**21,862**	19,195	**18,994**	5,361	**–**	–	**–**	–	**979,615**	716,809
4.7 %	3.6 %	**2.2 %**	2.7 %	**1.9 %**	0.7 %	**–**	–	**–**	–	**100.0 %**	100.0 %
10,263	–19,325	**1,899**	1,328	**797**	–5	**–**	–	**522**	29	**197,510**	83,833
22.1 %	–74.0 %	**8.7 %**	6.9 %	**4.2 %**	–0.1 %	**–**	–	**–**	–	**20.2 %**	11.7 %
–6,721	–36,663	**1,682**	1,106	**790**	–112	**–**	–	**522**	29	**125,325**	11,287
–14.5 %	–140.3 %	**7.7 %**	5.8 %	**4.2 %**	–2.1 %	**–**	–	**–**	–	**12.8 %**	1.6 %
1,795	1,783	**968**	898	**–**	–	**–**	–	**5,723**	5,663	**44,518**	37,464
373,691	354,482	**3,126**	2,881	**1**	5,187	**–**	–	**–**	–6,736	**886,900**	856,872
–	–	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
447,020	379,681	**680**	689	**2**	324	**–**	–	**–234,604**	–201,393	**981,672**	931,661
9,351	3,219	**203**	122	**1**	2,817	**–**	–	**–1,145**	–23,405	**110,860**	66,612
16,984	17,338	**217**	222	**8**	107	**–**	–	**–**	–	**72,185**	72,546
–73	–3,855	**–**	–	**1,033**	191	**–**	–	**–18**	3,270	**941**	–395
290	216	**33**	33	**3**	3	**–**	–	**–**	–	**3,311**	3,176
285	269	**33**	33	**3**	5	**–**	–	**–**	–	**3,266**	3,383

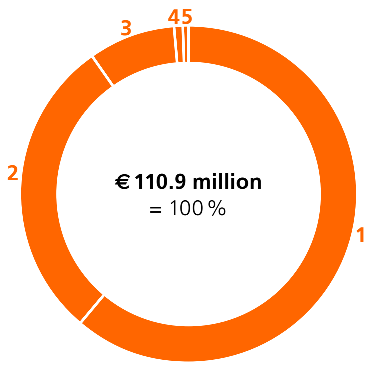
Sales 2021 by region in %

1	Poland	**35.2 %**
2	Other EU Member States	**26.2 %**
3	Germany	**20.3 %**
4	Other Regions	**5.7 %**
5	Asia	**5.3 %**
6	Other Europe	**5.1 %**
7	USA	**2.2 %**



Capital expenditures 2021 by region in %

1	Poland	**61.9 %**
2	Germany	**29.4 %**
3	Other Europe	**8.4 %**
4	USA	**0.2 %**
5	Other EU Member States	**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, 2021	30,774	8,694	11,128	3,830	**54,426**
Additions	15,993	–	140	1,078	**17,210**
Disposals	8,300	–	–	–	**8,300**
Reclassifications	497	–	281	–627	**151**
Currency translation differences	–172	137	–86	–26	**–148**
Dec. 31, 2021	**38,792**	**8,831**	**11,462**	**4,255**	**63,339**
Amortization					
Jan. 1, 2021	13,128	757	1,803	1,275	**16,963**
Additions	9,333	–	613	–	**9,946**
Disposals	8,300	–	–	–	**8,300**
Write-downs	25	–	–	213	**238**
Reversal of write-downs	–	–	–3	–	**–3**
Currency translation differences	–59	63	–19	–7	**–22**
Dec. 31, 2021	**14,125**	**820**	**2,395**	**1,481**	**18,822**
Net carrying amount on Dec. 31, 2021	**24,666**	**8,011**	**9,067**	**2,774**	**44,518**

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 carrying amount for this class of assets increased in 2021 from € 37.5 million to € 44.5 million. The change mainly results from the acquisition of CO_2 allowance certificates.

Write-downs of € 0.2 million were recognized in the year under review (previous year: € 0.7 million), primarily attributable to development expenses.

As of the reporting date, the value of intangible assets with disposal restrictions was € 1.8 million (previous year: € 1.8 million).

Exploration and production activities are carried out by one subsidiary. At year-end, the associated net carrying amount contained in the total for intangible assets amounted to € 0.2 million (previous year: € 0.2 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.

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.

Figures in €k	Industrial property rights and similar rights	Goodwill	Internally generated intangible assets	Advance payments	Total
Historical cost					
Jan. 1, 2020	36,552	8,845	10,043	5,311	**60,750**
Changes in consolidation scope	−135	–	–	–	**−135**
Additions	8,089	–	218	1,050	**9,357**
Disposals	12,289	–	–	87	**12,376**
Reclassifications	578	–	1,534	−2,112	**–**
Currency translation differences	−2,020	−151	−667	−332	**−3,170**
Dec. 31, 2020	**30,774**	**8,694**	**11,128**	**3,830**	**54,426**
Amortization					
Jan. 1, 2020	12,466	827	1,387	868	**15,547**
Changes in consolidation scope	−35	–	–	–	**−35**
Additions	7,533	–	524	–	**8,057**
Disposals	6,394	–	–	25	**6,419**
Write-downs	156	–	–	499	**655**
Reversal of write-downs	–	–	−3	–	**−3**
Currency translation differences	−598	−70	−105	−67	**−840**
Dec. 31, 2020	**13,128**	**757**	**1,803**	**1,275**	**16,963**
Net carrying amount on Dec. 31, 2020	**17,647**	**7,937**	**9,325**	**2,555**	**37,464**

The adjacent chart shows all the goodwill recognized within the Group as of December 31, 2021. 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 or 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.

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 budget 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 7.15 % for Poland (previous year: 6.92 %) and 6.48 % for the USA (previous year: 6.27 %). Even taking into account a change in the weighted average cost of capital (WACC) of 10 %, there would be no impairment write-down requirement.

Figures in €k	Dec. 31, 2021	Dec. 31, 2020
PCC Silicium S.A.	**2,615**	2,615
PCC Intermodal SA	**2,593**	2,593
PCC Rokita subgroup	**1,330**	1,330
PCC Chemax, Inc.	**958**	884
PCC Exol SA	**515**	515
Goodwill	**8,011**	**7,937**

(20) Property, plant and equipment

Figures in €k	Land and buildings	Plant and machinery	Other facilities, factory and office equipment	Advance payments and construction in progress	Total
Historical cost					
Jan. 1, 2021	336,931	525,283	230,706	67,402	**1,160,323**
Changes in consolidation scope	–	1	3	–	**4**
Additions	2,548	4,739	828	61,882	**69,997**
Disposals	85	10,375	3,283	437	**14,179**
Reclassifications	9,839	40,291	21,441	–69,715	**1,855**
Currency translation differences	16,466	9,636	–1,553	–318	**24,231**
Dec. 31, 2021	**365,700**	**569,575**	**248,142**	**58,813**	**1,242,230**
Amortization					
Jan. 1, 2021	38,468	165,170	96,091	3,722	**303,451**
Changes in consolidation scope	–	–	2	–	**2**
Additions	9,236	31,787	12,075	–	**53,098**
Disposals	86	3,926	3,152	2	**7,167**
Write-downs	706	1,254	335	1,926	**4,220**
Reversal of write-downs	–32	–72	–28	–25	**–158**
Reclassifications	34	312	1,138	–	**1,484**
Currency translation differences	709	316	–583	–43	**400**
Dec. 31, 2021	**49,035**	**194,840**	**105,878**	**5,577**	**355,330**
Net carrying amount on Dec. 31, 2021	**316,666**	**374,735**	**142,264**	**53,235**	**886,900**

The net carrying amount for property, plant and equipment increased from €856.9 million to €886.9 million in the year under review. In the previous year, the PCC Group had temporarily suspended its investment activities or reduced them to a minimum as a Covid-19 safeguarding measure. Following renewed analysis of the investment measures, those projects of strategic importance were then reactivated or completed in the year under review. Ongoing replacement investments were also pursued.

Additions to property, plant and equipment amounted to €70.0 million in fiscal 2021 (previous year: €52.8 million). The capital expenditures implemented primarily involved the Logistics and Chlorine segments,

Additions to depreciation of property, plant and equipment amounted to €53.1 million in the year under review (previous year: €55.4 million).

Figures in € k	Land and buildings	Plant and machinery	Other facilities, factory and office equipment	Advance payments and construction in progress	Total
Historical cost					
Jan. 1, 2020	359,070	553,504	230,915	76,691	**1,220,180**
Changes in consolidation scope	−2,551	−7,133	−698	−7,409	**−17,791**
Additions	461	3,047	728	48,553	**52,790**
Disposals	773	8,160	2,381	276	**11,591**
Reclassifications	8,596	25,616	17,439	−46,060	**5,591**
Currency translation differences	−27,872	−41,591	−15,296	−4,097	**−88,856**
Dec. 31, 2020	**336,931**	**525,283**	**230,706**	**67,402**	**1,160,323**
Amortization					
Jan. 1, 2020	33,773	156,664	92,486	3,839	**286,762**
Changes in consolidation scope	−1,997	−7,001	−695	−83	**−9,776**
Additions	9,408	34,384	11,644	–	**55,435**
Disposals	654	7,824	2,072	–	**10,549**
Write-downs	460	995	179	323	**1,957**
Reversal of write-downs	119	184	33	105	**441**
Reclassifications	326	1,113	1,031	–	**2,470**
Currency translation differences	−2,727	−12,978	−6,449	−252	**−22,407**
Dec. 31, 2020	**38,468**	**165,170**	**96,091**	**3,722**	**303,451**
Net carrying amount on Dec. 31, 2020	**298,463**	**360,114**	**134,615**	**63,680**	**856,872**

In fiscal 2021, write-downs amounting to € 4.2 million were recognized on property, plant and equipment for the Group (previous year: € 2.0 million). A large part of this figure relates to replacement parts in the Chlorine segment and property, plant and equipment in the Logistics and Energy segments. Write-down reversals in both the year under review and the previous year were negligible.

As of the 2021 reporting date, the value of individual items of property, plant and equipment with disposal restrictions amounted to € 516.6 million (previous year: € 491.7 million). These additionally serve as debt collateral. As of December 31, 2021, there were total investment obligations in the amount of € 59.2 million (previous year: € 23.5 million) relating to investments already contractually agreed but not yet completed. Furthermore, € 1.1 million (previous year: € 1.9 million) in insurance compensation attributable to property, plant and equipment was received in the fiscal year under review.

(21) Right-of-use assets

Figures in € k	2021	2020
Historical cost		
Jan. 1	80,301	83,079
Changes in consolidation scope	6	–1,667
Additions	20,822	9,636
Disposals	10,040	1,957
Reclassifications	–2,006	–3,804
Currency translation differences	–397	–4,987
Dec. 31	**88,686**	**80,301**
Depreciation		
Jan. 1	24,922	16,997
Changes in consolidation scope	2	–345
Additions	12,693	12,659
Disposals	2,369	1,358
Reclassifications	–1,484	–1,814
Currency translation differences	–194	–1,217
Dec. 31	**33,570**	**24,922**
Net carrying amount on Dec. 31	**55,116**	**55,379**

Within the PCC Group, lease agreements exist particularly in the areas of developed and undeveloped land and buildings, plant and machinery, factory and office equipment, and vehicle fleet. To ensure flexibility, extension and termination options are sometimes agreed. When determining the term of the agreement, all circumstances and facts are taken into account which, to the best of our current knowledge, have an influence on the exercise of an extension option or the non-exercise of a termination option. When determining lease liabilities and corresponding right-of-use assets, all sufficiently assured cash outflows are taken into account. Classified by underlying asset type, the net carrying amounts for the right-of-use assets totaling € 55.1 million (previous year: € 55.4 million) break down as of year-end as follows:

Figures in € k	Dec. 31, 2021	Dec. 31, 2020
Land and buildings	24,494	23,720
Plant and machinery	16,088	18,249
Other facilities, factory and office equipment, incl. vehicle fleet	14,534	13,410
Right-of-use assets, net carrying amount	**55,116**	**55,379**

The underlying lease terms for land and buildings range from one to 25 years. Plant and machinery are leased for between one and three years, and other facilities, factory and office equipment, and vehicle fleet, for between one and four years. Classified by underlying asset type, the depreciation expenses totaling € 12.7 million (previous year: € 12.7 million) on right-of-use assets in fiscal 2021 break down as follows:

Figures in € k	2021	2020
Land and buildings	1,022	1,060
Plant and machinery	7,184	7,281
Other facilities, factory and office equipment, incl. vehicle fleet	4,469	4,323
Right-of-use assets, depreciation	**12,675**	**12,665**

(22) Investment property

Figures in € k	2021	2020
Historical cost		
Jan. 1	–	1,915
Reclassifications	–	– 1,787
Currency translation differences	–	– 127
Dec. 31	–	–
Depreciation		
Jan. 1	–	703
Reclassifications	–	– 656
Currency translation differences	–	– 47
Dec. 31	–	–
Net carrying amount on Dec. 31	–	–

The assets reported under investment property were reclassified in full to property, plant and equipment in fiscal 2020. As the letting of real estate for profit is not a core business activity of the PCC Group and does not generate any significant income, it has not been presented separately.

(23) 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. The value recognized is mainly attributable to affiliated, non-consolidated companies and amounted to € 10.1 million as of the reporting date (previous year: € 5.0 million), the increase being due primarily to capital measures. Securities account for € 0.4 million (previous year: € 0.0 million).

(24) Other non-current financial assets

This balance sheet item includes loans to affiliated companies that are not consolidated for reasons of materiality, loans to joint ventures, and other loans. On the reporting date, the total value under this heading amounted to € 16.4 million, € 3.3 million below the figure of € 19.7 million for the previous year. This includes in particular loans to the joint venture OOO DME Aerosol in the amount of € 12.5 million (previous year: € 10.5 million).

(25) Inventories

Figures in € k	Dec. 31, 2021	Dec. 31, 2020
Raw materials and supplies	42,645	23,505
Work in progress	20,601	10,159
Finished goods	28,423	11,135
Merchandise	18,687	9,391
Goods in transit	2,964	2,459
Advance payments	726	1,299
Total inventories	**114,046**	**57,948**

Inventories increased year on year from € 57.9 million to € 114.0 million as of the reporting date. This was mainly due to the sharp rise in raw material prices in the fiscal year and the associated increase in procurement costs.

In both the 2021 reporting year and the previous year, only insignificant write-ups were recognized on previously impaired inventories due to increased marketability. Impairment losses amounted to € 0.9 million (previous year: € 1.4 million). Inventories of € 595.5 million were expensed in the statement of income for full fiscal 2021.

(26) Trade accounts receivable

Figures in € k	Dec. 31, 2021	Dec. 31, 2020
Trade accounts receivable	112,188	75,400
Expected credit losses (ECL) – Stage 2	–158	–230
Credit losses already incurred – Stage 3	–2,483	–3,204
Total trade accounts receivable	**109,547**	**71,967**

Trade accounts receivable as of December 31, 2021 all had a remaining term of up to one year in their full amount. Their value increased by € 37.6 million or 52.2 % year on year.

Expected future losses determined on the basis of the impairment model decreased by € 0.1 million in fiscal 2021. Additions to individual value adjustments due to losses already incurred decreased year on year from €0.5 million to €0.2 million. Overall, the Group recognized value adjustments on trade accounts receivable in the amount of €2.6 million, €0.8 million less than in the previous year.

Figures in €k	2021	2020
Value adjustments as of Jan. 1	**−3,434**	−4,235
Changes in consolidation scope	666	–
Change in expected credit losses (ECL) – Stage 2	72	32
Change in credit losses already incurred – Stage 3	17	−429
Allowances utilized	29	1,048
Currency translation differences	9	151
Value adjustments as of Dec. 31	**−2,642**	−3,434

The maturity structure of all non-impaired trade accounts receivable is shown below. Some 91.3 % of the Group's receivables were neither impaired nor overdue as of December 31, 2021 (previous year: 92.6 %). Also shown are the default risks and the level of the expected credit losses (ECL) over the remaining term for each age group.

	Gross value of trade accounts receivable		Expected credit loss (ECL)	
Figures in €k	2021	2020	2021	2020
Not overdue	**100,063**	66,649	**65**	48
Overdue	**12,125**	8,752	**93**	181
up to 30 days	8,625	4,745	7	6
30 to 60 days	567	328	3	8
60 to 90 days	361	257	2	2
90 to 120 days	13	22	2	1
over 120 days	2,560	3,400	80	164
Expected credit losses (ECL)	**112,188**	75,400	**158**	230

Individual companies within the PCC Group use factoring as a receivables financing instrument. The volume of all receivables sold as of the reporting date amounted to €5.3 million (previous year: €13.2 million).

(27) Other receivables and other assets

Figures in € k	Dec. 31, 2021		Dec. 31, 2020	
	Non-current	Current	Non-current	Current
Accounts receivable from affiliated companies	–	1,178	–	938
Account receivable from associated companies and joint ventures	–	18	–	21
Security deposits paid	–	606	–	556
Receivables from VAT and other levies	–	11,363	–	7,936
Receivables from employees	–	8	–	10
Insurance claims	–	1	–	1
Positive fair values on derivatives	–	14	–	–
Prepaid expenses and deferred charges	352	3,385	426	4,647
Loans to affiliated companies	–	3,495	–	4,191
Contract assets	–	584	–	362
Sundry other assets	–	8,427	–	10,842
Other receivables and other assets	**352**	**29,079**	426	29,503

Accounts receivable from affiliated companies as of December 31, 2021 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 (39). These are largely loan receivables from project companies.

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

(28) 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 and other reserves as of December 31, 2021 are as follows:

Figures in € k	Dec. 31, 2021	Dec. 31, 2020
Revenue reserves, retained earnings, valuation reserves and debit differentials set off against revenue reserves	55,905	93,293
IFRS transition reserve	20,959	20,959
Share of net result attributable to Group	61,683	–37,193
Total revenue reserves / other reserves	**138,547**	77,059

The movements in Group equity are indicated in the statement of changes in equity included in the consolidated financial statements.

Revenue reserves and 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 €–59.6 million is disclosed in the revenue reserves under retained earnings. In fiscal 2021, the sole shareholder of PCC SE was paid out of retained earnings a dividend in the amount of €2.75 million (previous year: €3.15 million). This corresponds to a dividend per share amounting to €0.55 (previous year: €0.63). Recognized under other comprehensive income are differences arising from foreign currency translation. In the year under review, these increased Group equity by €4.2 million to a total of €–36.6 million (previous year: €–40.5 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, 2021	–40,381	–354	–86	414	–100	**–40,508**
Changes	4,165	–40	–	–221	–1	**3,903**
Deferred taxes	–	8	–	–	–	**8**
Dec. 31, 2021	**–36,216**	**–387**	**–86**	**193**	**–101**	**–36,597**

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, 2020	–17,951	–397	–62	414	–94	**–18,090**
Changes	–22,430	52	–25	–	–5	**–22,408**
Deferred taxes	–	–9	–	–	–	**–9**
Dec. 31, 2020	**–40,381**	**–354**	**–86**	**414**	**–100**	**–40,508**

(29) 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, 2021 was €37.6 million, representing an increase of €4.3 million compared to year-end 2020. 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 (44) drawn up in accordance with Section 313 (2) HGB (German Commercial Code).

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

	PCC Rokita subgroup		PCC BakkiSilicon hf.		PCC Exol SA	
Figures in €k	**2021**	2020	**2021**	2020	**2021**	2020
Balance sheet						
Minority interests	**39,394**	27,713	**−9,264**	−6,205	**4,423**	3,477
Minority interests in %	**15.83**	15.83	**13.50**	13.50	**12.96**	12.55
Dividends paid to minority interests	**2,532**	2,360	**–**	–	**834**	238
Non-current assets	**342,086**	350,141	**352,288**	332,567	**65,694**	60,075
Current assets	**172,621**	107,389	**39,842**	13,714	**48,068**	42,311
Non-current liabilities	**152,650**	185,140	**405,167**	342,089	**27,967**	39,288
Current liabilities	**112,791**	96,894	**29,003**	23,410	**52,940**	35,295
Statement of income						
Net profit attributable to minority interests	**14,534**	3,753	**−2,743**	−5,938	**1,518**	1,076
Sales revenue	**481,195**	331,020	**41,242**	20,289	**156,579**	127,448
Net result	**91,774**	23,697	**−20,319**	−46,387	**11,716**	8,576
Comprehensive income	**91,730**	23,719	**−20,319**	−46,387	**11,482**	8,584

(30) 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 commitments are internally financed.

Provisions for pensions and similar obligations as of the reporting date of the year under review amounted to €1.0 million, representing an increase of €0.1 million above the prior-year figure. Of this amount, €0.9 million was classified as non-current provisions with a term of more than one year.

Figures in €k	2021	2020
Opening balance of pension obligations as of Jan. 1	**894**	994
Current service costs	84	88
Payments made	–50	–54
Interest expenses	7	10
Actuarial gains/losses from changes in demographic assumptions	–5	–23
Actuarial gains/losses from changes in financial assumptions	–33	41
Actuarial gains/losses from experience adjustments	87	–48
Currency translation differences	–7	–113
Other effects	–4	–
Closing balance of pension obligations as of Dec. 31	**973**	894

A total of 2,822 employees of the PCC Group companies (previous year: 2,745) are covered by defined benefit plans, of which 75.4% are male and 24.6% are female. The average age at year-end 2021 was 38.1 years (previous year: 40.1 years).

A uniform discount rate of 1.1% was applied in calculating pension obligations (previous year: 0.8%). The rate adopted for the salary trend was 5.4% (previous year: 3.5%). The Polish mortality table for 2021 published by the Central Office for Statistics, which serves as the basis for pension calculations, anticipates a life expectancy of 76.7 years (previous year: 76.3 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	2021	2020	2021	2020
Change in underlying discount rate	–20	–2	34	50
Change in salary trend	33	49	–19	–1
Change in turnover rate	–10	6	24	40

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 2021 is € 7.1 million representing employer contributions to statutory pension schemes (previous year: € 6.8 million). In addition to the contributions to the statutory pension scheme, expenses for defined contribution pension plans in the amount of € 1.1 million are also included in the result for the current period (previous year: € 1.0 million).

Figures in € k	2021	2020
Expenses for defined benefit pension plans	–	88
Expenses for defined contribution pension plans	1,124	1,032
Total pension expenses recognized in result	**1,124**	**1,120**

(31) Other provisions

Figures in € k	Dec. 31, 2021		Dec. 31, 2020	
	Non-current	Current	Non-current	Current
Accruals for personnel expenses	5	11,944	246	8,120
Provisions for year-end accounting and audit expenses	–	536	–	536
Provisions for obligations to customers	–	22	–	6
Provisions for litigation risks	–	221	2	–
Provisions for recultivation	3,774	747	4,118	264
Provisions for the acquisition of emission allowances (CO_2 certificates)	–	13,622	–	6,240
Provisions for the purchase of energy efficiency certificates	–	1,342	–	2,024
Provisions for restructuring	–	530	–	–
Sundry other provisions	2,436	2,060	1,263	2,536
Total other provisions	**6,215**	**31,024**	5,630	19,726

Compared to the previous year, other provisions rose by € 11.9 million to € 37.2 million. The main reason for the increase is the € 7.4 million rise in provisions for the purchase of CO_2 allowance certificates (previous year: € 6.2 million). Personnel accruals mainly provide for bonus and vacation entitlements, and these also increased by € 3.6 million from € 8.4 million in the previous year to € 12.0 million at the reporting date. Provisions for energy efficiency certificates increased only slightly, by € 0.1 million to € 1.3 million. These provisions result from requirements relating to 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 2021. Other changes include foreign exchange effects and changes in the consolidation scope.

Figures in €k	Jan. 1, 2021	Added	Utilized	Released	Discounted	Other changes	Dec. 31, 2021
Accruals for personnel expenses	8,366	8,389	4,535	270	–	–	11,950
Provisions for obligations to customers	536	527	447	4	–	–76	536
Provisions for year-end accounting and audit expenses	6	22	6	–	–	–	22
Provisions for litigation risks	2	221	–	–	–	–2	221
Provisions for restructuring	–	441	–	–	–	88	530
Provisions for recultivation	4,382	6	–	–	168	–35	4,521
Provisions for the acquisition of emission allowances (CO_2 certificates)	6,240	13,622	6,007	182	–	–50	13,622
Provisions for the purchase of energy efficiency certificates	2,024	1,342	2,007	–	–	–16	1,342
Sundry other provisions	3,800	2,194	530	1,000	–	31	4,495
Total other provisions	**25,356**	**26,764**	**13,533**	**1,457**	**168**	**–61**	**37,239**

(32) Financial liabilities

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

Figures in €k	Dec. 31, 2021		Dec. 31, 2020	
	Non-current	Current	Non-current	Current
Bond liabilities	469,886	95,659	476,799	65,604
Bank liabilities	329,087	45,431	308,916	41,073
Lease liabilities	28,630	12,979	25,554	12,951
Negative fair value of derivatives	–	–	764	–
Total financial liabilities	**827,603**	**154,069**	812,033	119,628

Financial liabilities increased by €50.0 million from €931.7 million as of December 31, 2020 to €981.7 million as of December 31, 2021. The largest absolute increase of €24.5 million to €374.5 million was recorded in respect of liabilities to banks. Liabilities from bonds showed similar growth with a rise of €23.1 million to €565.5 million.

Liabilities from leases increased slightly by €3.1 million to €41.6 million.

Bank liabilities carry interest rates ranging between 0.4 % p.a. and 13.3 % p.a. Secured credit lines within the PCC Group not utilized as of year-end amounted to €35.4 million (previous year: €48.9 million).

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

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	**Dec. 31, 2021**
Bond liabilities	95,659	386,776	83,110	**565,545**
Bank liabilities	45,431	83,123	245,964	**374,519**
Lease liabilities	12,979	16,391	12,239	**41,609**
Total financial liabilities	**154,069**	**486,290**	**341,312**	**981,672**

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2020
Bond liabilities	65,604	394,719	82,080	**542,403**
Bank liabilities	41,073	85,535	223,381	**349,990**
Lease liabilities	12,951	15,025	10,529	**38,505**
Negative fair value of derivatives	–	429	335	**764**
Total financial liabilities	**119,628**	**495,707**	**316,325**	**931,661**

The relevant factors when presenting the maturities of contractual cash flows from financial liabilities are interest payments and redemption of principal, plus 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, 2021**
Bond liabilities	100,091	434,822	80,524	**615,437**
Bank liabilities	50,969	94,632	249,298	**394,899**
Lease liabilities	13,999	18,787	30,135	**62,921**
Cash outflows from financial liabilities	**165,059**	**548,241**	**359,956**	**1,073,257**

Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2020
Bond liabilities	70,518	442,750	83,213	**596,481**
Bank liabilities	45,741	95,494	228,109	**369,344**
Lease liabilities	14,038	16,695	29,852	**60,585**
Negative fair value of derivatives	–	764	–	**764**
Cash outflows from financial liabilities	**130,297**	**555,702**	**341,175**	**1,027,175**

The bank loans and also the leases disclosed under financial liabilities were secured in 2021 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 collateral assignments. Overall, the collateral provided amounted to €477.1 million, an increase of €27.9 million on the previous year.

Figures in €k	**Dec. 31, 2021**	Dec. 31, 2020
Mortgages, land charges and similar liens	**55,119**	59,101
Assignment of claims on assets	**359,645**	323,821
Chattel mortgages	**1,798**	1,772
Other assignments	**60,568**	64,556
Collateral securities granted	**477,131**	**449,249**

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 Icelandic silicon metal plant.

Bonds from the PCC Group are issued in euros, Polish złoty and US dollars. The public bonds issued in euros (EUR) carry coupons between 3.0 % and 6.5 % p.a., while those in złoty (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 złoty with a total face value of PLN 252.0 million (previous year: PLN 315.8 million) had a euro value of €53.9 million as of the reporting date (previous year: €68.1 million).

Figures in €k	Issue date	Maturity date	Issue currency	Coupon	Issue volume	Dec. 31, 2021	Dec. 31, 2020
Issued by PCC SE							
DE000A254TZ0	04/01/2020	12/01/2024	EUR	4.000 %	35,000	**34,503**	34,503
DE000A2TSEM3	07/01/2019	10/01/2024	EUR	4.000 %	30,000	**29,946**	29,946
DE000A3H2VU4	11/02/2020	10/01/2025	EUR	4.000 %	30,000	**29,653**	7,681
DE000A3E5S42	05/17/2021	07/01/2026	EUR	4.000 %	30,000	**29,293**	–
DE000A2YN1K5	10/22/2019	02/01/2025	EUR	4.000 %	30,000	**29,133**	29,133
DE000A2LQZH9	07/01/2018	10/01/2023	EUR	4.000 %	30,000	**28,783**	28,783
DE000A2NBJL3	01/01/2019	07/01/2024	EUR	4.000 %	25,000	**24,985**	24,985
DE000A2GSSY5	10/01/2017	07/01/2022	EUR	4.000 %	25,000	**24,968**	24,968
DE000A162AQ4	10/01/2015	10/01/2022	EUR	6.000 %	25,000	**24,860**	24,860
DE000A2YPFY1	12/02/2019	07/01/2025	EUR	4.000 %	30,000	**23,818**	23,818
DE000A2G8670	01/01/2018	04/01/2023	EUR	4.000 %	25,000	**21,802**	21,802
DE000A2NBFT4	10/01/2018	04/01/2024	EUR	4.000 %	25,000	**21,104**	21,124
DE000A2TSTW0	03/01/2019	02/01/2023	EUR	3.000 %	25,000	**18,447**	18,447
DE000A14KJ43	05/01/2015	04/01/2022	EUR	6.500 %	35,000	**16,181**	16,181
DE000A3H2VT6	11/02/2020	07/01/2023	EUR	3.000 %	15,000	**14,705**	3,016
DE000A254TD7	04/30/2020	05/01/2022	EUR	3.000 %	20,000	**14,631**	14,631
DE000A3MQEN8	11/15/2021	12/01/2026	EUR	4.000 %	30,000	**12,241**	–
DE000A3MP4P9	10/01/2021	10/01/2026	EUR	4.000 %	10,000	**10,000**	–
DE000A2G9HY2	04/01/2018	02/01/2022	EUR	3.000 %	10,000	**9,588**	9,588
DE000A3E5MD5	07/01/2021	01/01/2024	EUR	3.000 %	10,000	**9,545**	-
DE000A2YPFX3	12/02/2019	01/01/2024	EUR	3.000 %	20,000	**4,511**	4,511
DE000A3MQEM0	11/15/2021	04/01/2025	EUR	3.000 %	10,000	**2,336**	–
DE000A2AAY85	10/17/2016	07/01/2021	EUR	4.000 %	25,000	**–**	23,187
DE000A2E4Z04	07/01/2017	04/01/2021	EUR	4.000 %	25,000	**–**	19,927
DE000A13SH30	12/01/2014	10/01/2021	EUR	6.750 %	20,000	**–**	19,890
DE000A2YPFD5	10/01/2019	12/01/2021	EUR	2.000 %	5,000	**–**	2,600
Issued by PCC BakkiSilicon hf.							
Private placement without ISIN	06/05/2015	09/30/2035	USD	0.000 %	62,000	**76,572**	70,676
Issued by PCC Exol SA							
PLPCCEX00051	11/15/2017	05/15/2022	PLN	5.500 %	25,000	**5,431**	5,455
PLPCCEX00077	06/25/2020	06/25/2025	PLN	5.500 %	25,000	**5,377**	5,406
PLPCCEX00069	02/28/2020	11/27/2024	PLN	5.500 %	20,000	**4,308**	4,330
Issued by PCC Rokita SA							
PLPCCRK00209	12/20/2017	12/20/2023	PLN	5.000 %	30,000	**6,489**	6,525
PLPCCRK00134	08/11/2016	08/11/2023	PLN	5.000 %	25,000	**5,416**	5,448
PLPCCRK00183	10/11/2017	10/11/2023	PLN	5.000 %	25,000	**5,411**	5,441
PLPCCRK00225	03/23/2018	03/23/2024	PLN	5.000 %	25,000	**5,404**	5,434
PLPCCRK00258	04/29/2019	04/29/2026	PLN	5.000 %	22,000	**4,737**	4,766
PLPCCRK00241	04/24/2018	04/24/2025	PLN	5.000 %	20,000	**4,316**	4,342
PLPCCRK00274	04/22/2020	04/22/2027	PLN	5.000 %	20,000	**3,823**	3,849
PLPCCRK00266	10/22/2019	10/22/2026	PLN	5.000 %	15,000	**3,227**	3,247
PLPCCRK00167	04/07/2017	06/07/2022	PLN	5.000 %	25,000	**–**	5,456
PLPCCRK00175	08/02/2017	02/02/2023	PLN	5.000 %	25,000	**–**	5,448
PLPCCRK00159	11/17/2016	11/17/2023	PLN	5.000 %	13,772	**–**	3,000
Bond liabilities						**565,545**	542,403

(33) Other liabilities

Figures in €k	Dec. 31, 2021		Dec. 31, 2020	
	Non-current	Current	Non-current	Current
Deferred income	48,424	2,512	40,395	1,693
Liabilities from wage tax and similar levies	–	5,157	–	2,678
Social security contributions payable	–	4,825	–	2,944
Liabilities from interest payment obligations	–	2,780	–	2,502
Liabilities from VAT, customs, excise and other levies payable	–	2,843	–	1,051
Accounts payable to employees	–	2,844	–	2,515
Accounts payable to affiliated companies	–	1,941	–	1,558
Liabilities arising from investments	496	6,063	1,118	4,662
Contract liabilities	–	1,647	–	2,022
Sundry other liabilities	389	17,834	295	19,187
Total other liabilities	**49,309**	**48,445**	41,807	40,812

Other liabilities increased by €15.1 million, from €82.6 million as of December 31, 2020, to €97.8 million as of December 31, 2021, with an increase in particular in deferred income relating to subsidies and grants for investment projects. In the 2021 reporting year, a total of €2.4 million was released through profit or loss from deferred income from subsidies (previous year: €2.0 million). The increase in deferred income was accompanied by an increase in liabilities from investments as of the reporting date. These are liabilities for goods or services provided by third parties recognized in respect of investment projects as of the reporting date. The PCC Group temporarily suspended investment activities in the previous year, partly as a Covid-19 safeguarding measure, with the result that liabilities from investments remained at a low level.

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

(34) 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. For German subsidiaries, the tax rate applied is a uniform 30 %, as was the case in the previous year. For foreign entities, the relevant national tax rates are applied. Without exception, these remained constant year on year.

The distribution of deferred taxes among the various balance sheet items is shown in the table overleaf. 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 netting of tax liabilities and tax receivables. For fiscal 2021, this gave rise to deferred tax assets of €16.4 million (previous year: €13.5 million) and deferred tax liabilities of €9.4 million (previous year: €7.5 million).

Prevailing tax rates in %	2021	2020
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**	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**	22.0
USA	**23.6**	23.6

	Deferred tax assets		Deferred tax liabilities	
Figures in € k	**2021**	2020	**2021**	2020
Intangible assets	**259**	23	**911**	471
Property, plant and equipment	**−4,130**	3,680	**17,266**	20,404
Right-of-use assets	**199**	137	**8,609**	8,109
Financial assets	**4,361**	4,968	**–**	–
Inventories	**1,010**	822	**135**	–
Receivables	**704**	452	**289**	208
Other assets	**6**	–	**75**	113
Deferred item	**–**	5	**38**	–
Pension provisions	**177**	160	**–**	–
Other provisions	**5,092**	2,343	**24**	14
Liabilities	**8,188**	8,766	**264**	63
Other liabilities	**651**	205	**53**	35
Tax losses carried forward	**18,654**	14,474	**–**	–
Sundry deferred taxes	**1,813**	1,175	**1**	32
Amounts netted	**−20,585**	−23,778	**−18,304**	−21,921
Total deferred taxes	**16,399**	13,522	**9,362**	7,528

The table above shows the unnetted deferred taxes. Deferred taxes arising from consolidation adjustments amounted to € 0.0 k in 2021 (previous year: € 0.0 k); where applicable, these relate primarily to eliminated intercompany profits. Sundry deferred taxes include future tax benefits arising from activities in a special economic zone.

Deferred tax assets on unused tax losses carried forward increased in the year under review by a total of € 4.2 million to € 18.7 million as of the reporting date. The rise was due to the start-up losses incurred by the Icelandic company.

(35) 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, in order both to secure enterprise value over the long term and to 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 entity 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 income streams 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: € 0.7 million). A change in the exchange rate of the US dollar of likewise 10 % would have an impact on these items of €0.1 million (previous year: €0.1 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 a floating interest rate. 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 €3.1 million (previous year: €0.8 million).

Commodity price risks: These risks result from market price changes in relation to commodity/raw material 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 and market movements is especially relevant, particularly in the case of petrochemical commodities. 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. 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 safeguards 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 €75.3 million (previous year: €49.2 million). Financial assets that are neither impaired nor overdue are categorized as collectable in line with the creditworthiness of the debtor.

Liquidity risks

Liquidity risks result from income stream 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. Forward contracts in existence as of December 31, 2021 carried a nominal value of €–0.6 million (previous year: €–0.2 million). The immaterial fair values are recognized as assets or liabilities.

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 €124.4 million (previous year: €127.6 million), with a fair value of €–2.4 million recognized as a liability as of the reporting date (previous year: €–0.8 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, 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.

Figures in € k	**Carrying amounts Dec. 31, 2021**	Categories[1] FAaC	FLaC	FVtOCI	FVtPL	Fair Value
Financial assets						
Non-current financial assets	**10,056**	–	–	9,680	377	10,056
Other non-current financial assets	**16,424**	16,424	–	–	–	16,424
Trade accounts receivable	**109,547**	109,547	–	–	–	109,547
Accounts receivable from affiliated companies	**1,178**	1,178	–	–	–	1,178
Accounts receivable from associated companies and joint ventures	**18**	18	–	–	–	18
Other financial assets	**8,510**	8,496	–	–	14	8,510
Cash and cash equivalents	**93,763**	93,763	–	–	–	93,763
Financial liabilities						
Bond liabilities	**565,545**	–	565,545	–	–	566,146
Bank liabilities	**374,519**	–	374,519	–	–	371,470
Lease liabilities	**41,609**	–	41,609	–	–	38,350
Other financial liabilities	**8,358**	–	8,358	–	–	8,358
Trade accounts payable	**100,586**	–	100,586	–	–	100,586

Figures in € k	Carrying amounts Dec. 31, 2020	Categories[1] FAaC	FLaC	FVtOCI	FVtPL	Fair Value
Financial assets						
Non-current financial assets	**4,970**	–	–	4,970	0	4,970
Other non-current financial assets	**19,731**	19,731	–	–	–	19,731
Trade accounts receivable	**71,967**	71,967	–	–	–	71,967
Accounts receivable from affiliated companies	**938**	938	–	–	–	938
Accounts receivable from associated companies and joint ventures	**21**	21	–	–	–	21
Other financial assets	**8,943**	8,943	–	–	0	8,943
Cash and cash equivalents	**73,745**	73,745	–	–	–	73,745
Financial liabilities						
Bond liabilities	**542,403**	–	542,403	–	–	545,740
Bank liabilities	**349,990**	–	349,990	–	–	350,298
Lease liabilities	**38,505**	–	38,505	–	–	38,505
Other financial liabilities	**4,348**	–	3,584	–	764	4,348
Trade accounts payable	**87,265**	–	87,265	–	–	87,265

1 FAaC = Financial assets measured at amortized cost
FLaC = Financial liabilities measured at amortized cost
FVtOCI = Fair value through OCI
FVtPL = Fair value through profit or loss

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

Figures in €k	2021	2020
Financial assets measured at amortized cost (FAaC)	–469	–845
Financial liabilities measured at amortized cost (FLaC)	–33,148	–39,869
Fair value through profit or loss (FVtPL)	946	720
Fair value through other comprehensive income (FVtOCI)	–236	–

The net gains and net losses from financial instruments comprise valuation results, the carrying amounts of premiums and discounts, the recognition and reversal of impairment losses, currency translation results, 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 included in a hedging arrangement per IFRS 9. Net gains and losses on financial assets measured at amortized cost include net interest income of €1.8 million (previous year: €1.7 million) and net foreign exchange income of €0.2 million (previous year: €0.3 million). Net gains and losses on financial liabilities measured at amortized cost include a net interest loss of €–33.7 million (previous year: €–36.4 million) and net foreign exchange income of €0.7 million (previous year: loss of €–1.3 million).

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 commercial transaction made on the valuation date between independent market participants.

Figures in €k	Based on stock market prices (Level 1)	Derived from market data (Level 2)	Based on valuation models (Level 3)	**Dec. 31, 2021**
Financial assets measured at fair value through profit or loss (FVtPL)	–	391	–	**391**
Financial assets measured at fair value through other comprehensive income (FVtOCI)	–	–	9,680	**9,680**

Figures in €k	Based on stock market prices (Level 1)	Derived from market data (Level 2)	Based on valuation models (Level 3)	Dec. 31, 2020
Financial assets measured at fair value through profit or loss (FVtPL)	–	0	0	**0**
Financial liabilities measured at fair value through profit or loss (FVtPL)	–	764	–	**764**
Financial assets measured at fair value through other comprehensive income (FVtOCI)	–	–	4,970	**4,970**

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 reporting 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, 2021**		Dec. 31, 2020	
	Nominal value	Fair Value	Nominal value	Fair Value
Forward exchange contracts	**–618**	**14**	–172	0
Foreign currency interest rate swaps	**108,889**	**–2,369**	107,932	–6,856
Interest rate swaps	**13,403**	**370**	17,319	–764
Other derivatives (interest-rate- or currency-based)	**2,154**	**6**	2,171	0
Derivative financial instruments	**123,828**	**–1,978**	127,250	–7,620

Cash flow hedge
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 2022. The fair value amounts to €0.2 million (previous year: €0.4 million). In the period under review, changes amounting to €0.2 million were recognized in other comprehensive income (previous year: €0.0 million).

(36) Leases

Leases in which PCC acts as lessee are accounted for in accordance with the rights-of-use model set out in IFRS 16. For a tabular presentation of the rights of use for the reporting year, please refer to section (21) Right-of-use assets. Right-of-use assets in the amount of € 55.1 million were countervailed by lease liabilities of € 41.6 million as of the reporting date. These are recognized under financial liabilities. For further details, please refer to Note (32) Financial liabilities. The maturity structure of payment obligations under leases is shown in the following table.

Figures in € k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	**Dec. 31, 2021**
Minimum lease payments	13,999	18,787	30,135	**62,921**
Interest element	1,020	2,396	17,896	**21,312**
Present value	12,979	16,391	12,239	**41,609**

Figures in € k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2020
Minimum lease payments	14,038	16,695	29,852	**60,585**
Interest element	1,087	1,670	19,323	**22,081**
Present value	12,951	15,025	10,529	**38,505**

Compliant with the exemptions allowed, no right-of-use assets have been recognized in the balance sheet where the underlying leased asset is of minor value or where the contractual term is less than twelve months. Instead, the lease is expensed. The following amounts related to leases were recognized in the statement of income in the year under review:

Figures in € k	**2021**	2020
Expenses for short-term leases with a term of less than twelve months	**2,741**	1,615
Expenses for leases of assets of minor value not included in the short-term leases referred to above	**7**	16
Expenses for variable lease payments, not included in lease liabilities	**582**	–
Interest expenses for lease liabilities	**1,713**	1,942

There was no income from subleasing. In total, the outflow of funds from lease agreements amounted to € 19.5 million in the past fiscal year (previous year: € 16.1 million). In addition to the leases, the PCC Group has minor obligations under rental agreements. A corresponding maturity profile is provided in Note (37) below.

(37) Contingent liabilities and other financial commitments

Figures in € k	**Dec. 31, 2021**	Dec. 31, 2020
Contingent liabilities arising from sureties and debt guarantees	12	50
Other contingent liabilities	12,558	25,707
Total contingent liabilities	**12,570**	**25,756**

The contingent liabilities arising from sureties and debt guarantees are attributable to Polish subsidiaries. These are commitments 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 currently expects no claims to be made in respect of any such contingent arrangements.

As of December 31, 2021, the PCC Group had other financial obligations arising from investment commitments, rental obligations and other commitments amounting to € 60.6 million. The increase of € 35.9 million compared to the previous year is mainly due to higher obligations arising from capital expenditure commitments on property, plant and equipment. In the previous year, the investment activities of the PCC Group were temporarily suspended, partly as a Covid-19 safeguarding measure. The obligations from rental agreements with a remaining term of up to one year include commitments in the amount of € 0.5 million attributable to short-term leases.

Figures in € k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	**Dec. 31, 2021**
Rental commitments	559	216	25	**800**
Investment commitments for property, plant and equipment	58,887	324	–	**59,211**
Other commitments (incl. pending transactions)	540	–	–	**540**
Total financial commitments	**59,986**	**540**	**25**	**60,551**

Figures in € k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2020
Rental commitments	830	142	54	1,027
Investment commitments for property, plant and equipment	23,516	–	–	23,516
Other commitments (incl. pending transactions)	107	–	–	107
Total financial commitments	**24,478**	**142**	**54**	**24,674**

(38) 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 has been drawn up in accordance with IAS 7.

The cash flows are broken down according to 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 disposal of shares in a subsidiary takes place without a change in status, such transactions are disclosed as financing activities.

The conclusion of a lease agreement per IFRS 16 essentially constitutes a non-cash transaction. Payments made for investments in property, plant and equipment are netted against lease proceeds.

Cash and cash equivalents disclosed in the balance sheet include an amount as of December 31, 2021 of €2.2 million (previous year: €11.5 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 or outflows under cash flow from financing activities. In the previous year, the cash-effective changes amounted to €–9.3 million; in the year under review, they amounted to €23.3 million.

Figures in €k	**Jan. 1, 2021**	Cash-effective changes	Non-cash changes: Changes in consolida-tion scope	Transfers	Currency translation differences	Interest accrued	Other changes	**Dec. 31, 2021**
Bond liabilities	542,403	17,579	–	–	5,345	–	218	565,545
Bank liabilities	349,990	2,824	–	–	13,193	8,136	376	374,519
Lease liabilities	38,505	2,941	2	–	–733	99	795	41,609
Negative fair value of derivatives	764	–	–	–	–6	–	–758	–
Total financial liabilities	**931,661**	**23,344**	**2**	**–**	**17,799**	**8,235**	**630**	**981,672**

Figures in €k	Jan. 1, 2020	Cash-effective changes	Non-cash changes: Changes in consolida-tion scope	Transfers	Currency translation differences	Interest accrued	Other changes	Dec. 31, 2020
Bond liabilities	570,617	–16,352	–	–	–12,107	–	246	542,403
Bank liabilities	339,242	12,118	–	188	–24,981	23,277	145	349,990
Lease liabilities	45,491	–5,079	–616	–188	–1,834	392	339	38,505
Negative fair value of derivatives	316	–	–	–	–21	–	469	764
Total financial liabilities	**955,666**	**–9,314**	**–616**	**–**	**–38,943**	**23,669**	**1,198**	**931,661**

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 exploited. 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 marketable securities, as well as the EBITDA figure, this constitutes a dynamic indicator of indebtedness.

Figures in €k	**Dec. 31, 2021**	Dec. 31, 2020
– Cash and cash equivalents	**93,763**	73,745
+ Pension provisions	**973**	894
+ Bond liabilities	**565,545**	542,403
+ Bank liabilities	**374,519**	349,990
+ Lease liabilities	**41,609**	38,505
+ Negative fair value of derivatives	**–**	764
Net debt	**888,882**	**858,810**

With a net debt of €888.9 million (previous year: €858.8 million) and a reported EBITDA figure of € 197.5 million (previous year: €83.8 million), the net debt/EBITDA ratio for the year under review is 4.5 (previous year: 10.2), representing a significant improvement of 5.7 points. Our aim of improving this metric to below 5.0 has thus been achieved.

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 was one case of failure to comply with mandatory covenants in fiscal 2021. This has not led to any adjustments to credit terms or similar measures imposed by the lender. The case relates to typical financial ratios for loan agreements which a subsidiary failed to achieve.

Other disclosures

(39) 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.

Related parties are the sole shareholder and ultimate controlling party of PCC SE, Mr. Waldemar Preussner, as well as key management personnel (members of the Executive Board and Supervisory Board of PCC SE) and their family members. For compensation to Executive Board members, please refer to the disclosures under Note (41) Corporate bodies. For compensation of the Supervisory Board, again please refer to the disclosures under Note (41) Corporate bodies.

Sundry other receivables include a receivable from the sole shareholder of PCC SE amounting to €0.2 million (previous year: €0.2 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 reporting date, December 31, 2021, the PCC Group has claims against affiliated entities not included in the consolidated financial statements for reasons of immateriality amounting to a total of €3.0 million (previous year: €7.3 million). These relate to loans, accounts receivable and current loan receivables. The Group-internal financing arrangements carry interest rates ranging between 3.65 % p.a. and 10.0 % p.a.

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 entities or payables to related parties or entities.

Claims relating to loan receivables exist against the joint venture company OOO DME Aerosol amounting to €12.5 million as of the reporting date (previous year: €10.5 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. The two co-partners also granted financial resources for start-up financing and to cover initial debt servicing requirements.

Figures in €k	2021	2020
Sales transacted with related parties		
Non-consolidated entities	1,251	1,174
Joint ventures	118	301
Other related entities	800	–
Accounts receivables from related parties		
Non-consolidated entities	3,036	7,250
Joint ventures	15,620	13,187
Other related entities	3,825	3,822
Liabilities to related parties		
Non-consolidated entities	1,941	1,558
Joint ventures	4,770	2

(40) 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 business entities.

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 have been 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/financial result 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	2021	2020
Earnings before taxes (EBT)	91,728	−38,436
+/− Interest/financial result	−33,597	−49,723
= EBIT	**125,325**	11,287

EBITDA (Earnings before Interest/financial result, 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	2021	2020
EBIT	125,325	11,287
+/− Depreciation and amortization on property, plant and equipment, intangible assets and right-of-use assets	72,185	72,456
= EBITDA	**197,510**	**83,833**

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 (38) and the explanations concerning capital structure management contained therein.

Figures in €k	Dec. 31, 2021	Dec. 31, 2020
+ Equity	144,569	74,824
+ Current financial liabilities	154,069	119,628
+ Non-current financial liabilities	827,603	812,033
+ Provisions for pensions and similar obligations	973	894
= Capital employed	**1,127,214**	**1,007,379**
= Average capital employed	1,067,296	1,055,836

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.

Gross margin refers to gross profit as a ratio of sales.

Figures in € k	2021	2020
Sales revenue	979,615	716,809
+ Change in inventory of finished products and work in progress	29,696	–9,106
+ Other internal costs capitalized	8,796	8,910
– Purchased goods and services	662,174	500,141
= Gross profit	**355,934**	**216,472**

(41) Corporate bodies

At the Extraordinary General Meeting of PCC SE on August 10, 2021, a resolution was passed to amend the Articles of Association so as to provide for a new management structure comprising an Executive Board and a Supervisory Board. The new structure replaces the previous system consisting of an Administrative Board and Managing Directors. The two new bodies are strictly separate in terms of personnel. With this reorganization, PCC SE is preparing long-term for a generational change in its Group management while generally strengthening the governance structure of the company. The new arrangement further serves to strengthen our strategic focus on sustainable development as a key issue of the future. The amendment to the Articles of Association came into force on August 31, 2021, when it was entered in the Commercial Register.

The corporate bodies of PCC SE are as follows:

Executive Board (since August 31, 2021):
- Dr. Peter Wenzel, CEO; lead responsibilities: Business Development, Project Development, Sustainability
- Ulrike Warnecke; lead responsibilities: Finance, Human Resources, Public Relations
- Dr. rer. oec. (BY) Alfred Pelzer, lead responsibilities: Chemicals Production, Logistics, Sales

The members of the Executive Board and its predecessor Managing Directors received remunerations totaling € 2,344 k in fiscal 2021 (previous year: € 456 k) comprised of non-performance-related compensation of € 574 k and performance-related compensation of € 1,770 k, with the full amount being accounted for as short-term employee benefits.

Supervisory Board (since August 31, 2021):
- Dipl.-Volkswirt Waldemar Preussner, Chairman of the Supervisory Board
- Dr. Hans-Josef Ritzert, Vice Chairman of the Supervisory Board
- Reinhard Quint

The Supervisory Board and its predecessor Administrative Board received fixed, non-performance-related compensation totaling € 199 k in fiscal 2021 (previous year: € 145 k), the full amount being accounted for as short-term employee benefits.

Managing Directors (until August 30, 2021):
- Ulrike Warnecke; lead responsibilities: Finance, Human Resources, Public Relations
- Dr. rer. oec. (BY) Alfred Pelzer, lead responsibilities: Chemicals Production, Logistics, Sales

Administrative Board (until August 30, 2021):
- Dipl.-Volkswirt Waldemar Preussner, Chairman of the Administrative Board
- Dr. rer. oec. (BY) Alfred Pelzer, Vice Chairman of the Administrative Board
- Reinhard Quint

Dr. Alfred Pelzer received no separate compensation in his function as Vice Chairman of the Administrative Board.

Annual General Meeting:
The Annual General Meeting of PCC SE took place on May 25, 2021. The consolidated financial statements and the Group management report for 2020 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 2021.

(42) Events after the reporting date

The bond carrying the ISIN code DE000A2G9HY2 issued by PCC SE with a placed volume of € 9.6 million was redeemed in full as of February 1, 2022. It was issued on April 1, 2018 with a coupon of 3.0 % p.a.

The bond carrying the ISIN code DE000A14KJ43 issued by PCC SE with a placed volume of € 16.2 million was redeemed in full as of April 1, 2022. It was issued on May 1, 2015 with a coupon of 6.5 % p.a.

Effective April 7, 2022, PCC BakkiSilicon hf., Húsavík (Iceland), completed the restructuring of its financing and thus of all its financial liabilities. This had become necessary due to the pandemic-related downtime periods and the resultant change in the underlying economic conditions.

There is currently uncertainty with regard to the war in Ukraine and the resulting economic consequences. Political and regulatory measures may have a direct or indirect impact on the global economy and thus also on the business activities of the PCC Group. Close communications with our customers and suppliers in the region are currently enabling us to identify risks at an early stage and to act accordingly. The impact on business performance as a whole cannot be estimated with sufficient accuracy at present.

(43) Miscellaneous

The PCC Group and the individual German companies were audited by Grant Thornton AG Wirtschaftsprüfungsgesellschaft, Düsseldorf (formerly Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft) 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 € 244.0 k (previous year: € 233.0 k). No tax consultancy services or other services were rendered either in fiscal 2021 or in the previous year.

(44) Schedule of shareholdings in accordance with Section 313 (2) HGB

Name and head office of company	Segment	Currency	Exchange rate as of Dec. 31, 2021 1 euro =	Direct	Indirect	PCC SE participating interest in % 2021	2020
Parent company							
PCC SE, Duisburg	Holding/Projects	EUR	1.0000	–	–	**–**	–
Fully consolidated subsidiaries							
AO Novobalt Terminal, Kaliningrad	Specialty Chemicals	RUB	85.3004	–	100.00	**100.00**	100.00
Aqua Łososiowice Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00
CATCH66 GmbH, Duisburg	Holding/Projects	EUR	1.0000	100.00	–	**100.00**	100.00
ChemiPark Technologiczny Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00
distripark.com Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	50.00	50.00	**100.00**	100.00
Ekologistyka Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00
Elpis Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00
GRID BH d.o.o., Sarajevo	Energy	BAM	1.9558	–	85.62	**85.62**	85.62
LabMatic Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00
MCAA SE, Brzeg Dolny	Chlorine	PLN	4.5969	100.00	–	**100.00**	100.00
OOO PCC Consumer Products, Moscow	Consumer Products	RUB	85.3004	–	100.00	**100.00**	100.00
OOO PCC Consumer Products Navigator, Grodno	Consumer Products	BYN	2.8826	–	100.00	**100.00**	100.00
PCC Apakor Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	99.59	**99.59**	99.59
PCC Autochem Sp. z o.o., Brzeg Dolny	Logistics	PLN	4.5969	–	100.00	**100.00**	100.00
PCC BakkiSilicon hf., Húsavík	Holding/Projects	USD	1.1326	86.50	–	**86.50**	86.50
PCC BD Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**–**	–
PCC Bulgaria EOOD, Sofia	Polyols	BGN	1.9558	100.00	–	**100.00**	100.00
PCC Chemax, Inc., Piedmont, SC	Surfactants	USD	1.1326	–	100.00	**100.00**	100.00
PCC Chemicals GmbH, Duisburg	Holding/Projects	EUR	1.0000	100.00	–	**100.00**	100.00
PCC Consumer Products Kosmet Sp. z o.o., Brzeg Dolny	Consumer Products	PLN	4.5969	–	100.00	**100.00**	100.00
PCC Consumer Products S.A., Brzeg Dolny	Consumer Products	PLN	4.5969	100.00	–	**100.00**	100.00
PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle	Energy	PLN	4.5969	84.46	–	**84.46**	84.46
PCC EXOL Kimya Sanayi ve Ticaret Limited Şirketi, Istanbul	Surfactants	TRY	15.2335	–	100.00	**100.00**	100.00
PCC EXOL SA, Brzeg Dolny	Surfactants	PLN	4.5969	–	87.04	**87.04**	87.45
PCC HYDRO DOOEL Skopje, Skopje	Energy	MKD	61.6270	–	100.00	**100.00**	100.00
PCC Insulations GmbH, Duisburg	Polyols	EUR	1.0000	100.00	–	**100.00**	100.00
PCC Integrated Chemistries GmbH, Duisburg	Holding/Projects	EUR	1.0000	100.00	–	**100.00**	100.00
PCC Intermodal GmbH, Duisburg	Logistics	EUR	1.0000	–	100.00	**100.00**	100.00
PCC Intermodal SA, Gdynia	Logistics	PLN	4.5969	98.80	–	**98.80**	98.80
PCC IT S.A., Brzeg Dolny	Holding/Projects	PLN	4.5969	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	4.5969	58.46	40.42	**98.88**	98.88
PCC MORAVA-CHEM s.r.o., Český Těšín	Specialty Chemicals	CZK	24.8580	98.00	2.00	**100.00**	100.00
PCC NEW HYDRO DOOEL Skopje, Skopje	Energy	MKD	61.6270	–	100.00	**100.00**	100.00
PCC Packaging Sp. z o.o., Brzeg Dolny	Consumer Products	PLN	4.5969	–	–	**–**	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	4.5969	–	100.00	**100.00**	100.00
PCC PU Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.5969	–	100.00	**100.00**	100.00
PCC Renewables GmbH (formerly: PCC DEG Renewables GmbH), Duisburg	Energy	EUR	1.0000	100.00	–	**100.00**	60.00
PCC Rokita SA, Brzeg Dolny	Polyols, Chlorine, Specialty Chemicals, Energy, Holding/Projects	PLN	4.5969	–	84.17	**84.17**	84.17
PCC Seaview Residences ehf., Húsavík	Holding/Projects	ISK	147.6000	100.00	–	**100.00**	100.00
PCC Silicium S.A., Zagórze	Specialty Chemicals	PLN	4.5969	99.99	–	**99.99**	99.99
PCC Specialties GmbH, Oberhausen	Specialty Chemicals	EUR	1.0000	100.00	–	**100.00**	100.00
PCC Synteza S.A., Kędzierzyn-Koźle	Specialty Chemicals	PLN	4.5969	100.00	–	**100.00**	100.00
PCC Therm Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.5969	–	100.00	**100.00**	100.00
PCC Trade & Services GmbH, Duisburg	Specialty Chemicals	EUR	1.0000	100.00	–	**100.00**	100.00
PolyU GmbH, Oberhausen	Polyols	EUR	1.0000	100.00	–	**100.00**	100.00
S.C. Euro-Urethane S.R.L., Râmnicu Vâlcea	Specialty Chemicals	RON	4.9490	58.72	–	**58.72**	58.72
ZAO PCC Rail, Moscow	Logistics	RUB	85.3004	100.00	–	**100.00**	100.00

CONTINUED

				PCC SE participating interest in %					
Name and head office of company	Segment	Currency	Exchange rate as of Dec. 31, 2021 1 euro =	Direct	Indirect	2021	2020	Equity in local currency ('000)	Net result in local currency ('000)
Joint ventures accounted for using the equity method									
IRPC Polyol Company Ltd., Bangkok	Polyols	THB	37.6530	–	50.00	**50.00**	50.00	128,694.5	78,181.1
OOO DME Aerosol, Pervomaysky	Holding/Projects	RUB	85.3004	50.00	–	**50.00**	50.00	–801,175.1	–17,687.2
PCG PCC Oxyalkylates Sdn. Bhd. (formerly: PCC Oxyalkylates Malaysia Sdn. Bhd.), Kuala Lumpur	Holding/Projects	MYR	4.7184	50.00	–	**50.00**	50.00	137,662.0	–3,737.4
Subsidiaries not consolidated due to immateriality									
Abwicklungsgesellschaft TEC artec valves GmbH & Co. KG, Oranienburg	Holding/Projects	EUR	1.0000	–	–	**–**	68.85	–	–
BiznesPark Rokita Sp. z o.o. i.L., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	–	**–**	100.00	–	–
Chemia-Profex Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	66.8	10.6
Chemia-Serwis Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	106.3	18.9
Chemi-Plan S.A. i.L., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	–43.3	–21.2
CWB Partner Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	716.5	413.0
Fate Sp. z o.o. i.L., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	–64.2	0.0
Gaia Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	50.1	–12.8
GEKON S.A. i.L., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	–	**–**	100.00	–	–
Hebe Sp. z o.o. i.L., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	–134.8	–7.3
LabAnalityka Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	266.6	102.3
LocoChem Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	–25.2	8.4
Logoport Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	100.00	**100.00**	100.00	126.9	81.8
New Better Industry Sp. z o.o., Brzeg Dolny	Chlorine	PLN	4.5969	–	100.00	**100.00**	100.00	–46.7	0.0
Pack4Chem Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	–	**–**	100.00	–	–
PCC ABC Sp. z o.o., Brzeg Dolny	Polyols	PLN	4.5969	–	100.00	**100.00**	100.00	–33.5	–7.7
PCC Consumer Products Czechowice S.A. i.L., Czechowice-Dziedzice	Consumer Products	PLN	4.5969	–	99.74	**99.74**	99.74	–16,604.7	–2,733.4
PCC Exol Philippines Inc. i.L., Batangas	Surfactants	PHP	57.7630	–	99.99	**99.99**	99.99	unknown	unknown
PCC Organic Oils Ghana Ltd., Accra	Surfactants	GHS	6.8281	100.00	–	**100.00**	100.00	–30,026.7	–7,683.4
PCC Slovakia s.r.o. i.L., Košice	Specialty Chemicals	EUR	1.0000	–	–	**–**	100.00	–	–
Technochem Sp. z o.o., Brzeg Dolny	Holding/Projects	PLN	4.5969	–	85.80	**85.80**	85.80	–24.9	–9.1
TzOW Petro Carbo Chem, Lviv	Specialty Chemicals	UAH	30.9226	92.32	–	**92.32**	92.32	8,508.0	61.1
Vâlcea Chemicals S.R.L. i.L., Bucharest	Specialty Chemicals	RON	4.9490	–	–	**–**	100.00	–	–
ZAO Exol, Nizhny Novgorod	Surfactants	RUB	85.3004	100.00	–	**100.00**	100.00	–3,885.4	593.1
Associated companies not accounted for using the equity method due to immateriality									
S.C. Oltchim S.A. i.L., Râmnicu Vâlcea	Holding/Projects	RON	4.9490	32.34	–	**32.34**	32.34	unknown	unknown
Other investments in corporations									
Brama Pomorza Sp. z o.o., Gdańsk	Holding/Projects	PLN	4.5969	7.41	–	**7.41**	7.41	–1,034.8	–747.0
TRANSGAZ S.A., Rybnik	Holding/Projects	PLN	4.5969	9.64	–	**9.64**	9.64	unknown	unknown

Duisburg, April 28, 2022
PCC SE

Executive Board

Dr. Peter Wenzel

Ulrike Warnecke

Dr. rer. oec. (BY) Alfred Pelzer

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 2021, the consolidated statement of income, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the financial year from 1 January 2021 to 31 December 2021, 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 2021 to 31 December 2021. 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 2021 and of its financial performance for the financial year from 1 January 2021 to 31 December 2021, 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 executive directors respectively the chairman of the supervisory board 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.

The chairman of the supervisory board is responsible for the foreword by the chairman of the supervisory board contained in the annual report. Save as aforesaid, the executive directors are responsible for the other information.

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 doing so, 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 Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to 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 executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to 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 executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Düsseldorf, April 29, 2022

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Stefan Sinne	Marianne Reck
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

Credits / Legal

Published by
PCC SE
Moerser Strasse 149
47198 Duisburg
Germany

Contact
Public Relations
Phone +49 (0)2066 2019-35
Fax +49 (0)2066 2019-72
pr@pcc.eu
www.pcc.eu

Concept
Susanne Biskamp, PCC SE

Design / Realization
Kaiserberg – Agentur für Markenkommunikation GmbH, Duisburg, Germany

Translation
Paul Knighton, Cambridge, United Kingdom

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This annual report is available in its original German version and as a convenience translation in English.

Both versions can be downloaded from www.pcc.eu.

PCC SE
Duisburg, May 2022

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.