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# LETTER FROM THE MANAGEMENT BOARD

Dear Investors,

This has been a year full of challenges for PCC EXOL; however, despite this, it has been a very good year. We achieved the highest financial and sales results in our history. It was another record-breaking year for us. Compared with the previous year, we doubled our profits, and revenues exceeded our first billion. These results are even more satisfying because they were achieved in the most macroeconomically difficult period of recent years.



The consolidated net profit achieved a high level of almost PLN 120 million, which is an increase of 106% from the previous year. The consolidated EBITDA profit reached a record level of over PLN 176 million, which constitutes a 95% increase compared with 2021. The gross margin on sales was almost 22%.

We owe these great results to the very high demand for products made by the Company. At the same time, last year the market recorded lower supply from Western European producers. The situation of a large supply-demand imbalance and a significant increase in the prices of raw materials – mainly oleochemicals – resulted in an increase in the prices of surfactants. The increases continued until the end of the third quarter. Importantly, in 2022, we recorded the largest increase in export sales in Western Europe. However, a change has been observed in the market since the fourth quarter of 2022. There was a slowdown in the demand for surfactants and a significant increase in their supply and with it the beginning of a decline in the prices of these products. The above situation may persist in subsequent periods.


The increase in 2022 sales in the group of products for industrial applications is the result of investments made in previous years. We are talking about the oxyalkylates installation, the installation for the production of phosphate esters, and the modernised installation for the production of surfactants from the sulphated products group.

The implementation of these investment projects enabled the development of sales of specialty products

for use in the construction industry, household and professional detergents, and lubricants. The level of sales revenues for this product group increased by almost half compared with the previous year, exceeding PLN 450 million. We also recorded very good results in the group of products for use in cosmetics and detergents, increasing revenues by over 60% and closing at a level of almost PLN 538 million. The results were mainly influenced by the increase in surfactant prices on the global market, including the market of detergents and cosmetics. In addition, we noted a significant increase in sales of low-foaming surfactants for dishwasher detergents, as well as an increase in sales of mild surfactants of natural origin intended for cosmetics.

In addition to sales successes, we effectively implement planned investment projects. The launch of a reactor for the production of phosphate esters in Brzeg Dolny in the middle of last year significantly contributed to the development of this promising product group.

In Plock, in 2022, we commissioned a warehouse base for the local Ethoxylates Plant. At the same time, sales needs contributed to the decision to expand this plant to include a second technological line.



Currently, following the design stage, executive works are in progress. The project is to significantly increase the volume of the products offered

and expand the Company's product portfolio in the area of ethoxylates with a wide range of applications. After it is completed, the planned potential average annual production capacity of the plant in Plock will double and be at a level of approximately 80,000 tonnes, depending on the range produced.

At the same time, the Group is involved in an investment project being run in Brzeg Dolny by affiliated company PCC BD Sp. z o.o., whose shareholders are PCC EXOL and PCC Rokita – each with 50% of shares. As part of this investment, a new universal plant is being built, which is to enable the production of a wide range of products, including ethoxylates and polyether polyols.

The project is currently at the stage of designing individual elements of the installation, and the first construction works are in progress at the same time. At the current stage of work, not all design aspects have been determined yet. Given the unstable macroeconomic environment, we are analysing potential scenarios in various hypothetical cost variants. All of these circumstances are leading us to believe that the final investment costs will be higher than initial estimates. Despite this, the project is currently being implemented as per schedule. However, it cannot be ruled out that circumstances may

arise that may potentially affect the modification of the schedule as well as the scope of

Currently, the Company does not expect known conditions to prevent the implementation of the investment.

On the commodities market, in recent years, the world has faced various challenges for the global supply chain, which were further amplified last year by the war in Ukraine. This resulted in significant cost volatility, which we managed by operating on the basis of a proven business model. We are trying to move away from low-margin products in favour of innovative product solutions.

Our business strategy works, which is confirmed by the results we achieve. We invest in production capacity, develop high-margin products, and undertake activities leading to geographical diversification. This allows us to mitigate the impacts associated with economic slowdown and market uncertainty.

We would like to thank our Investors, Clients and Employees for the past period. We invite you to read the full report.

**Rafał Zdon**

Vice-President of the  
Management Board

**Dariusz Ciesielski**

President of the  
Management Board




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# OPERATIONS IN 2022

The past year was another record-breaking period in the history of the PCC EXOL Group, despite the many challenges that occurred on the market. The group achieved record results in terms of both the level of sales and the generated results.

The increase in revenues was due to rising prices on the chemical market and increased sales volume, which rose by over 600 tonnes compared with 2021.



In 2022, the Group achieved record results, which was due to the high demand for products manufactured by the Company with the simultaneous reduced supply from Western European producers. The large discrepancy between demand and supply resulted in an increase in sales prices, which lasted until the end of the third quarter of 2022.

Last year, the development of the Company continued through investments that created the potential for both increasing production capacity and expanding the product portfolio. The PCC EXOL Group constantly implements measures aimed at caring for the environment and people. Thanks to, among others, the use of new technologies, some of the products manufactured at the new installation in Brzeg Dolny may be characterised by lower emissions of volatile organic compounds, a shorter and low-waste production process, and a lower carbon footprint.

The consolidated net profit for 2022 reached PLN 119.6 million and was higher by PLN 61.6 million compared with the net profit 2021. EBITDA was at PLN 176.4 million, which is an increase of 94.5% compared with the previous year's result. Sales revenues rose by 46.3% compared with the previous year. The Group is developing its presence in the countries of Western Europe, where in 2022 it generated almost 23% of its sales revenues, while on the Polish market approximately 53%.

The PCC EXOL Group achieved very good sales and financial results despite the persisting difficult situation on the raw materials market, in particular, in the first half of last year. There were two clear factors that impacted the entire chemicals sector. The first was strongly increasing prices of basic raw materials, such as natural gas, kerosene and its basic derivatives – ethylene, ethylene oxide and propylene – and a whole range of oleochemical raw materials, such as palm kernel oil, alcohols and fatty acids. The second factor was rising energy prices, which were also related to natural gas prices, which in turn caused significant increases in the prices of basic chemicals. The limited availability of many chemical raw materials continued but on a smaller scale than in 2021. As a result, the prices of almost all product groups rose. Despite the negative conditions, the Company maintained production and supply continuity in 2022, increasing both the value and volume of sales. The first three quarters of 2022 were particularly favourable for the PCC EXOL Group.



However, there has been a significant increase in supply and a weakening of demand since the last quarter. Most European producers have already gone through problems involving interruptions in their supply chains. Moreover, the drop in sea freight prices from Asia resulted in a significant increase in the import of chemicals, including surfactants, from China and India to the European market. These factors contribute to the increased supply of surfactants on the European market, and as a result, to the decrease in their prices. This may continue in subsequent quarters of 2023.

Similarly to previous years, the Group continued its customer portfolio, product and sales market diversification strategy. As a result of these measures, the Group recorded the sale of almost 700 diversified products to over 1,100 active customers in almost all continents.

In addition, PCC EXOL recently executed a series of investment projects at the industrial park in Brzeg Dolny and Plock. Intensively implemented projects not only increase production capacity but also take into account environmental issues.

Good practices are being introduced in the area of efficient planning of production processes and using modern technologies. Following the trend of sustainable chemistry, the Company regularly expands its offer to include surfactants belonging to the dynamically developing PCC GREENLINE® group. The rich and diverse portfolio of products in this series improves the Company's market position in the category of sustainable production. Importantly, thanks to RES, the electricity used in the manufacturing processes of PCC GREENLINE® products is entirely green.

In the past year, there were many unexpected external factors in the form of high transport prices (including sea freight), problems in the supply chains of many raw materials and rising prices in this area, very high energy prices, and unfavourable geopolitical conditions resulting from the outbreak of war in Ukraine. However, the Company managed to limit the negative impact of these factors on its operations.

## Industrial applications

As regards products for industrial applications, in 2022, the Group realised higher sales in terms of volume by 42.6% compared with 2021, achieving revenues of PLN 452.1 million in this surfactant group. At the same time, we achieved a similar sales volume compared with 2021, i.e. 33,600 tonnes.

Due to the lack of continuity in the supply chains, many of the Company's competitors located mainly in Western Europe had problems with maintaining the continuity of supplies. This situation had a positive impact and increased the interest of clients in the Company's offer. This translated into a considerable increase in revenues from the sale of products for industrial applications compared with the previous year.

A significant and positive factor that helped achieve such good results was the continuation of production at installations commissioned in 2021 and 2022, i.e. the oxyalkylates installation intended for the production of specialty non-ionic

surfactants and the modernised installation for the production of surfactants from the sulphated products group. The completion of these investments enabled the development of sales of specialty, high-margin products for applications such as the construction industry, household and professional detergents, as well as lubricants.

Surfactants from the family of phosphate esters are a strongly developing product group. In the first half of 2022, PCC EXOL also carried out a technological start-up and commenced production at a new installation dedicated to phosphate esters. This allows for a further increase in sales and thus will affect the ability to service new sales markets. One of the goals of the Group's geographical development is to increase sales of phosphate esters on the US market through the US subsidiary PCC Chemax. Last year, we expanded our regular offer to include six new phosphate esters, intended mainly for metalworking applications and as additives to paints and varnishes.

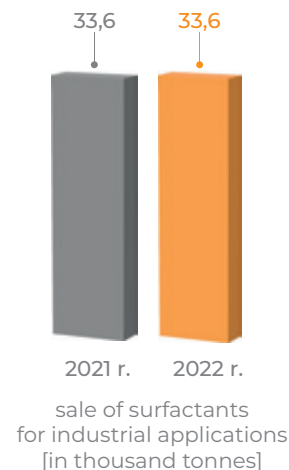
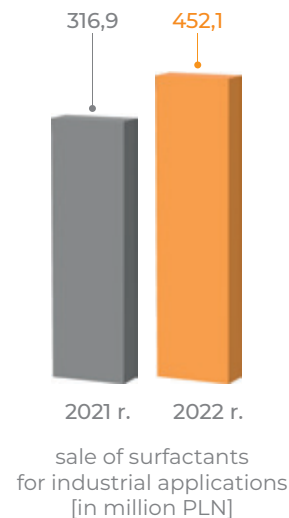
The Company also developed the first non-silicone defoamer in the form of an emulsion.

The next product the Company has brought to the market is a new additive for paints, varnishes

and pigment concentrates based on organic solvents. A second anti-corrosion additive for use in water-soluble anti-corrosion paints has also been launched. The next product is an agent designed for the oil industry.

PCC EXOL also develops products with anti-foaming properties. The new product from this group that has been launched is used in many industries, such as food, paper, printing and metal processing. The Group has also developed and implemented new agents for the agrochemicals industry, and a new foaming agent for firefighting.

One of the most important launches in 2022 was the production-scale introduction of another surfactant used as an air-entraining agent for the construction industry. The Company intends to intensify work on this application in subsequent quarters.



## **Cosmetic and detergent applications**

In the area of surfactants for cosmetics and detergent applications, in 2022 the Group reported an increase in the value of sales of PLN 201.9 million compared with the previous year, achieving revenues of PLN 537.6 million. In terms of value, these are historically record sales. It is important to mention that the Group has generated revenues that are over 60% higher at similar volumes.

As in the case of industrial applications, the best period for cosmetic and detergent applications last year was the first three quarters. In the fourth quarter, we were faced with sharply falling demand on the detergents market, which was mainly due to the reduction of inventories by manufacturers, and much better supply.

The sales results were mainly affected by the limited availability of surfactants on the European market and a significant increase in the prices of raw materials, mainly oleochemicals, until mid-2022.

These two factors caused an increase in surfactant prices on the global market, including the market of detergents and cosmetics. Other factors include continued significant growth in sales of low-foaming surfactants used as dishwasher detergents, as well as an increase in sales of mild surfactants of natural origin intended for cosmetics.

PCC EXOL continually expands its offers of products used in cosmetics.

In 2022, the Company launched a new type of surfactant from the betaine group with better thickening properties compared with standard products. Following market trends, PCC EXOL is invariably expanding the group of anionic surfactants of natural origin that have a mild effect on the skin. The new product can be used in rinse-off cosmetics for the body and hair as an ingredient in shampoos, bath gels and liquid soaps. In addition, it is used in hair sprays, hair-strengthening products, as well as colouring shampoos, where it reduces hair darkening after dyeing. The product is also recommended for washing agents and

household chemicals. Its mild effect on the skin makes it ideal for use in dishwashing liquids and hand-washing detergents.

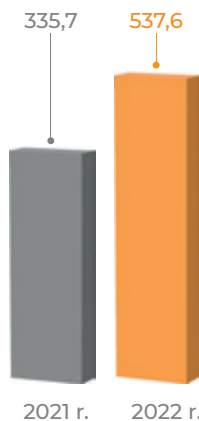
An important factor for this product group was the launch of another low-foaming surfactant intended for detergent applications – mainly dishwasher detergents.

For several years, the Company has focused its attention on this application, which is one of the

most intensively developing market segments, and it regularly expands its offer to include new products tailored to the needs of clients.

Other products launched by the Company are two non-ionic surfactants that are a component of body and hair wash and care products, such as shampoos, conditioners, balms, shower gels, hair styling and colouring products, face moisturisers, sunscreens and anti-wrinkle creams.

The year 2022 also saw continued development of the sale of products for pharmaceutical applications. In this area, the Company is becoming a noticeable partner on the Polish and European markets. This sector is still in its early stages and includes further product development for this market sector. In 2022, in the field of pharmaceutical applications, the Company increased sales revenues by almost 50% compared with 2021.



sale of surfactants for cosmetic and detergent applications [in million PLN]




sale of surfactants for cosmetic and detergent applications [in thousand tonnes]



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# RESEARCH AND DEVELOPMENT

In 2022, the most important directions of our activities were to strengthen the market position by protecting innovative technologies, continuing the strategy of expanding the portfolio with new, highly specialised products, and contributing to improving the effectiveness and efficiency of processes carried out on production lines of various branches of industry.



An important area of PCC EXOL's activity is the design of new products at its own research and development laboratories. The main goals are the development and launching of new products, significant improvement of the quality of currently manufactured products, as well as optimisation of production processes aimed at reducing emissions and saving raw materials and energy. The research team consists of specialists and experts in chemistry, supported by laboratory and other technicians. It employs 45 people, including six with a PhD. The department has professionally equipped laboratories and systematically invests in specialist apparatus enabling the Company's product development.

**In 2022, the most important course of action was to strengthen PCC EXOL's market position by protecting innovative technologies developed by the R&D department.**

In the last 12 months, five patent applications were submitted to the Patent Office, and another five are being prepared. Also, acting in a con-

sortium with PCC MCAA Sp. z o.o., the Company obtained a decision from the Patent Office of the Republic of Poland for the right of the owner of the technical solution to six inventions in the area of polymer surfactants with plasticizing properties.

In addition, last year the Company continued its strategy of expanding its portfolio to include new, highly specialised products. The functional surfactant additives developed in laboratories combined with expert technical advice contribute to improving the effectiveness and efficiency of processes carried out on the production lines of various industrial branches of target clients.

The year 2022 saw intensive development of new products for the paint and varnish industry, emulsion polymerization, and printing. New agents were launched facilitating the distribution of pigments and anti-corrosion additives for pro-environmental, water-soluble paint products, whose function is to protect against corrosion. Other products brought to market include components for the synthesis of emission-free UV varnishes used in printing, for example, labels and promo-

tional leaflets, catalogues, covers, calendars and exclusive printed paper bags, which have been popular in recent years.

At the same time, research work commenced expanding the range of products used for the production of specialised polyurea coatings, otherwise known as insulating membranes, which are characterised by high resistance to all kinds of structure loads, chemical factors, and mechanical damage. These specialised coatings are designed to protect against moisture, light, mechanical damage, and corrosion of concrete, steel and wooden surfaces. In the construction industry, polyurea coatings are used for waterproofing foundation slabs, floors, terraces, swimming pools, roofs and pipes.

In 2022, the construction industry was also supported by further new products, which are used, for example, as functional additives to aluminium pastes used in the production of concrete, and foaming agents for the production of drywall. Furthermore, the Company intends to intensively develop xPEG series products, used in large quantities as raw materials for the synthesis of new



generation concrete superplasticizers. Their use reduces the consumption of mixing water, translating directly into increasing the strength of concrete, which in turn makes it more airtight. In addition, its resistance to aggressive substances and frost as well as abrasion resistance is increased.

In 2022, work on products for the lubricating greases and lubricants industry focused primarily on expanding the range of products from the EXOfos series, i.e. anionic products belonging to the phosphate esters group. They are characterised by specific properties aimed at counteracting seizing and reducing the wear of equipment operating in an atmosphere of high process pressures. We have also developed products based on neutralised phosphate esters, the function of which is to prevent the corrosion of metals such as steel, copper and aluminium.

In 2022, we placed a very strong emphasis on activities aimed at protecting the natural environment and human health. In the chemical industry, the directions for achieving these goals must always be multi-dimensional. That is why at PCC EXOL we optimise synthetic processes with an

emphasis on creating low-emission technologies, increasing the use of raw materials with a mild impact on humans and the natural environment from the green and bio lines, and using renewable energy sources for electricity production. The carbon footprint of the organisation and production processes of the Company is being verified. As a result, several new improvements were introduced last year, allowing PCC EXOL to find innovative solutions in line with the principles of sustainable development.

These activities follow the general European trend in this respect. Our fulfilment of client expectations is confirmed by appropriate certificates and statements ensuring the „green” properties of the final product.

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# INVESTMENT

In 2022, the PCC EXOL Group implemented both development- and modernisation-related investment projects.

In July 2022, the expansion of the Ethoxylates II plant in Płock was completed in terms of expanding the warehouse base.

At the same time, following the stage of designing the individual elements of the installation, an investment in the construction of the second technological line of the Ethoxylates II plant in Płock is underway. It is aimed at significantly increasing the volume of offered products and expanding the Company's product portfolio. The production planned by PCC EXOL will cover non-ionic surfactants (ethoxylates) with a broad spectrum of applications, including in the production of cosmetics, cleaning agents, paints and coatings, lubricants, and in the following industries: personal care, textiles, metalworking, plant protection products and pharmaceuticals. The expected completion date is 2024. After the completion of the second technological line, the planned potential average annual production capacity of the Plant in Płock will double and be at a level of approximately 80,000 tonnes, depending on the range produced.

At the same time, the technological start-up of the reactor for the production of phosphate esters was completed. This project allowed to increase the production capacity to 2,000 tonnes. It enables the production of a very wide range of products used in the metalworking industry as well as in the industrial and institutional cleaning sectors. At the same

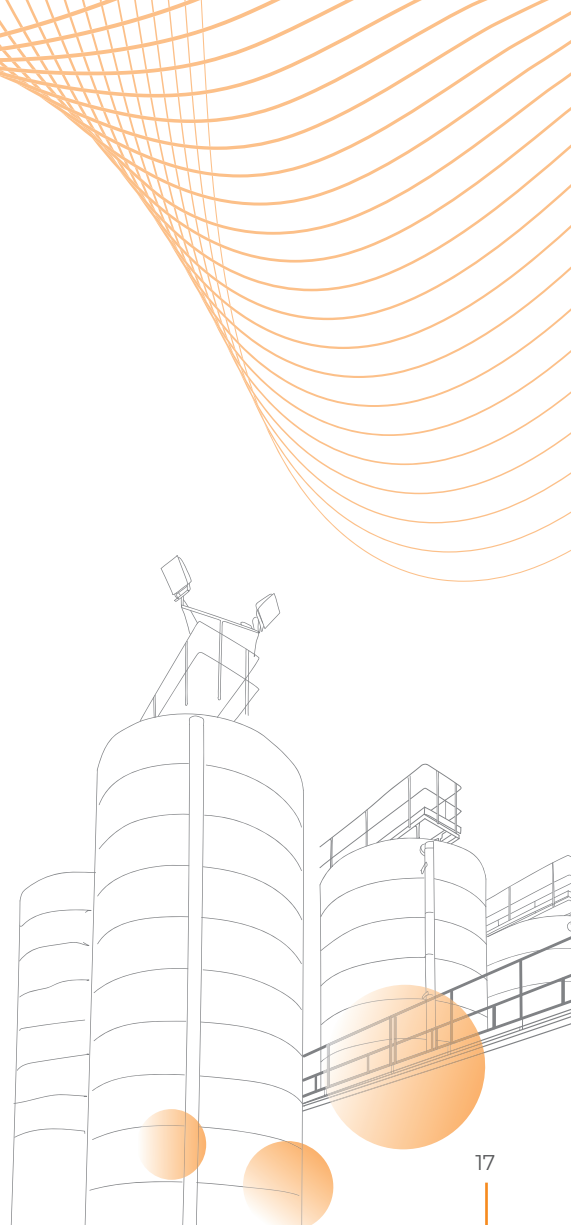
time, preparations have commenced for an investment project

in the field of a second reactor for the production of phosphate esters, which will further increase the production capacity for this product group.

Design work is continuing on the construction of a filtration station that will enable an increase in the use of the potential of the oxyalkylate installation.

In 2022, PCC BD, whose partners are PCC Rokita and PCC EXOL, which both hold 50% of shares, focused on preparatory works for the investment project to build a new, universal plant for the production of alkoxylates and other chemical compounds in Brzeg Dolny, including polyether polyols. The new installation is designed to produce a wide range of, among other things, ethoxylates and polyether polyols, which can be widely used in numerous sectors. Some of the products from this installation may be characterised by lower emissions of volatile organic compounds, a shorter and low-waste production process, and a lower carbon footprint.

When making the investment decision in December 2021, circumstances such as the war in Ukraine,



the energy crisis, and the rapidly deteriorating competitiveness of European producers against producers from Asia and North America had not yet taken place. Analyses are being carried out of available information, and every effort is being made to – as the situation evolves – minimise insofar as possible their risk on the investment project.

The project is currently at the stage of designing individual elements of the installation, and the first construction works are in progress at the same time. Tanks for raw materials and process equipment have already been partly ordered. A basic design is also currently being prepared. The detailed design will not exist until this is completed. At the current stage of work, not all design aspects have been determined yet. This is also important in terms of difficulties in the current estimation of investment costs. Given the unstable macroeconomic environment, we are analysing potential scenarios in various hypothetical cost variants. All of these circumstances are leading us to believe that the final investment costs will be higher than initial estimates.

Despite this, the project is currently being imple-

mented as per schedule. However, it cannot be ruled out that circumstances may arise that may potentially affect the modification of the schedule as well as the scope of the project or production volumes. At present, the Company does not expect currently known conditions to prevent the implementation of the investment.

However, the actual level of increase in investment costs remains a huge unknown. Inconsistent information coming from the market and from suppliers regarding the possible prices of materials and services purchased as part of the implementation of the investment project makes it impossible to estimate at this stage how much these costs will increase. According to generally available information, the situation on the market of materials and services (including construction) is causing volatility in prices, which are mostly rising. The increases concern the prices of semi-finished products, construction materials, components, machinery and equipment, and as a result increase the costs of building installations necessary for the implementation of the investment. Some purchases related to the project will be made in a currency other than PLN, which further increases the uncertainty of possible estimates. At

the same time, it cannot be ruled out that after a period of dynamic increases in the prices of materials and services, this trend may slow down in the coming years.

In addition, the project is very complex, which affects, among other things, the way in which it is implemented. Like most investments in the PCC Group, this project is also carried out without the participation of a general contractor, with the involvement of internal specialised services.

A more detailed calculation of the estimated value of the investment will not be possible until further stages of the investment, including, among others, on the basis of detailed design documentation and final decisions regarding the scope of the investment.

The total outlays incurred by the Group in 2022 on the investment were

**PLN 34.5 milion**





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# **SUSTAINABLE CHEMISTRY AT PCC EXOL**

PCC EXOL focuses its actions on sustainable production and consumption. The Company focuses strongly on aspects such as, for example, green energy from renewable sources, designing new products with a view to their biodegradability, and the use of raw materials of natural origin.





It is worth noting that the electricity used for production at PCC EXOL is fully covered by guarantees of origin for electricity generated from renewable energy sources. Guarantees of origin enable the recipient to confirm care for the environment and that the energy introduced into the distribution network in the amount indicated in these guarantees comes from renewable energy sources.

In addition, PCC EXOL offers clients a range of sustainable products that have been created following the principles of green chemistry and are the answer to the needs of many companies operating in various industrial sectors. They have been produced based on raw materials of natural origin and hold the RSPO MB certificate.

Sales of the above-mentioned products generated by the Company in 2022 in quantitative terms was at 63,600 tonnes, which is almost 67.2% of PCC EXOL's sales volume, while in terms of value, it was at PLN 561.6 million, i.e. almost 65.4% of the Company's product sales revenues.

These are mostly basic raw materials and additives for cosmetics, household chemicals and professional chemicals for industrial applications.

The Company offers clients products with diverse features, which mainly include natural raw material composition and a high index of natural origin, high degree of biodegradability, low content of volatile organic compounds, no parabens, alkylphe-

nols and solvents, no animal testing, no allergens, and many more. The Company offers hypo-allergenic products and alternatives to SLES/SLS surfactants.

The products offered by the Company can be successfully used as ingredients for vegan and vegetarian products. They also meet halal requirements, and in many cases hold kosher certification.



## Green chemistry on the product platform of the PCC Group

The broad range of over 1,300 published products and industrial formulations of the PCC Group's companies covers raw materials, specialty additives, industrial formulations and ready products used by manufacturers and distributors representing 32 different sectors.

In addition to raw materials and additives to cosmetics and detergents, on the product platform of the PCC Group users interested in the chemical sector will find specialty chemical raw materials used, among other things, in the textile, metallurgical, energy, construction, furniture, automotive, food and pharmaceutical industries.

The Product Portal generates over 400,000 visits per month, and its search engine gives us access to information about products and formulations intended for tens of sectors. The PCC Group is seeing a significant increase in searches for products via the Product Portal. The PCC Group's Product Portal is recognised by industry circles as one of the best and most user-friendly chemical product search engines and the PCC Group's full product

offer is presented in 16 languages – in addition to European languages, also in Thai, Malay and Korean.

Currently, the Product Portal is also being expanded to include new, multimedia tools presenting the PCC Group's offer for the cosmetics and auto-care industries. The cosmetics showroom presents a whole range of proposals for cosmetic formulations based on surfactants produced at PCC EXOL installations. This tool is dedicated to cosmetics producers mainly from the group of personal hygiene products. It presents selected proposals of cosmetic formulations containing raw materials produced in the PCC Group. The showroom for the auto-care industry functions in a similar way. It shows examples of preparations for washing and looking after vehicles, for the production of which raw materials from the PCC EXOL offer can be used.

A detailed description of all products is available at the Product Portal:  
[www.products.pcc.eu](http://www.products.pcc.eu).



## Certified surfactants

PCC EXOL is an active participant in the market of certified products covered by specific standards, certificates and approvals, depending on the sectors and applications for which they are intended. Holding a recommendation in the form of meeting the requirements of standards for certificates or approvals shortens the qualification process of the Company as a supplier, and means that the Company is perceived as a credible and reliable organisation implementing a strategy of sustainable production and consumption.

The Company's group of products intended for the cosmetics industry holds the European Ecocert Cosmetics, Ecocert Cosmos and Ecocert Detergents ecolabel for detergent products. PCC EXOL also offers products that meet very stringent criteria for the Ecolabel and Nordic Swan certifications.

It is worth noting that PCC EXOL is the first and only company in Poland to implement and certify the Good Manufacturing Practices system in line with the guidelines of the European Federation for Cosmetic Ingredients (GMP EFfCI).

The Company undergoes an external audit every year. It also carries out a number of internal audits that allow for improvement in the area of implementation and maintenance of GMP (Good Manufacturing Practices) standards.

An important verification standard for products provided for the food industry is the kosher certificate. Only products made of the right raw materials under strictly defined and controlled conditions in accordance with kosher requirements can obtain it.

Another commercially important certification system that the Company has implemented is RSPO in the MB (Mass Balance) model. This allows the Company to sell surfactants that it produces based on natural fatty alcohols. The recipients of these types of products are mainly global producers operating in the cosmetics and food industries.

PCC EXOL is also successfully expanding its commercial range to include products designed for the pharmaceutical industry. Irrespective of the application, all of these products must meet very high quality standards defined by the so-called pharmacopoeia, which is an official list of medications

admitted to trading in a given country or territory containing the applicable norms for their composition, dosing, preparation and storage, as well as methods for testing their quality.

It is worth noting that PCC EXOL is currently realising subsequent implementation projects, which will result in the dynamic development of the green offer of surfactants for various industrial sectors.



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