BETOLAR

Safeguarding climate and natural resources

Annual Review 2022

Content

Key events in 2022

1

Betolar's first commercial Geoprime agreements with the Finnish company JA-KO Betoni, the Danish company IBF and the Belgian company Tubobel were signed.

2

Investigation on the utilisation of slag from the steel industry that is purified from vanadium started together with Australian Critical Metals and its two Nordic subsidiaries RISAB and the Vanadium Recovery Project.

3

A commercial Geoprime agreement was signed with the German FC Nüdling Group (FCN).

Ecofurn launched the low-carbon EcoRocky concrete products and lightweight infrastructure products.

4

Betolar was awarded as a pioneer of the circular economy in the Helsinki Stock Exchange.

Betolar participated in the delegation of the Ministry of Economic Affairs and Employment of Finland to promote sustainable development cooperation in Indonesia.

5

First commercial Geoprime agreement was signed in Vietnam.

Betolar was awarded a new patent that strengthens Betolar's ability to process waste materials from the mining industry into binders.

6

First commercial Geoprime agreements were signed in India.

7

Betolar and Consolis Parma announced cooperation to test low-carbon concrete in hollow-core slab production.

Silo AI partnered with Betolar to develop an AI-based platform solution for the green construction industry.

8

The Danish company IBF started supplying Geoprime sewerage pipes to its customers.

Betolar featured prominently in Europe's leading landscaping trade fair GaLaBau in Germany and introduced the Geoprime paving stones together with FCN.

9

Betolar launched low-carbon Geoprime products for the Indian market at the World of Concrete event in Mumbai.

10

Betolar decided to invest in a significant expansion of its Innovation Centre in Kannonkoski.

11

Betolar adopted IFRS reporting.

12

+8 commercial Geoprime customers in Europe and Asia

+25 new pilot customers

5 granted patents and several in progress

51 employees in 2022, on average

14 different nationalities in Betolar

CEO'S REVIEW

Strategic focus on resource allocation

The first year on the stock market is behind us. We have launched business operations and promoted product development to meet the promises we made during the Initial Public Offering. It is not necessary to update our long-term financial objectives, but we are making strategic choices to ensure business growth. Various challenges will arise and we will learn new things. That is the reality of a pioneer.

In a developing growth company, things progress rapidly. This requires that the resources received from investors are used wisely. During Betolar's first year on the stock market, various markets have been tested commercially and the product portfolio has been refined based on research. At the same time, the company's structure has been developed and the responsibility areas have been updated.

I started as the CEO of Betolar at the beginning of November last year, taking the lead after Matti Löppönen, who was responsible for the company's operations at the early stage and for the initial listing. We streamlined the composition of the Management Team and strengthened it with international top experts. We have utilised Betolar's attractiveness in recruiting top experts for key functions.

Last year, we made moves in new markets in our home country, elsewhere in Europe and Asia. In our ongoing strategy work, we use the market and product development data which we have collected to focus our business operations in terms of the product and service offering as well as geographic markets. With the new recruitments, our operations will expand in Asia, where our key growth markets are located.

Betolar's roots and home are in Kannonkoski in Central Finland. At the Kannonkoski Innovation Centre, we advance the materials technology. The aim is to design future solutions into patentable and commercialised products. In November, we announced investments for the expansion of the Innovation Centre. With the opening of the Espoo office, our operations will be integrated into the Otaniemi technology ecosystem.

> "In our strategy work, we focus our business operations in terms of the product and service offering as well as geographic markets."

Challenges in the construction industry are intensifying

Green building plays a key role in our search for effective and efficient solutions to mitigate global warming. The construction product industry continues to face three key sustainable development challenges globally: carbon dioxide emissions from cement, untapped industrial side streams and the limited availability of virgin raw materials.

Regulations are becoming stricter and the need to accelerate the commercialisation of solutions is growing. So we are on the right track, as Betolar's business is based on introducing solutions to precisely these problems.

Last year, we started introducing solutions for lighter-regulated concrete products. We are now moving forward in developing more demanding products, of which the cooperation projects with the international concrete manufacturer Consolis Parma and Lujabetoni serve as an example. The aim of the cooperation is to use our technology to produce hollow-core slabs and wall elements made of low-carbon concrete for the market.

Patents for solutions in the mining sector are also being commercialised. Mines use a lot of cement in their different fills and reservoirs. The mining industry also produces a significant amount of side streams that could be upcycled with our technology.

The operating environment needs Betolar's solutions

The objectives related to the green transition and carbon neutrality in the construction sector as well as increasing sustainability regulation will increase the demand for low-carbon building materials rapidly. Every concrete manufacturer who wants to stay competitive is searching for greener concrete solutions.

We strive to meet this need and be an expert partner in hard skills. The more than 200 technical pilot projects carried out by Betolar last year and the market feedback show that the construction industry is ready to rapidly adopt green solutions.

Rising energy prices worldwide and challenges in supply chains are driving up the price of traditional cement. As a result, the price of blast furnace slag, which is commonly used to partially replace cement, has also increased with the price fluctuation of cement. The energy crisis and Russia's invasion of Ukraine have also temporarily increased the prices of chemicals used as activators. However, the situation is expected to improve in the longer term.

> The green transition and increasing sustainability regulation increases the demand for low-carbon building materials rapidly.

In the future, we will strive to produce binders from side streams that are not dependent on the development of the world market price, such as blast furnace slag. A good example of this is the cooperation launched with Critical Metals last year, which aims to utilise slag purified of vanadium.

However, the use of new side streams requires a multi-stage research and approval process. They will take their time, but when completed, they will increase Betolar's technological lead.

A technology company attracts the interest of investors

For investors, Betolar is an interesting target, as we are not a traditional concrete operator, but a technology company. We invest in research and product development, with which we change the processes of a traditional, enormous industrial sector extensively without large investments from us or from our customers.

In addition to material research, we are developing an artificial intelligence platform that the Finnish Climate Fund has funded in order to promote its climate goals. The platform will serve the ecosystem of the concrete industry and side streams globally.

We have a strong and growing patent portfolio, which in itself carries a lot of value. I encourage investors interested in growth and sustainability to follow the company's commercial agreements, patent news and press releases.

I would like to thank our customers, owners and other partners for their trust in the company and our personnel for their dedicated contribution to the company's strong growth story. This year, we will definitely have something new to tell you throughout the year. Stay tuned!

Riku Kytömäki
CEO

Geoprime® is Binder as a Service

Geoprime is next-generation, low carbon construction material and a alternative to cement for sustainable construction, industry and circular economy.

Up to
80%
CO_2 savings compared to cement-based materials.[1]

Enables circular business by utilizing up to
95%
of side streams as raw materials.

Geoprime® meets
100%
all the required standards.

PRECAST

The Geoprime solution is used in Europe and Asia for the production of non-load-bearing cement-free concrete products. Examples of products are paving stones, infrastructure products, sewer pipes and roof tiles.

First customers' commercial and industrial production started gradually in 2022.

CONSTRUCTION

We develop low-carbon ready-mix concrete, hollow-core slabs and wall elements for large-scale green construction.

We launched solution development and piloting in 2022. Our goal is to carry out the first commercial projects in 2023–2024.

MINING

We are developing a cement-free solution for structures and masses in mining construction, from injection concretes to fillings.

We launched solution development and piloting in early 2023. The first commercial projects are targeted in 2024.

Photo credit Unsplash

WASTE UPCYCLING

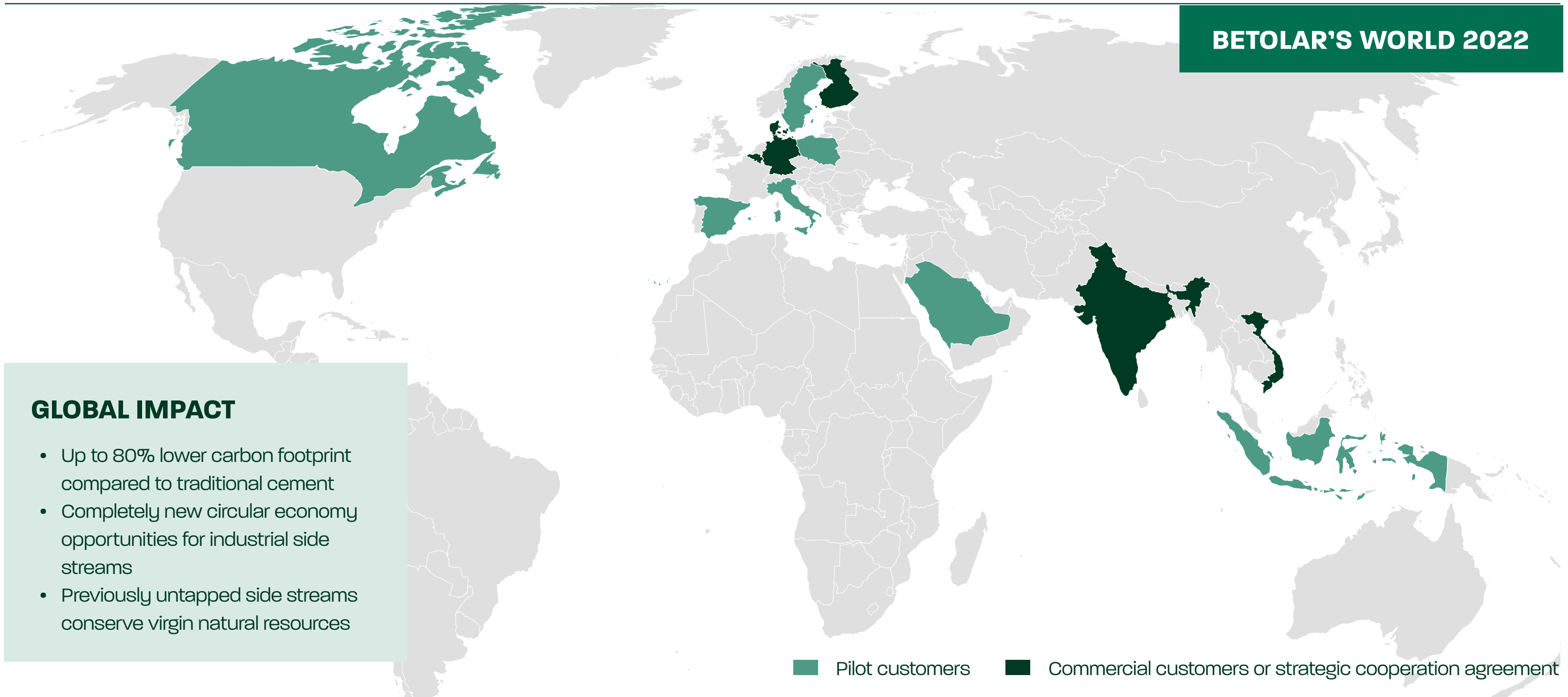
We are developing a circular economy solution that enables the conversion of previously untapped side streams from industry into commercial raw materials.

We started solution development in 2022, and our goal is to implement the first commercial projects in 2025.

[1] Vahanen Enviroment research report 20 August 2021.

Be a game changer with us

Betolar's material technology enables the green transition of concrete construction and the process, energy and mining industries globally.



GLOBAL IMPACT

- Up to 80% lower carbon footprint compared to traditional cement
- Completely new circular economy opportunities for industrial side streams
- Previously untapped side streams conserve virgin natural resources

STRATEGIC PRIORITIES

- Launching international business and generating net sales with Betolar solutions →
- Building a data-based business ecosystem →
- Ensuring sufficient access to industrial side streams →

OBJECTIVES

IN THE MEDIUM TERM (3–6 YEARS)

- Global scale-up of Betolar's solution
- Reaching 100 commercial agreements
- Scale-up of the applications and production volumes of Betolar solutions with Betolar's AI platform and ecosystem

IN THE LONG TERM (WITHIN 10 YEARS)

- R&D expenditure approximately 5% of the net sales pursued by the company
- Geoprime is a leading brand in environmentally sustainable products in the construction materials industry
- Reducing carbon dioxide emissions by 150 million tonnes cumulatively[1)]

FINANCIAL TARGETS

- Net sales of EUR 200 million and positive cash flows from business operations by 2026.
- Net sales in excess of EUR 1 billion and EBITDA margin of 30% within 10 years.

1) compared to the average carbon dioxide emissions from Portland cement using the 2021 emissions level

MARKETS

The green building market is growing

Demand for green solutions is growing strongly in the construction market. New investments and innovations increase the ecosystem of the sector's technology companies. Markets for geopolymer-based cement-free building materials and green cements are growing globally.

Out of the total emissions[1] of buildings, the construction materials represent approx.

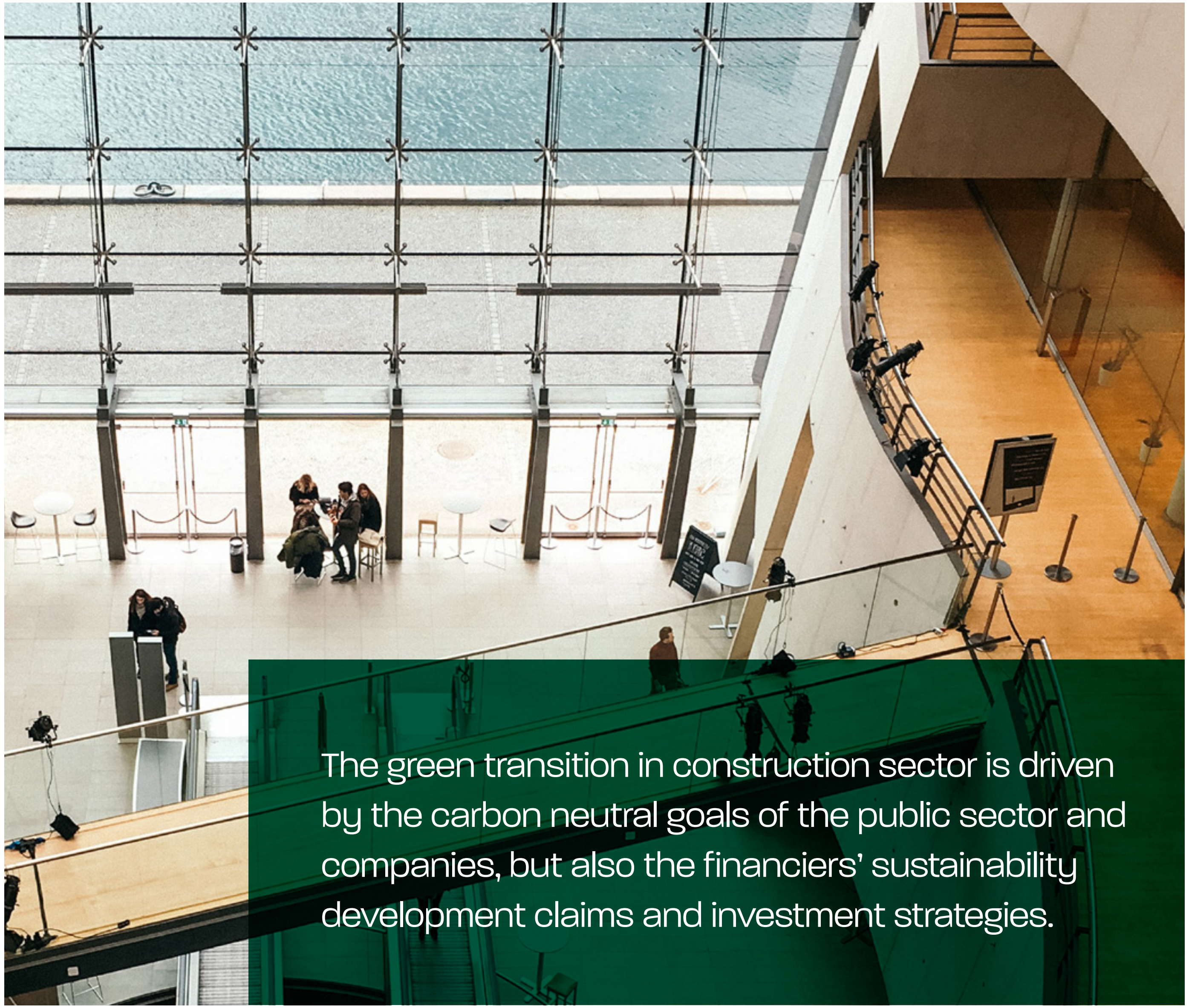
40%

Cement accounts for

8%

of the world's CO_2 emissions[2]

[1] Betolar management estimate [2] Chatham House



The green transition in construction sector is driven by the carbon neutral goals of the public sector and companies, but also the financiers' sustainability development claims and investment strategies.

The Geoprime solution developed by Betolar responds directly to the global need to reduce carbon dioxide emissions and the consumption of natural resources in construction. Its main target markets are Europe and Asia, which together account for approximately 90 per cent of the world's cement production.

Carbon neutrality goals and measures have increased in the construction sector

The construction industry is the key to a low-carbon tomorrow. Out of the total emissions of buildings, the construction materials represent approx. 40 per cent.

Green building has become the mainstream of sustainability and climate work within the construction industry and among the real estate and infrastructure developers and financiers. The climate commitments of the public and private sectors, together with tightening regulation, will increase the demand for and spread of green solutions. Taking carbon neutrality and climate risks into account is also part of the risk management of financial institutions, investors and companies.

Markets opening up in Europe and Asia

National climate commitments and sustainable financing models will sharply increase the demand for green building technologies in Betolar's target markets. The value of the green building market has risen significantly in a short period of time, and the growth will not be slowing down.

The European Union is committed to reducing its climate emissions by 55% by 2030 compared to the 1990 levels. The EU's classification system for sustainable finance, i.e. the taxonomy, also strengthens the channelling of financing to green projects in the construction and real estate sector. National building regulations implement the EU's low-carbon targets in Member States. In the EU, the aim is to achieve carbon neutrality by 2050. In Europe, construction regulations strongly guide developers to reduce the carbon footprint of their projects, and there is growing demand for cement substitutes in all areas of construction.

In Asia, Betolar currently operates in the Indian and Vietnamese markets. Along with China, India, which is one of Asia's largest users of cement, is committed to reducing the carbon intensity of its gross domestic product (GDP) by 45% by 2030 (from the 2005 levels). The aim is to achieve carbon neutrality by 2070. Therefore, the Government of India is strongly advocating the transition of the construction industry to less environmentally damaging construction materials. Replacing cement with industrial side streams in concrete production is one of the key means.

Betolar's market offering and research and product development are focused on providing the market not only with precast concrete products but also with sustainable solutions related to load-bearing building elements, mining solutions and waste upcycling. Betolar has strategic development partnerships in all areas that support the opening of new markets in the short and medium term.

Competitive environment

In Europe, Betolar's competition currently consists mainly of companies producing and offering blended cements, such as Hoffmann Green Cement. In blended cement, part of the cement clinker has been mainly replaced by ground granulated blast furnace slag (GGBFS), which is one of the side streams of the steel industry.

However, the challenge of blended cement is that cement clinker can only be replaced with blast furnace slag to a certain extent. Increasing slag content has a impairing effect on the working characteristics of concrete, such as the rate of setting and strength development, which limits the applicability of blended cements. This creates a need for Betolar's solutions that enable efficient utilisation of side streams with properties similar to those of cement-based concrete.

In Asia, the main competitors are traditional cement manufacturers. The availability of side streams in Asia is driving the market, and product standards generally focus on properties rather than on raw materials, which creates favourable opportunities for cement-free binders. In addition, development funding by Western countries is mainly directed at green projects, which is expected to have a positive impact on Betolar's market demand.

The global market potential of low-carbon cement solutions is estimated [1] at

EUR 1.5 billion

in 2026

Global annual cement production (2019)[2]

4.1 billion tonnes

Europe and Asia together account for about[2]

90%

of the world's cement production

EU's goal is to be carbon neutral in

2050

India's goal is to be carbon neutral in

2070

[1] KPMG Market Study, Betolar management estimate. [2] CEMBUREAU

PROGRESS OF COMMERCIALISATION

Markets opening up for low-carbon Geoprime® products

The regulation strongly guides the green transition of the construction value chain. The market pull for Betolar's low-carbon solutions is especially strong in places where the pressure for emission reductions and recycling of industrial side streams is increasing. Betolar has opened up markets in Europe and Asia. New markets are being explored in the Middle East and North America.

Green transition is steered by the regulation and markets

The Paris climate targets are becoming increasingly visible in different industries as a transition to climate-friendly solutions. The ever-tightening regulation guides the green transition of industry in Finland and the rest of the world.

Cement alone represents 8 per cent of global CO_2 emissions. The share of materials in the total lifecycle emissions of buildings is estimated to be approximately 40 per cent, which means that the replacement of cement represents a significant reduction potential.

The goal is to make the Geoprime solution part of the value and production chains of larger industries and companies.

In the future, it will not be sustainable to produce concrete without utilising industrial side streams – without cement that burdens the climate. The regulation also guides those who commission and finance construction projects towards green solutions. Climate friendliness reduces, among other things, the risk of environmental taxes on projects, which is increasing especially in polluting industries.

From the point of view of the circular economy and carbon neutrality, it is important that the new regulation is not based on old technology. The use of recycled materials in structural construction solutions should be made possible. There should be a shift from blended cements to cement-free alternatives.

Emerging markets are rapidly setting ambitious targets to prevent climate change. Large infrastructure and urban construction projects in Asian countries have demand for low-carbon and completely cement-free solutions.

India, for example, directs investors to invest in projects that are in line with the long-term climate goals. India is aiming for carbon neutrality by 2070. Industrial emissions must also be drastically reduced in Finland if the country is to achieve its carbon neutrality target set for 2035.

Product portfolio development and market openings for commercialisation needs

The global change of markets is increasingly driven by green projects. The green projects are based on Science Based Targets (SBTI). This fits well with the strengths of Betolar's science-driven community. One in seven Betolar employees has a doctoral degree, which is reflected in the whole way of thinking within the materials technology company.

In the early stages of launching Betolar's business, area-specific sales teams were established to win the first customer relationships in the market. The customer projects have demonstrated the functionality of the Geoprime solution and affected the traditional concrete product manufacturing processes.

This year and the following years, the goal is to make the Geoprime solution part of the value and production chains of larger industries and companies. Drivers differ to some extent from market to market. The development in Asia is promoted by the good availability of various side streams. Europe and the developed countries, on the other hand, are driven by a commitment to green values, which is also reflected in the willingness to pay for green added value.

In the current phase of commercialisation, Betolar aims to focus on the markets where the demand for low-carbon solutions is strongest. These markets also have the most cooperative partners, who will become the pioneers in their own markets.

From the perspective of the product offering, research and product development as well as customer support focus on product groups which have the best and fastest scaling conditions for commercialisation. The decisive factors are the size of the customer companies and the availability of product approval.

Betolar's product offering is divided into four segments: precast small concrete products, building elements, mining and recycling of untapped side streams. The expansion of the portfolio is linked to the timeline of product development and commercialisation in the next few years.

Concrete products have proven the functionality of Geoprime

Betolar started to commercialise the Geoprime solution in precast small non-loadbearing concrete products, such as paving stones, small infrastructure products and sewerage pipes. Their approval requirements are lighter than those of load-bearing structures. Last year, Betolar signed commercial Geoprime agreements with a total of eight customers.

In Europe, Betolar started with four customers. A ten-year agreement was concluded with JA-KO Betoni in Finland. JA-KO Betoni gradually started the production of infrastructure products with the Geoprime solution at its Kokkola plant last summer. The company manufactures, among other things, the foundations of charging stations for electric vehicles.

In

2023

the aim is to open the first commercial solutions for the value chain of concrete construction.

Sewerage pipes without cement in Denmark

The Danish concrete manufacturing market leader IBF A/S has succeeded in halving the carbon dioxide emissions of concrete pipes in products using Betolar's Geoprime solution. The first customer of cement-free concrete pipes is Aarhus Vand A/S, which is responsible for water and wastewater management of approximately 350,000 private and corporate customers in the Aarhus area.

"IBF is a pioneer in introducing low-carbon solutions to the Danish market. The company has integrated the Geoprime solution into its strategy and aims to use it to build a significant competitive advantage," says Janne Rauramo, Executive VP of Strategic Partnerships.

The Geoprime solution, which replaces cement as a binder, is based on blast furnace slag, which is a by-product of steel production. The cement-free solution can be adopted without significant investments in the concrete production process.

"It has been a real surprise to us and our customers how easy it is to implement Geoprime. We didn't have to make any changes to our production," says Jesper K. K. Bang, Head of Department at IBF.

IBF operates in several different application areas, which means that production is planned to be expanded from climate-friendly sewerage pipes to other concrete products.

Photo: IBF

Betolar's commercial partner Tubobel is the market leader in the manufacture of sewerage pipes in Belgium. The local approval is being applied for the products in order to bring the Geoprime solution to the market. In Germany, a commercial agreement has been concluded with FC Nüdling, the leading manufacturer in its home market areas in Thuringia and Hesse, for the manufacture of paving stones.

In Denmark, Betolar has signed a five-year commercial agreement with IBF, the country's largest producer of concrete products with an annual concrete production volume of approximately two million tonnes. Production has started with sewerage pipes, but the application areas will be expanded to other product groups as made possible by the availability of slag used as raw material as well as product testing and approvals.

In Asia, Betolar signed commercial Geoprime agreements with four concrete manufacturers last year. In Vietnam, the partner is Trung Hieu, a manufacturer of construction blocks and paving stones. In India, Betolar signed the first commercial agreements in July. The product offering of these companies focuses on various concrete products for infrastructure and environmental construction, such as sewer pipes and paving stones.

New customer pilots have been carried out in Sweden, Belgium, Poland, Italy and Saudi Arabia as well as in India, Vietnam and Indonesia. The first customer pilot has also been carried out in North America.

Roadmap leading to elements, mines and side streams

As a new industry, the aim is to open the first commercial solutions in the precast concrete element value chain in 2023. Last year, Betolar announced a collaboration with the Consolis Parma to produce cement-free hollow-core slabs. Lujabetoni, on the other hand, is working on a solution that will decisively improve the working properties of blended cement. When introduced to the market, the low-carbon solutions will revolutionise the construction industry and expand Betolar's business.

In 2024, Betolar aims to achieve commercial readiness in the mining business, which currently uses large amounts of cement at different stages of the contract process. In addition, the recovery and enrichment of metals in the mining industry generates huge amounts of metal-containing wastewater, sludge and sediment globally, and their processing is risky in many ways from the point of view of environmental safety.

The mines need to change their traditional practices in order to comply with sustainable development. Betolar has already developed the first patented solutions for the identified needs. Development cooperation has been announced with the lithium mining company Keliber, which operates in Finland. Globally, the mining market is growing and is particularly large in Asia. At the same time, the market is concentrated in the hands of fewer and fewer operators.

Betolar has launched research to survey and implement larger untapped side streams. At present, many processes generate streams that end up dumped and in landfills, and these streams currently have no value. The utilisation of these opens up significant opportunities for saving virgin natural resources by utilising the circular economy. The key is the Geoprime solution, which enables the recovery of waste.

In order to optimise its resources, Betolar seeks to focus on the most attractive markets and the most rapidly commercialised concrete product groups. The expansion of product groups is proceeding at the pace of material research and product development as well as the accumulation of side stream data.

In

2024

the goal is to achieve commercial readiness in the mining business.

Targeting the Indian infrastructure market

India is a huge country regionally, socially and economically. In the market, the growing interest in sustainable development solutions is combined with extensive business opportunities in construction. In particular, large infrastructure construction projects require a significant number of concrete structures.

"The magnitude of emissions generated by such enormous masses of concrete play a significant role. With Betolar's low-carbon solutions, emissions can be reduced in India even in a globally significant way," says **Abhishek Bhattacharya**, Managing Director of Betolar India.

Betolar actively piloted with concrete product manufacturers operating in the Indian market in 2022. The first of these, Sneh Precast, has started to shift its production to manufacturing according to Betolar's Geoprime solution.

"The authorities are more open to green solutions than before, so we see a huge and long-term market opportunity. We sell products that help builders achieve their green goals faster," says Bhattacharya.

Abhishek Bhattacharya started as the Managing Director of Betolar India in September 2022.

RESEARCH AND DEVELOPMENT

Technological advantage increases with research and data utilisation

As a material technology company, Betolar focuses on material research and recipe development. To increase the technological advantage, digitalization and AI are used to make research and product development more efficient. The data platform is also being built to meet the needs of the concrete industry ecosystem.

The product portfolio is gradually expanding

Betolar's mission is to bring circular economy solutions to the construction sector. The company's story began with the manufacture of concrete furniture and paving stones. When aiming for lower CO_2 emissions in these products started, the possibility of extensively replacing cement was discovered.

After this discovery, Betolar gave up the production of concrete products and gradually became a materials technology company. The development work has continued

Geoprime enables the use of a cement-free binder without major changes in the production process, without large investments.

with scientific research on various industrial side streams. The applications are built on deep scientific understanding and practical customer piloting.

Betolar's solution is financially attractive to customers, as switching to cement-free concrete production does not require large investments from customers. Switching to use cement-free binders requires only minor changes in the existing machinery.

In 2022, Betolar conducted more than 200 technical and production tests with its customers. The functionality of Betolar's Geoprime solution has been proven in practice in precast concrete product groups, such as paving stones and sewerage pipes, as well as in various foundations for luminaires and electric vehicle charging stations. In the initial customer pilots, Betolar has also collected a large amount of information for the development of products and processes.

Development projects seek new application areas for Geoprime

Betolar has tuned its product development capabilities to support the entry of new concrete product groups into the market. Half of Betolar's approximately 60 employees work in research and product development. Technology development is divided into five teams: research, product development, laboratory, innovations and digitalisation. External resources are also used, especially in the development of digitalisation and the artificial intelligence platform.

In some product groups, switching to cement-free production at once would require a long period of product standardisation. That is why Betolar is developing a Geoprime Hybrid accelerator solution that improves the working properties of concrete using CEM III blended cement that contains blast furnace slag. The accelerator solution opens up a wide range of possibilities for applications where cement is still required due to concrete standards.

The Geoprime Hybrid solution has been developed in cooperation with Lujabetoni, one of Finland's leading manufacturers of precast elements. The aim of the cooperation is to develop the Geoprime Hybrid solution for partition wall elements and, thereby, improve the efficiency of the mould rotation in manufacturing.

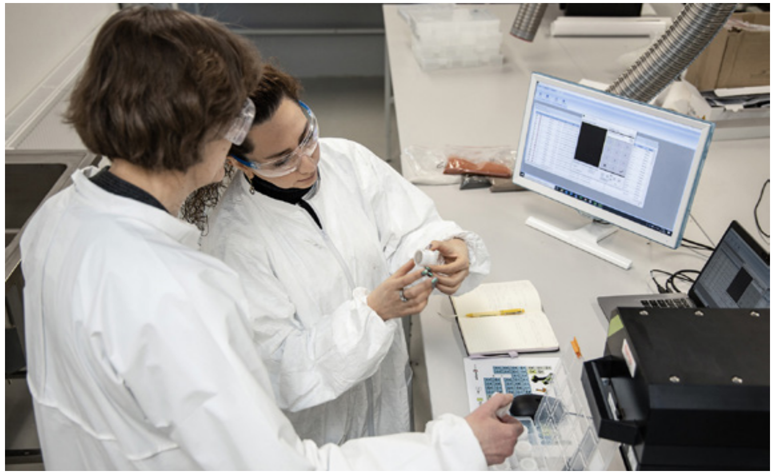
In development cooperation with Consolis Parma, part of the international Consolis Group, Betolar is testing and developing the Geoprime solution for load-bearing concrete elements, such as hollow-core slabs. This product group is significant, as the hollow-core slab is a key product in various building construction projects.

In addition, Betolar started research cooperation with two companies specialising in vanadium extraction, RISAB and Vanadium Recovery Project Oy. The aim of the work is to find opportunities to utilise slag purified from vanadium, which could replace up to 10 per cent of the cement used in Finland. RISAB and Vanadium Recovery Project, which are part of the Australian company Critical Metals, are developing the process for the vanadium recovery plant planned in Pori.

AREAS OF BETOLAR TECHNOLOGY DEVELOPMENT

Internal teams					Partnerships
Research	Product development	Laboratory	Innovations	Digitalization	The development of digitalization and AI

The recipe functionality and the product quality are secured by piloting. Standardization of cement-free concrete products is a demanding process. The solutions must withstand wear and tear.



Scientific breadth gives Betolar a technological edge. Experimental material research in Kannonkoski plays an important role when developing innovations.

Laboratory research is expanding and becoming more efficient

As a materials technology company, Betolar's short and long-term business focuses on research and product development. The closest to the customer interface are the Geoprime recipes developed for the needs of customers by means of piloting and the quality assurance of the product. Standardisation of cement-free concrete products is a demanding and complex process, as the solutions must withstand time, wear and tear.

The scientific scope of the research and the enhancement of research processes increase Betolar's technological advantage. Betolar's laboratory operations are being built in Espoo, where the company's research activities will be linked to the Otaniemi technology ecosystem. The focus in Betolar's hometown of Kannonkoski in Central Finland is on large-scale product testing, experimental research on side stream materials and the development of radical innovations.

The research projects will bring additional resources to Betolar's development work and, at the same time, create a channel for reforming the practices within the industry. The objective of the European consortium's EXCEED project is to find cost-effective, sustainable and responsible extraction routes for the recovery of critical metals and industrial minerals generated as by-products of the mining industry. Betolar participates in the project together with the mining company Keliber.

Betolar is also involved in the LOIKKA project of Association of Concrete Industry in Finland and Aalto University, which is looking for new ways to reduce carbon dioxide emissions in the Finnish concrete industry. European companies in the sector are also participating in the project with their own projects. In research carried out within the scope of the project, Betolar has achieved very promising results with its Geoprime Hybrid solution together with Lujabetoni in the development of the initial strength of blended cements.

Innovations enable the green transition

Betolar wants to change the way of thinking within the traditional concrete industry, so that new side streams can effectively reduce emissions in the industry. The path of a pioneer is always challenging. That is why Betolar has recruited top experts and ensured that the best prerequisites for research and development are in place also in terms of facilities, hardware and software.

Betolar's Innovation Centre is located in Kannonkoski, Finland, and its expansion aiming to improve working conditions will be completed in 2023. The new premises will enable the testing of the concrete production methods developed by Betolar, which will accelerate the piloting at the customer's premises and bring cost savings. Testing of large products can be carried out to speed up product approvals.

> Artificial intelligence is used in the R&D process to radically improve is efficiency and scalability.

The circular economy of raw materials requires efficient and sustainable solutions which Betolar's innovation activities aim to produce. A good example is the mining industry, where the structures are massive and currently use a large amount of cement. On the other hand, the global mining industry generates huge amounts of metal-containing wastewater, sludge and sediment, which can be challenging to process and create risks to environmental safety.

The method patented by Betolar last year involves thermal treatment of the waste material formed in the bioleaching process and its conversion into reactive material. It can be used to make a reinforcing binder through a simple treatment, which can be used to harden the waste material to be disposed of in the mining industry and stabilise the soil. In the future, the binder could potentially be used commercially.

In the long term, Betolar's strengthening patent portfolio will increase the company's value through business protection and access to financing.

The digital platform promotes product development and the ecosystem of the concrete industry

The potential of digitalisation is still underexploited in the concrete industry. From the very beginning, Betolar started to develop the data platform and digitalisation as its key strength. In addition to research and analysis of side streams in its own laboratory, Betolar also collects high-quality data about the characteristics of side streams from external sources. Data is also collected from customers' production processes.

The accumulated extensive AI-assisted understanding is utilised to increase the efficiency of research and product development exponentially. The platforms digital applications are developed together with Futurice. The data platform and AI algorithms embedded in digital applications are developed in partnership with AI laboratory Silo AI.

Betolar's development work aims to create a data and service platform that benefits customers and the entire value chain. At the same time, it will increase Betolar's own lead in knowledge. In 2021, the Finnish Climate Fund granted Betolar a EUR 7 million capital loan for the development of the digital platform.

With the platform, the goal is to have Betolar bring together the side stream producer and the users, which enables serving growing numbers of customers and producers. In the future, the platform aims to serve as a digital marketplace for Betolar's solutions and as a meeting place for concrete product manufacturers and industrial side stream producers.

The decision of the Climate Fund is based on Betolar's target to achieve a cumulative reduction of 150 million tonnes of carbon dioxide emissions by 2030. Without business through the data and AI platform, only a fraction of the cumulative emission reductions would be achieved in the same period.

PEOPLE

A growing team of top talent is changing the world

Our most important resource is people. We do our best to make Betolar the best place to make a change, learn and develop as a professional, and feel good as an individual. 2022 was a year of value-driven growth, shared leadership and setting up structures.

Betolar is a young material technology company in a strong growth and development phase. In a few years, the employee base has grown from the founding team to an international company of top experts. For Betolar, it is important to continue to develop as a learning, productive and prosperous community.

In Finland, the offices are located in Espoo, Jyväskylä, Tampere and Kannonkoski. In Asia, operations are also carried out in Vietnam and Indonesia through the Indian office. A multi-site working environment is based on the principles of co-operation and communality.

Betolar's number of employees approximately doubled in 2022. Recruitment focused particularly on strengthening competences in digital solutions, R&D, commercial skills and within the Management Team.

Betolar's team doubled in 2022. In Finland, the workplaces are in Espoo, Jyväskylä, Tampere and Kannonkoski. In Asia, operations in Vietnam and Indonesia are run from India. A multi-location work environment is based on communality and cooperation.

Taking steps on the growth path

As Betolar continues to grow, our HR processes and practices are also evolving and moving to the next level. In 2022, we introduced operating models and tools related to the life cycle management and leadership of the employment relationship which support the development of the capabilities of people and the work community. We strengthened structures in the management, competence development, occupational safety and employment relationship management. Particular attention was paid to the orientation of new persons, where the importance of more experienced members of the work community was emphasised.

To realise Betolar's vision, we must be able to create and accelerate the green transition in construction and industry globally. The core of our HR strategy is to attract, engage and develop people who together can do this and who find our mission meaningful. The most common background education of our employees is a higher university degree in the field of technology and academic research. Leadership that can unite experts from different fields around a common mission is a critical part of growth management.

Cultural power

Betolar's operations are guided by common values, which we have jointly defined: courage, commitment to responsibility and working together. The examples set by the management and supervisors strengthen the value base and activates values into action on a daily basis.

> Employees' competence and its development is an important success factor for Betolar.

At the same time as we introduce processes that are essential for quality, we strive to maintain an agile and committed entrepreneurial culture. Human-centred management that strengthens trust and safety play a vital role. The importance of managerial competence is emphasised in demanding expert work and in a multicultural work community.

Betolar has decided to invest in diversity, equality and inclusion management. Together, these are the strengths that increase our human capital, well-being at work, productivity and ability to renew. Diversity management will be promoted in 2023 through training and by paying attention to ensuring and promoting diversity in Betolar's Code of Conduct.

For us, equality means that all people are equal, regardless of their personal background, characteristics, thoughts, beliefs, opinions or other personal reasons. None of these factors prevent or slow down an individual's success or potential at Betolar.

Well-being and occupational safety

We support the work ability of our employees with good occupational health services, employee benefits and benefits that facilitate everyday life and increase well-being, such as sick child care support and fitness testing. Occupational safety is taken into account in all operations in accordance with the working environment.

During 2022–2023, we are implementing a safety programme that aims to engage our personnel in safety thinking. We operated safely in 2022, and there were no accidents resulting in absences from work during the year.

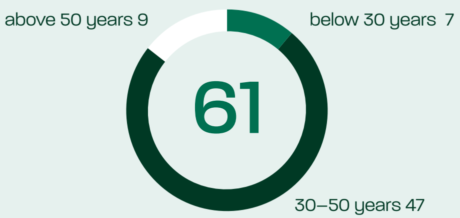
Development

Employee competence is one of Betolar's most important success factors. In addition to the current competence base, the next steps in the implementation of the growth strategy will require the acquisition of significant new capabilities, for example, in technology and commercial operations. In the initial phase, the development of competence is focused on recruitment, and Betolar also offers its employees the opportunity to continuously develop their own competence.

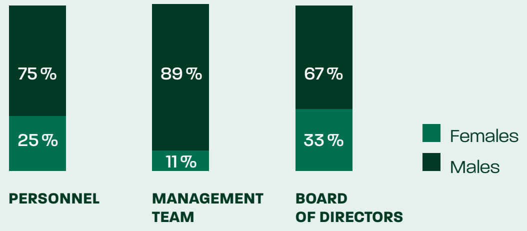
NUMBER OF EMPLOYEES

* India, Indonesia, Vietnam

AGE BREAKDOWN OF PERSONNEL



GENDER DISTRIBUTION



15% of the employees have an academic doctoral degree

14 different nationalities

IMPACT

More sustainable concrete for the building of tomorrow

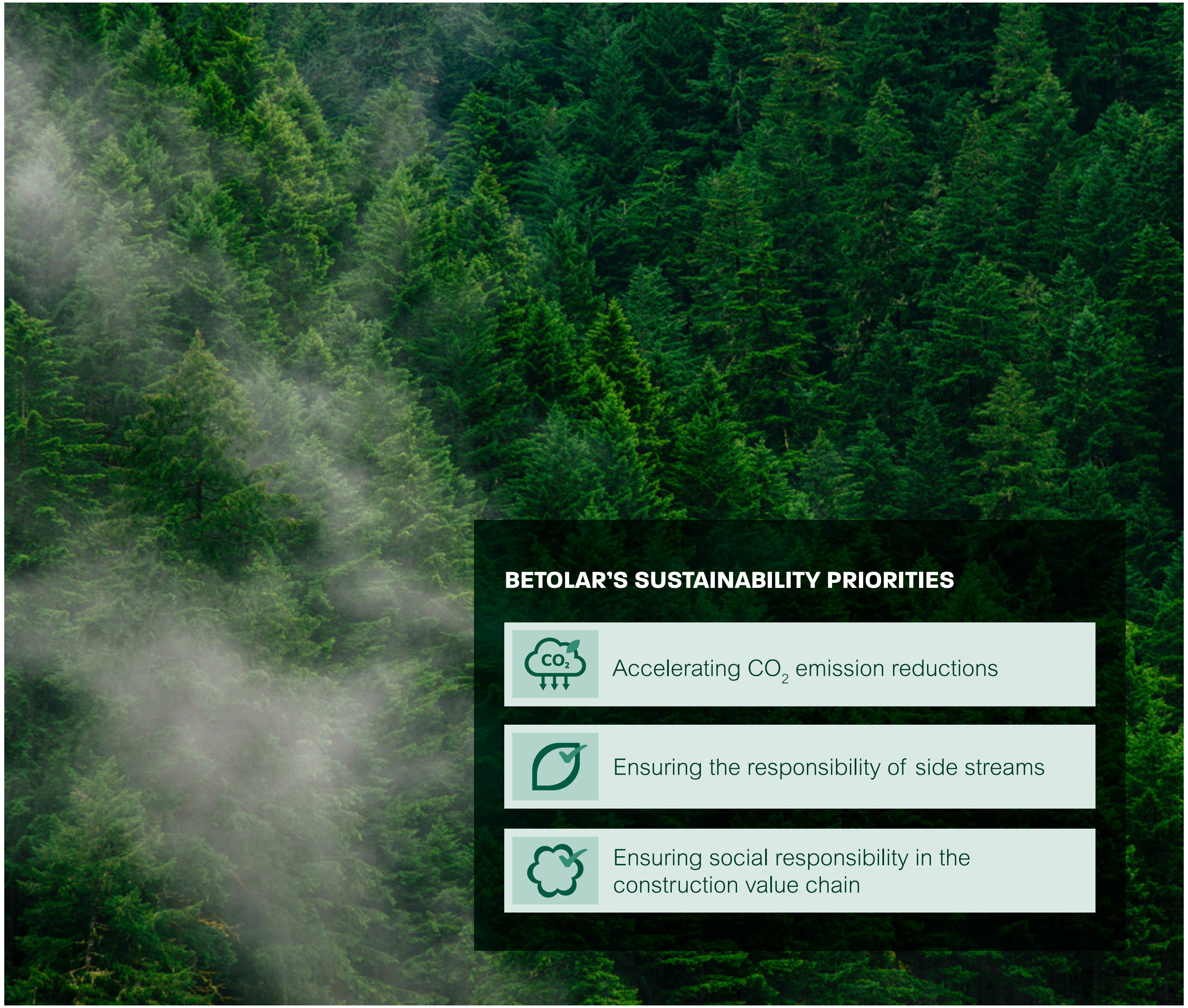
Betolar's mission is to reduce the climate and environmental damage caused by the building sector. The Geoprime solution helps the concrete industry to replace cement, which allows up to 80 per cent lower CO_2 emissions from raw materials.

Betolar enables significant global environmental impacts, as the cement industry is responsible for up to seven per cent of global greenhouse gas emissions. In addition, the use of major industrial side streams to replace limestone and other aggregates saves virgin natural resources.

The new sustainability strategy focuses on impact

In 2022, Betolar started to build its comprehensive sustainability strategy and action plan. The focus was extended to cover Betolar's global value chain and a wide range of stakeholder perspectives were heard – ranging from real estate investors to concrete manufacturers and political decision-makers.

A strong foundation was carrying out by conducting a double materiality assessment to identify the most relevant sustainability issues for Betolar and its stakeholders. In other words, the work identified the most relevant sustainability themes from all



ESG aspects with the biggest impact and with the link to Betolar's strategy and sustainability ambition & vision. Understanding the views and expectations of stakeholders has a decisive impact on the company's success, the availability the best resources and the acceptability of operations ('license-to-operate').

The sustainability topics relevant to Betolar's operations were summarized into three themes that are most relevant to Betolar and its stakeholders. These are ensuring the sustainability of side streams, accelerating CO_2 emission reductions and ensuring social responsibility in the construction value chain. These three themes create the foundation and the ambition level for the development of Betolar's sustainability work.

In 2023, the structure, objectives, measures and indicators of Betolar's sustainability action plan will be defined in more detail. In addition, Betolar's links to the international frameworks for sustainable development and responsibility will be strengthened. Sustainability reporting is developed on the principle of continuous improvement, while taking into account the regulation related to reporting requirements.

The carbon handprint produced by Geoprime was modelled

Together with Gaia Consulting, Betolar developed the first version of the scalable carbon handprint calculation tool for the Geoprime solution. Carbon handprint refers to the avoided emissions produced by the use of a product or service compared to a conventional product or service. Practical, measured information on avoided emissions plays an important role for Betolar's customers, partners and investors who are implementing their own climate targets.

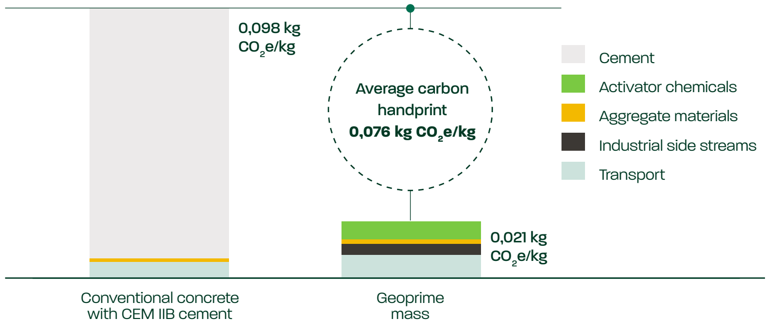
Certified quality and safety management

Betolar strives to ensure the highest possible level of quality and safety in its own operations as well as in the operations of its suppliers and customers. The quality and safety management systems help to ensure and demonstrate that the management and processes meet the agreed requirements.

Betolar's quality, environmental and occupational health and safety certificates (ISO 9001, 14001, 45001) are an indication of the quality and safety of operations. In addition to the commitment, they show partners and customers the company's high expectations and standards in this area. Bureau Veritas is responsible for the certification and regular audit of the management systems.

> Betolar's mission is to globally reduce climate and environmental harm caused by cement.

GEOPRIME INGREDIENT EMISSIONS IN EUROPE AROUND 80% LOWER THAN CONVENTIONAL CONCRETE



The lower emissions of Geoprime concrete compared to conventional are due to elimination of the use of cement. The exact carbon footprint is dependent on the comparison product. With the comparison product selected here, the average carbon handprint is 0,076 kg CO_2e / kg of concrete. The recipes for both Geoprime and conventional concrete are typical for semi-dry concrete products for infrastructure and landscaping such as pipes and tiles. The calculation is averaged and not tied to any specific European country. Concrete production, use, and end-of-life stages excluded from assessment as they were assumed to be identical between Geoprime and conventional concrete

PRIORITIES OF RESPONSIBILITY WORK IN 2023

- Calculation of Betolar's Scope 1, 2 and 3 carbon footprint according to the GHG protocol
- Definition and implementation of the code of conduct
- Training of diversity, equality and inclusion (DE&I) principles

550 tons less CO_2 emissions with Geoprime

Betolar and its first customers already achieved significant climate impacts in 2022. With Geoprime, the carbon footprint of Betolar's customers was reduced by 552,757 kg CO_2e by replacing the use of traditional cement in the manufacture of concrete products. GHG emissions from the Geoprime products were almost 80% lower compared to manufacturing with cement.

In order to verify these, Betolar, in cooperation with a third party, developed a CO2 calculation tool that can be used to calculate the carbon handprint of using the Geoprime solution, i.e. the avoided emissions, in different target markets and application areas.

The aim is to develop an open and fully scalable calculation model for customers which can be used to reliably calculate the positive climate impact of each Geoprime product or tonne produced compared to the reference products.

In the first phase, the calculation tool was limited to include Geoprime application areas in the 2022 customer base and average use cases in European countries and in India, in the Mumbai region. In these, Geoprime replaced traditional, limestone-based ordinary Portland cement (OPC) in the production of concrete products.

The average emission reduction produced by Geoprime compared to a traditional solution was 78% in both Europe and India (Mumbai region). The calculation included a comparison of the raw material level of cement, used activators and side streams as well as transport emissions. No comparison was made between manufacturing, in-use and end-phase emissions as they are the same for both products.

Report of the Board of Directors and Financial Statements

Report of the Board of Directors 2022

Betolar in brief and group structure

Betolar is a Finnish materials technology company in the growth stage, whose mission is to enable the green transition of different industries globally, especially in the construction, process and energy industries, by offering solutions for the utilisation of its unique material technology. With its Geoprime solution, the company offers an alternative for producing sustainable and low-carbon concrete and concrete applications. The solution can be used to convert previously under-used or unused industrial side streams into a substitute for cement used in the production of concrete.

Betolar's material and production development innovations can significantly reduce the carbon dioxide emissions of concrete production at the raw material level by up to 80 per cent. Products produced with the Geoprime solution can contain up to 95 per cent of side stream-based raw materials. Betolar uses and optimises existing production processes and industrial side streams in its solutions. In accordance with its strategy, Betolar aims for growth first and foremost in Europe and Asia, and later globally.

The Betolar Group is comprised of the parent company Betolar Plc and its wholly-owned subsidiary Betolar Chemicals Ltd. In addition, the Group includes the subsidiary Betolar India Private Limited, owned by Betolar Chemicals Ltd with a holding of more than 99 per cent and the parent company with a holding of under 1 per cent.

The parent company Betolar Plc develops technology solutions and owns the company's IPR portfolio. At the end of the financial period, Betolar's business operations were centralised with the parent company and Betolar Chemicals Oy.

Main events during the financial year

- Betolar started its commercial phase after concluding the first Geoprime agreements with a total of eight customers.
- The company carried out pilots with a total of 25 new customers in line with the objectives.
- In addition to commercial agreements, Betolar signed two strategic development agreements with Critical Metals' two subsidiariesand the precast concrete element manufacturer Consolis Parma.
- The development of Betolar's capabilities continued with new recruitments. The implemented recruitments were especially focused on strengthening of commercial competence, research and product development, the setting up supply chains.
- The research and development activities were carried out as planned during the period. The activities were targeted at carrying out material research, development of the AI platform, refining the digitalisation strategy and expanding the patent portfolio.
- On 12 May 2022, Betolar's Board of Directors appointed Riku Kytömäki as the new CEO of the company, and he assumed his duties on 1 November 2022.
- The company's Management Team was complemented by four new members. Antti Uski started as Chief Human Resources Officer on 11 January 2022, Ilkka Iittiläinen as Chief Operations Officer on 29 March 2022, Jarno Poskela as Chief Technology Officer on 1 September 2022 and Ville Voipio as Chief Commercial Officer on 1 October 2022.
- Betolar moved from Finnish accounting practice (Finnish Accounting Standards, FAS) to reporting according to international accounting standards (International Financial Reporting Standards, IFRS). The transition date to IFRS standards was January 1, 2021.
- In November, Betolar made an investment decision to expand its innovation center in Kannonkoski. Innovation center's new expansion includes 1000 sqm warm space and the value of the investment is approx. EUR 0.8 million.

Key figures

FINANCIAL INDICATORS

(EUR thousand, unless otherwise specified)	2022 (IFRS)	2021 (IFRS)	2020 (FAS)	2019 (FAS)
Net sales	287	10	6	7
Gross margin[1]	121	10		-9
EBITDA[1]	-9,988	-4,777	-1,053	-463
Operating profit (loss)	-11,518	-5,513	-1,373	-598
Earnings before interest and taxes	-11,873	-5,587	-1,385	-608
Profit for the financial period	-11,844	-5,587	-1,385	-608
Cash and cash equivalents and short-term fund investments[1] (at the end of the period)	26,624	37,355		

OPERATIONAL INDICATORS

	2022 (IFRS)	2021 (IFRS)	2020 (FAS)	2019 (FAS)
Personnel (average number during the financial period)	51	23	12	8
Number of pilot customers[1]	25	12	5	5

PER SHARE INDICATORS

(EUR, unless otherwise specified)	2022	2021	2020	2019
Number of shares at the end of the financial year on 31 Dec, pcs	19,531,757	19,444,024	7,853,868	7,853,868
Earnings per share, basic and diluted[1,2,3]	-0.61	-0.53	-0.18	-0.08
Shareholders' equity per share	1.36	1.98	0.18	0.06
Lowest price, BETOLAR	2.52	5.95	-	-
Highest price, BETOLAR	6.30	6.88	-	-
Closing price at the end of the financial year on 31 Dec	3.05	6.30	-	-
Average daily turnover of shares, pcs	10,068	53,287	-	-
Market capitalisation at the end of the financial period at 31 Dec, EUR million	59.6	122.5	-	-

[1)]Betolar uses certain alternative performance measures (gross margin, EBITDA, earnings per share, cash and cash equivalents and short-term fund investments and number of pilot customers) as indicators of operational profitability and performance. The definitions and calculation formulas for these key figures can be found as an appendix to the financial statements.

[2)]The number of shares used in the calculation of earnings per share is as follows: 31 December 2022: 19,531,757 pcs, 1–12/2022: 19,506,730 pcs, 7–12/2022: 19,522,071 pcs, December 31, 2021: 19,444,024 pcs, 1–12/2021: 10,448,522 pcs, 7–12/2021: 11,788,257 pcs

[3)]In the calculation of earnings per share, the IFRS was applied in 2021–2022 and FAS in 2019–2020.

Strategy

Betolar aims to offer its customers the Geoprime concept solution under license-based agreements, which includes the formula for low-carbon construction material and allows the production of the material and continuous services for production support and optimisation parameters, quality assurance and aftermarket support. Betolar is developing an artificial intelligence platform that enhances its research and development activities. As a result, Betolar aims to provide its customers with continuously developing services. The company collects and analyses data to increase the efficiency of its R&D activities, improve customers' production processes and provide the users of the end products with added value.

Betolar's mission is to promote CO_2 emission reductions and the use of virgin natural resources in construction. The strategic growth objectives are pursued by focusing on the following matters in particular:

- Launching international business and generating net sales with Betolar solutions.
- Building a data-based business ecosystem.
- Ensuring sufficient access to industrial side streams.

The Board of Directors of the company has set the following business and financial objectives at the end of 2021.

Betolar has the following short-term (1–2 years) business objectives:

- 10–15 pilot projects annually with new customers of significant volume potential, based on the company's more than 150 identified potential customers;
- First commercial customer agreements;
- Increasing the size of the customer delivery and sales organisation;
- Expanding brand and marketing measures into the target markets;
- Strong solution-building and value chain development based on product development together with industrial partners and customers;
- Launching the Geoprime Academy training platform;
- Piloting an automated laboratory and development work on the AI platform.

In the medium term (3–6 years), Betolar has the following business objectives:

- Global scale-up of Betolar's solutions;
- Reaching 100 commercial agreements;
- Scale-up of the applications and production volumes of Betolar solutions with Betolar's AI platform and ecosystem;
- Strong global sales, marketing and delivery resources.

In the long term (within 10 years), Betolar has the following business objectives:

- R&D expenditure approximately 5% of the net sales pursued by the company;
- Geoprime is a leading brand in environmentally sustainable products in the construction materials industry;
- Reducing carbon dioxide emissions by 150 million tonnes cumulatively (compared to the average carbon dioxide emissions from Portland cement using the 2021 emissions level).

In addition to the business objectives, Betolar has the following medium- and long-term financial objectives based on its scalable business model:

- Medium term: Net sales of EUR 200 million and positive cash flows from business operations by 2026;
- Long term: Net sales in excess of EUR 1 billion and EBITDA margin of 30% within 10 years.

Business overview

Betolar's offering and research and product development are currently focused on four product segments: precast, building elements, mining and waste upcycling.

Concrete products

Betolar's first goal has been to commercialise the Geoprime solution in non-loadbearing concrete products, such as paving stones, infrastructure products and sewerage pipes. During January–December, Betolar signed commercial Geoprime agreements with a total of eight customers in line with the targets.

In Europe, Betolar signed commercial agreements on the Geoprime concept with a total of four customers. The term of the agreement between Betolar and JA-KO Betoni Ltd in Finland is 10 years. JA-KO Betoni launched in the summer a phased production of Geoprime concrete products, such as infrastructure productsr. In Belgium, Betolar and Tubobel have entered into an agreement which is valid until 2030. Tubobel is the market leader in the manufacture of sewerage pipes in Belgium. In the first few years, Tubobel will acquire the exclusive right to use the Geoprime concept for manufacturing sewerage pipes for the Belgian market. Production will gradually be expanded to include other product groups, such as paving stones and infrastructure products. By the end of the reporting period, Tubobel had not yet started production in accordance with the Geoprime concept. The parties have jointly decided to apply for local approval to bring Geoprime to the market. The aim is to carry out the first commercial projects in 2023.

In Germany, Betolar and FC Nüdling Betonelemente GmbH + Co. KG (FCN) have entered into a commercial agreement in which FCN will have the exclusive right to use the Geoprime concept for the manufacture of paving stones in its market area of Thuringia and Hesse for a period of five years. The first product group is paving stones, but the use of Geoprime is planned to be gradually extended to other product groups. FCN introduced the first low-carbon Geoprime paving stones to the German market at the GaLaBau trade fair in Nuremberg in September. The company is ready to start commercial production and the goal is to make commercial deliveries in 2023.

In Denmark, Betolar and the country's largest concrete product manufacturer A/S Ikast Betonvarefabrik, IBF AS (IBF) entered into an agreement which is valid until the end of 2026. IBF's annual concrete production volume is approximately two million tonnes, and it manufactures a wide variety of concrete products. IBF gradually started the production of concrete products according to the Geoprime concept under the agreement. The first product category will be sewerage pipes and paving stones. In the summer of 2022 delivered the first Geoprime sewage pipes to the Danish company Aarhus Vand A/S, which is responsible for the drinking water and sewage disposal of 350,000 private and corporate customers in the Aarhus area. The plan is to expand into other product categories as made possible by product testing and approvals.

In Asia, Betolar signed commercial Geoprime agreements with four concrete manufacturers during the period. In Vietnam, Betolar signed a commercial Geoprime agreement with Trung Hieu Investment and Development Corporation. Trung Hieu is a manufacturer of construction blocks and paving stones in Ho Chi Minh City with a production capacity corresponding to 120,000 tonnes of concrete. In India, Betolar signed its first commercial contracts in July. The product offering of these companies focuses on various concrete products for infrastructure and environmental construction, such as sewer pipes and paving stones.

In addition to the commercial agreements, the company carried out piloting with new customers in accordance with the targets. The sales and marketing measures were targeted at key markets and pilots were carried out with a total of 25 new customers last year. New customer pilots were carried out in the EMEA market in Sweden, Poland, Italy and Saudi Arabia, among others. In Asia, piloting was performed in India, Vietnam and Indonesia. The first customer pilot in North America was also carried out at the end of the period.

Building elements

Another of Betolar's product segments is solutions for the professional construction value chain. In building materials, ready-mixed concrete and large elements are emphasised, especially in the construction of large volumes. In these cases, the phasing out of the use of cement is one of the key ways for developers to reduce their carbon footprint without significant investments.

With the Geoprime Hybrid solution, Betolar develops an accelerator solution that improves the working properties of concrete using CEM III cement that contains blast furnace slag. The accelerator solution will open up wide possibilities for applications where cement is required to be used due to concrete standards. The Geoprime Hybrid solution has been developed in the academic Loikka project and with Lujabetoni. Lujabetoni is one of the leading manufacturers of precast elements in Finland, and the aim of the cooperation is to develop a Geoprime Hybrid solution for partition wall elements and thus improve the mold cycle. The project was advanced during the period.

In August, Betolar and concrete element manufacturer Consolis Parma signed a development cooperation agreement, with the purpose to test Betolar's low-carbon solutions in the industrial manufacture of hollow-core slabs. During the autumn, promising laboratory and factory-scale results were obtained.

Mining

Vast amounts of cement are used in the mining industry at different stages of the mine operations. In addition, the recovery and enrichment of metals generates huge amounts of metal-containing wastewater, sludge and sediment globally. The processing and storage of waste streams also require massive reservoirs in mining areas. The mining sector has the same need as the construction sector to change traditional practices to be in line with sustainable development. During the period, we developed the first solutions for the identified needs of the mining industry.

During the period, the mining and battery chemicals company Keliber announced that the lithium project's construction phase will start. In September 2021, Betolar, Keliber and the Finnish concrete producer JA-KO Betoni announced a cooperation agreement which aims to help Keliber utilise the side streams generated in its production with Betolar's innovations. Tailings and analcime sand generated in the mining industry could be used as concrete aggregate at JA-KO Betoni's plant in Kokkola, Finland. This low-carbon concrete could be used, for example, in the structures of the Keliber mine.

During the period, Betolar was granted a patent concerning the method and arrangements related to the treatment of a slurry type waste stream from the mining industry and converting it into a reinforcing binder. In the future, the binder could be used commercially. It creates value for waste material, which currently generates only costs.

Waste upcycling

Globally, a significant amount of unused industrial side streams is produced. The aim of Betolar's artificial intelligence-supported data and analytics is to enhance R&D work, so that unused side streams can be utilised more quickly. The need for the utilization of new side streams is emphasized when the market demand for existing side streams such as blast furnace slag (GGBFS) increases.

During the period, continuous studies were started to identify the largest untapped side streams and start utilising them. In March, Betolar started strategic research collaboration with RISAB and Vanadium Recovery Project Oy (VRP), two Critical Metals' subsidiaries specialising in vanadium extraction. The aim of the cooperation is to develop a method for the use of vanadium-cleaned slag produced at the planned Pori vanadium recovery plant in the concrete industry.

Market situation

Betolar's solution to replace cement is designed to meet the global need to reduce carbon emissions and the consumption of natural resources in construction.

Net Zero goals and measures have increased in the construction sector

Carbon neutrality targets that are being set within industries create opportunities for new solutions on the market. This is particularly evident in the field of construction, where green building has become the mainstream of responsibility and climate work. The climate targets of the public and private sectors have also increased economic investments in the introduction of green solutions. According to research, building materials account for approximately 40 per cent of the total carbon emissions in buildings, The market value of green construction has also risen significantly, and it is expected to grow exponentially in the coming years.

The key drivers of the green transition in construction are not only the carbon neutrality targets but also the sustainability requirements set by institutional investors, which are increasingly starting to guide the granting of financing to construction projects. Taking carbon neutrality into account is therefore part of the risk management of both financial institutions and companies.

Impacts of Russian invasion of Ukraine

Russia's invasion of Ukraine and the resulting rise in energy prices have pushed up the price of cement, among other building materials. Therefore, alternative binders have attracted the interest of concrete manufacturers. Betolar's commercial progress and other market feedback indicate that the construction industry is ready to adopt green solutions quickly.

Geopolitical tensions, increased energy prices and raw material costs and the slow recovery of maritime logistics from the pandemic have also indirectly affected the prices and transport costs of chemical activators used in Geoprime recipes. In Asia, the increase in energy prices has not had a significant impact on the prices of side streams such as blast furnace slag or fly ash. In Europe there will be a growing demand for type approved blast furnace slag, as it can be used in blended cements as a partial substitute for cement.

Competitive environment

In Europe, the competitive environment is made up of companies offering blended cement. In blended cement, part of the cement clinker has been mainly replaced by ground granulated blast furnace slag (GGBFS), which is one of the side streams of the steel industry. This reduces the carbon dioxide emissions of the cement. However, the challenge of blended cement is that cement clinker can only be replaced with blast furnace slag to a certain extent. Increasing slag content has a detrimental effect on the working characteristics of concrete, such as the rate of setting and strength development, which limits the applicability of blended cements. This creates a need for Betolar's solutions that enable efficient utilisation of side streams with properties similar to those of cement concrete.

In Asia, the main competitors are traditional cement manufacturers. The availability of side streams in Asia is driving the market, and product standards generally focus on properties rather than on raw materials, which creates favourable opportunities for cement-free binders. In addition, development funding in Western countries is primarily directed at green projects, which is expected to have a positive impact on Betolar's market demand

Financial review

Net sales

The Group's net sales in January–December 2022 amounted to EUR 287 thousand (2021: EUR 10 thousand). Other operating income for the period consisted mostly of grants.

Approximately half of the net sales for the financial period consisted of license and chemical sales in accordance with the Geoprime concept. Part of the net sales for the financial period came from fees related to customer piloting. The introduction of pilot fees is in line with the company's growth strategy and commits the customer to future productions.

Geographically, the net sales are broken down as follows: EMEA (Europe, Middle East, Africa) 69% (100%), APAC (Asia Pacific) 22% (0%) and Americas 9% (0%).

Result

Gross margin amounted to EUR 121 (10) thousand and EBITDA was EUR -9,988 (-4,777) thousand.

Personnel expenses increased from the comparison period to EUR 4,352 (2,808) thousand. The increase in personnel expenses was due to strengthening the R&D personnel, commercial team and management team according to plans.

Depreciation, amortisation and impairment amounted to EUR 1,530 (736) thousand and other operating expenses to EUR 5,896 (2,069) thousand. The significant increase in other expenses was attributable to costs from external experts related to research and development activities and the construction of the AI platform. In addition, the company's administrative expenses related to business development and investments in marketing and sales were particularly high at the beginning of the year.

The Group's operating profit for January–December 2022 amounted to EUR -11,518 thousand (1–12/2021: EUR -5,513 thousand).

Net financial income and expenses amounted to EUR -356 thousand (2021: EUR -74 thousand). The company uses short-term interest funds to hedge cash assets, which had a negative impact during the financial year. The reason for this was the unfavorable change in the general interest rate situation.

Earnings before taxes and interest were EUR -11,873 (-5,587) thousand. The result for the financial year was EUR -11,844 (2021: EUR -5,587) thousand.

Betolar is a growth-phase company whose investments in developing its Geoprime concept and its international commercialisation increased strongly during the financial period. The operating loss reflects the growth of personnel and related costs in accordance with the company's growth strategy, investments in research and product development as well as the building of other prerequisites and capabilities under the growth strategy.

Financial position and cash flows

Betolar's balance sheet total at the end of the financial period was EUR 31,948 thousand (31 December 2021: EUR 40,112 thousand). Equity amounted to EUR 26,582 (38,291) thousand. Equity ratio at the end of the financial period stood at 83 (95) per cent.

At the end of the financial period, the Group's net gearing was EUR -23,614 (-36,906) thousand and the gearing was -89 (-96) per cent.

Cash flow from operating activities in January–December 2022 was EUR -9,546 thousand (1–12/2021: EUR -3,221 thousand). Net cash flow from operating activities was affected by higher personnel costs and other operating expenses.

Cash flow from investing activities was EUR 5,434 (EUR -35,585) thousand, comprising the company's tangible and intangible assets.

Cash flow from financing activities amounted to EUR 1,922 (EUR 41,519) thousand. Cash flow from financing activities includes withdrawals from long-term loans to the amount of EUR 2,088 thousand, repayments of lease liabilities of EUR -215 thousand and a share issue of EUR 57 thousand.

Betolar's current investments at the end of the reporting period amounted to EUR 25,457 (33,998) thousand. Betolar's cash and cash equivalents at the end of the period amounted to EUR 1,167 (EUR 3,358) thousand and the change in cash and cash equivalents was EUR –2,191 (EUR 2,713) thousand. Cash, cash equivalents and short-term fund investments were in total EUR 26 624 (37 355) thousand.

Research and development

Investments in tangible and intangible assets totaled EUR 3,339 (2021: EUR 1,787) thousand. Investments accounted for 31 (36) per cent of the total expenses.

The research and development activities at Betolar are based on the research and analysis of industrial side streams and the continuous development of Geoprime ® formulas and low-carbon building materials. During the review period, these operations were mainly carried out at Betolar's Innovation Centre in Kannonkoski, Finland, and the company also decided to start research and development laboratory operations in early 2023 in Espoo. Betolar announced that it will expand the Kannonkoski Innovation Centre with an additional 1,000 m2 of facilities, which will enable the expansion of laboratory operations, the implementation of wider and more diverse innovation programmes, the study of new side streams and the testing of larger elements in standardised conditions.

Research and development work focused on materials technology and the development of the digital technology platform. Betolar is constantly exploring new side streams to find the best formulas and collect data to develop the best geopolymer-based construction material solutions. In addition, services were purchased from external experts in connection with the development of an artificial intelligence platform, laboratory analyses, basic and product approval testing etc.

During the review period, research on industrial side streams focused in particular on the development of slag-based Geoprime® formulas through laboratory research and AI models being developed. Continuous research was also started during the period to identify and implement the largest untapped side streams. In March, Betolar began research collaboration with Critical Metals' two vanadium recovery subsidiaries, RISAB and Vanadium Recovery Project Ltd (VRP). The aim of the cooperation is to develop a method for the use of vanadium-cleaned slag produced at the planned Pori vanadium recovery plant in the concrete industry.

The research and analysis of side streams provides Betolar with extensive understanding and information about the characteristics of side streams and their applicability in different applications of materials technology.

With the Geoprime Hybrid solution, Betolar is developing an accelerator solution for concrete using CEM III cement that contains blast furnace slag. The accelerator solution opens up wide possibilities for applications such as structural concrete elements, where cement is required due to concrete standards. The Geoprime Hybrid solution was developed during the financial year in cooperation with the academic Loikka project and Lujabetoni. In August, Betolar and concrete element manufacturer Consolis Parma signed a development cooperation agreement to test Betolar's low-carbon solutions for the industrial production of hollow-core slabs. During the autumn, promising laboratory and plant-scale results were obtained.

Betolar is developing an AI-based platform that utilises the collected data and is expected to allow the provision of continuously developing services to customers. Betolar continuously collects and analyses the data generated from product development in order to further boost its product development activities and improve its customers' production processes.

So far, Betolar has developed its technology platform by strengthening the data base and building the architecture, the analytical model and the necessary interfaces. The data entered into the model on the formulas, parameters and laboratory test results can be used analytically and to visualise the test results and enable the testing of simulated recipes within the limits of the quantity and quality of the data.

The long-term vision of the development of the technology platform is to develop a predictive model that takes into account all of the key parameters related to the product (such as the substances used, the requirements set for the product and application and the minimisation of pre-processing) and produce a formula optimised on the basis of the accumulated data. The formulas aim to produce a geopolymer-based binder solution that replaces cement and is competitive in terms of CO_2 emissions, price and quality.

Sustainability

The Geoprime ®solution developed by Betolar helps the concrete industry to replace cement, which allows up to 80 per cent lower emissions from raw materials. The cement industry is responsible for up to 7% of global greenhouse gas emissions, so the environmental impacts made possible by Betolar's operations are significant. The use of major industrial side streams to replace limestone and other aggregates saves virgin natural resources.

In 2022, the systematic development of the sustainability strategy was also started by carrying out a double-materiality assessment, which identified both through internal and stakeholder discussions the themes to which the company must pay special attention in terms of sustainability. Based on the results obtained, the relevant sustainability topics were encapsulated in the three most relevant sustainability topics for Betolar and its stakeholders. These are ensuring the sustainability of side streams; accelerating CO_2 emission reductions; ensuring social responsibility in the construction value chain. These three themes lay the foundation and guide the management of Betolar's responsibility.

Betolar does not itself carry out activities that would require an environmental permit. The principle of continuous improvement guides the management of environmental and safety activities. Betolar has a quality management system that is certified according to the ISO 14001 environmental management standard and the ISO 45001 occupational health and safety management standard. The auditor is Bureau Veritas. The systems are re-audited every 3 years, and annual periodic audits are carried out in between.

Personnel and offices

The Group's average number of employees during the period was 51 (23). The number of employees increased by 28 persons. At the end of the period, there were 61 employees in total, 56 (31.12.2021: 30) in Finland and 5 (31.12.2021: 1) working outside Finland. In Finland, the company has offices in Espoo, Jyväskylä and Tampere and a laboratory in Kannonkoski. In addition to the subsidiary in India, the company has operations in Vietnam and Indonesia.

Betolar grew and its capabilities continued to be strong with new recruitments. The implemented recruitments were especially focused on strengthening competences in digital solutions, research and product development and commercial skills and the Management Team. The organisation developed especially the capabilities of new supervisors, strengthened occupational safety practices and developed the prerequisites for a healthy and competent workplace culture. Particular attention was paid to the orientation of new employees, where the importance of more experienced members of the work community was emphasised.

Changes in the corporate structure

The Group's subsidiaries Betolar Element Ltd, Betolar Geotechnical Solutions Ltd, Betolar Green Building Technologies Ltd, Betolar Mining Solutions Ltd and SolidWatt Ltd merged with the parent company Betolar Plc on 31 August 2022 to clarify the Group structure.

Governance

Betolar's decision-making and governance comply with the Limited Liability Companies Act, the legislation on the securities market, the rules of the Nasdaq First North Growth Market marketplace, the company's Articles of Association and other regulations applicable to the company.

The company does not comply with the Corporate Governance Code published by the Securities Market Association, which is voluntary for the companies listed on the First North Growth Market, as the company estimates that this is not justified considering the company's size and scope of business.

Resolutions of the Annual General Meeting

The Annual General Meeting (AGM) of Betolar held on 23 March 2022 adopted the financial statements for the financial period 2021 and discharged the members of the Board of Directors and the CEO from liability. The Annual General Meeting decided to transfer the loss of the financial year to the profit (loss) account of the previous financial years and decided not to distribute dividend in accordance with the proposal of the Board of Directors.

In accordance with the proposal of the Board of Directors, the Annual General Meeting confirmed that the Board of Directors consists of six (6) members and re-elected Tero Ojanperä, Soile Kankaanpää, Kalle Härkki, Inka Mero and Juha Leppänen as members of the Board of Directors and Ilkka Salonen as a new member. Tero Ojanperä was re-elected Chair of the Board.

The Annual General Meeting decided to pay the Chair of the Board of Directors EUR 3,300 per month and the other members of the Board of Directors EUR 1,800 per month. In addition, the Annual General Meeting decided to pay the Chairs of the committees established by the Board of Directors EUR 600 per meeting and the other members of the committees EUR 300 per meeting. Persons employed by or in an employment relationship with the company are not paid remuneration for serving on the Board of Directors. Travel expenses are reimbursed in accordance with the maximum amount of the current travel reimbursement basis established by the Tax Administration.

In accordance with the Board of Directors' proposal, the Annual General Meeting resolved to authorise the Board of Directors to decide on the issue of a maximum of 1,850,208 shares (including shares issued on the basis of special rights) in one or more issues, which corresponds to approximately 9.5 per cent of the total number of shares in the company. The Board of Directors decides on all terms and conditions of issuance of new shares, stock option rights and other special rights entitling to shares within the framework of the authorisation. The issuance of shares and special rights entitling to shares, including options, may also take place in a directed manner in derogation from the pre-emptive rights of shareholders (directed share issue). The authorisation revokes the previous unused authorisations concerning the issuance of shares and the issuance of options and special rights entitling to shares and is valid for 18 months from the decision of the Annual General Meeting.

In addition, the Annual General Meeting decided in accordance with the proposal by the Board of Directors to authorise the Board of Directors to decide on the acquisition of a maximum of 973,793 of the company's treasury shares, which corresponds to approximately 5 per cent of the total number of shares in the company. Treasury shares may be acquired only by using unrestricted equity and at the price in multilateral trading on the date of the repurchase or other publicly quoted price. Shares may also be acquired outside public trading at a price that is not higher than the market price at the time of acquisition in public trading.

The Board of Directors decides how shares are acquired. Treasury shares may be repurchased other than in proportion to the shares held by the shareholders (direct repurchase) if there is a compelling economic reason for the company. The authorisation is valid for 18 months from the decision of the Annual General Meeting.

The Annual General Meeting decided to establish a permanent Shareholders' Nomination Committee and approved the Nomination Committee's rules of procedure.

Board of Directors

The members of Betolar's Board of Directors on 31 December 2022 were Tero Ojanperä (Chair), Inka Mero (ordinary member), Kalle Härkki (ordinary member), Soile Kankaanpää (ordinary member), Ilkka Salonen (ordinary member) and Juha Leppänen (ordinary member).

Ilkka Salonen was elected as a new member of Betolar's Board of Directors by the Annual General Meeting held on 23 March 2022.

In its organising meeting, which was held after the Annual General Meeting on 23 March 2022, the Board of Directors decided to establish an Audit Committee and a Personnel and Remuneration Committee. The Committees are responsible for assisting the Board of Directors and do not have independent decision-making power.

Tasks of the committees

The task of the Audit Committee is to assist the Board of Directors in ensuring the proper organisation of the company's accounting and financial control and to ensure that the company has an adequate internal control system covering all of its operations. The committee is also responsible for monitoring that the company's activities and internal controls are organised in accordance with the laws, regulations and good management and governance system as well as for supervising the activities of the internal audit.

The task of the Personnel and Remuneration Committee is to assist the Board of Directors in the preparation of personnel matters related to the operations and remuneration of the company's CEO and Management Team as well as the company's remuneration and incentive schemes. The committee is also responsible for monitoring the remuneration in the company and in the relevant industrial sectors.

Composition of the committees

The Chair and members of the Committees were elected by the Board of Directors at its organising meeting.

Audit Committee: Ilkka Salonen, Chair, and members Soile Kankaanpää and Kalle Härkki. The members of the Audit Committee are independent of the company and the company's significant shareholders.

Personnel and Remuneration Committee: Tero Ojanperä, Chair, and members Inka Mero and Kalle Härkki.

Shareholders' Nomination Committee

The Annual General Meeting decided to establish a permanent Shareholders' Nomination Committee and approved the Nomination Committee's rules of procedure. The Nomination Committee consists of five (5) members, of whom the four (4) largest shareholders of the company are each entitled to appoint one member. In addition, the Chair of the Board of Directors is a member of the Nomination Committee. The members of the Nomination Committee are appointed annually and their term of office expires when new members have been appointed.

Each year, the Nomination Committee is responsible for preparing and presenting to the Annual General Meeting and, if necessary, to the Extraordinary General Meeting, proposals on the composition of the Board of Directors (number of members and persons) and their remuneration. In addition, the Nomination Committee's task is to find successor candidates for the members of the Board of Directors and to prepare the principles concerning the diversity of the Board of Directors.

In 2022, the Nomination Committee was chaired by Alexander Ehrnrooth (Nidoco AB) and the other members were Olli-Pekka Kallasvuo (representative of Juha Leppänen), Peter Seligson (Ahlstrom Invest B.V.), Annika Ekman (Ilmarinen Mutual Pension Insurance Company) and Tero Ojanperä (Chair of Betolar's Board of Directors).

Management Team

On 12 May 2022, Betolar's Board of Directors appointed Riku Kytömäki as the new CEO of the company, and he assumed his duties on 1 November 2022. Matti Löppönen continued as CEO until 31 October 2022.

Betolar's Management Team was strengthened through key recruitments during the first half of the year. Antti Uski (PhD, EMBA) started as Chief Human Resources Officer on 11 January 2022. Ilkka Iittiläinen (M.Sc. (Tech), LL.M., MBA) was appointed as Chief Operations Officer and a member of the Management Team on 29 March 2022. Ville Voipio (M.Sc., Econ.) was appointed as Chief Commercial Officer and Jarno Poskela (D.Sc., Tech.) as Chief Technology Officer during the second half of the year. Pekka Hintikka, the company's current Chief Technology Officer, left the Management Team after Poskela's appointment. He announced that he will retire in 2023 and will continue to support Betolar's R&D activities as an advisor until then.

In addition to the new Management Team appointments, Lasse Happonen who was responsible for ready-mixed concrete and precast elements announced in March that he would retire and will continue as Betolar's advisor. Juha Pinomaa, the company's Head of Asia and a member of the Management Team, left Betolar at the end of 2022 and Juha Leppänen, the founder and Chief Innovation Officer of Betolar, resigned from the company's operational management and Management Team on 31 December 2022, but will continue as a member of the Board of Directors and support Betolar's innovation activities and projects in an advisory role.

On 31 December 2022, Betolar's Management Team consisted of Riku Kytömäki (CEO), Riikka Ylikoski (CFO), Ville Voipio (CCO), Jarno Poskela (CTO), Janne Rauramo (Executive VP Strategic Partnerships), Antti Uski (Chief Human Resources Officer) and Ilkka Iittiläinen (COO).

Auditor

Betolar's Annual General Meeting of 23 March 2022 elected the auditing firm PricewaterhouseCoopers Oy as its auditor, with Janne Rajalahti, Authorised Public Accountant, as the responsible auditor.

Share-based incentive and commitment schemes

Share option plans

Betolar has five option-based incentive and commitment plans, aimed to encourage the management and select key persons and employees to work to increase shareholder value in the long term.

Betolar's current share option programmes and the related outstanding share options are described in the table below.

Plans	Subscription price	Number of shares issued under options	Subscription period
Options 2019			
2019-2A-D	EUR 0.64	49,883	31 December 2030
Optiot 2020			
2020	EUR 1.31	168,280	31 December 2030
Options 2021			
2021-1	EUR 1.31	582,970	31 December 2030
	EUR 1.31	121,402	9 September 2021–31 December 2030 1 December 2021–31 December 2030
Options 2022			
2022	EUR 5.96	486,788	From 1.4.2025 to 28.2.2027
Total		**1,409,323**	

The options 2019, 2020 and 2021 became vested in connection with the listing.

The members of the company's Board of Director and Management Team held a total of 407,634 option rights on 31 December 2022, entitling them to subscribe for a total of 915,234 shares in the company. Other employees held a total of 100,294 option rights on 31 December 2022, entitling them to subscribe for a total of 276,694 shares in the company. In total, the number of issued unsubscribed options accounted for a total of 7.2 per cent of all shares in the company on 31 December 2022.

Betolar's share-based incentive and commitment scheme is described in appendix 15 to the financial statements.

Share-based incentive plan 2022

The reward under the Restricted Share Plan 2022 is based on a valid employment or management contract and the continuation of the employment or service with a separately defined commitment period of at least 12 months, which may end on 31 August 2023, 2024, 2025, 2026 or 2027. The reward will be distributed free of charge after the end of the fixed commitment period. The system is intended only for separately appointed key personnel.

The rewards will be paid partly in Betolar Plc's shares and partly in cash. The financial contributions to the fees are intended to cover taxes and statutory social insurance contributions arising from the fees paid to the participants. On the basis of the Restricted Share Plan, the rewards to be allocated correspond to the value of a maximum of 100,000 Betolar Plc shares in total, including the proportion to be paid in cash.

Shares and shareholders

At the end of the financial period, Betolar had a total of 4,486 (3,931) shareholders. The table below presents Betolar's ten largest shareholders based on the number of shares according to information from the shareholder register maintained by Euroclear Finland Ltd as at 31 December 2022.

TEN LARGEST SHAREHOLDERS ON 31 DECEMBER 2022

Position	Shareholders	Number of shares	% of shares
1	Nidoco AB	2,077,214	10.64
2	Leppänen, Juha Markus	1,603,468	8.21
3	Ajanta Innovations Ltd	1,600,463	8.19
4	Ilmarinen Mutual Pension Insurance Company	1,080,139	5.53
5	Ahlstrom Invest B.V.	1,058,335	5.42
6	Voima Ventures Fund II Ky	744,853	3.81
7	Entrada Ltd	691,150	3.54
8	Equity fund Säästöpankki Pienyhtiöt	650,000	3.33
9	Mutual fund Danske Invest Suomi Osake	571,828	2.93
10	Ylitalo, Kari Tapani	557,469	2.85
	10 largest, total	10,634,919	54.45
	Other shareholders	8,896,838	45.55
	All shares, total	19,531,757	100.00

The members of the Board of Directors and Management Team and entities controlled by them held a total of 2,070,752 shares in Betolar at the end of the financial period, accounting for approximately 10.6 per cent of all shares and votes.

LARGEST SHAREHOLDERS BY SECTOR ON 31 DECEMBER 2022

Postion	Shareholders by sector	Number of shares	% of shares
1	Private companies, total	6,259,407	35.39
2	Households	5,284,216	29.88
3	Foreign, total	3,282,086	18.56
4	Public organisations	1,341,463	7.58
5	Financial and insurance institutions, total	1,175,444	6.65
6	Not-for-profit organisations, total	344,404	1.95
	Total	17,687,020	100.00
	Nominee-registered	1,372,351	7.0
	On the joint account	472,386	0.00
	All shares, total	19,531,757	0.00

Of the shares, 7.0 per cent were held by nominee-registered shareholders. In addition, there was a total of 472,386 shares owned by one shareholder on the joint account that had not been transferred to the shareholder's book-entry account by the end of the financial period. The shares on the joint account and their shareholders are not included in the list of the largest shareholders.

BREAKDOWN OF SHARES ON 31 DECEMBER 2022

Position	Number of shares	Number of share-holders	% of share-holders	Number of shares	% of shares
1	1–100	2,741	61.10	150,171	0.77
2	101–500	1,192	26.57	290,796	1.49
3	501–1,000	270	6.02	212,149	1.09
4	1,001–5,000	170	3.79	382,587	1.96
5	5,001–10,000	35	0.78	239,372	1.23
6	10,001–50,000	38	0.85	840,030	4.30
7	50,001–100,000	9	0.20	703,957	3.60
8	100,001–500,000	20	0.45	4,746,882	24.30
9	500,001–	11	0.25	11,493,427	58.85
	On the joint account	0	0.00	472,386	2.42
	Total	4,486	100.00	19,531,757	100.00

The 100 largest shareholders are listed on Betolar's website https://www.betolar.com/investors

Share price and trading

The highest quoted share price during the financial period was EUR 6.30 and the lowest EUR 2.52. The volume-weighted average share price was EUR 4.64. The closing price of the financial period was EUR 3.05, resulting in Betolar's market capitalisation of EUR 59,571,859. The total share turnover during the financial year was EUR 11,667,819 and the trading volume was 2,547,223 shares. The average daily turnover during the financial period was 10,068 shares.

Valid authorisations of the Board of Directors

Betolar's Board of Directors has the following authorisations issued by the Annual General Meeting on 23 March 2022.

Authorisation to issue shares, stock option rights and other special rights entitling to shares

The Board of Directors is authorised to decide on the issue of a maximum of 1,850,208 shares (including shares issued on the basis of special rights) in one or more issues, which corresponds to approximately 9.5 per cent of the total number of shares in the company. The Board of Directors decides on all terms and conditions of issuance of new shares, stock option rights and other special rights entitling to shares within the framework of the authorisation. The issuance of shares and special rights entitling to shares, including options, may also take place in a directed manner in derogation from the pre-emptive rights of shareholders (directed share issue). The authorisation revokes the previous unused authorisations concerning the issuance of shares and the issuance of options and special rights entitling to shares and is valid for 18 months from the decision of the Annual General Meeting.

Authorisation to acquire treasury shares

The Board of Directors is authorised to decide on the acquisition of a maximum of 973,793 of the company's treasury shares, which corresponds to approximately 5 per cent of the total number of shares in the company. Treasury shares may be acquired only by using unrestricted equity and at the price in multilateral trading on the date of the repurchase or other publicly quoted price.

Shares may also be acquired outside public trading at a price that is not higher than the market price at the time of acquisition in public trading. The Board of Directors decides how shares are acquired. Treasury shares may be repurchased other than in proportion to the shares held by the shareholders (direct repurchase) if there is a compelling economic reason for the company. The authorisation is valid for 18 months from the decision of the Annual General Meeting.

The most significant risks and business uncertainties

Risk factors and risk management

The rapid development of Betolar's business and operating environment requires strong anticipation and management of the risk environment and internal risks. Betolar's risk management supports the implementation of the company's strategy, business continuity and the achievement of objectives in accordance with the risk management policy approved by the Board of Directors.

The risk management policy describes the basis of Betolar's risk management, the risk environment, the control model and the key risk management processes. Betolar's Board of Directors and management determine the amount of risk that the company is willing to take and able to accept. The Board of Directors directs and supervises the planning and implementation of risk management.

The CEO of Betolar is responsible for risk management as a whole, while the CFO is responsible for the risk management process, its development and guidance, and the monitoring and coordination of practical implementation. The business management is responsible for achieving the set goals and managing and mitigating the risks that threaten them. The operational management is also responsible for risk management work and for ensuring the performance of the risk management process and the availability of sufficient resources.

Continuous, active communication throughout the organisation strengthens risk understanding and culture.

Risk management process

Phase	Contents / categories	Key decisions and assessments
Strategy process	Risk environment related to the strategy and its objectives and implementation.	• Willingness to take risks and risk tolerance
Business planning	Annual recurrent risk assessment	• Consideration of risks in the business plan
Identification, classification and assessment of risks	• Strategic risks • Operative risks • Financial risks • Risks related to compliance	• Trend of risk • Probability • Criticality
Risk mitigation	• Plan active management • Avoid risk • Accept the risk	• Method of mitigation • Responsibility
Risk reporting	• Internal reporting • External reporting	• Efficiency of the risk management process • Assessment of risk management results

Risk environment

In Betolar's risk management policy, risks are divided into strategic, operational, financial and compliance risks. In addition, the risk map used in the risk management process examines risks in a more subtle way from the perspective of different parts of the business and processes. This enables operative responsibility, monitoring and reporting of risks.

Strategic risks

Strategic risks are uncertainties related mainly to the operating environment and Betolar's ability to utilise or prepare for changes in the operating environment. These may include the overall economic situation, the performance of strategic projects, intellectual property rights, business model, competitor activities, legislation or technological developments. Strategic risks may relate to both financial and non-financial objectives

Operative risks

Operational risks are circumstances or events that may prevent or hinder the achievement of objectives or damage people, property, business, information or other business activities. The operational risks related to Betolar's operations are related in particular to the functionality and capacity of the procurement and supply chains, the retention and attraction of the best workforce, the well-being and safety of the personnel and those working in the supply chains. In Betolar's business model, information security and cyber risks related to the digital platform are a significant risk category that has recently grown in importance.

Financial risks

Financial risks are risks related to Betolar's financial position. These include, for example, liquidity, risks related to the availability and price of financing, changes in exchange rates and investments.

Compliance risks

Compliance risks are risks related to exposure to legal penalties, financial losses and material losses that Betolar faces if it does not act in accordance with the laws and regulations or internal practices of the industry. The most significant risks in a strongly internationalised operations are the management of the requirements of the regulatory environment of the target markets and operations in accordance with them.

The most significant business risks

The following section describes the main risks considered significant by Betolar, which may have a negative impact on its business operations, financial position, results and market value.

Strategic risks

Risks related to the business environment

Economic cycles and especially the level of activity in the construction market affect the demand for Betolar's products and services. High inflation, rising interest rates and supply chain disturbances have weakened the outlook for the global economy, posing a risk to the implementation of Betolar's growth strategy. The changed security situation in Europe resulting from the Russian invasion of Ukraine has increased geopolitical risks, intensified disruptions in global supply chains and increased uncertainty in European product and energy markets. Shortages, disruptions and cost inflation resulting from the situation may adversely affect the competitiveness, delivery, sales or profitability of Betolar's solution. However, uncertainty in the operating environment is not expected to have a significant impact on the implementation of plans and programmes related to the green transition in societies, companies and financial markets.

Changes in the regulatory environment

Betolar's strategic market and operating environment is influenced by regulatory initiatives related to environmental sustainability at both supranational and national levels. In Betolar's target markets in Europe and Asia, significant regulatory packages are being prepared and implemented that aim to accelerate the spread of green and other sustainable investments and financing models, reduce the environmental and climate impacts of various sectors, protect biodiversity and increase the activity of the emission allowance and carbon offset market.

According to Betolar's estimate, the Geoprime solution will particularly benefit from the requirements set by the new and ongoing regulatory projects of the aforementioned entities. It is, however, possible that the development of the regulatory environment is neutral from the point of view of the Geoprime solution, or that the regulatory environment may develop in a direction that is unfavourable from the point of view of the Geoprime solution and the related value chain.

Operative risks

Success in producing and selling a strong and scalable solution

Betolar is an early-stage technology company aiming for a large cement-replacing building materials market internationally, especially in Asia and Europe. The strong commercialisation and growth of operations in these markets, as well as the building of the conditions for scalability, require significant investments in growth, development and acquisition of capabilities and the making of related strategic choices. In the rapidly opening global market for green building materials, Betolar has decided to accept a higher level of risk in its strategic choices which are related to defining and creating a new market and commercialising its innovation.

Betolar manages the risk related to the commercialisation of the technology and operating model it has developed in new markets by actively reviewing its operating environment, value chain and strategic choices, and by making the necessary changes quickly but in a controlled manner. The experiences gained from the first pilot and commercial customer relationships are analysed and utilised in specifying the strategic weight of customer segments and in continuously seeking larger customer relationships and production volumes. It is also essential to identify and ensure the availability of optimal side streams in terms of applicability, availability and price competitiveness.

Price competitiveness of the solution

The price competitiveness of the Geoprime solution is largely based on the price and availability of industrial side streams, activator components and binders used in the solution. In Betolar's formulas, the market-priced raw material blast furnace slag is currently emphasised, and there is also increasing demand for it in blended cements which compete with geopolymer solutions. Betolar aims to gradually offer alternative, non-commercialised side streams and their utilisation technologies for use alongside or instead of blast furnace slag. Examples of these are the steel industry's vanadium purified slag (SSM, Stabilised Slag Material) and mixer slag ([ladle slag]). The aim is to establish long-term contracts with providers of such side streams.

Similarly, Betolar aims to target its offerings to markets and customer segments where, in addition to price, the focus is also on environmental and sustainability factors, or where Betolar's solution provides an overwhelming competitive advantage due to its technical or production characteristics.

Failure in major projects

The widespread use of Betolar's Geoprime solution and securing profitability in target markets in Asia and Europe require commercial, financial and technical success, especially in projects with the largest potential volumes.

Betolar has decided to strengthen risk management related to the management and success of critical projects. The productisation of deployment, clear phasing and utilisation of the steering model significantly reduce the risk of failure, especially in more extensive and larger-scale deployment projects. The steering model supports and strengthens project management, risk management and monitoring.

Through the productisation and phasing of the commissioning, Betolar also aims to strengthen the customer's prerequisites for carrying out their own commissioning or similar project tasks efficiently, productively and on schedule together with Betolar.

Failure of continuous management of formulas

The special strength of the geopolymer formulas applied in the Geoprime solution is the possibility to utilise several different industrial side streams of various quality. As Betolar strives for the best possible continuous management of formulas, the capacity for analysing varying side streams must be increased from the current level.

Betolar manages the risk created by fluctuating side streams by increasing its laboratory capacity, which increases the speed and capacity of side stream analysis from the current level. Increasing laboratory capacity also increases the possibilities to study an increasing number of new individual side streams. In addition, Betolar uses its AI-based platform to analyse new side streams.

Protection of intellectual property and trade secrets

An essential part of Betolar's strategic competitive advantage is based on its innovations, intellectual property rights and confidential information related to technologies, processes and business operations. Betolar has a strong intellectual property rights strategy and a portfolio of intellectual property rights, as well as a process for managing and protecting its rights through technical, legal, operational and commercial means.

However, there is a risk that parties with access to the Company's intellectual property rights and other confidential information, such as partners, employees and consultants, disseminate or otherwise use such information in a manner that may damage the Company's competitive advantage. Betolar takes full account of the protection of intellectual property rights in all its agreements, as well as in the induction and continuous training of employees.

Key personnel risk

Betolar’s success is essentially based on its key personnel and the human capital they form. If one or more key persons decide to leave the company, this may have a significant impact on Betolar’s operations at least in the short term. Betolar invests significantly in its ability to identify, attract and retain the best experts in their fields. Betolar strives to offer an attractive commitment and reward model, employee benefits that promote well-being, and diverse working environments. A strong, meaningful mission, a working community that unites top experts and technology, and strong values and leadership based on them are strengths that are cherished and developed as the company grows and becomes more international.

Risks in the digital infrastructure and operating environment

Betolar’s business depends on a well-functioning digital infrastructure, strong information security and uninterrupted access to digital tools and systems. In recent years, various cyber attacks on public and private sector information systems and digital services have become more common, for example, as a result of the changed security situation in Europe and the growth of cybercrime. Disruptions may also result from human errors, omissions, accidents, breaches or data breaches affecting Betolar’s or its service providers’ systems and data. Betolar manages the security and availability of its digital infrastructure and data by maintaining a high level of information security and information security infrastructure and operating models, as well as a continuous readiness to respond to potential disruptions and attacks. The information management practices aim to ensure the highest possible reliability, integrity, timeliness and security of the information. Events in our information systems are monitored 24/7, and abnormal events trigger an alarm immediately.

Compliance risks

Functionality of the solution in accordance with the customer’s own and national requirements

Betolar’s solution is based on customer-specific customisation of the technology, formulas, raw material chains and marketing. The aim is to offer the customer an opportunity to manufacture, market and deliver a superior – from the perspective of quality, sustainability and environmental impact – compliant and cement-free concrete product to their own customers.

The meaning of the first customer relationships is central to the popularisation of the Geoprime solution, which is why the success in meeting the customer’s own requirements and the product-specific requirements is of primary importance to Betolar.

Products manufactured with Betolar’s Geoprime technology must meet requirements for each product or product group, which vary depending on the country or region in which the product is manufactured or used. Betolar manages the risk related to the conformity of construction products and materials based on its solution by actively and proactively managing the product development process. At the beginning of each pilot or deployment project, local regulations, standards and other local requirements, guidelines and practices for the targeted Geoprime end product and its manufacture are surveyed. The definition, implementation and reporting of compliance are ensured in stages as the product development process progresses. Separately from this, Betolar implements the necessary testing programmes to ensure long-term durability as early as possible.

Financial risks

Financing of the growth strategy

Due to the early stages of its business operations, Betolar is dependent on external financing. The company’s financial situation, readiness and needs are systematically monitored and anticipated as part of the financial process. New financing may be required, for example, to carry out investments that are significant for the implementation of the growth strategy. Financing may be provided in the form of equity or debt. However, Betolar may not be able to raise the funding it needs or may have to raise funding at a higher cost than in the past. The availability of financing may be affected by several factors, such as the situation on the financial markets, the general availability of credit, uncertainties related to the profitability of Betolar’s business, and creditworthiness.

The company manages the risk related to the availability of financing by actively mapping the sources of equity and debt financing, and green financing in particular, by building its target capability.

Estimate of probable future development

In the years to come, Betolar will focus on developing its business operations and financing its growth in accordance with its strategy. The company does not expect to be distributing dividends in the short or medium term.

Board of Directors’ proposal for the distribution of profit

The parent company’s distributable unrestricted shareholders’ equity amounted to EUR 23,130,790.99 on 31 December 2022. The parent company’s profit for the financial period was EUR -12,098,481.79.

The company does not expect to be distributing dividends in the short or medium term. In addition, the terms and conditions of Betolar’s financing agreements include certain restrictions for Betolar’s ability to pay out dividends or otherwise distribute equity.

Additional information about the restrictions is available in the company’s listing prospectus under “Financing Betolar’s business”.

The Board of Directors proposes to the Annual General Meeting that no dividend be distributed for the financial period 1 January–31 December 2022 and that the loss for the financial period be carried over under retained earnings.

Major events after the review period

No significant events.

Annual General Meeting

Betolar Plc’s Annual General Meeting is planned to be held on 31 March 2023. The notice of the general meeting will be published later.

Financial statements

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

EUR	NOTE	1 Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
NET SALES	4	287,425	9,924
Other operating income	5	139,455	90,518
Materials and services	6	-166,428	-75
Personnel expenses	7	-4,351,828	-2,808,168
Depreciation, amortisation and impairment	8	-1,529,949	-736,203
Other operating expenses	9	-5,896,264	-2,069,297
Operating profit (loss)		**-11,517,590**	**-5,513,301**
Financial income	10	124	374
Financial expenses	10	-355,904	-74,185
Profit (loss) before taxes		**-11,873,369**	**-5,587,112**
Income taxes	11	0	0
Change in deferred taxes	11	29,578	581
Result for the financial year		**-11,843,791**	**-5,586,531**

EUR	NOTE	1 Jan. - 31 Dec. 2022	1 Jan. -31 Dec. 2021
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss			
Translation differences		4,435	0
Total comprehensive income		**-11,839,356**	**-5,586,531**
Profit for the period attributable to			
Shareholders of the parent company		-11,843,791	-5,582,909
Non-controlling interests		0	-3,622
		-11,843,791	**-5,586,531**
Comprehensive income for the period attributable to			
Shareholders of the parent company		-11,839,356	-5,582,909
Non-controlling interests		0	-3,622
		-11,839,356	**-5,586,531**
Earnings per share	12		
Earnings per share, basic and adjusted for dilution, EUR		-0.61	-0.53

CONSOLIDATED BALANCE SHEET

EUR	NOTE	31 Dec. 2022	31 Dec. 2021	1 Jan.2021
ASSETS				
Non-current assets				
Development expenses	13	3,656,455	1,780,212	858,182
Other intangible assets	13	30,403	28,885	0
Property, plant and equipment	14	299,009	169,995	120,262
Right-of-use assets	15	479,087	153,377	111,770
Other non-current receivables	17	201,444	115,595	8,685
Deferred tax assets	11	30,160	581	0
Non-current assets, total		**4,696,558**	**2,248,645**	**1,098,899**
Current assets				
Trade receivables	16	142,667	6,646	272
Other receivables	17	314,813	281,559	92,641
Accrued income and prepaid expenses	17	169,774	219,599	73,388
Investments	22	25,456,989	33,997,518	0
Cash and cash equivalents	18	1,167,078	3,357,609	644,186
Current assets, total		**27,251,320**	**37,862,931**	**810,488**
Total assets		**31,947,878**	**40,111,576**	**1,909,387**

Total assets	NOTE	31 Dec. 2022	31 Dec. 2021	1 Jan.2021
SHAREHOLDERS' EQUITY AND LIABILITIES				
Equity				
Share capital	19	80,000	80,000	2,500
Invested unrestricted equity reserve	19	45,086,315	45,035,910	949,995
Share issue	19	0	12,866	2,770,538
Treasury shares	19	0	-14,170	0
Translation differences		4,435	0	0
Retained earnings		-6,744,977	-1,236,979	-707,201
Profit for the financial period		-11,843,791	-5,586,530	-1,622,616
Non-controlling interests		0	0	0
Total equity		**26,581,983**	**38,291,097**	**1,393,217**
Non-current liabilities				
Capital loans	23	2,152,774	0	0
Loans from financial institutions	23	10,263	12,157	0
Government loan	23	353,894	277,100	0
Lease liabilities	15, 23	246,958	72,922	57,279
Non-current liabilities, total		**2,763,889**	**362,179**	**57,279**
Current liabilities				
Loans from financial institutions	23	3,315	4,073	0
Lease liabilities	15, 23	243,056	83,362	54,491
Accounts payable	23	885,995	766,990	141,348
Other payables	24	141,236	52,305	50,811
Accruals and deferred income	24	1,328,405	551,570	212,242
Current liabilities, total		**2,602,007**	**1,458,300**	**458,891**
Total liabilities		**5,365,896**	**1,820,479**	**516,170**
Shareholders' equity and liabilities, total		**31,947,878**	**40,111,576**	**1,909,387**

CONSOLIDATED CASH FLOW STATEMENT

EUR	NOTE	1 Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
Cash flow from operating activities			
Profit for the financial period		-11,843,791	-5,586,531
Adjustments:			
Depreciation, amortisation and impairment	8	1,529,949	736,203
Net financial income and expenses	10	354,145	71,669
Share-based payments	20	65,855	1,216,589
Other adjustments		-20,642	1,271
Income taxes	11	-29,578	-581
Cash flow before change in working capital		-9,944,062	-3,561,380
Change in working capital:			
Change in accounts payable and other payables	24	-205,297	-448,412
Change in trade receivables and other receivables	17	634,245	796,762
Cash flow from operating activities before financing items and taxes		**-9,515,114**	**-3,213,030**
Interest paid and payments for other financial expenses	10	-31,031	-7,881
Net cash flow from operating activities (A)		**-9,546,144**	**-3,220,911**
Cash flows from investing activities			
Investments in tangible and intangible assets	13,14	-2,978,505	-1,584,778
Investments in other assets	22	8,412,590	-34,000,000
Net cash flow from investing activities (B)		**5,434,085**	**-35,584,778**

EURO	NOTE	Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
Cash flows from financing activities			
Share issues	19	56,778	39,788,312
Transaction costs of share issue	19	-5,069	-2,936,268
Acquisition of treasury shares	19	0	-14,170
Acquisitions of non-controlling interests	28	0	-127,240
Long-term loan disbursements		2,088,099	4,871,792
Short-term loan disbursements	23	568	5,092
Repayment of short-term loans	23	-3,538	-1,018
Repayments of lease liabilities	23	-215,311	-67,387
Net cash flows from financing activities (C)		**1,921,528**	**41,519,113**
Change in cash and cash equivalents (A + B + C) increase (+)/decrease (–)		-2,190,531	2,713,423
Cash and cash equivalents at the beginning of the period		3,357,609	644,186
Change		-2,190,531	2,713,422
Cash and cash equivalents at the end of the period		1,167,078	3,357,609

STATEMENT OF CHANGES IN EQUITY

EUR	NOTE	Equity attributable to owners of the parent							
		Share capital	Invested unrestricted equity reserve	Share issue	Treasury shares	Translation differences	Retained earnings	Non-controlling interests	Total equity
FAS financial statements shareholders' equity at 31 December 2020		2,500	949,995	2,770,538	0	0	-2,312,410	0	1,410,624
IFRS transition effect	3	0	0	0	0	0	-17,407	0	-17,407
Adjusted shareholders' equity 1 January 2021		**2,500**	**949,995**	**2,770,538**	**0**	**0**	**-2,329,817**	**0**	**1,393,217**
Comprehensive income									
Profit for the financial period		0	0	0	0	0	-5,582,909	-3,622	-5,586,531
Other comprehensive income									
Translation differences		0	0	0	0	0	0	0	0
Comprehensive income (loss) for the period total		**0**	**0**	**0**	**0**	**0**	**-5,582,909**	**-3,622**	**-5,586,531**
Transactions with owners									
Issues less transaction costs	19	0	36,837,874	0	0	0	0	0	36,837,874
Convertible bond conversion	19	0	4,553,699	0	0	0	0	0	4,553,699
Increase in share capital	19	77,500	-77,500	0	0	0	0	0	0
Acquisition of treasury shares	19	0	14,170	0	-14,170	0	0	0	0
Registration of shares	19	0	2,757,672	-2,757,672	0	0	0	0	0
Share-based payments	20	0	0	0	0	0	1,216,589	0	1,216,589
Transactions with non-controlling interests	28	0	0	0	0	0	-130,737	3,622	-127,115
Other adjustments		0	0	0	0	0	3,364	0	3,364
Total transactions with owners		**77,500**	**44,085,915**	**-2,757,672**	**-14,170**	**0**	**1,089,216**	**3,622**	**42,484,411**
Shareholders' equity 31 Dec. 2021		**80,000**	**45,035,910**	**12,866**	**-14,170**	**0**	**-6,823,509**	**0**	**38,291,097**

STATEMENT OF CHANGES IN EQUITY

		Equity attributable to owners of the parent							
EUR	NOTE	Share capital	Invested unrestricted equity reserve	Share issue	Treasury shares	Translation differences	Retained earnings	Non-controlling interests	Total equity
Shareholders' equity 1 Jan. 2022		**80,000**	**45,035,910**	**12,866**	**-14,170**	**0**	**-6,823,509**	**0**	**38,291,097**
Comprehensive income									
Profit (loss) for the financial period		0	0	0	0	0	-11,843,791	0	-11,843,791
Other comprehensive income									
Translation differences		0	0	0	0	4,435	0	0	4,435
Comprehensive income (loss) for the period, total		**0**	**0**	**0**	**0**	**4,435**	**-11,843,791**	**0**	**-11,839,356**
Transactions with owners									
Issues less transaction costs	19	0	51,709	0	0	0	0	0	51,709
Registration of shares	19	0	12,866	-12,866	0	0	0	0	0
Cancellation of treasury shares	19	0	-14,170	0	14,170	0	0	0	0
Share-based payments	20	0	0	0	0	0	65,855	0	65,855
Other adjustments		0	0	0	0	0	12,677	0	12,677
Total transactions with owners		**0**	**50,405**	**-12,866**	**14,170**	**0**	**78,532**	**0**	**130,241**
Shareholders' equity 31 Dec. 2022		**80,000**	**45,086,315**	**0**	**0**	**4,435**	**-18,588,768**	**0**	**26,581,983**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 1. BASIC INFORMATION ABOUT THE GROUP

The Group's parent company is Betolar Plc. Betolar Plc (hereinafter referred to as the "Company" or "Betolar") is a Finnish public limited company domiciled in Kannonkoski, Finland. The registered address of the company is Mannilantie 9, 43300 Kannonkoski, Finland.

Betolar is a Finnish materials technology pioneer that helps the construction industry reduce CO^2 emissions, reduce the use of natural resources and achieve climate goals in practice.

2. ACCOUNTING PRINCIPLES

2.1. ACCOUNTING POLICY

The consolidated financial statements have been prepared in accordance with the International Accounting Standards (IFRS, IAS) and Interpretations Committee (IFRIC) issued by the International Accounting Standards Board (IASB) which are accepted for application in the EU. The consolidated financial statements for the financial year ended on 31 December 2022 have been prepared in accordance with the International Financial Reporting Standards (IFRS) and Interpretations Committee (IFRIC) in force on 31 December 2022. The notes to the consolidated financial statements have also been prepared in accordance with the requirements of the Finnish Accounting Act and the Limited Liability Companies Act.

These consolidated financial statements are Betolar Plc's first IFRS financial statements. The Group applies IFRS 1 First-time Adoption of International Financial Reporting Standards in its consolidated financial statements. Betolar's date of transition to IFRS was 1 January 2021. The consolidated financial statements were prepared in accordance with the Finnish Accounting Standards (FAS) until 31 December 2021. The FAS accounting policy is presented in Betolar's financial statements for 2021. The impacts of the transition are explained in Note 3: Transition to IFRS.

The Group's financial statements are presented in euros, which is the company's functional and presentation currency. The figures presented in these financial statements have been rounded up or down, and therefore the aggregates for individual figures may differ from the total figures presented in the tables. Transactions denominated in foreign currencies are converted into the functional currency at exchange rates prevailing on the date of the transaction.

Betolar has not yet applied the revised standards already issued by the IASB, which are mandatory for the financial years beginning on or after 1 January 2023.

Betolar Group's accounting principles are described in each note to make them easier to understand. The following table summarises the notes that present each accounting principle and a reference to the relevant IFRS standard.

Accounting principle	Note	IIFRS
Revenue recognition principles for sales	4	IFRS 15
Research and development expenses	13	IAS 38
Personnel expenses	7	IAS 19
Income taxes	11	IAS 12
Earnings per share	12	IAS 33
Intangible assets	13	IAS 38
Tangible assets	14	IAS 16
Leases	15	IFRS 16
Government grants	23	IAS 20
Trade receivables	16	IFRS 9
Share-based payments	20	IFRS 2
Financial assets and liabilities	22,23	IFRS 9

2.2. ACCOUNTING PRINCIPLES REQUIRING MANAGEMENT DISCRETION AND KEY UNCERTAINTIES RELATING TO ESTIMATES

Under IFRS, the preparation of financial statements requires discretion by the management regarding the selection and application of accounting principles. In addition, the management has had to make forward-looking accounting estimates and assumptions that may affect the amounts of assets, liabilities, income and expenses recognised during the reporting period, and the outcomes may differ from these estimates. The estimates and assumptions are based on historical experience and other justifiable assumptions considered reasonable when the financial statements are prepared. It is possible that actual outcomes differ from the estimates used in the financial statements.

The discretionary decisions that Betolar's management has made when applying the accounting principles and which have the most significant impact on the figures presented in the financial statements concern the following areas:

- Revenue recognition: determination of performance obligations and stand-alone selling prices and method of revenue recognition over time (Note 4)
- Treatment of leases: estimates of lease term and incremental borrowing rate (Note 15)
- Deferred tax assets from losses (Note 11)

2.3. CONSOLIDATION PRINCIPLES

Subsidiaries

The consolidated financial statements include the parent company Betolar Plc and all of its subsidiaries over which the parent company has control. Controls arises when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Intra-Group shareholding has been eliminated using the acquisition cost method. Acquired subsidiaries are consolidated from the moment the Group acquires control and transferred subsidiaries are consolidated until control ceases. All intra-Group transactions, receivables, liabilities and unrealised gains and internal distribution of profit are eliminated in preparing the consolidated financial statements. Where necessary, the accounting policies of subsidiaries have been amended in the consolidation to reflect the accounting principles of the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Non-controlling interests in the acquiree are measured either at fair value or pro rata to their proportional share of the acquiree's identifiable net assets. The measurement principle is determined separately for each acquisition.

The distribution of net profit or loss for the period to the owners and non-controlling interests of the parent is disclosed in the statement of comprehensive income. The net profit or loss and comprehensive income for the period are attributed to the owners and non-controlling interests of the parent, even if this would result in the non-controlling interests becoming negative. The non-controlling interests in the equity are shown as a separate item on the balance sheet as part of shareholders' equity. Changes in the parent company's ownership in a subsidiary, which do not result in the loss of control, are treated as equity transactions.

Items denominated in foreign currencies

The figures concerning the profit and loss and financial position of the Group's units are measured in the currency that is the currency in the principal operating environment of each unit ('functional currency'). The consolidated financial statements are presented in euros, which is the functional and presentation currency of the parent company.

Transactions denominated in foreign currencies are recorded in the functional currency using the exchange rates prevailing on the date of the transaction. Monetary items denominated in foreign currencies are translated into the functional currency at the exchange rates prevailing at the end of the reporting period. Gains and losses arising from foreign currency transactions and the translation of monetary items are measured through profit or loss.

The income and expense items of foreign Group companies are translated into euros at the average exchange rates for the reporting period and balance sheets at the exchange rate on the closing date. The translation of the result and comprehensive income for the period at different rates in the statement of comprehensive income and balance sheet results in a translation difference recognised in shareholders' equity on the balance sheet, the change in which is recognised in other comprehensive income.

2.4. NEW AND REVISED STANDARDS AND INTERPRETATIONS TO BE APPLIED IN FUTURE FINANCIAL YEARS

On the date when these financial statements were authorised for release, the Group has not adopted the following new and revised IFRS standards that have been issued but have not yet become effective. The management does not expect them to have a material impact on the consolidated financial statements in future reporting periods. They will be adopted from the date of their entry into force.

Disclosure of Accounting Policies – Amendment to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements

(Effective for financial years beginning on or after 1 January 2023, early application is permitted)

The amendments clarify the application of the principle of materiality to the notes on accounting policies.

Definition of Accounting Estimates – Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors

(Effective for financial years beginning on or after 1 January 2023, early application is permitted)

The amendments clarify how companies should distinguish changes in accounting policies from changes in accounting estimates, and focus on defining and clarifying accounting estimates.

Deferred Tax related to Assets and Liabilities arising from a Single Transaction – Amendments to IAS 12 Income Taxes

(Effective for financial years beginning on or after 1 January 2023)

The amendments narrow the exception to the initial recognition rule and clarify that the exception rule is not applicable to individual events, such as leases and termination obligations, which give rise to equal and opposite temporary differences.

3. FIRST-TIME ADOPTION OF IFRS

These financial statements are Betolar Plc's first financial statements in accordance with IFRS. The date of transition to IFRS was 1 January 2021. In the transition, the Group applied IFRS 1 First-time Adoption of International Financial Reporting Standards.

The accounting policies described in these financial statements have been applied in preparing the financial statements for the financial years 2022 and 2021 and the opening IFRS balance sheet of 1 January 2021. The impact of the IFRS transition is presented in the following tables: consolidated statement of comprehensive income 2021, balance sheet of 31 December 2021 and balance sheet of 1 January 2021.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME 2021

EUR	FAS 1 January–31 December 2021	IFRS 16 Leases	IFRS 10 Non-controlling interest	IFRS 2 Share-based Payment	IAS 2 Inventories	IAS 23 Borrowing Costs IFRS 9 Financial Instruments	IAS 20 Government Grants	IAS 32 Listing costs	Reclassi-fication	Effects of the transition to IFRS	IFRS 1 January–31 December 2021
Net sales	**9,924**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9,924**
Production for own use	1,617,476	0	**0**	0	0	0	0	0	-1,617,476	-1,617,476	0
Other operating income	90,518	0	0	0	0	0	0	0	0	0	90,518
Materials and services	-10,876	0	0	0	10,801	0	0	0	0	10,801	-75
Personnel expenses	-2,004,338	0	0	-1,216,589	0	0	0	0	412,759	-803,830	-2,808,168
Depreciation and impairment	-688,284	-62,764	14,845	0	0	0	0	0	0	-47,920	-736,203
Other operating expenses	-2,873,648	67,387	0	0	-2,451	0	0	-465,302	1,204,717	804,351	-2,069,297
Operating loss	**-3,859,228**	**4,622**	**14,845**	**-1,216,589**	**8,351**	**0**	**0**	**-465,302**	**0**	**-1,654,073**	**-5,513,301**
Financial income	374	0	0	0	0	0	0	0	0	0	374
Financial expenses	-3,470,367	-7,530	0	0	0	2,142	0	3,401,570	0	3,396,182	-74,185
Loss before taxes	**-7,329,221**	**-2,907**	**14,845**	**-1,216,589**	**8,351**	**2,142**	**0**	**2,936,268**	**0**	**1,742,109**	**-5,587,112**
Income taxes	0	0	0	0	0	0	0	0	0	0	0
Change in deferred taxes	0	581	0	0	0	0	0	0	0	581	581
Loss for the period	**-7,329,221**	**-2,326**	**14,845**	**-1,216,589**	**8,351**	**2,142**	**0**	**2,936,268**	**0**	**1,742,690**	**-5,586,531**
Other comprehensive income											
Translation differences	0	0	0	0	0	0	0	0	0	0	0
Other comprehensive income, total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total comprehensive income	**-7,329,221**	**-2,326**	**14,845**	**-1,216,589**	**8,351**	**2,142**	**0**	**2,936,268**	**0**	**1,742,690**	**-5,586,531**
Profit for the period attributable to shareholders of the parent company	-7,329,221	0	3,622	0	0	0	0	0	0	3,622	-5,582,909
Non-controlling interests	0	0	-3,622	0	0	0	0	0	0	-3,622	-3,622

CONSOLIDATED BALANCE SHEET 31 DECEMBER 2021

EUR	FAS 31 December 2021	IFRS 16 Leases	IFRS 10 Non-controlling interest	IFRS 2 Share-based Payment	IAS 2 Inventories	IAS 23 Borrowing Costs IFRS 9 Financial Instruments	IAS 20 Government Grants	IAS 32 Listing costs	Reclassi-fication	Effects of the transition to IFRS	IFRS 31 December 2021
ASSETS											
Non-current assets											
Development expenses	1,812,848	0	0	0	0	9,874	-90,268	0	47,758	-32,636	1,780,212
Other intangible assets	28,885	0	0	0	0	0	0	0	0	0	28,885
Other capitalised expenditures	47,758	0	0	0	0	0	0	0	-47,758	-47,758	0
Consolidated goodwill	112,270	0	-112,270	0	0	0	0	0	0	-112,270	0
Property, plant and equipment	169,995	0	0	0	0	0	0	0	0	0	169,995
Right-of-use assets	0	153,377	0	0	0	0	0	0	0	153,377	153,377
Non-current receivables	15,600	0	0	0	0	0	0	0	99,995	99,995	115,595
Deferred tax assets	0	581	0	0	0	0	0	0	0	581	581
Non-current assets, total	**2,187,355**	**153,958**	**-112,270**	**0**	**0**	**9,874**	**-90,268**	**0**	**99,995**	**61,290**	**2,248,645**
Current assets											
Inventories	9,057	0	0	0	-9,057	0	0	0	0	-9,057	0
Trade receivables	6,646	0	0	0	0	0	0	0	0	0	6,646
Other receivables	381,555	0	0	0	0	0	0	0	-99,995	-99,995	281,559
Accrued income and prepaid expenses	219,599	0	0	0	0	0	0	0	0	0	219,599
Financial securities	33,997,518	0	0	0	0	0	0	0	0	0	33,997,518
Cash and cash equivalents	3,357,609	0	0	0	0	0	0	0	0	0	3,357,609
Current assets, total	**37,971,983**	**0**	**0**	**0**	**-9,057**	**0**	**0**	**0**	**-99,995**	**-109,052**	**37,862,931**
Total assets	**40,159,338**	**153,958**	**-112,270**	**0**	**-9,057**	**9,874**	**-90,268**	**0**	**0**	**-47,762**	**40,111,576**

EUR	FAS 31 December 2021	IFRS 16 Leases	IFRS 10 Non-controlling interest	IFRS 2 Share-based Payment	IAS 2 Inventories	IAS 23 Borrowing Costs IFRS 9 Financial Instruments	IAS 20 Government Grants	IAS 32 Listing costs	Reclassifica-tion	Effects of the transition to IFRS	IFRS 31 December 2021
Equity											
Share capital	80,000	0	0	0	0	0	0	0	0	0	80,000
Invested unrestricted equity reserve	47,958,008	0	0	0	0	0	0	-2,936,268	14,170	-2,922,098	45,035,910
Share issue	12,866	0	0	0	0	0	0	0	0	0	12,866
Treasury shares	0	0	0	0	0	0	0	0	-14,170	-14,170	-14,170
Translation differences	0	0	0	0	0	0	0	0	0	0	0
Retained earnings	-2,309,046	0	-127,115	1,216,589	-17,407	0	0	0	0	1,072,067	-1,236,979
Loss for the period	-7,329,221	-2,326	14,845	-1,216,589	8,351	2,142	0	2,936,268	0	1,742,690	-5,586,530
Non-controlling interests	0	0	0	0	0	0	0	0	0	0	0
Total equity	**38,412,608**	**-2,326**	**-112,270**	**0**	**-9,057**	**2,142**	**0**	**0**	**0**	**-121,511**	**38,291,097**
Non-current liabilities											
Loans from credit institutions	12,157	0	0	0	0	0	0	0	0	0	12,157
Government loan	359,635	0	0	0	0	7,733	-90,268	0	0	-82,535	277,100
Lease liabilities	0	72,922	0	0	0	0	0	0	0	72,922	72,922
Non-current liabilities, total	**371,792**	**72,922**	**0**	**0**	**0**	**7,733**	**-90,268**	**0**	**0**	**-9,613**	**362,179**
Current liabilities											
Loans from credit institutions	4,073	0	0	0	0	0	0	0	0	0	4,073
Lease liabilities	0	83,362	0	0	0	0	0	0	0	83,362	83,362
Accounts payable	766,990	0	0	0	0	0	0	0	0	0	766,990
Other payables	52,305	0	0	0	0	0	0	0	0	0	52,305
Accruals and deferred income	551,570	0	0	0	0	0	0	0	0	0	551,570
Current liabilities, total	**1,374,938**	**83,362**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**83,362**	**1,458,300**
Total liabilities	**1,746,730**	**156,284**	**0**	**0**	**0**	**7,733**	**-90,268**	**0**	**0**	**73,749**	**1,820,479**
Shareholders' equity and liabilities, total	**40,159,338**	**153,958**	**-112,270**	**0**	**-9,057**	**9,874**	**-90,268**	**0**	**0**	**-47,762**	**40,111,576**

GROUP 1 JANUARY 2021

EUR	FAS 1 January 2021	IFRS 16 Leases	IFRS 10 Non-controlling interest	IFRS 2 Share-based Payment	IAS 2 Inventories	Reclassification	Effects of the transition to IFRS	IFRS 1 January 2021
ASSETS								
Non-current assets								
Development expenses	803,165	0	0	0	0	55,017	55,017	858,182
Other intangible assets	55,017	0	0	0	0	-55,017	-55,017	0
Property, plant and equipment	120,262	0	0	0	0	0	0	120,262
Right-of-use assets	0	111,770	0	0	0	0	111,770	111,770
Non-current receivables	0	0	0	0	0	8,685	8,685	8,685
Deferred tax assets	0	0	0	0	0	0	0	0
Non-current assets, total	**978,444**	**111,770**	**0**	**0**	**0**	**8,685**	**120,455**	**1,098,899**
Current assets								
Inventories	17,407	0	0	0	-17,407	0	-17,407	0
Trade receivables	272	0	0	0	0	0	0	272
Other receivables	101,327	0	0	0	0	-8,685	-8,685	92,641
Accrued income and prepaid expenses	73,388	0	0	0	0	0	0	73,388
Financial securities	0	0	0	0	0	0	0	0
Cash and cash equivalents	644,186	0	0	0	0	0	0	644,186
Current assets, total	**836,581**	**0**	**0**	**0**	**-17,407**	**-8,685**	**-26,092**	**810,488**
Total assets	**1,815,024**	**111,770**	**0**	**0**	**-17,407**	**0**	**94,363**	**1,909,387**

GROUP 1 JANUARY 2021

EUR	FAS 1 January 2021	IFRS 16 Leases	IFRS 10 Non-controlling interest	IFRS 2 Share-based Payment	IAS 2 Inventories	Reclassification	Effects of the transition to IFRS	IFRS 1 January 2021
SHAREHOLDERS' EQUITY AND LIABILITIES								
Equity								
Share capital	2,500	0	0	0	0	0	0	2,500
Invested unrestricted equity reserve	949,995	0	0	0	0	0	0	949,995
Share issue	2,770,538	0	0	0	0	0	0	2,770,538
Translation differences	0	0	0	0	0	0	0	0
Retained earnings	-926,914	0	0	219,713	0	0	219,713	-707,201
Profit for the financial period	-1,385,495	0	0	-219,713	-17,407	0	-237,120	-1,622,616
Non-controlling interests	0	0	0	0	0	0	0	0
Total equity	**1,410,624**	**0**	**0**	**0**	**-17,407**	**0**	**-17,407**	**1,393,217**
Non-current liabilities								
Loans from credit institutions	0	0	0	0	0	0	0	0
Government loan	0	0	0	0	0	0	0	0
Lease liabilities	0	57,279	0	0	0	0	57,279	57,279
Non-current liabilities, total	**0**	**57,279**	**0**	**0**	**0**	**0**	**57,279**	**57,279**
Current liabilities								
Loans from credit institutions	0	0	0	0	0	0	0	0
Lease liabilities	0	54,491	0	0	0	0	54,491	54,491
Accounts payable	141,348	0	0	0	0	0	0	141,348
Other payables	50,811	0	0	0	0	0	0	50,811
Accruals and deferred income	212,242	0	0	0	0	0	0	212,242
Current liabilities, total	**404,400**	**54,491**	**0**	**0**	**0**	**0**	**54,491**	**458,891**
Total liabilities	**404,400**	**111,770**	**0**	**0**	**0**	**0**	**111,770**	**516,170**
Shareholders' equity and liabilities, total	**1,815,024**	**111,770**	**0**	**0**	**-17,407**	**0**	**94,363**	**1,909,387**

Effects of the transition by standard

Leases

Betolar has leases on premises as well as a furniture lease agreement for which the balance sheet impact in accordance with IFRS 16 has to be calculated at the time of transition. At initial recognition, the value of the right-of-use asset corresponds to the amount of the lease liability calculated as the present value of the leases payable during the lease term. As a transitional measure, the Group has adopted a simplified approach in accordance with the standard, whereby the impact of applying the standard is recognised as an adjustment to the opening balance of retained earnings at the date of transition to IFRS.

At the date of transition to IFRS, a right-of-use asset of EUR 112 thousand and a corresponding lease liability divided into a non-current and a current component is recognised in the consolidated balance sheet. The present value of the lease liability has been determined using the estimated incremental borrowing rate. Most of the agreements remain in force until further notice. With respect to agreements that remain in force until further notice, the Group has estimated that exercising the extension option is reasonably certain, in which case the lease term is defined as the period of time including the option. At the beginning of each lease, the Group assesses how long it is likely to stay in the premises, and reassessments are made in the event of changes in circumstances.

According to FAS, lease payments are recognised in other operating expenses during the lease term and lease payments after the end of the financial year are presented as off-balance-sheet liabilities. In IFRS financial statements, rental expenses are adjusted from other operating expenses to amortisation of the lease liability and interest expense. The right-of-use assets recognised on the balance sheet are amortised through profit or loss. On 31 December 2021, the total right-of-use asset arising from leases was EUR 153 thousand and the total lease liabilities EUR 156 thousand.

Deferred tax

In FAS, no deferred taxes were recognised, whereas according to IFRS, the Group recognises deferred taxes for all temporary differences between IFRS values and taxable amounts. With regard to the opening balance sheet, deferred taxes have been recognised from temporary accrual differences resulting from IFRS 16 adjustments.

Non-controlling interests

The Group has non-controlling interests on its opening balance sheet. According to FAS, non-controlling interests are separated, as the companies are loss-making. Under IFRS, an entity shall allocate profit or loss and all other items of comprehensive income to owners and non-controlling interests of the parent. An entity shall also allocate comprehensive income to the owners and non-controlling interests of the parent, even if this would result in the non-controlling interests becoming negative. A first-time adopter shall apply the above requirements non-retroactively. Therefore, non-controlling interests are not retrospectively separated in the opening balance sheet. The non-controlling interests' share of the result for the period 2021 is EUR -4 thousand.

The Group redeemed the non-controlling interests during the financial year 2021. In connection with acquisitions, the Group has recognised goodwill of EUR 127 thousand, which has also been amortised in accordance with FAS. Under IFRS, changes in a parent's participation in a subsidiary that result in the parent not losing or gaining control of control are equity transactions. Therefore, according to the IFRS, the cost recognised as goodwill under FAS is reclassified to equity and the amortisation recognised under FAS is reversed under IFRS.

Share-based payments

Betolar has four option-based incentive and commitment plans, aimed to encourage the management and selected key persons and employees to work to increase shareholder value in the long term. In the FAS financial statements, option plans are not recognised on the income statement. In accordance with IFRS 2, the fair value of the options should be expensed to profit or loss during the vesting period. In applying IFRS 2 to share-based payments, the Group has measured the options granted in the option plans at fair value and recognised the resulting expense in the income statement in the period in which the options were earned in employee costs and in offsetting with unrestricted equity. An expense of EUR 220 thousand has been recognised in the opening balance sheet. The amount expensed during the financial year 2021 is EUR 1.2 million.

Inventories

Betolar's inventories are based on the Group's previous business operations, when the equipment in inventories was part of the ordinary business operations. For Betolar Plc, the requirements of IAS 2.6 regarding the definition of inventories are not met. Inventory items are not related to the ordinary business operations of the company, are not handled in the production process for sale, and are not raw materials or supplies related to the business operations. Therefore, inventories at 1 January 2021 and 31 December 2021 have been written down in the IFRS financial statements.

Financial instruments and borrowing costs

On the date of transition to IFRS, the Group did not have any loans from financial institutions. Loans drawn in the financial year 2021 have been measured using the effective interest rate method, which has resulted in the interest recognised in the IFRS income statement. The interest recorded under FAS is accrued interest amortised in accordance with the loan agreement. In accordance with IAS 23, interest on R&D loans has been capitalised as intangible assets.

Government grants

Betolar has one product development loan issued by the State Treasury, which was drawn down in the financial year 2021 and had a balance of EUR 360 thousand on 31 December 2021. The loan is a government loan that meets the interpretation of IFRSs because its interest rate is below the market rate. The market rate used is an interest rate based on the financial position of the Group and the current interest rate during the period under review. The benefit of a government loan at a rate lower than the market rate is treated as a government grant under IAS 20. The actual loan is recognised initially at its fair value in accordance with IFRS 9 and subsequently measured at amortised cost using the effective interest method. The benefit of a loan at a rate lower than the market rate, that is, a government grant, is determined as the difference between the fair value at initial recognition of the loan, calculated in accordance with IFRS 9, and the cash payment receivable from the lender. The official grant accounted for EUR 90 thousand of the loan on 31 December 2021 and has been recognised as an adjustment to the balance of the loan with a reversing entry of the development costs to which the grant received relates.

Listing costs

IAS 32 requires that transaction costs arising from an equity transaction (e.g. a public offering) should be accounted for as a deduction of equity to the extent that they are incremental costs that are directly attributable to the equity transaction and that would otherwise have been avoided. Transaction costs may include, for example, fees paid to public authorities or experts in legal and accounting matters. The listing costs of Betolar Plc, EUR 3.4 million, at the end of 2021 have been recognised as an expense in accordance with Finnish accounting standards in the profit and loss for the financial year 2021. Since listing costs can be attributed in full to the new shares issued in the IPO, the subscription price of which is entered in the invested unrestricted equity reserve, listing costs must be adjusted from profit and loss at 31 December 2021 and reclassified on the balance sheet from retained earnings to the invested unrestricted equity reserve. The total equity adjustment is EUR 2.9 million. However, listing marketing costs, 'road show' costs or tax advice are not deducted from equity but are recognised as expenses. These costs, EUR 465 thousand, are included in other operating expenses as part of marketing costs.

Reclassification

These adjustments have dealt with other differences between FAS and IFRS, such as the classification of the cost of patents as part of development costs from other long-term costs, the presentation of capitalisation of development costs in the income statement as a netting expense instead of an item under Manufacturing for own use and the presentation of own shares in the Group's equity as a separate item. These adjustments have no impact on the figures, but are changes in presentation in accordance with the IFRS financial statements.

4. REVENUE FROM CONTRACTS WITH CUSTOMERS

Betolar Group's earnings model is based on the licensing of the Geoprime concept and the acquisition and resale of chemicals used as part of the Geoprime technology. Betolar's net sales consist of licence fees and separately charged resale prices of chemicals, which together form a complete solution. Betolar offers the chemicals used in its solution to its customer as part of the Geoprime concept. In Asia, where licence fees are not currently charged to customers, efforts are made to include licence fees in margins on future sales of chemicals.

SALES REVENUE DISTRIBUTION

EUR	Revenue recognition	2022	2021
	Over time	287,425	9,924
Sales revenue, total		**287,425**	**9,924**

BREAKDOWN OF SALES REVENUE BY MARKET AREA

The table below shows a breakdown of the Group's sales revenue according to the customer's domicile.

EUR	2022	2021
Finland	35,952	9,924
Europe	162,431	0
Other countries	89,042	0
Total	**287,425**	**9,924**

ASSETS AND LIABILITIES UNDER SALE AGREEMENTS

The following assets and liabilities arising from contracts with customers are included in the consolidated balance sheet:

EUR	2022	2021	1 Jan. 2021
Assets related to contracts with customers (receivables)	0	0	0
Liabilities under contracts with customers (advances received)	0	0	0

SIGNIFICANT CHANGES IN CONTRACTUAL ASSETS AND LIABILITIES

The Group's assets related to contracts with customers consist of trade receivables, no other contractual funds have been identified. The change in trade receivables is based on the growth in business volume.

REVENUE RECOGNISED IN RELATION TO CONTRACTUAL LIABILITIES

The table below shows the proportion of sales revenue recognised in the reporting period that relates to contractual liabilities that were carried over from the previous financial year.

EUR	2022	2021
Recognised revenue that was included in the contractual liabilities at the beginning of the period	0	0

ASSETS RECOGNISED FROM COSTS INCURRED IN PERFORMING THE CONTRACT

For the periods 2022 and 2021 as well as 1 January 2021, the Group has not identified the costs incurred in fulfilling the contract for which an asset should be recognised.

	2022	2021	1 Jan. 2021
Asset recognised from costs incurred in performing the contract	0	0	0

Accounting principle

Betolar Group applies IFRS 15 Revenue from Contracts with Customers. Revenue is recognised up to the amount expected to be received from customers in consideration for the transfer of the product or service. Revenue is recognised when either control of the product has been transferred or the service has been transferred to the customer. Revenue is recognised either at a point in time or over time. These principles are applied by following the five-step guide:

1) Identification of the contract,
2) Identification of performance obligations;
3) Determination of the transaction price;
4) Allocation of the transaction price to performance obligations and
5) Revenue recognition

Betolar Group's earnings model is based on the licensing of the Geoprime concept and the acquisition and resale of chemicals used as part of the Geoprime technology. Betolar's net sales consist of licence fees and separately charged resale prices of chemicals, which together form a complete solution. Betolar offers the chemicals used in its solution to its customer as part of the Geoprime concept. In Asia, where licence fees are not currently charged to customers, efforts are made to include licence fees in margins on future sales of chemicals.

Geoprime customer contracts consist of the following components:

* Licence maintenance fee: fixed licence fee. Gives the customer access to Betolar's Geoprime formulas. The formulas also include a service that helps the customer to optimise their production and the right to use the modified formulas, as a result of continuous development work. In accordance with IFRS 15.B56a, a licence is a right to access an entity's intellectual property as it exists for the entire period of the licence. All changes in the formulas are available to the customer throughout the contract period.

* Royalty fee: A royalty based on the customer's production volume. A licence agreement for the Geoprime concept, where net sales consist of a royalty per cubic metre of Geoprime material with which the customer manufactures products. All changes in the formulas and the total solution included in the trademark are available to the customer throughout the contract period.

* Sales of chemicals: Betolar offers the chemicals used in its solution to its customer as part of the Geoprime concept. The sale of chemicals is a resale product for Betolar. Betolar has the right to change the chemicals offered to customers in accordance with the formulas. The fee for sales of chemicals is based on the quantities of chemicals delivered.

Betolar has identified the total sold solution to include two performance obligations that are recognised over time. The pricing for the performance obligations is based on fixed stand-alone selling prices agreed in the agreements.

Compliance with IFRS does not lead to a materially different result for the Group compared to compliance with the FAS regulations, because the Geoprime solution was recognised over time in the FAS financial statements as well when the performance obligation was fulfilled and the company has therefore been entitled to consideration.

Betolar has not identified any additional costs incurred in obtaining the contracts or costs incurred in performing the contract.

Significant decisions based on management discretion

Revenue recognition involves management discretion. The determination of performance obligations and stand-alone sales prices, as well as the interpretation of the recognition method over time, involve significant discretion.

Determining whether the contract components of the Geoprime solution are separable, which is why the performance obligations must be treated separately, or whether they are not separate from each other and therefore part of a single performance obligation, requires significant consideration. Betolar has interpreted the Geoprime solution to include two performance obligations, licence sales and chemicals sales.

Separate sale prices are agreed with customers in the contract stage and this is based on the pricing policy that is based on management discretion.

In determining the recognition date, the management's judgement is supported by the interpretation of IFRS 15. The different components of the total solution support the interpretation that the total solution as a single performance obligation is recognised as revenue over time. The licence fees of the total solution have been identified as a form of right of access, in which case the entity must treat the promise to grant the licence as a performance obligation to be satisfied over time because the customer simultaneously receives and consumes the benefits of the entity's performance of providing access to its intellectual property as the performance is provided. Betolar's performance can also be seen as creating the customer an asset over which the customer therefore has control, this being Geoprime material produced with Geoprime technology, in which case the recognition of revenue also takes place over time.

5. OTHER OPERATING INCOME

EUR	2022	2021
Grants received	138,237	90,518
Other income	1,218	0
Total	**139,455**	**90,518**

Accounting principle

Grants received include grants that have been earmarked for expensed projects. The grants received consist of Business Finland project subsidies. Other operating income includes grants received as compensation for realised costs and recognised through profit or loss in the period during which the right to the grant arises.

6. MATERIALS AND SERVICES

EUR	2022	2021
Materials, goods and supplies		
Purchases during the period	-152,536	0
Change in inventories	0	0
External services	-13,893	-75
Total	**-166,428**	**-75**

Accounting principle

The Group's materials and services consist of purchases and external services. Expenses are recognised as expenses for the financial year in accordance with the accrual principle when they are incurred and when the related sales are recognised.

7. PERSONNEL EXPENSES

EUR	2022	2021
Salaries and fees	-3,500,643	-1,263,235
Pension expenses - defined contribution plans	-515,303	-185,298
Other social security expenses	-270,027	-143,046
Share-based payments	-65,855	-1,216,589
Total	**-4,351,828**	**-2,808,168**

	2022	2021
The Group's personnel on average during the financial year	51	23

Accounting principle

The Group's personnel expenses consist of short-term employee benefits, post-employment benefits (statutory defined contribution pension plans) and share-based remuneration. Current service cost is recognised through profit or loss and disclosed in personnel expenses for the period in which the related services are performed. A liability is recognised when a statutory or constructive obligation has arisen for the Group based on the work performed and the amount of the obligation can be estimated reliably. Information about the remuneration of the management is provided in Note 26 on related party transactions and information on share-based payments in Note 20.

Pension obligations

The Group currently has only defined contribution plans in place. Payments for them are recognised as expenses in the income statement for the financial period to which they relate. The Group has no legal or constructive obligation to pay additional contributions if the recipient entity is unable to pay the retirement benefits concerned.

8. DEPRECIATION, AMORTISATION AND IMPAIRMENT

EUR	2022	2021
Depreciation and amortisation of development expenses	-1,231,497	-607,794
Amortisation of intangible assets	-8,403	-10,468
Depreciation of tangible assets	-82,876	-55,177
Amortisation of right-of-use assets	-207,172	-62,764
Total	**-1,529,949**	**-736,203**

9. OTHER OPERATING EXPENSES

EUR	2022	2021
Personnel-related expenses	-542,774	-44,386
Facilities expenses	-205,719	-67,533
Vehicle expenses	-19,740	-3,932
IT expenses	-347,114	-113,074
Other machinery and equipment expenses	-340,816	-92,703
Marketing and communication expenses	-713,081	-523,444
Travel and entertainment expenses	-629,797	-86,417
Research and development expenses	-511,475	-143,171
Administrative services	-2,163,677	-957,647
Other expenses	-422,070	-36,990
Total	**-5,896,264**	**-2,069,297**

Accounting principle

The Group's other operating expenses consist of voluntary personnel expenses, IT expenses and research and development expenses, which are not capitalised as part of balance sheet development expenses and administrative services.

Auditor's fees

EUR	2022	2021
PricewaterhouseCoopers Oy		
Audit fee	106,432	21,762
Tax advice		9,660
Other fees	19,257	299,209
Total	**125,689**	**330,631**

The other services presented in the auditor's fees for 2022 consist of consulting services related to subsidiary mergers. The other expenses for the financial year 2021 consist of consulting services related to the company's listing.

10. FINANCIAL INCOME AND EXPENSES

Financial income EUR	2022	2021
Interest income and other financial income	124	374
Foreign exchange gains	0	0
Other financial income	0	0
Total	**124**	**374**

Financial expenses EUR	2022	2021
Interest expenses	-153,848	-58,229
Exchange rate losses	-22,021	-2,218
Interest expenses on lease liabilities	-22,017	-7,530
Financial assets at fair value through profit or loss	-127,938	-2,482
Other financial expenses	-30,080	-3,726
Total	**-355,904**	**-74,185**

Accounting principle

Interest expenses consist mainly of interest expenses on financial liabilities. In addition, the other most significant items of financial expenses consist of interest expenses in accordance with IFRS 16 and a change in the fair value of financial assets.

11. TAXES

11.1. Income taxes

EUR	2022	2021
Tax through profit or loss	0	0
Change in deferred taxes	29,578	581
Total	**29,578**	**581**

Reconciliation between the tax expense of the income statement and the taxes calculated at the company's domestic tax rate:

EUR	2022	2021
Profit before taxes	-11,873,369	-5,587,112
Income taxes calculated at the Finnish tax rate, 20%	2,374,674	1,117,422
Non-deductible expenses and tax-exempt income	6,778	97
Share-based payments	-13,171	-243,318
Deductible listing expenses in equity	0	587,254
Difference between foreign tax rates and Finnish tax rate	0	0
Tax losses and temporary differences for which no deferred tax asset has been taken into account	-2,335,911	-1,462,152
Deferred tax assets not recognised for losses of the financial year	0	0
Other items	-2,791	1,278
Income taxes on the income statement	**29,578**	**582**

Accounting principle

The tax expense consists of current tax and deferred tax. Taxes are recognised through profit or loss, except when they relate directly to items recognised in equity or other comprehensive income. In this case, taxes are also recorded in these items. The Group has not recognised income taxes in other comprehensive income.

Current tax is calculated on the basis of the current tax rate in each country or the rate actually adopted by the closing date. The Group deducts current tax assets and tax liabilities if, and only if, the Group has a legally enforceable right to set off the recognised amounts and the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Deferred taxes are calculated from temporary differences between the carrying amount and the tax base. However, a deferred tax liability is not recognised on initial recognition of goodwill or if it arises from initial recognition of an asset or liability, if it is not a business combination and if the transaction, at the time it takes place, does not affect accounting profit or taxable income.

11.2. Deferred tax

EUR Changes in deferred tax assets	1 Jan. 2022	Recognised through profit or loss	Recognised in equity	31 Dec. 2022
IFRS 16 accounting entries	581	1,604	0	2,185
Other items	0	27,974	0	27,974
Total	**581**	**29,578**	**0**	**30,160**

EUR Changes in deferred tax assets	1 Jan. 2021	Recognised through profit or loss	Recognised in equity	31 Dec. 2021
IFRS 16 accounting entries	0	581	0	581
Total	**0**	**581**	**0**	**581**

Tax losses and other temporary differences for which no deferred tax asset has been recognised	31 Dec. 2022	31 Dec. 2021	1 Jan. 2021
Confirmed losses	-21,301,300	-9,621,744	-2,310,983
Total	**-21,301,300**	**-9,621,744**	**-2,310,983**

Tax losses for which no deferred tax has been recorded are due to the Group's strong investments in technology development, commencement of commercialisation and acquisition of the necessary competencies.

Significant decisions based on management discretion

Tax assets and liabilities are based on an estimate of the amount of tax payable or refundable on the basis of current taxable income. Long-term tax assets are not discounted.

The company has deferred tax assets and liabilities that are expected to be recognised in the income statement during certain periods in the future. The management has made assumptions and used certain estimates in relation to the tax consequences for the years to come resulting from differences in the carrying amounts of assets and liabilities recognised in the financial statements and their tax bases.

The main assumptions relate, for example, to the fact that the recovery period of the estimated deductible confirmed tax losses remains unchanged and that the current tax laws and tax rates will remain unchanged for the foreseeable future.

At each balance sheet date, the recoverability of the deferred tax assets is assessed, and if circumstances indicate that there will be no future taxable profit against which the temporary difference can be utilised, the deferred tax asset is written off to the available amount.

11.3. Confirmed losses

Confirmed losses expire in 10 years. Tax losses expire as follows:

EUR	2022	2021	1 Jan. 2021
Due in 5 years	100,350	0	0
Due later than in 5 years	21,200,950	9,621,744	2,310,983
Total	**21,301,300**	**9,621,744**	**2,310,983**

12. EARNINGS PER SHARE

The basic and diluted loss per share is calculated by dividing the loss for the period by the weighted average of ordinary shares.

EUR	2022	2021
Profit for the financial period	-11,843,791	-5,586,531
Weighted average number of ordinary shares issued	19,506,730	10,448,522
Loss per share, undiluted and adjusted for dilution	-0.61	-0.53

Accounting principle

Earnings per share are calculated by dividing the profit for the financial year by the average number of ordinary shares outstanding during the year weighted by issuance dates. The Group's potential dilutive instruments consist of stock options issued in 2019, 2020, 2021 and 2022 and the convertible bond issued and converted in 2021. Since the Group has made a loss, the stock options and the convertible bond would not have a dilutive effect and are therefore not included in the calculation of the diluted loss per share. Therefore, there is no difference between the basic and diluted adjusted earnings per share. In the future, these options may have a dilutive effect on earnings per share.

13. INTANGIBLE ASSETS

EUR Intangible rights	Development expenses	Other intangible assets	Total
Acquisition cost on 1 January 2022	2,848,098	32,094	2,880,192
Increases	3,117,093	9,922	3,127,015
Deductions	-9,352	0	-9,352
Acquisition cost on 31 December 2022	**5,955,839**	**42,016**	**5,997,855**
Accumulated depreciation on 1 January 2022	-1,067,886	-3,209	-1,071,096
Accumulated depreciation of deductions and transfers	0	0	0
Depreciation for the financial period	-1,231,497	-8,403	-1,239,901
Impairment	0	0	0
Accumulated depreciation on 31 December 2022	**-2,299,384**	**-11,613**	**-2,310,996**
Book value on 1 January 2022	1,780,212	28,885	1,809,097
Book value on 31 December 2022	**3,656,456**	**30,403**	**3,686,859**

EUR Intangible rights	Development expenses	Other intangible assets	Total
Acquisition cost on 1 January 2021	1,311,016	0	1,311,016
Increases	1,617,476	32,094	1,649,570
Deductions	-80,394	0	-80,394
Acquisition cost on 31 December 2021	**2,848,098**	**32,094**	**2,880,192**
Accumulated depreciation on 1 January 2021	-452,833	0	-452,833
Depreciation for the financial period	-615,053	-3,209	-618,262
Accumulated depreciation of deductions and transfers	0	0	0
Impairment	0	0	0
Accumulated depreciation on 31 December 2021	**-1,067,886**	**-3,209**	**-1,071,096**
Book value on 1 January 2021	858,182	0	858,182
Book value on 31 December 2021	**1,780,212**	**28,885**	**1,809,097**

Accounting principle

The company's intangible assets consist of development costs and other intangible assets, which mainly consist of computer software.

Development expenses and other intangible assets are recognised on the balance sheet at acquisition cost, if the cost can be reliably determined and it is likely that the expected economic benefit from the asset will flow to the Group. The residual values, useful lives and depreciation methods of assets are reviewed at the end of each financial period and, if necessary, adjusted to reflect the changes in the expected economic benefits.

Research and development expenses

Betolar recognises research expenses, such as the acquisition of new knowledge and the search for product and process alternatives, as expenses on an accrual basis, i.e. at the time the expenses are incurred.

Betolar capitalises development expenses in intangible assets if they are expected to generate income in several financial years. When the company classifies an intangible asset as development expenses, completion is technically feasible so that the asset is available for use or sale, the entity has the ability, intention and resources to complete the asset and use or sell it. The company estimates that an asset has probable future economic benefits that can be demonstrated and that the company can reliably measure the costs incurred from the intangible asset during its development phase.

At the end of each reporting period, the company evaluates whether there are indications that the capitalised development expenses have decreased in value. Estimates of capitalised development costs are subject to uncertainties and it is possible that, as conditions change, the expected return on development projects will change. The value of capitalised development costs may decrease if the expected economic benefits change. If the expected return on a capitalised asset is less than the sum of the development expenses recognised on the balance sheet, the value of the capitalised development expenses is adjusted by means of an impairment charge to correspond to the expected return.

Capitalised development costs are depreciated on a straight-line basis over their useful life of 5 years.

Borrowing costs

Borrowing costs of EUR 22 thousand related to development expenses were capitalised during the financial year (2021: EUR 9 thousand). The interest rate used is the effective interest rate on loans.

Other intangible assets

Other intangible assets mainly include computer software. The amortisation period for other intangible assets with a limited useful life is 5 years.

14. PROPERTY, PLANT AND EQUIPMENT

EUR Property, plant and equipment	Machinery and equipment	Buildings and structures	Other tangible assets	Right-of-use assets	Total
Acquisition cost on 1 January 2022	292,075	8,017	0	216,141	516,233
Increases	168,874	0	42,750	547,465	759,089
Deductions	0	0	0	-14,583	-14,583
Acquisition cost on 31 December 2022	460,949	8,017	42,750	749,023	1,260,739
Accumulated depreciation, amortisation and impairment on 1 January 2022	-128,063	-2,034	0	-62,764	-192,861
Depreciation for the financial period	-82,192	-419	0	-207,172	-289,782
Impairment	0	0	0	0	0
Accumulated depreciation, amortisation and impairment on 31 December 2022	**-210,255**	**-2,453**	**0**	**-269,936**	**-482,644**
Book value on 1 January 2022	164,012	5,983	0	153,377	323,372
Book value on 31 December 2022	**250,694**	**5,564**	**42,750**	**479,087**	**778,095**

Property, plant and equipment	Machinery and equipment	Buildings and structures	Other tangible assets	Right-of-use assets	Total
Acquisition cost on 1 January 2021	156,236	8,017	30,929	111,770	306,952
Increases	136,928	0	1,146	104,371	242,445
Deductions	-1,089	0	0	0	-1,089
Reclassifications	0	0	-32,075	0	-32,075
Acquisition cost on 31 December 2021	**292,075**	**8,017**	**0**	**216,141**	**516,233**
Accumulated depreciation, amortisation and impairment on 1 January 2021	-73,337	-1,583	0	0	-74,920
Depreciation for the financial period	-54,726	-450	0	-62,764	-117,941
Accumulated depreciation of deductions and transfers	0	0	0	0	0
Impairment	0	0	0	0	0
Accumulated depreciation, amortisation and impairment. 31 December 2021	**-128,063**	**-2,034**	**0**	**-62,764**	**-192,861**
Book value on 1 January 2021	82,899	6,434	30,929	111,770	232,032
Book value on 31 December 2021	**164,012**	**5,983**	**0**	**153,377**	**323,372**

Accounting principle

Property, plant and equipment consists mainly of machinery and equipment, buildings and structures and right-of-use assets subject to IFRS 16, which in the financial years 2022 and 2021 have concerned the company's premises leases and machine and equipment leases. These are set out in more detail in Note 15.

Property, plant and equipment is measured at cost less any accumulated depreciation and impairment losses. The acquisition cost includes costs directly attributable to the acquisition of the property, plant and equipment item. The assets are depreciated on a straight-line basis over the estimated useful life.

The estimated useful lives are as follows:

- Machinery and equipment 5 years
- Buildings and structures 10–20 years
- Other tangible assets 5 years

The residual values, useful lives and depreciation methods of assets are reviewed at the end of each financial period and, if necessary, adjusted to reflect the changes in the expected economic benefits.

15. LEASES

Betolar Group acts as a lessee and has leased office premises and machinery and equipment through leasing agreements. A contract is considered to be, or contain, a lease if the contract conveys the right to control the use of an identified asset for a limited period of time in exchange for consideration.

Leases are recognised as a right-of-use asset and a lease liability. A right-of-use asset is recognised on the balance sheet at an amount that corresponds to the lease liability, advances paid and direct expenses of the lease. Subsequently, right-of-use assets are measured at the acquisition cost less any accumulated depreciation and impairment losses. It is adjusted for certain remeasurements of the lease liability. The lease liability corresponds to the present value of the lease payments at the reporting date. The income statement recognises depreciation that is related to lease assets and interest expenses that are related to the lease liability.

At the commencement date, right-of-use assets that are capitalised under leases and the corresponding lease liability are measured at the present value of the minimum lease payments that are not paid at that date. The Group uses the incremental borrowing rate as the discount rate for lease payments. For open-ended contracts that include an option to extend or terminate, the Group assesses whether the options will be used to determine the lease term. As of 1 January 2021, the lease period of contracts valid until further notice has been assessed whenever changes have occurred in the conditions related to the contracts. The assessment takes into account the fact that the Group has no prospect of terminating contracts of indefinite duration, but considering the operating environment of the company at the moment, making estimates of more than two years is challenging. For this reason, the company has decided to use a probable two-year extension option for contracts of indefinite duration.

IFRS 16 provides practical expedients for the derecognition of right-of-use assets and lease liabilities that relate to:

- short-term leases (lease term up to 12 months).
- leases of low-value assets (the value of each asset as new does not exceed approximately EUR 5,000).

Significant decisions based on management discretion

The Group's leases consist mainly of business premises, the leases of which remain in effect until further notice. The management has to assess the likelihood of exercising such an extension option, which will have a corresponding impact on the estimated duration of the lease term and the amounts of the right-of-use asset, lease liability, depreciation and interest expenses. The impact of the exercise of the options on the financial benefits received by the Group has been taken into account in the assessment. Extension options are included in the lease period until their exercise is reasonably certain.

The Group's management has estimated the incremental borrowing rate to be 5%. The Group has estimated the incremental borrowing rate by using the indicative interest rate data on similar loans obtained from the bank.

Lease liabilities are presented on the balance sheet line Lease liabilities, divided into long-term and short-term items according to their maturity dates.

Right-of-use asset items on the balance sheet	31 Dec. 2022	31 Dec. 2021	1 Jan 2021
Business premises	426,523	148,440	111,770
Machinery and equipment	52,564	4,936	0
Total	**479,087**	**153,377**	**111,770**

Lease liabilities on the balance sheet	31.12.2022	31.12.2021	1.1.2021
Long-term	246,958	72,922	57,279
Short-term	243,056	83,362	54,491
Total	**490,014**	**156,284**	**111,770**

Additions to right-of-use assets for the financial year 2022 amounted to EUR 532,882 (2021: EUR 104,371).

Items recognised through profit or loss	2022	2021
Interest expenses on lease liabilities (included in financial expenses)	22,017	7,530
	22,017	**7,530**

Amortisation of right-of-use assets	2022	2021
Business premises	185,273	62,550
Machinery and equipment	21,899	215
Total	**207,172**	**62,764**

Expenses of rigth-of-use assets	2022	2021
Expenses in the income statement that are related to leases of minor value	6,143	3,557
Expenses in the income statement that are related to short-term leases (less than 12 months)	2,822	1,030
Total	**8,965**	**4,587**

The outgoing cash flow from leases in 2022 totalled EUR 215,311 (2021: EUR 67,387).

16. TRADE RECEIVABLES

Age distribution of trade receivables

EUR		31. Dec 2022	Provision	31. Dec. 2021	Provision	1 Jan. 2021	Provision
Not due	0%	132,628	0	6,646	0	272	0
1–30 days past due	0%	2,145	0	0	0	0	0
31–60 days past due	5%	8,309	415	0	0	0	0
61–90 days past due	10%	0	0	0	0	0	0
91–180 days past due	25%	0	0	0	0	0	0
181–360 days past due	50%	0	0	0	0	0	0
Over 360 days past due	100%	0	0	0	0	0	0
Total		**143,082**	**415**	**6,646**	**0**	**272**	**0**

Reconciliation for loss allowances of trade receivables

	31 Dec. 2022	31 Dec. 2021
Provision for credit losses 1 January	0	0
Net change in provision for credit losses during the period	415	0
Recognised as credit losses during the financial year	0	0
Credit loss allowance 31 December	**415**	**0**

Accounting principle

Trade receivables are recognised on the balance sheet at the original invoice value less any impairment losses. An impairment loss is recognised immediately through profit or loss. For the recognition of expected credit losses, the Group applies the simplified procedure set out in IFRS 9 for recognising expected lifetime credit losses on trade receivables. The expected credit loss is determined by estimating the impairment of the exposures of individually material clients on the basis of their probability of default. In the financial year 2022, the company recognised a credit loss allowance of EUR 415 (2021: EUR 0).

A trade receivable is derecognised as a final credit loss when it is not reasonably estimated to be recoverable. Such situations include the customer's bankruptcy, debt restructuring or other insolvency-indicating circumstances. The company has not had significant credit losses in recent history.

No realised impairment losses on trade receivables were recognised in the financial years 2022 and 2021.

17. OTHER RECEIVABLES AND ACCRUED INCOME AND PREPAID EXPENSES

Other non-current receivables EUR	31. Dec 2022	31. Dec. 2021	1 Jan. 2021
Rental security deposits paid	51,448	15,600	8,685
Credit card guarantees paid	149,995	99,995	0
Total	**201,444**	**115,595**	**8,685**

Other current receivables EUR	31. Dec 2022	31. Dec. 2021	1 Jan. 2021
VAT receivables	313,279	277,111	92,285
Other receivables	1,533	4,448	356
Total	**314,813**	**281,559**	**92,641**

Current accrued income and prepaid expenses EUR	31. Dec 2022	31. Dec. 2021	1 Jan. 2021
Grant accruals	40,202	157,170	67,598
Other	129,572	62,430	5,790
Total	**169,774**	**219,599**	**73,388**

Accounting principle

Other accounts receivable and accrued income and prepaid expenses comprise accruals related to taxes and other expenses and securities paid.

18. CASH AND CASH EQUIVALENTS

EUR	31. Dec 2022	31. Dec. 2021	1 Jan. 2021
Cash and bank accounts	1,167,078	3,357,609	644,186
Total	**1,167,078**	**3,357,609**	**644,186**

Accounting principle

Cash and cash equivalents are comprised of bank balances and liquid financial securities. Items classified as cash and cash equivalents have a maturity of three months or less from the date of acquisition.

19. SHARE CAPITAL AND EQUITY RESERVES

	Number of outstanding shares (qty)	Treasury shares (qty)	Number of shares (qty)	Share capital (EUR)	Share issue (EUR)	Treasury shares (EUR)	Reserve for invested unrestricted equity (EUR)	Translation differences (EUR)
1 January 2021	**7,853,868**	**0**	**7,853,868**	**2,500**	**2,770,538**	**0**	**949,995**	**0**
Acquisition of treasury shares	-13	13	0	0	0	-14,170	14,170	0
Increase in share capital	0	0	0	77,500	0	0	-77,500	0
Registration of shares	0	0	0	0	-2,757,672	0	2,757,672	0
Convertible bond conversion	991,656	0	991,656	0	0	0	4,553,699	0
Share issue, less transaction costs	10,598,500	0	10,598,500	0	0	0	36,837,874	0
31 December 2021	**19,444,011**	**13**	**19,444,024**	**80,000**	**12,866**	**-14,170**	**45,035,910**	**0**
Cancellation of treasury shares	0	-13	-13	0	0	14,170	-14,170	0
Registration of shares	13,823	0	13,823	0	-12,866	0	12,866	**0**
Share issue, less transaction costs	73,923	0	73,923	0	0	0	51,709	0
Change in translation differences	0	0	0	0	0	0	0	4,435
31 December 2022	**19,531,757**	**0**	**19,531,757**	**80,000**	**0**	**0**	**45,086,315**	**4,435**

Company shares

The number of the company's shares on 31 December 2022 is 19,531,757.

The company's shares are included in the book-entry system maintained by Euroclear Finland Oy. The company's share capital is EUR 80,000.

Share capital

The subscription price of the shares received in connection with the share issues is recorded in the share capital to the extent that the subscription price has not been decided to be recorded in the reserve for invested unrestricted equity.

Reserve for invested unrestricted equity

The reserve for invested unrestricted equity includes other equity investments and the subscription price of shares to the extent that it is not recognised in share capital according to an explicit decision.

Translation differences

Translation differences include translation differences arising from the translation of the financial statements of foreign operations. The Group's accumulated translation differences on 31 December 2022 totalled EUR 4,436 (31 December 2021: EUR 0).

20. SHARE-BASED PAYMENTS

Betolar has option-based incentive and commitment plans, aimed to encourage the management and selected key persons and employees to work to increase shareholder value in the long term. The different option programs and their terms and conditions are presented in the tables below.

The option rights are measured at fair value at the date of issue and are recognised as expenses in personnel expenses and retained earnings/losses at a constant rate over the vesting period. The amount expensed for 2022 is EUR 66 thousand (2021: EUR 1,217 thousand). The change is attributable to options granted before the listing in 2021, which were released in connection with the listing in December 2021. In 2022, expenses were recognised for incentives that had a commitment effect. There was no accumulation of expenses during the first half of the year.

The estimated subscription price of the options granted during the financial year 2021 was EUR 637.06 per option before the split (allocation date 22 January 2021) and EUR 721.20 per option before the split (other allocation dates) and EUR 1.15 per option for those granted during 2022. In connection with the split, the subscription price was changed and 601 shares could be subscribed for with one option. The subscription ratio for the 2022 options is 1:1. The subscription price at the date of issue is determined using a modified Black Scholes model including a Monte Carlo simulation model that takes into account the exercise price, the duration of the option, the effect of dilution (if material), the share price at the date of issue and the expected volatility of the price, the expected dividend yield, the risk-free interest rate over the term of the option and the correlation with and volatility of the companies in the reference group.

The model used the following as inputs for options granted in 2022:

Plan	Option plan 2019	Option plan 2020	Option plan 2021	Option plan 2021	Option plan 2022	Option plan 2022
Type	OPTION	OPTION	OPTION	OPTION	OPTION	SHARE
Instrument	**2019-2A - 2019-2D**	**2020A - 2020G**	**2021-1A - 2021-1C**	**2021-2A - 2021-2B**	**Options 2022**	**Restricted stock option plan 2022–2024**
Grant date	5.6.2019	16.9.2020	05.06.2019, 16.09.2020, 23.02.2021, 27.07.2021	16.09.2020, 23.02.2021	23.3.2022	23.3.2022
Number of options/shares granted, qty	207	280	1,004	202	500,000	100,000
Subscription ratio, qty	601	601	601	601	1	n/a
Initial exercise price, EUR	382,00	790,00	790,00	790,00	n/a	n/a
Dividend adjustment	No	No	No	No	No	No
Initial exercise price after share split, EUR	0.635607	1.314476	1.314476	1.314476	5.96	n/a
Original allocation date	30.8.2019	22.11.2020	22.1.2021	26.9.2021	8.7.2022	1.11.2022
Release date	1.1.2020, 1.1.2021, 9.12.2021	22.11.2020, 1.1.2021, 1.4.2021, 1.7.2021, 1.10.2021, 9.12.2021	9.12.2021	1.12.2021, 9.12.2021	1.4.2025	31.8.2024
Release criterion	Obligation to work	Obligation to work	Obligation to work	Obligation to work	Obligation to work	Obligation to work
Expiration date	31.12.2030	31.12.2030	31.12.2030	31.12.2030	28.2.2027	n/a
Maximum duration, years	11.3	8.5	9.9	9.3	4.6	1.8
Running time remaining, years	8	8	8	8	4.2	1.7
Persons at the end of the financial year	2	1	9	2	14	1
Method	In shares	In shares	In shares	In shares	In shares	In cash and in shares

The model used the following as inputs for options granted in 2022:

Plan	Option plan 2019	Option plan 2020	Option plan 2021	Option plan 2021	Option plan 2022	Option plan 2022
	OPTION	OPTION	OPTION	OPTION	OPTION	SHARE
	2019-2A - 2019-2D	**2020A - 2020G**	**2021-1A - 2021-1C**	**2021-2A - 2021-2B**	**Options 2022**	**Restricted stock option plan 2022–2024**
1 January 2022						
Outstanding at the beginning of the period	182	280	994	202	0	0
Changes during the period						
Issued	0	0	0	0	486,788	20,000
Lost	0	0	0	0	0	0
Exercised	99	0	24	0	0	0
Expired	0	0	0	0	0	0
Weighted average exercise price, EUR	0.635607		1.314476			
Average share value, EUR	5.62, 5.68, 5.42, 4.70		4.58			
31 December 2022						
Exercised at the end of the period	124	0	24	0	0	0
Outstanding at the end of the period	83	280	970	202	486,788	20,000
Exercisable at the end of the period	83	280	970	202	13,212	80,000

The model used the following as inputs for options granted during 2021:

Plan	Option plan 2019	Option plan 2019	Option plan 2020	Option plan 2021	Option plan 2021	Personnel offering 2021
Instrument	OPTION	OPTION	OPTION	OPTION	OPTION	SHARE
	2019-1A - 2019-1E	**2019-2A - 2019-2D**	**2020A - 2020G**	**2021-1A - 2021-1C**	**2021-2A - 2021-2B**	**Personnel offering 2021**
Grant date	13.2.2019	5.6.2019	16.9.2020	05.06.2019, 16.09.2020, 23.02.2021, 27.07.2021	16.09.2020, 23.02.2021	20.10.2021
Number of options/shares granted, qty	404	207	280	1,004	202	319
Subscription ratio, qty	601	601	601	601	601	1
Initial exercise price, EUR	382.65	382.00	790.00	790.00	790.00	378.74
Initial exercise price after share split, EUR	0.636689	0,.35607	1.314476	1.314476	1.314476	n/a
Dividend adjustment	No	No	No	No	No	No
Original allocation date	13.2.2019	30.8.2019	22.11.2020	22.1.2021	26.9.2021	20.10.2021
Release date	1.1.2020, 1.1.2021, 1.4.2021, 1.6.2021, 1.9.2021	1.1.2020, 1.1.2021, 9.12.2021	22.11.2020, 1.1.2021, 1.4.2021, 1.7.2021, 1.10.2021, 9.12.2021	9.12.2021	1.12.2021, 9.12.2021	n/a
Expiration date	1.2.2029	31.12.2030	31.12.2030	31.12.2030	31.12.2030	n/a
Maximum duration, years	10	11.3	8.5	9.9	9.3	n/a
Running time remaining, years	7.1	9	9	9	9	n/a
Persons at the end of the financial year	0	2	1	10	2	n/a
Method	In shares	In shares	In shares	In shares	In shares	In shares

The model used the following as inputs for options granted during 2021:

Plan	Option plan 2019	Option plan 2019	Option plan 2020	Option plan 2021	Option plan 2021	Personnel offering 2021
Type	OPTION	OPTION	OPTION	OPTION	OPTION	SHARE
	2019-1A - 2019-1E	**2019-2A - 2019-2D**	**2020A - 2020G**	**2021-1A - 2021-1C**	**2021-2A - 2021-2B**	**Personnel offering 2021**
1 January 2021						
Outstanding at the beginning of the period	404	207	280	0	0	0
Changes during the period						
Issued	0	0	0	1,004	202	319
Lost	0	0	0	0	0	0
Exercised	404	25	0	10	0	0
Expired	0	0	0	0	0	0
Average exercise price, EUR	382.65	382.00	0.00	790.00	0.00	391.89
Average share value, EUR	1203.70	1203.70	0.00	1203.70	0.00	1203.70
31 December 2021						
Exercised at the end of the period	404	25	0	10	0	n/a
Outstanding at the end of the period	0	182	280	994	202	n/a
Exercisable at the end of the period	0	182	280	994	202	n/a

Inputs used in the valuation of options

The tables below describe the inputs and fair values used to calculate the fair value of each option plan.

	2022	2021
Share value at the time of issue, EUR	3.76	1191.78
Share value at the time of reporting, EUR	3.05	6.401
Subscription price, EUR	5.96	790
Expected volatility	43.3%	42.8%
Maturity, years	4.5	9.3
Risk-free interest rate	1.50%	-0.14%
Expected dividends, EUR	0	0
Valuation model	Black-Scholes	Black-Scholes
Weighted fair value of options granted	0.90	
Fair value on 31 December 2022	465,552	1,125,729

Betolar has option-based incentive and commitment plans, aimed to encourage the management and selected key persons and employees to work to increase shareholder value in the long term. The plans have been approved by the Board of Directors. Persons participating in the plan are granted options not subject to special conditions. The Board of Directors decides who participates in the plan, and no one has a contractual right to participate in the plan or to receive any guaranteed benefits.

The options granted before 2022 expired in connection with the listing and their subscription period expires at the end of 2030. The subscription period for new options approved in 2022 is 1 April 2025–28 February 2027 and their vesting period ends on 28 February 2027.

The options are granted without consideration and do not carry any dividend or voting rights. Each viable option entitles the holder to subscribe for 601 ordinary shares.

The purpose of Betolar's personnel offering is to encourage and commit employees and to secure the company's short-term operating conditions, so there is a compelling economic reason for the company to allocate options its personnel. The prerequisite for the issue arranged in 2021 was that:

a) the subscriber has accepted and signed the agreement to join the Amended and Reinstated Shareholders' Agreement dated 16 September 2020, attached as Appendix 6, and

b) the subscriber has committed in writing, in respect of the shares subscribed for in the personnel offering, to a transfer restriction decided by the Board of Directors of the company that would take effect if the Board of Directors of the company decides, within one year of this share issue decision, to apply for the shares of the company for public trading (IPO), whereby the transfer restriction on the shares would take effect at the moment when the Amended and Reinstated Shareholders' Agreement concerning the company would expire, and may remain in force until no later than 360 days after the commencement of trading of the share.

The expected volatility of the price is based on the realised volatility (based on the remaining maturity of options), adjusted, according to publicly available information, to reflect expected changes.

According to Finnish tax laws, Betolar Plc must withhold an amount equal to the employee's tax obligation related to the granting of options and remit it to the tax authorities on behalf of the employee.

The amount withheld and remitted to the tax authorities in conjunction with the options granted in the financial year 2021 was EUR 0.

21. FINANCIAL RISK MANAGEMENT

In its normal business operations, the Group is exposed to a number of financial risks. The main financial risks are credit, solvency, currency and interest rate risks.

The Group's financial risk management focuses on the above-mentioned risks and aims to reduce the uncertainty that financial market changes may cause to the company's profit and cash flows. The aim is to secure continuous operations in different market conditions and to support the Group's long-term strategic development.

The Board of Directors and the CEO are responsible for the organisation and supervision of internal control and risk management. The CEO is responsible for the implementation of risk management together with financial administration.

21.1 Credit risk

Credit risk arises from the possibility that a counterparty may not be able to meet its payment obligations. The Group strives to cost-efficiently minimise losses caused by the non-performance of the counterparty's obligations. The Group manages credit risk already at the contract stage by assessing the creditworthiness of the counterparty. In addition, the company's financial administration continuously monitors customers' payment behaviour. The age distribution of trade receivables and the recognition of credit loss provisions are presented in Note 16.

The Group's fund investments are in a fund that is quoted on the public market.

21.2 Liquidity risk

The Group's risk management objective in terms of liquidity risk is to secure a sufficient amount of liquid assets for financing operations and repaying maturing loans. The company aims to continuously assess and monitor the amount of financing required for business operations in order to achieve the above-mentioned goal.

Cash flows from operating activities and liquid assets (financial securities and cash equivalents), together with any new debt or equity financing, are the main source of funding for future payments.

Maturities of contractual financial liabilities at the end of 2022.

EUR	2023	2024	2025	2026 - later	Total	Book value on 31 December 2022
Loans from credit institutions	4,018	3,851	3,681	2,939	14,489	13,579
Subordinated loans	0	0	0	2,000,000	2,000,000	2,152,774
Interest on subordinated loan *	184,037	184,543	184,037	568,248	1,120,865	152,774
Government loan	4,457	4,469	115,629	340,204	464,759	353,894
Accounts payable	885,995	0	0	0	885,995	885,995
Lease liabilities	261,874	250,765	3,030	0	515,670	490,014
Total	**1,340,381**	**443,628**	**306,378**	**2,911,391**	**5,001,778**	**4,049,028**

* The payment of interest on the subordinated loan is tied to the repayment terms of the subordinated loan in accordance with the terms and conditions of chapter 12 of the Limited Liability Companies Act. The principal and interest of the loan become payable in a situation where the company's unrestricted equity and all subordinated loans at the time of payment exceed the loss to be confirmed for the last ended financial period or the loss included in more recent financial statements, if the company's unrestricted equity is sufficient. The table shows the interest rates that would be payable annually if these conditions were met.

Due dates of contractual financial liabilities at the end of 2021.

EUR	2022	2023	2024	2025 - later	Total	Book value on 31 December 2021
Loans from credit institutions	4,186	4,018	3,851	6,620	18,675	16,231
Government loan	3,580	3,580	3,590	365,613	376,363	277,100
Accounts payable	766,990	0	0	0	766,990	766,990
Lease liabilities	89,272	74,907	0	0	164,179	156,284
Total	**864,028**	**82,505**	**7,441**	**372,233**	**1,326,207**	**1,216,604**

Maturity dates of contractual financial liabilities at the beginning of 2021.

EUR	2021	2022	2023	2024 - later	Total	Book value on 1 January 2021
Loans from credit institutions	0	0	0	0	0	0
Government loan	0	0	0	0	0	0
Accounts payable	141,348	0	0	0	141,348	141,348
Lease liabilities	58,842	52,614	0	0	111,456	111,770
Total	**200,190**	**52,614**	**0**	**0**	**252,804**	**253,118**

21.3 Foreign exchange risk

Foreign exchange risk arises from transactions in currencies other than the functional currencies of the Group companies. The functional currencies of the Group companies are the euro and the Indian rupee. The majority of the Group companies' sales and purchase transactions are denominated in euros. The Group seeks to avoid foreign exchange risk by negotiating contracts in euros, as far as possible. Betolar India Private Ltd's operations include piloting and sales of the Geoprime solution and related purchases. All sales contracts in India are in INR. There are a few commercial agreements in India under which the Geoprime solution is sold. Betolar India's accounting currency is INR, so there is no foreign exchange risk in India. The only foreign exchange risk is between the parent and Betolar India (EUR/INR), which, due to the small volume of transactions, is seen as a minor risk and not a material risk for the Group.

The general objective of foreign exchange risk management is to limit the short-term negative effects of exchange rate changes on profit and cash flow, thereby increasing the predictability of earnings. The Group manages the effects of foreign exchange risk by regularly monitoring risk exposures and, if necessary, hedging relevant cash flows. The Group has not had currency hedges in the reporting or comparison periods.

The table below shows the currency breakdown of the Group's trade receivables, financial securities, cash and cash equivalents and trade payables. Assets and liabilities denominated in a foreign currency are translated into euros at the exchange rate prevailing at the end of the reporting period.

31 Dec. 2022	EUR	INR	Total
Trade receivables	128,173	14,909	143,082
Financial securities	25,456,989	0	25,456,989
Cash and cash equivalents	1,114,770	52,308	1,167,078
Accounts payable	871,964	14,031	885,995
Net position	**27,571,897**	**81,247**	**27,653,144**

31 Dec. 2021	EUR	INR	Total
Trade receivables	6,646	0	6,646
Financial securities	33,997,518	0	33,997,518
Cash and cash equivalents	3,357,609	0	3,357,609
Accounts payable	766,990	0	766,990
Net position	**38,128,761**	**0**	**38,128,761**

1 Jan. 2021	EUR	INR	Total
Trade receivables	272	0	272
Financial securities	0	0	0
Cash and cash equivalents	644,186	0	644,186
Accounts payable	141,348	0	141,348
Net position	**785,807**	**0**	**785,807**

21.4 Interest rate risk

Interest rate risk is the risk that the fair values or future realised cash flows of a financial instrument fluctuate due to changes in market interest rates. The Group's income and operating cash flows are mainly independent of fluctuations in market interest rates. Any increase in interest rates as a result of changes in market interest rates may have a direct impact on the costs of available financing and the company's existing financing costs. The company has not had derivatives to hedge interest rate risk at the balance sheet date or during the comparison periods.

The Group had financial liabilities totalling EUR 2,520 thousand (2021: EUR 293 thousand), consisting of bank loans, subordinated loans and the Business Finland loan. All of the Group's financial liabilities are fixed-rate liabilities. The average interest rate on financial liabilities in 2022 was 8.10 per cent (2021: 1.17 per cent).

The Group's fund investments include a short-term interest rate fund. The fund is exposed to interest rate risk through fluctuations in fair value.

21.5 Capital management

The purpose of the Group's capital management is to ensure the continuity of operations in different market conditions and to support the company's long-term strategic development in all circumstances. The Company assesses the development and adequacy of its capital structure and equity ratio on a regular basis. There are no specific targets for the equity ratio. The equity ratio was 83 per cent (2021: 95 per cent).

22. FINANCIAL ASSETS

Betolar classifies its financial assets according to IFRS 9 as financial assets at amortised cost and financial assets at fair value through profit or loss. At initial recognition, financial assets are classified based on their business model and cash flow characteristics.

All purchases and sales of financial assets are recorded on the balance sheet on the trade date. Trade receivables are recorded at the transaction cost. Other financial assets are recognised on the balance sheet at their original cost, which corresponds to their fair value at the time of acquisition. In the case of an item that is not measured at fair value through profit or loss, transaction costs are included in the original book value of the financial assets. After initial recognition, these items are measured at amortised cost using the effective interest method.

A financial asset is derecognised when the Group no longer has a contractual right to cash flows or has transferred the material risks and rewards of the financial asset outside the Group. Financial assets are included in non-current balance sheet items when they have a maturity of more than 12 months.

Financial assets at fair value through profit or loss include financial securities consisting of a short-term interest rate fund. These financial instruments are measured at fair value and any revaluation is recognised through profit or loss in the period in which they are incurred.

Financial assets at amortised cost include trade receivables and cash and cash equivalents. Trade receivables are measured at amortised cost less any impairment losses. Items classified as cash and cash equivalents have a maturity of three months or less from the date of acquisition. Cash and cash equivalents include cash and cash in bank accounts and financial securities.

EUR	Fair value hierarchy	Book value on 31 December 2022	Fair value on 31 December 2022	Book value on 31 December 2021	Fair value on 31 December 2021	Book value on 1 January 2021	Fair value on 1 January 2021
Financial assets at fair value through profit or loss							
Financial securities	1	25,456,989	25,456,989	33,997,518	33,997,518	0	0
Financial assets at amortised cost							
Trade receivables	N/A	142,667	N/A	6,646	N/A	272	N/A
Guarantees given	N/A	201,444	N/A	115,595	N/A	8685	N/A
Cash and cash equivalents	N/A	1,167,078	N/A	3,357,609	N/A	644,186	N/A
Total financial assets		**26,968,178**		**37,477,367**		**653,144**	

The book values of trade receivables, guarantees and cash and cash equivalents correspond substantially to their fair values.

Accounting principle

Fair value items are defined according to hierarchy levels 1 to 3 as follows:

Level 1: The fair values of financial instruments are based on prices quoted for identical assets or liabilities in active markets.

Level 2: The fair value of financial instruments is calculated on the basis of inputs other than level 1 quoted prices that are observable for the asset or liability, either directly or indirectly.

Level 3: The fair value of financial instruments is calculated based on inputs that are not observable for the asset or liability

23. FINANCIAL LIABILITIES

Betolar classifies its financial liabilities as financial liabilities at amortised cost. At initial recognition, the classification of financial liabilities is made on the basis of the purpose of the asset.

Financial liabilities at amortised cost are initially recognised at their original value, which corresponds to the amount of consideration received. Transaction costs are included in the original book value of the financial liability. Subsequently, financial liabilities are measured at amortised cost using the effective interest method. Financial liabilities are included in long-term and short-term liabilities. Borrowing costs are recognised as interest expense in the period when they are incurred. Borrowing costs are capitalised on the balance sheet to the extent that they relate to borrowed assets that have acquired an asset to be capitalised on the balance sheet.

The financial liability, or portion of it, is derecognised when the obligation identified in the contract has been settled, extinguished or terminated. A financial liability is classified as current unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

Financial liabilities measured at amortised cost include the Group's external financial loans, lease liabilities, trade payables and other interest-bearing liabilities.

EUR	Fair value hierarchy	Book value on 31 December 2022	Fair value on 31 December 2022	Book value on 31 December 2021	Fair value on 31 December 2021	Book value on 1 January 2021	Fair value on 1 January 2021
Financial liabilities at amortised cost							
Loans from credit institutions	2	13,579	13,579	16,231	16,231	0	0
Subordinated loans	2	2,152,774	2,152,774	0	0	0	0
Government loan	2	353,894	353,894	277,100	277,100	0	0
Accounts payable	N/A	885,995	N/A	766,990	N/A	141,348	N/A
Lease liabilities	N/A	490,014	N/A	156,284	N/A	111,770	N/A
Total financial liabilities		**3,896,255**		**1,216,604**		**253,118**	

The book values of trade payables correspond substantially to their fair values.

Accounting principle

Fair value items are defined according to hierarchy levels 1 to 3 as follows:

Level 1: The fair values of financial instruments are based on prices quoted for identical assets or liabilities in active markets

Level 2: The fair value of financial instruments is calculated on the basis of inputs other than level 1 quoted prices that are observable for the asset or liability, either directly or indirectly.

Level 3: The fair value of financial instruments is calculated based on inputs that are not observable for the asset or liability

Loans from credit institutions

The Group's loans from credit institutions include one instalment credit arrangement. The interest rate is 4.99% and the term of the loan is 5 years. The loan was drawn down in the 2021 financial year.

Government loan

The Group has one product development loan issued by the State Treasury. Two tranches of the total loan granted have been drawn down during the financial year 2021. The loan interest rate is 1% and the loan period is 7 years, of which the first four years are free of repayment. The loan is a government loan that meets the interpretation of IFRS because its interest rate is below the market rate. The benefit of a government loan at a rate lower than the market rate is treated as a government grant under IAS 20. The actual loan is recognised initially at its present value in accordance with IFRS 9 and subsequently measured at amortised cost. The benefit of a loan at a rate lower than the market rate, that is, a government grant, is determined as the difference between the present value of the loan at initial recognition of the loan, calculated in accordance with IFRS 9, and the cash payment receivable from the lender.

Convertible bond

There were six lenders in the convertible loan. The loan was drawn down in three instalments, on 22 October 2021, 25 October 2021 and 5 November 2021. The total amount of the loan was EUR 4.5 million and the interest rate was 10%. The loan period was three years, but not longer than until the company's listing. In addition, the lenders had the right to convert the loan into equity at certain points in time under certain circumstances. The convertible bond was converted into equity for all lenders in connection with the company's listing on 9 December 2021. The converted amount included accrued interest of EUR 54 thousand, totalling EUR 4.6 million. The conversion price per share was EUR 4.59.

Subordinated loan

The Group has a subordinated loan of a total of EUR 7 million, of which the first tranche, EUR 2 million, was drawn down in February 2022. The loan can be drawn down for three years from the first drawdown. The maturity date of the subordinated loan is January 2029 and the interest rate is 9.6%. The subordinated loan complies with the terms and conditions of a capital loan set forth in chapter 12 of the Limited Liability Companies Act, and Betolar has the right to repay the loan in part or in full, provided that the conditions set forth in the Limited Liability Companies Act for unrestricted equity are met. The subordinated loan has been amortised to its acquisition cost. The accrued interest on the loan, EUR 153 thousand, is amortised into interest expenses and interest liability.

Changes in liabilities arising from financing operations

The table below provides a reconciliation of the opening and closing balances of financial liabilities.

EUR	Loans from credit institutions	Subordinated loans	Government loan	Lease liabilities	Convertible bonds	Total
Balance on 1 January 2021	**0**	**0**	**0**	**111,770**	**0**	**111,770**
Cash flow	16,231	0	359,635	-67,387	4,500,000	4,808,479
Conversion into equity	0	0	0	0	-4,553,699	-4,553,699
Other non-monetary changes	0	0	-82,535	111,901	53,699	83,065
Balance on 31 December 2021	**16,231**	**0**	**277,100**	**156,284**	**0**	**449,614**
Cash flow	-2,970	2,000,000	88,099	-215,311	0	1,869,818
Conversion into equity	0	0	0	0	0	0
Other non-monetary changes	318	152,774	-11,305	549,040	0	690,827
Balance on 31 December 2022	**13,579**	**2,152,774**	**353,894**	**490,014**	**0**	**3,010,260**

24. OTHER PAYABLES AND ACCRUALS AND DEFERRED INCOME

Other payables

EUR	31 Dec. 2022	31 Dec. 2021	1 Jan. 2021
Tax liabilities	996	50,962	0
Withholding tax liability	132,055	0	42,318
Other payables	8,185	1,344	8,493
Total	**141,236**	**52,305**	**50,811**

Accruals and deferred income

EUR	31 Dec. 2022	31 Dec. 2021	1 Jan. 2021
Payroll liabilities	520,719	145,238	42,187
Holiday pay liabilities	632,897	265,962	130,953
Other payables	174,790	140,370	39,101
Total	**1,328,405**	**551,570**	**212,242**

Accounting principle

Other payables and accruals and deferred income include accruals related to salaries, taxes and other expenses.

25. COMMITMENTS AND CONTINGENT LIABILITIES

Liabilities for which collaterals have been given

EUR	31 Dec. 2022	31 Dec. 2021	1 Jan. 2021
Loans from credit institutions	13,579	16,231	0
Business mortgages	0	150,000	150,000

The company has no other reportable collaterals or contingent liabilities.

Disputes and legal proceedings

The company's management is not aware of any open disputes or litigation that could have a significant impact on the company's financial position.

26. RELATED PARTY TRANSACTIONS

Betolar's related parties include the subsidiaries of the parent company Betolar Plc. Related parties also include the key employees of Betolar's management as well as their close family members and the entities under their control. The key management personnel are the members of Betolar's Board of Directors, the CEO and other members of the Management Team. Transactions with related parties are made on normal commercial terms. The transactions include consultancy services related to business development purchased from a member of the Board of Directors and a member of the Management Team and minority shares of subsidiaries purchased from the members of the Management Team during the 2021 financial period. The acquisition of minority shares is described in more detail in Note 27. In addition, share subscriptions made by related parties have been identified as related party transactions during the financial period.

No loans or any other guarantees or securities were issued to any related parties.

Remuneration of key management personnel

EUR	2022	2021
Chair	37,500	26,777
Members	57,000	6,362
Board of Directors' fees, total	**94,500**	**33,139**
CEO	**2022**	**2021**
Salaries and other short-term benefits	406,596	172,731
Post-employment benefits	86,061	0
Share-based remuneration	6,751	146,082
Total	**499,407**	**318,812**
Key management personnel *)	**2022**	**2021**
Salaries and other short-term benefits	860,172	359,495
Post-employment benefits	0	0
Share-based remuneration	33,162	199,443
Total	**893,334**	**558,938**

*) The key personnel of the company's management include the members of the Board of Directors and the Management Team. In the financial year 2022, the Management Team of 10 members (2021: 8 members) and 5 members of the Board of Directors (2021: 5 members).

Betolar Plc's Board of Directors for the financial year 2022 consisted of Tero Ojanperä (Chairman), Kalle Härkki, Soile Kankaanpää, Inka Mero, Juha Leppänen and Ilkka Salonen.

Management's shareholding	31 Dec. 2022	31 Dec. 2021
Number of shares (qty)	329,054	830,582
Shareholding, percentage	1.7 %	4.3 %

Shareholding of the Board of Directors	31 Dec. 2022	31 Dec. 2021
Number of shares (qty)	1,741,698	1,741,698
Shareholding, percentage	8.9 %	9.0 %
Total number of outstanding shares (qty)	19,531,757	19,444,011

Related party transactions and outstanding balances

The following transactions have been concluded with related parties

Purchases from entities controlled by key management personnel

EUR	2022	2021
Sales management services	159,899	110,562
Consulting services	22,100	27,200
	181,999	**137,762**

EUR	2022	2021	1 Jan. 2021
Trade payables, consulting services	16,877	16,300	8,999

27. GROUP STRUCTURE

Information about the Group companies Company name	Registered office	2022 Shareholding (%)	2021 Shareholding (%)
Parent company Betolar Plc	Finland		
Betolar Geotechnical Solutions Ltd	Finland	-	100 %
Betolar Green Building Technologies Ltd	Finland	-	100 %
Betolar Mining Solutions Ltd	Finland	-	100 %
Betolar Chemicals Ltd	Finland	100 %	100 %
SolidWatt Ltd	Finland	-	100 %
Betolar Element Ltd	Finland	-	100 %
Betolar India Private Limited	India	100 %	100 %

Changes in Group structure

Betolar Geotechnical Solutions Ltd, Betolar Green Building Technologies Ltd, Betolar Mining Solutions Ltd, SolidWatt Ltd and Betolar Element Ltd merged with Betolar Plc in August 2022.

The Group includes Betolar India Private Limited, a subsidiary registered in India on 1 September 2021. The Indian subsidiary has not been included in the consolidated financial statements for 2021. It not being consolidated does not materially compromise the true and fair view of the consolidated financial statements. The Indian subsidiary has been consolidated in the consolidated financial statements starting from the financial year 2022.

Non-controlling interests

In June 2021, Betolar acquired non-controlling interests' 2.5% holding in Betolar Element Oy and 2.5% holding in Betolar Green Building Technologies Ltd. The acquisition cost of the holdings totalled EUR 127 thousand and a reduction in non-controlling interests of EUR 131 thousand was recognised, as the consideration paid exceeded the non-controlling interests included in equity. Non-controlling interests have been negative, as the companies have been loss-making.

	Betolar Element Oy	Betolar Green building Technologies Oy
Book value of the acquired non-controlling interests	-1,858	-1,764
Consideration paid to non-controlling interests	63,620	63,620
Amount by which the consideration paid exceeds the non-controlling interests included in equity	65,478	65,384

28. NEAR-TERM RISKS AND UNCERTAINTIES

Betolar's most significant risks and business uncertainties are described in more detail in the Report of the Board of Directors of the financial statements. Risks and uncertainties related to the near future are described below.

Economic cycles and especially the level of activity in the construction market affect the demand for Betolar's products and services. High inflation, rising interest rates and supply chain disruptions have weakened the outlook for the global economy, posing a risk to the implementation of Betolar's growth strategy. The changed security situation in Europe resulting from the war in Ukraine has increased geopolitical risks, intensified disruptions in global supply chains and increased uncertainty in European product and energy markets. Shortages, disruptions and cost inflation resulting from the situation may adversely affect the competitiveness, delivery, sales or profitability of Betolar's solution.

However, uncertainty in the operating environment is not expected to have a significant impact on the implementation of plans and programmes related to the green transition in societies, companies and financial markets.

29. EVENTS AFTER THE END OF THE REPORTING PERIOD

The Group is not aware of any significant events after the financial period.

PARENT COMPANY INCOME STATEMENT

EURO	NOTE	1 Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
NET SALES	5.	273,962.91	3,810.49
Other operating income	3.	3,107,218.67	1,617,476.25
Production for own use	6.	139,454.99	90,517.91
Materials and services			
Materials, supplies and goods			
Purchases during the period		-126,996.80	0.00
Increase (+) or decrease (-) in inventories		-6,128.36	-10,085.19
External services		-13,892.50	0.00
Materials and services, total		**-147,017.66**	**-10,085.19**
Personnel expenses			
Salaries and fees		-4,212,418.83	-1,553,768.18
Indirect employee costs		-879,148.97	-321,287.81
Pension expenses		-644,092.00	-228,032.83
Other social security expenses		-235,056.97	-93,254.98
Total personnel expenses	7.	**-5,091,567.80**	**-1,875,055.99**

EURO	NOTE	1 Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
Depreciation and impairment			
Depreciation according to plan		-1,322,096.05	-669,488.94
Depreciation and impairment, total	8.	**-1,322,096.05**	**-669,488.94**
Other operating expenses	9.	-8,892,749.10	-2,822,063.73
Operating profit (loss)		-11,932,794.04	-3,664,889.20
Financial income and expenses			
Other interest and financial income			
From others		116.88	372.98
Interest and other financial expenses			
To others		-165,804.63	-3,470,216.16
Total financial income and expenses	11.	**-165,687.75**	**-3,469,843.18**
PROFIT BEFORE APPROPRIATIONS AND TAXES		**-12,098,481.79**	**-7,134,732.38**
PROFIT FOR THE FINANCIAL PERIOD		**-12,098,481.79**	**-7,134,732.38**

PARENT COMPANY BALANCE SHEET

EUR	NOTE	31 Dec. 2022	31 Dec. 2021
ASSETS			
NON-CURRENT ASSETS			
Intangible assets			
Development expenses	3. 12.	3,695,827.81	1,812,847.76
Other capitalised long-term expenditures		70,902.48	76,642.49
	12.	**3,766,730.29**	**1,889,490.25**
Tangible assets			
Buildings and structures		5,564.34	5,983.16
Machinery and equipment		245,329.14	164,011.72
Other tangible assets		42,750.00	0.00
	12.	**293,643.48**	**169,994.88**
Investments			
Holdings in Group undertakings		0.00	232,865.71
	13.	**0.00**	**232,865.71**
NON-CURRENT ASSETS, TOTAL		**4,060,373.77**	**2,292,350.84**

EUR	NOTE	31 Dec. 2022	31 Dec. 2021
CURRENT ASSETS			
Inventories			
Materials and supplies		0.00	0.00
Work in progress		0.00	0.00
Finished goods		0.00	6,128.36
		0.00	**6,128.36**
Non-current receivables			
Receivables from Group companies		116,964.60	432,259.11
Other receivables		51,448.31	15,599.79
		168,412.91	**447,858.90**
Current receivables			
Trade receivables		128,173.31	5,285.00
Receivables from Group companies		211,200.00	0.00
Loan receivables		1,521.95	5.57
Other receivables		451,543.21	380,884.87
Accrued income and prepaid expenses		169,773.64	219,599.43
	14.	**962,212.11**	**605,774.87**
Financial securities			
Other shares and holdings		25,456,989.34	33,997,517.53
		25,456,989.34	**33,997,517.53**
Cash and cash equivalents		1,059,351.82	3,347,779.31
CURRENT ASSETS, TOTAL		**27,646,966.18**	**38,405,058.97**
TOTAL ASSETS		**31,707,339.95**	**40,697,409.81**

PARENT COMPANY BALANCE SHEET

EUR	NOTE	31 Dec. 2022	31 Dec. 2021
SHAREHOLDERS' EQUITY AND LIABILITIES			
SHAREHOLDERS' EQUITY			
Share capital		80,000.00	80,000.00
Invested unrestricted equity reserve		48,027,652.33	47,958,008.33
Share issue		0.00	12,866.00
Retained earnings (losses)		-9,102,551.74	-1,967,819.36
Profit for the financial period		-12,098,481.79	-7,134,732.38
TOTAL EQUITY	15.	**26,906,618.80**	**38,948,322.59**

EUR	NOTE	31 Dec. 2022	31 Dec. 2021
LIABILITIES			
Non-current			
Loans from credit institutions		457,749.26	371,792.40
Subordinated loans		2,000,000.00	
	16.	**2,457,749.26**	**371,792.40**
Current			
Loans from credit institutions		3,315.24	4,073.28
Accounts payable		871,177.44	765,192.24
Liabilities to Group companies		0.00	6,200.00
Other payables		140,074.00	50,990.51
Accruals and deferred income		1,328,405.21	550,838.79
	17.	**2,342,971.89**	**1,377,294.82**
TOTAL LIABILITIES		**4,800,721.15**	**1,749,087.22**
SHAREHOLDERS' EQUITY AND LIABILITIES, TOTAL		**31,707,339.95**	**40,697,409.81**

PARENT COMPANY CASH FLOW STATEMENT

EUR	1 Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
Cash flow from operating activities		
Loss before appropriations and taxes	-12,098,481.79	-7,134,732.38
Adjustments:		
Depreciation and impairment	1,322,096.05	669,488.94
Financial income and expenses	165,687.75	3,469,843.18
Other adjustments	521,574.21	3,852.97
Cash flow before change in working capital	-10,089,123.78	-2,991,547.29
Changes in working capital:		
Change in trade receivables and other receivables	-384,582.49	-432,691.55
Increase (-) / decrease (+) in inventories	3,999.28	4,235.63
Change in accounts payable and other liabilities	614,977.35	523,933.62
Cash flow from operating activities before financing items and taxes	-9,854,729.64	-2,896,069.59
Interest paid and payments for other financial expenses	-34,599.56	-9,894.96
CASH FLOWS FROM OPERATING ACTIVITIES (A)	**-9,889,329.20**	**-2,905,964.55**

EUR	1 Jan. - 31 Dec. 2022	1 Jan. - 31 Dec. 2021
Cash flows from investing activities:		
Investments in tangible and intangible assets	-2,972,458.67	-1,584,778.08
Loans granted	-35,848.52	-195,858.90
Repayments of loan receivables	-73,295.68	
Investments in subsidiary shares	0.00	-127,240.14
NET CASH USED IN INVESTING ACTIVITIES (B)	**-3,081,602.87**	**-1,907,877.12**
Cash flows from financing activities:		
Paid increase in equity	56,778.00	39,788,311.88
Acquisition of treasury shares	0.00	-14,170.00
Short-term loan disbursements	568.21	5,092.00
Repayment of short-term loans	-3,468.39	-1,018.32
Long-term loan disbursements	2,088,099.00	4,871,792.00
Payments related to the acquisition of financing	0.00	-3,071,713.79
CASH FLOWS FROM FINANCING ACTIVITIES (C)	**2,141,976.82**	**41,578,293.77**
CHANGE IN CASH AND CASH EQUIVALENTS (A+B+C)	**-10,828,955.25**	**36,764,452.10**
Cash and cash equivalents at the beginning of the period	**37,345,296.84**	**580,844.73**
Cash and cash equivalents at the end of the period (*	**26,516,341.16**	**37,345,296.84**

(* Cash and cash equivalents include financial securities

NOTES TO THE FINANCIAL STATEMENTS

1 BASIC INFORMATION ABOUT THE ENTITY

Betolar Plc is the Group's parent company. It is a Finnish public limited company domiciled in Kannonkoski, Finland. The registered address of the company is Mannilantie 9, 43300 Kannonkoski, Finland. Betolar Plc has a subsidiary, Betolar Chemicals Ltd, which is 100% owned by Betolar Plc.

Betolar Plc's subsidiaries Betolar Element Ltd, Betolar Geotechnical Solutions Ltd, Betolar Green Building Technologies Ltd, Betolar Mining Solutions Ltd and Solidwatt Ltd merged with their parent company on 31 August 2022.

2 ACCOUNTING POLICIES

The financial statements have been prepared in accordance with the accrual basis, the going concern principle and the prudential principle independent of the result of the financial period. The financial statements have been prepared in accordance with Finnish accounting legislation.

3 MEASUREMENT AND ACCRUAL PRINCIPLES

Development expenses

Betolar Plc recognises research expenses, such as the acquisition of new knowledge and the search for product and process alternatives, as expenses on an accrual basis, i.e. at the time the expenses are incurred. The company recognises capitalised development expenses through the item "Production for own use"" in the income statement.

Betolar capitalises development expenses in intangible assets if they are expected to generate income in several financial years. When the company classifies an intangible asset as development expenses, completion is technically feasible so that the asset is available for use or sale, the entity has the ability, intention and resources to complete the asset and use or sell it. The company estimates that an asset has probable future economic benefits that can be demonstrated and that the company can reliably measure the costs incurred from the intangible asset during its development phase.

At the end of each reporting period, the company evaluates whether there are indications that the capitalised development expenses have decreased in value. Estimates of capitalised development costs are subject to uncertainties and it is possible that, as conditions change, the expected return on development projects will change. The value of capitalised development costs may decrease if the expected economic benefits change. If the expected return on a capitalised asset is less than the sum of the development expenses recognised on the balance sheet, the value of the capitalised development expenses is adjusted by means of an impairment charge to correspond to the expected return.

Capitalised development costs are depreciated on a straight-line basis over their useful life of 5 years.

When distributable funds are presented, the residual amount of capitalised development expenses is deducted from unrestricted equity.

Capitalisation of development expenses

Personnel expenses and other operating expenses are capitalised in development expenses as follows:

EUR	2022	2021
Personnel expenses	-994,564.71	-468,841.61
Other operating expenses	-2,112,653.96	-1,148,634.64
Total production for own use	**-3,107,218.67**	**-1,617,476.25**

Intangible and tangible assets - depreciation according to plan

Intangible and tangible assets are expensed as depreciation according to plan over their estimated useful life. The depreciation periods according to plan are:

Development expenses	5 years
Other capitalised long-term expenditures / intangible assets	5 years
Buildings and structures	10 - 20 years
Machinery and equipment	5 - 10 years

Revenue recognition principles for grants received

Grants are recognised as income in other operating income to the extent that the project concerned gives rise to acceptable costs in accordance with the grant decision and terms and conditions. The income recognition of grants also takes into account any self-financing related to the grants.

4 MATERIAL EVENTS AFTER THE END OF THE FINANCIAL YEAR

There have been no significant events after the financial period.

NOTES TO THE INCOME STATEMENT

5 NET SALES

	2022	2021
Sales domestic	35,952.00	3,810.49
Sales Europe	162,430.60	
Sales in other continents	75,580.31	
	273,962.91	**3,810.49**

6 OTHER OPERATING INCOME

	2022	2021
Grants received	138,237.22	89,571.61
Other operating income	1,217.77	946.30
	139,454.99	**90,517.91**

Grants received include grants that have been earmarked for expensed projects.
The grants received consist of Business Finland's project grants.

7 NOTES TO THE PERSONNEL

Personnel expenses	2022	2021
Wages and salaries	-4,212,418.83	-1,553,768.18
Pension expenses	-644,092.00	-228,032.83
Other social security expenses	-235,056.97	-93,254.98
Total personnel expenses	**-5,091,567.80**	**-1,875,055.99**

Number of employees	2022	2021
Average number of persons employed during the financial year	48	22

8 DEPRECIATION AND AMORTISATION

	2022	2021
Development expenses	-1,224,238.67	-603,843.93
Other intangible rights	-15,662.01	-10,468.20
Buildings and structures	-418.82	-450.36
Machinery and equipment	-81,776.55	-54,726.45
Depreciation according to plan, total	**-1,322,096.05**	**-669,488.94**

9 OTHER OPERATING EXPENSES

	2022	2021
Voluntary personnel expenses	-611,114.73	-98,842.69
Facilities expenses	-392,602.08	-131,962.82
Vehicle expenses	-30,487.69	-9,028.25
IT expenses	-367,517.42	-114,582.30
Other machinery and equipment expenses	-375,931.83	-102,020.16
Marketing and communication expenses	-854,934.66	-61,354.00
Travel and entertainment expenses	-582,584.10	-146,417.14
Research and development expenses	-2,405,029.92	-1,135,377.54
Administrative expenses	-2,187,531.19	-890,757.60
Other expenses	-1,085,015.48	-131,721.23
Total other operating expenses	**-8,892,749.10**	**-2,822,063.73**

Other expenses include the merger loss of EUR 634,724.32 arising from the merger of the subsidiaries.

NOTES TO THE INCOME STATEMENT

10 AUDITOR'S FEES

	2022	2021
Assignments referred to in section 1.1,2 of the Auditing Act	75,707.00	13,506.00
Tax advice		9,660.00
Other services	34,257.00	293,613.69
Total auditor's fees	**109,964.00**	**316,779.69**

The other services presented in the auditor's fees consist of consulting services associated with the company's listing and the merger of subsidiaries.

11 FINANCIAL INCOME AND EXPENSES

	2022	2021
Other interest and financial income	116.88	372.98
Other interest and financial income, total	**116.88**	**372.98**
Expenses related to the acquisition of financing		-3,401,569.92
Other interest and financial expenses	-165,804.63	-68,646.24
Interest expenses and other financial expenses, total	**-165,804.63**	**-3,470,216.16**
Financial income and expenses, total	**-165,687.75**	**-3,469,843.18**

The financial expenses for the financial period mainly consist of interest on the loan and change in the value of the fund investment. In 2021, the costs incurred due to the company's listing, EUR 3.4 million, were presented in financing costs.

NOTES TO THE ASSETS ON THE BALANCE SHEET

12 INTANGIBLE AND TANGIBLE ASSETS

	2022	2021
Development expenses 1 January	2,851,994.19	1,234,517.94
Increases	3,107,218.72	1,617,476.25
Deductions	0.00	0.00
Cost on 31 December	5,959,212.91	2,851,994.19
Accumulated depreciation and impairment on 1 January	-1,039,146.43	-435,302.50
Depreciation for the financial period	-1,224,238.67	-603,843.93
Development expenses - Book value on 31 December	3,695,827.81	1,812,847.76
Intangible rights 1 January	104,641.65	72,547.65
Increases	9,922.00	32,094.00
Deductions		0.00
Cost on 31 December	114,563.65	104,641.65
Accumulated depreciation and impairment on 1 January	-27,999.16	-17,530.96
Depreciation for the financial period	-15,662.01	-10,468.20
Intangible assets - Book value on 31 December	70,902.48	76,642.49
Buildings and structures on 1 January	8,016.99	8,016.99
Increases	0.00	0.00
Deductions	0.00	0.00
Cost on 31 December	8,016.99	8,016.99
Accumulated depreciation and impairment on 1 January	-2,033.83	-1,583.47
Depreciation for the financial period	-418.82	-450.36
Buildings and structures - Book value on 31 December	5,564.34	5,983.16

	2022	2021
Machinery and equipment on 1 January	292,075.05	156,235.78
Increases	163,093.97	136,927.98
Deductions		-1,088.71
Cost on 31 December	455,169.02	292,075.05
Accumulated depreciation and impairment on 1 January	-128,063.32	-73,336.87
Depreciation for the financial period	-81,776.56	-54,726.45
Machinery and equipment - Book value on 31 December	245,329.14	164,011.73
Advance payments and work in progress on 1 January	0.00	30,929.22
Increases		1,146.02
Deductions		-32,075.24
Cost on 31 December	0.00	0.00
Advance payments and work in progress - Book value on 31 December	0.00	0.00
Other tangible assets on 1 January	0.00	0.00
Increases	42,750.00	
Deductions		
Cost on 31 December	42,750.00	0.00
Other tangible assets - Book value on 31 December	42,750.00	0.00

13 INVESTMENTS

	2022	2021
Holdings in Group undertakings on 1 January	232,865.71	105,625.57
Increases		127,240.14
Deductions	-232,865.71	0.00
Book value on 31 December	**0.00**	**232,865.71**

14 CURRENT RECEIVABLES

	2022	2021
Trade receivables	128,173.31	5,285.00
Loan receivables	212,721.95	5.57
Other receivables	451,543.21	380,884.87
Accrued income and prepaid expenses	169,773.64	219,599.43
Total current receivables	**962,212.11**	**605,774.87**

Accrued income items	2022	2021
Grant accruals	40,201.50	157,169.63
Purchase accruals	129,572.14	62,429.80
Total	**169,773.64**	**219,599.43**

15 SHAREHOLDERS' EQUITY

	2022	2021
Share capital on 1 January	80,000.00	2,500.00
Increases		77,500.00
Share capital on 31 December	**80,000.00**	**80,000.00**
Invested unrestricted equity reserve on 1 January	47,958,008.33	949,995.20
Increases	69,644.00	47,022,183.13
Acquisition of treasury shares		-14,170.00
Invested unrestricted equity reserve on 31 December	**48,027,652.33**	**47,958,008.33**
Share issue on 1 January	12,866.00	2,770,538.25
Increases		12,866.00
Registration of shares	-12,866.00	-2,770,538.25
Share issue on 31 December	**0.00**	**12,866.00**

	2022	2021
Retained earnings/losses on 1 January	-1 967 819,36	-904 369,90
Transfers retained earnings/losses	-7 134 732,38	-1 064 938,62
Adjustment of error in previous financial year		1 489,16
Retained earnings (losses) on 31 December	**-9 102 551,74**	**-1 967 819,36**
Result for the financial year	-12 098 481,79	-7 134 732,38
Total equity	**26 906 618,80**	**38 948 322,59**

Calculation of the distributable unrestricted equity of the parent company

	2022	2021
Invested unrestricted equity reserve	48 027 652,33	47 958 008,33
Share issue	0,00	12 866,00
Retained earnings/losses	-9 102 551,74	-1 967 819,36
Profit for the financial period	-12 098 481,79	-7 134 732,38
Total unrestricted equity	26 826 618,80	38 868 322,59
- Capitalised development expenses	-3 695 827,81	-1 812 847,76
Distributable equity, total	**23 130 790,99**	**37 055 474,83**

The Board of Directors' proposal on the use of distributable unrestricted shareholders' equity

The Board of Directors proposes that the loss of EUR 12,098,481.79 for the financial period be transferred to retained earnings and that no dividend be paid.

Number of shares of the Company by share class and the main provisions of the Articles of Association for each class

The number of the company's shares on the closing date 31 December 2022 is 19,531,757.

All the decisions of the Annual General Meeting, the authorisations of the Board of Directors and the decisions of the Board of Directors mentioned below have been registered in the Trade Register during the financial period.

Shares and share capital:

The company's shares are included in the book-entry system maintained by Euroclear Finland Oy. The company's share capital is EUR 80,000.

Valid authorisations of the Board of Directors

Betolar's Board of Directors has the following authorisations issued by the Annual General Meeting on 23 March 2022.

Authorisation to issue shares, stock option rights and other special rights entitling to shares

The Board of Directors is authorised to decide on the issue of a maximum of 1,850,208 shares (including shares issued on the basis of special rights) in one or more issues, which corresponds to approximately 9.5 per cent of the total number of shares in the company. The Board of Directors decides on all terms and conditions of issuance of new shares, stock option rights and other special rights entitling to shares within the framework of the authorisation. The issuance of shares and special rights entitling to shares, including options, may also take place in a directed manner in derogation from the pre-emptive rights of shareholders (directed share issue). The authorisation revokes the previous unused authorisations concerning the issuance of shares and the issuance of options and special rights entitling to shares and is valid for 18 months from the decision of the Annual General Meeting.

Authorisation to acquire treasury shares

The Board of Directors is authorised to decide on the acquisition of a maximum of 973,793 of the company's treasury shares, which corresponds to approximately 5 per cent of the total number of shares in the company. Treasury shares may be acquired only by using unrestricted equity and at the price in multilateral trading on the date of the repurchase or other publicly quoted price. Shares may also be acquired outside public trading at a price that is not higher than the market price at the time of acquisition in public trading.

The Board of Directors decides how shares are acquired. Treasury shares may be repurchased other than in proportion to the shares held by the shareholders (direct repurchase) if there is a compelling economic reason for the company. The authorisation is valid for 18 months from the decision of the Annual General Meeting.

Option decisions:

On the basis of the authorisation granted by the Annual General Meeting of 23 March 2022 and the authorisation granted by unanimous shareholders on 16 September 2020, the Board of Directors decided on the issuance of a maximum of 500,000 options on 25 May 2022

Articles of Association:

The Articles of Association were not amended during the financial year 2022.

16 NON-CURRENT LIABILITIES

	2022	2021
Loans from credit institutions	457,749.26	371,792.40
Subordinated loans	2,000,000.00	
Total	**2,457,749.26**	**371,792.40**
Loans due in more than five years	**2,110,234.00**	**179,817.50**

Subordinated loan

The Climate Fund has granted Betolar Plc a subordinated loan of a total of EUR 7 million, of which the first tranche of EUR 2 million was drawn down on 8 February 2022. It is possible to withdraw the following tranches at the earliest on 1 January 2023, EUR 2.5 million, and on 1 July 2023, EUR 2.5 million.

The loan is due on 1 January 2029. The interest rate on the loan depends on Betolar Plc's credit rating, the reference period is annually on 30 June. Until the first review on 30 June 2023, the annual interest rate on the loan is 9.6%. Accrued interest not recognised an expenses as at 31 December 2022 is EUR 172,010.96. Interest is not paid until the loan is repaid. The loan has priority over other subordinated loans to the company.

17 CURRENT LIABILITIES

	2022	2021
Loans from credit institutions	3,315.24	4,073.28
Accounts payable	871,177.44	765,192.24
Liabilities to Group companies		6,200.00
Other current liabilities	140,074.00	50,990.51
Accruals and deferred income	1,328,405.21	550,838.79
Total	**2,342,971.89**	**1,373,221.54**

Significant items in accruals and deferred income	**2022**	**2021**
Salary expenses, bonus salaries	520,718.88	145,237.50
Holiday pay expenses	632,896.82	265,962.16
Other accruals and deferred income	174,789.51	139,639.13
Total	**1,328,405.21**	**550,838.79**

18 GUARANTEES GIVEN, CONTINGENT LIABILITIES AND OTHER LIABILITIES

	2022	2021
Lease liabilities (incl. VAT 24%)	121,564.33	23,330.40
Business mortgages	0.00	150,000.00
Other liabilities, total	**121,564.33**	**173,330.40**

19 TRANSACTIONS WITH RELATED PARTIES

Betolar Plc's related parties include Betolar Plc's subsidiary Betolar Chemicals Ltd. Related parties also include the key employees of Betolar Plc's management as well as their close family members and the entities under their control. The key management personnel are the members of the Board of Directors, the CEO and other members of the Management Team. Transactions with related parties are made on normal commercial terms. The transactions include consultancy services related to business development purchased from a member of the Board of Directors and a member of the Management Team. In addition, share subscriptions made by related parties have been identified as related party transactions during the financial period.

No loans or any other guarantees or securities were issued to any related parties.

The following transactions were carried out with related parties

	2022	2021
Income statement		
Purchased services	181,999.30	136,761.59

	2022	2021
Balance sheet		
Subordinated loan to Betolar Chemicals Ltd	116,964.60	43,668.92
Accounts payable	16,877.00	16,300.00

Management salaries and fees	2022	2021
Remuneration to the members of the Board of Directors	94,500.00	31,757.59
CEO		
Salaries and fees	406,595.63	172,730.73
Pension expenses	76,033.38	30,486.97
Indirect employee costs	10,571.49	4,819.19
	493,200.50	**208,036.89**
Other Management Team		
Salaries and fees	860,171.79	359,495.23
Pension expenses	160,852.12	63,450.91
Indirect employee costs	22,364.47	10,029.92
Total	**1,043,388.38**	**432,976.06**

During the financial periods 2022 and 2021, management has been granted options (qty) as follows:

	2022	2021
Members of the Board of Directors		431,518
CEO	145,000	60,701
Other members of the Management Team	195,733	165,876
Total	**340,733**	**658,095**

Calculation formulas for certain financial indicators and operative indicators.

Measure	Definition	Purpose of use
Gross margin	Net sales – materials and services	Gross margin is a measure of the Group's profitability. Gross margin measures profitability after reducing the costs of materials and services.
EBITDA	Operating profit (loss) before depreciation, amortisation and impairment	EBITDA is a measure of the Group's performance.
Earnings per share, basic, EUR	Operating profit (loss) before depreciation, amortisation and impairment	The measure reflects the distribution of the Company's earnings for each individual share.
Earnings per share, adjusted for dilution, EUR	Profit for the financial period / weighted average number of outstanding shares during the financial period + diluting potential shares	The measure reflects the distribution of the Company's earnings for each individual share, taking dilution into consideration.
Cash, cash equivalents and short-term fund investments	Cash and cash equivalents + current investments	Cash and short-term fund investments describe the company's liquid assets.
Number of pilot customers	Number of new customers in the plant pilot phase.	The measure illustrates new customers in the plant pilot phase of the Company's sales process

Signatures to the financial statements

Place: Kannonkoski
Date: 13 February 2023

Riku Kytömäki
CEO

Tero Ojanperä
Chair of the Board of Directors

Soile Kankaanpää
Member of the Board of Directors

Juha Leppänen
Member of the Board of Directors

Inka Mero
Member of the Board of Directors

Kalle Härkki
Member of the Board of Directors

Ilkka Salonen
Member of the Board of Directors

Auditor's note

Our auditor's report on the audit was issued today.

Place: Helsinki
Date: 16 February 2023

PricewaterhouseCoopers Oy
Audit firm

Janne Rajalahti
APA

Report on the Audit of the Financial Statements

Opinion

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position and financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of the financial statements in Finland and comply with statutory requirements.

What we have audited

- We have audited the financial statements of Betolar Oyj (business identity code 2800638-3) for the year 1 January 2022 - 31 December 2022. The financial statements comprise:
- the consolidated balance sheet, consolidated comprehensive income statement, statement of changes in consolidated shareholders' equity, consolidated cash flow statement, and notes to the consolidated financial statements, including a summary of significant accounting policies
- the parent company's balance sheet, income statement, cash flow statement and notes.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or to cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. 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 financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, 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 opinion. 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 in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's 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 parent company's or 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 our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. 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 parent company or the group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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.

Other Reporting Requirements

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors and the information included in the Annual Report but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

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

Helsinki 16 February 2022
PricewaterhouseCoopers Oy
Authorised Public Accountants

Janne Rajalahti
Authorised Public Accountant (APA)

Board of directors

TERO OJANPERÄ
Chair of the Board of Directors since 2020, Chair of the Personnel and Remuneration Committee since 2022.
M.Sc. (Tech), D.Sc., Tech.
born 1966, Finnish citizen

Other concurrent positions of trust
- OP Osuuskunta, Member of the Board
- Siili Solutions Plc, Member of the Board
- Visionplus Ltd, Chair of the Board
- Silo AI, Chair of the Board and Co-Founder
- Fintraffic Ltd, Chair of the Board

Key work experience
- Silo AI, CEO 2017–2019 and Co-Founder
- Visionplus Ltd, CEO, 2012–2017, and Co-Founder.
- Nokia Corporation, CTO and Chief Strategy Officer, Senior Vice President of Nokia Research Center and Vice President of Nokia Networks as well as other executive positions and member of the Board 1990–2011

Ownership in Betolar Plc
516 option rights, number of shares granted with options 310,116.

Independent of the company and its significant shareholders

INKA MERO
Member of the Board of Directors since 2020, member of the Personnel and Remuneration Committee since 2022.
M.Sc. (Econ.)
born 1976, Finnish citizen
Voima Ventures, Managing Partner and Founder

Other concurrent positions of trust
- KoppiCatch Inc., Chair of the Board
- Voima Ventures Oy, Chair of the Board
- Kuva Space Ltd, Chair of the Board
- Adamant Health Oy, Chair of the Board
- Musti Group Plc, Member of the Board
- Nokian Tyres Plc, Member of the Board
- Dispelix Ltd, Member of the Board
- ElFys Inc., Member of the Board
- Tacto Tek Ltd, Member of the Board

Ownership in Betolar Plc
-

Independent of the company and its significant shareholders

KALLE HÄRKKI
Member of the Board of Directors since 2021, member of the Audit Committee and the Personnel and Remuneration Committee since 2022.
D.Sc. (Tech.)
born 1969, Finnish citizen
Finn Recycling Oy, CEO

Other concurrent positions of trust
- Vuorimiesyhdistys ry, Chair of the Board
- Kolmen Kaverin Jäätelö Oy, Member of the Board

Key work experience
- Outotec Corporation, President, Metals, Energy & Water, Minerals Processing and Services Business Areas, 2008–2020
- Outokumpu and Outokumpu Copper, 2000–2008

Ownership in Betolar Plc
101 option rights, number of shares granted with options 60,701.

Independent of the company and its significant shareholders

SOILE KANKAANPÄÄ
Member of the Board of Directors since 2021, member of the Audit Committee since 2022
M.Sc. (Econ.)
born 1970, Finnish citizen
ISS Services Ltd, Chief Commercial Officer

Other concurrent positions of trust

Key work experience
- Uponor Infra Ltd, Vice President, Sales and Marketing, 2016–2018
- Outotec Oyj, Vice President, Account Management & Sales Development, 2013–2016
- Konecranes Plc, Director, Global Account Management and Development, 2010–2013
- Nokia Networks, various managerial positions, 1997–2010

Ownership in Betolar Plc
101 option rights, number of shares granted with options 60,701.

Independent of the company and its significant shareholders

ILKKA SALONEN
Member of the Board of Directors and Chair of the Audit Committee since 2022
M.Sc. (Econ.)
born 1965, Finnish citizen

Other concurrent positions of trust
- Metsä Group, Member of the Board and Chair of the Audit Committee
- Nordea Mortgage Bank Plc, Member of the Board
- NADMED, Vice Chair

Key work experience
- YIT Corporation, CFO, Deputy CEO, 2018–2021
- Lemminkäinen Group, CFO, 2014–2018
- Forest BtL Oy, Advisor to the Board, 2013–2014
- Neste Oil Plc, CFO, 2009–2012
- Pohjola Bank Plc, CFO, 2006–2008
- Pohjola Group, CFO, 2003–2005
- Comptel Plc, various managerial positions, 2000–2003

Ownership in Betolar Plc
-

Independent of the company and its significant shareholders

JUHA LEPPÄNEN
Member of the Board since 2016, Founder of Betolar
Technician in Electronics
born 1976, Finnish citizen
Betolar Plc Chief Innovation Officer

Other concurrent positions of trust
-

Key work experience
- Betolar Ltd, Chief Technology Officer, 2019–2021
- Betolar Ltd, CEO and Chair of the Board, 2016–2019
- Entrepreneur 2000–

Ownership in Betolar Plc
1,603,468 shares and 46,055 options

Dependent on the company and a significant shareholder.

Management team

RIKU KYTÖMÄKI
CEO
Member of the Management Team since 2022
M.Sc. (Tech)
born 1971, Finnish citizen

Key work experience
- Exel Composites Plc, President and CEO, 2014–2022
- ABB Plc, several business management and supervisory positions, 2001–2013
- Sonera Plc, Development Manager, 2000–2001
- ABB Oyj, expert and managerial positions in product development, 1996–2000

Ownership in Betolar Plc
22,562 shares and145,000 options. In addition, the potential share-based commitment plan amounts to 20,000 shares, with commitment period ending in 2024.

RIIKKA YLIKOSKI
CFO
Member of the Management Team since 2021
M.Sc. (Econ.)
born 1978, Finnish citizen

Key work experience
- Cargotec Corporation, various leadership positions in finance and financing, 2008–2021
- Boliden Harjavalta Oy, Controller, 2005–2008
- Kemira Plc, financial expert positions, 2000–2005

Ownership in Betolar Plc
23,439 shares and 46 082 option rights, number of shares granted with options 62,282.

VILLE VOIPIO
Chief Commercial Officer
Member of the Management Team since 2022
M.Sc. (Econ.)
born 1975, Finnish citizen

Key work experience
- Stora Enso Plc, Head of Sales and Marketing, 2017–2022
- Annalect Finland, Head of B2B and Consulting, 2013–2017
- Nokia Corporation, Markets Division, Manager, 2008–2021
- Family Inc & TBWA, Partner, Account Director and Planner, 2003–2008
- Done Software Solutions, Partner, 1998–2001

Ownership in Betolar Plc
1,184 shares and 11,513 options

JARNO POSKELA
Chief Technology Officer
Member of the Management Team since 2022
D.Sc. (Tech.)
born 1973, Finnish citizen

Key work experience
- Neste Corporation, Head of Development and Processes, 2019–2022
- Innotiimi Oy, various expert and managerial positions, 2007–2019
- BIT Research Centre, researcher assignments, 2003–2007

Ownership in Betolar Plc
11,513 options

JANNE RAURAMO
Executive VP Strategic Partnerships
Member of the Management Team since 2019
born 1981, Finnish citizen

Key work experience
- Ajanta Ltd, Investment Manager, 2018–

Ownership in Betolar Plc
52 287 shares ands 46 156 option rights, number of shares granted with options 106,756.

ANTTI USKI
Chief Human Resources Officer
Member of the Management Team since 2022
PhD, EMBA
born 1973, Finnish citizen

Key work experience
- University of Tampere, Chief Human Resources Officer, 2020–2021
- Kiilto Family Ltd, various executive and managerial positions in HR management, 2007–2020

Ownership in Betolar Plc
46,055 options

ILKKA IITTILÄINEN
Chief Operating Officer until 2 June 2023.
Member of the Management Team since 2022
M.Sc. (Tech), LL.M., MBA
born 1973, Finnish citizen

Key work experience
- DEN Group Ltd, Chief Procurement Officer, 2020–2021
- Neste Corporation, various managerial positions in procurement, logistics and operations, 2014–2020
- Neste Shipping Ltd, various executive and managerial positions, 2001–2014

Ownership in Betolar Plc
34,542 options

Betolar's Board of Directors appointed Riku Kytömäki as the CEO on 12 May 2022, and he took up his duties1 November 2022. Matti Löppönen acted as the Company's CEO until 31 October 2022.

Information to shareholders

Betolar Investor Relations

Betolar's investor relations are handled by the CEO, CFO and ESG & Investor Relations Manager. Our email addresses are in the format firstname.lastname@betolar.com.

Riku Kytömäki
CEO
Riikka Ylikoski
CFO
Melina Pinomaa
ESG and Investor Relations Manager

Investor meeting and call requests

melina.pinomaa@betolar.com

Objectives and principles of investor communications

The objective of Betolar's investor communications is to provide reliable, timely and accurate information to support the correct valuation of the company's shares in accordance with the disclosure policy approved by the Company's Board of Directors.

In investor relations and related communication situations, Betolar's principle is to ensure equal service for stakeholders, good availability and quick response of the company's representatives, high ethics and compliance with the guidelines and regulations concerning listed companies.

The disclosure policy approved by Betolar's Board of Directors is available in full at www.betolar.com/ disclosure-policy .

Visit our investor pages at
https://www.betolar.com/investors

Annual General Meeting

The Annual General Meeting is held on Friday, 31.3.2023. The Board of Directors of Betolar Plc will convene the meeting at a later date.

For more information please visit: www.betolar.com/general-meeting

Dividend proposal

In the years to come, Betolar will focus on financing its growth and developing its business operations in accordance with its strategy. The company does not expect to be distributing dividends in the short or medium term.

The Board of Directors proposes to the Annual General Meeting that no dividend be distributed for the financial period 1 January–31 December 2022 and that the loss for the financial period be carried over under retained earnings.

Financial reporting

Betolar will publish the following financial reports in 2023

- Business review 1–3/2023 will be published on 27 April 2023
- Half-year financial report 2023 will be published on 25 August 2023
- Business review 1–9/2023 will be published on 3 November 2023

Betolar share

BetolarPlc's shares are listed on the Nasdaq First North Growth Market Finland operated by Nasdaq Helsinki Oy. The trading code of the shares is "BETOLAR" and the ISIN code is FI4000512587. The company has one share series and each share carries one vote. On 31 December 2022, Betolar's registered share capital was EUR 80,000.00 and the number of shares was 19,531 757

Share information as of 31 December 2022

- Highest paid: EUR 6.30
- Lowest paid: EUR 2.52
- Volume weighted average price: EUR 4.64
- Total turnover in 2022: 2 547 223 shares
- At close: EUR 3.05
- Market Capitalization: EUR 59.6 million

The company's shares are included in the book-entry system operated by Euroclear Finland Ltd. The shareholder register is maintained and available at Euroclear Finland Ltd's office on Urho Kekkosen katu 5 C, 8th floor, Helsinki, Finland.

SILENT PERIOD

Betolar observes a 30-day silent period in its investor and media relations before the publication of business review, a half-yearly report or financial statements release. During such period, the company will not give comments to the media or other parties on the company's financial position, markets or outlook. The Company will also not meet with representatives of capital markets during the silent period.

Betolar observes a closed period of 30 days, during which persons discharging managerial responsibilities at Betolar are prohibited from trading the company's shares or debt instruments, or derivatives related to them or other financial instruments on their own account or for the account of a third party and from conducting other transactions. Betolar also applies the closed period to persons participating in or those who as to their assignments have access to the information on the financial results to be published in its preparation phase.

Certified Advisor

The company's certified advisor in accordance with the First North Rulebook rules is Aktia Alexander Corporate Finance.

BETOLAR

Betolar Plc
FI-43300 Kannonkoski, Finland
contact@betolar.com