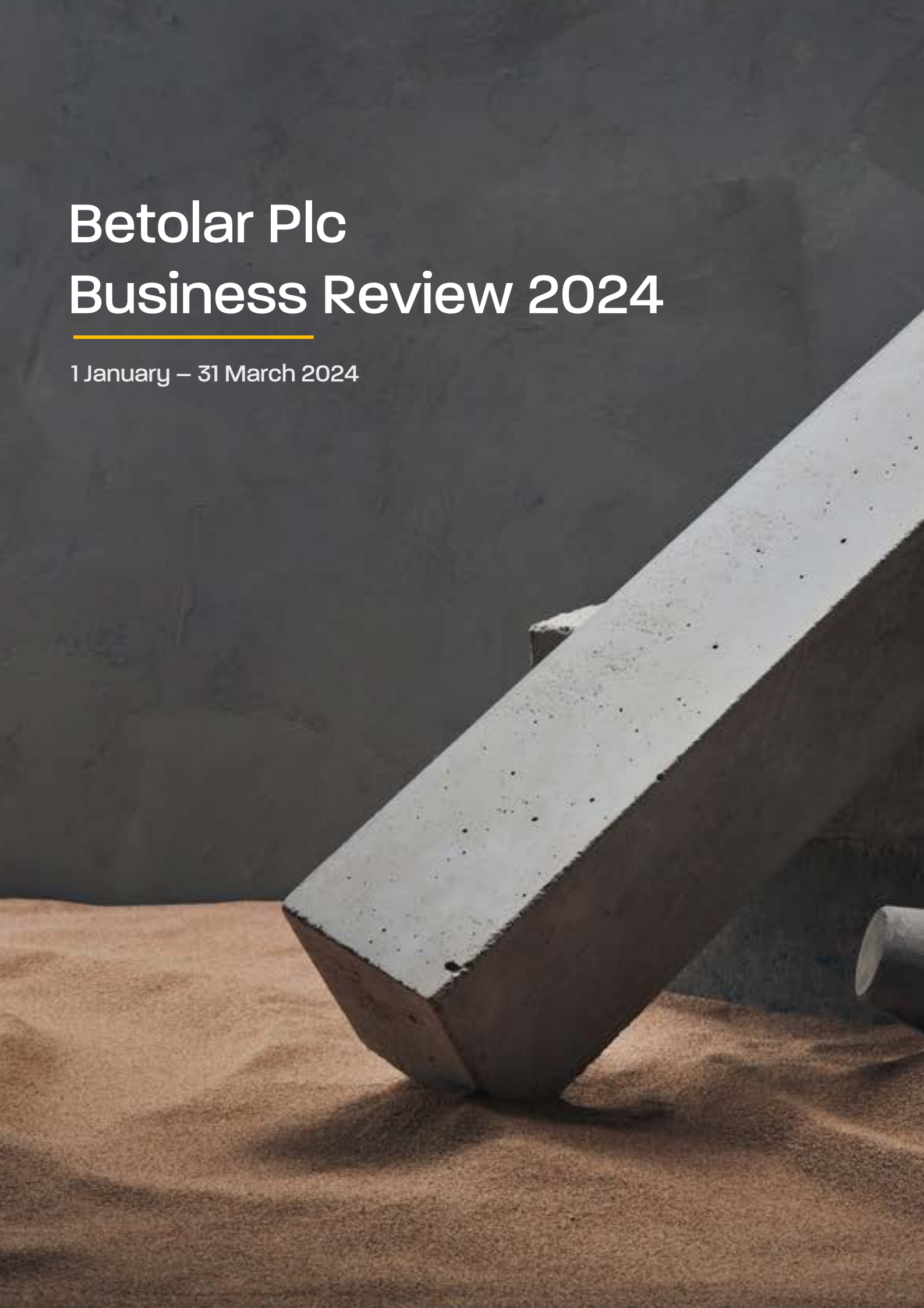


# Betolar Plc

# Business Review 2024

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1 January – 31 March 2024



Betolar Plc's Business Review 1-3/2024 (unaudited)

## Betolar Plc's Business Review 1–3/2024: Mining business has opened

### January–March 2024 in brief

- Net sales amounted to EUR 68 (43) thousand
- EBITDA amounted to EUR -1,959 (-3,124) thousand
- Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 11,665 (22,604) thousand
- Order intake amounted to EUR 369 (46) thousand
- The number of new NRE projects was 2 (-)
- The number of new pilot customers was 1 (5)
- The average number of employees was 52 (66)

### Main events in January-March

- Betolar was granted a patent for a method of treating road or foundation base layer with an activator in a mobile apparatus to form a hardenable geopolymeric or alkali-activated mixture.
- Betolar updated its medium and long-term business and financial targets on 14 February 2024.
- The Annual General Meeting was held on 27 March 2024.

### Main events after the period

- The Board appointed COO Tuija Kalpala as Betolar's new CEO to accelerate the company's commercial development. She took up her duties on 22 April 2024.
- CFO and member of the Management Team Riikka Ylikoski announced that she will move to a new position outside the company. Ylikoski will continue in her position until mid-July.
- As Sales and Operations functions were merged, Chief Commercial Officer, Ville Voipio stepped down from the Management Team.
- The company started change negotiations on 29 April 2024 as it focuses on rapidly developing solutions for the side stream, mining, and metal industries.

This business review is not an interim report under the IAS 34 standard. The company complies with the half-yearly reporting requirements of the Securities Markets Act and publishes business reviews for the first three and nine months of the year, which present key information and key figures on the company's strategy and business development. The figures presented in this business review are unaudited. The figures in brackets refer to the corresponding period in the previous year, unless otherwise stated.

## CEO Tuija Kalpala

During the first quarter, we focused on our mining business. We are addressing the need for high-volume, low-carbon material solutions in mine construction, and providing avenues for utilizing mining side streams, such as in soil stabilization. At the same time, we continued the development of hollow core slabs, particularly focusing on projects for our existing clients.

The mining industry and untapped side streams offer significant potential for Betolar's business. Early this year, we secured commercial research service projects from two mining companies with the objective of developing material solutions for low carbon and waste free mining operations. Additionally, in March, we started the development of cement-free shotcrete for Outokumpu's Kemi chrome mine structures.

We estimate that the mining industry's emission reduction goals accelerate the interest and demand for Betolar's solutions to replace cement. We see an opportunity for rapid business growth in this high-volume market. The order intake in Europe and Asia further reinforces our strategy. We accelerate the research and commercialization of untapped side streams. In the development of cement alternatives, we are able to leverage existing solutions that have been developed for the concrete product business.

In early part of the year, we launched an AI-based side stream analysis service for companies generating side streams. The service efficiently and quickly provides customers with a preliminary assessment of the opportunities for utilizing the material generated in their operations. Through this novel approach, Betolar can leverage side streams more extensively than with traditional methods. The service was initially launched for a carefully targeted customer segment but will gradually be extended to a larger customer base.

The revenue for the first quarter was low. However, winning non-recurring engineering (NRE) projects strengthens our expectations for the future and going forward, we will report on new NRE projects as part of our financial reporting. As early-stage consultative NRE projects progress, our aim is to become part of the value chain and commercialize the developed side stream or material solution together with our client.

Betolar's side stream and technology expertise is very strong and offers significant commercial opportunities. To meet the market demand of the green transition in the side stream, mining, and metals sectors, we need to improve our operational efficiency and strengthen our customer-oriented culture. In April, we launched change negotiations concerning the entire personnel in Finland. Our culture puts customer needs at the center of everything we do, with particular focus on the effective delivery of customer projects.

## Key Figures

(EUR thousand, unless otherwise specified)	1–3 2024	1–3 2023	1–12 2023 <sup>2</sup>
<b>Financial indicators</b>			
Net sales	68	43	515
EBITDA <sup>1</sup>	-1,959	-3,124	-11,181
Cash and cash equivalents and short-term fund investments (at the end of the period) <sup>1</sup>	11,665	22,604	14,315
<b>Operational indicators</b>			
Order intake (EUR thousand) <sup>1</sup>	369	46	-
Number of new NRE projects <sup>1</sup>	2	-	-
Number of new pilot customers <sup>1</sup>	1	5	24
Personnel (average number during the financial period)	52	66	60

- 1) Betolar uses certain indicators (EBITDA, cash and cash equivalents and short-term fund investments, order intake, number of new NRE projects and number of new pilot customers) as quarterly indicators of operational profitability and business performance. The definitions and calculation formulas of these indicators can be found in the appendix to the report.
- 2) The figures for the financial year 2023 have been audited.

## Business Review

Betolar's offering focuses on three customer segments: mining and metal industry, side streams, and concrete solutions for construction. The order intake during the period came particularly from the mining customer segment.

The business in the mining and metal industry segment opened up at the beginning of the year. There were two new NRE projects. In addition, in March, Betolar and Outokumpu agreed on the development of cement-free shotcrete concrete to be used in the structures of Outokumpu's Kemi chrome mine, aiming to introduce a low-carbon alternative to the current shotcrete composition without compromising the properties and quality requirements. The goal of the development work is to produce shotcrete concrete compliant with CEMIII standards within the current year, after which the development will continue to create entirely cement-free shotcrete concrete by the end of next year. The collaboration contributes to Outokumpu's goal of making the mine carbon-neutral by the end of 2025.

Within side streams, Betolar continued with the two previously announced projects, to research and commercialize unused side streams. Projects yielded encouraging results regarding the material usability. During the period, the first commercial AI-enabled side stream analysis service was introduced. It allows companies that generate side streams to order an analysis regarding the material's upcycling potential in construction or mining.

In the concrete solutions customer segment, one new pilot customer was commenced. Betolar focused on commercializing hollow-core slabs and existing Geoprime customers in target markets. In concrete products, Betolar continued deliveries to existing customers for new production projects in Europe and India. During the period, the

delivery capability of activator chemicals in Geoprime hollow-core slabs was built, and pilot projects were prepared for selected markets.

## Financial Review

### January – March 2024

The Group's net sales in January–March 2024 amounted to EUR 68 thousand (1–3/2023: EUR 43 thousand). Approximately 69 % of the net sales for the reporting period consisted of license and chemical sales in accordance with the Geoprime concept and 31 % came from sales of NRE services.

EBITDA totalled EUR -1,959 thousand (EUR -3,124 thousand). The negative EBITDA decreased from the comparison period because of lower expenses. The company's cost level in the quarter ended was EUR 1 million lower than in the same period of the previous year.

Cash and cash equivalents and short-term fund investments amounted to EUR 11,665 (22,604) thousand.

The development of the company's cash and cash equivalents will be impacted by the business progress, the targeted cost savings and the outstanding EUR 2.7 million grant from Business Finland. In addition, the company has an outstanding loan of EUR 2.5 million from the Climate Fund.

## Research and development

Early this year, Betolar was granted a patent that enables improving the load-bearing capacity of roads and thus reduce life-cycle costs. The patented invention relates to a method for treating the load-bearing layer of a road or soil with an activator. In the patented solution, the load-bearing layer is removed from the road structure and stabilised by a mobile machine, after which the stabilised mass is spread back into the road as a load-bearing structure. The patented invention enables the use of side streams from mining operations, for example, in soil stabilization in use cases such as road structures. Betolar's patent portfolio consists of six granted patents, with nine other inventions in the patenting process.

The focus of research and product development was strengthened in product applications for the mining industry, e.g. paste filling and shotcrete. The development work carried out showed that cementless paste filling can provide a solution that meets the required strength and long-term durability properties, while reducing carbon dioxide emissions by 40-80% depending on the side streams used. The development of a low-carbon shotcrete solution was initiated in cooperation with Outokumpu. The side stream research programme continued as planned and new side stream studies were launched, in particular on tailings for the mining industry. In addition, Betolar focused on the development of its process for fractionation of critical metals from the metal industry, enabling the use of refined slag as a binder. Betolar has been investigating the use of carbon dioxide in the treatment of side streams.

Betolar's side stream analysis service, enabled by the AI-platform, assists customers in identifying value creation opportunities related to side streams by providing precise information on material composition, properties, and suitability as raw material for concrete. Betolar also achieved several significant advancements in AI utilization by creating multiple predictive models, such as simulating customer solution performance and long-term durability.

The Annual Report and the Half-Year Review provide an extensive description of the priorities and the overall scope of Betolar's research, development and innovation activities.

## Financial reporting

Betolar will publish the following financial reports in 2024:

- 27 August Half-year Review
- 1 November Q3 Business Review

Betolar's financial reports are available on the company's website at [www.betolar.com/investors](http://www.betolar.com/investors).

## Webcast for investors and media

Betolar will host a live webcast in English for investors and media on 30 April 2024 at 10.00 a.m. Finnish time. The webcast can be followed at <https://betolar.videosync.fi/q1-2024>

In the English-language presentation, CEO Tuija Kalpala and CFO Riikka Ylikoski will present Betolar's business review. A recording of the event and the corresponding presentation will be available on Betolar's investor website later in the day.

## APPENDIX

Calculation formulas for certain financial indicators and operative indicators.

Measure	Definition	Purpose of use
EBITDA	Operating profit (loss) before depreciation, amortisation and impairment	EBITDA is a measure of the Group's performance.
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.
Order intake	The value of orders for materials and services received during the reporting period.	The indicator describes the expected future development of the company's sales.
New Non-Recurring Engineering (NRE) projects	The number of new NRE order intakes received in the reporting period.	The indicator describes the development of the contract base of the company's research service business
Number of new pilot customers	The number of new customers in the factory pilot phase at the end of the reporting period.	The indicator describes the volume development of the company's license-based business sales process.