



# Betolar Plc Business Review 2024

1 January – 30 September 2024

**BETOLAR**

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Betolar Plc's Business Review 1-9/2024 (unaudited)

## Betolar Plc's Business Review 1–9/2024: New partnerships in the mining business

### July–September 2024 in brief

- Net sales amounted to EUR 276 thousand (EUR 167 thousand)
- EBITDA amounted to EUR -974 thousand (EUR -2,625 thousand)
- Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 10,748 thousand (EUR 14,989 thousand)
- Order intake amounted to EUR 237 thousand (EUR 256 thousand)
- The number of new NRE projects was 1 (3)
- The number of new pilot customers was 2 (5)
- The average number of employees was 44 (59)

### January–September 2024 in brief

- Net sales amounted to EUR 551 thousand (EUR 298 thousand)
- EBITDA amounted to EUR -4,623 thousand (EUR -8,811 thousand)
- Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 10,748 thousand (EUR 14,989 thousand)
- Order intake amounted to EUR 732 thousand (EUR 394 thousand)
- The number of new NRE projects was 6 (4)
- The number of new pilot customers was 4 (23)
- The average number of employees was 49 (62)

### Main events in July–September

- Betolar and Norge Mineraler signed a memorandum of understanding to develop sustainable mining solutions in Norway.
- Betolar signed a Memorandum of Understanding with Latitude 66 limited to cooperate in exploring sustainable mining solutions for the development of Latitude 66 Limited's Kuusamo cobalt mining project in Northern Finland.
- Betolar acquired MetalCirc Ltd's patent regarding treatment of waste combustion ashes.
- Betolar was granted a patent in Finland enabling the large-scale use of sidestreams in road, soil and ground construction.
- Betolar was granted a patent in Finland for CEM III/B accelerator solution.
- Betolar successfully completed the directed share issue of 1,960,688 new shares raising EUR 2.35 million.
- On 30 August 2024, Ahlström Invest B.V. sold all its shares in Betolar Plc. Consequently, Andreas Ahlström, resigned from the Shareholders' Nomination Board. Annika Ekman, representative of Ilmarinen Mutual Pension Insurance Company, was appointed to replace him.
- During the period, Nidoco Ltd's shareholding increased from 13.26 % to 27.81 %.
- On 3 September, Mikko Wirkkala started as Chief Financial Officer at Betolar

Commented [MM1]: Virallinen nimi englanniksi on Ilmarinen Mutual Pension Insurance Company

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### Main events after the period

- Betolar and Hycamite TCD Technologies Oy signed a commercial agreement to assess the applicability of carbon nanofibers for enhancing the strength properties of concrete and reducing its carbon footprint.

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.

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### President and CEO's review

In July-September 2024, Betolar's net sales continued to grow and was 65 % higher than in the comparison period. Net sales consisted of revenue from customer pilots and NRE projects, as well as license and material revenues from the Geoprime concept. EBITDA clearly increased due to efficiency improvements, although it remained negative. We strengthened our financial position in the third quarter and successfully completed a directed share issue, raising EUR 2 353 thousand.

During the period, we made progress in refocusing our strategic priorities, as announced in the Spring, towards the sidestreams, mining and metals industry. We continued to develop our sidestream activities, focused on commercial customer projects and new research projects. The first analysis services for two new industrial sidestreams were successfully completed. We targeted this service development on the needs of the mining activities using AI models and the previously collected data. The expanded analysis portfolio enables pre-assessment of several industrial sidestreams, as well as broader recipes and testing, especially in the mining industry.

Our activities in the mining and metals industry expanded well. We signed Memorandums of Understanding with Norge Mineraler and Latitude 66 Limited. With Norge Mineraler, we will focus on developing sustainable mining solutions for Norway, while with Latitude 66 Limited we will explore sustainable solutions for the Kuusamo cobalt mining project in Northern Finland. In addition, we continued to develop the low-carbon shotcrete at Outokumpu's mine in Kemi, where the first pilot project was successfully carried out with our solution.

We continued to deliver low-carbon concrete solutions to our customers in both Europe and India. Our products passed challenging salt freeze thaw tests, which are essential for the long-term durability and performance of concrete. As a result, these methods have proven to improve both the quality and durability of our products.

We are very pleased with this progress and proud of our team's achievements. This success strengthens our position in the market and gives us the credibility to continue developing and delivering innovative and sustainable solutions to our customers around the world.

I would like to thank all our employees for their excellent work and dedication to our company. Additionally, I would like to thank our customers and partners for their cooperation and for being a frontrunner. Your contribution has been crucial in driving Betolar forward in line with our new strategic focus.

Tuija Kalpala

President and CEO

Commented [MM2]: Pohjois-Suomi = Northern Finland (kapitaalein)

Commented [MM3]: Pitäisikö tähän lisätä salt freeeze thaw 'tests'? Suolapakkasrasitus 'testit'

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### Key Figures

(EUR thousand, unless otherwise specified)	7-9 2024	7-9 2023	1-9 2024	1-9 2023	1-12 2023
<b>Financial indicators</b>					
Net sales	276	167	551	298	515
EBITDA <sup>1</sup>	-974	-2,625	-4,623	-8,811	-11,181
Cash and cash equivalents and short-term fund investments (at the end of the period) <sup>1</sup>	10,748	14,989	10,748	14,989	14,315
<b>Operational indicators</b>					
Order intake (EUR thousand) <sup>1</sup>	237	256	732	394	607
Number of new NRE projects <sup>1</sup>	1	3	6	4	9
Number of new pilot customers <sup>1</sup>	2	5	4	23	24
Personnel (average number during the financial period)	44	59	49	62	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.

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### Business Review 1–9/2024

During the period, Betolar progressed in the mining and metals industry with Memorandums of Understanding with Norge Mineraler and Latitude 66 Limited. For Norge Mineraler, various sustainable mining solutions will be developed in Norway. A similar collaboration with Latitude 66 Limited is starting to explore and develop sustainable mining solutions for the Kuusamo cobalt mining project in Northern Finland.

Commented [MM4]: Northern

The development project for low-carbon shotcrete continued with Outokumpu. The project has progressed on schedule and with good results. The first pilot has been successfully carried out at the Kemi mine with the aim of developing a CEM III-compliant concrete and later a fully cementless shotcrete. This innovative solution uses alternative binders and industrial sidestreams, further reducing the environmental impact of concrete.

Betolar advanced its sidestream business and put effort into strengthening the international sourcing and logistics capabilities. In addition, the company carried out a commercial consultancy project on the industrial sidestream supply chain to a Central European customer. During the period, Betolar continued its small-scale, low-risk blast furnace slag sales. In the sidestream business, the focus was on commercial customer projects. Additionally, new industrial sidestream studies were launched during the period, for example with Hycamite TCD Technologies Ltd. The research project will assess the applicability of carbon nanofibers for enhancing the strength properties of concrete and reducing its carbon footprint in concrete products and mining applications.

At the beginning of the year, Betolar launched an AI-based commercial sidestream analysis service, which continued growing its customer numbers. During the period, the development of the service focused on the needs of the mining industry. A new feature allows previewing the applicability of MetalCirc technology, acquired during the period, for neutralizing hazardous ash for the customer. The AI-based solution is based on data collected from materials previously tested and studied at Betolar, and the AI models developed based on the data, as well as a constantly growing material bank. In addition, the new expanded sidestream analysis portfolio enables an increasingly efficient pre-screening of multiple sidestreams and thus a more extensive pre-screening and testing of selected sidestreams, for example for a mining site.

In low-carbon concrete solutions for construction, Betolar continued to supply Geoprime-based materials to customers in Europe and India. Betolar's Geoprime-based products passed the challenging double-sided salt freeze/thaw tests, which are critical to the long-term durability and performance of concrete. The tests simulate the extreme conditions under which concrete is exposed to salt and freezing temperatures, and the passing demonstrates the high quality and reliability of products based on our Geoprime solution.

Commented [MM5]: ... salt freeze thaw tests?

During the reporting period, Betolar signed a new Geoprime hollow-core slab pilot contract with a customer in Australia. In addition, the suitability of Geoprime hollow-core slab was evaluated, particularly in relation to data centre projects.

The low-carbon hollow-core slabs developed by Betolar as part of a Consolis Parma customer project received approval in the spring according to EN standards. This includes endorsement from the Finnish Concrete Association for the use of activator chemicals as concrete admixtures. Together, these will enable CE marking in Finland for a new type of low-carbon hollow-core slabs that can be used in the same way as conventional hollow-core slabs.

Over the past year, Betolar's innovative solutions have received significant recognition in Finland and also internationally. Betolar's solutions have won several awards during the year.

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## Financial Review 1–9/2024

### July – September 2024

The Group's net sales for July-September 2024 amounted to EUR 276 thousand (EUR 167 thousand). During the period, 39 % of revenue came from license and materials sales associated with the Geoprime concept and 61 % of revenue came from sales related to customer pilots and research service projects.

EBITDA totalled EUR -974 thousand (EUR -2,625 thousand). The company's cost base in the third quarter was EUR 1,283 thousand lower than in the comparison period, which was achieved by the cost structure adjustment measures.

Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 10,748 thousand (EUR 14,989 thousand).

### January – September 2024

The Group's net sales for January – September 2024 increased from the comparison period and amounted to EUR 551 thousand (EUR 298 thousand). 33 % of the net sales for the period consisted of license and materials sales associated with the Geoprime concept and 67 % came from fees related to customer pilots and research service projects.

EBITDA was EUR -4,623 thousand (EUR -8,811 thousand). The negative EBITDA improved compared to the comparison period due to cost structure adjustment measures. The company's cost base was EUR 3,200 thousand lower compared to the comparison period. In January-September, non-recurring costs related to change negotiations and management changes totalled EUR 549 thousand.

Cash and cash equivalents and short-term fund investments amounted to EUR 10,748 thousand (EUR 14,989 thousand).

The company has taken active measures to secure the financial conditions to implement its strategy, which was updated in 2023. In 2023, Betolar initiated cost structure adjustment measures aimed at achieving annual cost savings of EUR 5,000 thousand. Betolar has continued its cost saving measures, started change negotiations in April 2024 and reduced the size of the Management Team. The change negotiations resulted in a reduction of 13 employees which will not jeopardise Betolar's ability to meet its contractual commitments, ensure customer satisfaction or develop its business in line with its strategy. The measures to achieve the cost saving target were completed largely during the period.

Betolar has received public financing for research and development. Business Finland granted Betolar EUR 2,700 thousand for a research and development project on alternative sidestreams during financial year 2023. This grant will be drawn down as the research project progresses during 2024, 2025 and 2026 with EUR 2,200 thousand remaining undrawn. In addition, EUR 2,500 thousand out of the EUR 7,500 thousand loan from the Finnish Climate Fund remains undrawn. The loan drawdown is linked to development targets, some of which the company already met in 2023, and the loan will be drawn down further in 2024. In addition, in January Finnpartnership awarded the company a grant of EUR 370 thousand to pilot the prefabrication of hollow-core slabs in Malaysia.

During the reporting period, Betolar successfully completed a directed share issue, with 1,960,688 new shares issued, raising EUR 2 353 thousand. The subscription price was recorded in full to the Company's invested unrestricted equity reserve.

Commented [MM6]: Voisi avata ... financial year tai financial period.

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### Research and development 1-9/2024

During the period, Betolar's research and development activities progressed as planned in the sidestream, mining and metals customer segments. In mining solutions to replace cement, progress was made in areas such as low-carbon shotcrete and paste filling solutions.

Betolar continued the development of metal fraction recovery processes. The research project on metal recovery and the production of clean slags has progressed. The method developed allows, for instance, the purification of tailings from harmful substances, making them usable as high-quality binders such as cement or blast furnace slag. The next objective of the development work is to carry out larger scale pilot phases before moving to industrial scale. Development work on the capture of carbon dioxide in different materials is currently in the phase where the equipment for the process is being developed.

Two new patents were granted to Betolar during the third quarter. In July, Betolar was granted a patent in Finland enabling the large-scale use of sidestreams in road, soil and ground construction. In August, the company was also granted a patent for an accelerator solution for CEM III/B mix cement, which accelerates the initial strength development of low-carbon concrete, enabling it to meet conventional demolding times. In addition, Betolar acquired in August a patent from MetalCirc Ltd, which relates to a method for neutralizing waste combustion ashes and recycling of valuable materials contained in the ashes. The patent complements the technology developed by Betolar and reinforces the protection scope of its patents in the application stage, as well as its hazardous materials separation capabilities. In June, Betolar was granted a patent for a liquid chemical dosing device in Finland. In March, a European patent was granted for the treatment of road or foundation base layer with an activator in a mobile machine.

Betolar continued to develop its AI-based data platform, focusing on helping customers to identify value creation opportunities in sidestreams, such as mining and metals applications and concrete raw material applications. The focus was on the quality, availability and usability data utilization. In addition, several AI models were developed to predict the performance and long-term durability of end products.

### Personnel and management

In July – September 2024, Betolar had an average of 44 employees, compared to 59 in the comparison period. At the end of the period, the Group employed 37 (59) persons. This change reflects the adjustment and new strategic focus announced by the company in the spring.

Betolar's management team consists of President and CEO Tuija Kalpala, CFO Mikko Wirkkala, who took up his position on 3 September, and Soila Söderström, General Counsel.

### Financial reporting

Betolar will publish the following financial reports in 2025:

- 5 February Financial Statements bulletin 2024
- 24 April Q1 Business Review
- 18 July Half-year Review
- 28 October Q3 Business Review

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The Annual Report for 2024 will be published no later than 5 March 2025. The Annual General Meeting is planned to be held on 27 March 2025.

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

**APPENDIX**

Calculation formulas for certain financial indicators and operative indicators.

<b>Measure</b>	<b>Definition</b>	<b>Purpose of use</b>
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 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.