



# Betolar Plc Business Review 2023

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1 January – 30 September 2023



Betolar Plc's Business Review 1-9/2023 (unaudited)

## Betolar Plc's Business Review 1–9/2023: Good progress in developing the side-stream business - demand on the rise

### July–September 2023 in brief

- Net sales amounted to EUR 167 (45) thousand
- EBITDA amounted to EUR -2,625 (-2,587) thousand
- Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 14,989 (30,328) thousand
- The number of new pilot customers was 5 (5)
- The average number of employees was 59 (56)

### January–September 2023 in brief

- Net sales amounted to EUR 298 (65) thousand
- EBITDA amounted to EUR -8,811 (-7,104) thousand
- Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 14,989 (30,328) thousand
- The number of new pilot customers was 23 (19)
- The average number of employees was 62 (46)

### Main events in July–September

- In the concrete products segment, progress was particularly strong in India, where two new customers started the ramp-up of the production of Geoprime concrete products.
- In the construction elements segment, the first hollow core slab pilot was carried out in Southeast Asia.
- In the Waste upcycling product segment, the first contracts for side stream research and recovery were signed, such as a research project order from Inno Precast Company Limited, a Thai company belonging to the leading real estate developer Prukso Group. The contract covers research and analysis of local side streams.
- Betolar received a positive decision of EUR 2.7 million grant funding from Business Finland for a research and development project on alternative side streams.
- Tuija Kalpala (M.Sc. Econ.) was appointed Chief Operating Officer and Member of the Management Team. She took up her position on 2 October 2023.
- Janne Rauramo, the Executive Vice President of Strategic Partnerships and Member of the Management Team will leave the company on 30 November 2023 at the latest.
- In order to strengthen the implementation of the growth strategy, Betolar initiated a cost structure adjustment, as part of which the company entered into change negotiations. The negotiations started on 18 September 2023 and were concluded at the beginning of October 2023.

This is not an interim report under IAS 34. 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 Riku Kytömäki

Since the summer, in addition to commercial openings, we have focused on research and development of new strategic growth directions, mining and alternative side streams. As expected and in line with the focus of our updated strategy, our side stream expertise has opened up opportunities for us. The green transition is accelerating in various industrial sectors, which in turn is creating increasing pressure for the discovery of alternative binders and the use of unused side streams.

We continued to pilot our solutions in the concrete products and construction elements segments in different markets. Progress was particularly strong in India, where two new customers started the ramp-up of Geoprime concrete products in the third quarter. We also made good progress in the piloting and development of hollow-core slabs. In August, we carried out the first hollow-core slab pilot in South-East Asia, where we have identified growing interest to move into the production of precast load-bearing building elements.

Our net sales increased from the comparison period and from the previous quarter. We are still at the beginning of new strategic growth areas. The moderate increase in production volumes of first-generation concrete products is directly reflected in volume-based licensing and chemical revenues.

We continued to invest in our capabilities to upcycle new side streams, strongly supported by a EUR 2.7 million grant from Business Finland. We achieved readiness to enter the pilot phase of a new geopolymer recipe and dosage system. We expect that the new method will enable us to make more extensive use of industrial side streams and improve product quality characteristics. This in turn will open doors to move into more demanding application areas in the future.

In waste upcycling solutions, we signed the first contracts for side-stream research. An example of a sale of our research services is a research project order from Pruksa Group, a Thai property developer and concrete manufacturer. The contract covers research and analysis of local side streams. With the new side streams, Pruksa Group aims to promote a green transition in the production of concrete products. During the period, we have also progressed our side stream research service in North America.

Our financing needs for the strategy period require us to allocate resources as efficiently and productively as possible. We have refined our priorities as technology, business and markets evolve. We are aiming for total annual savings of EUR 5 million by adjusting our cost structure. We expect the impact of these savings to be moderately visible during the remainder of 2023 and fully realised in 2024. As part of the cost-saving measures, we started change negotiations in September, which were finalised in early October.

We are also constantly evaluating opportunities to improve our position in the value chain and scalable customer segments, for example through key partnerships. We are currently working on updates to our business model in line with our strategy and also examining our medium and long-term goals in this context.

## Key Figures

(EUR thousand, unless otherwise specified)	7–9 2023	7–9 2022	1–9 2023	1–9 2022	1–12 2022 <sup>2</sup>
<b>Financial indicators</b>					
Net sales	167	45	298	65	287
EBITDA <sup>1</sup>	-2,625	-2,587	-8,811	-7,104	-9,988
Cash and cash equivalents and short-term fund investments (at the end of the period) <sup>1,2</sup>	14,989	30,328	14,989	30,328	26,624
<b>Operational indicators</b>					
Personnel (average number during the financial period)	59	56	62	46	51
Number of new pilot customer <sup>1</sup>	5	5	23	19	25

- 1) Betolar uses certain indicators (EBITDA, cash and cash equivalents and short-term fund investments and number of 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 2022 have been audited.

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Betolar's offering, as well as research and development is focused on four product segments: concrete products, construction elements, mines, and waste upcycling.

In the concrete products segment, progress was made in the third quarter, particularly in India, where two new customers started the ramp-up of the production of Geoprime concrete products. The Geoprime solution has helped local manufacturers to switch to low-carbon products that meet local standards. Betolar assesses itself to be one of the few companies in India offering concrete product manufacturers a complete solution for cement-free products.

In the third quarter, Betolar reached the readiness stage to proceed with piloting a new geopolymer formulation and dosage system that has been developed since spring. The new improved method will allow a wider use of different side streams and further improve the quality characteristics of products based on the Geoprime solution.

In the construction elements product segment, the development of hollow-core slabs progressed well. The first hollow-core slab pilot was carried out in South-East Asia, where a strong local trend towards pre-cast building elements is visible. A construction application that belongs to load-bearing structures and has wide-ranging applications, is also currently being developed for the Asian markets. It is suitable for in-situ construction, which is widely used in developing markets.

In the mining product segment, Betolar's main application areas are cemented paste backfill (CPB), shotcrete and stabilisation of tailings. The productisation of mining solutions was promoted through participation in events of the European EIT Raw Materials community and by actively building the bid pool in the third quarter. Betolar also participated in the development work of the Coordination Group on the Circular Economy in Mines, which is helping to promote Finland's innovation and development in the field.

The Waste upcycling segment secured its first contracts related to side stream research and utilization. An example of this includes a research project order received in the third quarter from Thai property developer and concrete manufacturer Pruksa Group. The contract covers the research and analysis of local side streams. Through the use of new side streams, Pruksa Group aims to promote a green transition in the production of concrete products. Side stream research was also conducted in North America during the period.

## Financial Review 1–9/2023

### July – September 2023

The Group's net sales in July – September 2023 amounted to EUR 167 thousand (7–9/2022: EUR 45 thousand). EBITDA totalled EUR -8,811 thousand (EUR -7,104 thousand). Majority of the net sales came from product development 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.

### January – September 2023

The Group's net sales in January–September 2023 amounted to EUR 298 thousand (1–9/2022: EUR 65 thousand). Approximately 42% of the net sales for the reporting period consisted of license and chemical sales in accordance with the Geoprime concept.

EBITDA totalled EUR -8,811 thousand (EUR -7,104 thousand).

Betolar is a company in a growth phase, and its investments in the development and international commercialisation of its Geoprime concept continued during the period. The negative operating margin reflects the costs in line with the company's growth strategy, investments in research and product development, and in building other prerequisites and capabilities for the growth strategy. The company expects to achieve positive cash flow from operating activities by 2026.

Cash and cash equivalents and short-term fund investments amounted to EUR 14,989 (30,328) thousand.

The development of the company's cash and cash equivalents will be impacted by the business progress, the targeted annual cost savings structure of EUR 5 million and the EUR 2.7 million grant from Business Finland. In addition, the company has an outstanding loan of EUR 5 million from the Climate Fund.

### Investments

During January–September 2023, Betolar has invested EUR 917 thousand in the expansion of the Innovation Centre in Kannonkoski.

## Research and development 1-9/2023

Betolar's research and development activities progressed as planned during the period.

In product development, Betolar's focus shifted from precast concrete products towards structural solutions. Extensive cooperation continued with precast concrete manufacturer Consolis Parma on the product development of low-carbon hollow-core slabs. A first customer pilot was also carried out on the same product application in the Asian market. Using the Geoprime solution, it is possible to achieve up to 75% lower emissions than standard hollow-core slabs. Product development work was also carried out on another major product application in the field of load-bearing structures, specifically targeted at the Asian market.

The development of the first product applications for the mining industry, cemented paste backfilling and shotcreting, progressed as planned. The side streams research programme received significant additional resources from Business Finland's research funding. This grant will enable even broader and more challenging side stream research activities. The ongoing programme aims to find viable alternatives to blast furnace slag (GGBFS) and fly ash. The research programme currently covers more than 20 different industrial side streams. Some of these research projects are carried out on a non-recurring engineering fee basis with side stream owners.

The development of the Betolar Platform Program (AI data platform) progressed in line with the strategy. Data collection on side streams, customer pilots, Geoprime end-product characteristics, continued as planned. Betolar continued to develop a programme of data-driven value-added services, initially to support customers in identifying opportunities to utilize side streams. The piloting of the side-stream analysis service started with several customers during the third quarter.

## Personnel and management

The average number of personnel was 59 (56). In order to strengthen the implementation of the growth strategy, Betolar initiated a cost structure adjustment, as part of which the company entered into change negotiations. The negotiations started on 18 September 2023 and were concluded at the beginning of October 2023.

Betolar's management team consists of President and CEO Riku Kytömäki, CFO Riikka Ylikoski, Chief Commercial Officer Ville Voipio, Chief Technology Officer Jarno Poskela, Executive Vice VP of Strategic Partnerships Janne Rauramo (who will leave the company on 30 November 2023 the latest), Chief Operating Officer Tuija Kalpala (took up the position after the period on 2 October 2023) and Chief Human Resources Officer Antti Uski.

## Financial reporting

Betolar will publish the following financial reports in 2024:

- 14 February Financial Statements bulletin 2023
- 30 April Q1 Business Review
- 27 August Half-year Review
- 1 November Q3 Business Review

The Annual Report for 2023 will be published no later than 6 March 2024. The Annual General Meeting is planned to be held on 27 March 2024.

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.
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.