

---

Betolar Plc  
Business Review 2025  
1 January–31 March 2025

---

## Betolar Plc's Business Review 1–3/2025: Focus on the mining and metals industry continues as planned

### January – March 2025 in brief

- Net sales amounted to EUR 164 thousand (68 thousand)
- EBITDA amounted to EUR -1,007 thousand (-1,959 thousand)
- Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 10,253 thousand (11,665 thousand)
- Liquidity and undrawn grants at the end of the period amounted to EUR 12,408 thousand (17,801 thousand)
- Order intake amounted to EUR 90 thousand (369 thousand)
- The number of new NRE projects was 1 (2)
- The average number of employees was 34 (52)
- Full year guidance unchanged: net sales for 2025 is expected to increase compared to the previous year

### Main events in January-March

- The world's lowest-emission hollow core slabs developed by Betolar and Consolis Parma entered production phase (1/25).
- Betolar studied the circular economy use of ashes generated from Alva-yhtiöt energy production using the SidePrime analysis service (2/25).
- Betolar updates its financial targets (2/25).
- Betolar has been granted a patent for a climate cabinet that standardizes the storage conditions of test samples (3/25).
- The Annual General Meeting was held on 27 March 2025 (3/25).

### Main events after the period

- Betolar strengthens Finland's and EU's self-sufficiency in critical and strategic raw materials: Betolar's newly developed innovative method combines the separation of metals from waste material with the production of green cement (4/25).
- Betolar to develop cementless rockfill solution for Canadian Royalties Inc. (4/25).
- 99 % yield confirmed in metal extraction tests (4/25).
- Jyri Talja has been appointed as the new Chief Growth Officer and invited to join the Management Team as of 23 April 2025 (4/25).

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.

## President and CEO's review

In the mining and metals industry, Betolar expanded its business from shotcrete solution to cementless rockfill. The first cementless rockfill development project was launched, and customer acquisition was expanded to Canada and Australia. The low-carbon shotcrete development project with Outokumpu progressed well. The most significant achievement was the development of a fully cementless shotcrete, which entered the pilot phase.

During the period, Betolar has advanced its sidestream business and strengthened the international sourcing and logistics capabilities. Betolar continued to sell ground granulated blast furnace slag in the Indian market through the local subsidiary and focused on commercial customer projects.

Betolar developed its AI-based SidePrime service for material owners further and launched new industrial sidestream projects, including a collaboration with Alva-yhtiöt. An AI-assisted research project explored the potential of ash from energy production as a substitute for cement in construction and mining solutions.

In concrete solutions for construction, Betolar and Consolis Group's Finnish subsidiary Parma Oy have signed a three-year license and supply agreement, to manufacture the world's lowest-emission hollow core slabs in Finland using Betolar's Geoprime® solution. Betolar's technology achieves 75 % lower emissions compared to traditional solutions. The agreement also includes a pre-emption and exclusive right for other Consolis Group companies operating in 17 different countries

On the innovation front, a breakthrough was achieved in metal extraction and green cement production. Betolar has developed a new technology that enables the efficient recovery of valuable metals from industrial sidestreams. In the same process, green cement is also produced, offering a more environmentally friendly circular economy alternative to conventional cement.

I want to thank our customers, stakeholders, partners and staff for their valuable contribution and support. Together, we have made significant progress, particularly in the development of metal extraction technology and green cement. With these innovations, we have laid a strong foundation for a sustainable future.

## Key Figures

(EUR thousand, unless otherwise specified)	1–3 2025	1–3 2024	1–12 2024
Financial indicators			
Net sales	164	68	762
EBITDA <sup>1</sup>	-1,007	-1,959	-5,818
Cash and cash equivalents and short-term fund investments (at the end of the period) <sup>1</sup>	10,253	11,665	8,987
Liquidity and undrawn grants (at the end of the period) <sup>1</sup>	12,408	17,801	14,159
Operational indicators			
Order intake (EUR thousand) <sup>1</sup>	90	369	1,003
Number of new NRE projects <sup>1</sup>	1	2	11
Personnel (average number during the financial period)	34	52	46

- 1) Betolar uses certain indicators (EBITDA, cash and cash equivalents and short-term fund investments, liquidity and undrawn grants, order intake, and number of new NRE projects) 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.

## Business Review 1–3/2025

### Industrial sidestreams

Betolar advanced its sidestream business and continued to strengthen the international sourcing and logistics capabilities.

During the period, Betolar continued to sell small-scale, low risk ground granulated blast furnace slag. The initial phase of operations focused on the Indian market, where Betolar operates through a local subsidiary. The sidestream business focused on commercial customer projects.

Betolar continued the development of the SidePrime service, an AI-based service for material owners. In addition, new side industrial side stream studies were launched during the period, for example with Alva-yhtiöt. A commercial AI-assisted research project studied ashes from energy production and explored their potential for use as a binder to replace cement in various sectors, including construction, infrastructure and mining.

### Mining and metals industries

During the period, Betolar's mining and metals industry expanded from shotcrete solutions to cementless rockfill solutions. A development project for a cementless rockfill solution was launched during the first quarter. Customer acquisition was expanded geographically to Canada and Australia.

The development project for low-carbon shotcrete continued with Outokumpu. The first pilot with fully cementless shotcrete was successfully completed. The aim is to have the cementless shotcrete solution ready for production during the third quarter.

### Concrete solutions for construction

Betolar and Consolis Group's Finnish subsidiary Parma Oy, signed a three-year license and supply agreement, which includes the exclusive right to manufacture the world's lowest-emission hollow core slabs in Finland based on the Geoprime® solution. The agreement also includes a pre-emption and exclusive rights for other Consolis Group companies operating in 17 countries to use the Geoprime® solution developed by Betolar to produce concrete for hollow core slabs and certain other products. The agreement follows a long period of development and certification, where the technology implemented by Betolar achieves 75 % lower emissions than the conventional solution in widely used building elements.

In addition, Betolar carried out a Geoprime pilot for a Saudi Arabian customer. The results of the pilot were good and achieved the targeted strength and durability results.

## Financial Review

### January-March 2025

The Group's net sales for January-March 2025 increased from the comparison period and amounted to EUR 164 thousand (68 thousand). During the period, 15 % of revenue came from license and materials sales associated with the Geoprime concept and 85 % of revenue came from sales related to customer pilots and research service projects.

EBITDA totalled EUR -1,007 thousand (-1,959 thousand). The company's cost base in the quarter was EUR 644 thousand lower than in the comparison period, due to cost structure adjustment measures.

Cash and cash equivalents and short-term fund investments at the end of the period amounted to EUR 10,253 thousand (11,665 thousand).

During the period, Betolar withdrew the last instalment of EUR 2,500 thousand of the EUR 7,000 thousand loan from the Climate Fund. Betolar has received public financing for research and development. In 2023, Business Finland granted Betolar EUR 2,700 thousand for a research and development project on alternative sidestreams. This grant will be used as the research project progresses during 2025 and 2026 with EUR 1,600 thousand remaining undrawn. In addition, Finnpartnership awarded the company a grant of EUR 370 thousand to pilot the prefabrication of hollow-core slabs in Malaysia. This grant is yet to be drawn down.

## Financial targets

Betolar's Board of Directors has, on 5 February 2025, approved the company's financial targets, which are as follows:

- Achieving positive cash flow from operating activities by the end of 2026.
- The long-term financial target to achieve one billion euros in revenue and a 30 percent EBITDA margin by the end of 2033 remains unchanged.

Betolar does not consider the financial targets as guidance for any specific year. In the long term, low-carbon solutions that replace cement are expected to grow, especially in the mining and metal industries as well as in construction, and Betolar aims to capture a significant market share.

## Guidance

Net sales for 2025 is expected to increase compared to the previous year.

## Research and development 1-3/2025

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

Betolar continued to develop the process for the recovery of metal fractions and the further processing of cleaned residual slag into a low-carbon binder, green cement. The next development objective is to carry out larger scale pilot phases before moving to industrial scale. Betolar filed seven new patent applications in early April to strengthen the protection of the process it has developed, in addition to the patents already filed.

During the period, Betolar developed an innovation to protect submarine cables from anchor damage. The solution protects submarine cables against different types of damage and allows the use of low-carbon materials. In addition to physical protection, the developed solution can also serve as a real-time data collection platform for maritime traffic monitoring and marine research.

Betolar was granted two new patents in the first quarter of the year. In March, a patent was granted in Finland for a climate cabinet that standardizes the storage condition for test samples. In addition, Betolar was granted a patent for an acoustic solid-liquid separation method. Betolar currently has 25 active patent families, 48 granted patents and 68 patent applications pending.

Betolar continued to develop its AI-based data platform, focusing on helping customers 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 of data exploitation. In addition, several AI models were developed to predict the performance and long-term durability of end products.

## Personnel and management

In January-March 2025, Betolar had an average of 34 employees, compared to 52 in the comparison period.

Betolar's management team consists of President and CEO Tuija Kalpala, CFO Mikko Wirkkala, and Soila Söderström, General Counsel. Jyri Talja was appointed as Betolar's Chief Growth Officer and invited to join the Management Team as of 23 April 2025.

## Financial reporting

Betolar will publish the following financial reports in 2025:

- 18 July Half-year Review
- 28 October Q3 Business Review

Betolar is organizing a Capital Markets Day in Helsinki on 14 May 2025, more information is available on [www.betolar.com](http://www.betolar.com).

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.

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.
Liquidity and undrawn grants	Cash and cash equivalents, current investments, undrawn loans and grants granted but not drawn.	Liquidity describes the company's liquid assets over the long term.
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.