Business Review January–June 2024

Betolar's new focus is starting to pay off

Briefing August 27, 2024 Helsinki

BETOLAR Transforming The World of Mining & Metals

Agenda

- Main events in H1
- Events after the period
- Business review
- Financial review
- Patents & Innovation

Presenting today



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Main events in H1 2024

\rightarrow New focus on sidestreams, mining & metals

- Development of new innovative solutions for the mining and metals industries
- Several development and partnership agreements with several mining companies
- → Changes in the Management and change negotiations in April-June
 - Changes and reducing the size of the Management Team to enable more agile organization
 - New organization and operating model for customer and project excellence
 - 13 positions ends in Finland
- ightarrow Increased net sales, lower cost level
 - Focus on high-volume mining projects shows an increase in the number of research projects and a decrease in the number of pilot customers

ightarrow Patents and innovations

- Several new patents granted
- Innovation awards in Finland and internationally

\rightarrow Low carbon hollow-core slab approved with CE-marking

Events After the Period

Cooperation with Norge Mineraler

- Betolar and Norge Mineraler sign memorandum of understanding
- Developing sustainable mining solutions in Norway

New granted patents

- Method of extensive utilization of side streams in road, earth and foundation construction
- Patent for CEM III/B accelerator solution

Betolar acquired patent regarding treatment of waste combustion ashes

• Method for neutralizing waste combustion ashes and recycling the valuable materials contained in the ashes



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Business & Impact



PRIMARY PRODUCTION Sustainable Mining

Growing need to find solutions to environmental challenges and better tailings management. New methods for more efficient recovery of materials and critical metals.

2 REFINING PRODUCTION Zero Waste Industry

Need to find solutions for Industrial waste. Increasing demand for sustainable and local industrial sidestreams, transforming waste into valuable resources.

3 Impact Economy

Circular economy enabling new high-quality locally usable materials for different industries including construction and infrastructure.

Business Review for H1/24

Technical and commercial activities progressed focusing mainly on industrial side streams, mining & metals



Mining and Metals

H1 progress

- Consulting projects in cementless paste backfill, shotcrete and tailings productization applications
- Strengthening M&M portfolio: Novel methods development for extraction of valuable metals and binder products
- New partnership with Norge Mineraler

Application areas

Paste backfill, shotcrete and stabilisation of tailings.

Side streams, waste upcycling

H1 progress

- Building global side stream value chain expertise
- Productization of analcime sands and spodumene tailings
- GGBFS trading in India started to existing and new customers on a small scale
- Launched an Al-enabled sidestream analysis service and sold to first customers, also expanded it and data models towards mining use cases

Application areas

Industrial sidestreams requiring aspecific analysis and solution to avoid land-filling and to enable profitable manufacturing and re-use.



Construction

H1 progress

- Geoprime hollow-core slab: chemical approvals in Finland enabling European wide CE marking, new order from Australia, growing interest from data centre builders
- Concrete products: first production batches ordered by new customer in Germany, continuation of activator chemical deliveries to existing customers in Europe and India

Application areas

Large structural concrete elements used in house building and urban development as well as nonstructural small concrete products, e.g. paving blocks.



Case MetalCirc

Betolar acquired patent regarding treatment of waste combustion ashes



Patent Treatment of waste combustion ashes

Groundbreaking patent on technology that will revolutionize the way we handle waste combustion ashes, turning them from hazardous waste into valuable resources.

Key Highlights

- Enhanced Recycling Capabilities: Our new patent allows us to neutralize and recycle waste combustion ashes, significantly reducing landfill fees and environmental impact
- Sustainable Growth: This acquisition aligns with our commitment to the circular economy, promoting resource efficiency and reducing the use of virgin natural resources
- Technological Integration: The patent will be integrated into various Betolar solutions, enhancing our metal recovery and waste purification processes



Case Norge Mineraler Partnership for sustainable mining solutions in Norway

Norge Mineraler AS (NMAS) is exploring a world-class deposit of EU Critical Raw Materials in southwest Norway

- The goal is to find solutions to minimize carbon emissions, reduce waste and create profitable solutions to side product management in Norge Mineraler's mining operations
- Immediate focus on better tailings management practices by commercializing mine tailings in production of geopolymer based concrete
- Potential future collaboration in recovery of valuable fractions, as well as in-process carbon dioxide recovery and permanent carbon dioxide capture



Case Outokumpu Cement-free shotcrete development continues

Betolar is developing cement-free shotcrete for Outokumpu. This partnership aims to create a carbon-neutral or low-carbon alternative for Outokumpu's Kemi mine.

- Cement accounts for a significant share of suppliers' raw material emissions (Scope 3)
- The goal is to achieve a low-carbon alternative to the current shotcrete by 2025
- Betolar first develops design mix solution that is based on blended cement



Financial Review

Financial indicators	4–6	4–6	1–6	1–6	1–12
(EUR thousand, unless otherwise specified)	2024	2023	2024	2023	2023 ⁴
Net sales	208	88	276	131	515
Gross margin ¹			217	36	340
EBITDA ^{1,2}	-1,691	-3,062	-3,649	-6,186	-11,181
Operating profit (loss)			-4,664	-7,075	-13,260
Earnings before interest and taxes			-4,569	-7,051	-13,177
Profit (loss) for the financial period			-4,534	-7,031	-13,153
Earnings per share, basic and diluted ^{1,3}			-0.23	-0.36	-0.67
Cash and cash equivalents and short-term fund investments (at the end of the period) ^{1,2}	9,982	18,514	9,982	18,514	14,315
Operational indicators					
Order intake (EUR thousand) ^{1,2}	120	90	495	138	607
Number of new NRE projects ^{1,2}	3	1	5	1	9
Number of new pilot customers ^{1,2}	1	13	2	18	24
Personnel (average number during the financial period)	51	63	51	64	60

1. Betolar uses certain indicators (gross margin, EBITDA, earnings per share, cash and cash equivalents and short-term fund investments, order intake, number of new NRE projects and number of pilot customers) as halfyearly indicators of operational profitability and business performance.

2. Betolar uses certain indicators (EBITDA, cash and cash equivalents and short-term fund investments, order intake, number of new NRE projects and number of pilot customers) as quarterly indicators of operational profitability and business performance.

3. The number of shares used in the calculation of earnings per share is all follows 30 June 2024: 19,606,882, 30 June 2023: 19,551,590, 1– 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/2024: 19,606,882, 10- 6/202

4. The figures for the financial year 2023 have been audited.

Cash impact items

- Annual £5 million cost-saving program, which commenced in Q3 2023, is set to conclude in Q3 2024
- In April 2024, Betolar aimed at restructuring the organization, introducing new business models and ways of working, and reducing fixed costs. As a result of these negotiations, 13 positions were terminated in Finland.
 - Non-recurring expenses of EUR 541 thousand were incurred in connection with change negotiations and management changes
- Betolar has outstanding €2.5 million Climate Fund loan
- In September 2023, Betolar received a €2.7 million grant from Business Finland, followed by a €0.37 million grant from Finnpartnership in January 2024



Innovations Pave the Way for Impact Economy

Patent portfolio expanding

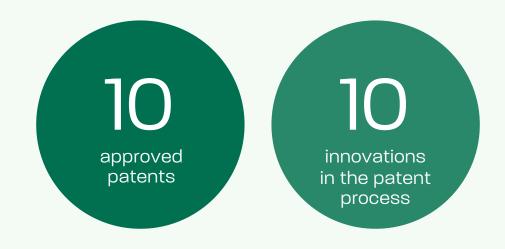
Latest patent granted in Q2/2024 and after the period

- For liquid chemical dosing device
- Enabling the large-scale use of side streams in road, soil and ground construction
- For CEMIII/B accelerator solution

New patent purchased in August 2024

 MetalCirc's patent on Treatment of waste combustion ashes

Patent portfolio development



Innovation awards in Finland and internationally

- In April, Betolar's Geoprime hollow-core slabs won the first prize at the acknowledged Building Materials Industry Innovation Award in Paris, France
- In May, the company received The 2024 Terry Treanor Innovation Award from the International Prestressed Hollowcore Association (IPHA) for developing the "World's Lowest Emission Hollow-Core Slabs"
- Betolar's Belgian customer, Tubobel Group, won the Sustainability Award at **The Techni-Mat** event for their cement-free Geoprime concrete pipes
- The Finnish Chemical Society also honoured Betolar with The 2024 Circular Economy Innovation Award for the innovative circular economy chemistry business idea that benefits both the environment and the economy





World's Lowest Emission Hollow-Core Slabs Award



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Thank you for your interest!

Next event \rightarrow Q3 result on November 1, 2024

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