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From Waste to
Innovations

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Business Review
January–September 2024

New partnerships in the mining business

Briefing November 1, 2024
Helsinki



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Agenda

- Main events in Q3
- Business review
- Financial review
- Q&A

Presenting today



Tuija Kalpala
President & CEO



Mikko Wirkkala
CFO



Soila Söderström
SVP & General Counsel

Main events in Q3 2024

Partnership with **Latitude 66** to explore sustainable mining solutions for Kuusamo cobalt mining project in Finland

Partnership with **Norge Mineraler** to develop sustainable mining solutions in Norway

Successfully completed a **direct share issue**, raising total of 2,4 Meur

3 new patents for:

- Large-scale use of side streams in road, soil and ground construction
- CEM III/B accelerator solution
- Waste combustion ashes (MetalCirc)

New CFO Mikko Wirkkala joined the company on Sept 3, 2024

Business Review for Q3 2024

- The sales pipeline and the number of proposals sent increased. However, market conditions, particularly in the construction sector, remain challenging
- Commercial agreement with Hycamite to explore the use of carbon nanofibers
- New order for Geoprime pilot from Australia
- Outokumpu research development project progressed well
- Betolar's Geoprime-based products successfully passed the rigorous double-sided salt freeze-thaw tests, proving their durability and reliability in extreme conditions
- Sidestream analysis services concept was finalised earlier this year and continued growing. Two research projects were completed during the period



Speeding up industrial circular potential

Unique Betolar sidestream analysis

- Easiest service to reveal material potential
- Enables circular economy
- Suitable for a wide range of industries



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Betolar Sidestream analysis

First step towards zero waste potential for many industries

Betolar's years of development work, uniquely broad expertise and practical experience are combined into a new service. This is an enabler for scaling up Geoprime solutions.

- Service that connects the expertise from physicists, chemists and data scientists
 - Based on Betolar's constantly evolving database with more than 100,000 recorded laboratory tests
 - Analyzes the most challenging materials
 - AI enhanced service allows faster analysis and service turnaround compared to traditional methods
- Quick identification of profit potential
- Clear report, recommendations and action plan



Case Latitude 66

Partnership for sustainable mining solutions in Kuusamo

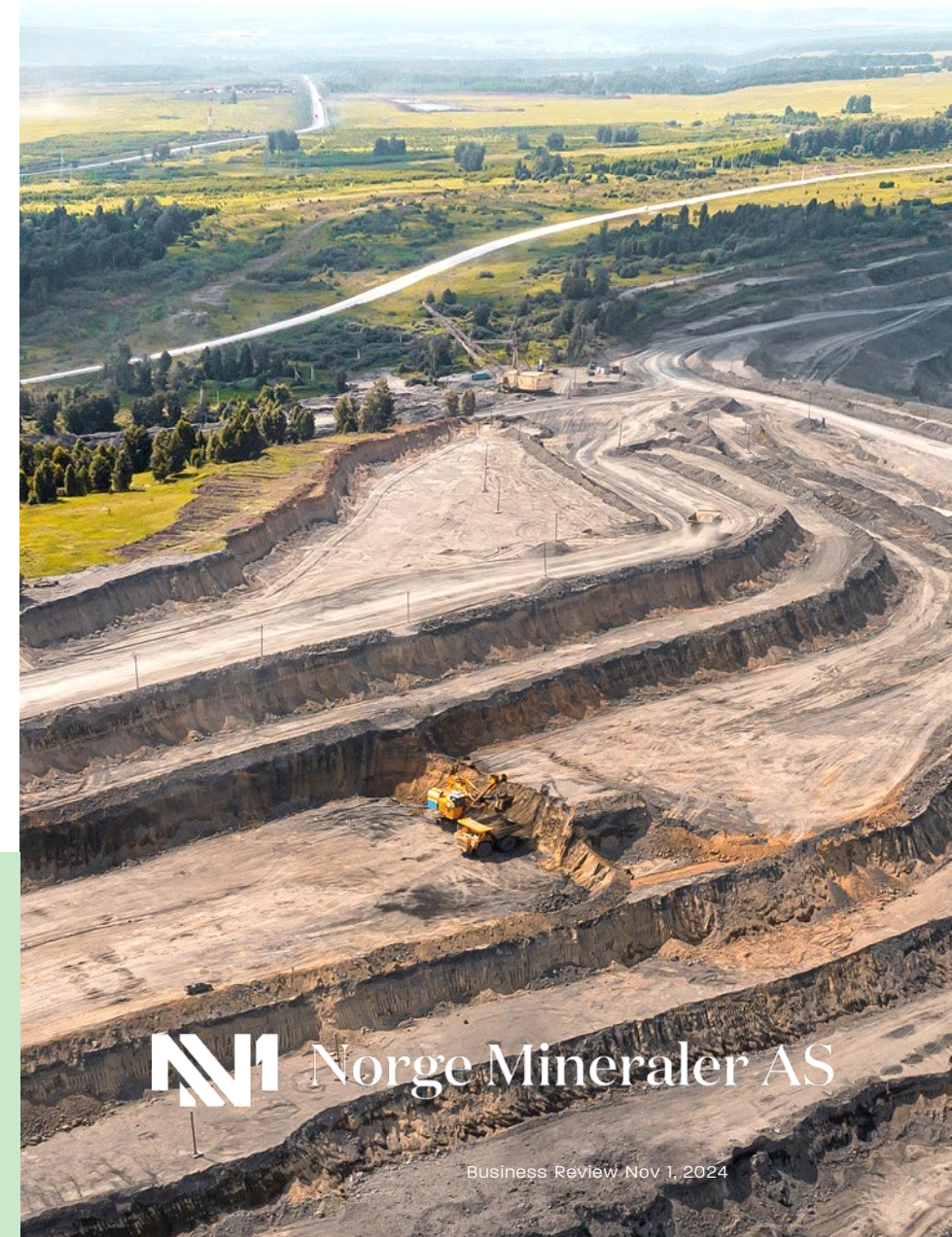
The collaboration will enable to explore potential sustainable mining solutions through the utilisation of Betolar's technology and innovations which will include the potential to minimise carbon emissions.

- Latitude 66 and Betolar Plc have signed a MoU to collaborate on investigating sustainable mining solutions for Latitude 66's KSB Project in Finland
- The partnership will look to utilise Betolar's technologies and innovations in Latitude 66's KSB Project, advancing sustainable practices and enhancing the project's sustainability credentials

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 Hycamite

Commercial agreement to explore the use of carbon nanofibers

Betolar and Hycamite have signed a commercial agreement to explore the use of carbon nanofibers in improving concrete's strength and reducing its carbon footprint.

- This innovative project will focus on testing and developing the quality and usability of the carbon product
- Aim is to tailor the material for Betolar's high-volume solutions in the mining, metal, and construction industries.



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.

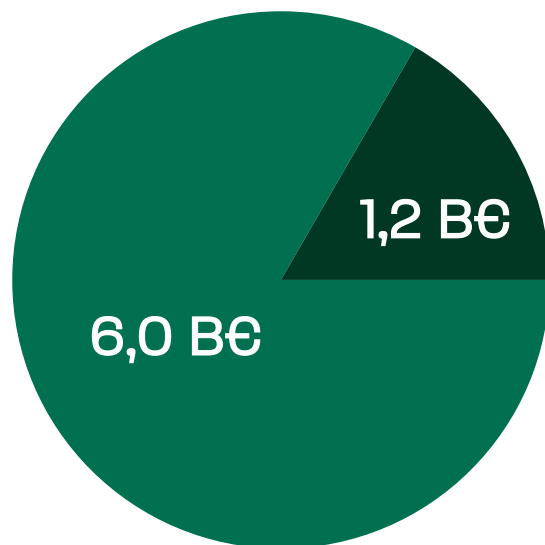
- The first pilot has been successfully carried out at the Kemi mine
- The project is developing first a shotcrete that meets the requirement of CEM III standards (low cement shotcrete) and after, a fully cementless shotcrete



Global shotcrete market is worth 7 B€, from which underground mines is estimated to take some 20–25%

Global shotcrete market 2023

2023 7,2 B€ $\xrightarrow{\text{CAGR 8 \%}}$ 2031 ~13,3 B€



Mines

- 509 operating underground mines globally
- Average use of shotcrete is estimated to be ~20,000 m³/a*

Infrastructure

- Tunnels
- Bridges
- Repair & renovation
- Reinforcement of slopes

Shotcrete market in Europe for mines 2023

60 M€

- 25 operating underground mines in Europe
- Currently the market uses CEM I class cement-based shotcrete
- In the future, our solutions can replace the use of traditional cement-based shotcrete
- We aim to *transform* the market towards a lower-emission solution



Financial review

Mikko Wirkkala
CFO

Financial Review

Financial indicators (EUR thousand, unless otherwise specified)	7–9 2024	7–9 2023	1–9 2024	1–9 2023	1–12 2023
Net sales	276	167	551	298	515
EBITDA ¹	-974	-2,625	-4,623	-8,811	-11,181
Cash and cash equivalents and short-term fund investments (at the end of the period) ¹	10,748	14,989	10,748	14,989	14,315
Operational indicators					
Order intake (EUR thousand) ¹	237	256	732	394	607
Number of new NRE projects ¹	1	3	6	4	9
Number of new pilot customers ¹	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 pilot customers) as quarterly indicators of operational profitability and business performance.

Actions taken to strengthen financial position

- Majority of cost structure adjustment measures to reach €5 million annual cost savings were completed
- In April 2024, Betolar restructured the organization, introduced new business models and ways of working, and reduced fixed costs. As a result of these change negotiations, reduced 13 positions in Finland
- Betolar successfully completed a directed share issue with 1,960,688 new shares issued, raising €2.4 million
- Betolar has an outstanding €2.5 million loan from Climate Fund
- €2.2 million remaining of Business Finland's €2.7 million grant
- €0.37 million grant from Finnpartnership in January 2024
- In total €15.8 million liquidity when combining cash, outstanding loan and grants



Questions & Answers

Soila Söderström
SVP & General Counsel

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Q&A

Thank you for your interest!

Next event

→ 5 February 2025: Financial Statements bulletin 2024 release



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