

BETOLAR

Betolar Plc
Half-year Financial Report
1 January–30 June 2022

Betolar entered commercial phase in Europe and Asia

Briefing 31 August 2022 at 10:00 a.m.
Helsinki



BETOLAR
Disrupting
The World of
Concrete

Presenting today



Riikka Ylikoski

Chief Financial Officer

Agenda

- Key results in January-June
- Progress of piloting and commercialisation
- Business development
- Summary

Mission

Betolar's mission is to help reduce CO₂ emissions and the use of virgin raw materials in construction.

Values

Courage

Commitment to responsibility

Working together



Chapter 1

Key events
for the period

Key events

- Betolar entered commercial phase after signing its first Geoprime contracts with a total of five customers.
- The company carried out pilots with 14 new customers in line with the objectives.
- Betolar's capabilities continued to develop strongly with new recruitments. The recruitments focused especially on R&D, supply chain and commercial capabilities.
- Betolar's Board of Directors appointed Riku Kytömäki as the new CEO. Matti Löppönen will continue as CEO until Kytömäki takes over (latest by 12 Nov. 2022.)
- Ilkka Iittiläinen was appointed as Chief Operating Officer and member of the Management Team.

Events after the reporting period

- Betolar signs its first commercial Geoprime contracts in India.
- In August, Betolar signed a cooperation agreement with Consolis Parma, a leading manufacturer of precast concrete elements.
- Two new members will join the company's Management Team. Ville Voipio appointed as Chief Commercial Officer and Jarno Poskela as Chief Technology Officer



Operational environment

- Rising energy prices and the war in Ukraine have pushed up the price of cement, among other building materials. This has led to a growing interest among concrete manufacturers in alternative binders.
- Rising energy and raw material prices and the slow recovery of maritime logistics from the pandemic have indirectly affected the prices of activators used in Geoprime recipes, as well as transport costs.
- In Asia, the increase in energy prices has not had a significant impact on the prices of the side streams used in Geoprime recipes. In Europe, demand and pricing for blast furnace slag has increased.
- Companies working in the building material value chain are setting their own climate targets, requirements and guidance models to promote the use of green solutions in construction.
- Betolar's commercial progress as well as other market feedback show that the construction sector is ready to embrace green solutions quickly.

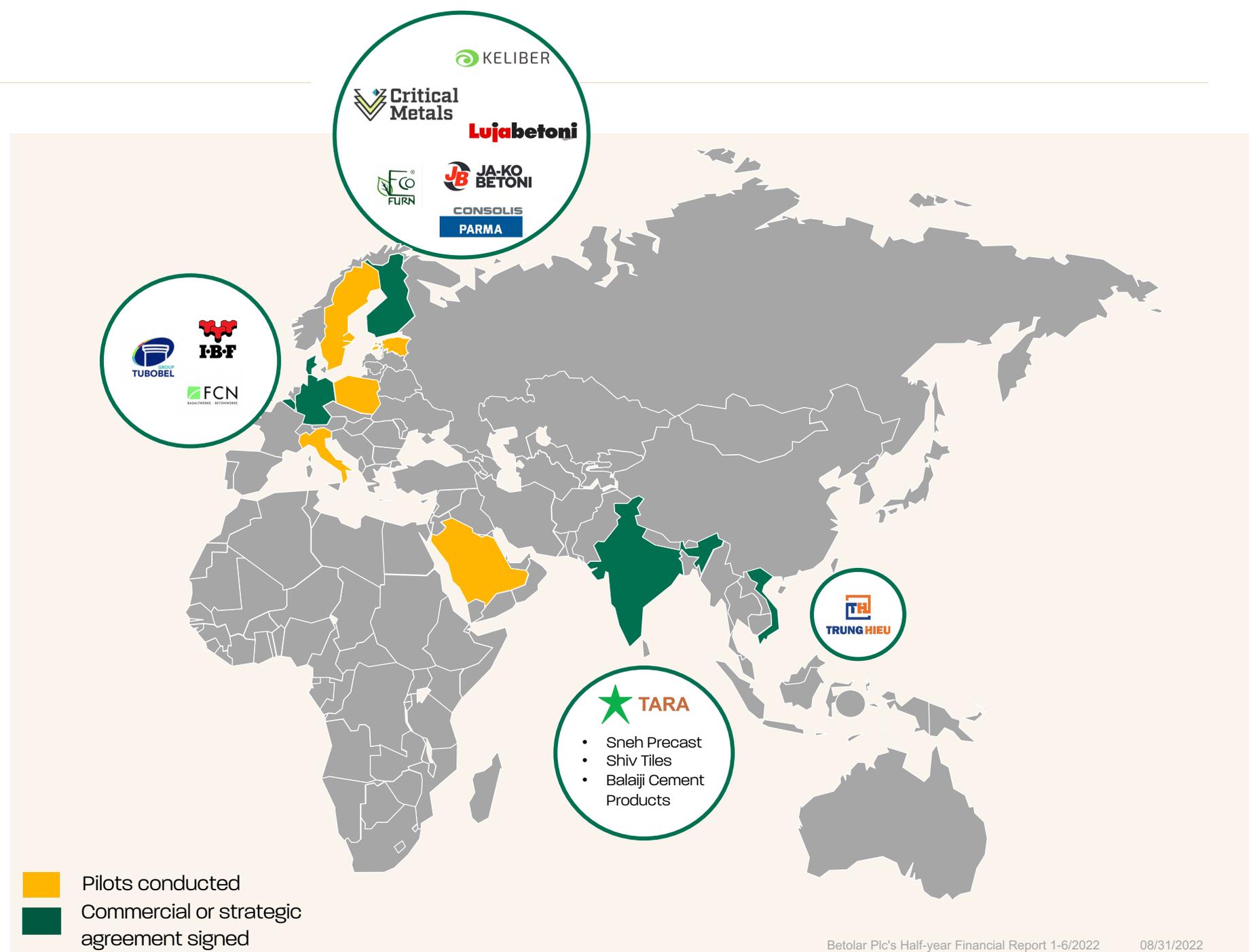




The effects of the war in Ukraine

- Betolar has no operations or customers in Russia or Ukraine and the war has no direct impact on the company.
- However, countries are major exporters of structural steel and blast furnace slag, which has created uncertainty in the supply chains and markets for raw materials and materials used in concrete construction, mainly in Europe.
- No similar effects have been observed in the Asian market.

Betolar scaling internationally



First commercial contracts

In January-June 2022, Betolar announced commercial agreements that opened up business in Europe and Asia. After the reporting period, commercial agreements were also signed with three Indian manufacturers.

 <p>2/2022 FINLAND</p>	 <p>2/2022 DENMARK</p>	 <p>2/2022 BELGIUM</p>	 <p>4/2022 GERMANY</p>	 <p>6/2022 VIETNAM</p>
<p>Geoprime contract until 2032</p> <p>JA-KO Betoni is a strong and versatile player in Finland.</p> <p>The first Geoprime® product group of pre-cast concrete products such as various infrastructures, column pedestals and pedestals for electric car charging stations.</p> <p>Production is expected to start in H1/2022.</p>	<p>Geoprime contract until the end of 2026</p> <p>IBF is the largest concrete producer in Denmark.</p> <p>First Geoprime® product group of sewer pipes. IBF manufactures almost all products for the concrete industry.</p> <p>Production is expected to start in H1/2022.</p>	<p>Geoprime contract until the end of 2030</p> <p>Tubobel is the Belgian market leader in the manufacture of sewer pipes.</p> <p>The first Geoprime product group is sewer pipes.</p> <p>Production will gradually expand to include other product groups, such as yard tiles and infrastructure products.</p> <p>Production is expected to start in H2/2022.</p>	<p>Geoprime contract until the end of 2027</p> <p>FCN is a leading player in Thuringia and Hesse in central Germany. The total annual volume is 500 000 tonnes.</p> <p>The first Geoprime product group is paving stones, but the use will gradually be extended to other product groups.</p> <p>Manufactures precast concrete elements for garden and landscape design, roads and houses.</p> <p>Production is expected to start in H2/2022.</p>	<p>Geoprime contract until 2027</p> <p>Trung hieu is focused on the production of high quality building blocks for the South Vietnamese construction market</p> <p>Production is expected to start in H1/2023.</p>

Strategic partnerships supporting product development

In addition to commercial agreements, product development together with partners plays a particularly important role in Betolar's business.



Cement-free manufacturing of landscaping products

2021
FINLAND



Developing low-carbon concrete products

9/2021-
FINLAND



Utilisation of vanadium-purified slag in Geoprime production. RISAB & VRP Oy as partners.

3/2022-
Finland



Utilisation of side streams from the future lithium mine and the Raahe steel plant

9/2021-
FINLAND

CONSOLIS

PARMA

Development of low-carbon hollow-core slabs

8/2022-

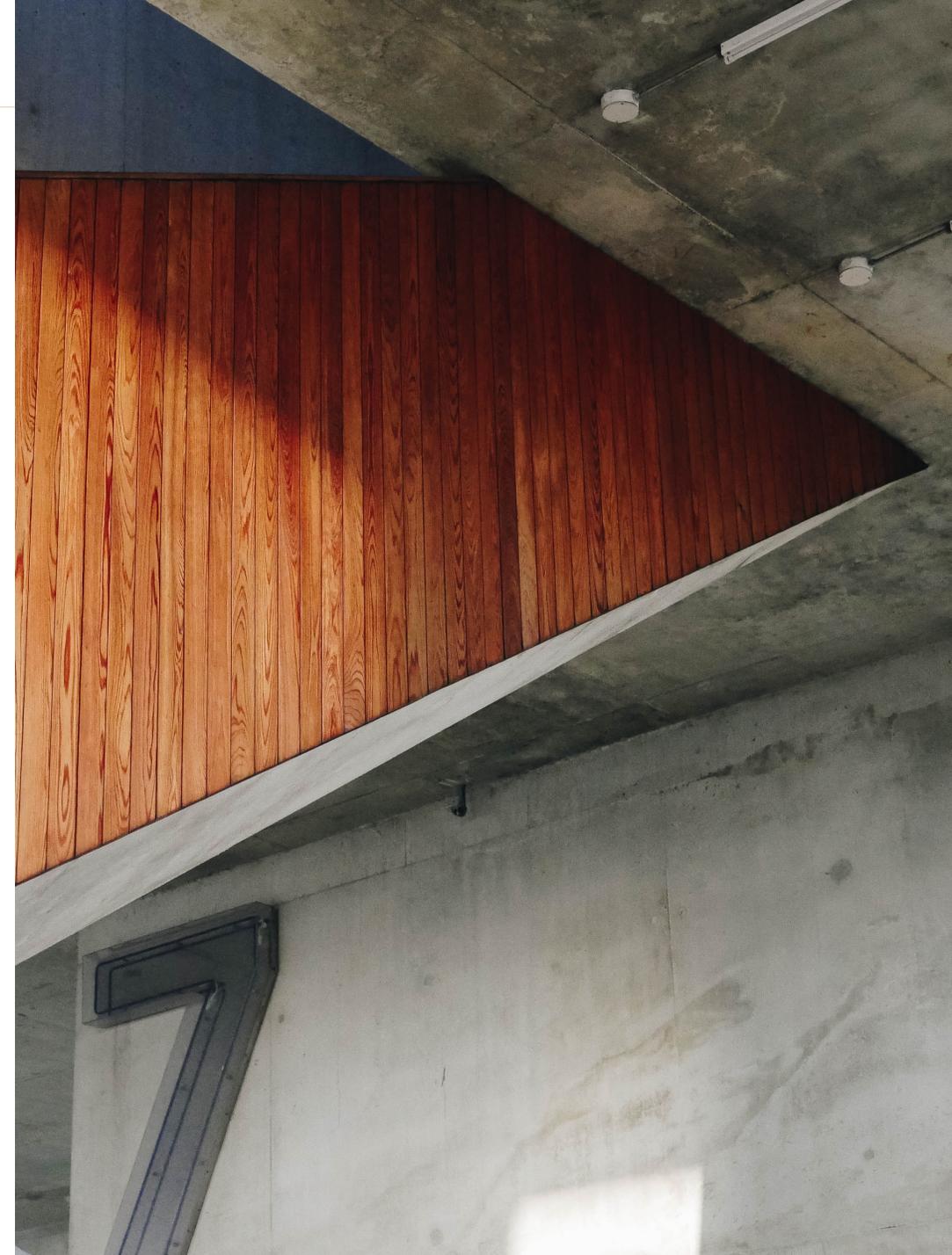


Strategic cooperation agreements: Consolis Group

- Betolar signed a development cooperation agreement with concrete product manufacturer Consolis Group and its Finnish company Consolis Parma.
- The aim is to test the Geoprime solution in the production of hollow-core slabs and to significantly cut emissions at the manufacturing phase.
- Consolis is Europe's leading manufacturer of precast concrete solutions. Consolis net sales is over EUR 1 billion and it operates in 17 countries.
- Consolis Parma is the Finnish subsidiary of Consolis. Parma's large-scale sustainability plan aims to cut the company's CO2 emissions by 5% annually, which means halving total emissions by 2035.
- The cooperation will enable Parma to further reduce the industrial production of low-carbon hollow core slabs and at the same time support the circular economy in the building materials.
- Consolis is committed to Science Based Targets with the goal to be carbon neutral by 2050.

Already 14 new pilot customers in the first half of the year

- Interest towards Geoprime is supported by the applicability, environmental benefits as well as the rising price of traditional cement.
- The successful development of the Geoprime concept and the experience gained from piloting have enabled the acceleration of piloting activities in the early part of the year.
- During the period, product development and factory testing pilots were conducted with 14 new customers, six in Europe and eight in Asia.
- Countries where pilots were carried out with new customers:
 - EMEA: Sweden, Belgium, Poland, Italy and Saudi Arabia
 - APAC: India, Vietnam



Key Figures 1-6/2022

Financial key figures (1,000 € unless otherwise specified)	1-6/2022	1-6/2021	1-12/2021
Net sales	21	0	10
EBITDA ¹	-4,599	-1,055	-3,171
Cash and cash equivalents (at the end of the period)	33,590	1,731	37,355
Operational key figures	1-6/2022	1-6/2021	1-12/2021
Personnel (end of period)	49	23	32
New pilot customers	14	1	12

Personnel
end of H1/2022

49

(06/2021: 23)

New pilot customers

H1/2022

14

(H1/2021: 1)

¹⁾ Betolar uses certain alternative performance measures (gross margin, EBITDA and number of pilot customers, EPS) as indicators of operational profitability and performance. The definitions and calculation formulas of these measures are enclosed to the report.

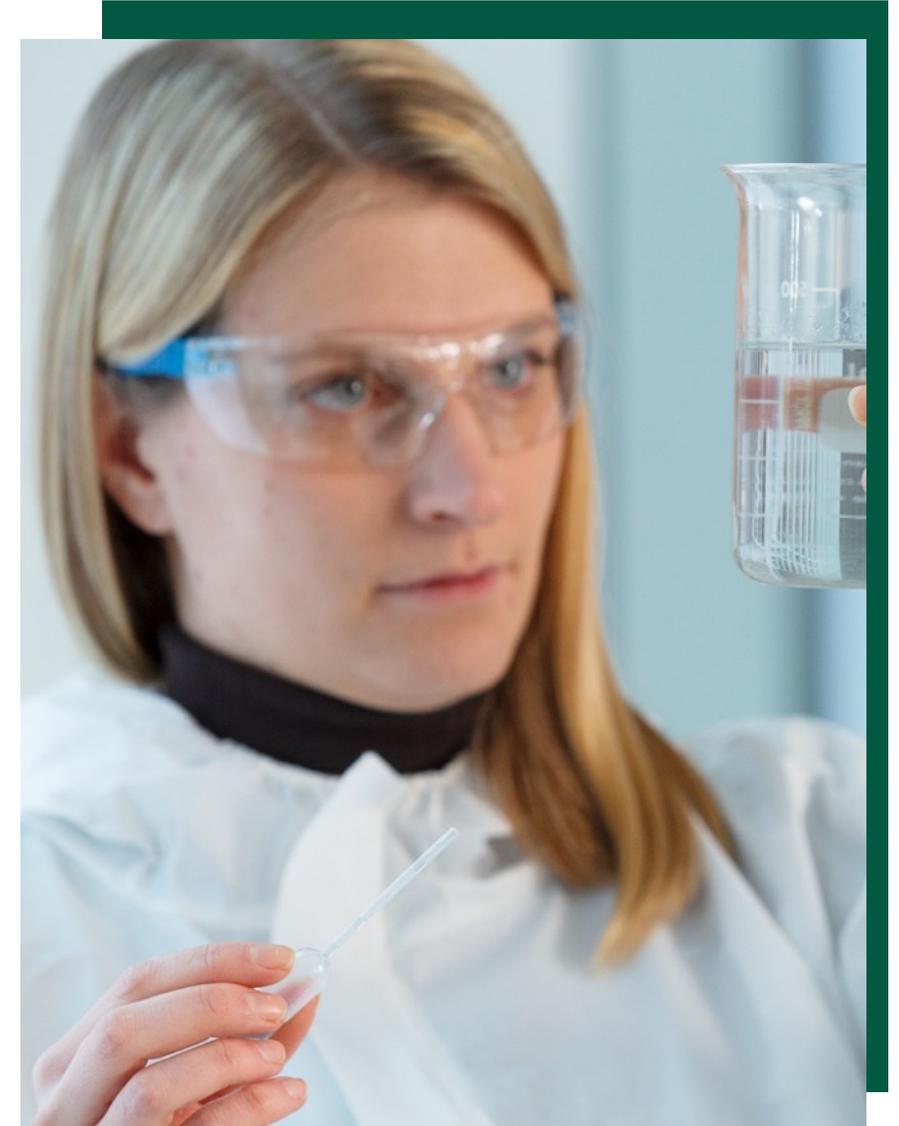
Chapter 2

Technology, knowledge and people

R&D activities progressed as planned

The priorities support the achievement of the company's business objectives:

- **Strengthening capabilities:** the R&D and digital teams were strengthened in line with the digitalisation strategy.
- **Materials research:** the research focused in particular on slags from the steel industry and the development of Geoprime recipes using them.
- **Digitalization strategy and AI platform:** the Betolar Platform Program development work progressed towards refining the digitalisation strategy and architecture.
- **Geoprime Academy:** a virtual learning environment to train in the use of the Geoprime solution. During the period, the content production of the learning environment was started.
- **Intellectual property rights.** Betolar was granted a patent for the conversion of mining waste material into a binder. In the future, the binder could potentially be commercially viable.



Betolar is exploring the possibility of using slag that is purified from vanadium

- The demand for vanadium is growing rapidly as vanadium electrolytes are used in lithium batteries for electric cars and in wind and solar power plants.
- Betolar is investigating the utilization of slag from the steel industry in the production of cement-free concrete.
- Betolar signed a Letter of Intent with two Australian vanadium recovery companies, RISAB and Vanadium Recovery Project Ltd (VRP), to start a research collaboration to develop the process at the planned plant in Pori. The plant is planned to start operations in late 2024. VRP Ltd is owned by Critical Metals Ltd.
- The slag is treated in VRP's vanadium recovery process, leaving about 300,000 tonnes per year. It could be potentially used to as a raw materials in Geoprime production. This could help Finnish concrete manufacturers replace more than 10% of the cement used in Finland.



Betolar and people growing together

- Success stories are created when knowledge, courage and business are combined.
- The number of employees at the end of the period was 49 (23).
- The recruitments carried out focused in particular on strengthening digital solutions, research and development and commercial expertise.
- In particular, the organisation developed the skills of new recruits, strengthened safety practices and developed a culture of wellbeing and competence in the workplace.



New members to the Management Team and the Board of Directors

Ilkka Iittiläinen**Ilkka Iittiläinen appointed Chief Operating Officer**

Iittiläinen was appointed Chief Operating Officer and a member of the Management Team.

Ilkka Salonen**Ilkka Salonen as a new member of the Board of Directors**

Salonen has been a member of the Board of Metsäliitto Cooperative since 2018, and until 2021 he was also CFO and Deputy CEO of YIT.

Riku Kytömäki**Riku Kytömäki appointed as new CEO**

Kytömäki is currently the CEO of Exel Composites Oyj. He will take over as CEO of Betolar on 12.11.2022 at the latest.

Matti Löppönen will continue as CEO until Kytömäki takes over.

After period**Ville Voipio****Ville Voipio**

Starting as Chief Commercial Officer
1.10.2022

Jarno Poskela**Jarno Poskela**

Starting as Chief Technology Officer
1.9.2022 as Pekka Hintikka, the company's current CTO, retires

Chapter 3

Finally

Business and financial targets

Targets set in conjunction with the IPO

Short term (within 1-2 years)

- 10–15 pilot projects annually with new customers of significant volume potential, based on the company's more than 150 identified potential customers;
- First commercial customer agreements;
- Increasing the size of the customer delivery and sales organisation;
- Expanding brand and marketing measures into the target markets;
- Strong solution-building and value chain development based on product development together with industrial partners and customers;
- Launch of the Geoprime Academy;
- Piloting an automated laboratory and development work on the AI platform.

Medium term (within 4-6 years)

- Global scale-up of Betolar's solutions;
- Reaching 100 commercial agreements;
- Scale-up of the applications and production volumes of Betolar solutions with Betolar's AI platform and ecosystem;
- Strong global sales, marketing and delivery resources.

Medium term financial targets (by 2026)

- Revenue of EUR 200 million
- Positive cash flow from operating activities

Long term (within 10 years)

- R&D expenditure approximately 5% of the net sales targeted by the company;
- Geoprime is a leading brand in environmentally sustainable products in the construction materials industry;
- reducing carbon dioxide emissions by 150 million tonnes cumulatively¹.

Long term financial targets (within 10 years)

- Revenue of over EUR 1 billion
- EBITDA margin of 30 percent

Next events

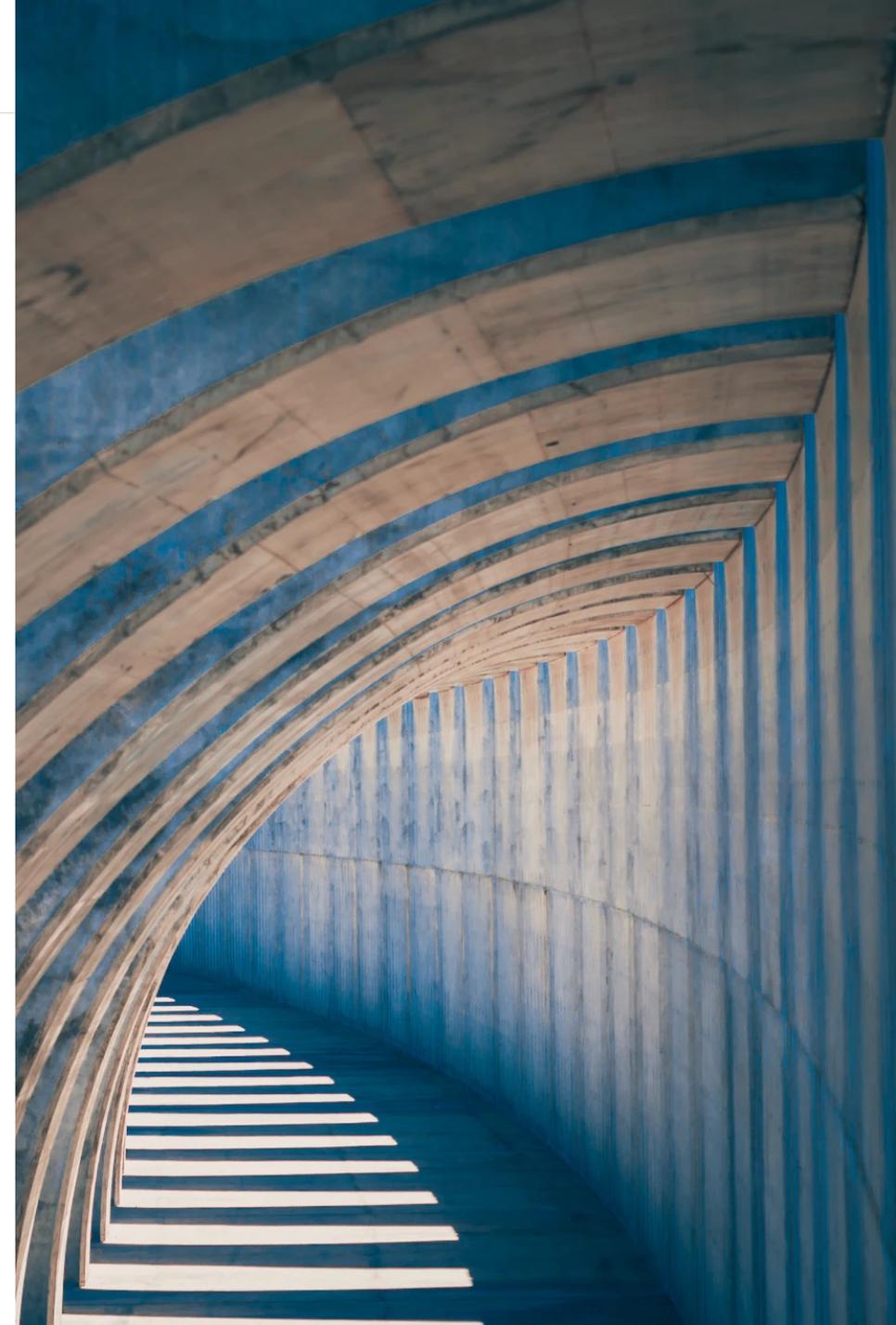
INVESTOR EVENTS

6 Sept. HCA & Inderes Green Transition Event 6.9. (Virtual)

14 Sept. Inderes & Kauppalehti Pörssisijoittajan viikko (Virtual)

FINANCIAL REPORTING

26 Oct. Business Review 1-9/22



Thank you for your interest!