

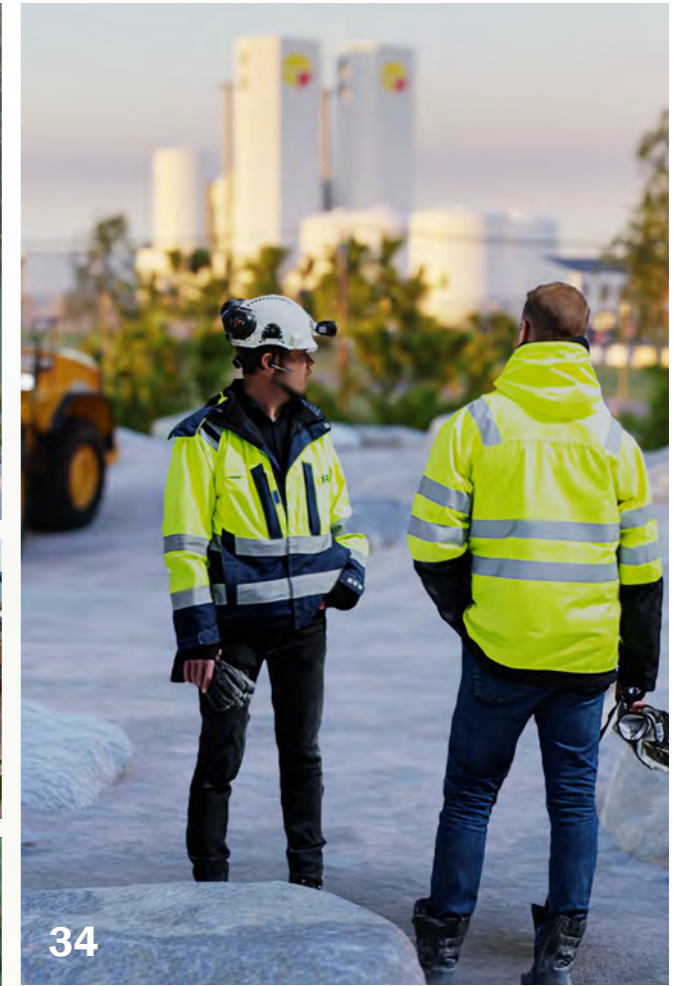
Sustainability Report 2022



**sma
mineral**

Contents

Table of contents	
Word from the CEO	4
Important events 2022	6
Description of the company - and Corporate governance	8
Areas of use of lime	10
Our products	12
Stakeholder dialogue	14
Our risks	16
Materiality analysis	19
Sustainability focus and objectives	20
ZEQL – Our roadmap	22
Our financial responsibility and corporate governance	26
Our social responsibility	34
Our responsibility for the environment and the climate	48





"Creating a sustainable business is not just about carbon dioxide; it also encompasses workplace environment, health and safety, equality and fair working conditions."

Together, we make the future better!

Our goal regarding carbon dioxide emissions is crystal clear, and we have a well-defined roadmap to get there. However, creating a sustainable business is not just about carbon dioxide, it also concerns workplace environment, health and safety, equality, and working conditions.

AS A COMPANY WE CAN SOLVE A LOT on our own, but not everything. The same is true for our suppliers, customers, and other partners. They can do a lot themselves, but sometimes they need our help. To achieve the most sustainable business possible and create a better future, we all need to take responsibility and help each other. At SMA Minerals, we promise all our stakeholders to take full responsibility for ensuring that such collaborations are successful!

DURING 2022 we set as one of SMA Minerals' strategic goals to reduce carbon dioxide emissions by 50% by 2027. We have since intensified the work to reach the goal.

At the end of June 2022, SMA Mineral acquired 15% in the Greentech company *SaltX Technology AB*. We have since then together developed a close collaboration with the aim of starting operations of the first carbon dioxide-neutral lime factory in 2025. The collaboration has resulted in the recently launched future concept *ZEQL - Zero Emission Quicklime*.

The new technology, based on so-called electric calcination, not only eliminates the use of fossil fuels but also opens up new opportunities to capture and use pure carbon dioxide in other processes. This is something that will make a significant difference in our efforts to achieve a lower CO₂ footprint.

The response from our largest customers has been very positive and we are very hopeful about the work in 2023. The collaboration with SaltX is now generating a collaboration with our customers with the aim to achieve increased competitiveness for us both, them and their customers. And best of all - we create a better future for everyone when we reach our climate goals!

THERE ARE ALWAYS RISKS with new technology and rapid development, both technical and financial. When it comes to climate change, time is not on our side,

we simply do not have time to wait. Instead, we are focusing on identifying and controlling risks through careful planning, studies, as well as increased resources and expertise. Additionally, we have a highly competent and engaged workforce that will make a great difference for the success of this initiative.

The new method of calcination involves starting from scratch and doing things right. Here, we feel that we have good alignment with how many of our larger customers approach the development of their business.

ONE THING THAT WE CANNOT influence entirely on our own, but which will be an important factor in our transition to new technology, is safe and efficient permit processes. This may involve permits for quarrying limestone or dolomite, but also for the construction of facilities with changes to operations, transport or handling.

This is currently an important issue for the entire industry, and we can only hope that the setbacks we have seen before are will not be repeated. Also the permit issue can be linked to the need for collaboration between different stakeholders. We really need to be able to collaborate and find local solutions to contribute to global goals!

IN SUMMARY, it can be said that our sustainability work is becoming increasingly important every year and is a prerequisite for us to achieve all our strategic goals. We have a lot of work ahead of us, but with great efforts and good collaborations both within and outside the company, we are confident that we will succeed!

And lime - it will still be needed in the future!

Svante Fielding, CEO

Important events 2022

2022 has been an eventful year. A lot has happened which in various ways is connected to our long-term sustainability work.

Decision on roadmap for ZEQL - Zero Emission Quicklime

The ZEQL concept is our plan to address our two major challenges: CO₂ emissions and the utilization rate of limestone.

Early on, we understood that the *kiln* would be one of the major challenges. Therefore, during the summer, we bought 15% of the greentech company *SaltX* through a targeted new share issue. *SaltX* has developed a kiln/reactor for energy storage, which will be an essential part of the development of ZEQL.

Whistleblower function

A whistleblower function was introduced at SMA Mineral during the autumn of 2022.

Ongoing dialogue with our employees completed

During the year, we have started using the tool *Winningtemp*, which enables us to collect input on important issues from our employees. We see the application as an important step towards achieving our strategic goal of engaged employees.



Update of the Code of Conduct

In June 2022, we updated our *Codes of Conduct*. Upgrades were partly made to the code of conduct which clarifies how we ourselves consider issues around sustainability and partly to the one that addresses our suppliers and which we expect that they adhere to.

Water treatment at Svensk Oljeåtervinning

A major investment in the *water treatment* plant was started in order to meet the new BAT conditions that came into force on 17 August 2022.

Pilot plant for purifying and converting bio-oils.

A pilot plant has been built at *Svensk Oljeåtervinning's* facility in Västerås in order to find methods for purifying and converting bio-oils.

Supplier assessment conducted

In 2022, a *web survey* was sent out to all suppliers with purchases exceeding SEK 1 million annually at SMA Mineral and Svensk Oljeåtervinning. The purpose of the supplier assessment was to follow up on whether our suppliers comply with our *Supplier Code of Conduct* and that their sustainability efforts in terms of quality, occupational health and safety, business ethics, working conditions, and the environment follow our guidelines.

SMA Kraftmesa became 100% fossil-free

At *Sandarne limeworks*, the raw material for quicklime is 100% recycled *lime mud* delivered from sulfate pulp mills around Sweden.

During 2021, recycled mineral oil used as fuel was replaced with bio-oil. In 2022, fossil fuel was replaced with 95% biofuel, corresponding to 16 kton of bio-CO₂. With lime mud as the raw material and bio-oil as fuel, the end product - *SMA Kraftmesa* - is 100% fossil-free.

Bronze medal from EcoVadis

For several years, SMA Mineral has been using *EcoVadis*, the world's largest provider of sustainability ratings, to continuously measure our sustainability efforts. The evaluation from EcoVadis helps us to understand which parts of our sustainability work are good and which ones we need to improve.

Our long-term sustainability work has in 2022 been awarded **EcoVadis' bronze medal**, which places us in a position among the top 30 percent in our industry, worldwide.



Description of the company and the corporate governance

SMA Mineral is one of the leading producers of lime products in northern Europe. By combining efficient lime extraction with knowledge-driven refinement, we offer high-quality products for a range of different applications.

Business idea

SMA Mineral, together with its subsidiaries, operates in Sweden, Finland, Norway and Estonia. Our mission is to add value to stone materials, primarily but not exclusively carbonate stone, for all stakeholders. This includes owners, employees, employee families, customers, suppliers, local communities impacted by our operations, associations and society at large.

Refinement of stone raw materials involves rock extraction, crushing, sieving, and, when appropriate, burning carbonate stone to produce quicklime and dolomite. We also produce hydrated lime and mine and refine silica-rich minerals.

Our products are transported by truck, rail and boat, and are used in industries such as steel, pulp and paper, construction and civil engineering. Additionally, our products have a positive impact on air and water environments in several applications, as they are used to purify flue gases and water or to counteract acidification of soil, lakes, and waterways.

Governance

Representatives from management, along with a broad representation of employees, participate in annual workplace meetings where local operations are analyzed based on factors such as economics, facility performance, occupational health and safety risks, social conditions, environment, and technology. The impact of these factors on customer relations and results is also analyzed.

Action plans are prioritized and established in workgroups, with representatives from senior management participating. Revisions and business analyses are documented in writing.

The group's senior executives are thus involved in ongoing operations and report back to the rest of the

management team on local conditions and any deviations. The management team also conducts annual reviews of performance indicators relating to economics, consumption, environmental performance, and occupational health and safety goals.

Financial reporting and reporting on the group's greenhouse gas emissions are audited by external auditors.

SUSTAINABILITY GOVERNANCE

The responsibility for sustainability work within SMA Mineral is divided among various parts of the company.

THE TECHNICAL SUSTAINABILITY WORK is focused on development and forward-looking through the roadmap towards a fossil-free process for lime burning and carbon capture. Much of this development work will be carried out in separate projects.

RESPONSIBILITY: Sustainability and Development Manager.

THE ADMINISTRATIVE PART of sustainability work is carried out through reporting to authorities, responding to customer inquiries, and so on. SMA Mineral is also subject to sustainability reporting requirements under the Annual Accounts Act.

RESPONSIBILITY: HSEQ Department with support from other functions within the company.

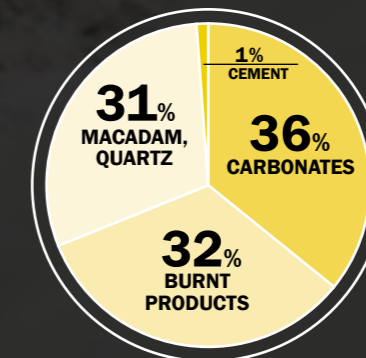
The company's management is responsible for establishing sustainability goals and prioritizing and following up on significant sustainability issues.

SMA MINERAL NORTHERN EUROPE

SMA Mineral Northern Europe includes the part of the group's operations that is present in the Nordics and the Baltics. We currently operate at around 20 locations in Sweden, Norway, Finland and Estonia.

Our market is in industry, infrastructure, environment and agriculture across Northern Europe.

Our head office is located in Persberg, in Värmland's largest mining area, dating back several hundred years.



PRODUCTS



MARKET COUNTRIES

Lime - a natural but unknown part of our daily lives

Limestone and dolomite are the foundation for a wide range of products with different properties and uses. In fact, much of what we take for granted in our daily lives wouldn't work without lime.

Lime is needed to purify the water we drink and the air from harmful fumes. It is also necessary to enrich the soil we cultivate and prevent our waterways from becoming acidic. In some form, lime is also present in or around many of the foods we consume.

In the iron and steel industry, lime is required to remove impurities and protect the steel from oxidation. It is also used in paper production and mining. In a green shift, lime is necessary for the production of green steel and green cellulose.

Lime is also an important ingredient in a functioning infrastructure. Our roads are covered with asphalt where lime is used as a filler material and as an adhesive to bind bitumen to the aggregate material.

Lime-based stabilizing materials are also used for soil stabilization, making it possible to build houses and roads even in difficult soil conditions. The construction industry uses lime products in cement and concrete, as well as for the production of roofing felt.



LIME IN INDUSTRY



Steel industry



Paper & cellulose



Mining industry

LIME AT HOME



Water purification



Packaging



Food

LIME IN THE INFRASTRUCTURE



Roads



Bridges & tunnels



Construction

LIME IN AGRICULTURE

LIMESTONE is crushed into different fractions where the coarseness is determined by the intended use of the stone.

Crushed limestone can be used without further processing, but it can also be further processed.

During further processing, the limestone is taken into lime kilns where it is burned under very high temperatures to *calcium oxide - quicklime*. The quicklime can be mixed with water. When the calcium oxide reacts with the water, calcium hydroxide is formed so-called *slaked lime*.



Soil improvement



Animal feed

LIME IN THE ENVIRONMENT



Sea liming



Flue gas cleaning

Our products and their environmental challenges

SMA Mineral's product range mainly consists of products based on the carbonate minerals *limestone* and *dolomite*. The operations also include a deposit for *quartz* mining, as well as several other minerals and rocks that can be considered by-products. The carbonate stone is crushed, sieved, and ground into fractions tailored to customer specifications or further processed through calcination and hydration.

The environment is a key issue throughout our value chain, from mining and transportation to the control and regulation of processes at our facilities.

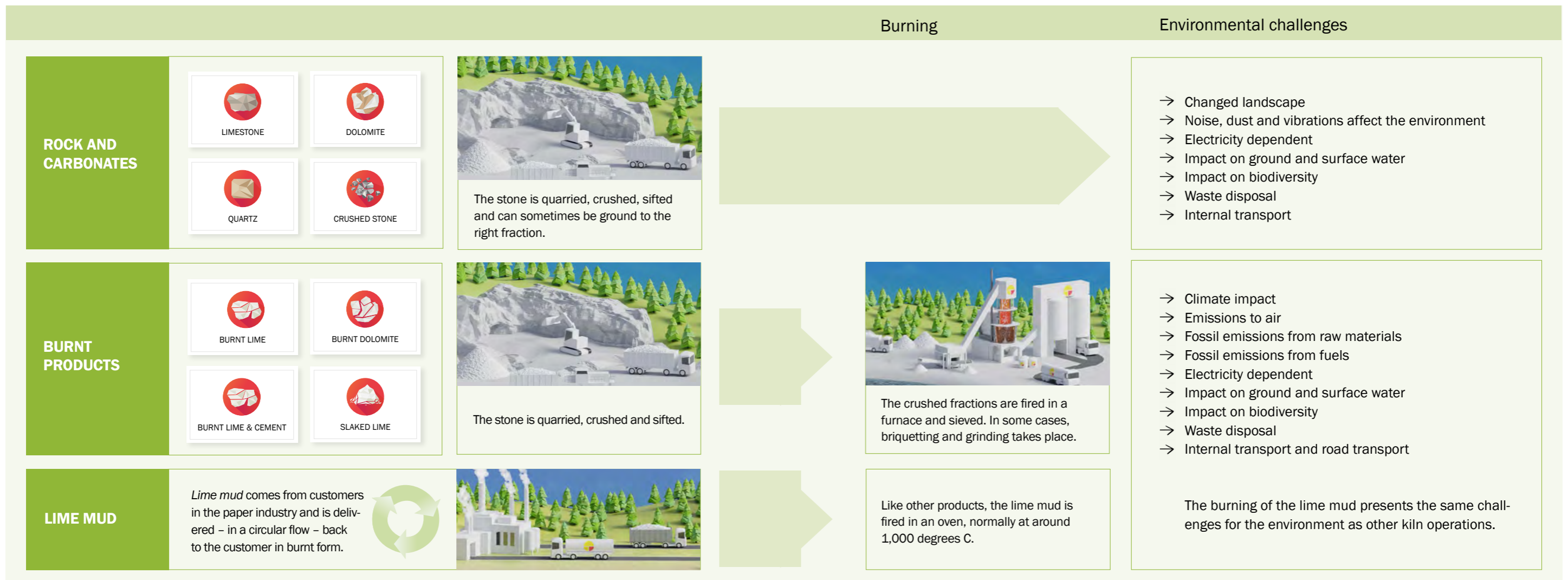
Mining of raw stone materials impacts the environment by irreversibly altering the landscape as the raw materials are extracted from nature. During mining, the surroundings are affected by noise from machinery and vibrations associated with blasting. The operations can also impact the biological diversity around the facilities.

When limestone and dolomite are processed into burnt lime and burnt dolomite, carbon dioxide is emitted into the atmosphere from the raw stone materials as well as from the fuels used in the process.

Lime calcination also results in air pollution emissions, such as sulfur dioxide, nitrogen oxides, carbon monoxide, hydrocarbons, heavy metals, and dioxins.

All operations are carried out in accordance with conditions specified in obtained permits.

In the future, we will need to develop new technologies to minimize emissions and pollution. We will also need to reduce the use of virgin raw materials by finding circular flows and managing waste products. To find the best solutions, we will also enhance cooperation with customers and other companies.



Dialogue with our stakeholders

In 2022, efforts were initiated to develop and deepen stakeholder dialogue, which will continue throughout 2023.

The purpose of the dialogue is to ensure ongoing understanding of the demands, preferences, and key sustainability issues in the areas of environment, quality, occupational health and safety, and business ethics from our customers and suppliers. It also aims to follow up on compliance with our code of conduct.

Stakeholder dialogue

Stakeholder group	Key sustainability issues
<p>Employees Question in Winningtemp, January 2023</p>	<ol style="list-style-type: none"> 1. Safe and secure working environment 2. SMA Mineral's social responsibility 3. Profitability 4. Reduced environmental impact (resource consumption, waste, chemicals) 5. Emissions reduction
<p>Customers Interviews conducted in spring 2022</p>	<ol style="list-style-type: none"> 1. Emissions reduction 2. Sustainable supply chain 3. Occupational health and safety
<p>Suppliers Interviews conducted in autumn 2022</p>	<ol style="list-style-type: none"> 1. Reduced environmental impact (resource consumption, waste, chemicals) 2. Emissions reduction 3. Reduced emissions from transportation 4. Occupational health and human rights 5. Social sustainability 6. Circular economy 7. Sustainable energy (including energy efficiency) 8. Delivery reliability



Our risks

All operations within SMA Mineral are monitored and governed based on principles of sustainable development. Emissions and other environmental impacts are reviewed through specific monitoring programs. Continuous improvement is ensured, among other things, through a certified management system that encompasses SMA Mineral Northern Europe, as well as the sustainability report.

Regular control

Risks related to the environment, social conditions and corruption are assessed and monitored through internal and external audits linked to the ISO 9001 (quality) and ISO 14001 (environment) management systems.

Environmental risk assessments and permits

Environmental risk assessments are an integral part of the statutory permit processes for the company's various operations. The dominant environmental impact of the group's operations is the emission of greenhouse gases in the form of carbon dioxide. The group participates in the European Union Emissions Trading System. Carbon dioxide emissions are measured and audited by an external party and reported to authorities.

Other environmental risks, such as noise, dust emissions to the air, or emissions to water, are regulated through environmental permits. Compliance with permit conditions is evaluated through self-monitoring and annually followed up by supervisory authorities.



Risks and how we manage them

RISK/OPPORTUNITY	MANAGEMENT OF RISK
More complex, unpredictable, and time-consuming permit management can jeopardize ongoing operations.	Managed by finding alternative routes (raw material delivery routes). Limited participation in societal debates with limited influence. The risk is also managed by being proactive in planning with a long-term perspective, ensuring accuracy in documentation, and resource conservation, i.e., increasing the utilization rate of extracted rock and cleared materials.
Increased energy and emission permit prices pose a risk to the competitiveness of our products in the global market.	The risks are mitigated through significant investments in technological development to explore new energy sources and methods for managing a larger portion of the extracted materials.
Limited access to energy, primarily green energy.	Collaborations with other stakeholders, customers, and energy producers. Localization of production based on energy availability. Technological advancements for reduced energy consumption. Ongoing work in energy recycling and the implementation of biofuels in Sandarne. Exploring opportunities for in-house energy production.
Risks in the technological development towards green energy.	Significant investment in the ZEQL concept, investing in testing, and collaborating with customers to evaluate and minimize risks.
Risk of difficulties in recruiting the right expertise due to our dispersed presence in many remotely located places where specialized skills can be hard to find.	Meeting the market's demands for hybrid work. Increased focus on HR initiatives and opportunities to offer thesis projects.
Availability and quality of recycled products to increase circularity in production (including lime mud and oil).	Improved logistics have increased SMA Minerals' access to lime mud. Enhanced process control and operational filters have led to increased capacity and reduced energy consumption. A new ramp for wood chip trucks has resulted in reduced environmental impact. Additionally, projects are underway to purify residues from bio-oil to convert them into productified bio-oil. We are also working on finding alternative international deliveries and routes for oil, as well as increasing the reuse of filter dust material, which is used as extinguishing material in Rättvik.
Risk of serious harm to personnel (collapse/fall hazards, workplace accidents).	Systematic occupational health and safety work. We assess our working environment through regular safety rounds and encourage our employees to report risk observations. We assess risks at our facilities and in our tasks. We investigate incidents and accidents and develop preventive measures. We encourage employees to take on the role of safety representatives to enhance collaboration. We learn from incidents and establish accident prevention and response practices, such as signage indicating required personal protective equipment at loading/unloading areas, providing information to emergency responders regarding first aid, and using QR codes to quickly access product information via relevant safety data sheets.
Risk of non-compliance with policies internally and in the supply chain.	Training and internal/external follow-up to ensure understanding and compliance with policies. Plans are in place for enhanced supplier evaluations and audits.
Risk of sabotage in operations by interest groups.	Improved communication about climate and environmental initiatives. Risk assessment of certain contracts.
Risk of emissions during accidents and operational disruptions.	A new water treatment plant is under construction in Västerås. A new sedimentation basin has been built in Boda, reducing the risk of emissions into waterways. Additional sedimentation steps are being implemented in Sandarne for stormwater management. Environmental impact assessments are conducted in relation to permit issues.

Risks and opportunities with climate changes

Risk or opportunity	Description
Future risks for climate refugees at increased temperatures. Risk of extreme population changes, community planning unavailable, infrastructure	Plan to reduce CO ₂ emissions. Follow up and adapt our roadmap to the changes that take place.
Extreme weather	Plan to reduce CO ₂ emissions. Follow up and adapt our roadmap to the changes that take place.
Opportunities linked to political initiatives and directives around emissions trading and circular economy	There is potential in creating new products from carbon capture and from waste products.



Materiality analysis

The issues we have identified as most essential for SMA Mineral are a synthesis of input gathered from several different analyses and sources.

The work began in 2021 with an analysis of our *risks, value chain, external environment*, as well as *our customers and competitors*. We also conducted a review of our *goals and key performance indicators*. The data was processed in multiple workshops with the management team, where all significant issues were thoroughly examined. In 2022, we continued with an updated vision process and the initiation of a more comprehensive and systematic stakeholder dialogue.

Our most important stakeholders are *our owners, employees, customers, and suppliers*. In the materiality analysis, we also considered important international agreements such as the Paris Agreement and relevant legislation. Our material sustainability issues are prioritized on a scale from important to very important for our stakeholders and sustainable development.



Economy
(Prosperity)

- Stable and efficient production
- Satisfied customers
- Ethical business practices
- Profitable operations





Social
(People)

- Safe working environment
- Attracting and retaining the best industry professionals
- Good leadership leading to engaged employees





Environmental
(Planet)

- Reducing the company's climate footprint
- Increased resource efficiency
Material and energy efficiency
- Circular economy - CCU (Carbon Capture Usage) and the use of by-products, industrial symbiosis
- Respect for and responsibility towards the environment and biodiversity



Sustainability focus and objectives

Our vision is for SMA Mineral to be the natural choice for development and value creation - both locally and globally. Our long-term plans revolve around both saving the climate and surviving as a company. Our customers are at the forefront of their respective industries, and in order to remain competitive, we must do the same.

SMA Mineral's prioritized sustainability issues lay the foundation for our priorities and efforts. The work to deepen our commitment and responsibility began in 2021 and continues into the year 2023.

Our chosen focus areas are based on our *materiality analysis*, which includes our most significant areas of impact and risk, as well as the issues that are most important to our stakeholders. The production of our products should be carried out with the utmost consideration for the environment, health, and safety.

Responsibility for our part in achieving the Paris Agreement

As a business with relatively large emissions in our processes, we have a significant responsibility to do our part in achieving the goals of the Paris Agreement. The determination of our customers to transform their production processes inspires us to do the same.

To be able to do so, new expertise is required. Therefore, SMA Mineral needs to be an attractive employer with fair conditions and values. All of this is reflected in our overall chosen focus areas for sustainability work.



Our goals			
	AREA OF FOCUS	MATERIAL ISSUES	GOALS
 <p>Economy (Prosperity)</p>	<p>Profitable business</p>	Stable and efficient production	2 billion in value-creating turnover > 20% EBITDA
		Live up to permits and requirements	Minimized local impact
	<p>Ethical business practises</p>	Satisfied customers	NPS and CSI must exceed 78 = the limit of <i>Very good</i>
 <p>Social (People)</p>	<p>Engaged employees</p>	Safe working environment Employee interviews and individual skills development plan	LTI <7 100% completed and produced
		Attract and retain the industry's best employees	Higher results for committed employees than for the reference group in Winningtemp
	Good leadership leads to engaged employees	Goals will be drawn up in 2023	
	Minimize local impact (noise and dust)		
 <p>Environmental (Planet)</p>	<p>Reduce the business's climate footprint</p>	Reduce the amount of emissions from the business	50% CO ₂ reduction/ton of burnt product by the year 2027
	<p>Increased resource management</p>	Material efficiency	Goals will be drawn up in 2023
		Energy efficiency	
	<p>Circular economy</p>	CCU – Carbon Capture Usage Industrial symbiosis – use of residual products	
<p>Consideration of the environment and biological diversity</p>	Protection of threatened species and provision for land restoration.		

ZEQL - our path to halving CO₂ emissions

The largest and most important, but perhaps also the most challenging part of SMA Mineral's sustainability responsibility is to significantly reduce CO₂ emissions. With the new concept ZEQL - *Zero Emission Quicklime* - we make it possible to achieve this goal.

Carbon dioxide has transitioned from being seen as a cost burden and problematic to store to being regarded as a potentially valuable resource in the new circular carbon economy.

Through new technology, captured carbon dioxide can be classified for storage (CCS - Carbon Capture Sequestration) or processed into new products (CCU - Carbon Capture Usage).

However, the regulations in this area are incomplete, creating uncertainty regarding its utilization. SMA Mineral continuously explores opportunities for sustainable carbon dioxide sequestration in circular products.

Advancing the future goal

Previous decisions within SMA Mineral to reduce carbon dioxide emissions from our calcined products by 50% by 2030 have been revised in 2022 to achieve a 50% reduction by 2027.

Previous objectives were based on transitioning operations to renewable fuels and implementing carbon capture at certain factories. By switching from fossil to renewable fuels, it was estimated that fossil carbon dioxide emissions would decrease by approximately 30%.

ZEQL - concept for the future

The decision to accelerate the reduction of carbon dioxide emissions is made possible through the new concept, ZEQL.

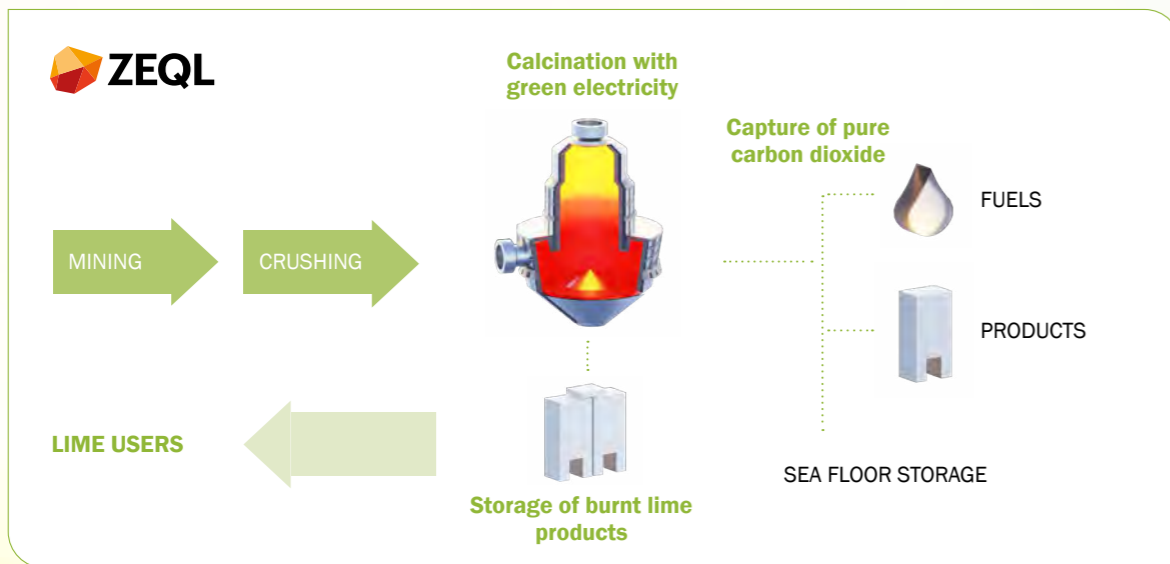
Facilities under the ZEQL framework are operated with green electricity - electricity produced without the use of fossil fuels. In the Nordic countries, the share of fossil-free electricity is very high. In Sweden, approximately 98% of the electricity comes from hydro, wind, and nuclear power. The corresponding figure in Finland is around 86%, and in Norway, 90% of all electricity production is based on hydroelectric power.

Replacing fossil fuels with fossil-free electricity results in a significant reduction in CO₂ emissions. However, to achieve a fully carbon-neutral lime production, we must also address the CO₂ released from the limestone during the heating process in the lime kiln.

The advantage of using electricity as fuel is that the emissions will consist of nearly 100% carbon dioxide. This means that we can avoid the costly and energy-intensive process of separating CO₂ from emissions in a conventional lime kiln.

Consequently, the captured carbon dioxide can be used in processes for fuel production or other products. Another possibility is to store CO₂ in the seabed or in products that prevent its release into the atmosphere.

Furthermore, factories designed in a new and modern way will significantly improve the working environment, especially with regards to dust.



Green electricity solutions

In ZEQL, electricity is produced without the use of fossil fuels.

Carbon capture

To achieve a carbon-neutral lime production, we must also address the CO₂ released from the limestone during the heating process in the lime kiln.

Pure carbon dioxide can be used in the production of fuels or other products (CCU), or it can be stored in the seabed or in products that prevent the release of CO₂ into the atmosphere (CCS).



The roadmap 2020-2027

The management has decided on the strategic goal of reducing carbon dioxide emissions from our lime production by 50% by 2027.

The base year is set to 2020 when the total emission was 487 kton. In order to achieve a fifty percent reduction in emissions by 2027, carbon dioxide emissions must be reduced to 243 ktons. The production of burnt products (BRP) corresponded to 463 kton in 2020.

In order to manage the varying production volume of BRP per year, the carbon dioxide emission is calculated at tons of CO₂/ton of BRP, which corresponds to 1.05 tons of CO₂/ton of BRP based on 2020 production.

A 50% reduction in carbon dioxide corresponds to an emission of 0.53 tonnes of CO₂/ton of BRP in 2027.

Our roadmap

Year	Measure	CO ₂ kton	CO ₂ emission - reduction	CO ₂ BRP/ton
Base year				
2020		487	100	1,05
2022	Sandarne Fuel change	-17	-3	1,02
2025	3 factories 2 Fuel change 1 ZEQL	-137	-28	0,72
2026	1 factory 1 ZEQL	-67	-14	0,57
2027	1 factory 1 ZEQL	-69	-14	<0,53
Total		-290	-59 (<50)	<0,53 (0,43)





Content

Legal compliance	28
Customer satisfaction	28
Code of Conduct and work for anti-corruption	31
Supplier follow-up	32
Whistleblower system	33
Profitable business	33
IT security	33

Our financial responsibility and corporate governance

For over fifty years, SMA Mineral has developed a long-term stable business built on *quality products, satisfied customers, and sustainable business relationships*. We have clear and strong core values and approach our customers with expertise, reliability, and good business ethics throughout the value chain.

Focus areas	Significant issues	Goals / KPIs	Activities in 2022
Profitable business	Stable and efficient production	EBITDA target in %. Refer to the saved documents/charts.	Efforts to offset cost increases through our own price adjustments and streamlining of our processes.
	Compliance with all permits and requirements	Minimized local impact (noise and dust).	Noise investigation conducted in Gåsgruvan, as well as annual dust emissions measurements from all burned lime/dolomite production facilities. Online measurement of dust emissions from the production facilities in Sandarne, Boda, Rättvik, Röyttä.
	Satisfied customers	Results: 2022: Complaints (number submitted): 2. SMA Mineral: LKI 82/100 NKI 77/100 Swedish oil recovery: 4.4/5	Customer survey and stakeholder dialogue conducted.
Ethical business practices	Anti-corruption	Goal: 100% of recurring suppliers exceeding the documentation threshold should have accepted SMA Mineral's code of conduct. Results in 2022: 64%, 72/113 Whistleblower function (number of reported cases/number of resolved cases): Results in 2022: 0/0	Updated Code of Conduct based on the Global Compact, which sets higher requirements for suppliers. Supplier audits under development/planned. Establishment of a whistleblowing function.
	IT security	Risk assessment, deviations IT security training for all staff	28% completed the IT security training in 2022.

Our financial responsibility and corporate governance

For over fifty years, SMA Mineral has developed a long-term stable business based on quality products, satisfied customers, and sustainable business relationships. We have a clear and strong set of values and meet our customers with competence, reliability, and good business ethics throughout the value chain.

Legal compliance

Legal monitoring

Comprehensive legal monitoring is carried out by *environmental and occupational health and safety managers* who are responsible for identifying and compiling the regulations and other binding requirements that affect us. Identification is done through government websites and/or subscriptions, as well as monitoring requirements from other stakeholders.

Binding requirements, environment and occupational health and safety

When regulations and other binding requirements change, the manager with environmental delegation and delegated occupational health and safety tasks is responsible for gathering the necessary information, communicating information about the changes to staff, and implementing changes in relevant procedures in the operations and, if necessary, conducting training.

Environmental and occupational health and safety managers, together with top management, ensure that the list of relevant regulations is up-to-date and complete, and how we are affected is documented through a control process. Follow-up takes place, according to the management calendar, during management review meetings.

Customer satisfaction

During 2022, customer surveys were conducted among both SMA Mineral's and Svensk Oljeåtervinnings' customers.

Results:

SMA Mineral



CSI (Customer Satisfaction Index) The CSI for SMA Mineral was measured at 77, while the **NPS** gave a value of 82. According to the measurement standards, both values are considered good.

Svensk Oljeåtervinning

Regarding Svensk Oljeåtervinning, an overall rating is given based on how customers and drivers perceive the performance.

2022: 4,4 (out of 5 possible)

The result shows that 80% of respondents are satisfied (40%) or very satisfied (40%) with the services provided. These results can be compared to previous years' measurements, which were 4.5 (2017) and 4.6 (2007).

The survey also provides information about the requirements regarding certifications.





"SMA Mineral aims to be a competitive, fair, reliable, and responsible partner to employees, customers, suppliers, stakeholders, authorities, and the wider community."

Code of Conduct and anti-corruption efforts

In June 2022, we updated our two codes of conduct: one *code of conduct that clarifies* SMA Mineral's perspective on sustainability issues, and one code of conduct that is directed towards suppliers, outlining our expectations for sustainability practices. The definition of sustainability encompasses a broader perspective, including social responsibility, ethics, human rights, working conditions, environment etc.

Our codes of conduct are based on the UN Global Compact and its ten principles in the areas of human rights, labor, environment, and anti-corruption. They also declare that SMA Mineral aims to be a competitive, fair, reliable, and responsible partner to our employees, customers, suppliers, stakeholders, authorities, and the wider community that interacts with our company.

To achieve this, we actively work on climate and environmental measures. We value ethical business practices and strive for long-term and trustworthy relationships. The code of conduct guides us by describing our values and the expectations we have for employees and business partners. The foundation of the code of conduct is SMA Mineral's core values, which guide us in everything we do.



KPI

64% of our suppliers have **confirmed compliance with our code of conduct** concerning environment, quality, occupational health and safety, and business ethics.

Plan for 2023

In 2023, we have planned educational initiatives regarding relevant legislation, competition law, etc., for sales and procurement teams. Additionally, we are planning a review and development of training programs on supplier assessments, decentralization of procurement, and an procurement manual to be communicated to all relevant parties.

Policy on bribery

Area	Policy	Activities/Follow-up/Results
Anti-corruption measures	Policy against giving and receiving bribes	<ul style="list-style-type: none"> - Included in the Code of Conduct - Planned educational initiatives - Relevant legislation, competition law, etc. for Sales and Procurement - Review and development of training programs on supplier assessments - Decentralization of procurement - procure ment manual - comm to all relevant parties

Supplier follow-up

In 2022, we initiated the work on *supplier follow-up*. Our aim is to influence our suppliers to improve in areas that we consider important through regular surveys.

The results of the survey will contribute to creating a supplier strategy and an internal assessment framework. It will also serve as a basis for providing feedback to the suppliers. A fundamental requirement to be an approved supplier for us is to comply with our supplier code of conduct or to demonstrate a code of conduct that is at least as comprehensive as our own.

Quantity	Rating	General assessment
4	<45%	Evaluated
9	45-59%	OK
31	60-84%	Good
14	85-100%	Very good

The rating is based on the number of responses out of a total score of 47 (maximum number of "yes" responses in the survey) as a percentage.

Based on the overall results of the supplier assessment, it will be clear how well a supplier functions for our operations. The survey will also provide guidance on any necessary actions that may need to be taken. However, these actions will be evaluated on a case-by-case basis, considering the type of supplier, relevant areas for the respective company, company size, and available alternatives.

In the survey, suppliers were asked whether they comply with the code of conduct applicable to SMA Mineral and *Svensk Oljeåtervinning*, which was sent separately earlier in the year.

The overall result shows that 72 out of 113 suppliers (64%) have confirmed compliance with our code covering *environment, quality, occupational health and safety, and business ethics*.

Generally, our suppliers are rated as good or very good in their work on sustainability, including environment, quality, occupational health and safety, and business ethics. The suppliers' key performance indicators are often related to emissions and fuels, personnel, and the code of conduct.

The suppliers have identified several important sustainability issues related to the environment, including:

- Reduced environmental impact (resource consumption, waste, chemicals)
- Reduced greenhouse gas emissions
- Reduced emissions from transportation (fuels, load capacity)
- Circular economy
- Sustainable energy (including efficiency)

45% of our suppliers have *environmental certifications*. 95% have an *environmental policy*, but only 12% have *documented plans* to achieve 100% fossil-free transportation. 81% have reported that 0-20% of their transportation has been fossil-free. The companies have set multiple goals related to transportation, which can be attributed to the question regarding fossil-free transportation. None of the evaluated suppliers were rejected based on environmental requirements.

Plan for 2023

There are plans to further develop the survey process and stakeholder dialogue with suppliers within and outside Sweden in 2023.

Whistleblower system

On December 17, 2021, a new Swedish law was introduced, which provides enhanced protection against retaliation for whistleblowers. All organizations with 50-249 employees are required to establish a *whistleblowing function* by December 2022. Whistleblowing is an important part of creating a sense of security in the workplace, allowing employees to report anonymously if something is amiss without fear of reprisals.

SMA Mineral's whistleblower system was implemented in the fall of 2022. The system is designed for both internal and external stakeholders, and all types of irregularities can be reported anonymously. Incoming cases are handled by a designated group, and providing feedback to the reporter is an integral part of the process. Policies and procedures for handling whistleblowing have been developed. In 2022, only 3 *false alarms* were received, and no actual cases needed to be addressed.

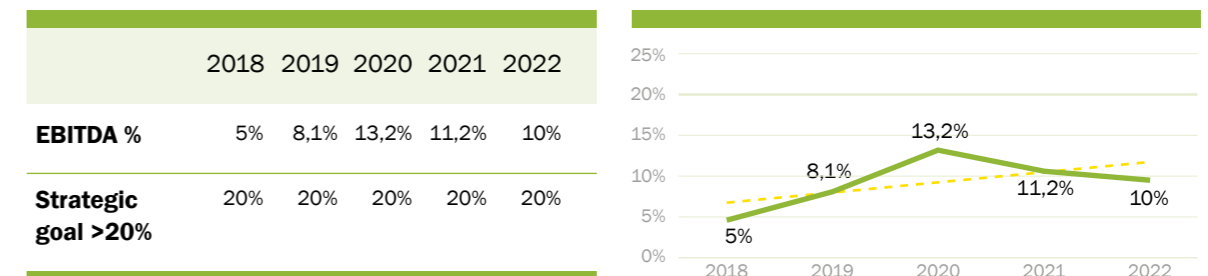
	2020	2021	2022	General Assessment
Corruption and bribes	N/A	N/A	0/0	Number of reported cases divided by resolved cases
IT Security breaches	N/A	N/A	0/0	Number of reported cases divided by resolved cases
Other whistleblowing matters	N/A	N/A	0/0	Number of reported cases divided by resolved cases
Money laundering	N/A	N/A	0/0	Number of reported cases divided by resolved cases
Conflict of interest	N/A	N/A	0/0	Number of reported cases divided by resolved cases

The key performance indicator (KPI) for whistleblowing is the number of reported cases divided by the number of resolved cases.

Profitable business

Long-term profitability is a crucial factor in being a secure employer and fulfilling our responsibility to the environment, local communities, and important climate solutions.

EBITDA as a percentage for the fiscal year 2022 (adjusted for the impacts of EU ETS) was negatively affected by significant cost increases that the group could not fully pass on to its customers.



IT security

To enhance our employees' knowledge and awareness of IT security, we utilize micro-training sessions. These *micro-trainings* simulate and provide a training program consisting of short and effective learning sessions designed specifically for knowledge-based understanding with the goal of behavioral change.

Each interaction with the user is based on previous activities and naturally integrated into their daily workflow. Simulated attacks, such as *phishing* and *social engineering*, test and prepare users' resilience against real-world attacks.



Content

Physical risks	36
Organizational and social risks	37
Feedback from employees	38
Human rights and labor law	40
Handling and consequences of the Corona pandemic	42
Safe workplace	42
Minimizing the number of accidents	44
Training	46
Responsibility for the local community	46
Equality, diversity and the equal value of persons	46



Our social responsibility

SMA Mineral strives for a secure, safe, and stimulating work environment where competent and engaged employees thrive and continue to develop. We achieve these goals by analyzing the risks in our workplaces and understanding how our employees value their work with us. With knowledge about these issues, we can prevent accidents and unhealthy conditions and create a pleasant work environment with sound values.

Focus areas	Key issues	Goals / KPIs	Activities in 2022
Engaged employees	Safe work environment	LTI <7 LWR (measurement)	Providing information and encouragement to take on the role of safety representative. Enhanced safety measures for pressurized equipment. Clearer signage at loading areas regarding personal protective equipment and first aid. QR code for safety data sheets on the website.
	Attracting and retaining the industry's best employees	Outperforming the reference group in Winningtemp.	Winningtemp - implementation in 2022 Training hours per employee (2023) Online training + Code of Conduct training (2023)
	Good leadership leads to engaged employees		

Our social responsibility

For us, a sustainable work environment means offering a workplace where employees enjoy coming to work. It entails a healthy work environment with a pleasant atmosphere and motivating tasks, where work-related injuries and accidents are rare.

Physical risks

Most of our employees work in a physical environment that exposes them to various risks. The most significant risks, based on *reported accidents and incidents*, are:

- Contact with harmful substances (including inhalation)
- Being struck by flying or falling objects
- Fall on the same level (trip, slip)

These can be compared to the most significant potential risks based on reported *risk observations*:

- Fall on the same level (trip, slip)
- Fall from height
- Contact with harmful substances (including inhalation)

Proactively addressing *risk observations* is essential for effective risk prevention. We have made progress in reporting, but there is room for improvement.

To reduce risks in handling *chemicals and products that can cause health issues*, we regularly assess these sources of risk. We also provide training to our staff on chemical health risks to increase awareness.

Gender distribution - by country

Employees	2020	♀	♂	2021	♀	♂	2022	♀	♂
Total	182	86%	14%	190	85%	15%	186	84%	16%
Sweden	132	88%	12%	141	86%	14%	140	86%	14%
Finland	36	81%	19%	35	80%	20%	32	78%	22%
Norway	11	100%	0%	11	100%	0%	11	100%	0%
Estonia	3	67%	33%	3	67%	33%	3	67%	33%

Gender distribution - by position

Distribution	2020	♀	♂	2021	♀	♂	2022	♀	♂
Senior management positions	N/A	N/A	N/A	7	57%	43%	7	57%	43%
Board of directors	N/A	N/A	N/A	4	75%	25%	4	75%	25%

General comprehensive risk assessments for the facilities are regularly reviewed or updated when changes that may affect safety occur. Job tasks are assessed based on needs.

All employees have an obligation to report accidents and incidents that occur. Reported events should be investigated, and actions should be taken to prevent their recurrence. The Incident Reporting and Management System (*IA-system*) is used for reporting and handling incidents.

To proactively address actual and/or potential risks, the company encourages employees to report *risk observations*. This fosters greater engagement among everyone regarding our safety practices.

Organizational and social risks

The *organizational work environment* refers to the conditions and factors affected by management and governance, communication, participation, autonomy, demands, resources, and responsibilities. The *social work environment* refers to the conditions and factors that encompass social interaction, collaboration, and social support from managers and colleagues.

Shortcomings in the organizational and social work environment can increase the risk of health issues such as *sleep disorders, cardiovascular diseases, back problems, and depression*. The risk of *stress reactions* also increases, negatively impacting employees' concentration, memory, problem-solving, and decision-making abilities, leading to reduced work efficiency. Deficiencies in the work environment are thus not only detrimental to the individuals affected but also to the organization and society as a whole.

To counteract these issues, the group has several policies and procedures in place that describe how we handle matters such as *harassment and bullying, gender equality, discrimination, and personnel issues*. We also have a *Code of Conduct* for employees and suppliers, outlining how we should interact with internal and external stakeholders.

KPI	2020	2021	2022	Goal 2022
	Completed employee interviews	69,7%	94,2%	90,0%

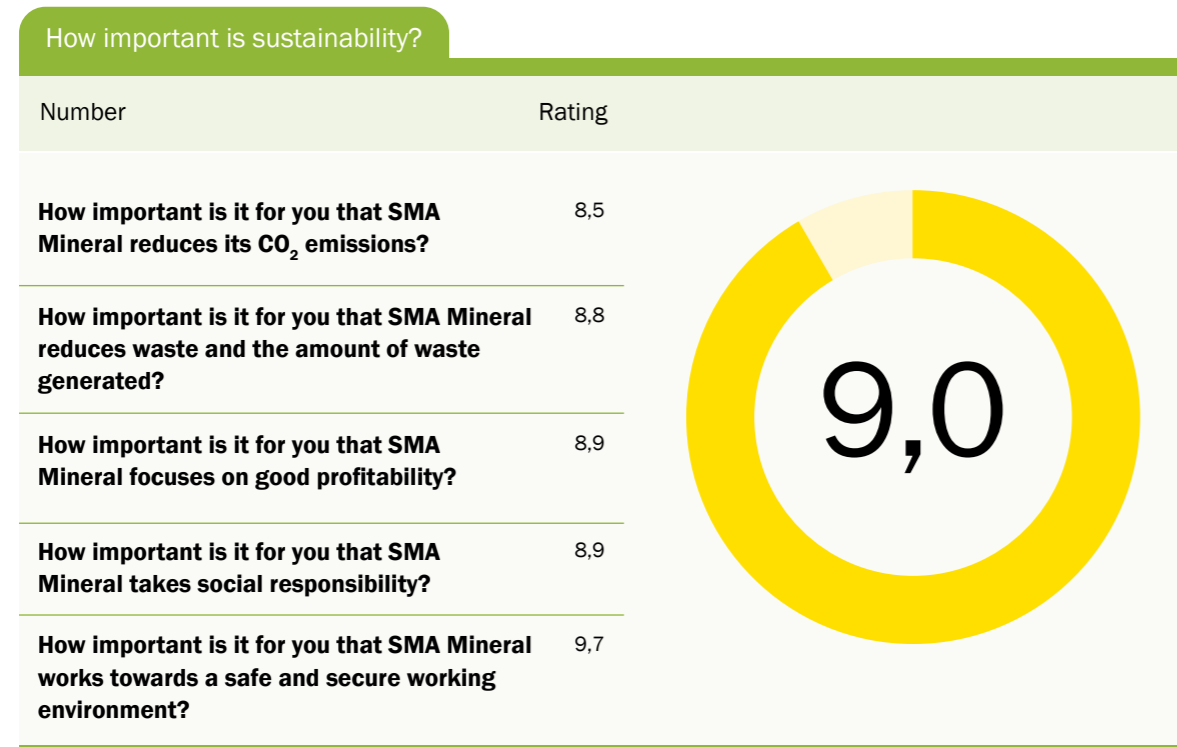


Ongoing feedback lays the foundation for engaged employees

Engaged employees are one of our key strategic goals. To continuously measure the well-being and health of our employees and gather opinions on important matters, SMA Mineral has introduced a new tool in 2022 - *Winningtemp*. This tool provides us with opportunities for continuous feedback and the insights we need for effective dialogue.

The survey consists of an employee questionnaire where employees answer questions at regular intervals. The questions are designed to gather information about what the respondent considers important and the values attributed to variables such as leadership, job satisfaction, meaningfulness, autonomy, work situation, participation, personal development, team spirit, and engagement. The answers also generate a key value that summarizes the overall picture (page 39). By indexing the results, we can compare them with the rest of the industry, where a value >1.0 indicates a position better than the industry as a whole.

Winningtemp also provides opportunities to express which issues are considered important from a sustainability perspective. The answers are provided and interpreted on a scale of 1-10 (page 38). The weighted value for sustainability issues in January 2023 stands at 9.0.

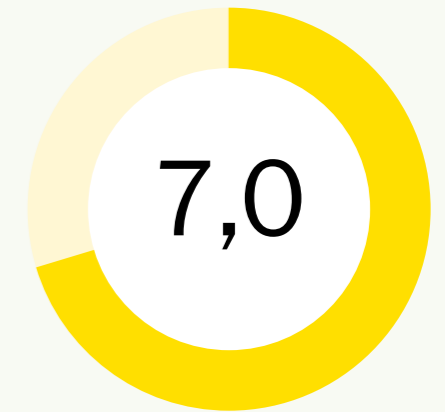


Sustainability questions in *Winningtemp* for our employees. 44 responses as of January 3, 2023.

Our employees' perspectives

Winningtemp provides ongoing insights into how our employees, based on given variables, evaluate their work situation.

The outcomes are compared to the industry at large, where an index >1.0 indicates a positive position compared to the rest of the industry.



Reported values from *Winningtemp*: January 1 - December 31, 2022.

Human and labor rights

It is obvious for us at SMA Mineral that all activities contributing to our products should be carried out with respect for human rights, and that all employees should have reasonable conditions and a safe working environment. Therefore, our codes of conduct are based on international agreements that safeguard individual fundamental rights and equal treatment.



KPI

	2020	2021	2022	Goal 2022
Human rights	0/0	0/0	0/0	0
Freedom of association	0/0	0/0	0/0	0
Forced and bonded labor	0/0	0/0	0/0	0
Child labor	0/0	0/0	0/0	0
Harassment or discrimination	0/0	0/0	0/0	0
Equal treatment and diversity	0/0	0/0	0/0	0
Safe working environment and health				
FR-LTI*	9,76	6,24	9,62	<7
LWR**	6,51	3,12	25,66	-
Training hours	N/A	N/A	N/A	N/A
Reasonable working conditions	0/0	0/0	0/0	0

For all metrics (excluding Safe working environment and health), the KPI is the Number of reported cases divided by resolved cases.

* Number of work-related accidents with sick leave per 1,000,000 hours worked.

** Number of lost workdays per 200,000 hours worked.

We uphold human rights...

...where internationally recognized rights are protected and respected. Personal data is handled with care in accordance with laws and regulations such as GDPR.

We do not accept forced or bonded labor...

...but work should be conducted on a voluntary basis. Personal documents and belongings must not be seized. Workers should be free to leave the workplace after completing their shift. The use of illegal labor is prohibited.

We uphold freedom of association...

...and do not accept any limitations on employees' right to freedom of association or collective bargaining.

We prioritize a safe working environment...

...and prioritize the health and safety of our employees. At our workplaces, everyone is involved in occupational health and safety and takes responsibility for following guidelines and workplace rules.

We do not accept child labor

All forms of violence, coercion, or exploitation of children are unacceptable. Workers under 18 years of age should be specifically protected from hazardous tasks that pose risks to their health and safety, such as night work.

We promote equal treatment and diversity...

...and the equal value of all individuals is self-evident. Everyone should be entitled to the same rights and opportunities regardless of gender, gender identity or expression, ethnicity, religion or belief, disability, sexual orientation, or age.

We do not tolerate harassment

There is zero tolerance for any form of abusive behavior, bullying, or discrimination. We have a responsibility to prevent, address, and take action. All employees and business partners who witness or suspect violations are obligated to report them.

We uphold reasonable employment conditions...

...and do not accept conditions that fall below national and local legislation or ILO core conventions. Signed collective agreements must be respected and adhered to. Working hours and minimum wages should comply with national laws in the country where the product is manufactured or the service is provided.



Management and consequences of the Corona pandemic

Although the group has had confirmed cases of Covid with sick leave, all operations have been able to continue. The absence of delivery problems or major outbreaks is thanks to employees and suppliers following the guidelines, recommendations, and advice provided by the company and authorities.

Safe workplace

Preventive work environment measures

While SMA Mineral is not certified in occupational health and safety, we still work based on ISO 45001 as it provides a good structure. The foundation is our systematic work environment measures, where we conduct regular safety inspections at our workplaces. External personnel often participate in these inspections to see the environment and work processes with "fresh eyes" to avoid overlooking any shortcomings that other employees may have become accustomed to.

The company also encourages employees to report risk observations, which can be done through a mobile application or computer to the IA system used for risk management and incident reporting. With the assistance of external parties, annual risk assessments are also conducted for all products we handle, as well as potential chemical risk sources.

Based on the results of inspections and reports, actions are prioritized to address the most serious risks and those measures that can be easily implemented. The effectiveness of these actions is followed up to ensure they meet expectations. The responsibility for follow-up lies with the person in charge of the facility, but we also have a responsibility for follow-up with the facility's safety representative.

To evaluate the effectiveness of our systematic work environment measures, an annual follow-up is conducted using a questionnaire where managers and employees assess various aspects of the work environment measures. Each part of the questionnaire is weighted to make it measurable. Each facility can see how their own work environment measures, both overall and in each area, have developed over time and receive suggestions for areas of improvement. Comparisons can also be made with the rest of the Group.

Overall, this process leads to progressively safer workplaces.

KPI	2020	2021	2022
	Reported risk observations	24	397

Safety committees

The Group has two safety committees, one in Finland and one in Sweden.

The Finnish safety committee handles national occupational health and safety issues. The Swedish committee primarily handles national occupational health issues but also looks at cross-group matters to harmonize work environment measures across all countries.

Both safety committees work broadly and preventively toward the common goal of ensuring that no one gets injured or experiences ill health at work.

Occupational health care

All of the group's operations in northern Europe are connected to occupational health care. Regular health checks are carried out and, for those employees who are exposed to special risks, medical checks are also carried out at suggested or statutory intervals. Via occupational health care, we also have access to expertise in areas that we may lack internally.

PROTECTION & SAFETY

"It feels meaningful to contribute to a safer workplace."

Leif Frisk, safety representative in Oxelösund

Safety representatives Leif and Joachim - always alert

"Everything is about avoiding accidents"

Joachim Olsson and Leif Frisk are safety representatives at SMA Mineral and constantly work to ensure that we all return home unharmed after a day's work. What do they do? A lot of things.

Have you ever thought, "I'll just"? Just climb a few meters up, just move from point A to point B quickly? When you "just" do something, accidents can happen quickly.

"There's a reason why we keep nagging"

Leif Frisk and Joachim Olsson are both safety representatives at SMA Mineral, Leif in Oxelösund and Joachim in Gåsgruvan. You could say they are an extended arm of the employer. For example, they ensure that employees are updated on new tools and safety regulations. They conduct safety inspections to check if anything is broken, and if something is broken, there is a system where everyone can report it, and Leif and Joachim, as safety representatives, receive a notification. They also keep an extra eye on the staff.

Is there anyone feeling unwell or injured? Then we try to find out what we can change and improve, explains Leif Frisk. It's all about avoiding accidents. It may sound like nagging sometimes, but there's always a reason why we emphasize helmets and high-visibility clothing.

Conducting impact analyses

Joachim has been a safety representative for about a year and is glad he took on the role.

– It feels meaningful to contribute to increasing safety in the workplace. And it's educational to attend training and learn more, he says.

However, it's impossible to eliminate all hazards, Leif points out.

– It's impossible; otherwise, we would have to work in a padded cell. What we can do, though, is conduct impact analyses. That way, we can avoid common injuries such as crush and cut injuries. If you're going to climb a ladder, make sure it's stable or use a scissor lift instead. If you're going to screw and tinker, always wear gloves.

Importance of being brave

Both agree - at SMA Mineral, safety is taken seriously. The importance of safety is understood, and there's rarely a need to remind people to wear their helmets.

So, what does it take to do a good job as a safety representative?

– It requires having a boss who understands the importance of the work, and we truly have that here in Gåsgruvan. If I point something out to our site manager, Jesper, he takes care of it. It can be about ordering things, building walkways, or fixing railings. It's never a problem, says Joachim. Yes, understanding and willingness are necessary, Leif confirms.

– And it's important that we all dare to point out risks we discover. If we succeed in that, we can create a new generation with an even higher safety mindset.

From LimeLight 3-2022

Text: Maria Widar Photos: Maria Widar and Sebastian Wiman/Preferens



Joachim Olsson, Safety representative in Gåsgruvan

Minimizing the number of accidents

SMA Mineral operates in high-risk industries and strives to eliminate as many risks as possible through various measures. In order to minimize accidents during risky tasks that cannot be eliminated, the necessary personal protective equipment is provided to safely perform job duties.

The company monitors the development of accidents and compares itself with European industry counterparts in terms of *FR-LTI (the frequency of accidents with sick leave per 1,000,000 hours worked). The group's target is FR-LTI <7, which is a significant challenge considering the many smaller facilities with high-risk operations. Having more than 2 accidents with sick leave exceeds the threshold. Naturally, our goal is to have no accidents with sick leave at all and to generally reduce the number of accidents.

We also measure **LWR (the frequency of lost workdays per 200,000 hours worked) due to accidents. There is no explicit target for this, but the value still provides an indication of the severity of the accidents that have occurred.

In 2022, the FR-LTI was 9.62, which corresponds to 3 accidents with sick leave, and the LWR was 25.66, which corresponds to a total of 40 (10+10+20) days of sick leave. The total number of accidents in 2022 (employees and contractors) was 18, of which 2 were reported to the Swedish Work Environment Authority. The number of near misses, where no one was injured but could have been, reached 13, of which 2 were considered serious and reported to the Swedish Work Environment Authority.

KPI	2018						2019						2020						2021						2022						Goal 2022					
Fatalities	0						0						0						0						0						0					
*FR-LTI	9,62						6,87						9,76						6,24						9,62						<7					
**LWR	5,77						1,37						6,51						3,12						25,66						-					
Number of accidents with sick leave	3						2						3						2						3						-					
Total number of accidents	16						28						20						14						18						-					
of which accidents reported to the Swedish Work Environment Authority	0						0						0						1						2						-					
Total number of near misses	49						35						39						31						13						-					
of which near misses reported to the Swedish Work Environment Authority	0						0						0						2						2						-					



"For us, a sustainable work environment means being able to provide a workplace where employees enjoy going to work. A healthy work environment with a pleasant atmosphere and motivating tasks, where work-related injuries and accidents are rare."

Training

The presence of risks at our facilities makes training extremely important. In Sweden, we are affiliated with SSG, the *Standard Solutions Group*, as a demanding company. This means that we can require suppliers/contractors working at our facilities to complete an approved web-based course that provides basic knowledge of occupational health and safety laws, regulations, and rules. To ensure that our own personnel at production facilities, transport, and management have an equally high level of competence, the same requirements are imposed on them.

Most of our employees must also receive training in *chemical health hazards* to highlight existing risks and how to protect themselves using personal protective equipment, among other measures.

Each year, an individual competence development plan is created for all employees using a *competence matrix*. This captures the needs for all types of skills that an employee must have to perform their job duties safely. Examples of training include *Driver Certification for wheel loaders/forklifts/other machinery*, *Hot Work*, *Mobile Work Platforms*, *Fall Protection Training*, *ADR (transport of dangerous goods by road)*, *Safe Lifting*, *D-HLR (First Aid, CPR, and AED)*, *ATEX (Explosive Atmospheres)*, and *Handling of Flammable/Explosive Substances*. Of course, training can also involve teaching employees new tasks or work methods.

The individual competence development planning is measured and considered to be increasing. According to assessments by managers with employer responsibility, 87.6% of employees have a plan for ongoing competence development.

KPI	2020	2021	2022	Goal 2022
	Individual competence development plan	64,0%	87,0%	87,6%

Responsibility to the local community

At SMA Mineral, we are supportive of *sponsorship* to sports teams or other nonprofit organizations to a reasonable extent. We prefer to be visible primarily in locations where we or our customers are present. We prioritize sponsorship for youth activities and associations that have a policy and values that align with SMA Mineral's own.

The group's *wellness policy* aims to have a healthier and more motivated workforce, benefiting both the employees and the employer. Wellness should be part of the holistic view of the workplace and all aspects of the working environment. Positive personnel measures and active wellness efforts should be implemented to prevent work-related illnesses and long-term sick leave.

Freedom of choice, voluntary participation, and privacy, as well as motivation, stimulation, and encouragement, are crucial for promoting health. It is therefore essential for wellness initiatives to involve measures that encourage individuals and groups to make their own active contributions for the promotion of health. The goal is to achieve and maintain physical, mental, and social well-being – to thrive – at work and during leisure time.

Equality, diversity, and the equal value of all individuals

SMA Mineral's values are based on competence, reliability, flexibility, and innovation. These values form the foundation for our *brand* but also for *policies* such as *personnel policy*, *policy against harassment and discrimination*, *occupational health and safety policy*, and *procurement policy*. These documents emphasize the importance of complying with laws, regulations, and good business ethics, and prohibit any forms of anti-competitive practices and corruption.

The group and our employees should also promote *gender equality*, *ethnic diversity*, and *the equal value of all individuals*. This is evident, for example, through the use of our updated code of conduct for all employees. When recruiting new employees, diversity in terms of age, gender, and ethnicity should be prioritized when competence is equal.

As our operations span multiple countries, it is important to be consistent and ensure that we adhere to applicable legislation and culture regardless of the country. We must never participate in actions that violate human rights or contribute to child labor or corruption.

We also work to ensure that our suppliers and subcontractors meet these requirements.

Our policies

Area	Policies	Activities 2022
Social conditions and personnel	Non-discrimination policy	Utilization of tools such as Winningtemp to identify perceived discrimination. Enhanced structure for handling.
	Drug policy	Regular testing of employees in case of suspicion.
	Wellness policy	Wellness allowance with various local solutions.
	Gender equality policy	
	Salary policy	Regular internal reviews and salary analyses. Ensuring no unjust wage disparities exist.
	Personnel policy	Regular health tests for all employees. We are enhancing our managers' HR competence in 2023 with the launch of the <i>Manager's Handbook</i> . Regular employee discussions and individual competence development plans.
	Policy against bribery and corruption	
	Whistleblower policy	Whistleblowing is open to both internal and external stakeholders and can pertain to any irregularities.
	Employee care	Barbecue parties were initiated for all staff during the summer of 2022. The events were highly appreciated.
Respect for human rights	Policy against harassment and bullying	Addressing the effects of male-dominated workplaces. Ensuring the availability of workwear in women's models. Description of actions taken and handling of violations.
	Supplier Code of Conduct	Ensuring the Code of Conduct aligns, follows, and refers to the Global Compact. Follow-up through communications with suppliers. Planning for internal training. Procedure for addressing bullying in employee discussions.



Content

Deviation from environmental permits	51
Greenhouse gas emissions	52
Other activities to reduce CO ₂ emissions in 2022	54
Increased resource efficiency	57
Waste management	57
Air Emissions - minimization of harmful air pollutants	58
Water use and emissions	58
Biodiversity - active projects and initiatives	60
Permit assessment for Gotland	62
Collaborations and development	63

Our responsibility for the environment and climate

The environment is a key issue that runs through our entire value chain, from extraction and transportation to the control and management of processes at our facilities. The most significant environmental impact in our facilities that produce burnt products is CO₂ emissions. Therefore, ambitious goals have been set within the framework of our future concept ZEQL to halve these emissions by 2027.

Focus areas	Significant issues	Goals / KPIs	Activities 2022
Climate impact	Reduce the climate footprint of operations	50% reduction of emissions from the production of burnt products by 2027 (tonnes of CO ₂ /tonne of burnt product). Reduced emissions from transportation. Reduced emissions from company vehicles/fuel consumption. Consumption/mileage of company vehicles.	Reporting of the ZEQL roadmap.
	Increased resource efficiency	CO ₂ /tonne + Energy/tonne of product (joules/tonne of burnt product). Fossil: Proportion of recycled oil vs total amount. Energy: Proportion of renewable vs fossil energy of total amount/burnt product. Amount of stone for landfill (side stone). Energy efficiency linked to ZEQL.	Key performance indicators and monitoring will be developed in 2023.
	Material efficiency	Tonnes of stone extracted vs amount that creates value (extracted vs sold).	
Circular economy	Create utilization from all residual products	Utilization rate of stone/finished product/residual product. Amount deposited vs amount extracted. Utilization of residual gas vs total energy amount: recycled/bio oil.	
	CCU	According to the roadmap for ZEQL.	Ongoing testing in Mo in Rana. No CO ₂ captured yet.
	Consideration for and responsibility towards the environment and biodiversity.	Compliance with restoration cost legal requirements.	Marl spreading in the Baltic Sea.

Our responsibility for the environment and climate

SMA Minerals' products are necessary and have a positive impact on the environment. At the same time, we consume nature's resources, leave a footprint on land and biodiversity, and emit environmentally harmful gases from our processes. To reduce our climate footprint, we work hard and purposefully to optimize our use of materials and energy. Additionally, we have set an ambitious roadmap to halve emissions from the production of burnt products.

Our environmental work is governed by an overarching operational policy that includes *environment, quality, health, and safety*. SMA Minerals is certified according to the *ISO 14001* environmental standard. We continuously work to prevent environmental risks and minimize our impact on the environment and climate by employing best available techniques (BAT) and methods within the cement and calcium industry. We also strive to phase out products that are hazardous to the environment and health, enhance resource efficiency, and minimize our carbon dioxide emissions.

The scope and methods of extraction and lime burning are assessed for their environmental impact. Local sites where raw materials are processed through various processes such as crushing, grinding, burning, and quenching are also tested and assessed in the same manner. The risk assessments are regularly evaluated and updated in the event of significant changes.

Our operations are governed and regulated by environmental permits issued by national environmental authorities. The new permit processes always include environmental impact assessments and an evaluation process. The environmental permit includes measurements of environmental impacts and monitoring provisions that production facilities must adhere to. Measurements and monitoring are carried out, for example, in relation to groundwater, surface water, and air emissions.



Deviation from environmental permits

Our operations require permits, and we have established limit values that are determined by authorities. Any disruptions are typically local and short-lived, posing no risk to humans or the environment. Therefore, they should be considered minor. Any emissions that occur are measured and compared to reference documents regarding best available techniques (BAT) conclusions for the cement and lime industry. Deviations that occur are followed up on, and when temporary limit values cannot be met, relevant countermeasures are implemented as soon as possible.

In 2022, the following violations occurred in relation to our permits:

Violations/Actions		
Location	Violation	Action
Boda	Loader sunk in Osmundsbergsbrottet.	No emissions to water/nature. Remedied.
Sandarne	Oil spill affecting neighboring companies.	Cleanup work carried out in collaboration with the fire department. Remedied.
Sandarne	Dust emissions from the silo affecting neighboring companies.	Reconstruction required to prevent similar incidents.
Luleå	Dust emissions due to fan failure.	Some dust impact in the area. Remedied.
Oxelösund	Some dust/particulate emissions due to broken filter cartridges in the crushing house.	Remedied.
Klinte	Order to move stockpile into the operational area.	Remedied.
Kalkkimaan/Ristimaa	Temporary non-compliance, release of water with pH 10.	Water pipeline repaired.
Loukolampi	No water sampling conducted according to the monitoring program.	Remedied immediately upon discovery through new sampling and analysis.
Röyttä	Data collection omitted during 48-hour period for flue gas emissions measurement. However, no breaches of limit values occurred.	Remedied through manual data documentation.
Röyttä	Failure to meet quality requirements for raw material control of parameters such as TOC, Cl, and S for all imported raw materials.	Disclosed in the 2022 environmental report to the supervisory authority. Case handled in SMACASE.

Greenhouse gas emissions

When carbonate minerals such as limestone and dolomite are processed into quicklime and burnt dolomite, significant amounts of carbon dioxide are released into the atmosphere from both the raw materials and the fuels used in the process. SMA Mineral is one of the largest carbon dioxide emitters in Sweden. This entails a significant responsibility to find new solutions that reduce our emissions.

The majority of CO₂ emissions in our operations come from the production of quicklime, which involves the decomposition of carbonates and fuel combustion in the kiln. Lesser CO₂ emissions also come from vehicles and machinery used at our facilities.

The production of quicklime accounts for approximately 95% of our emissions. Therefore, we are focusing on reducing specific emissions from this particular production process. Emission reductions will be achieved through new technologies, such as the ZEQL concept, the CCU project, and by switching to bio-based fuels with lower emissions.

SMA Minerals' management team has set a strategic goal to reduce carbon dioxide emissions by 50% by 2027. In the base year of 2020, the total CO₂ emissions amounted to 487,000 tons per year. A reduction of 50% equates to 243,000 tons less CO₂ emissions in 2027. The production of burnt products (BRP) corresponded to 463,000 tons in 2020. As the produced volume of burnt product varies annually, the carbon dioxide emissions are calculated as tons of CO₂ per ton of BRP. Based on the 2020 production, it corresponds to 1.05 tons of CO₂ per ton of BRP. A 50% reduction in CO₂ emissions corresponds to an emission level of 0.53 tons of CO₂ per ton of BRP in 2027.

SMA Mineral operates within the *EU Emissions Trading System*, and the local facilities are allocated emission allowances based on regulations built upon historical production levels, expansion investments, etc. SMA Mineral Northern Europe released a total of 496,335 tons of fossil carbon dioxide during 2022 in the production of burnt products, of which 314,835 tons originated from raw materials. By utilizing a larger share of biofuels, fossil fuel emissions have been reduced by over 12%. CO₂ emissions are verified through external audits before final reporting to the relevant authorities in the countries where the group operates.

	2021	2022		2021	2022		2021	2022
Direct total CO₂ emissions (ktonne)	532	552	Biogenic CO₂ emissions (ktonne)	34	53	CO₂ Emission intensity (tonnes of CO ₂ /tonne of burnt product)	1,18	1,18

Note: GRI305-1. Includes direct fossil and biogenic CO₂ emissions from raw materials and fuel in the production of burnt products (quicklime and burnt dolomite), as well as CO₂ from internal transportation of sold products and CO₂ from Yellow vehicles.

Note: GRI305-1. Includes direct biogenic CO₂ emissions from fuel and raw materials in the production of burnt products (quicklime and burnt dolomite).

Note: GRI305-4. Represents the intensity of direct fossil and biogenic CO₂ emissions relative to the total production of burnt products (quicklime and burnt dolomite).

The transportation and delivery of products are carried out internally using vehicles that have the highest environmental classification at the time of purchase. Recently acquired vehicles have EURO 6 environmental classification and can be fueled with HVO100, a biofuel. New additions to the fleet will be more efficient and have a capacity for weights up to 70-74 tons. These vehicles are permitted to operate on BK4 roads.

Energy from various fuels

Significant amounts of energy in the form of various fuels are used within the company. In 2022, these primarily consisted of residual gases (51%) from neighboring operations, as well as heating oil and recycled residual oils (33%), and coal (16%).

The biogenic fuel is supplied by SMA Minerals' subsidiary, *Svensk Oljeåtervinning AB*, which has developed fuels with biogenic content and sustainability certification. Additionally, externally purchased biogenic fuels were used at one facility in 2022, resulting in a 95% reduction in fossil CO₂ emissions from the fuel.

Significant amounts of electricity are also required to power the processes. In Sweden, only green electricity is purchased and used, resulting in zero emissions of fossil CO₂. As SMA Mineral is subject to *the Energy Audit Act*, data on historical energy consumption and summary reports on energy-saving opportunities in the operations are reported to *the Swedish Energy Agency*.

Energy Audit

The energy audit for SMA Mineral is being conducted and will be compiled in the early part of 2023 (Q2).

The energy crisis has led to significantly increased production costs and challenges in the supply of biofuels for our green quicklime. Efforts to secure biofuels with various stakeholders are underway.

Regarding recycled fuels, the availability has slightly decreased. SMA Mineral has explored various potential alternatives to replace fossil fuels with biobased fuels, such as different types of *bio-oil*, *gasification of residual forest materials into pyrolysis gas or syngas*, *hydrogen*, *pellets*, *wood powder*, *biochar based on orange peels*, *sewage sludge*, *lignin*, *biogas*, and *pyrolysis oil*. SMA Mineral is investigating the possibility of utilizing new technology for electric calcination via plasma based on green electricity.

	2021	2022		2021	2022
Internal energy consumption from non-renewable fuels (TJ)	1900	1811	Internal energy consumption from renewable fuels (TJ)	217	399

Anm: GRI302-1. Includes energy from non-renewable fuels in the production of burnt products (burnt lime and burnt dolomite), as well as energy for internal transportation, product delivery, and internal yellow vehicles, including electricity.

Anm: GRI305-4. Includes energy from renewable fuels in the production of burnt products (burnt lime and burnt dolomite), as well as renewable energy in the form of electricity.

Other activities to reduce CO₂ emissions in 2022

SMA Mineral has an overarching goal to halve carbon dioxide emissions by 2027. This entails numerous significant investments at our facilities in the coming years. In addition to the activities related to our overall roadmap and the ZEQL concept, we are also exploring other ways to indirectly reduce our emissions.

1 HVO as a fuel

In 2022, the possibility of using HVO (Hydrotreated Vegetable Oil) instead of diesel as a fuel was examined at our units. HVO could be suitable for *work vehicles, vehicles used within the units, and potentially for trucks.*

The investigation showed that many of our existing vehicles could run on HVO100, although not all of them. Consequently, the conclusion was that transitioning to HVO at this time would pose significant challenges in terms of practical handling, such as fuel storage and payment solutions. Additionally, the availability of HVO cannot be fully guaranteed. Due to economic and accessibility reasons, SMA Mineral decided to refrain from pursuing this option. Instead, we will, whenever deemed feasible, replace vehicles with electric alternatives.

2 Electrified work vehicles

Meetings were held in 2021 and 2022 with producers of the type of work vehicles we currently use. None of the companies had ready-made models that meet our requirements, but within a couple of years, satisfactory variants are expected to be available on the market. Therefore, we will revisit the issue when suitable models are offered.

3 Electric cars

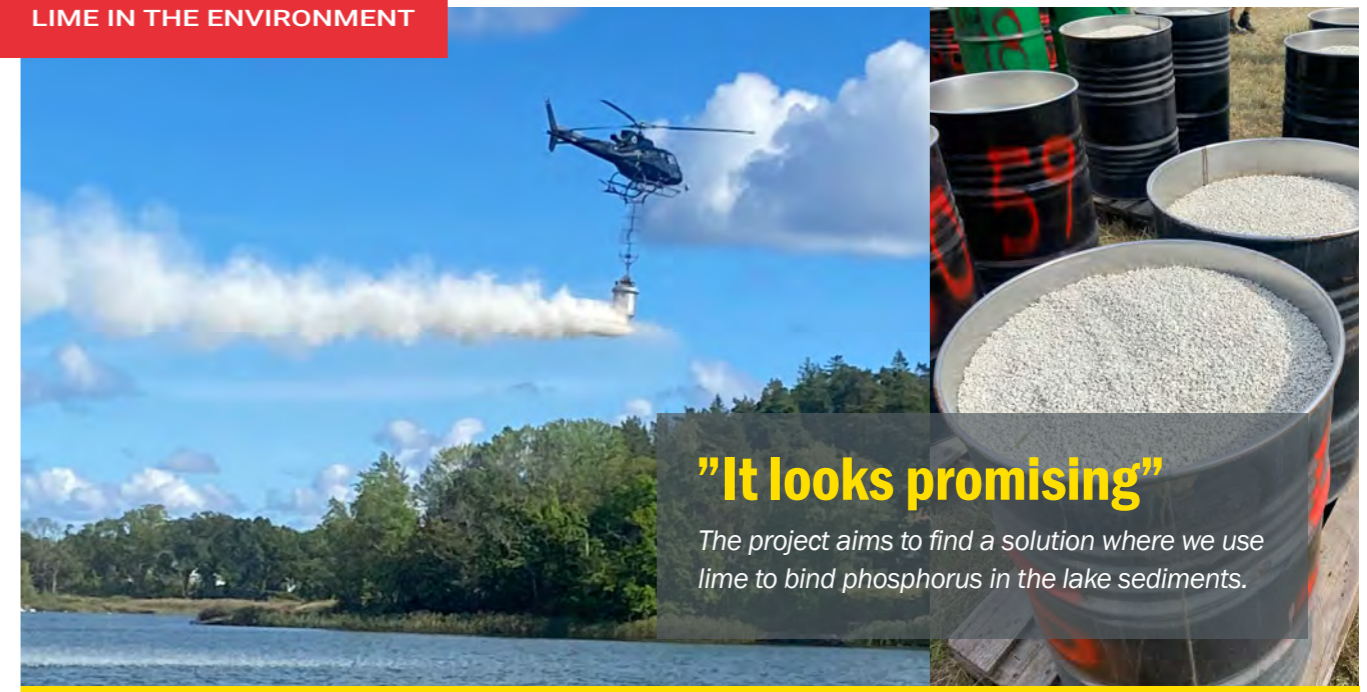
In 2022, we decided to transition entirely to electric vehicles for company cars and smaller service vehicles. When the existing vehicle fleet is to be replaced, electric models will be prioritized where it is economically and practically viable. However, due to long delivery times for electric vehicles, it may take longer than desired to complete the transition.

4 Electric vehicle charging stations

In 2022, quotations were obtained to equip several of our production units and the headquarters with electric vehicle charging stations. The investment is budgeted for 2023.



LIME IN THE ENVIRONMENT



"It looks promising"

The project aims to find a solution where we use lime to bind phosphorus in the lake sediments.

Lime can prevent algal blooms in the Baltic Sea

Since the late 1970s, lime has been successfully used to counteract acidification of our lakes and watercourses. For a little over a year now, SMA Mineral has been participating in a research project that investigates the possibilities of using lime to address the increasingly challenging problem of *algal blooms in the Baltic Sea.*

Approximately 100,000 tons of lime are spread over Swedish lakes every year. Lime serves a clear purpose. By restoring the pH value of the lake water, acidification can be mitigated, improving the conditions for sensitive plants and fish species to survive. Lake liming is often initiated by local municipalities but is financed with the help of state grants.

Limestone powder, calcium carbonate, is used for lake liming, and lime is typically spread by boat or helicopter.

Algal blooms - an environmental problem

The Baltic Sea is generally considered one of the world's most eutrophic seas. Large amounts of nitrogen and phosphorus have been stored on the seabed for a long time. When phosphorus is released and circulates in the seawater, especially during the summer when water temperatures are higher, problems with *algal blooms* arise.

Algal blooms involve significant proliferation of algae and, in particular, *cyanobacteria*. Cyanobacteria, in turn, produce

liver toxins, which pose a health risk to both humans and animals.

Lime can be the solution

To find solutions to the problem, an EU-funded Formas project was initiated over a year ago under the leadership of Stockholm University. Several stakeholders, including SMA Mineral, are involved in the project.

– The project aims to find a solution where phosphorus is bound to the lake sediment using lime," says *Mats Lindberg*, project manager at SMA Mineral. "If phosphorus can be isolated at the bottom, we hope to reduce algal blooms.

SMA Mineral contributes to the project with materials, technical know-how, and dissemination.

– The raw material comes from our Stucks limestone quarry in northern Gotland and has been burned in Cementa's kiln in Slite. The lime is relatively coarse, which causes it to sink to the bottom after spreading, where it dissolves and chemically binds phosphorus permanently in the lake sediment, explains Mats Lindberg.

As a result, phosphorus is prevented from becoming available nutrients during algal blooms, Mats Lindberg continues.

The tests currently being conducted are located in *Kyrkviken*, Valdemarsvik Municipality, and have been ongoing since the beginning of the year.

– The outcomes will be measured continuously, and a comprehensive evaluation will be conducted in a year. So far, the results look promising, concludes Mats Lindberg.

From *LimeLight* 3-2022



Mats Lindberg, project manager



Increased resource management

Preserving the resources we utilize for our production is a significant responsibility for SMA Mineral. Throughout 2023, we will continue to develop goals that challenge us to take further steps, particularly in relation to the ZEQL concept.

Factors

Tons of fossil CO₂ per ton of BRP:

2021: 1,10

2022: 1,05

Energy GJ per ton of BRP:

2021: 4,0

2022: 3,8 (Energy includes only fossil fuels for furnaces)

Fossil fuel usage: Percentage of recycled oil vs. total amount, **2021:** 98,5% och **2022:** 98,3%.

Material efficiency and circular economy

SMA Mineral aims to utilize the material from the natural resources we extract as efficiently as possible. Topsoil, side stones, and other byproducts are maximally utilized. The material from extraction is integrated into environmental processes and specified in monitoring programs specific to each quarry. The monitoring plan also includes extraction waste, which we strive to minimize by using it for purposes such as road and site construction and embankments around the mining area to prevent noise and dust.

Side stones can also be sold as ballast for construction or other purposes, such as soil improvement and fill material for dam core construction, among others. We also enhance the usability of side stones by segregating them into separate piles based on their geotechnical properties and rock type.

Any remaining stones will be used for landscaping and backfilling the excavation area when operations conclude. Since the side stones do not contain soluble metals or hazardous substances, they pose no risk and are inert to the environment. Each facility has a restoration plan that outlines how the reclamation will be carried out to return the mining area to its natural state. Regulatory authorities regularly monitor compliance with control plans and permit conditions.

	2021	2022
Extracted own raw materials (kton) (kton)	1391	1399

Note: GRI301-1. Excludes externally purchased raw materials.

Waste

The waste generated in the lime factory and quarries must not cause harm or pose a danger to human health or the environment. Therefore, our storage facilities for *chemicals* and *environmentally harmful waste* are designed to prevent the release of these substances into the environment, even in the event of an accident.

Furthermore, our operations generate both *municipal waste* and *hazardous waste*. Hazardous waste includes items such as oil waste, aerosol waste, old paint cans, lead-acid batteries, and battery cells. The used oil is stored in containers, such as the original packaging for oils (barrels, drums), and IBC containers. The used oil storage containers are regularly emptied, and the oil waste is collected by a waste management company that delivers different fractions of oil waste for appropriate processing.

Metal scrap is collected and sent for recycling. All waste fractions are collected in separate waste containers, and the waste management company delivers them for suitable treatment. As per the contract, the subcontractor handles explosives and waste containing explosive residues.



Air emissions - minimizing harmful air pollutants

In addition to carbon dioxide emissions, the burning of limestone and dolomite also results in the release of air pollutants such as *sulfur dioxide, nitrogen oxides, carbon monoxide, hydrocarbons, heavy metals, and dioxins.*

Our facilities operate around the clock, 330 to 365 days per year. Each facility holds an environmental permit in which air emissions have been assessed for risk and compared against air quality standards, best available techniques according to BAT conclusions for the cement and lime industry, and, where applicable, for waste incineration plants.

In 2022, we complied with the conditions set for each production unit.

The company's goal is for all facilities to meet BAT conclusions regarding emissions and energy consumption during normal operations as stipulated by the *Industrial Emissions Directive*. The number of operational disruptions in the purification plants resulting in temporary exceedances of limit values should, according to the overall objective of the group, be fewer than 3 incidents per year (this applies to all facilities within the group).

No exceedances of permit conditions occurred in 2022.

All facilities meet BAT conclusions regarding specific energy consumption and emissions. A scrubber in the lime slaker at Rättvik Lime Works has a dispensation from particle emission requirements with a new limit of 50 mg/Nm³ starting from July 1, 2019, until further notice or until new BAT conclusions are established.

The status is that the dispensation is still in effect.

User of and emissions to water

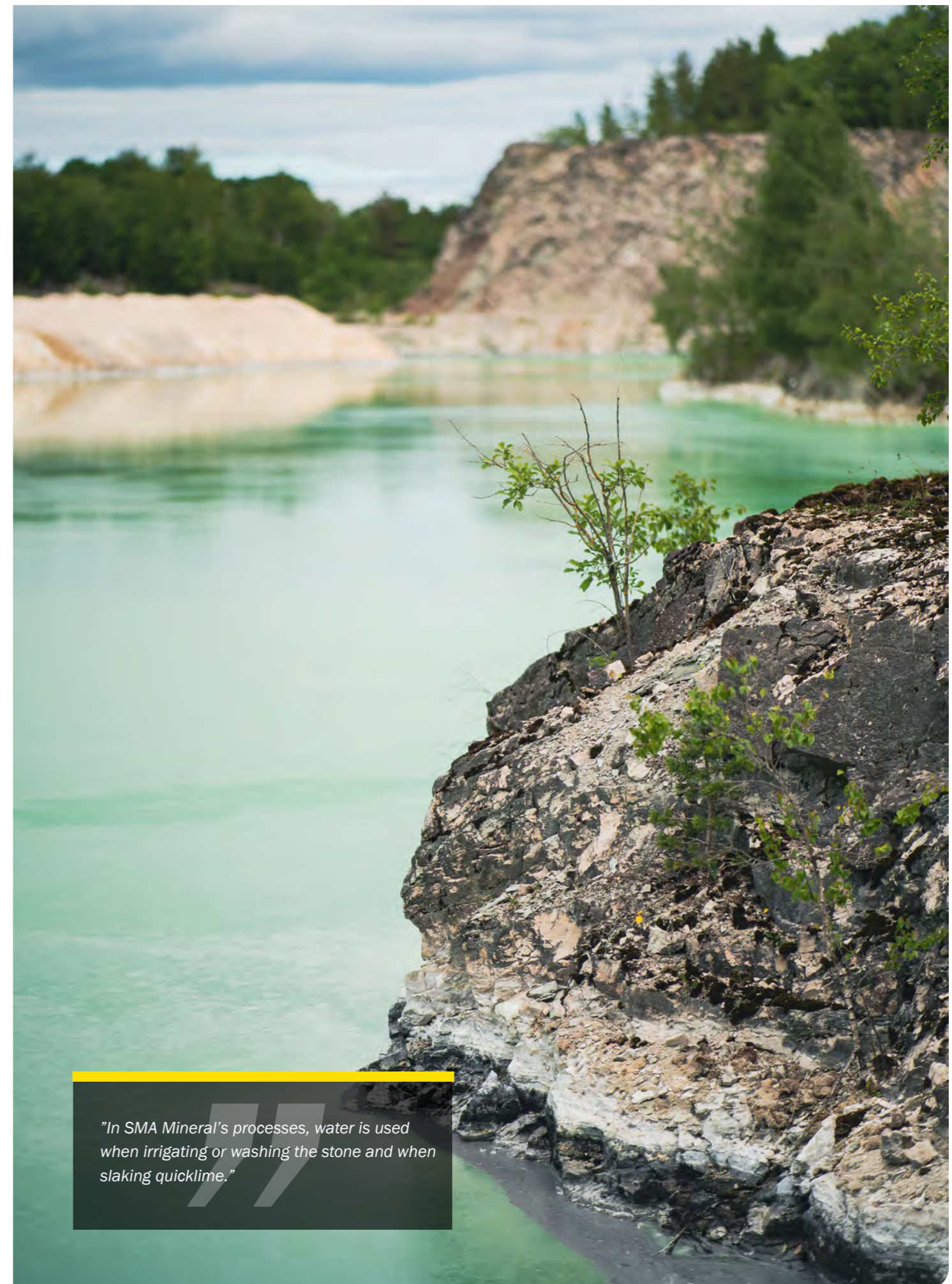
In our mining quarries, water inflow occurs, which can be considered as water extraction in the operations, even though it is not the primary intention. The water is pumped out and released into nearby ponds. The environmental impacts are usually covered within the framework of the environmental permit processes.

SMA Mineral uses water for irrigation or washing of stone, as well as for slaking burnt lime. This water is sourced from *our own wells, nearby watercourses, or the municipal water supply network.* As all water reacts intensely with calcium oxide, no wastewater is generated in the slaking process, only water vapor.

The management and handling of water are defined by *site-specific environmental permits and approved monitoring plans* by the national environmental authority. The monitoring plan includes measurements of quantity and quality from outlets, groundwater, and surface water. Parameters regularly monitored include the *amount of discharged water, pH levels, groundwater levels, and concentrations of metals, minerals, and other hazardous substances such as hydrocarbons.*

After the quarries have been closed, they often become filled with water over time. The environmental permit and site-specific closure plan define how the filled water is monitored after the mine's closure.

The operations also generate domestic wastewater (sludge from septic tanks), which is directed to the sewage network or, in some cases, to an underground sealed well. The waste management company regularly empties the wells and delivers domestic wastewater for appropriate treatment.



"In SMA Mineral's processes, water is used when irrigating or washing the stone and when slaking quicklime."



KALKKIMAA – TORNEÅ, FINLAND

In the immediate vicinity of the *Kalkkimaa mining area*, there are areas that are part of nature conservation programs and private protected areas. The closest one is located approximately 140 meters south of the quarry and is part of the Natura 2000 network.

There are many plant species with protected value, such as reeds, mosses, and lichens, around the Kalkkimaa quarry. Additionally, there are two endangered habitat types (groves and marshes) in the vicinity, which contain *highly endangered, specially protected, and regionally threatened species*, such as chinese gentian, calypso orchid, lady's slipper orchid, great horsetail, and persicaria campanulata.



GÅSGRUVAN – FILIPSTAD, SVERIGE

In the ongoing permit application for *Gåsgruvan*, valuable protected species and plants have been identified. Therefore, SMA Mineral proposes creating new conditions for the areas that will be negatively impacted by continued extraction.

For example, an *extremely species-rich marsh* could receive newly established areas with meandering watercourses and oxbow lakes of the same size as the affected area. Within *species protection and bird conservation*, a breeding site for whooper swan will be affected. The company is now offering new conditions for breeding by creating a nesting raft or an artificial island in the nearby Kotjärn.



Biodiversity - active projects and initiatives

SMA Mineral currently operates in areas adjacent to *natural habitats*, areas belonging to nature conservation programs and/or private nature reserves. The company aims to ensure the survival of rare and endangered species in and around these mining areas.

The protected areas and species are taken into account in the production planning process by site managers, who strive to avoid activities in the sensitive areas. In some locations, the protected species are considered to migrate to more favorable habitats. To enhance the survival of these species, in accordance with regional monitoring, observation, and management plans, we collaborate with professionals and environmental authorities.

During mining operations, surface and groundwater are pumped into ditches in the surrounding drainage system. This pumping can have a drying effect on the surrounding environment, which may affect the presence of protected plant species near the quarries.

The impact of dust from mining activities is monitored through various air emissions measurements and vegetation monitoring. Some plants have been found to benefit from calcareous conditions, but negative effects may also manifest, such as environmental eutrophication caused by increased nutrient loading and, to a lesser extent, impacts on linkages due to plant shoots being covered by dust.



Calypso orchid (Calypso bulbosa)

Permit review - Gotland

Gotland's mineral resources have contributed to meeting the global demand for lime products for centuries, and SMA Mineral has been active on the island for many years. Until 2015, lime was extracted from the company's quarry in northern Gotland, but the operation had to be discontinued when the area was designated as a *Natura 2000 site*.

Since then, we have been searching for alternative quarries on Gotland to replace the lost volumes and therefore applied to the Supreme Land and Environmental Court for expanded extraction. The application was approved in the first instance, but in January 2022, it was announced that the application was rejected upon a second review, citing SMA Mineral's inability to find a viable solution to the traffic situation. The court deemed that there was no finalized plan for traffic safety along the route between the quarry and the port in Klintehamn.

The Supreme Land and Environmental Court's ruling was appealed to the Supreme Court, which did not grant leave to appeal for further review in a decision dated May 19, 2022.



"Kalk är en nödvändig del av vår vardag och bidrar på många sätt till att förbättra våra levnadsvillkor".

Gotländsk kalk hjälper oss alla till ett bättre liv

Kalk är en nödvändig del av vår vardag och bidrar på många sätt till att förbättra våra liv. Utan kalk skulle samhället helt enkelt inte fungera. Gotländska kalkkredommar har under århundraden bidragit till att möta vårt behov av en råvara som vi idag inte kan vara utan.

KALKEN ÄR EN VIKTIG OCH NATURLIG – men ibland också lite bortglömd – del av vår vardag. Kalken är nödvändig för att berika jordarna vi odlar och förhindra våra vattendrag från att försuras. Kalk behövs också för att rena vattnet vi dricker och luften från hälsofarliga rökgaser från förbränning. Kalken finns även naturligt i många av våra viktigaste livsmedel. Försök att leva en dag utan kalk. Du skulle snabbt bli både hungrig, törstig och kall.

Kalken är också oersättlig i flera av våra viktigaste industriprocesser, inte minst inom stålindustrin där kalken används för att avlägsna föroreningar samt att skydda stålet från oxidering. Sverige satsar hårt på grönt stål. Dessa processer är omöjliga utan kalk.

DET ÄR NATUREN SOM AVGÖR var vi kan bryta kalken vi behöver. Kalksten finns naturligt på några få platser i Syd- och Mellansverige men också på Gotland. För oss som arbetar med kalk är det viktigt att finna råvaror som svarar upp mot de krav som ställs från våra användare. Den gotländska kalkstenen är unik då Gotland är enda platsen i Sverige som har tillgång till en sedimentär sten med den kemiskt rena sammansättning som krävs för att kunna användas inom exempelvis stålindustrin.

KALK FRÅN EGEN HEMMAPLAN är också viktig sett till miljön. Att kunna bryta i närområdet gör att vi kan undvika långa transporter med negativ påverkan på miljön.

Om SMA Mineral

SMA Mineral är ett familjeföretag med svenska ägare. Vi har vår historia och våra rötter i värmländska Persberg.

Genom att kombinera utvinning av kalk med avancerad förädling har vi under en dryg fyrtioårsperiod utvecklat till en ledande leverantör av kalkprodukter.

Vi har idag 23 produktionsenheter i fem länder och levererar med miljösamt logistik kalk till ett stort antal kunder i norra Europa.

SMA Mineral AB Box 329, 682 27 Filipstad, Sverige • Telefon 0590-164 00
Epost: sma@smamineral.com • Webb: smamineral.com



In order to raise awareness and engage public opinion, advertisements were placed in publications such as Dagens Industri during the spring/summer of 2022.

Collaborations and development

SMA Mineral is involved in the following collaborations:

- *Minfo – Association for Mineral Technology Research* - where we contribute financial and personnel resources to industry-wide research.
- *Centre for Sustainable Production of Cement and Quicklime* at Umeå University. The center conducts research on, among other things, the production of lime without fossil fuels.
- *CO₂-hub* Nordland in Norway, which is engaged in development work related to Carbon Capture and Storage (CCS). A pilot plant has been installed and inaugurated in January 2023. The pilot plant will be tested for 2 years and then evaluated to initiate a full-scale plant.

Studies conducted within the European Lime Association, EuLA, show that quicklime recarbonates more than 33% of its process emissions when used in processes such as flue gas purification, water treatment and steel production.

This suggests that the product should be regarded as a source of Carbon Capture and that all CO₂ from the process emissions should not be counted as fossil emissions. EuLA, as a collective industry organization, is advocating for this issue with authorities.

The group has begun the work towards fossil-free production by 2050, with a target of reducing the CO₂ footprint by 50% by 2027.





SMA Mineral AB Box 329, 682 27 Filipstad, Sweden • Phone +46 590-164 00
E-mail: sma@smamineral.com • Website: smamineral.com



**sma
mineral**