

SUSTAINABILITY REPORT 2018

MISSION VISION VALUES STRATEGY

We deliver limestone-based products to numerous industries, and our solutions contribute to clean air and water as well as the productivity of agricultural land.

Engaged personnel delivering profitable growth.

Openness, Fairness, Modesty, Trust and respect guide us in all our operations.

Our strategic focus areas:

- Good and safe workplace
- Secured reserves
- Growth on selected markets
- Unified processes and continuous improvements

VIEW OF OUR CEO



The role played by sustainable decisions and sustainable operations are becoming more important by the day. Developing our sustainability is of interest not just for our business, but also for our customers, investors and other stakeholders.

People are becoming more aware of the challenges we face in society, such as the climate change and pressure on our vital resources, and are making more conscious decisions. Demands and regulations concerning energy, emissions, transport, biodiversity and more are strenghtening and affecting our operations.

Nordkalk aims to be a long-term profitable business in a responsible manner in balance with our stakeholders and society at large. We are limiting the negative impacts of our operations through an increased focus on sustainability, continuous improvement and by using the best available methods and techniques.

The UN Sustainable Development Goals have a considerable impact in making companies adjust to these changing prerequisites. They provide a common language around long-term sustainability. We have analysed the goals and our impact on them, and will in this report highlight goal #6 - Clean water and Sanitation and how Nordkalk and our products can contribute to a more sustainable development in that area. Read more on page 19.

Limestone-based products and solutions play an important role in cleaner air, water and soil and as a raw material. The products are necessary to enable many industries to face up to the challenge of the green transition.

During 2018, our focus has been to implement and integrate our sustainability strategy into our daily work. We have started to measure and follow up new KPIs and taken actions to improve our sustainable development. Sustainability is a part of our business strategy and our nine focus areas are integrated into the monthly review by the management team.

This Sustainability Report is drawn up inspired by the GRI Standards. We improve our sustainability practices and reporting continously and aim for our reporting to comply fully with the GRI Standards within the coming years.

In the fourth quarter of 2018, a comprehensive analysis was conducted to identify improvement needs in order to reduce costs and to increase throughput and the profitability of the whole company. The analysis clearly showed that Nordkalk has a strong core business, but at the same time significant potential for improvements to create a solid platform for growth.

A major improvement programme was launched at the beginning of 2019, and a new CEO will be recruited to lead this significant step change for the company.

Always strive to be better today than yesterday, and even better tomorrow than today.

Marcel Gestranius Acting CEO, Nordkalk Corporation

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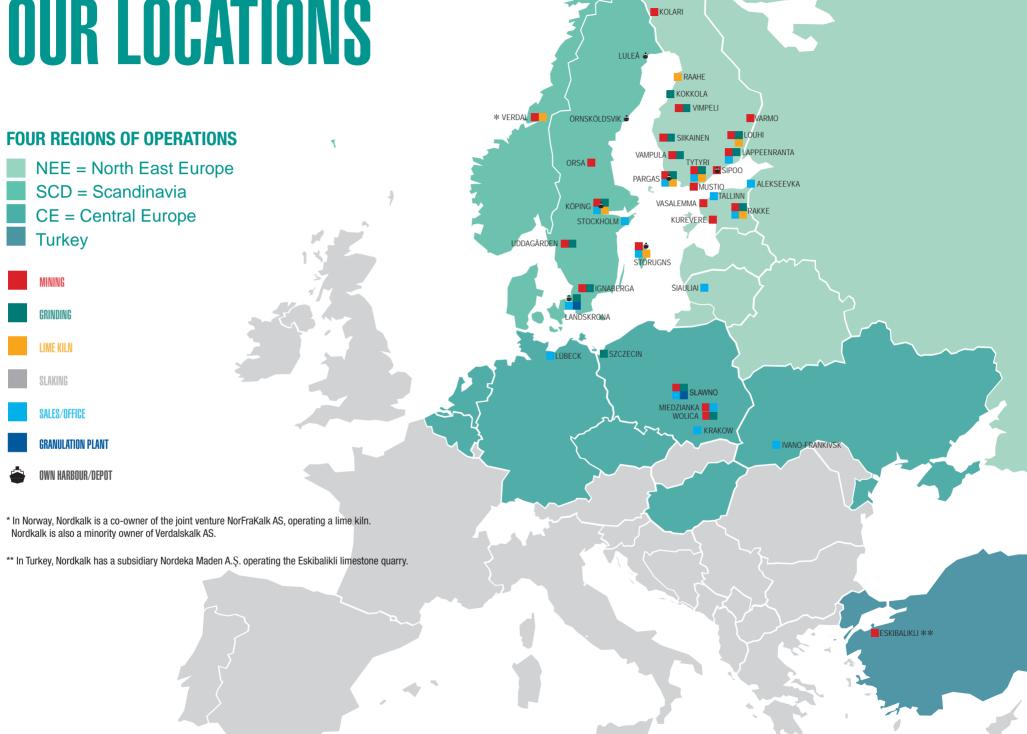
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OUR LOCATIONS



COMPANY IN BRIEF

Nordkalk is the leading company providing limestone-based products and solutions in Northern Europe.

We deliver essential raw materials to numerous industries such as the pulp, paper, metals, mining, construction and chemicals industry. Our solutions contribute to clean air and water as well as the productivity of agricultural land.

Nordkalk has operations in 10 countries at more than 30 locations around the Baltic Sea and in Central Europe: Estonia, Finland, Germany, Lithuania, Norway, Poland, Russia, Sweden, Turkey and Ukraine.

Operations are organised in four regions: North East Europe (NEE), Scandinavia (SCD), Central Europe (CE) and Turkey, see map. The company headquarters are located in Pargas, Finland.

Nordkalk has a total of approximately 1 000 employees, of whom 81% are male

ORGANISATION CHART

EMPLOYEES PER COUNTRY 2018



and 19% are female, while 65.4% are blue collar jobs and 34.6% white collar jobs. Out of the employees, 98.6% work full time, and the rest 1.4% work part time. The turnover for 2018 amounted to 300 M€and EBITDA to 53.4 M€

Nordkalk is one of the private core investments of Rettig Group, a Finnish familyowned investment company that creates **TURNOVER AND EBITDA 2016-2018**



value for generations through active and responsible ownership.

Rettig Group Ltd acquired full ownership of Nordkalk in 2010. Since the summer of 2018, Rettig Group Ltd has been the majority-owner of Nordkalk, while members of Nordkalk Management Team and external Board members are minority shareholders.





300 M€

TURNOVER

1000 EMPLOYEES



CODE OF CONDUCT

The aim of the Nordkalk Group's companies (hereinafter Nordkalk) is to pursue long term profitable business in an ethical and responsible manner by continually improving our processes, products and services while taking into account i.e. economic, human, social and environmental aspects. Our values – Openness, Fairness, Modesty, Trust and respect – guide our operations. Nordkalk is committed to sustainability and to high standard of business ethics and integrity. The Nordkalk Code of Conduct (hereinafter Code), applies to everyone in Nordkalk.

LEGAL COMPLIANCE

We comply with the laws of the applicable legal system(s) including legal requirements and local rules. We adhere to our internal Rettig policies and internal Nordkalk processes and instructions. We refrain from any dealings with our competitors or other actors that could be harmful to our customer's interests. Irrespective of position, no one at Nordkalk has the right to expect or allow illegal activities.

HUMAN RIGHTS

We support the United Nations' Universal Declaration of Human Rights and treat people with respect, and give them all equal opportunities for personal growth and professional development, regardless of their gender, age, race, ethnicity, disabilities, nationality, sexual orientation, religious beliefs, political affiliations, marital or economic status, or position within the company. We comply with recognised international labour standards as defined by International Labour organisation (ILO) and UN Global Compact covering human rights, labour, the environment and anticorruption. We do not under any circumstances accept child or forced labour at any of our operations or activities. We do not tolerate corruption or bribery.

HUMAN RESOURCES

We take responsibility for our own and our colleague's health and safety by following our internal health and safety process. We are continually improving the health, safety and security of our employees, visitors and other people impacted by our operations. We report safety observations and share best practice proactively within the company. We encourage our employees to engage in their own personal and professional development and growth. The employees shall always be aware of their role and authority in the company. All employees with managerial duties are required to actively and purposefully promote a leadership culture that is in accordance with our values and the spirit of this Code.

ENVIRONMENT

We use natural resources such as stone, water and energy in the production and therefore our activities inevitably affect the environment. We endeavour to limit the negative impacts on the environment derived from our activities by using the best available methods and techniques. By means of continual improvement we strive to minimise our negative impact on soil, water, air and biodiversity.

We also strive at reducing noise, dust and vibration generated from our activities. We comply with environmental legislation and strive to outperform the demands set by the legislation. We place a high value on the relationship with people and the local communities where we act and where our activity has an impact and strive to have good communication with the communities and local and national authorities.

Our aim is to be able to use hundred percentages of the mined raw materials, including limestone and by-products. We strive to develop and promote the use of our environmental products and applications.

OUR ASSETS

We treat Nordkalk's assets with care and respect. We maintain the physical security of our facilities and ensure all visitors are appropriately authorised. We safeguard the company's confidential and proprietary information, and share it with people outside the organisation only when an approved confidentiality agreement is in place. We take all sensible steps to protect our computer systems and ensure our passwords are secure and up-to-date. We are aware at all times that Nordkalk's tangible and intangible assets belong to the company, not to individuals, regardless of their position.

OUR CUSTOMERS

Our success depends on the success of our customers. Understanding our customers' businesses and needs enables us to incorporate their input into our operations and products. We always treat our customers with great respect and humbleness and strive to continually improve our relationship with our customers. We deliver the right product, quality and service at the agreed time.

REPORT A CONCERN

All Nordkalk employees must comply with this Code. We want our employees and stakeholders to feel free to report any concerns they might have about possible violations of this Code. Employees can report the concerns to their own manager or to Nordkalk's Legal function using the whistle-blowing reporting tool.

APPROVAL

This Code is approved by the Nordkalk Management Team. The Code is reviewed regularly and updated when necessary, most recently on 7 March 2018. It is distributed to the personnel and is also available to Nordkalk's stakeholders.

GOVERNANCE

CORPORATE STRATEGY AND TARGETS

Nordkalk's strategy was refined in 2018, and the strategic five-year plan for 2018-2022 has been set by the Nordkalk Management Team (NKMT) and approved by the Board of Directors. In addition, the NKMT works according to an annual plan. As part of our continuous improvement and management system we set annual targets for Nordkalk's main processes. The corporate targets are the basis for functions and units to set their own targets. The outcome of the corporate targets is followed up monthly and the results are shared quarterly.

DECISION MAKING

The governing bodies of Nordkalk are the Board of Directors, the Chief Executive Officer (CEO) and also the Nordkalk Management Team (NKMT), which operates under the authority of the CEO. The CEO reports to the Board of Directors. All sustainability decisions for economic, environmental and social issues are made by the Nordkalk Management Team and KPIs are followed up on a monthly basis. One member of the NKMT is responsible for each sustainability focus area. A sustainability team, with one nominated person for each focus area, prepares the issues and keeps day-to-day operations rolling.

PRECAUTIONARY PRINCIPLE

Our aim is to continuously improve our operations, products and processes, while taking the social, economic and environmental aspects of our operations into consideration. Natural resources such as stone, water and energy are used in our production and inevitably affect the environment. We endeavour to limit the negative impacts of our activities by using the best available methods and techniques and by applying the precautionary principle regarding people and the environment.

CONCERNS ABOUT ETHICS

Nordkalk's Code of Conduct, and Rettig Management Policies and Procedures, apply to everyone at Nordkalk and describes the ethical principles that underpin how we conduct business. We comply with applicable laws and legal requirements. A whistle-blowing procedure, which enables personnel to expose any kind of information or activity that is deemed illegal, unethical or not acceptable within the organisation, has been in place since 2017.

MANAGEMENT SYSTEM

Our management system is a tool for good leadership and for directing actions towards known, shared and planned targets, with the aim of continuously improving our performance. It ensures



customer satisfaction and steers our financial performance in the right direction.

Apart from the strategy process, the requirements set by the three standards ISO 9001 (Quality), ISO 14001 (Environment) and OHSAS 18001 (Health & Safety) guide the content of the management system. Nordkalk's management system is certified, which means that a third-party audit (currently DQS) is performed in order to assess the compliance of our activities with the standards.

Both internal and external audits of the management system are performed annually, and findings are reported and handled in a quality assurance system. Besides assuring compliance with the standards, they help us identify development opportunities for continuous improvement.

A management review of our performance is carried out at least once a year to ensure the effectiveness of our management system and that objectives and targets are used to manage our processes in order to fulfil our strategy and meet the needs and requirements of our customers and interested parties.

RESPONSIBLE SUPPLY CHAIN

Nordkalk has a large variety of suppliers. Logistic, energy, equipment and subcontractors are the most common. A list of suppliers have been identified as crucial to Nordkalk where sustainability is especially important. Energy, shipping and equipment are usually global, while land transports and subcontractors are hired by local companies.

All purchasing for Nordkalk Group is performed in compliance with Nordkalk's purchasing process. New suppliers are evaluated on reliability, ethical and financial performance before the tender process can begin.

All strategic suppliers and suppliers that Nordkalk has agreements with must comply with and agree to follow Nordkalk's Supplier Code of Conduct as a part of the purchase agreement. We expect all of our suppliers to work in the spirit of Nordkalk's values. Nordkalk is planning to create a web-based supplier portal in 2019 to update and inform all suppliers about the Suppliers Code of Conduct and to draft a Supplier Manual where all Suppliers would be informed about certain sustainability-related regulations and activities.

Our logistics chain is effective, fast and reliable and our products are transported by ships, trucks and trains. For about 60% of our total volume, we handle the transport solutions. We use many industrial harbours and our terminal network covers our whole area of operations in Northern Europe. We have many contract transport companies offering the best possible equipment for transporting lime and we take care of both trailer and container transports around Europe.

CUSTOMER SEGMENTS

CONSTRUCTION

Limestone is the most widely used building material in the world. It is used in the construction of roads, concrete and other building materials.

AGRICULTURE

Lime is a vital part of achieving sustainable and more productive agriculture, both with livestock and farming.

ENVIRONMENT

Limestone-based products are used in many different environmental applications. From water treatment of drinking water, purification of waste water and neutralisation of industrial waste waters as well as for flue gas cleaning.

INDUSTRY

Limestone-based products are often a necessary raw material in the manufacture of other products in industry. The function of the limestone is to clean, neutralise and fill, and it is used in the manufacture of paper and cardboard, steel, glass, sugar, paint, filler, plastic, rubber and much more.

LIMESTONE APPLICATIONS











Chemical industry



Flue das treatment



Water treatment





Concrete



Agriculture









PRODUCTS AND SERVICES

LIME OR LIMESTONE-BASED PRODUCTS

Nordkalk's main products are limestone, crushed and ground limestone, concentrated calcite, quicklime and slaked lime. The products also include dolomite and a rare mineral called wollastonite, which is found together with limestone.

Originally, limestone is a sedimentary carbonate rock consisting mainly of calcite mineral i.e. calcium carbonate (CaCO₃). Pure limestone contains 95% to 100% calcium carbonate. Limestone is one of the most common rock types, except for in Nordic bedrock areas, where limestone deposits are limited.

Limestone is a pure natural product, which can be used unrefined, either crushed or ground. When refined into calcium oxide (CaO, quicklime) or calcium hydroxide (Ca(OH)₂, slaked lime) the reactivity of lime increases as does its ability to absorb impurities. Limestone-based products are used to remove impurities in different processes and as neutralisation agents. The importance of these types of cleantech solutions, which decrease environmental impacts, is growing.

USE OF LIMESTONE IN SOCIETY

Limestone is a versatile and mainly irreplaceable raw material that plays a role in the production of many essential products that are necessary for maintaining our current standard of living. Every day we use products that can't be made without limestone-based products. Several of our base industries are dependent on limestone in their production i.e. the steel industry, paper industry and construction industry.

Limestone is used in the production of sugar, steel, glass, plastics, paints and paper. It is used as a raw material in building materials, bricks, plaster and cement. Lime is used for ground stabilisation in road constructions and is a key ingredient in asphalt. Lime fertilisers improve the soil on farm's and in gardens and are included in fodder for poultry and livestock.

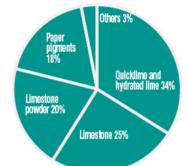
The function of lime is to purify, fill and neutralise and the products are often used for improving environmental performance.

LIMESTONE FOR THE ENVIRONMENT

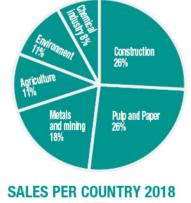
Increased environmental demands require more advanced technology and purification of emissions to air, water and soil. Limestone is used for all of these processes.

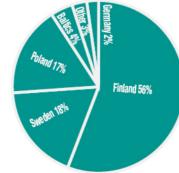
- WATER Treatment of drinking water, process waters and waste waters
- AIR Treatment of flue gases from power plants and waste incineration plants
- SOIL Improve crops and prevent phosphor leaching into our rivers and lakes. Neutralise acidic soils and upgrade clay soils to usable infrastructure construction land.

SALES PER PRODUCT 2018



SALES PER APPLICATION 2018





E-SERIES PORTOFOLIO EXPANDED

Nordkalk E-Series products for coatings and adhesives combine superior quality with cost-efficiency and environmental benefits. In 2018, the product portfolio was expanded to include a new Nordkalk Enrich® dry product, offering more choice to customers.

With the assistance of Nordkalk Enrich, the need for titanium dioxide (TiO_2) and binder is partially eliminated. This contributes to lower raw material costs while maintaining the technical performance of the paint at a high level, for example gloss and wet-scrub resistance.

Nordkalk Enrich is also an environmental friendly choice for coping with more stringent environmental objectives and advancing carbon footprint reduction. Production of Nordkalk Enrich represents a maximum of 20% of the carbon footprint created by the production of TiO₂.

FOSTOP STRUCTURE LIME

The Baltic Sea's most severe problem is eutrophication caused by excessive nutrient loading especially from diffuse sources like agriculture. All coastal countries are to reduce their nutrient loading by 2021.

Nordkalk's product, Fostop Structure Lime, cuts down the phosphorus runoff from fields to watercourses up to 50 percent while increasing the crop. In the unusual warm summer of 2018, the problems of the Baltic Sea become obvious through abundance of blue-green algae in the water. Nordkalk gained attention for Fostop in the Finnish political discussions. As a result, structure lime is proposed to be included in a water conservation programme prepared by the Ministry of the Environment.



THE GRANULATED AGRICULTURAL PRODUCT NORDKALK ATRIGRAN EXPANDED TO NEW MARKET AREAS IN 2018. THE PRODUCT WAS ALSO SOLD IN 25 KG BAGS FOR USE ON GARDENS AND LAWNS.

QUARRIED VOLUMES 2018

MARKET SITUATION

THE MARKET IN 2018

Nordkalk's turn-over and EBITDA 2018 slightly decreased in comparison to the previous year, as a result of mixed development in different market areas and customer segments. The competitive situation is challenging in the quicklime business.

In Poland in CE all customer segments performed well. Thanks to favourable economic conditions the road construction projects continued and sales of the granulated agricultural product Nordkalk AtriGran expanded to new market areas.

In NEE and SCD accelerated competition, particularly in the quicklime and slaked lime (calcium oxide and hydroxide) business, affected Nordkalk's financial development.

The sales decreased especially in the customer segment Metals & Mining while many other segments, e.g. Agriculture and Environment performed well and according to our expectations.

In Turkey, Nordkalk operates through the subsidiary Nordeka Maden. During 2018, the Turkish economy slowed down, and the currency weakened due to political uncertainties. This had a negative effect on sales to customers on the construction sector which makes up a tenth of the Turkish economy.

RESEARCH & DEVELOPMENT

In 2018, the R&D personnel worked more closely with Nordkalk's customers than before, and as a result many new, interesting development opportunities were identified. Another new internal action was to start cross-regional segment meetings, which bring together the segment sales and R&D experts to develop new concepts.

During 2018, R&D has continued to expand the customer base for E-Series in the coating and adhesive market while developing a dry version of the product further enhancing E-Series portfolio competitiveness.

A novel product for chemical energy storage was developed and produced in cooperation with SaltX for a potentially big energy market in the upcoming future. Projects in circular economy were developed with high expectations on commercialisation going into 2019.

INVESTMENTS

In Turkey, a new crushing line was inaugurated in November. On Gotland, the harbour was upgraded, and in Uddagården in Sweden preparations are under way for a new packing line.

Continued steps for further automation and digitalisation were taken during 2018, including the start of an IoT (Internet of Things) project to improve production and inventory information.

OUTLOOK 2019

Nordkalk's core business in limestone is expected to continue strong, and turnover and EBITDA are estimated to increase in 2019. In the quicklime market the competition will remain challenging. Positive development will be boosted by the performance improvement programme which was launched in the beginning of the year, in order to elevate Nordkalk's operational performance and improve profitability in the longer term.

ACCESS TO LIMESTONE RESERVES

Access to and the availability of limestone reserves are Nordkalk's key asset. There is a volume of reserves subject to permits and otherwise accessible and there is a resource volume of known geological mineralisation. These may be limited due to permit issues, land ownership or the need for significant investment prior to access.

Nordkalk serves a wide variety of customer segments and applications and as limestone is a natural raw material there are substantial variations in the properties of the resource. The material's properties and market demands must be matched.

In most cases location and distance factors must also be considered. Despite the added environmental footprint, transports from remote production sites can't always be avoided due to quality demands and the variation in properties between raw material sources.



ENERGY STORAGE WITH LIME

In 2018, Nordkalk embarked on an interesting project to study how energy could be stored with the help of lime. The energy storage company SaltX Technology and Nordkalk Corporation signed a Letter of Intent to manufacture Nano Coated Salt.

Especially energy storage from renewable resources is challenging and new technologies are desperately needed. New NCS-technology is one of the solutions. Nano-coated technology by SaltX has been developed to store energy thermo-chemically. The main ingredient of the "salt" is calcium oxide i.e. lime, which has a good volumetric energy density. The technology enables a longterm and a cost-effective solution.

Nordkalk started pilot production in Pargas Finland and has produced several tons of the SaltX NCS based on SaltX's recipe and specifications. The capacity of full-scale production will be 10,000 tons of NCS, which is equivalent to 4,000 MWh of thermal energy storage.

At Nordkalk, we find it important to support and participate in different development projects to find new ways of doing things that benefit the environment.

AFTER TREATMENT IN IGNABERGA QUARRY IS DONE SUCCESSIVELY WHERE THE MINING IS COMPLETED. A NEW LANDSCAPE IS CREATED BY ADDING NEW BIOTOPES AND LANDSCAPE QUALITIES TO THE NATURAL ENVIRONMENT. -

SUSTAINABILITY TO US

Sustainability and a strong sense of responsibility and ethics have been a part of our business for a long time. Focusing on environmental performance and improvements, Nordkalk has developed its operations in a sustainable manner over the years. Environmental reports have been published by Nordkalk for more than 20 years, evolving towards the more comprehensive sustainability report of today.

In 2017, Nordkalk reviewed and updated its sustainability strategy, policies and goals for the future. In the process, we identified and prioritised all the sustainable aspects of our business from a stakeholder perspective. A list of 27 important material issues were identified and grouped into nine different focus areas.

During 2018, our focus has been to implement and integrate the sustainability strategy in our daily work. New key performance indicators have been decided upon. Measurements and actions have been taken to improve our sustainable development. This is not a one-time project, but a long-term approach to continuous sustainable development in our operations. Sustainability is a part of our business strategy and our nine focus areas are integrated into the monthly review by the management team.

In a workshop with the management team in 2018, the list of material issues was reviewed and prioritised again as seen under materiality. The main sustainable risks in connection to our material issues were discussed and evaluated.

To engage our stakeholders in our sustainability work, and improve for the future, a sustainability survey was conducted among our stakeholders at the end of 2018. The survey was distributed to a selection of our key stakeholders.

In the survey, our stakeholders got to evaluate how we are performing today, and what material issues they think are most important for us to prioritise. The results are reported on page 15. For 2019, we plan to expand the distribution of the survey to a larger group of stakeholders.

Since our products and solutions also play an important role for sustainable development in society, for cleaner air, water and soil, Nordkalk has also put a lot of effort into developing new sustainable products and solutions. Some of that work is also described in this report.

The aim of this year's GRI-inspired sustainability report is to present our sustainability work for our internal and external stakeholders in more detail and give relevant examples to provide clarity and be transparent. However, it is still not in full accordance with the GRI Standard, but a step in that direction. We intend for our reporting to comply fully with the GRI Standards within the coming years.

Our sustainablility statement to the right.

WE MAKE AN EFFORT FOR CLEANER AIR, WATER AND SOIL

- We can have a positive impact on the quality of air, water and soil, by improving customers' cleaning processes with innovative limestone-based products and solutions, by constantly improving our own operations, and by creating value beyond our business through engagement in partnerships and projects.
- We meet society's challenges as our challenges. We proactively exceed the expectations from our owners, customers and society, through responsible, profitable business and ethical behaviour.
- We strive for a balance between environmental, social and economic expectations, a high degree of transparency and strong engagement. As we strengthen our brand, relations and business, we also commit to increasing value and opportunities for society and the local communities we operate in.
- Our continuous sustainable development is structured in nine focus areas. Each one of them with commitments, long-term goals and guiding principles on how to act.

Our long-term horizon on corporate sustainability is in correspondence with UN Sustainable Development Goals (2030).

NINE FOCUS AREAS ON SUSTAINABILITY

- Climate impact
- Responsibility for land, water and biodiversity
- Resource consciousness
 and circular solutions
- Society engagement and community development
- Ethical behaviour
- Good place to work
- Safe place to work
- Economic stability and profitable growth
- Quality of all activities



Stakeholder group

Owner, employees, customers

Media, general public

Authorities, NGOs, politicians

Main channels

customer support, procurements

Board meetings, capital market days, personnel surveys, union meetings, intranet, development discussions, on-site TV-screens, personnel meetings, website, customer events, fairs, customer surveys, customer audits,

Press releases, articles, open houses, neighbour meetings, website, social media, exhibitions, newsletters, seminars

Dialogue meetings, supervisory meetings, notifications, press releases, referrals, networks (energy, environment, quality, health & safety, communication), court proceedings

Main issues

Business development, strategy, finance, operations, processes, rules and regulations, health and safety, personnel wellbeing, products and solutions, customer support, agreements

Necessity of limestone in society, products and solutions, permits, sustainability issues

Rules, regulations and compliance, business conditions, permit processes, environmental monitoring

OUR STAKEHOLDERS

STAKEHOLDER ENGAGEMENT

Last year, our different stakeholder groups were identified, analysed and classified. In the analysis their different perspectives were evaluated, in order to understand which material issues matter the most to them. As a result, stakeholders were prioritised and grouped as a base for continued stakeholder dialogue.

At Nordkalk, stakeholder dialogue is conducted for many different purposes, with different stakeholder groups and through many different channels. Interactions with existing stakeholders take place through neighbour meetings, legal processes, consultations with authorities, customer and supplier audits, sales negotiations, feedback from digital channels and in many more ways. The main issues and channels for our stakeholder dialogue are listed on previous page.

MEMBERSHIPS IN ASSOCIATIONS

Nordkalk participates and contributes to the industry through memberships of relevant associations. Networks for issues like energy, the environment, labour, quality, health and safety and communication play an important role in the development of self-regulation in the business.

Co-operation with the local trade unions is also important, not only for our employees and their work conditions, but also to discuss important issues in the local communities where we operate.

AUDITS

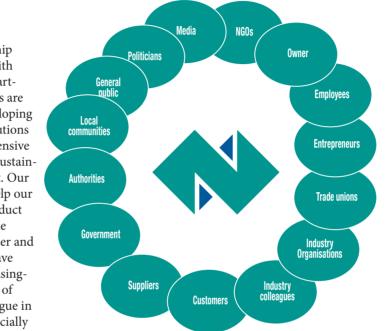
A close relationship and discussion with our customers, partners and suppliers are essential for developing products and solutions that meet the extensive requirements of sustainable development. Our products often help our customers to conduct a more sustainable business. Customer and supplier audits have become an increasingly important part of stakeholder dialogue in recent years, especially concerning sustain-

ability issues. Our customers carry out sustainability audits through self-evaluation forms or by visiting our facilities and taking part in the on-site operations.

During permit processes for our operations, extensive consultations and stakeholder dialogues are performed in order to meet all the environmental and social requirements. The stakeholders involved are authorities, NGOs, neighbours, local communities and politicians.

SUSTAINABILITY SURVEY

To engage our stakeholders in our sustainability work and make improvements for the future, a sustainability survey was



conducted among our stakeholders at the end of 2018. The survey was distributed to a selection of our key stakeholders in the four countries where we do the most business: Finland, Sweden, Poland and Estonia.

Among the participants there were customers, suppliers, authorities, NGOs, local communities, employees and owners. The result of the survey gives us an indication of what our stakeholders prioritise in our sustainable development and what needs to be highlighted and communicated further. The survey will be evaluated and developed to improve our stakeholder dialogue further.

SURVEY RESULTS

Nordkalk's sustainability work scored 4.2 overall on a scale 1-6. The most prioritised sustainability issues for Nordkalk to work on and improve according to our stakeholders are shown in the diagram on the next page. Below is the evaluation of how well we perform today.

HOW WELL NORDKALK PERFORMS

Energy efficiency	3.76
Transport	3.86
Waste management	4.11
Emissions	3.77
Water management	4.32
Environmental Impact Assessment	4.14
After-treatment of impacted areas	4.11
Measures to avoid environmental	
impact	4.36
Measures to avoid impact on	
biodiversity	4.36
Communication on environmental	
impact	4.32
Health and safety	4.83
Risk evaluations	4.41
Non-discrimination	4.38
Diversity and equality	4.35
Code of Conduct	4.55
Respects human rights	5.17
Handles complaints	4.00
Leadership and staffing	4.41
Minimise dust	4.28
Minimise noise	4.45
Minimise vibrations	4.37
Contributes to local economic	
development	4.54
Contributes to creating attractive	
social environments	3.68
Consults with local people on	
social development	4.04
Consults with authorities on	
social development	4.35

OUR STAKEHOLDERS MOST PRIORITISED SUSTAINABILITY ISSUES



MATERIALITY

Last year an extensive assessment was done to identify our material issues, the most important sustainability issues for our business and our stakeholders. The assessment incorporated many different perspectives.

The most important sustainability issues in society, and how they play out in the local contexts where Nordkalk is active were evaluated through desktop research, consultations and benchmarking some of the leading companies in the industry through the whole value chain of the limestone business. The most relevant requirements and structure provided by codes and frameworks were analysed, including the Global Compact, the OECD guidelines for multinational companies, ISO 26000, the Global Reporting Initiative, the UN Sustainable Development Goals and applicable legislation.

A vital part of the materiality analysis has been the stakeholder perspective and what issues concern them the most. Each material issue carries different risks and opportunities for different stakeholders, and the importance of them can therefore vary. By ranking each material issue based on the different stakeholders' priorities, and then weighing them together, we get a mean value for stakeholders to compare with business priorities.

For the 2018 materiality analysis, a workshop was conducted for the Nordkalk

MATERIAL ISSUES OF IMPORTANCE TO NORDKALK AND OUR STAKEHOLDERS

Energy Emissions Transports Land use and quarry restoration Water management and effluents Biodiversity Material and waste management Recycle and reuse in value chain Green solutions and products Local dialogue and support External water projects Partnerships/projects beyond current business Industrial relations and public affairs Responsible supply chain Business ethics and anti-corruption Human rights Employee engagement and development Stakeholders Labor practice, diversity & equality Occupational health and safety Economic performance and growth Sustainable leadership Customer satisfaction Secure limestone reserves Corporate governance Transparency in reporting **Continuous improvements** Capacity utilisation 9,0 10,0 7,0 8,0

Management Team and a survey was sent out to our different stakeholder groups. The result of their updated ranking of our

Nordkalk

5,0

6,0

material issues is presented here from both a stakeholder and a business perspective.

SUSTAINABILITY RISKS

Risk management is an integral part of Nordkalk's operational planning, governance and follow-up. Mining is a process industry with risks for people and for the environment. These risks have to be managed at all times. We develope risk analysis for all parts of the business, and rules and activities to mitigate those risks. The risks are dealt with directly in our operations and all employees are responsible for reporting safety observations regarding risks to people or environment.

The responsibility for risk management in operations is delegated to each unit and function. Nordkalk's management team is responsible for co-ordinating risk management and reporting significant risks and how they are handled to the Board. The risk analysis for our processes at Nordkalk, has been evaluated during 2018, in accordance with the management system requirements. Risk management is therefore a natural part of all our sustainability focus areas.

Risks to the environment, social conditions, personnel, respect for human rights and business ethics are regulated and managed through the company's business policy and code of conduct.

Our sustainability risks summarised here, are the main risks related to Nordkalk's material issues. These risks have been evaluated for each material issue and how to mitigate and handle risk. Some of the risks apply to more than one material issue. Risks to our business and/or to our stakeholders have been a factor. As an example, permit processes can be mentioned here. They are a risk because of changes in legislation can occur, because it is difficult to predict their outcome and because social acceptance thereof can be difficult to obtain, even if the outcome of the legal process is positive. Those risks therefore need to be evaluated and followed up from more than one angle.

RISK	RISK MANAGEMENT	
Energy cost/profitability	Risk is managed by continuously monitoring and improving our energy efficiency as well as by ensuring an efficient sourcing of energy.	
Emission rights/availability	Risk is managed by improving our energy efficiency, by introducing renewable energy sources in our production processes and by investing in technologies whi decrease all kinds of emissions into the air.	
Permit - new rules, predictability uncertain, social acceptance	Good performance and unprompted behavior may be a way to avoid stricter rulings in the future. However this requires the minerals sector as a whole to behave in the same manner.	
Low quality of secondary raw materials may reduce commercial use	Survey of applications where low quality secondary raw materials can be used. Availability of deposit alternatives (if needed) in order to avoid blockage of normal production.	
Availability and/or quality of secondary raw materials may hamper upgrading value-added products	Systematic availability and quality follow-up; back-up deliveries based on virgin products.	
Corruption - financial and company image, money laundering	By having in place: Code of Conduct and Rettig's Management Policies as instruc- tions prohibiting corruption, process for anonymous reporting of misconducts, such as corruption (whistle blowing reporting), limits and rules for invoice and payments approvals, which are based on two-eyes and grandparent principles. Money laundering is also mitigated mainly through approval processes for invoices and payments and by getting to know the customers and suppliers. On supplier end also some auditing is done.	
New managers, creating gaps in leadership duties	Managers regularly receive training. We have improved succession planning and work is done to ensure that we have the right resources in the right positions.	
Availability for diversity in roles and locations	Recruiting personnel to our locations and business can be a challenge. Our loca- tions are mostly far from urban society and hence our choice of potential employees is sometimes limited. We are in a business that historically has attracted above all male employees.	
Employee turnover increases, work satisfaction	We monitor work satisfaction through yearly personnel survey and do actions based on the results.	
Severe accidents, threaths to life or deaths	Developing and promoting safety helps us work towards our goal of zero accidents. The risk assessment must be re-examined at the latest within 5 years. Accidents, near misses and risk observation are reported, assessed and analysed and actions are taken.	
Increases in costs and competition. Too slow process for change	Good cost control. Monthly follow-up and corrective actions through CIP managers and Operations & Procurement organisations if we are falling behind the cumulative targets.	
Quaity issues, image issues, loss of customers, loss of sales	Contact customers and take effective corrective actions promptly. Serve customers well. Improve actions, avoid repeated claims.	
Utilisation of lime kilns	Optimising the capacity and maintence of the lime kilns. Overview of the whole network of kilns in company by customer demands.	

MOVABLE WASTE WATER CLEANING PLANT

Nordkalk is involved in several waterrelated research projects. In 2018, a co-innovation project was started with the Finnish state research organisation VTT and several companies to develop a waste water cleaning plant operating in a movable shipping container. The plant cleans the waste water while nitrogen and phosphorus are recycled and clean water released. Lime acts as a cleaning agent by precipitating the phosphorus in the process.

ADDITIONAL ON-GOING R&D PROJECTS

At lake Kymijärvi in Lahti in Finland, the removal of phosphorus from the hypolimnion (the lower part of the lake water) is studied in collaboration with the University of Helsinki.

NP harvest is a project with Aalto University researching nutrient recovery and its technologies from different kind of liquid waste.

The Sulfa II project, with for example the Finnish Environment Institute, studies the management of sulfide-induced acidity in peat harvesting.

And at lake Alinenjärvi in Nokia, the 100year liming project is in its 22nd year to keep the lake in good condition.

MEETING THE UN GLOBAL GOALS

The UN Sustainable Development Goals is based on one of the largest global consensus processes ever carried out. The goals have been ratified by practically all countries and consequently form an important framework for how the global community will work towards common societal goals of importance for humanity.

The goals are also important to Nordkalk. They provide a common language around long-term sustainability, and are increasingly being used by our different stakeholders.

We have analysed where we can contribute to the goals. By projecting the goals onto our material issues, we have gained a good understanding of which of our efforts that have the biggest impact and contribute to the different global goals.

Climate Impact Goal: 3, 7, 9, 11, 12, 12

Responsibility for land, water and biodiversity, Goal: 6, 14, 15

Resource consciousness and circular solutions, Goal: 6, 7, 8, 12, 13

Society engagement and community development, Goal: 6, 9, 11, 17

Ethical behavior Goal: 1, 3, 4, 5, 6, 8, 10, 16, 17

Good place to work Goal: 4, 5, 8

Safe place to work Goal: 3

Economic stability and profitable growth Goal: 4, 8, 15, 17

Quality of all activities Goal: 4, 8, 9, 17

UN SUSTAINABLE DEVELOPMENT GOALS



ble supply chain



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

REDUCED

INFOLIAL ITIES

Transports,

dialogue and

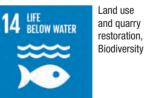
Local

support

Energy, Emissions, Transports, Material and waste management, Recycle, reuse in value chain, Green solutions and products

Transports, Industrial relations and public affairs, Continuous improvements, Capacity utilisation







Responsible

supply

chain

Emissions, Transports, Material and waste management, Recycle and reuse in value chain, Green solutions and products DECENT WORK AND ECONOMIC GROWTH ECONOMIC GROWTH

Eneray, Emis-

Material and

waste manage-

ment, Recycle

and reuse in

value chain

sions, Transports,

Green solutions and products, Business ethics and anti-corruption, Human rights, Employee engagement and development, Labor practice, diversity & equality, Economic performance and growth, Customer satisfaction, Secure limestone reserves, Corporate governance, Capacity utilisation



Ethics and anti-corruption



Land use and quarry restoration, Biodiversity, Secure limestone reserves



Partnerships and projects beyound our current business, Industrial relations and public affairs, Responsible supply chain, Sustainable leadership, Customer satisfaction, Transparency in reporting





Water and sanitation are critical to the survival of people and the planet and relates to issues like drinking water, sanitation and hygiene, but also the quality and sustainability of water resources worldwide. Lack of clean water and sanitation affects food security, individual health, healthy ecosystems, thriving communities and stable economic development.

Clean water and sanitation are one of the highest global risks. Millions of people die every year from diseases associated with inadequate water supply, sanitation and hygiene, even though there is enough fresh water available on the planet.

According to the Sustainable Development Goals Report 2018, too many people still lack access to safely managed water supplies and sanitation facilities. Water scarcity, flooding and lack of proper wastewater management also hinder social and economic development. Increased water efficiency and improving water management are critical to balancing the competing and growing water demands from various sectors and users.

NO ONE CAN DO EVERYTHING, BUT EVERYONE CAN DO SOMETHING

Water is also a key resource for many businesses, with risks connected to quality, availability and access. And for some companies, water and sanitation can also be an opportunity. According to the worldometer/UN, agriculture accounts for 70% of all water consumption, compared to 20% for industry and 10% for domestic use. In industrialised nations, however, industry consumes more than half of the water available for human use.

Besides minimising our own impact on water issues and producing products that have a positive effect on many water issues, we also engage in and sponsor different external water projects on a local, national and global level.

WATER USE IN OUR BUSINESS

Water is used in our production, even though the limestone industry is not a big consumer of water. Limestone is also a clean product and not dangerous to the environment. In quarries, water collects on the bottom as groundwater seeps in through cracks in the bedrock. Rain and melt water from nature also end up in the quarry. This water is clean. If a quarry extends deeper than groundwater level, it can have an impact on groundwater levels in the surrounding environment. Many of Nordkalk's quarries are shallow and do not affect the groundwater level.

Water is also used for washing stones, yards and vehicles. Recycled water is used when possible. In our flotation plant in Finland, water is recycled and the amount of water circulating in the closed system is about six million cubic metres. The system includes sedimentation ponds, where the flotation sand, a useful by-product of the process, settles to the bottom, and cleared water is reused in the process.

All Nordkalk sites have Water Management Plans and each quarry must carry out its operations with an absolute minimal negative impact on both the surface water and groundwater. In several of our sites, we deliver water to the municipal water network.

PRODUCTS FOR CLEAN WATER AND SANITATION

Limestone-based products are used for water treatment in a wide varity of applications including drinking water, wastewater, process water and cleaning of lakes and watercourses.

For treating drinking water, lime is often used to raise the pH level of the water and adjust alkalinity. Different raw water requires different treatment, and normally goes through several steps where lime is used in different ways in the process. It is important to check the chemistry of the lime and carbon dioxide equilibrium, both for taste and quality, and to prevent corrosion in our pipeline networks.

In waste water treatments, the goal is to minimise the burden on the receiving water courses by removing all organic, oxygen-consuming compounds and nutrients. In municipal waste water plants, treatments with physical, biological chemical processes, are used for controlling pH and alkalinity, precipitate phosphorus, stabilise sludge and remove odors. Lime products are also good for precipitating different metal ions and anions.



DESALINATION OF SEA WATER

Lack of drinking water has been a problem on Gotland for many years. To cope with the future drinking water supply, the local municipality has built a plant for the desalination of sea water from the Baltic Sea. It is a sustainable solution that also reduces groundwater consumption.

In sea water desalination, an advanced purification technique is used which makes the water very clean, soft and aggressive. Lime is then needed to give hardness and alkalinity to the water. By passing the water through a filter of fine limestone, Nordkalk's product Filtra A, we get stable water that reduces the risk of corrosion on the pipeline network and maintains the same water quality all the way to the consumer.

The lime dissolves in the water but provides a mineralised and tasty drinking water with calcium supplements for positive effects on health. Tap water is best for the body and the best drinking water contains lime.

The method is well proven and documented and is reminiscent of what happens in nature. It's an easy process with less risk of overdose, and one that is good for the working environment, cost-effective and with a very low environmental impact. Competing solutions in the form of lye or soda are considerably more harmful for the environment and difficult to dispense.

CLUB OF GEOLOGY FANS

Nordkall

Fossilised shrimps, fishes, mussels, horseshoe crabs and much more from over 145 million years ago can be found at Nordkalk's quarry in Sławno, Poland. The spot is called "the Polish Solnhofen", a name that comes from one of the most famous paleontological sites in the world located in the southern part of Germany. No wonder it attracts scientists and students from all over the world. In June members of the Club of Geology Fans operating at the Geopark in Kielce travelled to Sławno quarry to hunt for some paleontological treasures from the Late Jurassic period. For most of the participants it was their first visit to the operating limestone quarry and activities in the field were proceded by safety training. At the end of the day, there was a large collection of beautiful fossils ready to become a part of the exhibition at the Sławno plant.

CHAMPAGNE FERMENTED IN NORDKALK'S LIMESTONE MINE

Deep down in Tytyri mine French champagne is lovingly being fermented. This exceptional project started when The Charles Heidsieck Champagne House decided to experiment at Nordkalk's mine in Tytyri, Finland, to see how it lends itself to the fermentation of champagne.

The future champagne storage cellar in the Tytyri mine is located at an impressive depth of 175 meters, but the conditions are very similar to France: the temperature remains between five and eight degrees Celsius all year round. Only time will tell how the northernmost and deepest fermentation cellar in the world treats champagne during the final steps of the fermentation process.





MINING MUSEUM IN MIEDZIANKA

Ten years ago Nordkalk supported the idea of opening the Mining Museum in Miedzianka and since than has donated many exhibits related to the operations of the mining plant, as well as interesting geological findings from the Miedzianka quarry. In 2018 the Mining Museum celebrated its 10th anniversary with a new temporary exhibition "Polish paleontologists in the Arctic and Antarctic". The exhibition was organised on the initiative of Nordkalk thanks to cooperation with the Paleobiology Institute of the Polish Academy of Sciences and the Association of Friends of Geosciences PHACOPS. This is the first exhibition of its kind in Poland, unique due to the rarity of the presented specimens of polar fauna and flora. The exhibition will be open to the public for the whole year and will run regular workshops for local schools. It is the start of a series of exhibitions under the patronage of Nordkalk.

PLASTIC BOTTLE DECOMPOSED UP TO 400 YEARS

Plastic waste is a growing problem. Larger elements break down into smaller particles not visible to the eye. It creates a deadly trap for whales, dolphins and other ocean dwellers. Corals are destroyed by floating waste, and the fish, taking them for food, swallow it. The plastic microparticles end up in our food chain. Plastic waste on our beaches, also threatens people and companies in the costal areas. Inconsiderate use of plastics and irresponsible management of plastic waste is bad for the oceanic waters of the world. As consumers, we can protect our planet by reducing plastic waste.

In Miedzianka, Poland, 140 000 units of 0.5 I plastic bottles were used every year because the tap water is not drinkable. If each person drank two 1.5 L bottles of water every day, around 16.8 kg/person of plastic waste would be created. This can be significantly reduced by using water dispensers or filtering tap water. In July 2018, six 19 L dispensers for recirculating plastic containers were installed in office buildings. We reduced the number of small plastic bottles by 10%. If we reduce the number of plastic bottles by 50%, plastic waste will be reduced by 2.5 tonnes per year. The plan is therefore to implement

similar solutions in all of Nordkalk's locations in Poland and increase the number of dispensers in each location. Employees will be equipped with reusable bottles to be filled from the dispensers. It is a solution that decreases plastic waste and helps to save the environment and money at the same time.



TO LOWER OUR CO2 EMISSIONS AND USE OF FOSSIL FUELS, TESTS ARE PERFORMED TO INCREASE THE SHARE OF BIOFUELS IN OUR LIME KILNS.

CLIMATE IMPACT

The lime industry is and will continue to be energy intensive. While certain physical and chemical restrictions limit what level of improvement is theoretically possible to achieve, Nordkalk continues to actively work on issues relating to energy efficiency and climate impact. Producing quicklime will always require a lot of energy due to the exothermic nature of the process and CO_2 will be released from the limestone during calcination due to the chemical reaction formula. Still, we see possibilities to continuously improve our performance both when it comes to energy efficiency and emissions.

In Finland, Nordkalk has a long history of participating in the Energy Efficiency Agreements and is currently participating in the latest agreement which covers the years 2017-2025.

Nordkalk also has a long experience of capturing secondary heat from our lime kilns and using it either on-site or delivering it to the local communities' district heating networks. All rotary kilns in Nordkalk are equipped with heat recovery set-ups.

During recent years, Nordkalk has decreased emissions into the air by investing in new abatement technology at many of its production plants. The new equipment helps to cut down on both gaseous and particulate emissions. All Nordkalk lime kilns are covered by the EU Emission Trading System, which ensures that the CO₂ emissions are followed rigorously.

ENERGY EFFICIENCY ACTIONS

More than 30 separate energy efficiency improvements were reported during 2018. The projects cover a wide array of improvement actions, such as the optimisation of grinding processes, replacement of motors, pumps, lights and other equipment with more energy efficient versions, improved production, transport and maintenance routines etc.

INCREASED USE OF BIOFUELS

Last year, Nordkalk's plant in Ignaberga changed its production to 100% use of biofuels, by using sidestreams from the feed production.

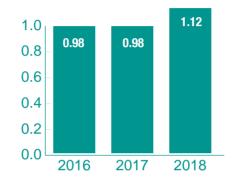
In Vampula, Finland we have been using locally produced biogas since 2011. The biogas is supplied to the plant by a 1,5 km long pipeline, so in addition to decreasing the fossil CO_2 emissions from the plant, the amount of transports is also reduced.

At the end of 2018, a biofuel test programme was started in Köping, Sweden. The programme aims to decrease the use of fossil fuels in quicklime production. In 2018, the first full-scale tests were carried out and the project will continue in 2019.

SITE EXAMPLE: IMPROVEMENTS IN KÖPING 2018

Nordkalk has also made several other improvements at its production plant in Köping during 2018. The heat recovery setup has been updated, which allows for more secondary heat to be captured. This

IMPROVED ENERGY EFFICIENCY %



increase the amount of district heat that can be delivered to the community. In 2018, Nordkalk delivered 40 GWh of district heat to the local community in Köping and Arboga.

The kiln automation system received an update as the function of the kiln optimiser software was improved. The optimiser maximises the energy efficiency of day to day kiln operations.

TRANSPORT

At Ignaberga, an increase in production rate enabled us to optimise the customer delivery network. Having less demand for supportive deliveries from alternative Nordkalk sites to Southern Sweden we could greatly reduce the overall transportation distances to our customers. The Ignaberga production process was improved using the Lean Six Sigma methodology. Limiting factors in the production chain were identified, ranked and purposely addressed.

MATERIAL ISSUES

- Energy
- Emissions
- Transports

- To lowering emissions to air by improving our energy efficiency and monitoring our completed energy efficiency actions against the annual target.
- To reporting our CO₂ emission performance and aiming to continuously reduce emissions per tonnes of quicklime.
- To investing a minimum of 10% of our investment budget (3year rolling average) into better environmental technologies and to increasing the automated monitoring of the emissions.
- To choosing low-emission alternatives for logistics – transports by sea or rail when possible. Aiming at a higher payload and alternative fuels in truck transports.

LIME IS USED FOR THE PURIFICATION OF DRINKING WA-TER, WASTE WATER AND PROCESS WATER, BUT ALSO TO PREVENT EUTROPHICATION IN OUR WATER COURSES.

RESPONSIBILITY FOR LAND, WATER AND BIODIVERSITY

BIODIVERSITY

Mining operations take up areas of land and alter the landscape. This is one of Nordkalk's main environmental impacts. At the same time new environments are created as a result of a mining operation. Mostly new and valuable preconditions for biodiversity values are also created. Environmental values and biodiversity issues are considered during the entire life cycle of mining operations.

When a new environmental permit is prepared, environmental values are one of the main focuses during the investigations. Recultivation work usually includes actions aimed at restoring suitable environments for the local species. The aspects that are important for biodiversity must also be known and respected during the active operations phase.

This is well recognised at Nordkalk and thus this topic is also included in the strategy. The target is to have at least one active biodiversity project per geographic region ongoing.

In 2018, biodiversity issues were documented in a systematic way for all Nordkalk mining sites. This is a long-term effort and an issue which is on the agenda for the future. We have now selected a number of projects which will be developed further in more detailed project plans and concrete improvement actions.



The projects will focus on diverse aspects and they include improving the environment of birds' habitats in Estonia, a lime loving plant in Finland, bats in Sweden, butterflies on Gotland island and frogs in Poland. We are very confident that we can guarantee a variety of species a good place to live alongside our modern mining operations.

QUARRY RESTORATION

Recultivation plans are now updated to the best knowledge available. The challenge in most cases is that the real actions are still far in the future, and that's why it is premature to involve the stakeholders in the planning process. So far the plans predominantly focus on ensuring safety around the sites.

There is potential to provide the public recreation possibilities at those of our sites which are entering the recultivation phase. There is interest in both swimming spots and bird watching. At this point we must ensure safety and prioritise production.

WATER MANAGEMENT

In all Regions, we now have valid plans from 2017 and forward for all but two sites. Reviews and updates were made for 13 sites in 2018 and early 2019. The number of sites are considered in relation to our mining sites. One minority share JV is excluded. To provide fresh water sources to the close by communities is a potential.

NUMBER OF UPDATED WATER AND RECULTIVATION PLANS FOR 2018

Recultivation plans Number 22 Out of site 23 Water management plans Number 21 Out of site 23



• Land use and quarry restoration

2

- Water management and effluents
- Biodiversity

- To long-term planning in land and water use, covering the whole lifespan of a mine. When the extraction phase is over, the site is developed into a natural or otherwise usable state.
- To developing comprehensive plans for water management and handling of extractive waste.
- To describing the ideas for the post-mining phase and the related financial measures in recultivation plans.
- To recognising the endangered species and protective actions at our quarry operations, and keeping biodiversity records.

A SIDE STREAM FROM QUICKLIME PRODUCTION, LIME KILN DUST, IS REUSED IN STRUCTURE LIME FOR AGRICULTURE.

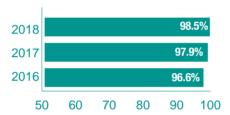
RESOURCE CONSCIOUSNESS AND CIRCULAR SOLUTIONS

Resource consciousness has lately become a clear focus area in all Nordkalk operations. The need to utilise quarried raw materials as efficiently as possible has been clearly understood and accepted. The company has gradually succeeded in improving the material efficiency of its operations to a very good level. The efforts are often also supported by direct cost savings when less material needs to be transported to landfill.

During the past years, resource consciousness and material efficiency have been supported by intense efforts to increase the productisation and use of different internal, as well as customer-related, side streams. In 2018, such products comprised 14.3% of the total sales volume, equalling about 5.6% of the net revenue, replacing the need for virgin raw materials. Further product development in this area creates a huge opportunity for Nordkalk in the future, when the circular economy will be a strong driver on the market.

Besides the above-mentioned circular solutions, Nordkalk also delivers residual heat from several lime kilns to be used in district heating networks, and clean groundwater from one mine to be utilised as drinking water by the surrounding municipality.

MATERIAL EFFICIENCY 2018



Raw material availability, quality control and legal approval processes are challenges to be controlled as the business cases are based on side streams and the utilisation of waste as raw material.

Legally binding directives (EU and national levels) will be the most important factor in setting boundaries for the future development of recycling and reuse of side streams and waste materials. Efforts to maximise the use of such raw materials for circular solutions are restricted by the need to secure the cleanness of circulated products on a precautionary basis.

Additional limitations are caused by the unpredictable availability of useful side streams as raw material sources for circular products. Such side streams are not produced for a specific need, but instead generated as an unwanted secondary material (or even waste) from the main production process.

SIDE STREAMS INTO NEW PRODUCTS

Nordkalk strives to use the side streams of its own production and helps its customers to do the same. The pulp industry uses lime in its processes, and one of the resulting side streams is electro-filter dust from the lime mud kilns. This fine and reactive material has mostly been used for adjusting the pH level of industrial waste waters. In 2018, a new agricultural product, Nordkalk Aito+, was created based on lime mud kiln dust. The new product strengthens Nordkalk's agri portfolio by offering a rapidly reacting alternative for farmers.

Lime kiln dust (LKD) is a side stream from quicklime production. It is particularly reactive, which makes it suitable to be used as it is or as an ingredient in structure lime, Nordkalk Fostop[®]. In 2018, LKD was also tested in a new recipe for Nordkalk Terra[®] soil stabilisation. The reactivity of LKD works well in stabilisation, to create strong and durable foundations with all soil types.

The product will continue to be fine tuned in 2019 to ensure it is of the best quality. In Sweden, LKD is also used in asphalt production as an adhesive additive. 3

MATERIAL ISSUES

- Material and waste management
- Recycle and reuse in value chain
- Green solutions and products

- To improving the material efficiency in our operations, thus extending the lifetime of our valuable natural limestone resources and reducing waste with a 100% material efficiency target.
- To fully utilising all internal side streams, whether limestone-based, wall rock, energy or water.
- To improving the utilisation of customer-related side streams wherever possible.
- To supporting and developing limecatalysed solutions for efficient reuse of organic residues and nutrients.
- To developing circular solutions to improve fertility of arable land and to reduce eutrophication of water courses.
- To developing products with non or low carbon footprints.

MAIN MEMBERSHIPS IN INDUSTRY ASSOCIATIONS

	International	Finland	Sweden	Poland	Estonia
	EuLA - European Lime Associ- ation	FinnMin - The Finnish Mining Association	Swedish Lime Association	Polish Lime Association	Association of Construction Mate- rial Producers of Estonia
	ILA - International Lime Asso- ciation	CFCI - The Confederation of Finnish Construction Industries RT (incl. Infra Contractors Association)	SweMin - Swedish Association of Mines, Mineral and Metal Producers	Polish Association of Aggregates Producers	Estonian Association of Mining Enterprises
	IMA Europe - Industrial Minerals Association (through European Calcium Carbonate Association)	VVY - Finnish Water Utilities Association	MinFo - Swedish Mineral Process- ing Research Association	Polish Asphalt Pavement Asso- ciation	
原語			Swedish Concrete Association (Svensk betong)		
			SLU - Swedish University of Agricultural Sciences		
			VFK – Association for Safe Feed		

IN LOHJA, FINLAND THERE IS A MINING MUSEUM, TYTYRI MINE EXPERIENCE, A CHAMPAIGNE CELLAR AND AN ELEVA-TOR TEST AREA IN THE OLD PARTS OF THE MINE.

6

SOCIETY ENGAGEMENT AND COMMUNITY DEVELOPMENT

Nordkalk strives to be a good neighbour engaging in various actions for the benefit of the local community. Open and transparent communication with our closest neighbours and local communities are a must to ensure we receive social acceptance for our operations. Good dialogue is the basis for mutual understanding of each other's needs. For Nordkalk, it's important to minimise impacts from the operation. A well-functioning collaboration is good for all parties and usually benefits the local communities. Feedback from our local stakeholders is expressed in neighbour meetings, open houses, consultations, complaint handling, and the feedback form on our webpage.

To increase awareness of the value of limestone in society, we also invite groups to visit our plants and take a tour of our quarries. We engage in different local events and projects to create useful added value for the local society. We sponsor cultural events, museums, schools, sports and others, but also contribute by delivering district heat and clean drinking water and infrastructure. We are present on social media to keep information updated and transparent with multiple Facebook pages, Instagram, LinkedIn, Youtube and Twitter besides our webpages in local languages. Another area of societal engagement is our cooperation in research and development programmes, on a local, national or global level, using limestone for different environmental purposes to achieve cleaner air, water and soil.

SOCIAL ACCEPTANCE PLANS

During 2018, each region, North East Europe, Scandinavia and Central Europe, made Social Acceptance plans to clarify and emphasise the importance of social acceptance in the local communities where we operate. The plans list our main stakeholders for the sites in each region and how feedback communication and complaints are handled. An overview of planned activities and local cooperations and sponsorships are also included.

RESEARCH CENTRE IN SWEDEN

A research centre, *the Centre for Sustainable Production of Cement and Quicklime*, was established at Umeå University, Sweden in 2018. The industrial partners behind it are the leading Nordic manufacturers; Nordkalk, SMA Mineral and Cementa, and the centre was formed together with the Association of Mineral Technology Research and the Department of Applied Physics and Electronics. The centre has a five year work plan with a focus on developing new knowledge and promoting development related to production capacity, operational availability, energy efficiency, raw material, product quality, emissions, the circular economy and sustainability in the production of quicklime and cement clinker.



EYE-CATCHING ROUNDABOUT

In Poland, limestone from Miedzianka quarry created an eye-catching roundabout. Nordkalk provided different fractions of aggregates for the renovation of the main roundabout in Piekoszów - a village located a few kilometers from Miedzianka. An interesting composition of stones of various colours and sizes and new plants now attracts the eye. It provides a beautiful setting for the historical statue of Saint James the Apostle who is the patron of Piekoszów. Everyday most of Nordkalk's employees working in Miedzianka pass the roundabout on their way to work.



MATERIAL ISSUES

- Local dialogue and support
- External water projects
- Partnerships and projects beyond current business
- Industrial relations and public affairs

- To being a good neighbour and corporate citizen, engaging in efforts that benefit the local communities and society at large.
- To acting in an open, transparent and responsible way.
- To providing jobs and services to local communities, such as district heat and clean water, and supporting local activities.
- To engaging in environmental projects contributing to clean air and water, and productivity of agricultural land, on a local, national and global level.
- To constantly developing our communication with various stakeholders to enable dialogue.

RETTIG POLICIES, NORDKALK PROCESSES AND THE COMPANY CODE OF CONDUCT WILL ALL BE COMMUNI-CATED TO ALL PERSONNEL IN NORDKALK.

ETHICAL BEHAVIOUR

Compliance with laws and regulations is a precondition for a company operating in a modern business world. Nordkalk believes that ethical business conduct is especially important in the field of business in which it operates, and is therefore committed to enhancing an ethical business culture in all of the countries in which it operates. The Nordkalk values of openness, fairness, modesty, trust and respect cause the company to strive to act in an ethical manner in order to fully represent these values.It is also recognised that some of Nordkalk's operating countries or joint-venture undertakings may carry with them exposure to risks related to corruption or breaches of competition law.

Nordkalk's owner, Rettig Group, has formulated a set of policies to guide the actions of its employees and directors, as well as their relations with third parties. These policies apply to Nordkalk as a majority owned subsidiary of Rettig Group. The Business Ethics Policy is one of the Rettig Management Policies and Procedures, which must be followed by everyone at Nordkalk. The Business Ethics Policy stresses among other things that ethical conduct is characterised by honesty, integrity and freedom from deception. The highest ethical standards based on transparency in all activities should be maintained.

In addition to the Rettig Group policies, Nordkalk has its own Code of Conduct (page 6) and Supplier Code of Conduct to provide guidance for acting in an ethical way. It is important that these two documents are well implemented throughout the organisation, and Nordkalk therefore plans to continue to educate its personnel on them to ensure they have a deeper understanding than before. Nordkalk continues to update them on a continuous basis.

Nordkalk rejects corruption in all its forms. As strict compliance with applicable antitrust and competition rules is of the utmost importance, in 2018 Nordkalk laid the groundwork for a competition compliance training programme that will take place in 2019.

Regarding ethics in Nordkalk's supply chain, Nordkalk expects its suppliers to commit to follow the Supplier Code of Conduct in order to assure that suppliers also adhere to a high level of business ethics (read more on page 7).

Nordkalk has committed to respect human rights in its Code of Conduct. Nordkalk operates mainly in low-risk countries regarding human rights, with some exceptions such as Ukraine and Turkey. Nordkalk has identified human rights as one of the key focus areas under sustainability. Consequently, Nordkalk will work towards full compliance with UN Guiding Principles on Business and Human Rights. This requires companies to conduct human rights due diligence procedures to identify, assess and address the human rights risks and impacts, among other things. Nordkalk encourages all its employees and managers to report any suspected cases of misconduct regarding human rights, corruption, breaches of laws or other unethical behavior. Employees are encouraged to contact their supervisors, but a confidential whistle-blowing procedure has also been available since March 2017.

Whistle-blowing complaints are handled with discretion and confidentiality, and are investigated by Nordkalk's Chief Legal Officer reporting to the Board of Directors' Audit Committee. Nordkalk will not retaliate against any employee or manager who in good faith reports a suspected violation or concern regarding compliance.

New instructions for the whistle-blowing procedure were prepared 2018, to be introduced in 2019. The plan is to make the whistle-blowing procedure also open for external use (ie. suppliers, neighbours and other stakeholders) to encourage openness and wider possibilities for reporting.

In 2018 there were two reported cases of misconduct, both of which were investigated and resolved in 2018. One was found to be unfounded during the investigation and the other led to process improvements.

NUMBER OF COMPLAINTS FROM THE WHISTLE-BLOWING SYSTEM

2016	2017	2018
-	0	2

5

MATERIAL ISSUES

- Responsible supply chain
- Business ethics and anticorruption
- Human rights

- To a high standard of business ethics and integrity, and respecting human rights.
- To running our operations according to law and applicable regulations, Rettig Group policies and the Nordkalk Code of Conduct.
- To treating people with respect, and giving them equal opportunities.
- To treating our suppliers fairly and with respect. Our rules are transparent and based on the Supplier Code of Conduct, and compliance with them is audited in a systematic way.

NORDKALK HAS CONTRIBUTED TO A TRIP TO THE BALTIC SEA SHORE FOR EMPLOYEES AND THEIR FAMILIES, WHICH IS ONE WELL-BEING ACTIVITY TO HELP ENSURE A HEALTHY WORK-LIFE BALANCE.

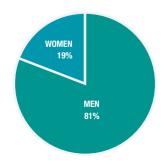
GOOD PLACE TO WORK

Actions to harmonise and improve the ways of working across countries continued in 2018 under the One Nordkalk umbrella. A personnel survey was conducted in March, showing a satisfactory rating like the year before. As follow- up, personnel teams have implemented 113 improvement actions. One of the themes in 2018 was increased internal communications, which was facilitated by the launch of a new intranet at the beginning of the year.

LABOUR PRACTICE

Nordkalk complies with international labour standards and 60% of employees are covered by collective agreements. A visible change on the job market has been seen in Poland. The unemployment rate is still dropping: Poland has an unemployment rate of 2.9% and Germany 3.2%. All industries have noticed high salary increases and due to economic growth more than 60% of employers have difficulties finding employees. This situation impacted a higher fluctuation in Nordkalk

PERSONNEL BY GENDER IN 2018 %



Poland – 9.8%. Some locations in Sweden also struggle to find blue-collar employees.

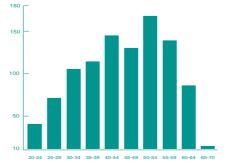
EMPLOYEE'S COMPETENCES

All white-collar positions at Nordkalk (in Finland only upper-level white-collar workers) are evaluated using the IPE methodology (International Position Evaluation provided by Mercer). One of the Management Team's actions after the previous personnel survey was to introduce the IPE methodology to make an equal and transparent incentive system. The change of method will bring many benefits: in general, incentive maximum levels will increase for many positions. Even though this means additional costs for the company, greater employee motivation is a priority.

PERSONNEL SURVEY

The 2018 personnel survey resulted in a Satisfactory level like the previous year, although we were aiming for Satisfactory+. Many units had a better result in 2018

PERSONNEL BY AGE IN 2018



compared to the previous year, but some teams have experienced challenges. Since the last survey, efforts have been made to support the departments with the weakest results by paying more attention to problem solving and allocating both internal and external resources. Many improvement actions were implemented in the areas of communication, well-being activities and personnel development. We have conducted meetings for our managers that have provided training and presentations on positive and open communication.

WELL-BEING AT WORK

All Nordkalk plants are now smoke free. We have launched a number of programs promoting healthy lifestyle that include physical activity and cultural events.

2018 saw the launch of the Active Life coaching programme in Finland. The programme applies the most up-to-date knowledge and understanding to human health and well-being. Participants meet with fitness experts and personal trainers for a personal coaching programme that lasts six months.

EMPLOYEE TURNOVER

2016	2017	2018
8.52%	8.64%	8.39%



MATERIAL ISSUES

- Employee engagement and development
- Labour practice, diversity & equality

- To being a very good place to work at, with engaged personnel.
- To developing the well-being and competence of our personnel.
- To encouraging open communication.
- To establishing a good leadership culture, taking diversity into account.
- To following-up personnel satisfaction on a yearly basis.

HEALTH AND SAFETY IS OUR NUMBER ONE PRIORITY. USING APPROPRIATE SAFETY EQUIPMENT AND METHODS AND ADHERING TO OUR SAFETY REGULATIONS ARE VITAL FOR OUR PERSONNEL AS WELL AS THE SUBCONTRACTORS WORKING AT OUR SITES.

SAFE PLACE TO WORK

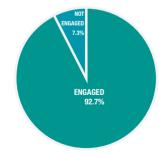


A Good and Safe workplace is one of Nordkalk's strategic focus areas. We work continuously towards our ultimate target of zero accidents. Our commitment to health and safety (H&S) is our highest priority, an integral part of all our activities that applies to both our employees and our subcontractors.

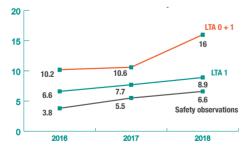
Nordkalk has had OHSAS 18001 certification since 2012 in the whole company. We have zero tolerance for drugs and alcohol, and a no smoking policy applies to all our premises. Our long-term target in H&S is zero accidents, for personnel and anyone on our premises. We have a midway LTA1 rate target of less than two by the end of 2022. Our gradual improvement in H&S is a result of continuous and long-term work towards zero accidents. We believe that all risks arising from work can be managed through foresight and careful behaviour. We therefore demand a commitment from everyone working on our premises to actively contribute to a safe behavior. Together we can improve workplace safety for everyone!

Our employees are active in safety matters and open to improvements. Some examples of our activities and processes for sharing information and learning from others include, monthly H&S reports, an annual Safety Week, safety committees for H&S discussions between management and personnel representatives, safety alerts to inform employees about accidents or serious near-misses, a shared H&S guide, campaigns, a tool for the chemical register and related data sheets.

EMPLOYEES ENGAGED IN SAFETY WORK %



ACCIDENT RATE AND SAFETY OBSERVATIONS



The work-related accident rate (LTA1) was 8.9 (7.7 in 2017), two more accidents than in 2017, and did not meet the 2018 target of five. LTA1 is the definition for an accident leading to absence for at least one day. The overall work-related accident rate (LTA0 +LTA1) was 16.0 (10.6 in 2017) and did not meet the 2018 target of 12. All countries except Finland reduced their number of accidents by 65% compared to 2017. A Lean project was started in Q4 with the target of reducing the number of LTA1 accidents & lost working days in Finland. In 2018 92.7% of all employees made observations during the year. The calculated average number of observations per employee (safety observation rate) was 6.6 (5.6 in 2017). It shows the right attitude and a high level of awareness of safety issues. All statistics are based on our own employees including subsidiaries (with the exception of JV NorFraKalk).

We participate in EuLA's (European Lime Association) Safety Task Force and in regional industry organisations' H&S activities. The structure of our organisation includes NK Management/Work committees at Corporate and regional levels, and Safety Committees at a unit/local level.

In 2018, our H&S work focused mainly on actions to improve positive safety behavior & culture and to unify processes & instructions. We developed further the common safety reporting/handling tool (GRIA) in order to include a new observation type: safety behavior. We also unified and implemented our H&S risk management processes into GRIA, and incorporated unified checklists for risk analysis and inspections. We work in close cooperation with our contractors in safety matters. Contractors get safety information/training and we encourage them to report observations, near misses and accidents in GRIA.

The programme has many advantages: good options for data analysing, common account for all employees that makes it possible to monitor reported occurrences, easy and logical way for obtaining periodical reports and other needed information. Via GRIA we can share our information and learn from other companies' experience. The system is user-friendly and easy to learn; all our languages are supported and available via online and in the app.

Read more about our H&S work on next page.

MATERIAL ISSUES

Occupational health and safety

- To being a safe place to work at, with zero accidents for personnel and anyone on our premises.
- To establishing a positive safety culture, where all employees are engaged in safety thinking and committed to safe behaviour and an accident-free working environment.
- To developing the personnel's competence in safety issues.
- To ensuring contractors' compliance with health and safety regulations.
- To giving priority to health and safety in all decisions and situations.



FOR THE MOMENTS THAT MATTER

SAFETY INSPECTIONS

In 2018 we introduced two new types of inspections: serious 7 and 5S. The checklists are unified and the inspections are carried out/handled in GRIA.

Serious Seven (S7). Operations in cooperation with the H&S team listed the seven most serious risk areas/types of work and made a checklist regarding those risk areas. These inspections are carried out by every unit manager once a month. The inspection targets behaviour. The most important aspect of the inspection is the interaction between the unit manager and the employees they meet during the inspection who perform this type of S7 high-risk work. The unit manager stops and talks to the employees, gives feedback and they discuss what improvements would be helpful in order to eliminate risks or make the work tasks easier. A total number of 118 S7 audits have been carried out in 2018. **5S**

THE 7 AREAS/TYPES OF WORK ARE: Lock out/Tag out/Try out (LOTOTO); Electrical safety; Working at heights; Mobile equipments/Vehicles; Machine guarding; Ground control/Rock scaling; Working with quicklime/slaked lime.

5S has been chosen as the Nordkalk method for workplace organisation to guarantee clean, tidy and safe workplace. The 5S methodology is a simple and universal approach that works in companies all over the world. Throughout the year, lots of old and unnecessary goods have been cleared away and 5S inspections have started in every country except Turkey. A total of 157 5S audits were held in 2018. And the quality of audits is improving all the time.

SAFETY UNIVERSITY

To further improve Nordkalk's safety culture and integrate safety behaviour into our everyday work, corporate-wide safety training, the Safety University, which focuses on attitudes, was rolled out in 2018 at management and upper levels. The training will continue in 2019 throughout the entire organisation to involve all employees.

SAFETY WEEK 2018

Safety Week is an event targeted at all groups of employees performing different types of activity, depending on each unit's needs and possibilities. Examples of activities from different units/countries include GRIA training, info meetings, 5S work, Serious seven (S7) inspections, emergency exercises, evacuation exercises, safety seminars, driving safety training, working at height training, demonstrations of PPE (personal protective equipment), blind spots and heavy working machines training, LOTOTO training, safety walks, fire protection training and first aid training with use of a defibrillator.

SAFETY DECLARATION

Certification that had to be signed by every Nordkalk employee and employees of contractors operating at Nordkalk's premises was implemented at the beginning of 2018 as a reminder of our safety rules and each individual's own responsibilities. We intensified the overseeing of compliance with safety rules. As part of this, it was a prerequisite for anyone working at Nordkalk's premises to study the safety rules and regulations and sign Nordkalk's Safety Declaration. Everyone is expected to abide by the safety rules as they would any other company rules, so the Safety Declaration is a reminder of them.

As a part of safety talks with contractors/ transport companies to remind them of hazards and our safety rules, a safety film was made at corporate level and adjusted for regional use. Signs on the required PPE (personal protective equipment), were checked, harmonised and updated to ensure that the right signs were in the right places on all Nordkalk sites.

SAFETY CAMPAIGN

Work Safely for the moments that matter. Being able to go home healthy after a day's work of course requires a safe working environment and the right kind of tools and equipment, among other things. But it also requires the right kind of attitude. Everyone must feel motivated to take care of themselves and their colleagues, not to cut corners, to demand the correct safety equipment and not to work in haste but instead plan the job in hand well and assess the risks in advance. An internal safety campaign was run to remind us to work safely for the moments that really matter.



E-LEARNING

At the end of the year, Nordkalk's E-learning platform, *Lime Learning*, was introduced to personnel with the first courses. This enables us to measure the amount of completed training and to reach out to all employees with training on HR-related issues. E-learning will be used for many different purposes. Its main purpose is to make learning more effective and more equal. All Nordkalk employees can use Lime Learning and the system is available in five languages: English, Estonian, Finnish, Polish and Swedish on computers or mobile devices.

Through E-learning, the company can also address learning needs in a better and more flexible way. Step by step, E-learning content is built into the E-learning tool. During the first year, the focus is on safety, introduction, company, legal and softwarerelated trainings. E-learning will not replace all forms of training, instead, the tool will complement the more traditional ways of learning.

TO US, GROWTH IS NOT ONLY ABOUT EXPANDING OUR BUSINESS AND SECURING RESERVES FOR OUR CUSTOMERS, BUT DOING IT IN A RESPONSIBLE AND SUSTAINABLE MANNER FOR THE BENEFIT OF FUTURE GENERATIONS.

ECONOMIC STABILITY AND PROFITABLE GROWTH

Nordkalk's core business in limestone performed well. In the quicklime business, competition was challenging. Nordkalk's turnover and EBITDA decreased slightly compared to the previous year.

STRATEGY

Nordkalk's strategy was refined in 2018, focusing on further developing the limestone business, e.g. AtriGran, and offering highly developed special products such as wollastonite. Both in the granulated and special products, preparations were made in order to increase production. In the quicklime business we carefully select growth opportunities and optimise our sustainable kiln and supply network. In January 2019, a decision was taken to close the lime kiln in Louhi, Finland by July.

In the fourth quarter of 2018, a comprehensive analysis was conducted to identify improvement needs in order to reduce costs and to increase the throughput and profitability of the whole company. The analysis showed clearly that Nordkalk has a strong core business, but at the same time significant potential for improvements to create a solid platform for growth. A major improvement programme was launched at the beginning of 2019, and a new CEO will be recruited to lead this change.

SECURE LIMESTONE RESERVES

Securing access to limestone is the fundament of Nordkalk's business. In 2018, we extracted 13.2 million tonnes of lime-stone. It represents less than 5% of the company's total reserves, which we aim to secure for a minimum of 20 years. Active drilling programmes, which were in progress at nine locations last year, are needed to reach the target.

In 2018, expansion of the extraction area was under way at the Lappeenranta site in Finland as well as in Karinu in Estonia. Preparations for expansion were continued in Miedzianka and Sławno in Poland, at Klinthagen on Gotland and Ignaberga in Sweden. In Buttle on central Gotland, where Nordkalk owns land, preparations for a future permit process continued.

Regarding the planned Bunge quarry on Gotland, a decision about the continuation of the permit process, which was started in 2006, is expected from the Supreme Court of Sweden in spring 2019.

Nordkalk has started to evaluate mineral assets according to the UNFC system, the United Nations Framework Classification. This will be carried out and cover all our limestone deposits in 2019. As the UNFC classification considers three dimensions, socio-economic, feasibility and the geological knowledge base, there will be a shift from reserves to resources. Up until now we have focused predominantly on the geological knowledge base. In the calculation of consumed assets in relation to the available reserves, no change to the previous has been made for 2018.

CUSTOMER SATISFACTION

A customer survey is conducted every third year. In 2017, the customer satisfaction index showed a good level. The next survey will take place in 2020. Effective and prompt corrections to reasons for customer claims often require thorough work and the cooperation of several departments. Each department needs to make customer claims a high priority so that we can take rapid action. The percentage of claims closed within two months, improved from 27% to 17% in 2018.

Nordkalk participates regularly in audits conducted by our customers. In 2018, a list of questions asked by our customers was drawn up with the purpose of improving and better meeting customer requirements. These audits are sometimes critical for winning customer tenders.



MATERIAL ISSUES

- Economic performance and growth
- Sustainable leadership
- Secure limestone reserves
- Customer satisfaction

WE COMMIT

- To long-term profitable growth, thus creating value for generations of stakeholders.
- To securing limestone reserves long into the future.
- To being a long-term, loyal partner for our customers.
- To providing local jobs and taxes.
- To being transparent in our reporting practices.
- To emphasising the sustainability perspective in all decisions and actions.

OUR CERTIFIED MANAGEMENT SYSTEM VERIFIES THAT WE ARE COMPLIANT WITH THE REQUIREMENTS OF ISO 9001 QUALITY, ISO 14001 ENVIRONMENT AND OHSAS 18001 HEALTH AND SAFETY. OUR PROCESS FOR CONTINUOUS IMPROVEMENT ENSURES OUR FOCUS ON BECOMING EVEN MORE EFFICIENT.

QUALITY OF ALL ACTIVITIES

Good progress was made on continuous improvement throughout the year. We moved onwards with 5S at all our main sites, introduced the Lean Six Sigma methodology to the company and performed four Lean Six Sigma training rounds. Our CIP process was updated and continued to be successful.

In 2018, 5S work was launched at every location in some form. 5S is a long process and change does not happen overnight, but the results can already be seen in many locations. A major improvement was to move 5S audits to a digital program called GRIA. Each audit is automatically recorded into the system which helps us to monitor change more effectively.

CONTINUOUS IMPROVEMENT PROCESS

Nordkalk started to use the Lean Six Sigma approach as a part of its continuous improvement process (CIP). In 2018 we trained a total of 58 LSS Yellow Belts and executed several LSS projects that will support our profitability going forward.

In 2019, we aim to train 50-60 more people to LSS Yellow Belt level. Through our LSS projects we have been able to open up bottle necks in our operations resulting in better than 20% capacity increaces in some of the projects.

The CIP process was updated and we clarified the definitions of CIP initiatives and defined the reward system for our employees related to approved CIPs. In 2018, a total of 174 CIP suggestions were approved.

NUMBER OF CIP SUGGESTIONS PER COUNTRY IN 2018



Workstation lifecycle management at Nordkalk enables the lifecycle of our computers to be prolonged. Computers are recycled and put to a new use, which decreases CO2 emissions, energy consumption and waste. Workstation lifecycle management is certified by ISO 9001, ISO 14001 and ISO 27001 through Nordkalk's leasing partner.



CERTIFIED IN QUALITY, ENVIRON-MENT AND HEALTH AND SAFETY

Nordkalk's operations are certified according to ISO 14001, ISO 9001 and OHSAS 18001. In 2018 all our multisite certificates were renewed.

Our operations in Turkey currently have their own certified management system, but we have plans to also include Turkey in our multisite certificates in coming years.

Our Turkish operations are currently certified according to the ISO 9001:2015 Quality Management standard and the ISO 14001:2015 Environmental Management standard by ASB Certification. A Health and Safety certification according to the OHSAS 18001:2007 standard has been issued by the CPC Certification Body. All certificates are valid for one year starting on 4 April 2018.

MATERIAL ISSUES

- Corporate governance
- Continuous improvements
- Capacity utilisation
- Transparency in reporting

WE COMMIT

- To improving efficiency, reducing unnecessary work, reducing mistakes and costs.
- To applying the continuous improvement process.
- To harmonising and unifying our business processes.
- To implementing modern technology such as digital solutions.
- To making our daily life at work run more smoothly than before.

KEY PERFORMANCE INDICATOR TABLE

FOCUS AREA/KPI	ACTUAL 2016	ACTUAL 2017	ACTUAL 2018	GOAL 2018	GOAL 2019	KPI CALCULATION	
CLIMATE IMPACT							
Improved energy efficiency, %	0.98	0.98	1.12	0.75% / a	0.75% / a	Annual energy saving impact from energy efficiency actions implemented during subject year.	
Specific CO ₂ emissions for kiln processes	1.1 tonne	1.1 tonne	1.1 tonne	Decrease in the long term	Decrease in the long term	CO ₂ emissions / tonne quicklime	
RESPONSIBILITY FOR LAND, WATER AND BIODIVERSITY							
Number of updated recultivation plans		7/23	22/23	100% documented plans for each quarry site	100% review and update of all the plans	Number of up-to-date plans as share of total sites. Turkey missing.	
Number of updated water management plans		13/23	21/23	100% documented plans for each quarry site	100% review and update of all the plans	Number of up-to-date plans as share of total sites	
Number of baseline records of biodiversity values (sitewise)			22/23	Documentation of known biodiversity values per site.	100% review and update of all the plans	Number of up-to-date plans as share of total sites. Turkey missing.	
Number of active biodiversity projects			5	5	One active project per Region/Country. NEE/FI, NEE/EE, SCD/Mainland, SCD/ Gotland, CE	Number of active projects (active / total of 5).	
RESOURCE CONSCIOUNESS AND CIRCULAR SOLUTIONS							
Material efficiency (%)	96.6	97.9	98.5	≥ 96%	> 96% Cyclical infra market why linear development can't be assumed. And change in screening setup in Storugns.	Total raw material quarried - all volumes put to heap / Total raw material quarried	
Average price of recycled products (€/tonne)	6.42 €/tonne	6.39 €/tonne	7.71 €/tonne	+ 5% compared to 2017	+ 5% compared to 2018	NR (€) / volume (tonnes) of products based on recycled side streams.	
Sales of products for environmental purposes (e.g. water treat- ment, flue gas cleaning and agriculture) (%)	n.a.	n.a.	n.a.	KPI under construction	+ 2% compared to 2018	NR of products for environmental purposes / NR of other products (%)	
SOCIETY ENGAGEMENT AND COMMUNITY DEVELOPEMENT							
Social acceptance plan for each Nordkalk region and plant			3/3	1 plan/region 3/3	1 plan/region 4/4, add Turkey	Number of plants with social acceptance plan	
Memberships in associations			17	Update list of critical memberships.	Update list of critical memberships.	Number of business-critical memberships.	
ETHICAL BEHAVIOR							
Supplier audits	22	21	24	50% audited from critical suppliers list (143 suppliers)	50% audited from critical suppliers list (143 suppliers)	Number/percentage of audited critical suppliers. Critical suppli- ers updated yearly. Audit all critical suppliers within two years (yearly target 50%).	
Number of complaints from the Whistle Blowing system		0	2	Zero complaints.	All reported misconduct cases are in- vestigated and resolved within a reaso- nable time from when the case was first reported.	Number of whistleblowing complaints / reports, number of whis- tleblowing complaints / reports investigated and resolved.	

KEY PERFORMANCE INDICATOR TABLE

FOCUS AREA/KPI	ACTUAL 2016	ACTUAL 2017	ACTUAL 2018	GOAL 2018	GOAL 2019	KPI CALCULATION	
GOOD PLACE TO WORK							
Personnel survey/People Power Index		Satisfactory	Satisfactory	Satisfactory +	Satisfactory +	Result of survey compared to People Power Index from Survey company	
Employee turnover	8.52	8.64	8.39	No increase in employee turnover	No increase in employee turnover	Number of new employees and employees leaving the company yearly	
Percentage male/female employees	80/20	80/20	81/19			Percentage male/female of total number of employees	
Percentage blue collar/white collar		64.7%/35.7%	65.2%/34.8%			Percentage blue collar/white collar of total number of employees	
Percentage full-time/part-time employees		98.2%/1.8%	98.6%/1.4%			Percentage full-time/part-time of total number of employees	
SAFE PLACE TO WORK							
Safety first, reduced work related accident rate, LTA1	6.6	7.7	8.9	≤5	≤5	Number of accidents (LTA1, own personnel) / million working hours per year (incl SKOY, KPAB)	
Safety first, reduced total work related accident rate, LTA0 +LTA1	10.2	10.6	16.0	≤12	≤12	Number of accidents (LTA0+LTA1, own personnel) / million working hours per year (incl SKOY, KPAB)	
Employees engaged in safety work %		84.2	92.7	≥90%	100%	% of employees that have made 1 or more observations (incl SKOY and KPAB)	
Safety observations rate	3.8	5.5	6.6	4	4	Number of safety observations per employee (incl SKOY and KPAB)	
ECONOMIC STABILITY AND LONGTERM GROWTH							
EBITDA, %	17.5%	17.9%	17.8%	Profitable growth	Profitable growth	EBITDA %: Result before interest, taxes, depreciation and amortisation / Turnover	
Turnover	298 m€	304 m€	300m€	Profitable growth	Profitable growth	Turnover	
Improve customer claims closing withing 2 months		27%	17%	< 20%	< 15%	Percentual part (%) of the reported claims, which are not closed within 2 months, time period previous 12 months	
Share of annual consumed reserve		3.2%	4.1%	< 5%	< 5%	Consumed annual share of available reserve (permitted and accessible)	
Number of reported customer claims	69	63	83	Less than last year	Less than last year	Number of reported customer claims, rolling 12 months.	
QUALITY IN ALL ACTIVITIES							
Number of initiatives in Continuous Improvement Process		126	176	Number of initiatives in CIP bigger than last year	Number of initiatives in CIP bigger than last year	Target is to increase the number of initiatives in Continuous Improvement Process yearly	
Number of employees trained in Lean Six Sigma			58	Start up Lean Six Sigma	50-60 additional trained persons in LSS	Number of trained persons/year	



NEW PERSONNEL FACILITIES IN TURKEY

Nordkalk has operated in Turkey since August 2017. Nordkalk follows the same operating principles and instructions in all of its countries of operations.

A good and safe workplace is one of our strategic focus areas. During 2018, the working environment at the Eskibalikli guarry site was greatly improved. A new limestone crushing line was brought on stream in November, which means new and safer machines to work with.

Along with the investment in production, improvements were also made to the office and social facilities. A dining area, TV room and dormitories with twin rooms have been warmly welcomed by employees. A dozen of them stay at the site for longer periods because their homes are far away.

The company's safety standards and culture developed in many ways in 2018. Personal protective equipment has been upgraded, walk ways separated, and reporting of near misses and accidents implemented using the common Nordkalk tool.

GRI CONTENT INDEX

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	assessments, and development programs			

REPORTING PRACTICE

The Nordkalk 2018 Sustainability Report covers Nordkalk Corporation and its fully owned subsidiaries. Where mentioned, partly owned subsidiaries are also included in the information reported. The Sustainability Report is a separate report from the annual report. Nordkalk Corporation is included in the Annual Report of our owner Rettig Group.

This report is based on the GRI Standards, but does not fully comply with them. The reporting period is 1 January 2018 - 31 December 2018 and reporting takes place annually. The previous report for 2017 was published on our website *www.nordkalk. com/sustainability* on 1 June 2018. The information provided in previous reports does not need to be restated. The ten reporting principles have been used as far as possible.

In 2017, Nordkalk reviewed and updated its sustainability strategy, policies and goals. In 2018, the process of implementing this work continued, new KPIs were set and measurements started to be able to be reported in full accordance with the GRI Standards in the coming years.

The Nordkalk 2018 Sustainability Report is available as a printed version, a digital version (pdf) to download from our website: *www.nordkalk.com/sustainability*, and some of the information has been published on the website. Any questions regarding the report should be made to the contacts for each focus area found at the end of this report.

The report has been reviewed in its entirety by KPMG.



Auditor's Limited Assurance Report on Nordkalk's Sustainability Report To Nordkalk Corporation

Introduction

We have been engaged by the Executive Management and the Chief Executive Officer of Nordkalk Corporation to undertake a limited assurance engagement of Nordkalk's Sustainability Report for the year 2018.

Responsibilities of the Executive Management for Nordkalk's Sustainability Report

The Executive Management are responsible for the preparation of the Sustainability Report in accordance with applicable criteria as explained on page 45 in the Sustainability Report, that are part of the Sustainability Reporting Guidelines published by GRI (The Global Reporting Initiative), that are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of a Sustainability Report that is free from material misstatements, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed. Our assignment is limited to the historical information that is presented and does not cover futureoriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 Assurance engagements other than audits or reviews of financial information. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. A limited assurance engagement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

The firm applies ISQC 1 (International Standard on Quality Control) and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Nordkalk in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The limited assurance procedures performed do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in a naudit. The conclusion based on a limited assurance engagement does not provide the same level of assurance as a conclusion based on an audit.

Our procedures are based on the criteria defined by the Executive Management as described above. We consider these criteria suitable for the preparation of the Sustainability Report.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our conclusions below.

Conclusions

Based on the limited assurance procedures performed, nothing has come to our attention that causes us to believe that the Sustainability Report is not prepared, in all material respects, in accordance with the criteria defined by the Executive Management and Chief Executive officer.

Stockholm, 8 March 2019

KPMG AB

Patrik Anderbro Authorized Public Accountant

Torbjörn Westman Expert Member of FAF



YOUNG DETECTIVES IN MIEDZIANKA

In Poland, Nordkalk engaged in an educational project for its little neighbours, the "Young Detectives". During the series of workshops the schoolchildren could solve many detective puzzles while learning about interesting places and local history.

They took a bus tour at Miedzianka quarry and plant to learn more about limestone, and how it is extracted and processed. After the series of workshops, they played the "Young Detectives" board game, which summarised the knowledge gained through the project.

Nordkalk awarded the little winners with safety equipment such as reflective bands and vests to make sure they could walk home safely!

OUR QUARRY IN PARGAS, FINLAND.

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Nordkalk

Nordkalk is the leading company providing limestone-based products and solutions in Northern Europe. We deliver essential raw material to numerous industries such as the pulp, paper, metals, mining, construction and chemicals industry. Our solutions contribute to clean air and water as well as the productivity of agricultural land.

www.nordkalk.com

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