

Sustainability Report

2021-2022



Contents

ABOUT US

About the report	5
Mirka in brief	6
The core of Mirka's business	8
Our Clean Commitments	9
Organisation	10
Mirka – A global company	11
Our journey towards a more sustainable business	12

HIGHLIGHTS

Highlights in 2021–2022	14
-------------------------	----

CLEAN PRODUCTION

Mirka halves its carbon dioxide emissions	16
CO ₂ -free production facilities in Jakobstad	18
Purified gases are converted into energy	19
Improved energy solutions	20
Energy use in production facilities 2022	21
Important policies and standards	22
Employees 2022	23
New Mirka Home	24
Education creates added value	25
The need for safety is on the rise	26
Improved employee satisfaction	28

CLEAN PERFORMANCE

Driving force of change	30
-------------------------	----

CLEAN PARTNER

The Sustainable European Abrasive Manufacturers	32
---	----

CLEAN PROACTIVITY

Products and services	34
Use of resources	35
Changing perspective	36
Product design and development	37
Power Tools	38
SHAPE – A driving force towards greener manufacturing	40
Our roadmap to a more sustainable way of working	41
Concluding remarks	43
GRI Index	44
Reporting principles	46





About the report

Mirka's 2022 Sustainability Report is a GRI-referenced report that describes the company's sustainability development in 2021–2022. The report discusses economic, social and environmental topics and indicators that have been selected based on their business significance and stakeholders' expectations and needs.

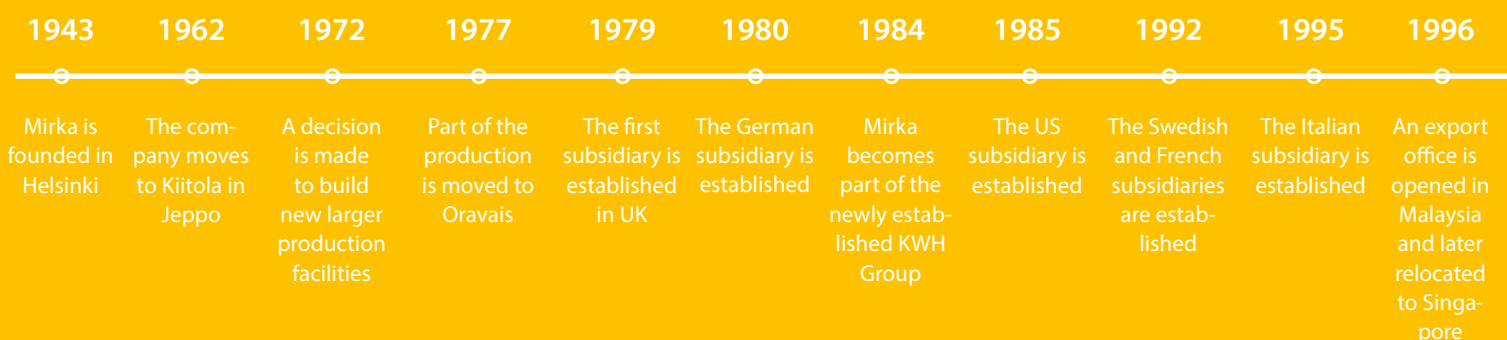
The report describes Mirka's sustainability commitments concerning the company's transition to green business. We analyse the challenges, opportunities and solutions as well as the difficulties that our business has had to deal with during the pandemic years – challenges that have resulted in a green transition.

Mirka in brief

For nearly 80 years, Mirka has paved the way for technical breakthroughs in surface finishing. Since its establishment in 1943, Mirka has been driven by the passion to develop products at the cutting edge of technology. Today, with decades of experience, Mirka is a world leader in surface finishing technology, offering innovative solutions for surface finishing and precision grinding that complement abrasives with machines and polishing products.

We are part of the KWH Group, and the key to our success is our continued drive forward. However, it is equally important to us to work sustainably and responsibly. This is why Mirka has been working for a considerable time to promote a more sustainable future and has developed products and processes designed to minimise the company's environmental impact.

Our company spirit is characterised by the keywords innovation and development. Mirka is always Dedicated to the Finish in order to develop products and processes in the right direction and deliver the highest quality to customers around the world.



98% — EXPORT 2022

392 milj — TURNOVER 2022

1620 — EMPLOYEES WORLDWIDE 2022

100+ — EXPORT COUNTRIES 2022

2003

2005

2006

2008

2009

2010

2012

2013

2016

2017

2021

2022

The Spanish subsidiary is established

The Mexican subsidiary is established

The Brazilian subsidiary is established

Subsidiaries are established in Shanghai and Russia

The Canadian subsidiary is established and the Swedish subsidiary becomes Mirka Scandinavia

The Indian subsidiary is established

Mirka CEROS is introduced

Mirka Technology Centre is completed and subsidiaries are established in Turkey and Belgium

Mirka establishes a subsidiary in the Middle East

Mirka and Cafro join forces to develop superabrasives

Urma Rolls becomes part of the Mirka family

Mirka acquires Flexmill, a specialist in robotics

The core of Mirka's business

Mirka's business is based on four fundamental values: responsibility, commitment, innovation and respect. The company's vision is to be the responsible market shaper that inspires renewal and leads with innovation.

Mirka's slogan, "Dedicated to the Finish", sums up the company's approach: being fully committed to every detail of the solutions. In an effort to improve our products and way of working, we always start with the question "What is your challenge?" in order to find the most effective and innovative solution for our customers.

Values

Responsible - Mirka emphasises sustainability in product development, customer relations and business. We want to be part of the solution for a better future by actively working to reduce the company's environmental impact.

Committed - By collaborating with our customers, we can develop tailored and more sustainable solutions that save both time and resources.

Innovative - Mirka knows that everything can be improved and is therefore constantly on the lookout for new and more efficient ways of working.

Respectful - With its respectful corporate culture characterised by openness, an inviting atmosphere and fairness, Mirka lays the foundation for trust and good relationships with its customers, partners and employees.

Vision

We want to achieve a market position where our customers and stakeholders consider us as a responsible market shaper that inspires renewal and leads with innovation.

Mission

We want to give people the opportunity to perform better. Our products are made to offer customers the opportunity to achieve the best possible results. Mirka has unique knowledge and expertise that enable the perfect combination of abrasives, tools and polishing products for each specific purpose based on the customer's individual needs. By collaborating with our customers in every aspect, we strive to create the best solution for our customers.

Our Company Culture

At Mirka, we believe there is always a better way of doing things. Therefore, we harness our expertise and experience to continuously improve our products and our brand, with innovation serving as the guiding light in everything we do. Innovation and continuous improvement are our heritage and our corporate tradition: we are Dedicated to the Finish, fully committed to every detail throughout the process.

Dedicated to the finish

Our Clean Commitments

Clean Performance

We approach our work systematically and strive for sustainability through a long-term economic strategy. For us, our customers' success is our success, which is why we develop products and services that enhance our customers' performance, health, and safety in their work.

Clean Partner

As a partner to our suppliers, customers, and employees, we aim to build strong relationships based on trust and mutual benefit for honesty, integrity, and collaboration. By collaborating with other industry players, we strive to develop more sustainable products and solutions for a more sustainable industry.

Clean Production

We work together to achieve goals related to safety, quality, efficiency, and sustainability in all our production facilities. Our objectives for clean production include for example improving energy usage, reducing waste, increasing recycling, and minimizing the use of hazardous chemicals.

Clean proactivity

We actively seek ways to reduce the environmental footprint of our products and view sustainable innovation as a smart and advantageous strategy for both our customers and our own business. Mirka has clear objectives for future sustainability development and strives proactively to find new innovative solutions that help the company achieve its sustainability goals.



Organisation

Our organisation

Mirka's operations are based on the company's long-term group strategy, which annually specifies the business objectives. The Management Team and Board of Directors approve the comprehensive business plan drawn up in co-operation with all business and production units. Department-level goals are set based on this plan. The Management Team includes an elected member who represents the staff in decision-making. In 2022, the Board of Directors decided to terminate the operations of the Russian subsidiary.

Corporate governance

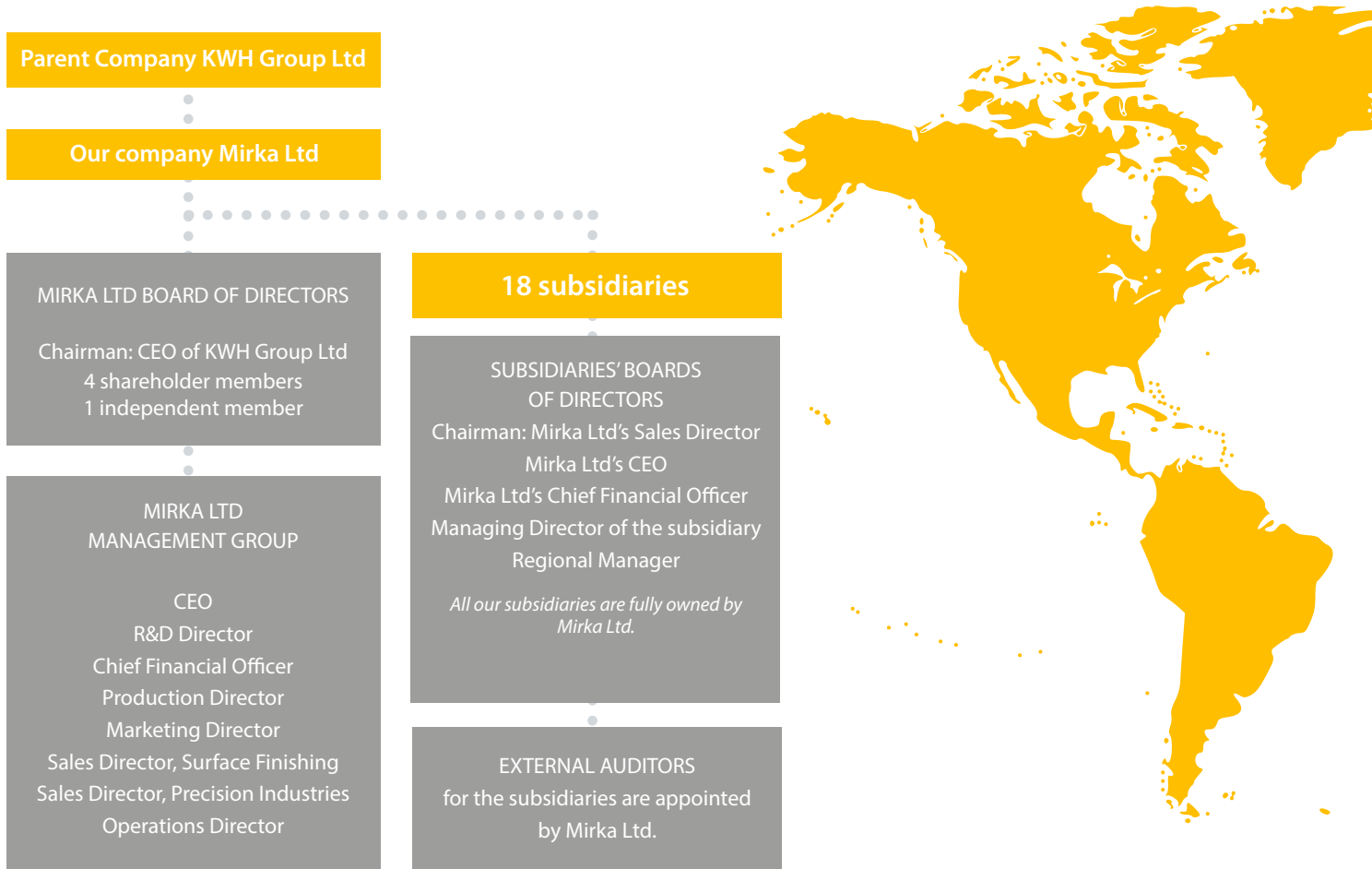
Mirka's corporate governance creates a solid foundation for our overall global operations, paving the way for open and reliable operations at the local level. The Board of Directors regularly reviews and updates governance material to ensure that the company's operations comply with the best practices and the latest guidelines. The company's ethical guidelines encourage all employees to work in a responsible manner that meets high ethical standards, and these guidelines are part of the induction process for new employees. Mirka regularly provides training to ensure that these standards are maintained.

Significant stakeholders

Mirka constantly strives to improve co-operation with the company's stakeholders and to maintain high ethical standards in all its operations. Our efforts are supported by the company's internal governance and ethical guidelines, which all employees are required to follow. Our stakeholders are defined based on how our business operations affect them and how their activities impact our operating processes. Mirka's most significant stakeholders are our customers, owners, employees, suppliers, distributors and service providers. Our goal is to deliver the best possible results for all stakeholders.

Stakeholder commitment

We use our Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems to support stakeholder commitment. Our CRM system enables a customer-oriented working method and helps manage sales operations and sales planning. This helps us to better develop our customer relationships and quickly respond to all customer needs. The systematic planning of our sales operations also optimises our travel, enabling us to reduce our environmental impact.



Mirka – A global company

Mirka Ltd is a global company owned by KWH Group Ltd, a Finnish family-owned corporation, which continuously pursues its goal of being a leader in its industry. With an export rate of approximately 98%, our products are sold in more than 100 countries to customers in various industries. Our products and solutions are used in areas such as the automotive aftermarket, construction and decoration, as well as the transport, wood and precision industries.

HEAD OFFICE

Mirka Ltd, Jeppo, Finland
Parent Company KWH Group Ltd
Vaasa, Finland

PRODUCTION FACILITIES

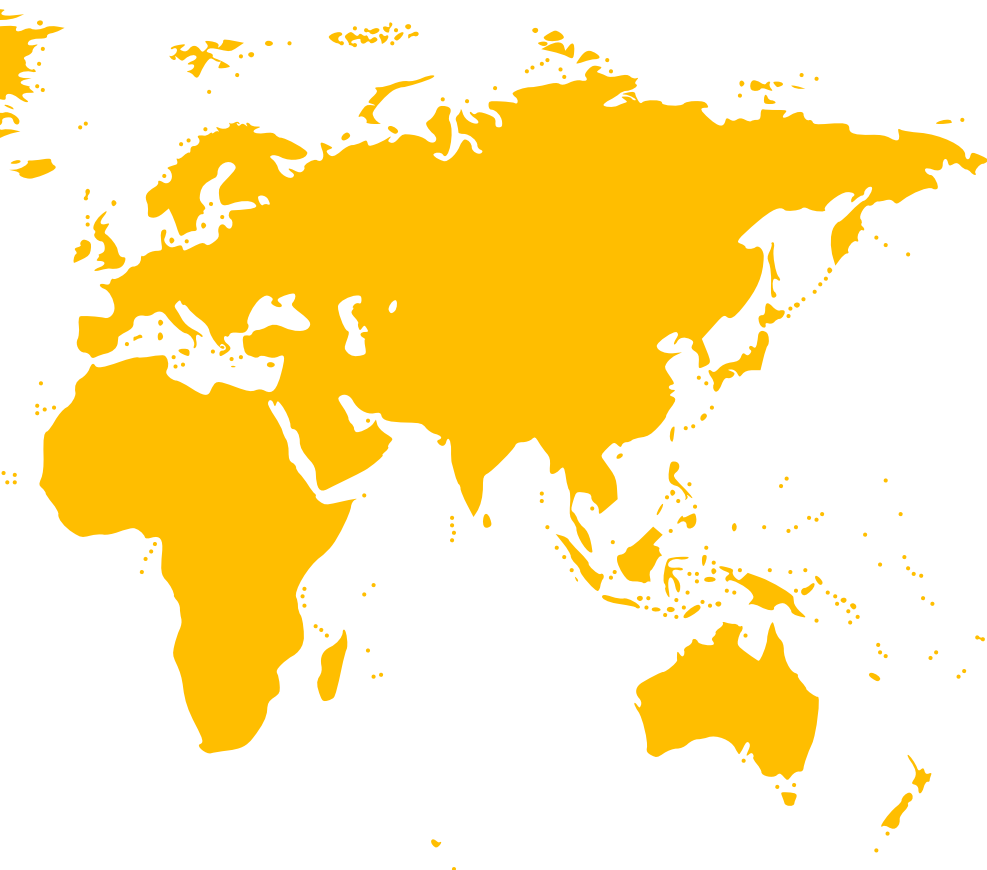
Finland: Jakobstad, Jeppo, Karis,
Nurmijärvi, Oravais
Belgium: Opglabbeek
Italy: Fino Mornasco, Torino

SALES OFFICES

Denmark, Norway, Estonia,
Belgium

SUBSIDIARIES

Mirka Brasil Ltda. (Brazil)
Mirka Belgium Logistics (Belgium)
Mirka Canada Inc (Canada)
Mirka Trading Shanghai Co., Lt.d
(China)
Mirka France Sarl (France)
Mirka GmbH (Germany)
Mirka (UK) Ltd (United Kingdom)
Mirka India Pvt Ltd (India)
Mirka Italy s.r.l. (Italy)
Mirka Superabrasives S.p.A. (Italy)
KWH Mirka Mexicana, S.A. de C.C.
(Mexico)
Mirka Poland Sp. z o.o (Poland)
Mirka Scandinavia AB
(Scandinavia)
Mirka Asia Pacific Pte Ltd
(Singapore)
KWH Mirka Ibérica S.A.U. (Spain)
Mirka Turkey Zimpara Ltd Sirekti
(Turkey)
Mirka USA Inc. (USA)
Mirka Middle East. FZCO (United
Arab Emirates)



Our journey towards a more sustainable business

Mirka was the first company in the surface finishing industry to initiate systematic sustainability work, and has been an industry forerunner in sustainability ever since. From the very beginning, Mirka's CEO Stefan Sjöberg has actively advocated the company's sustainability, and in 2021–2022, Mirka made considerable progress in the area, despite the past few years being challenging.

Mirka's commitment to sustainability is visible in all its operations, from product development processes to waste management and energy solutions. In the reporting period, Mirka successfully halved the carbon dioxide emissions of its production facilities by adopting smart energy solutions. It also initiated several projects with other industry operators, aimed at exchanging knowledge and finding solutions for more sustainable products and ways of working.

"One of Mirka's most significant successes is the personnel's attitude to sustainability. We have worked to make our operations more sustainable for many years, and this has made our personnel more knowledgeable about sustainability and encouraged them to actively think along these lines. When sustainability is present in everything you do, it leads to a snowball effect that creates even better conditions for developing operations in the right direction," says Sjöberg.

Despite the high energy and fuel prices, challenges in logistics, and social restrictions caused by the pandemic, Mirka successfully continued to improve the sustainability of its operations. Mirka's early and consistent focus on sustainability proved to be valuable during the pandemic, enabling the company to remain resilient in difficult times.

"It's time-consuming to create sustainable products and operating processes, which is why I'm pleased that we launched our sustainability efforts early on. Our investments in sustainability also make us better prepared for crises. We had implemented resilient solutions before the pandemic and the Ukraine war broke out, and that helped us weather the challenges of the past couple of years."

In autumn 2022, Mirka also received development funding from Business Finland for its SHAPE project, which aims to create an ecosystem of industry operators for knowledge exchange and joint development of sustainable solutions. Companies may find it difficult to work with sustainability because keeping up to date on complex, frequently changing rules and regulations requires considerable resources. Projects like SHAPE facilitate sustainability efforts and cooperation and provide companies with clear targets for sustainability.

"For us, the pandemic was not just a challenge but also a force driving change. For example, in Italy, where electricity prices surged due to the pandemic, we solved the problem by installing solar panels at our production facilities in Fino Mornasco, which now run on solar energy alone. In addition to the SHAPE project, Mirka is a founding member of the SEAM programme, in which we have developed a sustainability scheme for the abrasives industry jointly with European manufacturers and suppliers in the field. We consider it important to be part of the change in the industry."

Mirka's commitment to sustainability and its long-term investments in sustainable products and operating processes lay the foundation for the company's new sustainability strategy. The strategy's targets set the direction for future operations.

"Over many years, Mirka has made smart long-term investments to improve the sustainability of its operations. These investments helped us ride out the pandemic's challenges, and our sustainability work has proved that sustainable operations benefit not only the environment but also companies in the long term."

“For us, the pandemic was not just a challenge but also a force driving change”

Stefan Sjöberg



Highlights in 2021-2022

WINNER OF
**World Tool Awards
2021**



-30%
reduction in air transport

30 M

in funding from Business
Finland for the development of
sustainability

Mirka acquires
Flexmill,
a specialist in
robotics

Expansion of
production facilities
in Jakobstad

100%

electricity from Finnish hydropower

-56%

reduction in the carbon dioxide
emissions of production facilities

The factory in
Fino Mornasco is
100% powered by
solar energy.

Winner of the World Tools Award 2021

In 2021, Mirka's tools were awarded in the categories for corded hand-held power tools and cordless hand-held power tools for their high quality, good ergonomics and innovation. The winning products were: Mirka® AOS-B, Mirka® ARP-B, Mirka® DEOS and Mirka® DEROS. Read more about the winners on p. 39.

Reduction in air transport

The pandemic strained logistics and transport systems globally, posing a serious challenge to many companies. Despite the challenges caused by the pandemic, Mirka has managed to reduce air freight from 99 metric tons to 69. Read more about this on p. 31.

EUR 30 million in development funding

Mirka started the SHAPE ecosystem and was granted EUR 30 million in development funding by Business Finland for the project. Read more about SHAPE on p. 40-41.

Mirka acquires Flexmill, a specialist in robotics

Flexmill is a design and integrator company that specialises in robotics and surface finishing automation with a focus on demanding applications for grinding, polishing and grading. The acquisition is an important step in the strategy to expand the range within robotics.

Expansion of production facilities in Jakobstad, Finland

When the expansion of Jakobstad's Power Tools facilities began in 2022, a more sustainable energy solution based on geenergy was also installed. The solution has reduced the company's annual carbon dioxide emissions by approximately 900 tonnes. Read more about the solution on p. 18.

100% of the electricity used by Finnish production facilities is based on hydropower

In 2022, Mirka invested in fossil-free electricity generated by hydropower at all its production facilities in Finland. The Finnish facilities now run entirely on fossil-free electricity.

56% reduction in carbon dioxide emissions

Mirka has also managed to significantly reduce its carbon dioxide emissions within scope 1 and 2, largely thanks to its large investment in fossil-free electricity. Read more about the reduction on p. 16.

Fino Mornasco's new solar panels

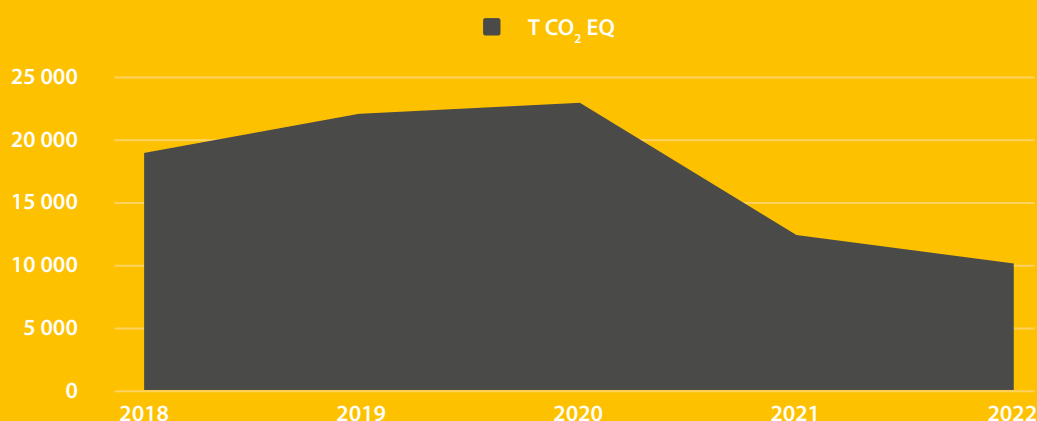
Due to the high energy prices in Italy Mirka decided to install solar panels on the production facility in Fino Mornasco in 2022. The facility now uses only solar energy.

Mirka halves its carbon dioxide emissions

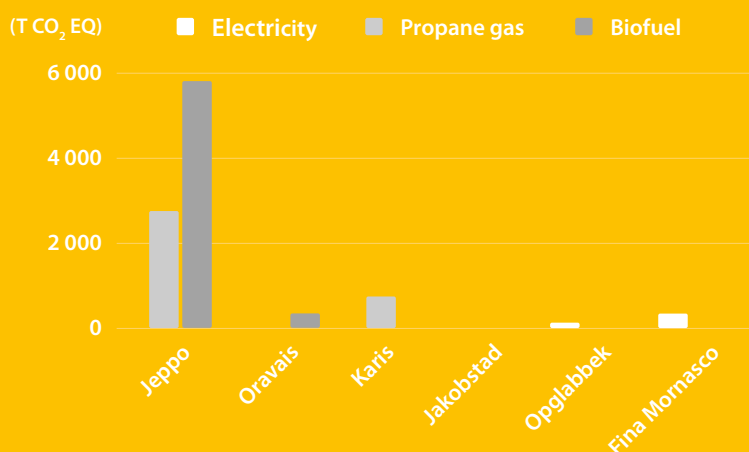
In 2021–2022, Mirka halved the total amount of carbon dioxide emissions from its production facilities (scope 1 and 2). Purposeful investments and systematic teamwork were two decisive factors behind the significant reduction in emissions.

Despite the considerable challenges caused by the pandemic, Mirka has managed to reduce its carbon dioxide emissions by approximately 56%. An extended network and strong co-operation with companies, research organisations and energy operators have provided Mirka with the competence needed to achieve the reduction. Mirka has also introduced internal processes for a continuous dialogue on sustainability, and the increased involvement of staff has already produced measurable results.

Amount of carbon dioxide (CO₂-eq) from all production facilities



Amount of carbon dioxide (CO₂-eq) from all production facilities 2022



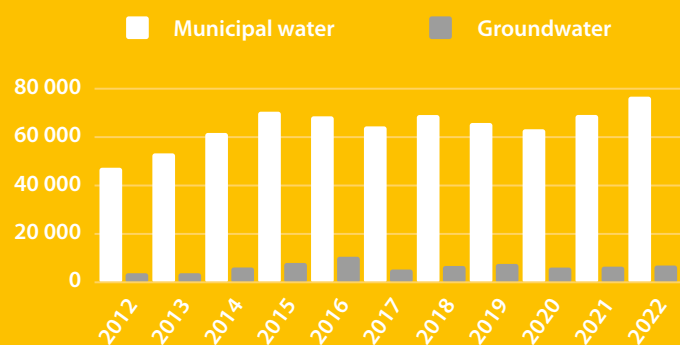
Amount of carbon dioxide (CO₂-eq) from company cars

71,7 t **1386 t**

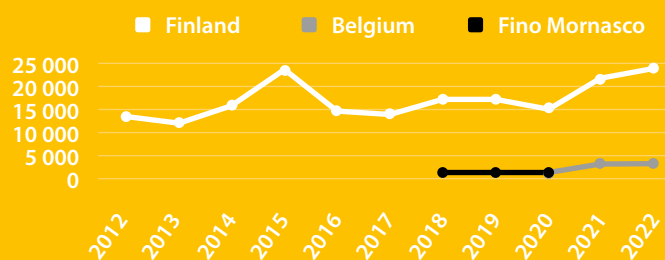
Mirka Finland

Subsidiaries

Annual water use, m³



Annual wastewater, m³



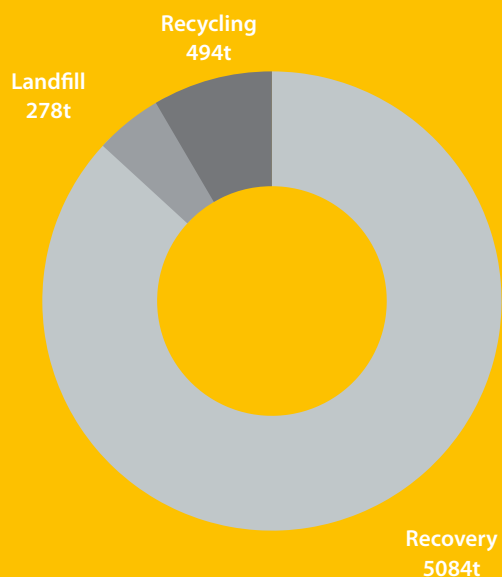
*From 2020 onwards Fino Mornasco's operations are not included in the statistics

Production waste 2022*

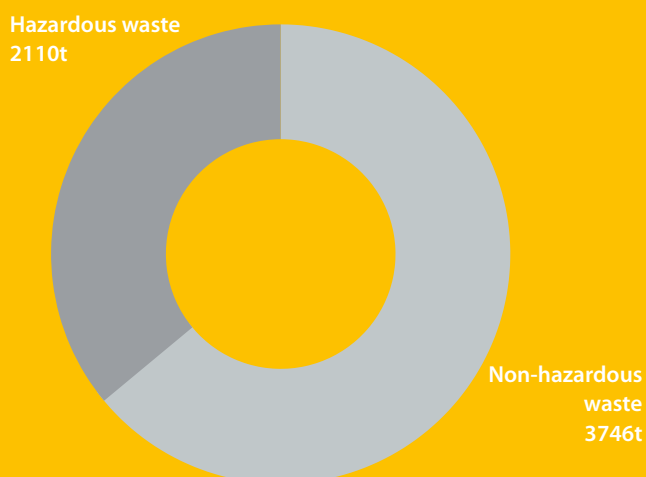


*For global operations, excluding Fino Mornasco.

Waste management method



Hazardous/Non-hazardous waste



CO₂-free production facilities in Jakobstad

When the expansion of Jakobstad's Power Tools facilities began in 2022, one of the goals was to find an efficient and more sustainable energy solution. The facilities' energy solution, based on geoenery from geothermal holes, has reduced the company's annual carbon dioxide emissions by approximately 900 tonnes.

Jari Lemberg, Project Office Manager and project manager for the energy solution, understood the potential of combining a geothermal solution with a cooling process to power the new production facilities. The energy solution means that heat is stored in the soil in the summer, and then withdrawn in the winter. A total of 115 geothermal holes have been drilled to a depth of 340 metres to supply all the energy required for the new facilities and other buildings on site.

"According to the annual reports from the district heating supplier in Jakobstad, this solution will reduce the facilities' annual carbon dioxide emissions by 900 tonnes. The ventilation and heat recovery in the hall are meticulously planned to maximise efficiency. We have installed solar panels on the roof and use LEDs for all lighting to minimise our environmental impact," says Lemberg.

The energy solution in Jakobstad is carried out in collaboration with the energy company Adven, which has served as an energy partner for Mirka's production facilities in Jeppo and Oravais for 20 years. Stefan Sjöberg, CEO of Mirka, is pleased with the collaboration and proud of the project, which demonstrates that it is fully possible to create sustainable energy solutions efficiently and innovatively.

"The solution itself is very interesting and a great example of creating extensive sustainable energy solutions," says Stefan Sjöberg.

The energy solution in brief:

Geoenery: 115 geothermal holes with a depth of 340 metres

Heat and water-air-heat pumps with a power output of 1,650 kW and 340 kW respectively

Solar panels with a rated output of 100 kWp

Share of renewable energy: 98%

Annual carbon dioxide emissions decrease by approximately 900 tonnes

The project was completed in the latter part of 2022



Purified gases are converted into energy

In 2022, Mirka invested in a purification and heat recovery system for the Oravais plant to utilise the heat from purified gases. The result has been a significant reduction in emissions from the facilities, and by the end of the year, the facilities will transition from oil heating to recycled energy using the extra heat.

Laser cutting produces gases that must be purified and removed from the facilities. It is an extremely energy-intensive process that also means losing a powerful energy source. According to Jari Lemberg, Project Office Manager, an increased understanding of the processes has made them realise that an improvement is necessary.

“When we got our first laser machine, we did not know much about the gas process as such. As the number of our laser machines has increased, we have realised that the laser cutting process is extremely energy-intensive and that it generates a great deal of heat,” says Lemberg.

“We realised it was possible to recover the heat from the laser cutting process, but it was a challenge to develop a workable solution because the gases first needed to be purified before they could be used for heat. The new system purifies the gases from the laser cutting machines before they are removed from the factory and utilises the heat with the help of heat recovery batteries,” says Lemberg.

The investment has improved the heating system across the premises, which is positive for both production and the environment. The system’s installation began in 2022, and it is expected to come online in the spring of 2023. According to our calculations, the exhaust gases can be purified by 99.9%, meaning that the heat recovery system can replace the oil boiler even in cold weather. The goal is to switch exclusively to recycled energy in 2023.



Improved energy solutions

The high electricity and fuel prices have made energy saving a topical issue in recent years. Mirka has worked to improve the company's energy solutions – in this process we have benefited from our own employees' competence.

Towards the end of 2022, we organised a competition to involve our personnel in the process of finding smart and effective energy saving solutions. It resulted in a long list of ideas. As a member of the Prize Committee, Jari Lemberg, Project Office Manager, participated in selecting the winning proposals.

"We received many good proposals. One of the winning ideas was to reduce the ventilation and lighting – a simple but very effective idea that we were able to carry out immediately. The measures were implemented in the system in 2022, and the next step is to install motion detectors," says Lemberg.

Large investment in solar panels at the Italian production facilities

In Italy, electricity prices have been high, and in order to sustainably secure production, Mirka invested in solar panels for the production facilities in Fino Mornasco in 2022. The solar panels, which will come online in 2023, will significantly reduce the facilities' carbon emissions.

"The solar panels will account for 100% of the electricity we consume in the facilities," says Lemberg.

Renewed laminating process

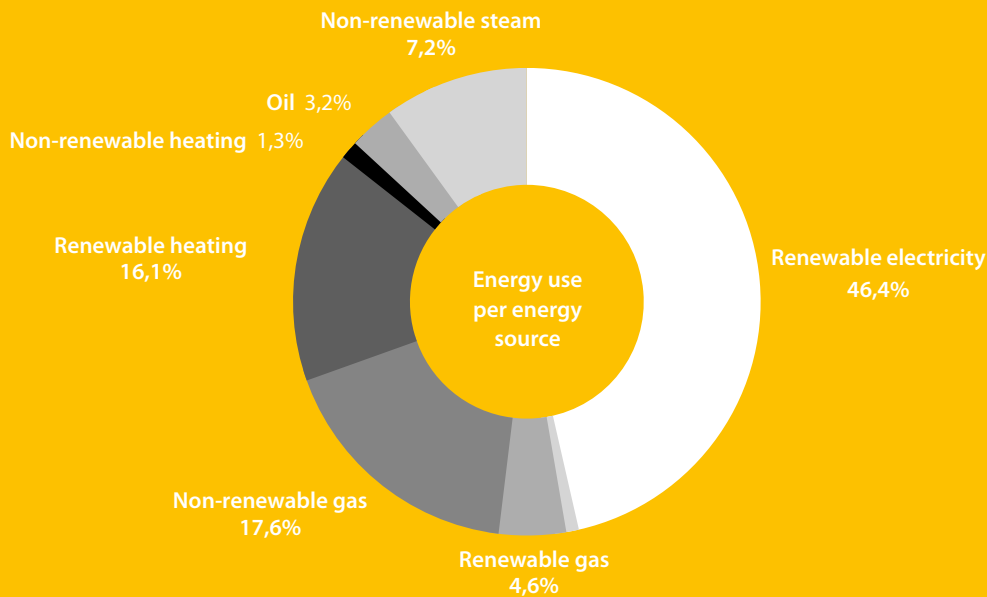
Mirka always seeks to protect its personnel and minimise its environmental impact, and it recently took another step towards this goal. Following a machine investment in Jeppo, flame lamination in Karis has been discontinued, and the process has instead been moved to Jeppo, where a new lamination technology is now in use. This change has been beneficial in improving the air quality at the Karis production facilities.



Energy use in production facilities

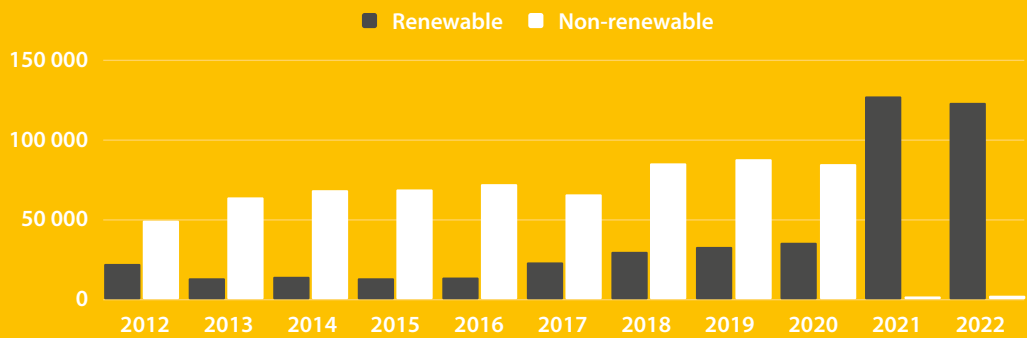
70 %
renewable energy

100 %
green electricity in Finnish
production facilities



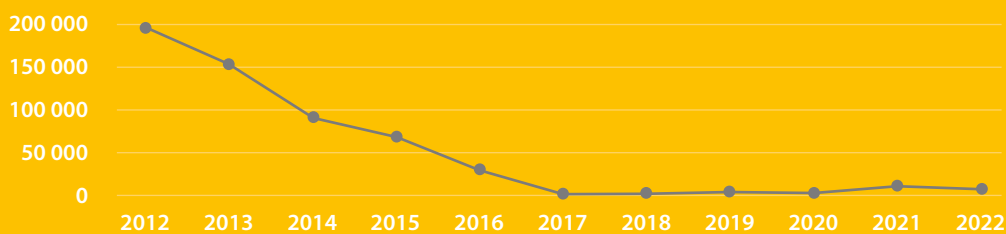
Electricity use (GJ)

In the 2021–2022 reporting period, Mirka reduced the use of non-renewable electricity at its Finnish production facilities to zero.



Oil use (GJ)

In the 2021–2022 reporting period, total oil use increased from 2020. However, Mirka has introduced smart energy solutions that are expected to reduce oil use in the future.



Important policies and standards

Collective agreements

All our employees are covered by collective agreements. As an employer, we follow the collective agreements of the Chemical Industry Federation of Finland with the trade unions Pro, YTN and the Industrial Union, which have their own representatives in negotiations between the employer and the personnel.

No discrimination

At Mirka, we strive for an inclusive and pleasant workplace where we value each other regardless of gender, age, skin colour, religion or sexual orientation. During the reporting period, we have not received any reports of discrimination.

Child labour

Mirka does not tolerate child labour, and in all our supplier audits, we always check the minimum working age to ensure zero child labour. We have also distributed our Code of Conduct globally to all our suppliers, and they have signed and returned it.

Anti-corruption

Anti-corruption training is provided to all new employees in Finland. In the 2021–2022 period, we received no reports of corruption involving our personnel or our business operations.

Period of notice

The minimum period of notice in case of operational changes is two weeks.

Approach to stakeholder engagement 2022

Mirka is regularly doing questionnaires and the KWH Group is having yearly meetings with trade union representatives from all KWH companies.

KWH Code of Conduct

Mirka adheres to the KWH Group Code of Conduct and follows the principles of transparency, honesty, reliability and fairness in its operations and all its relationships with customers, suppliers and staff. The Code of Conduct also applies to products and the environment.

HR Personnel Policy

Through its personnel policy, “Success driven by people”, Mirka wants to support, engage and develop its personnel to achieve the company’s goals. Success comes from competent and motivated employees. Mirka’s personnel policy focuses on participation, purposefulness, leadership, competence, personal development and motivation as well as on a safe and pleasant working environment.

Memberships in associations

- BCI Forum Ltd
- EPTA
- F.E.P.A
- Finnsafe r.y.
- Finnsecurity r.y.
- Henkilöstöjohdon ryhmä - Henry r.y.
- IBC Finland r.y.
- ISA
- Kemianteollisuus r.y
- Eurocard
- Kotel r.y.
- Licensing Executives society
- Nykarleby Företagare r.f.
- Puuteollisuusryttäjät. r.y.
- Rasi r.y.
- SESKO r.y.
- Steinbeis Transfers
- Suomalaisen Työn Liitto
- Suomen laatuyhdistys
- Suomen Riskienhallintayhdistys r.y.
- Suomen Tekstiiliteknillinen Liitto r.y.
- Veronmaksajan Keskusliitto r.y.
- Västra Nylands Handelskammare
- Österbottens Handelskammare

Management system

- ISO 14001
- ISO 45001
- ISO 9001

Employees 2022

Overview of Mirka's employees



1620

Employees in total

1534

Full-time employees

56

New employees

Gender distribution in Mirka's operations

Mirka board of directors



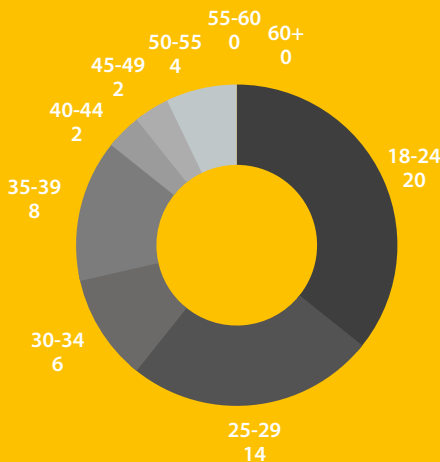
Mirka management group



Entire operations



New employees in Finland during 2022 according to age



2,2

Injury rate
2,2/200,000
working hours

0

No cases of
discrimination
in 2022

6h

Training hours per
employee in Mirka
Finland 2022

0

No child labour
was used in
2021-2022

New Mirka Home

In 2020, extensive construction work for the new Mirka Home project was carried out at our head office in Jeppo. The new facilities, which were introduced in early 2021, serve as a gathering place for both staff and guests. The new two-storey building, which covers approximately 2,000 square metres, houses a lunch restaurant, kitchen, café and meeting facilities.

"Mirka Home is an initiative that aims to strengthen internal co-operation by creating a space where the personnel can meet and share a meal together or with partners and customers visiting Mirka. The best feedback we have received is that there are always people in the facilities," says HR Manager Ulla Kauppi.

Mirka wants to invest in the wellbeing of its employees and offers an inspiring work environment that broadens the concept of a modern and flexible work culture. Approximately 500 employees work at Mirka's facilities in Jeppo, which are annually visited by nearly 2,000 partners from around the world. Mirka Home is not just an investment in the comfort and wellbeing of employees, but also an investment in the way the company works.

"Mirka's largest single investment in a long time will add significant value to our business, especially here in Jeppo," says Stefan Sjöberg, CEO of Mirka.

Together with the new technology and training center, Mirka Home creates an excellent foundation for the many customer visits and training sessions that Mirka arranges every year.



Education creates added value

Education creates added value for both companies and staff and is a key aspect of Mirka's sustainability. Trained and educated employees are more aware of environmental issues and better prepared to deal with future environmental challenges through innovative solutions and more sustainable ways of working.

"Training and continuing education offer employees the opportunity to develop themselves, which maintains their interest in work, while helping Mirka retain its staff," says HR Specialist Michaela Dahlsten.

According to Dahlsten, it is not just about retaining staff, but also about maintaining the staff's knowledge at the same high level. Some trainings, such as the occupational safety card, are mandatory for certain duties. Interest in training varies depending on the course, but is generally speaking quite high: the courses are often so popular that additional courses must be organised.

In recent years, Dahlsten has noted a positive development in staff training at Mirka. The supervisors have also become better at proposing courses for their own department, which has sometimes resulted in collaboration between departments with similar needs.

Employees are also showing increasing interest in education, and especially in apprenticeship.

"Apprenticeship training enables on-the-job learning, and interest in tailored apprenticeship agreements, such as Mirka's apprenticeship training for process operators, continues to increase," says Dahlsten.

Dahlsten emphasises the importance of external partners in the provision of training. For Mirka, these partners are important, as most of the training is offered by an outside party. Staff training is a central part of Mirka's sustainability plan, and Mirka will continue to invest in its collaboration with the company's training partners.



The need for safety is on the rise

The idea of what it means to create a sustainable and secure future continues to change as Mirka's business changes. Although our sustainability work focuses primarily on the environment, it has become clear that in connection with sustainability, Mirka also needs to prioritise the safety and wellbeing of employees and consumers, both in terms of workplace safety and chemical use.

In 2021 and 2022, the number of accidents in the workplace increased. The number of accidents per one million working hours went from 4.4 to 11.2 over the period, an increase that led to the introduction of the Back to Basics safety programme, meaning that the employees simply go back to basics concerning workplace safety.

At Mirka, workplace safety has long been a priority, and workplace safety is firmly rooted in the company's strategy and daily work. Despite the constant efforts to maintain safety at work, work-related accidents have increased in the last two years.

Ulla Kauppi, HR Manager, does not know what reason or reasons the increase is attributable to.

"We report each accident and have analysed all the reports to determine whether the accidents are connected in some way. We have investigated everything from age and time of accident to department and experience, but have found no connection," she says.

What emerges from the analysis is that the accident rate has varied in recent years and that the number of accidents in 2022 almost doubled, while the accident rate dropped to half.

The pandemic, which coincided with the increasing number of accidents, presented a major challenge to HR departments, as many employees experienced more severe fatigue than before, both at work and at home.

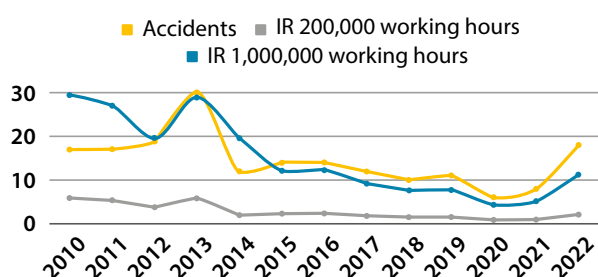
"Fatigue was a significantly bigger problem in the last two years than in the past, but we still cannot draw any conclusions about the factor or factors that are behind the increase in accidents," says Kauppi.

To reduce accidents in the workplace, Mirka has introduced the Back to Basics safety programme, aiming to provide occupational safety training to employees.

"We have also renewed our practice of safety walks and increased staff involvement in safety issues by discussing the topic more. Mirka's goal continues to be zero accidents, and although we have to consider the human factor, safety will continue to be one of our priorities," concludes Kauppi.

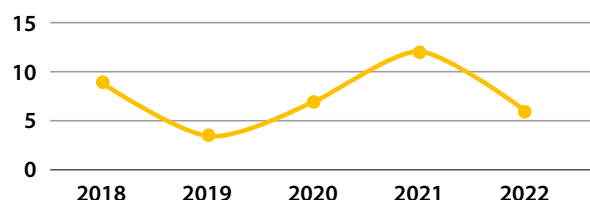
Injury rate (IR) in Finland 2010–2022

In 2021–2022, the number of work-related accidents increased. The injury rate per 1 million working hours rose from 4.4 in 2020 to 11.2 in 2022.



Trend in accident rate in Finland

In 2019, the accident rate was 3.5 but rose to 11.9 in 2021. In 2022, the accident rate fell to 5.9





Change requires hard work

As an active player in the chemical industry, Mirka constantly strives to ensure that the use and handling of chemicals in the company's production meets high standards and minimises any negative impact on both users and the environment. Although it is challenging to constantly ensure compliance with new regulations and requirements, we consider it an inherent part of our operations to promote responsible and sustainable production.

"We continuously keep track of legislative amendments that tighten the regulation of certain substances. For us, it is not just about following external regulations, but also about conducting internal discussions and making changes to the chemicals we use," says Maria Sundqvist, Compliance Manager at Mirka.

Replacing a raw material requires a lot of work, including contacts with suppliers and internal tests and test runs. New products are easier to develop compared to the challenges involved in replacing a raw material used in an existing product without affecting performance and appearance.

Safety is of key importance

"As concerns chemicals, it is more accurate to talk about harmful and less harmful than dangerous and harmless chemicals," says Sundqvist.

"In the chemicals industry, the main priority is to ensure that the chemicals are safe for users, both for producers and end users. However, this does not mean ignoring the impact of chemicals on the environment. In the production of chemicals, several advances have been made to offer more environmentally friendly alternatives, but this also places higher demands on chemicals."

The Green Deal, the EU's major environmental package, will further tighten requirements and affect both the classification and use of chemicals.

"We can't predict what the future will look like, but thanks to Mirka's active work with follow-up and compliance, I believe we are well equipped for the future."

Improved employee satisfaction

Mirka’s employees are the company’s driving force, and in our operations, we continuously work to promote wellbeing and satisfaction in the workplace. In the autumn of 2022, we introduced a new approach – a wishing well – to enable employees to express their own desires and proposals for improvement.

The initiative for arranging a business-wide idea campaign came from the personnel, the goal being to offer all employees the opportunity to share their ideas and wishes for a more pleasant workplace. The working group responsible for the campaign considered that the best way to organise the campaign was a wishing well – a real well where all the employees could drop their slip of paper.

The creative idea campaign got positive feedback when it was launched in the autumn of 2022, and the wishing well circulated through all of Mirka’s facilities in Finland. All employees had the opportunity to anonymously share their ideas and wishes for improving workplace wellbeing – and there were plenty of ideas.

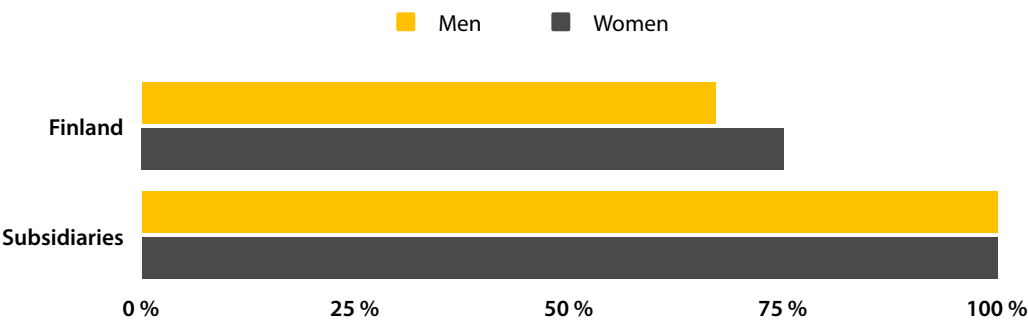
The working group has read all the proposals and formulated an implementation plan for carrying out the best ideas in 2023, when Mirka celebrates its 80th anniversary. For Mirka, staff wellbeing has always been a priority, so a similar competition is likely to be held again in the near future.

Progress through evaluation and development discussions

Mirka prioritises the wellbeing of its employees, and continuous evaluations and development discussions are an important part of the employees’ wellbeing and development. In development discussions, the manager discusses the wishes of the individual employees, concerning both personal and professional issues, and help each employee draw up an individual development plan based on the employee’s goals. Mirka considers development discussions an important tool for helping all employees develop and achieve their goals.

Employees who participated in evaluations or development discussions in 2022

In 2022, 67% of the men and 75% of the women in our Finnish operations participated in development discussions, while 100% of both women and men in our subsidiaries did so.





Increased collegiality among colleagues and departments

Mirka's employees have been taking workout breaks together to get a natural interruption to work. When the pandemic broke out, the staff were forced to temporarily stop the activity, but instead of completely abandoning their exercise, they turned to the Cuckoo app.

The app enables employees to exercise individually while also competing against one another, winning monthly prizes and inviting others to participate in various challenges. The app has been popular not only in the office but also in production, where the employees can exercise together. During an internal Cuckoo competition in early 2021, participants completed a total of 1,529 workouts.

Workout breaks have physical as well as mental benefits. The workout break has become an activity in which the entire personnel participate as a team, and it has been especially important after the pandemic.

Charging stations for electric and hybrid vehicles

Mirka has also introduced charging stations for electric and hybrid vehicles. Charging stations were discussed as early as 2018–2019, but it was not until last year that they became a reality. Employees pay to charge their cars via the Virta app, and the charging stations are obviously appreciated and necessary, as they are always fully booked.

To help our employees in times of high inflation in 2022, we offered an employee benefit to those members of the personnel who drive long distances to and from work with diesel or petrol cars. The employee benefit lasted from May to the end of the summer, and was appreciated by many employees.

Driving force for change

In recent years, the logistics industry has faced several challenges calling for rapid changes. Poor raw material availability and logistical problems have strained the company's transport systems and inventory turnover. Eventually, the challenges became a driving force for reforming the company's logistics.

The pandemic has been the main reason for transport crises in recent years. Many companies have found it challenging to get both materials and products delivered on time, and for most of the 2021–2022 period, the transport chain was stretched and chaotic.

Finding a solution to the problem was anything but easy.

"The goal has been to secure the availability of materials and optimise inventories to reduce waste. To achieve this, we sought new suppliers and increased the supply chain by 2% in Finland. We also increased the conversion rate of our large warehouse in Belgium and optimised freight by shipping larger rolls instead of smaller boxes, which usually contain a lot of air. These measures enabled us to not only reduce operational waste but also optimise freight and reduce costs," says Joachim Rännar, Operations Director at Mirka.

"The goal has been to secure the availability of materials and optimise inventories to reduce waste.."

-Joachim Rännar,
Operations Director at Mirka.

Mirka's central warehouses



Security is increasingly important in the transport industry

The transport industry has undergone an inevitable transformation in the last two years. The pandemic caused bottlenecks in the global logistics chains and the war in Ukraine has made rail transport from Asia and through Russia impossible. Many companies have become increasingly aware of the shortcomings in the transport network and the risks posed by long distances, and this has pushed companies to change.

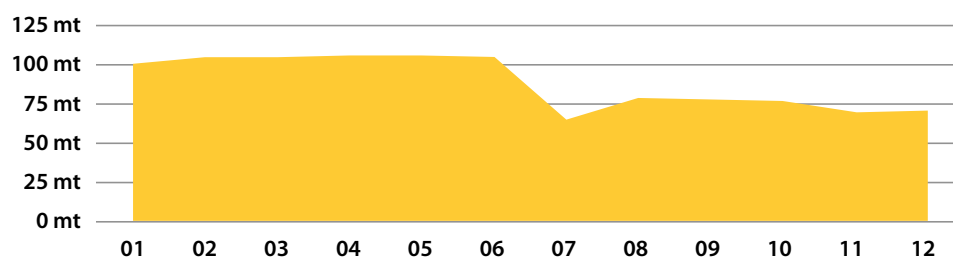
“The last few years have brought about numerous changes. Among other things, we have reduced air freight by making better plans and lowering the availability requirement in warehouses. In other words, we now produce only what we need to avoid having too much in stock. Every year, we also prune poorly selling products from our range, which makes production more efficient and sustainable. This proves that it is possible to meet the transport industry’s challenges through innovative thinking and a proactive approach,” says Rännar.

The increased number of suppliers and higher conversion rate ensures Mirka a better risk diversification while boosting co-operation with all the subsidiaries to streamline the company’s transport system.

Share of air freight in 2022 measured in metric tonnes

In January 2022, Mirka paid for almost 100 mt of air freight. During the year, the company’s efforts to reduce its air freight resulted in a 30% reduction.

Metric tonnes = mt



Increased opportunity for conscious choices

At the end of 2022, Mirka entered a partnership with nShift. The collaboration makes it easier to switch between carriers, without the need to create integrations between various computer systems. Instead, carriers and suppliers can easily book and track transports through the common integrations with nShift. The partnership with nShift offers Mirka a more accurate overview of deliveries, which means that transports are more reliable and easier to plan.

The partnership with nShift will also give our business access to information about carbon dioxide emissions from different deliveries, allowing us to review the environmental impact of products and make more conscious decisions in the transport chains. This enables us to take responsibility for the environmental footprint of our operations while ensuring safe and efficient transport solutions.

The Sustainable European Abrasive Manufacturers

In early 2020, the Federation of European Producers of Abrasives (FEPA), launched the SEAM project to support companies in their sustainability work and contribute to a more sustainable industry. Over the past three years, the project has developed into a valuable resource for companies in the abrasives industry that want to create more sustainable products and ways of working, and it has also paved the way for a new era of sustainability in the abrasives industry.

As a founding member of SEAM, Mirka wants to help develop a European standard for sustainability in the abrasives industry jointly with other European manufacturers, suppliers and distributors. The goal is to strike a balance between environmental efficiency, production performance and occupational safety to create a strong foundation for corporate values and forms of collaboration while contributing to a more sustainable industry. The project marks an important step in promoting sustainability and improving conditions in the abrasives industry: a step that is also expected to strengthen European companies' position in the global market.

"Within the project's framework, Mirka has set several improvement goals that the company wants to achieve in the first period of the project. Among other things, we want to improve the company's energy use, increase the share of renewable energy and boost co-operation with external parties. When setting the company's improvement goals, we have explored various measuring tools and developed a strategy for optimising processes in order to achieve the goals," says Ida Smedlund, Management Systems Engineer

Focal areas in 2020–2021

The SEAM project has three pillars: environmental sustainability, social sustainability and economic sustainability. The environmental component is about resource management, emissions management and waste management. The social component focuses on occupational health and safety, training and education as well as diversity, while the economic component involves the companies' ability to create high-quality and innovative products, improve their production processes and contribute to a sustainable economy.

Mirka has set itself specific targets for each pillar which it aims to achieve in the first three-year period starting in 2020. It has reported the related results at the end of each year, outlining the steps taken to achieve these targets. The project's goals have involved many questions and challenges, but have also resulted in several successes

Success stories from SEAM

One of the targets is to streamline the use of energy and reduce energy consumption by 10% over a period of three years. Prior to the project's launch in 2019, the company's energy consumption was 2.61 kWh per square metre. In the past two years, Mirka has succeeded in significantly reducing its energy consumption to 2.48 kWh and 2.17 kWh per square metre respectively. In 2022, construction and renovation projects posed an energy-intensive challenge to the company, and energy consumption increased to 2.5 kWh per square metre. The total energy reduction over the past three years amounts to 4.2%, a figure Mirka wants to improve in the future.



An energy target in which Mirka has been more successful is that of increasing renewable energy use. In 2019, renewable energy accounted for 62.7% of the company's overall energy consumption, and the target was to increase renewable energy use by 30% over a three-year period. However, the pandemic years of 2020 and 2021 proved to be a real challenge, with the share of renewable energy plunging to 51.2%. In turn, 2022 showed positive development, as the company's use of renewable energy was up to 69.9%, an increase of 11.5%. The target of 30% remains in place, and Mirka will continue to work for a more sustainable energy consumption over the next three years.


Perhaps the biggest success story during the SEAM project's first phase was seen in the target of increasing the number of development projects and co-operation with external actors. Mirka has invested in several projects during the reporting period, the two largest being SEAM and SHAPE, both of which emphasise the key role played by collaboration with other companies on the road towards a more sustainable abrasives industry. During the reporting period, Mirka managed to increase the number of development projects with external actors so much that the company exceeded the target of 7.5%. With two major projects underway, Mirka hopes to continue to increase co-operation with other parties in the future.

However, several challenges remain. One of Mirka's goals was to reduce the use of chemicals in production. However, because the accuracy of the current measuring tools involves some uncertainty, no firm conclusions can be drawn in this report.

"We have learned a lot in the last three years and have achieved some of our goals, but there are still challenges that we need to overcome. We must find a more structured way of working with our sustainability goals and identify the right measuring tool for each specific goal. Over the past three years, we have realised that our measuring tools used for some of the goals need to be improved, and that will be the next step," says Smedlund.

SEAM in the future

The SEAM project management has announced that the project will be further developed during the next three-year phase. The result of this development may lead to the SEAM organisation exercising stronger control regarding the companies' targets so as to facilitate co-operation between the companies and the organisation. Mirka looks forward to increased co-operation with all companies in the industry and is determined to lead the way in sustainability and promote a more environmentally friendly future in the abrasives industry.



"We want to improve the company's energy use, increase the use of renewable energy, and reduce the use of hazardous chemicals in production."

Ida Smedlund

Products and services



Top brands

Our best-known brands are Abranet®, Autonet®, Abralon®, Mirka® Deos, Mirka® DEROS, Mirka® LEROS, Mirka Iridium®, Mirka Novastar™, Gold, Mirlon Total®, Polarshine®, myMirka®, Q.Silver®, Net by Mirka and dust-free sanding.



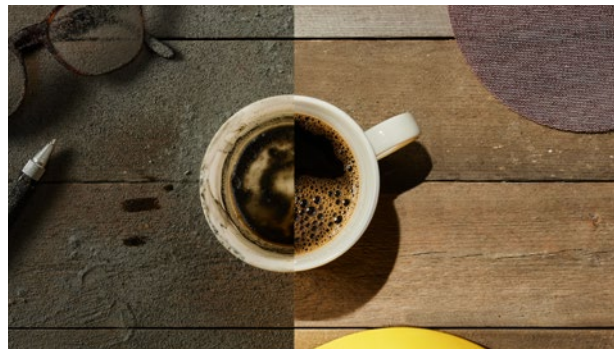
Industries

Collision repair, wood, construction and decoration, marine, wind power, automotive, transport, automation and precision industry.



Ergonomics

Mirka products are created to ensure good ergonomics in terms of their use, safety and efficiency.



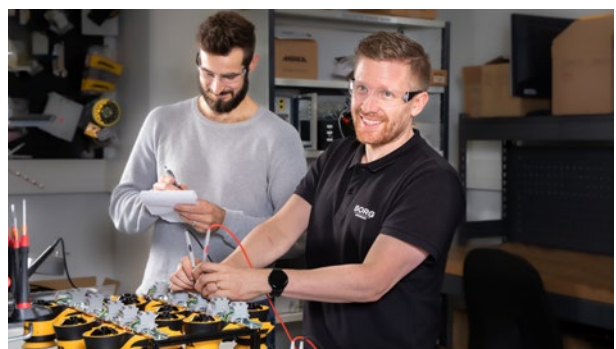
Dust-free sanding

Mirka was the first to develop dust-free sanding and has since continued to lead development in this area.



Abrasives and polishing compounds

Mirka offers first-class, innovative abrasives and polishing compounds for a wide range of industries. Our range also includes water-based polishing products.



Tool repairs

Our Mirka Tools Service subcontractors repair customers' tools. Mirka works continuously to extend the lifetime of its products.

Use of resources

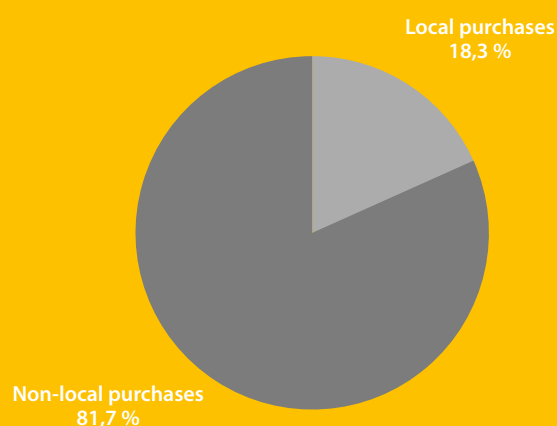
Mirka Finland 2022

Share of budget spent on local suppliers in Finland*

<100 km from all four of our manufacturing sites in Finland

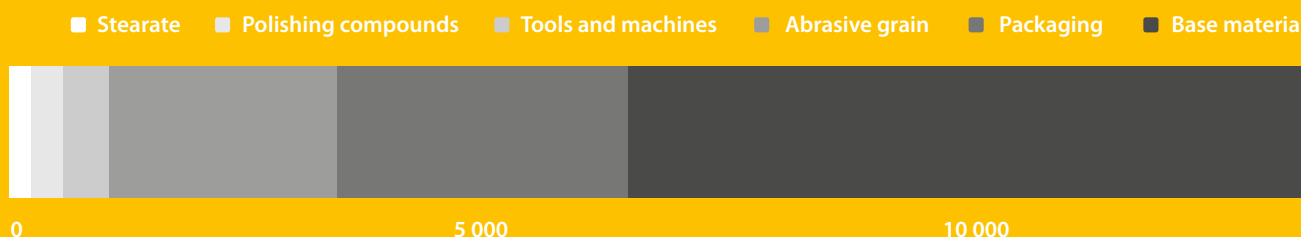
Jakobstad	4,3 %
Korsholm	0,8 %
Vaasa	3,2 %
Vörå	3,1 %
Nykarleby	2,0 %
Kokkola	0,5 %
Pedersöre	3,1 %
Raseborg	0,3 %
Kauhava	0,9 %
Larsmo	0,0 %
Kronoby	0,1 %

Share of budget spent on local suppliers in Finland*



Production sites in Finland

Tonnes of material used in Mirka's Finnish operations*



*Nurmijärvi is not included in the statistics due to ongoing integrations of the operations.

Changing perspective

The rapidly increasing demand for sustainable products implies a profound change for many companies. Long a pioneering industry leader with its innovative dust-free products, Mirka now wants to harness its innovative capacity to create more sustainable products – a challenge that requires cross-border collaboration

Jan Grön, Applied Development Manager, and Markus Kass, Technology Manager, Coated Abrasives, have both worked with product development at Mirka for 20 years. Despite their extensive competence, it is a huge challenge to create sustainable products due to the complexity of the concept of sustainability.

“When it comes to sustainability, we cannot trust our gut instincts but must rely on the facts. The problem is that we do not always have the facts. Additionally, sustainability is such an incredibly complex concept that it is difficult to know how to measure all of its variables. We are now focusing on improving product design and lifetime as well as finding feasible ways of measuring product durability,” says Kass.

Developing more sustainable products is not only about choosing the right materials or improving recycling, but also about making the entire system and work processes more sustainable. For Mirka, engaged in worldwide operations, sustainability is a cross-border phenomenon, which makes the product development process even more complex.

“The groundwork for sustainable products is laid at the product development phase, but instead of being linear, the phase is linked to many other processes in a web-like fashion. At Mirka, we have enormous competence, but it alone is not enough: creating sustainable products is a global challenge, and to achieve large-scale change we must work together,” says Petra Härmälä, Product Lifecycle Manager.

In 2022, Mirka initiated the SHAPE project, which aims to create an ecosystem of collaborating companies and organisations in different industries that together develop more sustainable products by exchanging knowledge and perspectives.

“The SHAPE project offers us a unique opportunity for systematic efforts to understand sustainability through new perspectives and to hopefully be able to launch better and more sustainable products in the future,” says Grön.



Product design and development

Changing conditions are a driving force for Mirka to develop and improve our business. Mirka's product development focuses on developing innovative and sustainable products and processes to reduce the environmental impact of our operations while offering our customers the best surface finishing solutions.

In product development, it goes without saying that we do not waste financial, material or environmental resources – neither our own nor our customers' resources. Sustainability is a natural extension of this mindset, which is why Mirka always works closely with customers to gain deeper knowledge of their needs and way of using products. Armed with knowledge about the customers' work processes and environment, we can develop more efficient and ergonomic products that our customers can use in a more sustainable way.

"Sustainability means that economic, environmental and social aspects are considered already in the product development stage and that the company strives to develop as circular processes and products as possible," says Johan Palmroos, Quality Manager.

Mirka continuously seeks opportunities to reduce the environmental impact of its operations and has in recent years calibrated its product development to save energy and raw materials, increase recycling and decrease the use of environmentally hazardous chemicals. We develop safer, more sustainable and more efficient products and processes that meet Mirka's high quality standards.

"We will soon initiate a project called "From dust to value", aiming to boost the incentive for dust extraction by creating added value for dust. Mirka already offers products for dust extraction, but this project is about finding new uses for the dust itself. Making dust a raw material worth collecting, reduces waste and makes processes more sustainable," says Charlotta Risku, General Manager Innovation and Sustainability.

Mirka's motto is Dedicated to the Finish, which stands for the high demands we place on ourselves, our products and our innovation. As a market leader in the surface finishing and abrasives industry, we have long invested in research and development to produce a complete range of technically superior, high-quality sandpaper, abrasives and polishing compounds, and a whole new generation of electric sanders. Together, our products create an innovative and increasingly sustainable solution that offers customers the high level of precision that Mirka is known for.



Power Tools

Groundbreaking advantages laid the foundation for Mirka Power Tools

Mirka Power Tools develops and manufactures advanced, ergonomic and lightweight sanders that offer customers a complete sanding solution. Our goal is to offer our customers the opportunity to perform better with immaculate precision – a concept that underlies the international success of Mirka Power Tools.

Mirka's tool range consists of electric and pneumatic sanders and polishers, sanding blocks and dust extractors, as well as additional tools for wall and ceiling sanding. The first product in the Power Tools range, the Mirka® CEROS electric sander, was released in 2009, laying the foundation for the rest of the products in the range. At the time, Mirka was the first company to introduce brushless motor technology in a sander – a technology offering great ergonomic and power advantages that revolutionised the sanding and finishing industry.

Today, Mirka Power Tools are recognised worldwide for their high quality and efficiency. To support Power Tools' strong growth, we have expanded our Power Tools production facilities in Jakobstad and also invested in larger and more environmentally friendly facilities. Our goal remains the same as when we first introduced the CEROS sander: to offer and develop the best products and processes on the market.

Extending the lifetime of products

A fundamental aspect of sustainable consumption involves extending the lifetime of products by ensuring that their components can be replaced. In our operations, we strive to protect the environment and offer high-quality solutions that have as long a lifespan and as low an environmental impact as possible. We offer a complete range of spare parts, backing pads and other accessories for our sanders to help users get the most out of their Mirka products.

Mirka also offers an advanced global service network, Mirka Tools Service, with subcontractors who repair customers' tools. Mirka works continuously to develop the most sustainable products possible, and extending the lifetime of its products is an essential part of this process.

Electronic development

The digital service myMirka offers operators of Mirka's products an easy way to take care of their most important tools: their hands. Our best-selling electric sanders feature integrated vibration sensors and Bluetooth® technology that enable the application to measure the operators' daily vibration exposure.

The hand-arm vibration syndrome (HAVS) is one of the best-known symptoms that can result from regular or prolonged sanding. Mirka cares for the health of operators and has



therefore made it easy for them to take the necessary measures to prevent injuries and protect health. Operators can monitor their daily vibration exposure by using the application's vibration indicator, which measures the instantaneous vibration level according to the standard ISO 5349-1:2001(E). The gauge turns yellow when the operator has been exposed to more than 50% of the daily maximum vibration exposure. This is a signal to the operators to stop sanding or lower the vibration level to protect their hands.

The goal of myMirka is to create smart interconnections that provide added value and instant feedback to Mirka's customers in a high-tech smart product environment, driven by our desire to constantly improve both our products and the product experience.

Individual solutions

The Mirka® Modular Trolley is a complete solution that has been developed with sustainability in mind. For example, the trolley's flexible design makes it easy for car repair shops to adapt it to their needs and work processes. Dust extraction is at the core of the sanding ecosystem, and Mirka's Modular Trolley enables users to optimise their workflow using the trolley's central dust extractor module.

“Mirka’s products offer high quality, good ergonomics and high efficiency. The Mirka® Modular Trolley is designed to facilitate users’ workflow, but while the main focus is on the user, the trolley’s design is also driven by the notion of sustainability. Dust extraction is at the core of the sanding ecosystem – and we have adapted the trolley specifically for this purpose. The trolley has a dedicated space for a dust extractor, which collects dust during the workflow to minimise the amount of dust in the workspace,” says Anders Karlström, Portfolio Manager at Mirka.

The trolley's flexible design allows users to adapt it to their own needs. Each module can be mounted separately to set up a customised trolley for the specific purpose required by the user.



Winner of the World Tool Awards

SHAPE – A driving force towards greener manufacturing

In collaboration with Finnish industry, Mirka will contribute to the green transition through the SHAPE project. The main goal is to create a cross-industrial ecosystem to develop solutions for the remanufacturing and construction industry: a major step towards a net carbon negative impact.

Business Finland has granted 10 million euros in development funding for the Mirka SHAPE project in a challenge competition as well as 20 million euros to the ecosystem companies surrounding the project. This is a unique project and first of its kind in Finland. The goal of the project is to achieve net carbon negative operations and to collaborate with other industry actors to create an ecosystem involving various sectors.

"By sharing knowledge with other companies, we can jointly develop solutions that enable net carbon negativity in the re-manufacturing and renovation industry," says Charlotta Risku, General Manager Innovation and Sustainability.

Focal areas in the project

The project focuses on four areas: accelerated circular economy, sustainable material solutions, repair, refurbish and remanufacturing solutions, and the creation of intelligent value chains through digital solutions.



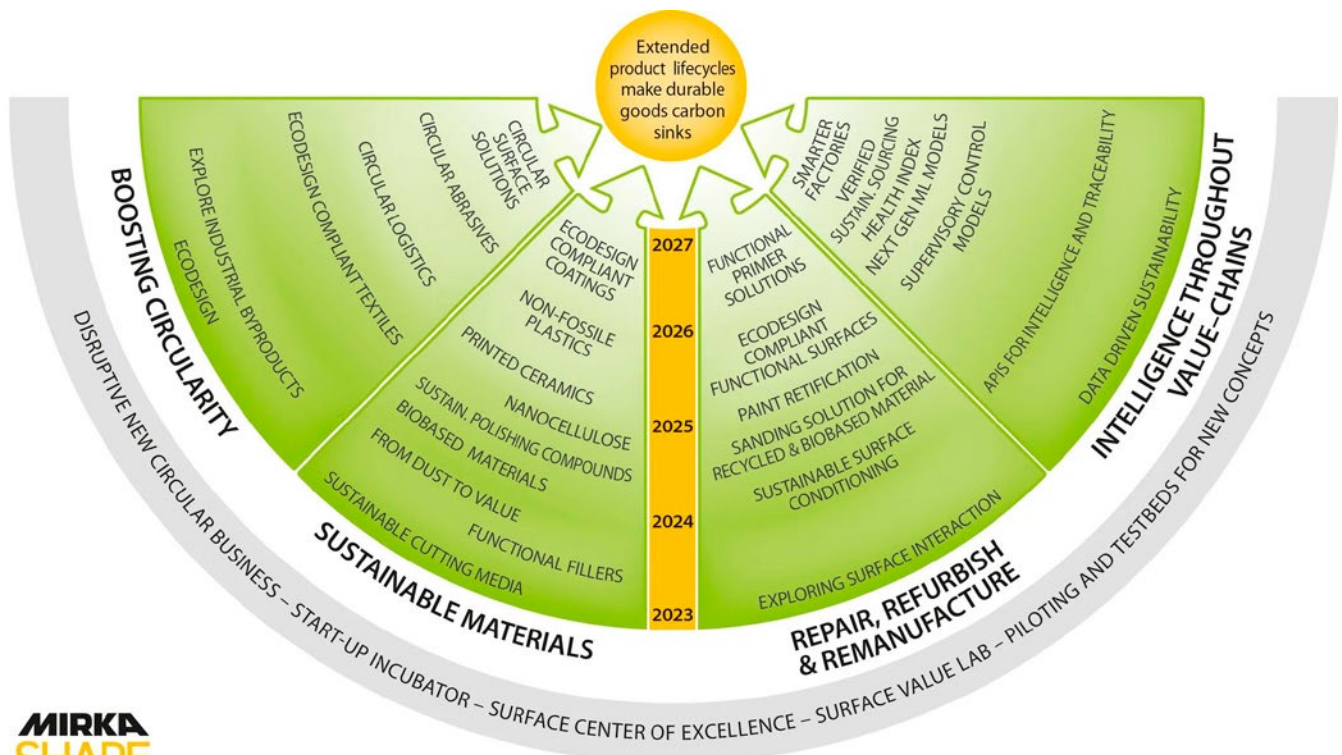
Our roadmap to a more sustainable way of working

All of the project's four pillars focus on improving both the products and the production processes to reduce carbon dioxide emissions. Mirka will realise the project's goals by, for example, extending the lifetime of products and finding new uses for by-products and waste.

"The project will last for five years, but its effects will be seen in all our operations much longer than that. The results of SHAPE will revamp the basis of our operations as a company: for example, we will retrain our staff and develop new, more sustainable products and solutions that will be used to renew our product portfolio," says Risku.

The tangible result of the project will not be known for another five years, but the expectations for the project are high. Jointly with the project partners, Mirka hopes to reduce the carbon footprint of the European industry by 100 million tonnes while creating greater export opportunities for the Finnish industry.

"This is an interesting way of building something more lasting as we are creating a large network and an entire ecosystem of companies that share our interests and want to solve sustainability issues together," says Risku.



The Veturi SHAPE ecosystem **aims to take a share** of the remanufacturing business growth which is expected to reach **90 B€ in EU by 2030**

Driving green transition of manufacturing industry by enabling net carbon negative surfaces



AFRIKA

Concluding remarks

Looking back on the past few years, we have every reason to be proud of the sustainability advances that Mirka made in 2021 and 2022, despite the challenging conditions posed by the pandemic. Through its perseverance, innovation and commitment, Mirka has achieved positive change and demonstrated that sustainable operations are not just attainable but also very beneficial to our operations and society at large.

This report describes how we have reduced our environmental impact and carried out our social responsibility. In the reporting period, Mirka reduced the carbon footprint of its operations, increased the use of renewable energy, prioritised the personnel's health and safety, implemented principles for the circular economy and most importantly, demonstrated that in addition to being a business goal, sustainability is part of our company identity.

Our sustainability investments have been made possible by the personnel's commitment and competence, support from our stakeholders, and the innovative solutions that we have developed in cooperation with our partners. We are thankful for their contribution and will continue to work together to create a more sustainable industry. We recognise that there is always more we can do to improve our sustainability and will continue to build on our successes and aim for increasingly better sustainability outcomes by investing in new technology, cooperating with other players in the field, and developing our competence in sustainability.

Mirka will also continue to work with suppliers and customers to promote sustainability across the value chain. Sustainability is a collective effort requiring cooperation and partnership, which is why we will continue to engage in dialogue and collaboration with our stakeholders to ensure that the sustainability of our operations moves in the right direction.

With 80 years in the business and a strong position to further improve its sustainability outcomes, Mirka will continue its determined work for a more sustainable industry. We are proud of our history and look forward to our continued position as the industry's driving force for positive change – for us, our children and future generations.

GRI Index

GRI Reference	Headline	Page
The organization and its reporting practices		
2-1-a	Organizational details	10
2-1-b	Organizational details	11
2-1-c	Organizational details	11
2-1-d	Organizational details	11
2-3-a	Reporting period, frequency and contact point	46
2-3-b	Reporting period, frequency and contact point	46
2-3-c	Reporting period, frequency and contact point	46
2-3-d	Reporting period, frequency and contact point	46-47
Activities and workers		
2-6-a	Activities, value chain and other business relationships	10-11, 34
2-6-b	Activities, value chain and other business relationships	10-11, 30, 7
2-6-c	Activities, value chain and other business relationships	10, 40-41
2-6-d	Activities, value chain and other business relationships	10, 30-31
2-7-a	Employees	23
Governance		
2-9-a	Governance structure and composition	10
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	12
2-23-a	Policy commitments	22
2-23-b	Policy commitments	22, 46
2-28	Membership associations	22
Stakeholder engagement		
2-29	Approach to stakeholder engagement	22
2-30-a	Collective bargaining agreements	22

GRI		Page
Reference	Headline	
Procurement Practices		
204-1	Proportion of spending on local suppliers	35
Anti-corruption		
205-2	Communication and training about anti-corruption policies and procedures	22
205-3	Confirmed incidents of corruption and actions taken	22
Materials		
301-1	Materials used by weight or volume	35
Energy		
302-1	Energy consumption within the organization	21
Water and Effluents		
303-3	Water withdrawal	17
303-4	Water discharge	17
Emissions		
305-1	Direct (Scope 1) GHG emissions	16
305-2	Energy indirect (Scope 2) GHG emissions	16
Waste		
306-3	Waste generated	17
Employment		
401-1-a	New employee hires and employee turnover	23
Labor/Management Relations		
402-1	Minimum notice periods regarding operational changes	22
Occupational Health and Safety		
403-1	Occupational health and safety management system	22
403-2	Hazard identification, risk assessment, and incident investigation	26-27
403-4	Worker participation, consultation and communication on occupational health and safety	28-29
403-6	Promotion of worker health	28-29
403-9	Work-related injuries	26
Training and Education		
404-3	Percentage of employees receiving regular performance and career development reviews	28
Non-discrimination		
406-1	Incidents of discrimination and corrective actions taken	22-23
Child Labor		
408-1-c	Operations and suppliers at significant risks for incidents of child labour	22

Reporting principles

Mirka publishes its GRI-referenced sustainability report, detailing the company's sustainability development, every two years. This report describes the company's sustainability work in the period 1 January 2021 – 31 December 2022. All the information contained in the report has been collected from every unit under Mirka Ltd's control, unless otherwise stated. This report was published in June 2023. The report follows Mirka's financial year, however, the financial statements are published on a yearly basis at the end of each financial year.

The topics and indicators discussed in this Sustainability Report have been chosen based on their importance to and impact on our operations, as well as stakeholders' expectations and needs. Mirka has also cross-referenced the UN Sustainable Development Goals.

The topics and indicators presented in this report provide our stakeholders a transparent and reliable overview of our economic, social and environmental sustainability work. Mirka wants to present all the sustainability information clearly and comprehensibly, including for topics that are complex and multifaceted.

The goal of our sustainability report is to give the reader an objective picture of our sustainability work – including the challenges we have encountered during the reporting period. Where possible, we also refer to the results from previous reporting periods to indicate trends and development. Our Board of Directors has approved this publication and confirmed that the information presented in it is accurate and verifiable.

More information about Mirka's sustainability work is available at www.mirka.com.

