



**Our Clean
Commitments**





About Mirka	3
A Message from our CEO	5
Highlights from 2014	6
The Mirka Way	7
Success Driven by People	8
Clean Partner	10
Clean Proactivity	14
Clean Production	15
Clean Performance	24
GRI Content Index	27



ABOUT MIRKA



KWH Mirka Ltd is a global company that specializes in advanced surface finishing technologies. We offer a wide range of high-quality abrasives, innovatively designed tools and polishing compounds as well as accessories and complete sanding solutions. Our philosophy that guides everything we do is: A job well done!

Our History

Mirka was founded in 1943 in Helsinki by Finnish engineer Onni Aulo. Engineer Aulo met the challenge of starting a new company during the war and successfully began production in 1946. Over the years, our business has changed many times in response to market needs.

In 1962, we moved to the small village of Jeppo on the west coast of Finland, where our headquarters and production facilities are still located today. Since then, our company and product lines have expanded rapidly. Our business focus has evolved from manufacturing sandpaper to highly innovative, patented



net abrasives, electric sanders, polishing compounds and complete dust-free sanding systems.

Our Company

We are part of the family-owned KWH Group and are one of the world's largest manufacturers of coated abrasives. We provide employment in Finland for over 660 people at our corporate headquarters and four production sites. 95% of our products are exported and sold across the globe through our 15 subsidiaries and a large network of long-term partnerships with importers and distributors. They provide technical and sales support to our customers in more than 100 countries on four continents.

Our products and systems are designed for professional users in the following industries: automotive manufacturing and refinishing, wood and furniture, construction and renovation and composite processing.

Corporate Responsibility

Our financial, environmental and social initiatives, combined with our willingness to invest in continual improvement and innovation, show our commitment to being an industry leader in sustainability.

For people working at Mirka, it has always been clear that we should not waste financial or material resources – either our own or those of our customers. We feel it is equally important to preserve the planet's resources. Sustainability is a natural extension of this approach. It means taking the economy, the earth, and people into consideration when we make business decisions – now and for future generations.

We are continuously looking for opportunities to reduce our environmental footprint – this aligns with our company values and also cuts costs. We have worked hard to conserve energy and raw materials, reduce waste, increase recycling, and decrease the use of persistent chemicals. We are developing healthier, safer, and more efficient products and processes so that our customers and employees will benefit. For example, our dust-free sanding systems help protect the lungs of workers while giving a cleaner and better surface finish.

We think we can make even greater positive impact towards sustainability by sharing what we do through communication and collaboration. We work hard to inspire sustainability throughout our supply chain and our communities.

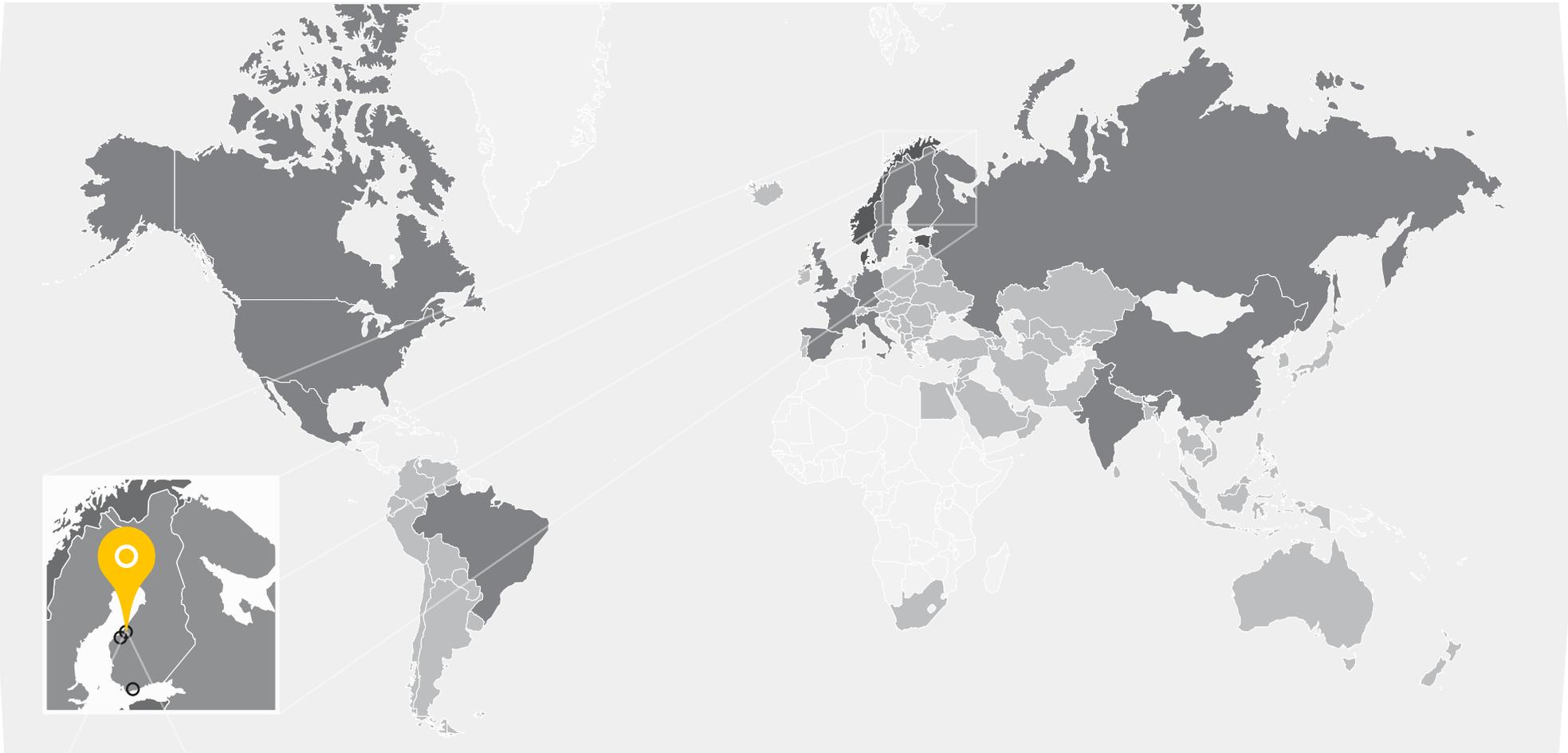


Our Clean Commitments

Our business is focused on providing the best surface finishing preparation tools and systems to customers. To be the most sustainable finishing systems provider, we are digging deep down to the core of our company to figure out what it really means to be sustainable. We have accomplished a great deal already and have many more initiatives we will take on in the future. On the following pages, under each of our Clean Commitments, descriptions and data are provided about our sustainability initiatives and performance to date.



Mirka Global



OUR GLOBAL REACH

-  **Corporate Headquarters** Jeppo, Finland
-  **Manufacturing Sites** Jeppo, Oravais, Karjaa, Jakobstad – all in Finland
-  **Subsidiaries** Brazil, Canada, China, France, Germany, India, Italy, Mexico, Russia, Singapore, Spain, Sweden, Turkey, UK and USA
-  **Branch Offices** Denmark, Norway, Estonia and Belgium
-  **Markets Served**



OUR BEST-KNOWN BRANDS

Abranet[®], Autonet[®], Abralon[®], Mirka[®] DEROS, Mirka[®] CEROS, Gold, Mirlon Total[®], Polarshine[®], Q.Silver[®], Net by Mirka and Dust-free sanding



A MESSAGE FROM OUR CEO

At Mirka, we are clear about our future. We want our customers and the public to recognise our position as a market leader – the most innovative and responsible company in the industries where we do business.

Our goal is to provide our customers with innovative products and solutions that achieve outstanding results in the surface finishing marketing segment.

As a company, we can achieve our goal by being ambitious, lean, and flexible. Each year, we carefully analyse customer feedback, review our policies, and study the market. Then, we make adjustments based on what we learn to stay in tune with market trends and customer needs.

How does sustainability fit in? It fits perfectly.

Changing conditions inspire us to improve and grow our business. We see that our customers are as interested in sustainability as we are. This is why our product development is focused on innovating the best sustainable products and solutions, while continually improving our own environmental performance.

We are partnering even more with suppliers, neighbouring businesses, and customers to develop both environmental and social sustainability throughout our supply chain.

The benefit will be continued economic sustainability and growth.

For our workforce, our approach to social sustainability includes offering health and safety training, professional development programmes, and performance reviews. Our goal is to give our co-workers as many opportunities as possible to realise their full potential.

Our main business challenge is market uncertainty – economic forecasts predict continued recession in some of our major markets.

In spite of uncertainty in the market due to the continued flat development of the European economies, fluctuating exchange rates and increased geopolitical tensions, 2014 was a very strong year for Mirka. Sales grew by 9 % in 2014 and by 8 % in 2013.

Mirka's growth was good in all markets and continues according to plan in the EMEA area (*Europe, Middle East and Africa*). In North America, we have strong growth and we are increasing our market share. Brazil is currently

experiencing a recession, which presents challenges for South American sales. Asia is a fast-growing market area, especially the Indian and Chinese market.

Moving forward, our goal is to achieve steady double-digit growth in current and new markets. This allows us to invest more in sustainability initiatives and to develop breakthrough technologies that address customer challenges and needs.

We have made excellent progress with our sustainability work, since we launched our initiatives in our first report from 2012. We have realised that it is important to communicate our activities and accomplishments publicly. The results can be found in this second biennial Global Reporting Initiative (GRI)* sustainability report, which I take great pride in presenting to you.

Stefan Sjöberg
KWH Mirka Ltd

* The Global Reporting Initiative (GRI) is a non-profit organisation based in Amsterdam that has developed one of the world's most recognised standards for sustainability reporting.



HIGHLIGHTS FROM 2014

Our initiatives address all three aspects of sustainability – economic, social, and environmental. They show our strategic and balanced business approach.

1 Zero Accidents

The “Zero Accidents” vision is a part of Mirka’s sustainability efforts and some of the factories have already attained the requirements for zero accidents. A development project together with the Finnish Institute of Occupational Health was completed during 2014, and the effort proved to be exactly what was needed for all factories to achieve the goal in the long term.

2 New Production Line Investment

The biggest investment during 2014, was the project to build a new hall for an additional new production line at our main production site in Jeppo. The new hall is 4740 m² and will house a new production line, further processing lines and facilities for logistics and shipping. The new production line will incorporate completely new technology, being an effective high capacity line and at the same time energy-saving.

3 Product Launches

We introduced the new Star generation, a platform of high-technology flexible film abrasives. The new coating technology has low VOC emissions and the production process is energy efficient.

The first new products in the microfinishing business area have been introduced to the market. A complete family of new microfilm rolls for precision sanding of challenging surfaces in the engine and electronics industries.

4 Bioenergy and Biogas Partnerships

Using bioenergy combined with biomass energy makes perfect sense for us. The bioenergy plant has been fully operational since January 2014. We are also replacing propane with biogas from a local supplier in the neighborhood.

5 Distribution Efficiency in Europe

Our distribution centers are close to our customers and are under constant development. Deliveries to the EU countries in the Balkan area are now shipped from our European distribution center in Belgium to shorten delivery times and increase flexibility. All our deliveries to Italy are now also shipped from the our Belgian distribution center.

6 Mirka® DEROS Product Awards

Our Mirka DEROS electric sander, which we developed in-house, received two awards in 2014: the IF Product Design Award and the Red Dot Industrial Design Award.

Its low weight and excellent ergonomic features make Mirka DEROS unique to the market. Mirka DEROS also plays an important part in our dust-free systems. All Mirka DEROS sanders are assembled and quality controlled at our Jakobstad site.



THE MIRKA WAY

Our Company Culture

At Mirka we understand that every job has its own unique requirements, which is why we work closely with customers to provide tailored solutions that precisely meet their needs.

After gaining a clear understanding of exactly what each customer requires, our technical customer support specialists recommend high-quality products, processes, and training that ensure successful results can be achieved at every step of the operation.

Sustainability is built into The Mirka Way. When the system is set up with all of the right parts and customers have all the information needed to get great results, then their work is more sustainable.

There is a minimum amount of mess to clean up, using the least amount of resources, with elements that make the workplace more healthy, safe, and comfortable.

Our Vision

"We wish to reach a market position, where customers and interested parties see us as a market leader and the most responsible company who drives innovation in our core business sectors."

Our Mission

"To give people the opportunity to perform better."

Our Values

Responsible

- For all results & resources.
- Ethical business practice.
- Structured and well organised.
- Cost-aware.

Committed

- Keep our promises.
- Close to the customer.
- Dedicated to high performance.
- Passionate people.

Innovative

- Open to new ideas.
- Continuously seeks to improve.
- We create solutions that are good for us, our customers and society as a whole.

Respectful

- Every individual is valuable and can contribute.
- Open work environment.
- Warm and genuine.
- Fair.



SUCCESS DRIVEN BY PEOPLE

Parent Company KWH Group Ltd

Our Company KWH Mirka Ltd

BOARD OF DIRECTORS

Chairman: CEO of KWH Group Ltd
 CEO of KWH Mirka Ltd
 3 Shareholders
 2 Non-Shareholders

KWH MIRKA LTD MANAGEMENT GROUP

CEO
 R&D Director
 CFO
 Production Director
 Marketing Director
 Quality Manager
 VP Sales
 Head of Customer Service and Logistics
 + one annually elected personnel representative

All of our 4 manufacturing sites and our 4 branch offices are administrated and 100 % owned by our company KWH Mirka Ltd.

How We Organise Ourselves

We have a strong business planning process that involves all departments at the headquarters and all subsidiaries. Each year, we work through the business plan for the whole company, which is then approved by the Management Group and the Board. This review process ensures that we are continually improving our strategy and operations. New Mirka projects and initiatives are then based on this programme.

Our 15 Subsidiaries

SUBSIDIARY BOARD OF DIRECTORS

Chairman: CEO of KWH Mirka Ltd
 CFO of KWH Mirka Ltd
 Managing Director of Subsidiary
 VP Sales
 Regional Manager

All our 15 subsidiaries are 100 % owned by the parent company KWH Mirka Ltd.

EXTERNAL
 AUDITORS
 for subsidiaries
 are appointed
 by KWH Mirka Ltd

Our Workforce

Our strength and competitive edge come from our workforce. As co-workers, each of us employed at Mirka is considered a partner

in the company. Here is a snapshot of who we are:

MIRKA EMPLOYEES/ 31.12.2014	MALE	FEMALE	TOTAL
Worldwide Workforce (All Employees and Supervised Workers)	792	287	1079
Total Group, Employees	783	287	1070
Workforce, Finland	480	183	663
Workforce, Subsidiaries	303	104	407
Full-time Employees	749	278	1027
Part-time Employees	34	9	43
Total Group, Supervised Workers*	9	0	9
Board of Directors for KWH Mirka Ltd	6	1	7
Management Group for KWH Mirka Ltd	7	1	8
Board of Directors for Subsidiaries of KWH Mirka Ltd	8	0	8
Europe, Middle East, and Africa	633	244	877
America	87	32	119
Asia	63	11	74

*A worker who performs regular work on-site, but is not considered an employee under national law.





Mikael Vikström
HR Manager

“Our employees have a central and active role in all our company’s operations. Through a dedicated work force we reach our goals. We know that success is born from skilled and motivated employees”.

With Employee Health in Mind

We believe access to health care and information is important. We make sure that:

- information and counselling are offered for health conditions and concerns
- regular health checks are given for potential work-related injuries and diseases
- risk-avoidance training is provided in the workplace
- our physical training facilities are available for use by all employees
- health risk information for travelling abroad is supplied prior to business travel



Professional Development – Investors in People

Investors in People (IIP) is a professional development accreditation programme for businesses. This internationally recognised programme is based on the idea that businesses can thrive through training, engaging, empowering, and rewarding the people who work for them.

“Success driven by People”, our HR strategy and IIP programme, has been an important and popular part of our company culture since it was created in 2006. Currently, all of our employees in Finland take part in the programme. In the near future, we plan to offer IIP to all our subsidiaries.

The renewal of our IIP certificate will be executed during 2015 and the outcome will be presented in our next GRI report for 2016.

To learn more: *Investors in People International* (www.investorsinpeople.com/home)



Workforce Training

Average number of training hours per employee group and gender 2014:

WORKFORCE FINLAND	
TRAINING HOURS/EMPLOYEE GROUP	[h]
Managers	38
White-collar	29
Blue-collar	14
WORKFORCE WORLDWIDE	
GENDER	[h]
Female (Finland)	21
Male (Finland)	19
Female (Subsidiaries)	14
Male (Subsidiaries)	17
A total of 19,598 training hours were given.	

Performance Reviews

In 2014, performance reviews were conducted among 230 male employees and 104 female employees at Mirka Finland, and 224 male employees and 78 female employees at our subsidiaries.

48 % Male	Finland
57 % Female	Finland
72 % Male	Subsidiaries
75 % Female	Subsidiaries

CLEAN PARTNER We strive to take care of employees, customers, end-users and suppliers better than anyone else.



Simon Bloxham
Vice President, Sales

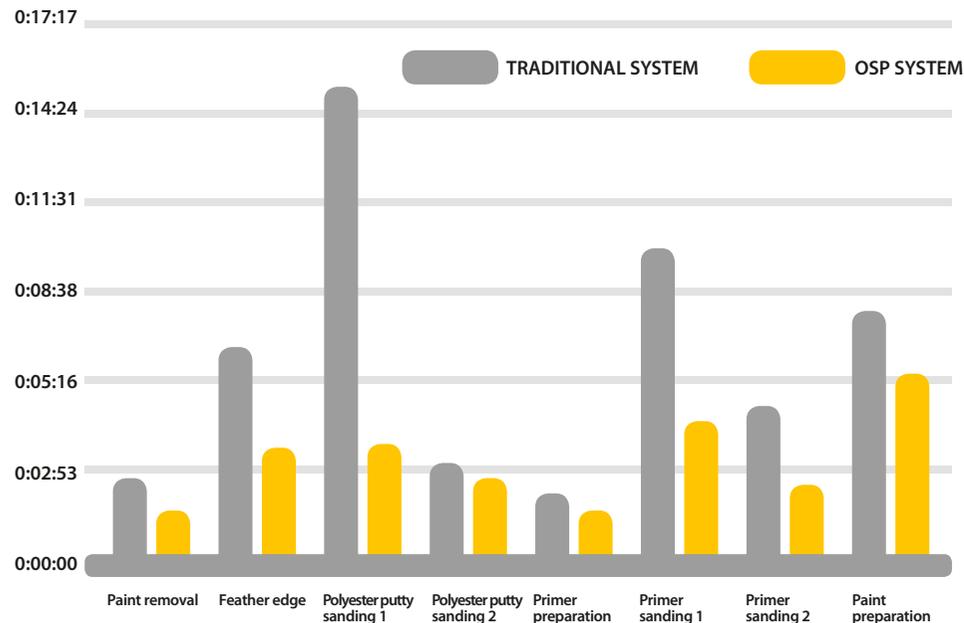
“We consider ourselves a partner to our customers, suppliers and co-workers. Developing strong relationships built on trust and mutual benefit backs up our clean partner statement.

It is a two-way communication around honesty, integrity, and collaboration.”

One of our success stories is the OSP system, a standardized repair process for body shops. Mirka's OSP (*Optimized Surface Preparation*) system is a clear and simple process which aims to keep the focus and achieve the goal

for the day – correctly accomplished repairs on time. Time studies performed in body shops show a time saving in the sanding process of 30 % thanks to the OSP system.

SANDING TIME COMPARISON OSP SYSTEM VS. TRADITIONAL SYSTEM



Customer Partnerships

We are both a supplier and a partner to our customers. We provide them with products, services, and solutions and they provide us with customer feedback and continued business.

First, customers let us know what challenges they face. Then, our sales and technical support specialists help them get the right products and training they need for their work. Later, our team follows up to find out how our solutions have performed and what can be improved. Our Management Group and product development team review this feedback regularly. Through this process, our customers drive many of our product improvements and system innovations. The result is a win-win situation. We bring products and services to market that are precisely what customers need and want to achieve success in their work.

Sustainability Makes Good Business Sense

At Mirka, a good decision is a sustainable decision. Everyone wins. Our sustainability activities reduce operating costs, increase

sales, and make us a great company to work at and to do business with. Our customers benefit because their business becomes more sustainable when they use our products. They deal with less waste and a and get a cleaner working environment while being more productive.

Ethical Conduct

Everyone who works at Mirka receives a copy of our Ethical Guidelines. This six-page document defines our high expectations of personal and professional conduct while they are employed. It provides a set of rules outlining proper practices for all internal and external financial and social interactions related to work and the work environment.

For our subsidiaries, we sign agreements with each of their Human Resource divisions related to ethics to ensure that our standards are met worldwide. However, we believe that it is important for local cultural practices to be taken into consideration when developing each subsidiaries' own ethical policies and standards. Our goal is to create a relationship built on trust and respect with our subsidiaries and with their customers.



Zero Tolerance of Corruption

At Mirka we have no tolerance of corruption. Every year, each new person hired is trained in our anti-corruption policies and procedures. This means that 100 % of our employees have received anti-corruption training over the years. In 2014, all 39 of our new hires received training. We are proud to report that there were no incidents of alleged, actual, or attempted corruption involving our workforce or our business activities.

We believe in developing long-term, fair partnerships with suppliers that are consistent, reliable, and secure. Our goal is to reduce risks for both our business and our suppliers.

Our Identified Stakeholder Groups

- different customer groups
- employees, other workers, and their trade unions
- educational institutions
- business and industrial associations
- suppliers shareholders and providers of capital
- civil society

Stakeholder Engagement

We have collected feedback from 2 different stakeholder groups about our first sustainability report from 2012. Based on the feedback received, we have improved and reviewed the content in this report.

Our customers state that we are forerunners in sustainability reporting and in comparison with our main competitors, we are the only one to publish such an exhaustive report.

"This report appears to me as perfectly correct and covers all our present needs in terms of communication on sustainability from our suppliers. Excellent job done by your company"

"The report fulfils the needs with all required information. The message from the CEO is important. It shows that all the company is fully committed. The facts on safety show how essential its people are. Zero tolerance of corruption makes the transparency of the business clear"

"The report is professionally well done, concise and goes straight to the point. It should be kept in the same format and layout for an easier

version comparison to follow the progress areas. The report is easy and pleasant to read. The choice in colours and paper are consistent with the subject, making the communication stronger and convincing. The electronic version should be redesigned for screen reading."

The feedback from our own personnel was to include more information about products and solutions, from a sustainability point of view.



Well-being at Keppo Guesthouse

Keppo Mansion and Guest House provide a perfect stay with accommodation and meeting facilities for our guests. The environment is idyllic and a river flows through the park area. Since our main production site including headquarters is located outside a city, there is no infrastructure. Therefore we built our own Guest House to save time and resources both for our guests and ourselves. The Mansion building was built in the 1860s and the Guest House has been in use since autumn 2014.



With Customer Performance, Health and Safety in Mind

The success of our customers' business is key to our own company success. Designing products and services that improve our customers' performance, health and safety in their workplace help us achieve our financial performance goals. Here are a few of our successful product innovations that address all three areas of customer sustainability performance:

- **dust-free systems** – increase job accuracy and reduce respiratory health effects by making sure that most dust particles never enter the work environment
- **vibration-reducing tools** – boost project precision and lessen the possibility of developing Vibration White Finger (VWF)
- **lighter-weight tools** – improve efficiency and ease and decrease repetitive strain injuries for difficult restorative work

Supplier Partnerships

We see strategic sustainability as an increasingly important component in supplier operations and products. As strong partners, we can share resources, implement best practices, and collaborate to bring sustainable products to market. We want to lead by example and work in partnership to promote a market shift towards sustainability. A great example is our partnerships with Ekokem on bioenergy plant operation and the local Jeppo Biogas, which supplies us with biogas.

Bioenergy Partnership with Ekokem

Ekokem Oyj is a leading Finnish environmental management company. Ekokem owns and operates the bioenergy plant, located right next to our Jeppo manufacturing site and is using production waste to create energy from both our Jeppo and Oravais sites.

In 2014 Ekokem bioenergy plant produced 32,016 MWh. More than 50 % of the fuel stream is of bio-origin. The source of the



fuel mix is approximately 22 % from our production waste, 50 % from other waste-derived fuel and 23 % from wood chips. Peat will only be used as a reserve fuel. How does it work? Basically, steam heat is created through combustion. Intense heat is needed for the incineration of waste process – 850 °C for two seconds.

Why are we doing this? We want to reduce our impact on the environment impact on the environment and we are progressing well with the closure of the landfill project. We have decreased the amount of heavy fuel used in production and as a result of these actions we have reduced our greenhouse gas emissions. This also means our energy costs are reduced, which allows us to invest more in other sustainability projects.

For more information about our partner Ekokem: www.ekokem.fi/en



Biogas Partnership with Jeppo Biogas

Jeppo Biogas AB is a local supplier, producing biogas from organic waste as a part of the locally based food industry chain. In May 2013 we signed a contract for conversion of the 3 MW hot oil boiler to use biogas as fuel at our main manufacturing site.

USE OF BIOENERGY

PROPANE REPLACED WITH BIOGAS
873 tonnes CO₂ equivalent in 2014

HEAVY FUEL REPLACED WITH BIOENERGY
5837 tonnes CO₂ equivalent in 2014



Joachim Rännar,
Head of Customer
Service and Logistics

“We always choose partners who have similar values as Mirka. We cooperate with suppliers who can guarantee the high quality and consistent availability of the raw materials we need. We use local Finnish suppliers whenever it is possible, which allows us to contribute to the economic sustainability of the communities near our four manufacturing sites. Local purchasing also cuts back the amount of transport and travel we do, which reduces our fuel use and emissions.”

Our Supplier Guide

We send the Mirka Supplier Guide to prospective suppliers, which lets them know our interests and expectations during the terms of our contract. The guide includes:

- guidelines on data sheets to document hazardous materials
- our expectations of quality and consistency
- our Code of Conduct that requires respect for all human rights
- our preference to work with companies that have an environmental management system certification



Our Supplier Audit

Suppliers are audited every 2–10 years. We look at their environmental performance and at their supply chain regularly. We request a copy of their environmental management system report and ask for documentation regarding waste, water, emissions, energy use, and any human or labour rights policies and certifications. We also carry out an onsite review of their processes and quality control.

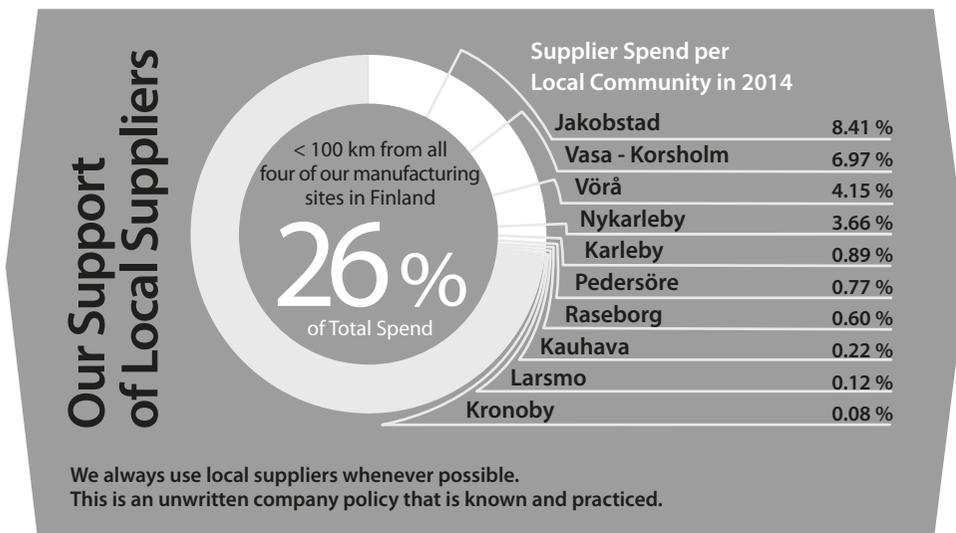
in the register of VAT payers, as required by Finnish law (1501/1993). Before signing an agreement, we also require a confirmation from the company that they continuously take care to comply with their legal obligations as an employer.

In 2013 we suspended an agreement with a transport company that was not following our guidelines. The company was also suspected of cabotage*. When the company wasn't able to give any further information or justify the information received earlier, we cancelled the agreement with this transport company.

* The right to operate sea, air, or other transport services within a particular territory.

Transport Company Agreements

We always require a signed agreement from the transport companies we are cooperating with. Before signing a cooperation agreement, all partners have to confirm that they have a valid transport operating licence and are entitled to carry out cabotage*, and that they are entered



CLEAN PROACTIVITY

We strive to be the most responsible company – driving innovation in our core business sectors.



Mats Sundell,
R&D Director

“We proactively look for ways to reduce the environmental footprint of our products. We do not use chemicals on the List of Substances of Very High Concern (SVHC) and are in full compliance with the EU’s Registration, Evaluation, Authorisation and Restriction of Chemicals legislation (REACH).”

Innovative Thinking at Every Step of Product Development

Mirka’s innovative products are developed to address needs, problems, and challenges that our customers face, including those related to sustainability. We continuously test new methods and products. In 2014, we spent 2.7 % of turnover on R&D compared to 2.1 % in 2012.

When choosing new product development projects, we analyse the risks involved to make sure that our innovations make sense and will be profitable. We also perform a product lifecycle analysis. This means that we look at how production affects the environment from the extraction of raw materials used to the exit of the product from the facility gate. Since 2002, we have used the Six Sigma methodology as the foundation of our production management. We do this because the many checks and balances of Six Sigma help ensure that we continually improve. For example, our management team and our Health, Safety and Environment Manager must both approve any new chemical before it can be used.

We have also just begun looking at sustainable innovation methods, tools, and training opportunities for our product development team. We see this as an exciting opportunity to be even more innovative for the long term.

Product and Technology Development

Development grants have been received again this year. Worthy of particular mention is a new three-year development project within the framework of the TEKES* Greengrowth** programme.

Several product and technology development projects have been completed and have resulted in both new products and a new technology platform. Worthy of special mention is our new, unique product Aquastar, the first launch from our new Star platform of new functionally patterned film products. Mirka’s know-how in system sales and sustainable development comes well to the fore in the product family. For example, a completely new patented packaging solution has been developed.



Several other new product concepts have been developed and launched during 2014. Worthy of mention is the fact that Mirka’s family of ceramic products have now been complemented by a ceramic paper product, Q.Silver Ace, new polishing compounds and also a complete product family for sanding surfaces sensitive to contamination has been successfully launched.

Product Design Awards

Mirka® Deros received the IF Product Design Award for its outstanding performance, innovative design, powerful performance and intelligent features. Our electric sander also impresses with its compact size and pronounced ergonomic qualities and won the Red Dot Industrial Design Award.



reddot award 2014
winner industrial design

We see sustainable innovation as smart and profitable. Here are some of the advancements we are making:

- Investing in new full scale maker lines with a low-energy curing process developed by us for manufacturing of coated abrasives.
- Developing our processes according to the LEAN philosophy.
- Based on customer feedback, we have developed a whole product family of abrasives for corrosion-sensitive surfaces.
- Designing efficient product transport routes - this reduces our carbon footprint.
- Developing total sanding solution systems - to help customers to improve their processes.

* The Finnish Funding Agency for Innovation. ** The aim of the Green Growth programme is to identify potential new growth areas for the sustainable economy business, which are essentially based on lower energy consumption and sustainable use of natural resources.

CLEAN PRODUCTION We strive to make our production safer, cleaner and smarter – without wasting resources.



Jan Torrkulla,
Production Director

“Our production work culture is team-oriented. We work together to reach high-level safety, quality, efficiency, and sustainability goals in all of our manufacturing facilities.”

Zero Accidents in the Work Environment

Our Occupational Health and Safety Vision 2017 has a clear message. The goal is to reach Zero Accidents throughout our company operations.

What is an accident at Mirka? Our definition is when an accident occurs within the fenced area or an accident that the insurance company has classified as an industrial accident and that causes at least a one working day's absence (*excluding the accident day*).

A development project together with the Finnish Institute of Occupational Health was completed during 2014, and this initiative proved to be exactly what was needed for all our manufacturing sites to achieve the goal in the long term. The development of the number of accident/incident reports has increased further and in particular the proportion of persons who have submitted reports has increased. There is a clear correlation between this and the awareness of personnel about matters that affect the work environment. A special working group has been set up to drive forward prevention efforts regarding hazards in connection with machines.

What has contributed to the positive development of our gauging of safety is the visibility of management and other leaders in matters of safety via a revised safety round setup. More people are involved now and the system was designed to focus on working methods, personal safety equipment and orderliness.

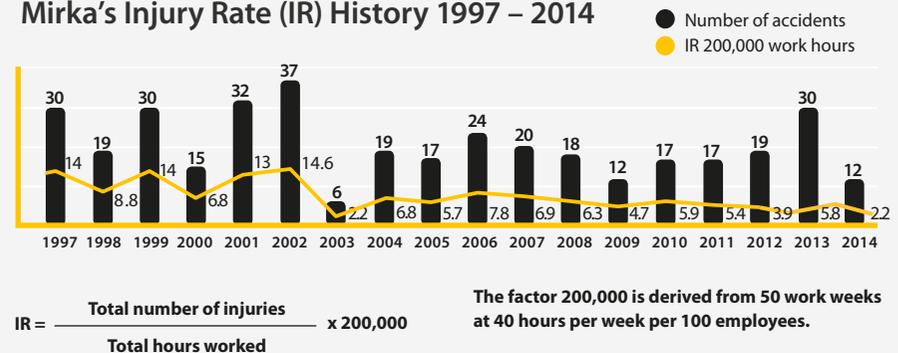
In 2014 we did not have a single environmental incident resulting in a fine or sanction for non-compliance.



Mirka Workplace Safety Evolution 1997–2014

Year	Actions
1997	Started nearby reporting process for accidents
1998	ISO 14001 certification achieved
1999	Began system for managing inspections
2000	Introduced OHSAS 18001 into our facilities (<i>Occupational Health & Safety</i>)
2001	Developed change management risk analysis
2002	Formed first safety group
2003	Introduced Zero Accident thinking
2004	Began new machinery acceptance inspection
2005	Started using Occupational Safety Card
2006	Established safety walks
2007	Developed root cause analysis
2008	Introduced Japanese 5S efficiency and effectiveness organisation system
2009	Initiated machinery risk analysis
2010	Oravais factory sets Zero Accident target
2011	Began systematic work of eliminating hazards
2012	Company-wide Zero Accident programme launched; achieved in Karjaa factory
2013	All factories have equal Occupational Health & Safety plans and metrics
2014	Full-time machine safety group initiated in Jepua factory

Mirka's Injury Rate (IR) History 1997 – 2014





OHSAS 18001, ISO 9001 and ISO 14001 Implemented in all Factories

In November 2014 the new production unit in Jakobstad and our converting unit in Belgium were audited and approved for all these three certificates. An extension of our established management systems to the new production units was a very natural step in our “Quality from start to finish” culture. Right from the start-up of the new units there has been a very clear focus on health, safety and quality. Both units have already been free from accidents for 1.5 years.

Paperless Office

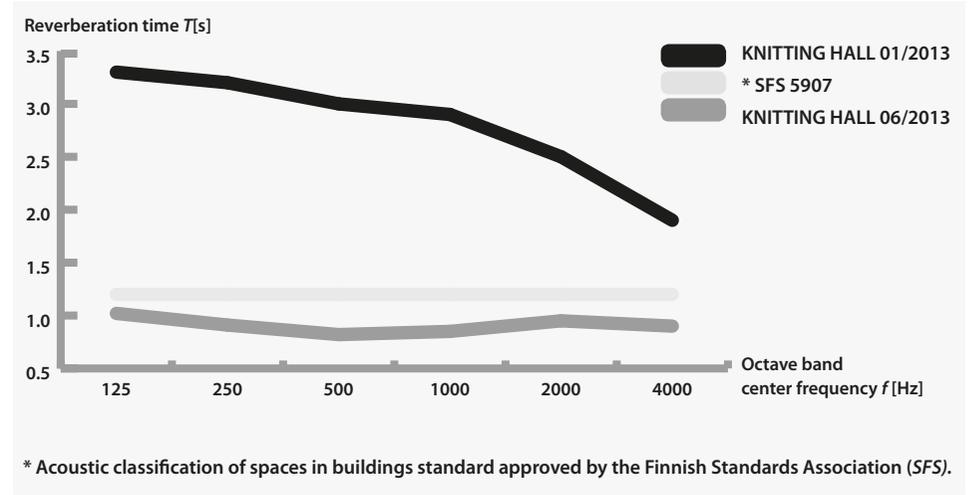
Customer Service departments in Finland and in our subsidiaries within the EMEA region are now working in a paperless office work environment, with the help of an efficient ERP system developed by us. This will be further

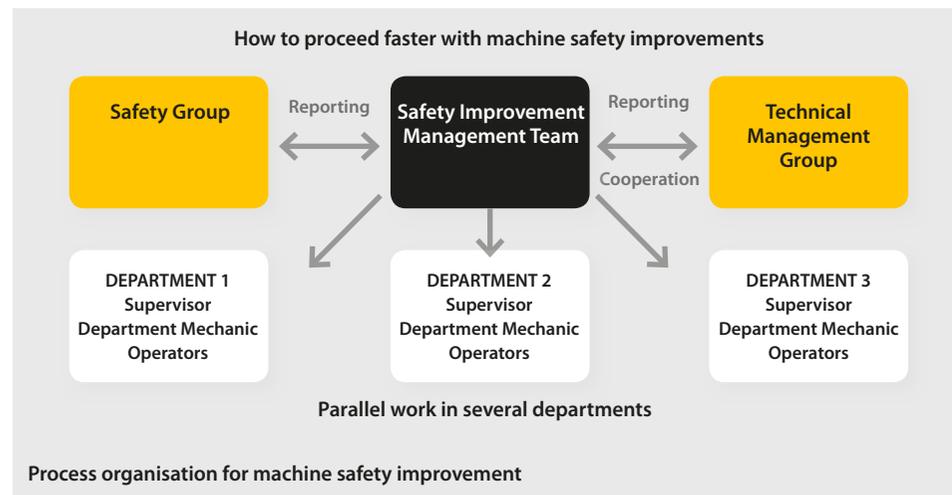
rolled out to our overseas subsidiaries. We of course continue to comply with local laws and regulations concerning paper printing and archiving of e.g. orders and invoices.

We want to achieve structured and standardized ways of working for order handling, invoice handling and general communication with our customers and sales as well as internal communication within the customer service teams.

Noise Reduction in Karjaa Factory

Noise reduction panels that reduce lower-frequency sounds have been successfully installed in our Karjaa factory. Relocation of the production equipment has also been done in order to achieve even more effective noise reduction during 2013.





Machine Safety

A safety improvement management team was established during 2014 at our main manufacturing site in Jeppo. The team is managing and running the improvement work and controlling the use of resources. Seriously high risks that are identified as “9-pointers” during the risk analyses conducted at the Jeppo site are prioritised and the team will also work on improvement of chemical handling. The team works in parallel in several departments at the same time. Regular meetings are held between the improvement team and the supervisor, mechanics and operators at the departments. It is important to train, spread knowledge and improve attitudes among the personnel to achieve an even better result in machine safety.

Closure of the Landfill is Proceeding

In October 2013, when the bioenergy plant was started up, the amount of material going to landfill started to decrease, and as of the middle of January 2014 all landfill materials are being used at the bioenergy plant except for sand waste.

In accordance with our “Zero Landfill” environmental vision, further fractions have been moved away from landfill and the amount of waste for landfill is now relatively small.

Pretreatment of Waste Water from all Factories

The current flocculation basin was extended during summer 2013, while process improvements were implemented.

- Significant increase in capacity (30 %), allows for the purification of all process water in the Jeppo factory, even when the production volumes are increasing.
- Enabled a cost-effective purification of all wash water from Karjaa and Jakobstad factories, due to a significant increase in the flow / unit time. The wash water deliveries from Karjaa started in September 2013 and from Jakobstad in October 2014.
- Modification of the flocculation basin enabling us to collect the residue without leaving traces.



Raw Materials including Chemicals

It is the greatest sustainability challenge in our industry to find replacement substances for persistent chemicals that are currently standard. We believe it is important to meet this challenge. That is why we have joined a governmental initiative here in Finland that brings together a cross-industry stakeholder group to find solutions. Together, we have a greater chance of being successful because we share costs and minimise risks.

We are always looking for ways to eliminate or substitute chemicals that pose any risk to employee or customer health and safety. Over the years, we have been able to stop using a number of hazardous substances and substances with high environmental impact.



We have developed a xylene-free process for manufacturing of waterproof finishing abrasives in fine grits.

The Use of Heavy Metals has been Reduced

The preparation of corrosion-sensitive surfaces (such as aluminium-based material) requires abrasive products which contain the lowest possible amount of heavy metals. We are the first company offering a full range of abrasives from net- to paper-based and non-woven discs and sheets to meet these customer requirements.



THE EVIDENCE OF HEAVY METALS IN NON-CORROSION ABRASIVES [ppm]

Product	Fe	Cr	Cu	Zn	Ni
Customer-defined limit values	<100	< 10	< 0.5	< 0.5	< 0.5
Mirlon® NC VF	62	5.3	< 4	1.3	< 4
Competitive non-woven abrasive	1190	26	6	14	6
Abranet® NC P180	70	4.1	2.2	2.1	< 3
Competitive paper abrasive	490	5.9	5.5	5.7	–
Abralon® P360	6.7	3.1	< 3	1.6	5
Competitive foam abrasive	97	19	6.7	2.6	–
Gold NC P150	42.3	1.08	1.16	2.6	< 0.5
Competitive paper abrasive	3600	3.3	8.2	18	1.2

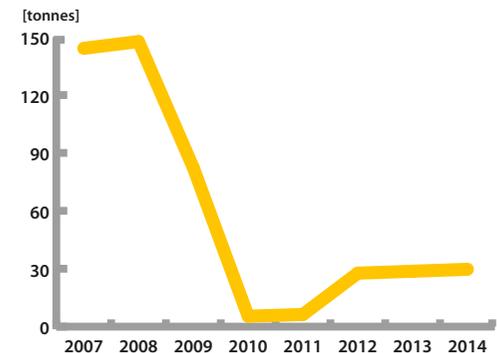
Restricted Materials List

We have published a restricted materials list (RML), which specifies the chemical substances that are classified as "banned", "restricted" and "substances of concern". The list can be viewed on www.mirka.com > responsibility > clean proactivity.

The objective with the RML is to achieve compliance with legislation according to our environmental policy and to facilitate a consistent approach to managing chemical substances. The RML is used to inform suppliers and other stakeholders about the status of chemical substances. It is an integral part of parts specifications and contractual agreements with suppliers.

Initiative to Reduce Waste Resin to Deposit

We discovered a more sustainable way to handle waste resin in 2008.

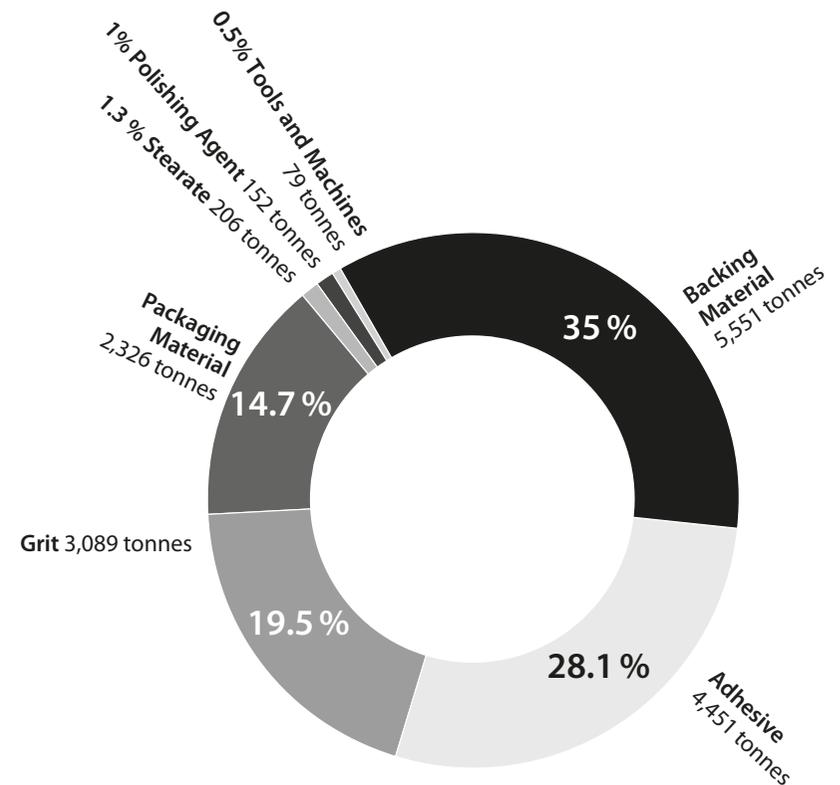




Materials We Use in Our Products and Packaging

There are very few renewable materials on the market today that we can use to produce abrasives, polishing compounds, or tools that give adequate quality and functionality. We are keen to find alternatives that fill this gap.

We continue to make improvements in our choice of packaging and packing materials. We also reuse packaging wherever possible. For example, we reuse wooden pallets in our warehouses.



MATERIALS USED

Total Direct Materials including Packaging	15,854	tonnes
Non-Renewable Materials including Packaging	6,985	tonnes
Non-Renewable Packaging Materials	149	tonnes
Renewable Materials in Products	3,284	tonnes
Renewable Packaging Materials	2,177	tonnes



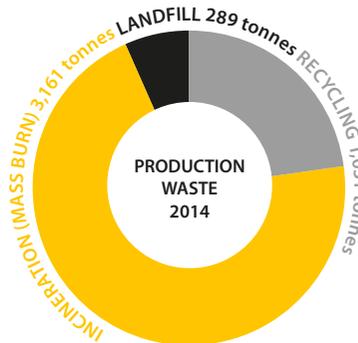
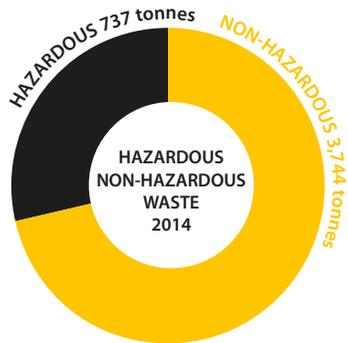
Johan Palmroos,
Quality Manager

"Our management systems helps us to achieve health & safety, environmental and quality goals as well as to meet our stakeholders' demands"

Production Waste

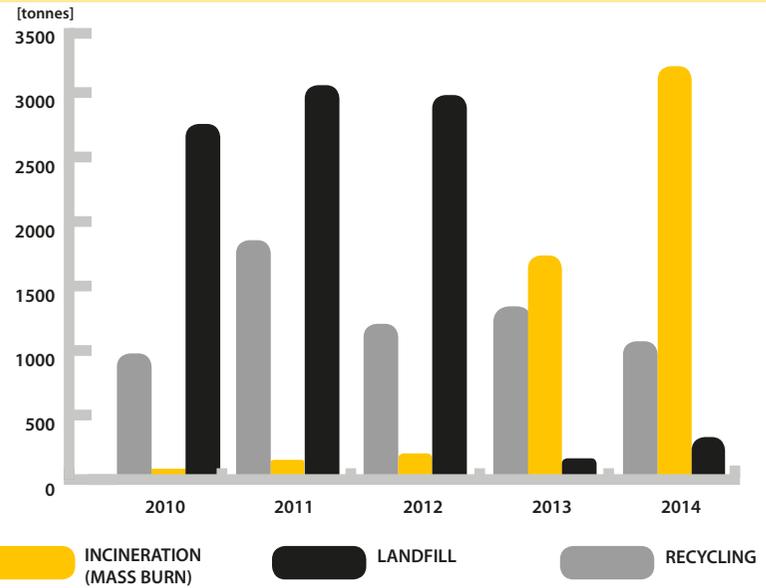
A Finnish company with special expertise treats, monitors, and measures all of our hazardous waste. We operate our own government-approved landfill and handle our own landfill waste, which is primarily made up of coated abrasive waste and grains.

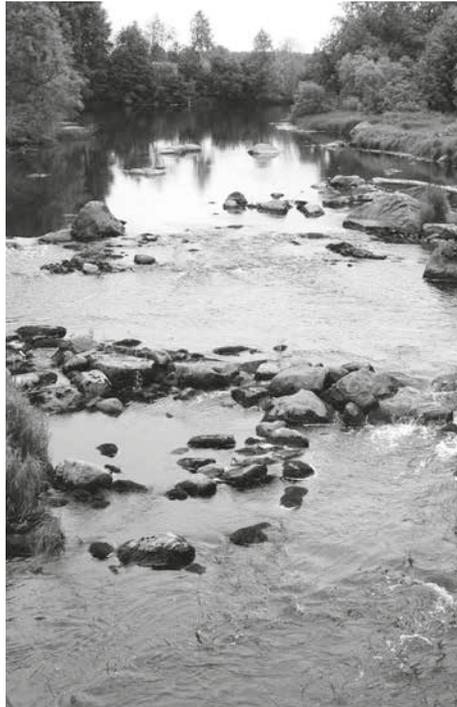
Since the mid-1990s, Mirka has actively taken part in recollecting waste streams including paper, packaging, plastics and wooden materials that are then used in energy production.



HOW THE METHOD OF DISPOSAL HAS BEEN DETERMINED:

- Disposed directly by reporting organization or otherwise directly confirmed.
- Information provided by the waste disposal contracts.
- Organisational defaults of the waste disposal contractor.

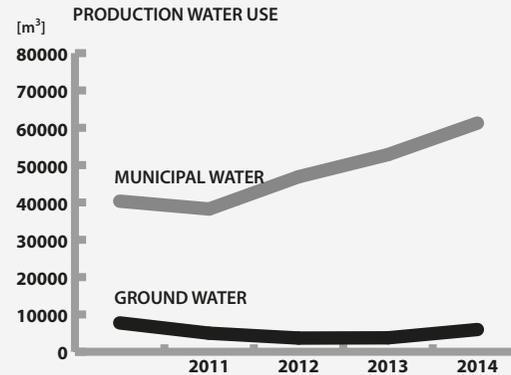




- separation process now in use
- lines to decrease wastewater output is under development
- standardization of clean-up operations for some of our manufacturing machine lines to decrease wastewater output is under development

Production Water Use

The increase in municipal water use in 2014 is due to new and modified processes in our factories and to increased production volumes.

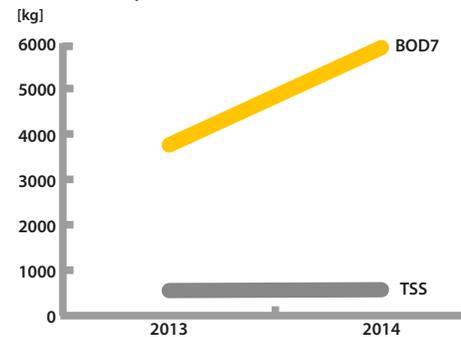


Production Wastewater

The water treatment plant is located at our main manufacturing site in Jeppo and handles production wastewater from all our manufacturing sites in Finland. The process water from all three of our manufacturing facilities is discharged to neighbouring

municipal wastewater treatment plants. Before we discharge the wastewater, it goes through onsite treatment in order to ensure full compliance with municipal regulations. No process water was reused by any other organisation.

BOD7 = Biologic Oxygen Demand
TSS = Total Suspended Solids



The increase is related to the waste water flow, not due to an increased load. Production waste water flow is included.



WASTEWATER 2013-2014
Process water, rainwater and domestic sewage are excluded.

Wastewater Initiatives

We continuously strive to improve our water use. Some of our successful innovations include:

- The process water is discharged to the waste water treatment plant in Jakobstad. Before the process waste water is discharged it is treated - sedimentation, flocculation plant and sand filtration.
- The process water is discharged to the waste water treatment plant in Karis. Before the process waste water is discharged it is collected in a tank to balance and reduce the temperature of the water.
- The process water is discharged to the waste water treatment plant in Oravais. Before the process waste water is discharged it is treated - sedimentation. (No analysis of this process waste water is needed because it is very clean).
- No data available for Jakobstad site (only domestic sewage water discharged to the water cleaning plant in town).

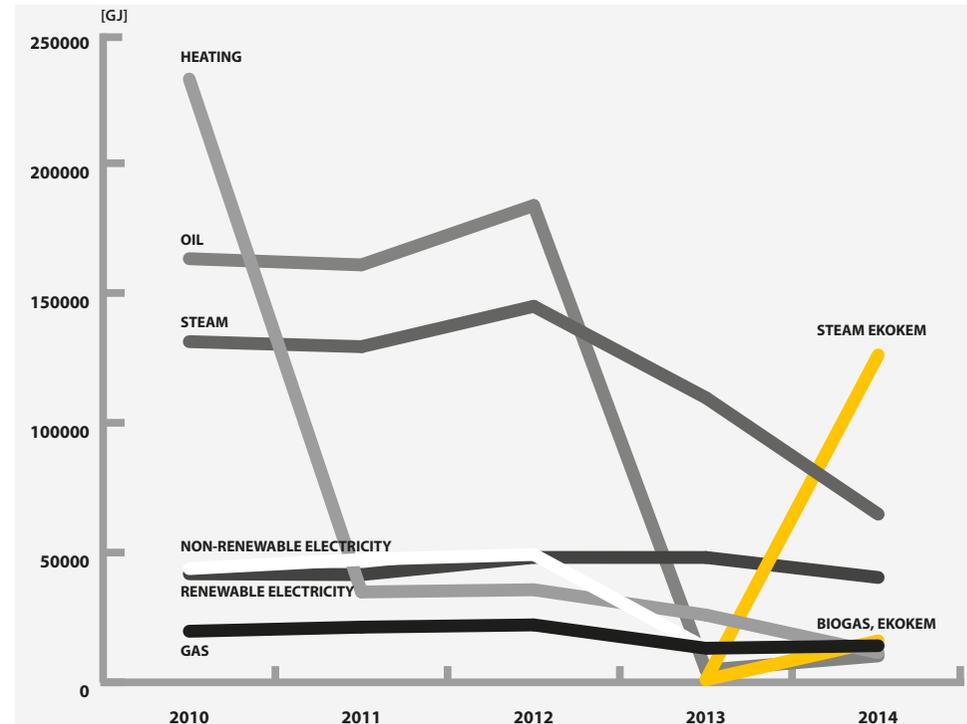
Total Manufacturing Energy Use 2012–2014

The increase in both indirect and direct energy use is due to a combination of increased production, changes in the product mix, installation of new ventilation and cooling equipment, and a new office floor.

We have started to produce products by using low-energy technologies. This means that, in a few years, we will be able to cut our energy consumption in these high technology processes by at least half.



Excluding our manufacturing site in Jakobstad and our converting unit in Belgium. Energy use is included in the rental costs of the premises.



Indirect and Direct Energy Consumption –2014

Indirect Energy Consumption	[GJ]	Direct Energy Consumption	[GJ]
Renewable Electricity	14,086	Gas	40,398
Non-Renewable Electricity	68,288	Biogas	14,983
Heat	11,419	Oil Ekokem	10,188
Steam	64,778		
Steam Ekokem	125,129		
TOTAL for 2014 >	229,498	TOTAL for 2014 >	65,569

Our gas and oil usage has decreased due to usage of bioenergy and biogas supplied by our energy partners. Currently 17% of our electricity comes from renewable sources. Our reporting for 2014 does not include energy use in our warehouses outside Finland.



Greenhouse Gas Emissions

We measure our greenhouse gas emissions in accordance with the Greenhouse Gas Protocol (GHG) framework. Our GHG inventory includes Scope 1 and 2 emissions. (www.ghgprotocol.org)

Our CO₂ (21,904 tonnes equivalent) is based on most relevant direct and indirect energy consumptions. Energy consumption for factories, facilities and use of business cars are included for our manufacturing sites, headquarters and branches. Jakobstad factory and Belgium branch office where we operate in rented facilities are not included.

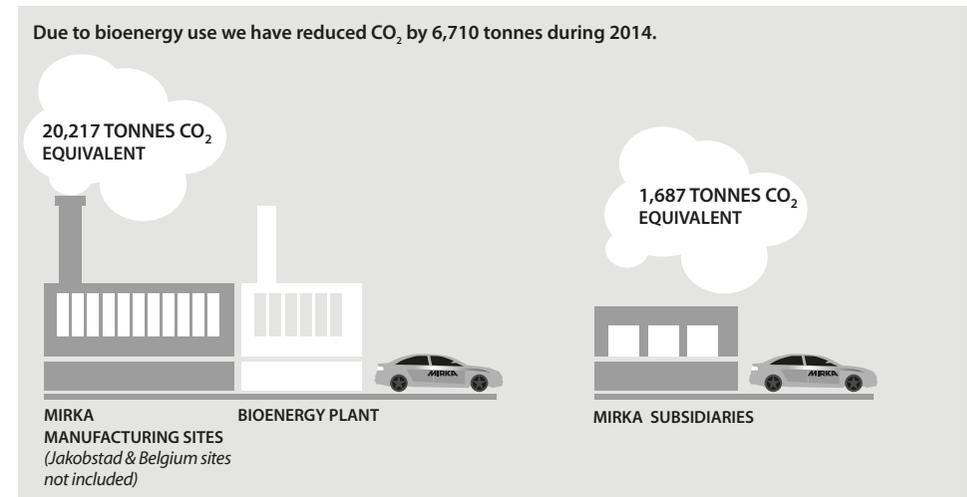
Consumption for facilities and use of business cars are reported for our subsidiaries.

Bioindicator Monitoring Initiative

Bioindicator monitoring has been performed in the Jakobstad region since the year 2000. Mirka participated in the examination during 2006 and 2012.

The objective is to examine, for example, lichens, mosses, pine trees and the element content of humus. Many different measurements are performed to obtain reliability. The results are compiled on maps in order to follow trends in the environmental impact on different activities in the surrounding region.

No alarming figures from Mirka's activities.



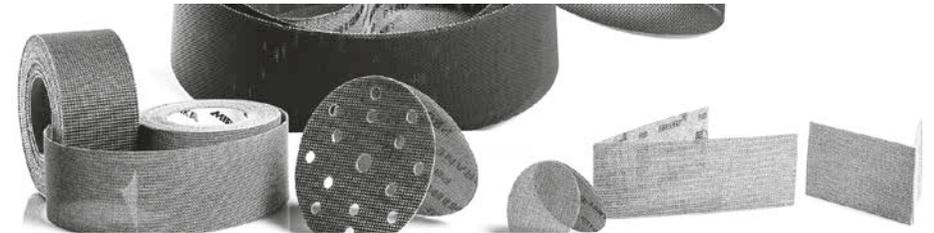
CLEAN PERFORMANCE

We strive to improve our economic, social, and environmental performance – results speak louder than words.



Olav Hellman,
CFO

"We are systematic in our approach and we have a long-term economic strategy. We focus on sustainable growth and healthy financial performance is our goal."



Financial Performance

In order to maintain the good financial health of our company, our executive management reviews and updates the risk management analysis for our business and investments every year. We have multiple financial and strategic measurement tools, that secure the information needed for healthy development of the company. Our in-house-developed ERP system, with the support of a number of other IT programs, provide us with very detailed information about all our internal

processes. We also review our values and look at current and future market trends – especially for the long term.

Our sustainability measurements are also included in this process. Our revenues increased in 2014 by 17 % to over EUR 206 million, which is over EUR 30 million more than in 2012. Our operations generate a financial value that includes a healthy distribution to our stakeholder groups including suppliers of goods and services, co-workers, banks, the community through

investments, and society through the taxes that we pay.

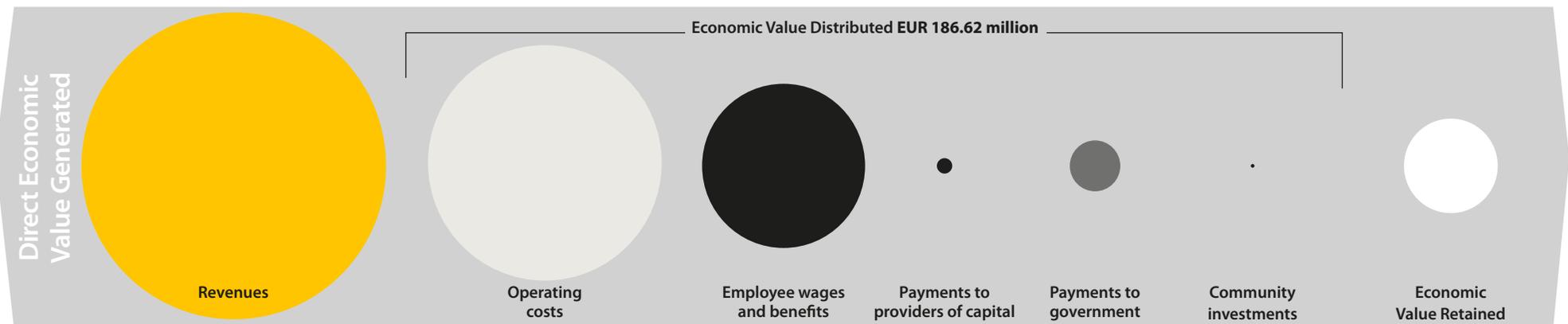
Our "Environmental Vision 2017" provides high-level targets and goals in areas where we can make the most impact: product development, production, logistics and transport. In 2014, our environmental expenditures and investments were close to EUR 5 million. The most exciting project is the building of a new production line at our main manufacturing site. The new line enables production of completely new kinds of products and increases the flexibility. Our investments are paying off.

Net Abrasives is a Growing Business

Our production of net abrasives, known under the Abranet® brand registered and owned by Mirka, showed stable growth in 2014.

The Abranet® dust-free sanding concept is a unique invention that delivers many advantages:

- healthier working environment
- saves time and money
- practical
- easy to use
- quality finish



Mirka's Commitments to the Environment 2012–2014 Type of Environmental Protection (in EUR)	EXPENDITURES	
	2012	2014
Waste Disposal, Emissions Treatment and Remediation Costs	836,161	1,025,508
Prevention and Environmental Management	663,491	954,386
SUBTOTAL	1,499,652	1,979,894
INVESTMENTS		
Combined Waste Disposal, Emissions Treatment, Prevention and Environmental Management	477,000	2,920,642
TOTAL Expenditures and Investments	1,976,652	4,900,536

The Future is Sustainable Business

It is our willingness to invest in projects and initiatives evolving over time that makes Mirka a successful company. Our long-term planning strategy makes us economically sustainable and provides us many opportunities to contribute to environmental and social sustainability.

We think that it is important to address sustainability as a company by looking at the whole picture. It makes sense to reduce environmental impact and improve health and safety.

When we develop more sustainable products and systems, it is not just about commercial viability, but also about contributing to the creation of a future sustainable society.

We cannot do it alone. We believe that, through developing solid partnerships – both in our industry and cross-industry, we can achieve a high level of success. We aim to inspire sustainability throughout our supply chain, our communities, and the industries where we do business.

Some of Our Goals

- embed sustainability thinking in all of our business decision-making processes
- create management, employee, and supplier incentives tied to sustainable innovation
- develop surveys, guidelines, and policies to inspire sustainability throughout the supply chain
- work with our customers to innovate solutions that address their sustainability interests
- establish more cross-industry initiatives with businesses experiencing similar challenges
- collaborate with NGOs (non-governmental organisations) and community organisations to build local sustainable development





Stakeholder Engagement, Materiality and Sustainability Context

The report is aimed at Mirka's all stakeholders. The extended management team of KWH Mirka Ltd has identified the stakeholders, reviewed and chosen the GRI indicators and topics for this report. The process helped us determine our most 'material' business activities that impact economic, environmental, and social value for the company, our stakeholders, and for society. The data and topics in this report are collected from all entities KWH Mirka Ltd has direct operational control over. For future reporting cycles, we intend to enlarge our environmental reporting to include the operations in our branch office in Belgium.

Balance, Clarity, Timeliness, Comparability, Accuracy, and Reliability

We are committed to transparency in reporting our sustainability impacts. It is our goal to show a balanced view of our performance rather than showing only favourable progress. We want to present our information in a complete, clear, and understandable way. Wherever possible, we have reported current and historical data for comparability. Currently, most of our environmental performance data focuses on our manufacturing activities. Our Board of Directors has authorised publication, affirming the data presented is accurate and reliable.



This report is produced in co-operation with Ecobio. Ecobio provides corporate sustainability services - resulting in environmental and social compliance, eco-efficiency and excellent reputation. www.ecobio.fi

The report fulfils the GRI G3.1 reporting principles to ensure the quality of this report.

For more information about GRI, go to: www.globalreporting.org



Mirka's Sustainability Report 2014 is printed on eco-labeled uncoated paper using plant-based colours to reduce the environmental impact.

GRI CONTENT INDEX

STANDARD DISCLOSURES PART I: Profile Disclosures			
Profile Disclosure	Disclosure	Level of Reporting	Cross-Reference/Direct Answer
1. Strategy and Analysis			
1.1	Statement from the most senior decision-maker of the organisation.	●	A Message from our CEO p. 5
2. Organisational Profile			
2.1	Name of the organisation.	●	About Mirka p. 3, Back Cover p. 28
2.2	Primary brands, products and/or services.	●	About Mirka p. 3, Our Best-Known Brands p. 4
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures.	●	Our Global Reach p. 4, How We Organise Ourselves p. 8
2.4	Location of organisation's headquarters.	●	Our Company p. 3, Back Cover p. 28
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	●	Our Global Reach p. 4 Our Company p. 3 About this Report p. 26
2.6	Nature of ownership and legal form.	●	How We Organise Ourselves p. 8
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	●	Our Company p. 3, Our Global Reach p. 4
2.8	Scale of the reporting organisation.	●	Our Company p. 3, Our Global Reach p. 4
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	●	Highlights from 2014 p. 6
2.10	Awards received in the reporting period.	●	Product Awards p. 14
3. Report Parameters			
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	●	Content Index p. 27, 1 Jan. - 31 Dec. 2014
3.2	Date of most recent previous report (if any).	●	2012
3.3	Reporting cycle (annual, biennial, etc.).	●	A message from Our CEO p. 5, Biennial
3.4	Contact point for questions regarding the report or its contents.	●	Back Cover p. 28
3.5	Process for defining report content.	●	About this Report p. 26
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	●	About this Report p. 26
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	●	About this Report p. 26
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisation.	●	We will be able to add the branch office environmental data in future reports without affecting comparability.
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	●	No re-statements made.
3.11	Significant changes from previous reportings periods.	●	Total direct and indirect greenhouse gas emissions by weight added p. 23. Environmental and social data for all our 15 subsidiaries added pp. 15, 16, 23.
3.12	Table identifying the location of the Standard Disclosures in the report.	●	Content Index p. 27
4. Governance, Commitments, and Engagement			
4.1	Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, e.g. setting strategy, organisational oversight.	●	How We Organise Ourselves p. 8
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	●	How We Organise Ourselves p. 8
4.3	For organisations that have an unitary board structure: total number, gender, independent, and non-executive.	●	How We Organise Ourselves p. 8
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	●	Ethical Conduct, p. 10. Stakeholder Engagement, p. 11.
4.14	List of stakeholder groups engaged by the organisation.	●	Our Identified Stakeholder Groups p. 11
4.15	Basis for identification and selection of stakeholders with whom to engage.	●	About this Report p. 26

STANDARD DISCLOSURES PART II: Performance Indicators			
Indicator	Disclosure	Level of Reporting	Cross-Reference/Direct Answer
Economic			
Economic Performance			
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	●	Financial Performance p. 24
Market Presence			
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	●	Our Support of Local Suppliers p. 13
Environmental			
Materials			
EN1	Materials used by weight or volume.	●	Raw Materials Including Chemicals and Heavy Metals. Materials for Products and Packaging pp. 18-19
Energy			
EN3	Direct Energy Consumption by Primary Energy Source.	●	Total manufacturing Energy Use, Indirect and Direct Energy consumption p. 22
EN4	Indirect Energy Consumption by Primary Source.	●	Total Manufacturing Energy Use, Indirect and Direct Energy Consumption, p. 22
EN5	Energy Saved Due to Conservation and Efficiency Improvements.	●	Innovative Thinking at Every Step of Product Development p. 14
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	●	Innovative Thinking at Every Step of Product Development p. 14
Water			
EN8	Total water withdrawal by source.	●	Production Water Use, p. 21
Emissions, Effluents, and Waste			
EN16	Total direct and indirect greenhouse gas emissions by weight.	●	Greenhouse Gas Emissions p. 23
EN21	Total water discharge by quality and destination.	●	Production Wastewater p. 21
EN22	Total weight of waste by type and disposal method.	●	Production Waste p. 20
Products and Services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	●	Clean Partner, Clean Proactivity Clean Production and Clean Performance pp. 10-25
Compliance			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	●	Work Environment p. 15
Overall			
EN30	Total environmental protection expenditures and investments by type.	●	Mirka's Commitment to the Environment p. 25
Social: Labor Practices and Decent Work			
Employment			
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	●	Our Workforce p. 8
Occupational Health and Safety			
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	●	Mirka's Injury Rate History 1997-2014 p. 15
Training and Education			
LA10	Average hours of training per year per employee by gender, and by employee category.	●	Workforce Training p. 9
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	●	Performance Reviews p. 9
Diversity and Equal Opportunity			
Social Society			
Corruption			
SO3	Percentage of employees trained in organisation's anti-corruption policies and procedures.	●	Zero Tolerance of Corruption p. 11
SO4	Actions taken in response to incidents of corruption.	●	Zero Tolerance of Corruption p. 11

MIRKA



KWH Mirka Ltd
Pensalavägen 210
FI-66850 Jeppo
Finland
Johan Palmroos, Quality Manager
johan.palmroos@mirka.com
Tel. +358 (0)20 760 2111
Fax +358 (0)800 155 144

www.mirka.com

Quality from start to finish

