

# A partner for the generations

## 2017 Sustainability Report



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The image shows a close-up, low-angle shot of the Miele logo on a building's exterior. The logo consists of the word "Miele" in a bold, white, sans-serif font, mounted on a red, vertically-ribbed background panel. The building's facade is primarily light green, with the red panel being a prominent feature. The sky above is a pale blue with soft, wispy white clouds. The perspective is from below, looking up at the logo, which creates a sense of height and scale.

**Miele**

# Foreword

## from the Executive Board

[GRI G4-1]

Dear readers,

We have formulated a clear vision in our sustainability strategy: we want to be the most sustainable company in the industry. In order to live up to this vision, we cannot rest on our laurels – we have to keep improving all the time. Our founders set the precedent in this regard by printing the guiding principle “Immer besser” (Forever Better) on the very first Miele machines. We have upheld sustainability standards for many generations now – and will continue to do so in the future. That is why this eighth Miele Sustainability Report is entitled “A partner for the generations”.

For us, winning the National German Sustainability Award in 2014 was more than just recognition of our achievements – it was an incentive to do even better in the future. In 2015, we conducted a comprehensive analysis and put the Miele sustainability strategy to the test. The key question was: are we ideally equipped to meet the central global sustainability challenges of the next ten years?

The results corroborated many aspects of our work to date. For example, we believe that demand for particularly durable, efficient products will continue in the future. In total, we met 93 percent of the objectives that we had set ourselves over the course of the reporting period. At the same time, however, we have also identified potential for further improvement in the years to come. We have therefore defined a number of ambitious new objectives, which can be found in our updated sustainability strategy.

These objectives primarily relate to topics that, based on our analysis, we believe will become increasingly important for Miele over the next few years. These include compliance with





The Executive Directors from left: Dr Stefan Breit (Technology), Dr Markus Miele (Executive Director and Co-Proprietor), Olaf Bartsch (Finance and Central Administration), Dr Reinhard Zinkann (Executive Director and Co-Proprietor) and Dr Axel Kniehl (Marketing and Sales)

environmental and social standards in the supply chain, the development of particularly resource-saving products and the growing demand for sustainable innovations. We made significant progress in these areas once again in the reporting period.

When it comes to developing resource-saving products, one of the central challenges is to keep reducing the use of resources without compromising on the quality of our products. That's why we are gradually working towards establishing a full circular economy (cradle to cradle). We are already successfully recovering and reusing metals from old Miele washing machines as part of an ongoing project.

Over the course of the reporting period, we were also able to introduce our customers to numerous innovations which demonstrate improved sustainability not only in the laboratory, but in real-life operation. For example, the PowerWash 2.0 Miele technology, which



Miele presented its first bagless vacuum cleaner to the public in the form of the Blizzard CX1.

was launched in 2015, achieves outstanding consumption values even when washing machines are not fully loaded, as is typically the case when they are in daily use. The EcoFlex dishwashers, available since 2016, are also very energy-efficient thanks to the use of an innovative heat storage system – and they offer short programme durations.

With the UN climate conferences in Paris and Marrakech, and the German government's climate protection plan, the subject of climate change has been very much at the forefront of the political agenda recently. It has also been a key priority at Miele for many years: since 2000, we have reduced our global energy consumption by 15.4 percent – while also experiencing a 70 percent increase in sales. The latest proof of our commitment to climate protection is the major investment in a new energy concept at the Bünde site, where we have extended the cogeneration plant. Investments like this one also demonstrate Miele's long-term commitment to Bünde and other sites – showing residents and politicians that we have a forward-looking regional policy.

One example that is evidence of our consistent growth trajectory is the expansion of our logistics site in Gütersloh during 2014 and 2015. During the 2015/16 business year, we boosted our sales by 6.4 percent – an increase that is reflected in our growing number of employees. In the first nine months of the 2016/17 business year alone, we have welcomed more than 1,000 new Miele colleagues. On 31<sup>st</sup> March 2017, we had 19,400 employees.

Over the next few years, we will work tirelessly to achieve the new objectives in our revised sustainability strategy together with our employees. As ever, though, there will be conflicting objectives: for example, we want to meet the growing demand in our overseas markets without significantly increasing transport-related CO<sub>2</sub> emissions. We want to achieve higher consumption efficiency for our products without compromising on convenience. We intend to face these challenges in the manner demonstrated by our company founders: with both prudence and determination. At the same time, we are committed to the objectives of the UN Global Compact, which Miele has been a member since 2004, as well as the objective of the Paris climate conference which aim to limit global warming to less than 2 °C.

We are relying on the feedback and support of our stakeholders in this matter. We hope that reading this report, the eighth sustainability report published by Miele, will serve as encouragement.

Miele & Cie. KG Executive Board

**Olaf Bartsch**, Executive Director Finances and Administration

**Dr Stefan Breit**, Executive Director Technology

**Dr Axel Kniehl**, Executive Director Marketing and Sales

**Dr Markus Miele**, Executive Director and Co-Proprietor

**Dr Reinhard Zinkann**, Executive Director and Co-Proprietor

Just like here in Vienna,  
Miele showcases its  
products in 90  
showrooms worldwide.



# Miele at a glance

## PHILOSOPHY

[GRI G4-56] Miele has been an independent family-owned company since its establishment in 1899 and is equally committed to its owners, employees, customers, suppliers, the environment and society. Miele embodies partnership-based conduct towards its business partners, an employee-focused corporate culture as well as continuity of values, goals and leadership. The remit is industry leadership in terms of quality and technology. Miele offers its customers products which set the standard for longevity, performance, operating convenience, energy efficiency, design and service. This fulfils the company's guiding principle "Forever Better", which even the founders Carl Miele and Reinhard Zinkann wrote on their first machines, and which continues to shape Miele to this day. The company focuses exclusively on the Miele brand and its consistent positioning in the premium segment.

## The Miele Group

[GRI G4-3, G4-5, G4-7, G4-9, G4-10]



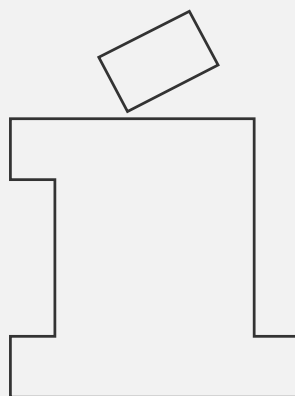
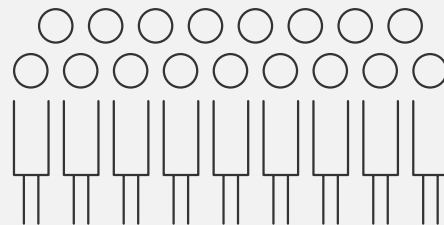
Miele is held in high esteem as the world's leading manufacturer of premium domestic appliances.



"Miele Professional" offers solutions for commercial applications.

18,370

employees<sup>1)</sup>, 56 percent of whom are in Germany  
<sup>1)</sup> as of 30<sup>th</sup> June 2016



**Headquarters:** Gütersloh

**Miele & Cie. KG:** central administration, plants and subsidiary in Germany

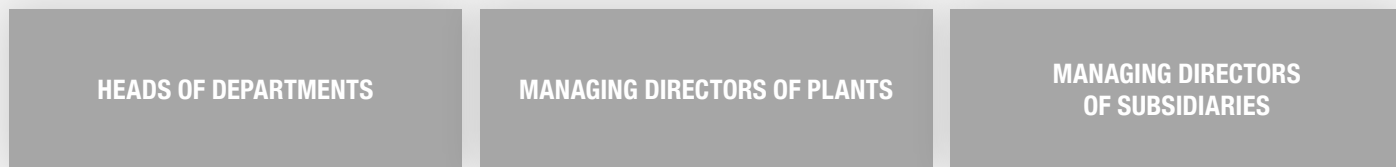
**Miele Beteiligungs-GmbH:** foreign subsidiaries and plants

**imperial-Werke oHG:** subsidiary (100 percent) of Miele & Cie. KG with the Bünde and Arnsberg plants

## Miele & Cie. KG Executive Board

[GRI G4-34]

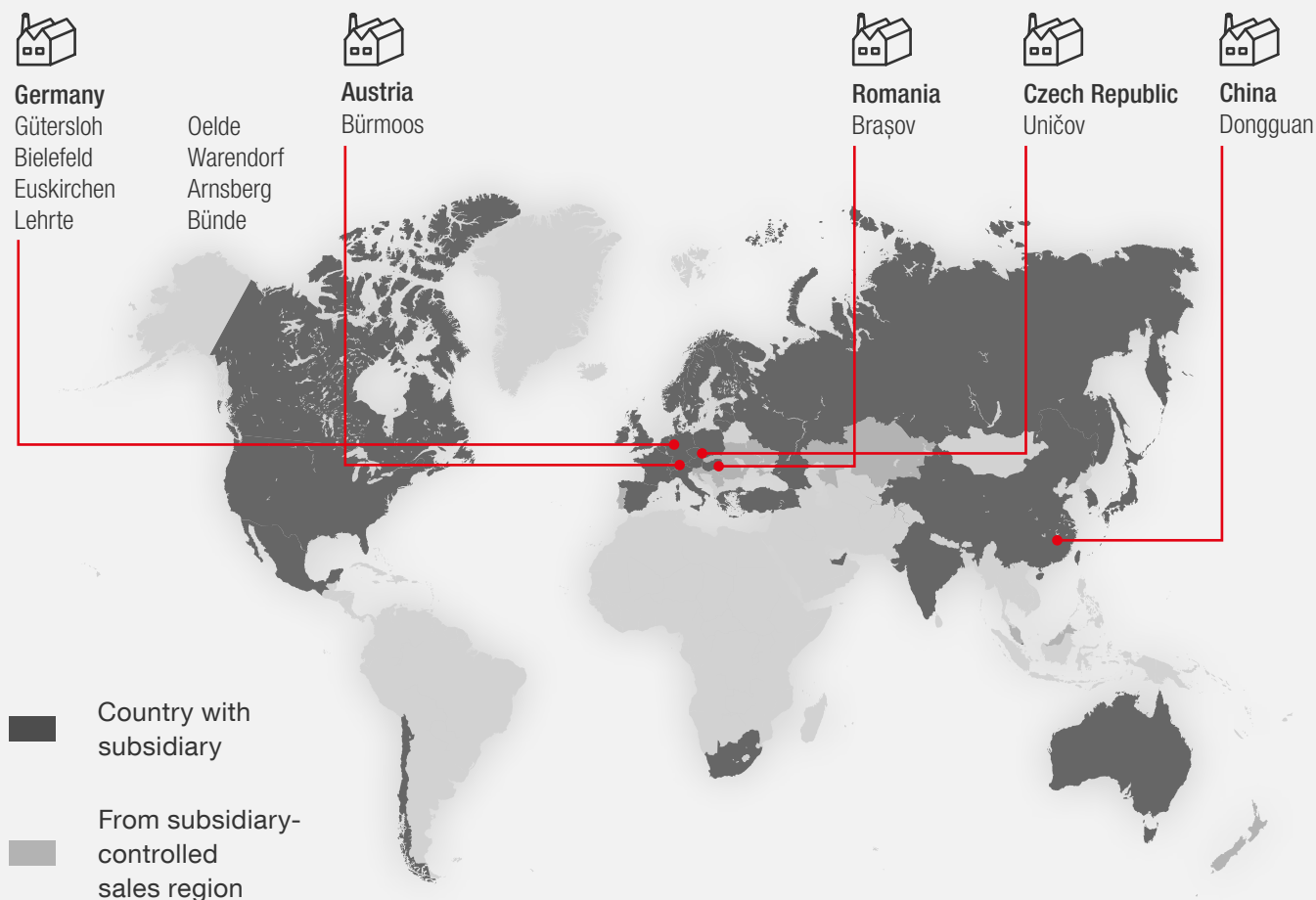
<b>Olaf Bartsch</b> Executive Director Finance and Administration	<b>Dr. Stefan Breit</b> Executive Director Technology	<b>Dr. Axel Kniehl</b> Executive Director Marketing and Sales	<b>Dr. Markus Miele</b> Executive Director and Co-Proprietor	<b>Dr. Reinhard Zinkann</b> Executive Director and Co-Proprietor
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The Executive Board of the Miele Group consists of five Executive Directors with equal voting rights. These include two Executive Directors who act as representatives of the families of owners, as well as three Executive Directors with divisional responsibility, who are not associated with the families. The management level immediately below the Executive Board is divided into the heads of the central departments, the plants and the subsidiaries.

## Locations

[GRI G4-6, G4-9, G4-EC8] Miele produces its devices in 13 factories in a total of 12 locations, most of which are in Germany. Production is also active in Austria, Romania, the Czech Republic and China. With its own subsidiaries or importers Miele is represented in about 100 countries. As a key employer and taxpayer in these regions, Miele is conscious of its own multi-layered responsibilities. A central policy at Miele is therefore to keep jobs secure at all company locations.





## Sales

[GRI G4-9] in the 2015/16 business year

5,596,000  
domestic appliances sold

96,000  
commercial machines sold

## Turnover

3.71 billion  
euros in the 2015/16  
business year

[GRI G4-8] by regions 2015/16,  
as a percentage of total turnover



Germany



America, Australia,  
New Zealand, South Africa



Northwest Europe

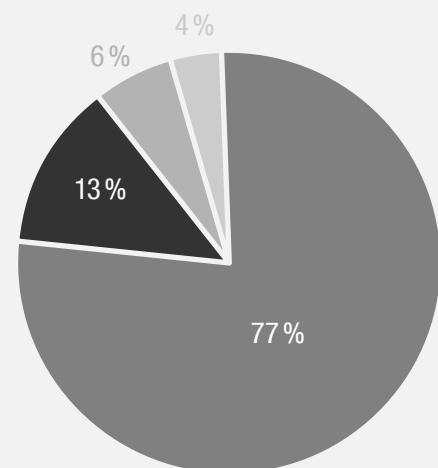


Southern, Eastern,  
Central Europe



Asia

by business areas 2015/16,  
as a percentage



- Domestic appliances
- Professional<sup>1)</sup>
- Customer service
- Care products and accessories

<sup>1)</sup> Commercial machines, service and spare parts.

## Product groups

[GRI G4-4] Miele's portfolio is divided into premium appliances for cooking, laundry care and floorcare, plus machines for commercial use, for medical applications and for laboratories ("Miele Professional").



### Products for domestic applications

#### **Kitchen appliances:**

- Coffee machines<sup>1)</sup>
- Cooker hoods
- Cookers and ovens/  
combination units
- Dishwashers
- Hob units
- Microwave ovens<sup>1)</sup>
- Refrigerators and freezers<sup>1)</sup>
- Steam ovens/combination units
- Vacuum drawers
- Warming drawers
- Wine units<sup>1)</sup>

#### **Laundry care:**

- Washing machines
- Washer-dryers
- Tumble dryers
- Rotary ironers

#### **Accessories and domestic appliance networking**

#### **Consumables:**

- Detergents (for washing machines)
- Detergents (for dishwashers)
- Cleaning products
- Tumble dryer fragrance
- Dustbags

#### **Floor care:**

- Cylinder and upright vacuum cleaners
- Stick vacuum cleaners
- Robotic vacuum cleaners



### Products for commercial applications

#### **Commercial laundry technology:**

- Washing machines
- Tumble dryers
- Rotary ironers

#### **Medical technology:**

- Washer-disinfectors
- Sterilisers
- Container and trolley washers
- Lab washers

#### **Industrial washers**

#### **Accessories and process chemicals**

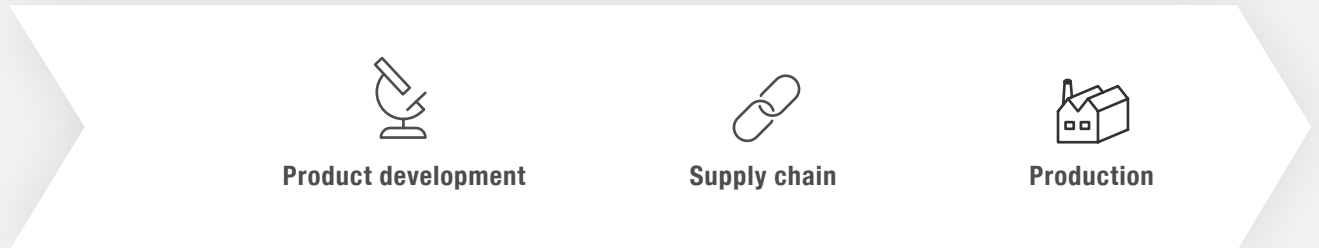
#### **Dishwashing technology:**

- Fresh water dishwashers
- Tank dishwashers

<sup>1)</sup> With these appliances, Miele cooperates with manufacturing partners.

## Value chain

[GRI G4-12, G4-20, G4-21] The Miele value chain extends across product development, the selection and procurement of raw materials and components, the production in the Miele factories, transport and sales, and usage itself. The chain ends with recycling or disposal of the appliances.



	Product development	Supply chain	Production
<b>Primary stakeholders involved</b>	Miele Legislators Customers Research & science	Miele Suppliers Legislators	Miele Legislators
<b>Miele core activities</b>	Research and development	Procurement and review	Environmentally friendly production with highly vertical integration
<b>Focus topics</b>	Customer requirements Energy label and other legislation	Availability of resources Transparency Adherence to standards	Energy efficiency Conservation of resources CO <sub>2</sub> savings Automation
Key GRI aspects	Procurement Practices; Materials; Products and Services	Procurement Practices; Materials; Supplier Assessment; Investments (human rights); Non-discrimination; Freedom of Association and Collective Bargaining; Child Labour; Forced or Compulsory Labour; Assessment (human rights); Local Communities; Anti-corruption	Materials; Energy; Water; Emissions; Effluents and Waste; Products and Services; Occupational Health and Safety; Product and Service Labelling
Comprehensive GRI aspects	Economic Performance; Employment; Labour/Management Relationship; Occupational Health and Safety; Training and Education; Diversity and Equal Opportunity; Equal Remuneration for Women and Men; Labour Practices Grievance Mechanism; Public Policy; Anticompetitive Behaviour; Compliance		



**Sales & transport**



**Use**



**Recycling & disposal**

<b>Primary stakeholders involved</b>	Miele Dealers	Customers Miele Legislators	Customers Disposal companies Legislators Miele
<b>Miele core activities</b>	Transport Selection and training of dealers Other sales	Offer of an appliance that is as durable, efficient, user-friendly and repair-friendly as possible Service	Disposal assignment Development of appliances that are as recyclable as possible
<b>Focus topics</b>	Emissions for growing transport volume	Goal conflict between ecological optimisation, performance and customer advantages Data security	Old machines/legacy systems Disposal standards
Key GRI aspects	Emissions; Transport; Product and Service Labelling	Energy; Emissions; Products and Services; Customer Health and Safety; Customer Privacy; Product and Service Labelling	Emissions; Effluents and Waste; Products and Services; Occupational Health and Safety; Customer Health and Safety; Product and Service Labelling
Comprehensive GRI aspects	Economic Performance; Employment; Labour/Management Relationship; Occupational Health and Safety; Training and Education; Diversity and Equal Opportunity; Equal Remuneration for Women and Men; Labour Practices Grievance Mechanism; Public Policy; Anticompetitive Behaviour; Compliance		

# 1 | Strategy

- 1.1 Remit
- 1.2 Sustainability strategy
- 1.3 Objectives
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## Strategic orientation

The development and implementation of the sustainability strategy is being carried out by teams from a variety of fields: Torsten Spließ from Quality Management (left) ensuring the link with the Miele management system; Sebastian Wegener, Technical Product Management and Environmental Office, controls the implementation.





# The remit: sustainability – forever better

**N**owadays, companies are faced with a multitude of global developments that impact their business: from climate change and the scarcity of valuable resources to the digitisation of all areas of life and demographic change. Miele is committed to facing these challenges with an open attitude. In accordance with its core corporate values, the company's actions are always considerate and oriented toward the long term. For Miele, sustainability stands for integrity, a sense of responsibility towards people and the environment, continuity and, last but not least, a sense of quality. The sustainability strategy forms the foundation for sustainable corporate development. At the same time, Miele always incorporates the expectations of relevant stakeholders. [GRI G4-2]

What Miele has already achieved<sup>1)</sup>

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National German  
Sustainability Prize

2014

Miele is Germany's most  
sustainable large-scale company.

All 12 locations are  
certified according to  
international standards:

ISO 9001  
ISO 14001  
OHSAS 18001  
SA8000

15

company-wide  
strategic sustainability  
objectives

93 %

objective  
achievement rate

13

departments  
are represented in  
the Sustainability  
Action Team.

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<sup>1)</sup> With reference the reporting period.

## Strategic objectives for 2025

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### Management

The long-term financial success of Miele is ensured through sustainability.

### Reputation

Miele is recognised and valued worldwide as the most sustainable company in the industry. Sustainability is an integral part of its brand identity.

### Stakeholder dialogue

Sustainability communication with stakeholders is tailored to the target audience and international.

### Risk management

In addition to legal requirements, risk management also takes into account the expectations of stakeholders.

“The sustainability strategy and its objectives help us live up to our pledge of being ‘Forever Better’. The company’s guiding principle and sustainability vision therefore go hand in hand.”

Christoph Wendker, Director  
Technical Product Management and  
Environmental Office, Gütersloh



# Sustainability strategy

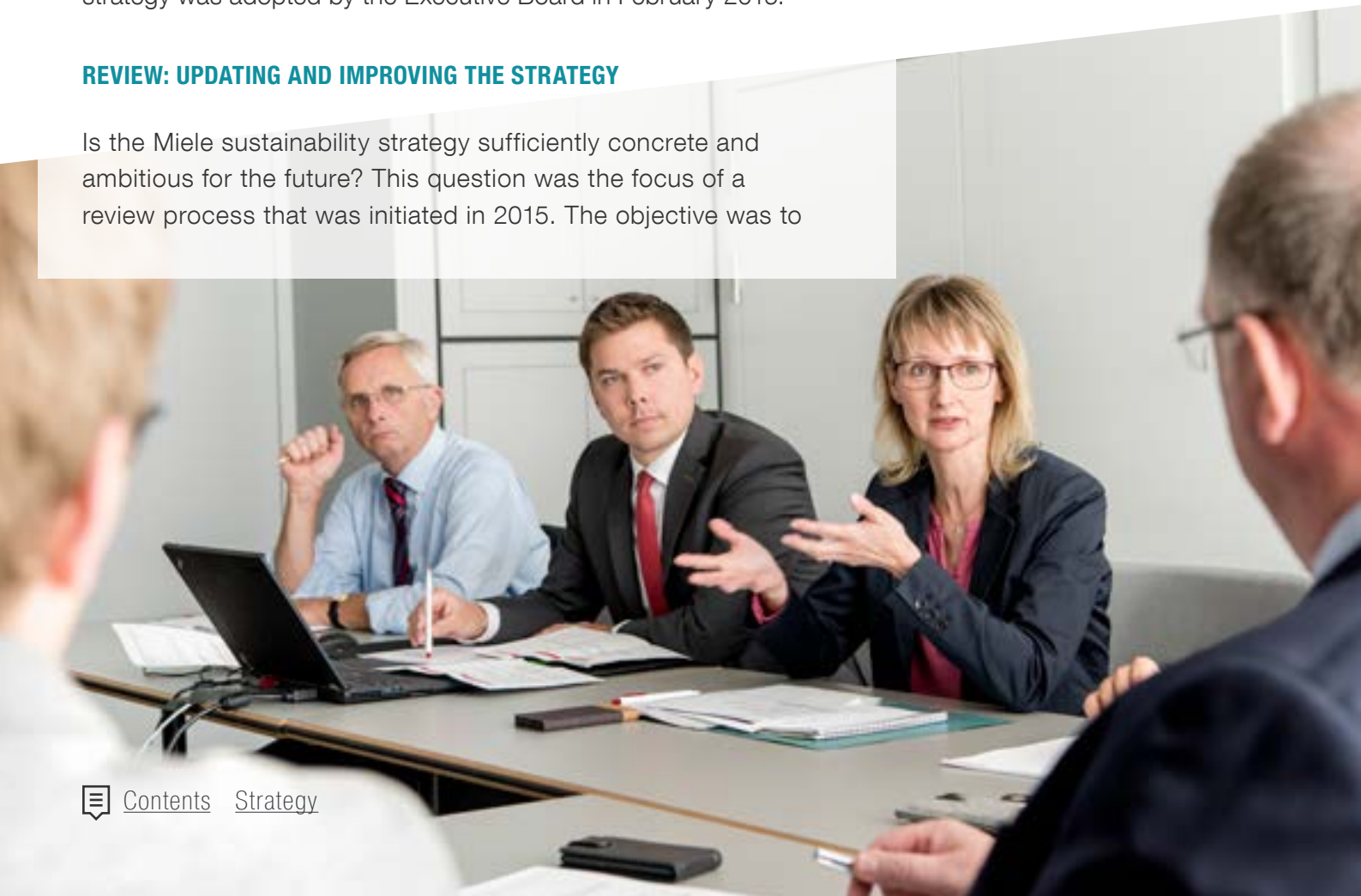
## Basis for current and future challenges

For Miele, sustainability in practice has always been an indispensable part of its business activities. Miele's sustainability policy was set down in an independent, comprehensive sustainability strategy for the first time in the 2011/12 business year. To this end, a team of commissioners, in close coordination with the Executive Board, determined the respective fields of action, defined objectives, measures and responsibilities, and defined key figures to measure progress. A review was agreed upon to ensure the effectiveness and future viability of Miele's sustainability strategy. A detailed review process in the 2015/16 business year revealed that the content needed to be updated and adapted. The sustainability strategy underwent further development in order to take this into account. The updated strategy was adopted by the Executive Board in February 2016.

In the Sustainability Action Team, the employees responsible for the areas meet in order to develop ideas and discuss methods of implementation.

### REVIEW: UPDATING AND IMPROVING THE STRATEGY

Is the Miele sustainability strategy sufficiently concrete and ambitious for the future? This question was the focus of a review process that was initiated in 2015. The objective was to





examine the extent to which the strategy is suited to addressing central sustainability developments and challenges over the next ten years. Miele decided on a **time frame up to 2025** to allow for long-term development focused on continuity.

## FIRST STEP: STATUS-QUO ANALYSIS AND EVALUATION

The first step involved determining the extent to which previously established sustainability objectives had been achieved. It also assessed the effectiveness and efficiency of the implemented measures. The basis for the analysis was, among other things, the information from the annual reviews, such as the target/performance comparison of the objectives. Furthermore, discussions were held with those responsible in order to identify the reasons why measures were unfulfilled or overfulfilled. The objective was also to gain insights into how strongly the sustainability strategy was already anchored in the company.

The result: Miele had been able to improve its performance with regard to key strategic issues. In production, energy consumption and CO<sub>2</sub> emissions decreased, and the energy consumption of the Miele appliances was also further reduced. Winning the National German Sustainability Award 2014 contributed to a better perception of Miele's sustainability performance. However, not all of the defined communication objectives had been fully achieved: sustainability considerations were not playing as large a role in public relations activities outside of Germany and in marketing and advertising as was intended. As part of her dissertation, a doctoral student at the Ludwig-Maximilians-University of Munich also discovered that, although Miele's experts and managers were fundamentally aware of the topic of sustainability, they were not always sufficiently aware of the existing sustainability strategy.

## SECOND STEP: ASSESSING THE FUTURE VIABILITY

In 2015, in addition to the review, Miele also conducted a trend analysis on important future developments. The aim was to ensure that the sustainability strategy incorporates the relevant global challenges of the coming years. The most important developments that will affect Miele between now and 2025 include:

- Increased demand for “sustainable” products: consumers expect evidence regarding the sound origin of raw materials, sustainable production as well as sustainable product properties.



# 2025

15 concrete strategic objectives should be achieved by this year.



- Technological developments: process and product innovations are required in order to achieve further advances in the environmental performance of the appliances, the distribution of efficient technologies and also in terms of usability. The subject of digitisation will play an increasingly important role against the backdrop of domestic appliances that are becoming more and more interconnected.
- Demographic development and recruitment of qualified employees: an aging population is changing the requirements for product design and for Miele as an employer (shortage of skilled labour).
- Compliance with human rights: the public is increasingly focused on violations of the core labour standards of the International Labour Organization (ILO), and on inadequate labour standards across the entire value chain. Violations are also subject to harsher sanctions.
- Resource scarcity: natural resources such as (drinking) water, energy and raw materials are becoming even scarcer due to population growth.
- Climate change: the effects of (human-induced) climate change are becoming more evident; the reduction of emissions is coming more to the fore.

The trend analysis was used for an evaluation of the [material topics](#) that are expected to gain relevance for Miele between now and 2025. This evaluation included a competition benchmark, an analysis of the demands of stakeholders (through events, association and committee work) as well as expert appraisals. Miele experts were also consulted internally about the respective topics, and the company held an internal trend workshop.

The topics identified include compliance with environmental and social standards, resource-efficient products and sustainable innovation. “Good leadership” (leadership improvement) and “sustainability communication” are also relevant in this context. Further topics with increasing importance are listed in the [materiality matrix](#).

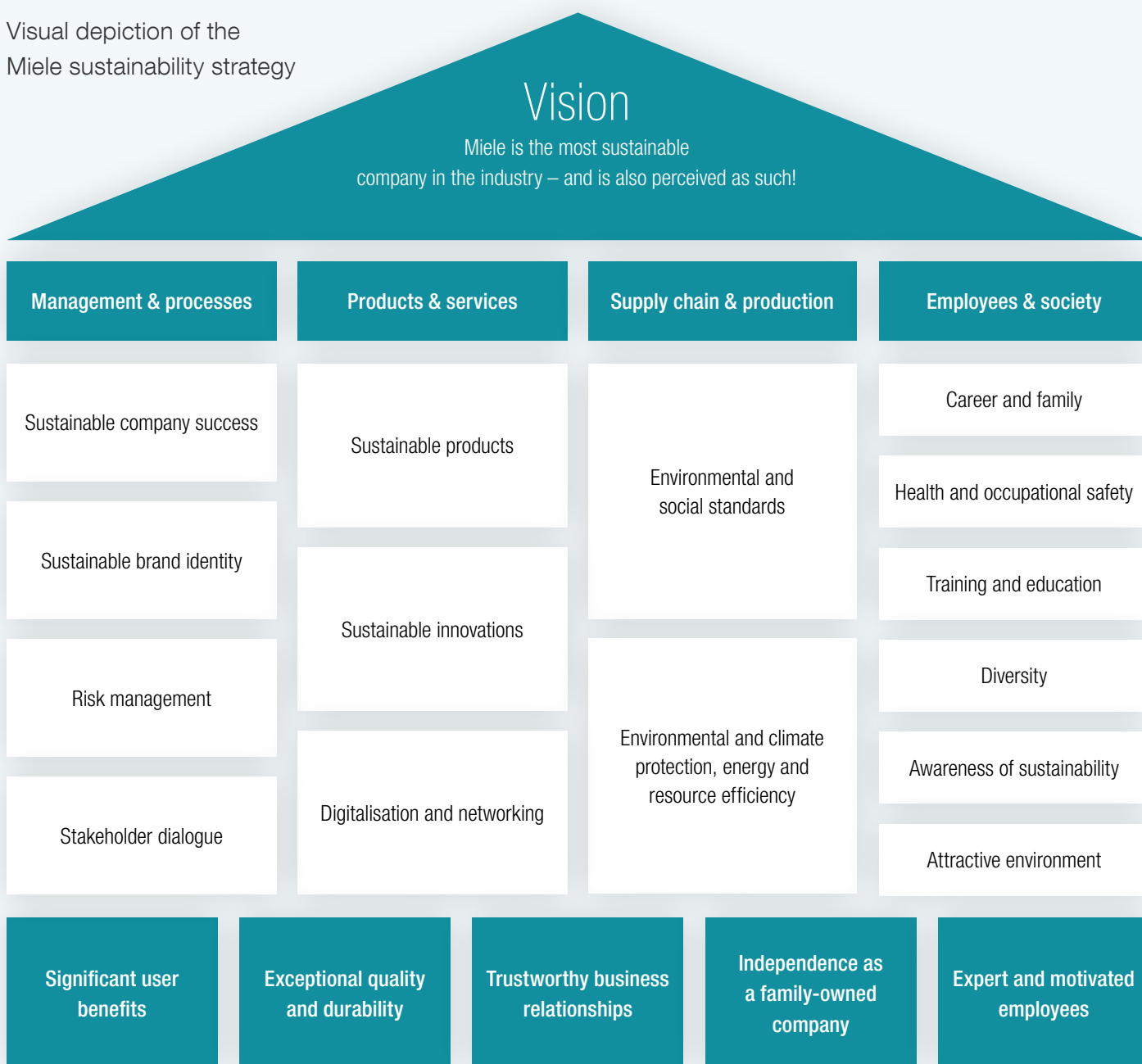
## **STRATEGY 2025: SUSTAINABILITY – FOREVER BETTER**

While updating the sustainability strategy, Miele systematically considered the potential for improvement and the future trends identified in the review process. The core of the sustainability strategy is formed around the following vision: “Miele is the most sustainable company in the industry – and is also perceived as such!”. This vision is set out in

15 concrete strategic objectives to be achieved by 2025. The refined sustainability strategy is an integral part of the corporate strategy and is incorporated into all of the Executive Board's decisions. It is also intended to serve as a model for all employees in their daily activities. The new version of the sustainability strategy was adopted by the Executive Board in February 2016. In the second half of 2016, Miele began to implement the strategy at its headquarters and in the plants.

## Strategic house

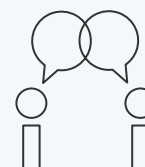
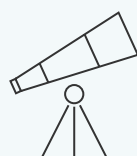
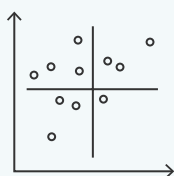
Visual depiction of the Miele sustainability strategy



## MATERIALITY PROCESS: CONTINUOUSLY IMPROVED

[GRI G4-18, G4-26] Miele is pursuing a comprehensive materiality process to determine its reporting topics and to orientate the sustainability strategy. This process was developed further between 2014 and 2016 (see [graphic](#)). Based on a comprehensive materiality analysis, which was carried out in 2014, Miele examined the results within the framework of the aforementioned [trend analysis](#) in 2015. In addition, expert interviews were conducted in 2016 with internal and external stakeholders in order to study the most important topics in depth.

### Materiality process



#### Materiality analysis (2014)

#### Trend analysis (2015)

#### Consolidation (2016)

#### Internal

39 technicians and managers surveyed

Evaluation by Technical Product Management/Environmental Office

30 agreements with the relevant departments

Workshops with specialist departments

Workshop with environmental consultancy

#### External

22 experts surveyed (online)

Evaluation by external sustainability experts

Phone interviews on five major topics with nine experts from science, associations, NGOs

570 customers and 25 dealers surveyed

Competition analysis

Stakeholder expectations

## MATERIALITY ANALYSIS 2014: COMPREHENSIVE RANKING OF TOPICS

[GRI G4-19, G4-20, G4-21] The Miele sustainability topics are ordered in the materiality matrix ([see graphic](#)) according to the significance that they hold for the stakeholders and the company. It clearly shows that both internal and external stakeholders largely agree about the topics that should be considered as particularly relevant. From a methodological perspective, the materiality matrix is still based on the comprehensive materiality analysis from 2014.

## TREND ANALYSIS 2015: TOPICS OF INCREASING IMPORTANCE

According to the [trend analysis](#), the graphic legend emphasises those topics whose relevance is likely to “rise sharply”, “rise” or “remain the same” between now and 2025. “Sustainable innovations” and “renewable energies” were identified as new topics. Smart Grid was replaced by the more comprehensive “Internet of Things”. Otherwise, there were only a few changes compared to 2014.

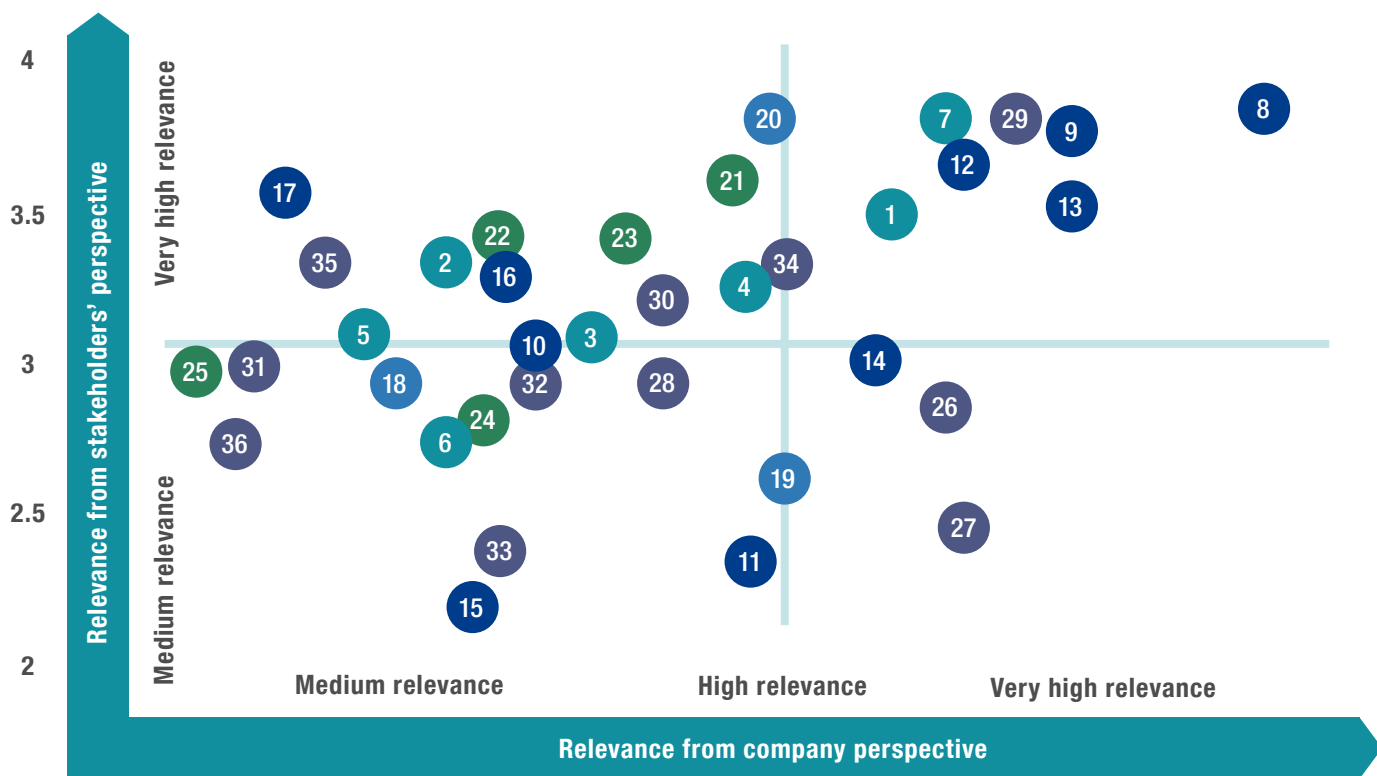
### Process 2014

[GRI G4-24] Starting with a predefined list of topics, the analysis in 2014 determined their relevance as well as Miele’s sustainability performance, and the respective need for action. The appraisals of 22 experts from the fields of business, science, politics, non-governmental organisations (NGOs) and the media were taken into account. Feedback from a public survey of more than 570 customers as well as 25 dealers and sales employees also contributed to the evaluation. In order to gain an internal perspective, Miele also interviewed 39 internal experts and managers on materiality topics, and held special workshops with responsible employees. These covered areas such as production, personnel, purchasing, quality management and environmental management as well as distribution logistics. In addition to stakeholder surveys, the review also included a hotspot analysis of the stakeholder challenges and requirements in the supply chain.

## A MORE IN-DEPTH APPROACH: EXPERT INTERVIEWS ON TREND ISSUES

[GRI G4-24, G4-26] In order to critically examine and further enhance the results of the 2015 strategy development, Miele conducted qualitative expert interviews which were concluded in October 2016. The focus was on five topics: “demographic change”, “digitisation”, “climate protection and resource efficiency in production” as well as “sustainable products” and “sustainability in the supply chain”. Miele interviewed a total of nine experts from associations, the field

# Materiality matrix



Trend <sup>1)</sup>		Trend <sup>1)</sup>		Trend <sup>1)</sup>		Trend <sup>1)</sup>	
● <b>Strategy and management</b>	13	Product safety (new: including data safety)	↗	● <b>Environment</b>	28	Vocational training and development	↗
1 Sustainability strategy <sup>2)</sup>	2)	14 Hygiene and cleaning performance	→	21 Energy efficiency in production and infrastructure	↗	29 Employee satisfaction <sup>2)</sup>	↗
2 Sustainability management	2)	15 Networking/Internet of Things (new: instead of Smart Grid)	↗	22 Climate protection <sup>5)</sup>	↗	30 Work-life balance/compatibility of family and work life	↗
3 CR risk management <sup>2)</sup>	2)	16 Resource-efficient products	↗	23 Resource efficiency in production	↗	31 Diversity and equal opportunity	↗
4 Compliance management ↗	2)	17 Recycling/disposal	↗	24 Environmental protection in transport and logistics	↗	32 Health management	↗
5 Stakeholder dialogue <sup>2)</sup>	2)	n.a. Sustainable innovations	↗	25 Water and waste water management	→	33 Occupational safety	→
6 Sustainability communication ↗	2)			n.a. Renewable energies	↗	34 Good leadership (leadership improvement)	↗
7 Compliance with social and ethical standards ↗	2)					35 Awareness of sustainability <sup>7)</sup>	↗
● <b>Products</b>		● <b>Supply chain</b>		● <b>People</b>		36 Social engagement	→
8 Products with optimised consumption ↗		18 Origin of resources, local procurement	↗	26 Development of young talent/recruitment of employees	↗		
9 Durability and reliability ↗		19 Supply security/resource availability	↗	27 Demographic change/skilled labour shortage	↗		
10 Gentle processes →		20 Supplier compliance with environmental and social standards	↗				
11 User convenience ↗							
12 Pollutant-free products ↗							

<sup>1)</sup> Trend description of material topics until 2025  
<sup>2)</sup> The topics sustainability strategy, sustainability management, CR risk management and stakeholder dialogue were not assessed as part of Miele's sustainability approach in the trend analysis; neither did it assess employee satisfaction as a result of the success of all employee measures. Further topics were pooled together:  
<sup>3)</sup> Compliance with social and ethical standards = good leadership (leadership improvement), environmental and social standards in the supply chain  
<sup>4)</sup> Origin of resources, local procurement = supplier compliance with environmental and social standards, environmental protection in transport and logistics  
<sup>5)</sup> Climate protection = energy efficiency in production and renewable energies  
<sup>6)</sup> Demographic change/skilled labour shortage = development of young talent/recruitment of employees  
<sup>7)</sup> Awareness of sustainability = good leadership (leadership improvement)



of science, non-governmental organisations and supplier companies, as well as from Miele itself. The objective was to assess the future development of the topics, to evaluate Miele's sustainability performance and to outline future development opportunities for Miele. The results were first presented to the Sustainability Action Team.

The results: the interviews confirmed the importance of the focal topics for Miele. At the same time, the experts described further possible approaches and provided recommendations for Miele. In the case of cross-functional or cross-product recommendations, the members of the Action Team examined which departments would be responsible for further processing. Discussions were arranged with the responsible departments; concrete measures were still pending at the editorial deadline.

Experts in the fields of environmental protection, energy and communications have an in-depth knowledge of the legal requirements and use their expertise to help evaluate the focus topics.




# Sustainability objectives


Strategic focus for 2025

The 15 objectives  of the [updated sustainability strategy](#) will define Miele's thematic and strategic focus between now and 2025. In addition to overarching management objectives, comprehensive objectives were formulated for the areas of "products and services", "supply chain and production", as well as "employees and society". The new objectives build on the previous [objectives for 2016](#), developing them further and continuing to include the objectives that have not yet been achieved. Concrete measures and key figures to measure progress are still in the elaboration stage in some cases.

## MANAGEMENT AND PROCESSES

 **The long-term financial success of Miele is ensured through sustainability.**

Miele has been present on the market for almost 120 years and wants to remain successful in the future – but not at the expense of future generations. The further development of particularly efficient or sustainable products and long-term, sustainable investment decisions contribute significantly to Miele's sales growth.

 **Miele is recognised and valued worldwide as the most sustainable company in the industry. Sustainability is an integral part of its brand identity.**

Competitions, ratings and rankings reflect Miele's sustainability efforts. Miele's sustainability commitment is

recognised and honoured by customers and experts in all sales markets. For this reason, sustainability will be integrated even more strongly in the brand's communication.

**🚩 Sustainability communication with stakeholders is tailored to the target audience and international.**

All internationally relevant target groups are specifically addressed via the appropriate topics, messages and channels. Stakeholder surveys are carried out to ensure progress.

**🚩 In addition to legal requirements, risk management also takes into account the expectations of stakeholders.**

In addition to the legal requirements of international markets, the expectations of stakeholders are an important aspect for shaping risk management. Risk management is based on well-informed and trained employees as well as on integrated sustainability risks.

## **PRODUCTS AND SERVICES**

**🚩 Miele appliances are the benchmark for sustainable product design and holistic efficiency.**

Designing appliances that are durable and repairable is an essential part of Miele's product philosophy. The performance and output of the appliances, as well as energy efficiency and material consumption are continually monitored and improved as a result.

**🚩 Miele is the industry leader in terms of product innovations and business models with a focus on sustainability.**

With new or revised business models, Miele opens up potential for sustainability and creates additional benefits for customers. System solutions, sharing, leasing and other models are thought through in detail and implemented wherever it makes sense to do so.

**🚩 Trust in Miele is secured, even in an interconnected world.**

Miele is safe and reliable – even in an increasingly digitised and interconnected world. Customers can access and manage their own data, and experience significant added value through interconnected products and digital services.

Strategic goals are constantly under review by committees in order to promote sustainability in the company.



## SUPPLY CHAIN AND PRODUCTION

### Minimising supply risks and full compliance with environmental and social standards

Good corporate governance means complying with environmental and social standards at production, sales and administrative locations, as well as at the locations of direct suppliers. Various strategies are implemented to ensure a secured supply with materials.

### Miele is the sector leader for environmental performance, in particular for CO<sub>2</sub> emissions, energy efficiency and resource efficiency.

Miele is continuing its efforts to improve efficiency in production which are supplemented by central climate indicators. The company is aiming to close material cycles in production and for products, wherever this is possible and economically sensible (cradle to cradle). The measures cover three sub-areas: energy efficiency, resource efficiency and CO<sub>2</sub> emissions.

## EMPLOYEES AND SOCIETY

### Miele is considered a role model when it comes to balancing work life and family.

The work-life balance is improved by a variety of measures; the fluctuation rate shows a low level which remains unchanged.

### Miele sets an example for occupational health and safety.

The promotion of health and the efforts to design a workplace that is appropriate for ageing employees are considered best practice among comparable companies. Measures and services help to further reduce the frequency of injuries and to promote employee health.

### Miele ensures the recruitment of young talent and the opportunity for qualifications at all locations.

Thanks to the excellent opportunities afforded to new starters and the wide range of training available, many vacancies are filled internally. Strategic planning with regard to age distribution takes into account the effects of demographic change and digitisation/automation.

**🚩 Diversity is made possible through respect and equal opportunity.**

The Miele culture is characterised by mutual respect. Employees are encouraged and supported, for example, with mentoring and qualification measures. This will be further enhanced in the future.

**🚩 Employees and managers are aware of and engaged in sustainable behaviour based on values.**

All Miele employees are aware of how their own operational activities influence Miele's sustainability performance and therefore behave accordingly. The Miele workforce is informed about and made aware of sustainability measures through e-learning programs, action days and lighthouse projects.

**🚩 Miele helps to maintain a sound, attractive environment at all locations.**

Miele demonstrates its commitment to social engagement all over the world on the basis of a standardised framework. Miele is perceived as a good neighbour at its locations, and actively fosters exchange and cooperation with the people living in those areas. Miele also pursues measures to promote biodiversity at its locations.

Objectives are defined across all departments in an open and constructive environment.



# Sustainability management

Providing for individuals and the environment

**S**ustainability management at Miele is based on the precautionary principle. This means that Miele thoroughly studies the potential negative effects that its business activities might have on people and the environment at an early stage, and takes measures to prevent or reduce these effects. This applies equally to the production of Miele appliances and to their use and disposal, and also includes the company's supply chain. Miele manages topics such as the conservation of resources, occupational safety, or climate protection via an effective organisational structure using certified management systems. Compliance management ensures that applicable laws and Miele's own guidelines are always observed. [GRI G4-14]

## SUSTAINABILITY: SYSTEMATIC CONTROL

[GRI G4-34, G4-36] Sustainability is ultimately the responsibility of the five-member Executive Board. The Board specifies the strategic direction, adopts objectives and defines indicators to measure progress. The Technical Product Management and Environmental Office, as well as other departments, perform the operational work. The central department heads, plant managers, heads of the sales regions and the heads of the sales subsidiaries are responsible for ensuring adherence to the objectives and requirements. Miele performs a systematic comparison of the objectives and key figures

Personal exchanges play an important role in defining objectives.





## Sustainability organisation

Central sustainability management committees



on sustainability performance on an annual basis. The graphic shows how sustainability is managed and implemented, from the Executive Board to the individual locations and sales subsidiaries.

### **SUSTAINABILITY COMMITTEE AND ACTION TEAM: CONTROL AND IMPLEMENTATION**

[GRI G4-36] The central and authoritative body for controlling sustainability management at Miele is the Sustainability Committee. It is directly tied to the Executive Board. The Sustainability Committee acts as the decision-making body for all important operational and product-related sustainability issues. The review and adaptation of the sustainability strategy was a key priority during the reporting period.

The Sustainability Committee meets at regular intervals – eight times during the reporting period. The meetings are chaired by the Executive Director, Dr Markus Miele, and the Technical Director, Dr Stefan Breit. The Committee includes representatives from the following departments: Occupational Safety, Operative Environmental Protection, Works Council, Purchasing, Energy Management, Product Engineering/Development, Press and Public Relations, Quality Management, Plant Management, as well as Technical Product

Management and Environmental Office (TPE). The TPE organises the Sustainability Committee and the head of TPE moderates the meetings. The Committee also serves as a critical information platform which helps to move communication beyond the limits of the individual departments. With its technical expertise, it helps to develop overall positions, strategies and recommendations.

In addition, the Sustainability Action Team was founded in April 2015. It ensures that the sustainability strategy is implemented and develops initiatives and measures, or solutions for strategic questions.

## Internal and external guidelines and standards

[GRI G4-15, G4-56] Sustainability management at Miele is based on a number of principles and international guidelines to which the company is committed:

- **Corporate philosophy:** stipulated principles, for example from the areas of quality and product safety, environmental protection, energy management and customer orientation, or specific sustainability aspects. These principles apply to all employees.
- **Ethical guidelines for purchasing:** have been applicable to all employees who work in procurement since 2006. Fair, transparent and partnership-based cooperation with suppliers is always paramount.
- **Code of conduct for all employees:** 13 mandatory rules for all employees, including issues such as human rights, anti-corruption, adherence to competition and antitrust law, or compliance
- **Ten principles of the United Nations (UN) Global Compact** on human rights, labour standards, environmental protection and anti-corruption
- **SA8000 standard** for fair working conditions and the recognition of labour rights: based on the conventions of the International Labour Organization (ILO), the Universal Declaration of Human Rights and the UN Convention on the Rights of the Child
- **Code of conduct of the German Central Association of the Electrical and Electronics Industry (ZVEI)** for socially responsible corporate management
- **Code of conduct of the European Committee of Domestic Equipment Manufacturers CECED** for corporate social responsibility
- **Diversity Charter:** corporate initiative to promote diversity in companies

In addition, the Action Team strengthens the exchange and networking between the headquarters in Gütersloh and the locations. Compared to the Sustainability Committee, the Action Team covers additional specialist areas. For example, its members include employees from the areas of Design, Marketing, Personnel, Logistics, or Professional.

### **INTEGRATED MANAGEMENT SYSTEM: FULFILLING BINDING STANDARDS**

[GRI G4-SO3] In order to continually improve its sustainability management, Miele uses an integrated management system for quality, environmental protection, energy, occupational safety and social protection. It combines all the tools and standards that Miele uses to adhere to various sustainability requirements (see table). The integrated management system is regularly reviewed in [internal and external audits](#). The current certification was issued in December 2014 and is valid for three years.

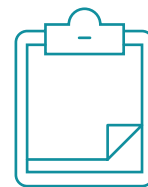
In addition, the relevant departments at the locations in Gütersloh, Bielefeld and Bürmoos were also certified according to the ISO 13485 standard for quality management of medical products.

### **MIELE SUCCESS SYSTEM: INTEGRATING SUSTAINABILITY INTO THE BUSINESS PROCESSES**

The integrated management system for quality, environmental protection, energy, occupational safety and social protection is interconnected with the Miele Success System (MES) in many places. The MES standardises and optimises the processes in product development, in the production environments as well as in quality management, and ranges across all stages from the Lean Management methods to the administrative processes at Miele. All areas of the MES take sustainability aspects into consideration.

The three pillars of the MES are:

- Miele product development system IMNU 2.0: The German acronym IMNU stands for “Mit Innovation und Mut zu neuen Ufern” (“breaking new ground with innovation and courage”) and refers to Miele’s standardised, company-wide product development system. The system provides the basis for efficient, streamlined structures as well as short development times. It also comprises the [environmental checklist](#) for products, which ensures that both statutory and Miele-specific environmental requirements are met during product development.



# 127

internal and external audits were conducted as part of quality management in 2015/16.

## Tools and standards

Locations	ISO 9001 (Quality) ISO 14001 (Environment) OHSAS 18001 (Occupational safety) SA8000 (Social standard)	ISO 50001 (Energy)
Gütersloh Washing machines, washer-dryers, electronic components	✓	✓
Bielefeld Dishwashers for domestic and commercial purposes, washer- disinfectors, vacuum cleaners	✓	✓
Euskirchen Electric motors, cable reels	✓	✓
Lehrte Laundry machines, rotary ironers	✓	✓
Oelde Cookers, ovens	✓	✓
Warendorf Plastic parts	✓	✓
Arnsberg Cooker hoods	✓	✓
Bünde Steam ovens, hob units	✓	✓
Braşov, Rumänien Electronic components	✓	✓
Bürmoos, Österreich Container and trolley washers, sterilisers, stainless steel components	✓	✓
Dongguan, China Vacuum cleaners	✓ <sup>1)</sup>	✗
Uničov, Tschechien Washing machines, tumble dryers, dishwashers	✓	✓

<sup>1)</sup> The plant in Dongguan was certified according to SA8000 at the end of 2016, outside the reporting period.

- Miele Value Creation System (MWS): the Miele Value Creation System was designed for the purpose of optimising processes in both production operations and administrative areas. With this system, the company ensures high product quality, efficient processes (for example in logistics) and the economical use of resources.
- Miele quality management system – Q core processes: the system structures important quality-related processes. It comprises the areas of product development, batch production, customer care, procurement and supporting processes such as internal or external auditing.

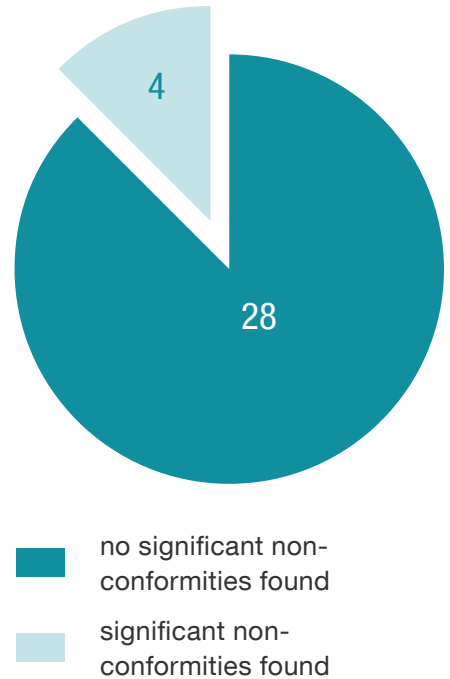
**EXTERNAL AUDITING: CENTRAL CONTROL, REGULAR INSPECTION**

The central quality management at the company headquarters in Gütersloh plans and manages all external auditing and certification procedures at all Miele locations. The only exception is the management system for medical products in Bielefeld and Bürmoos – the auditing and certification process for this system is independently organised by these plants themselves. The certification of the European company locations involves a matrix certification procedure. The Dongguan plant autonomously plans and organises its certification, but remains closely interlinked with the Miele management system and the Miele Success System. In both cases, external auditors check the processes that are relevant to the certification.

Within the framework of 32 external audits, four audits recorded a total of nine significant non-conformities in the 2015/16 business year. These instances exclusively concerned non-critical non-conformities in the area of occupational health and safety. Critical non-conformities that could jeopardize certification have not occurred at Miele since the 1990s. Non-critical non-conformities are typically the result of negligence or carelessness in work processes. In these cases potential hazards are eliminated immediately, and precautions are taken to prevent the mistakes from happening again. For example, employees that were found without suitable eye protection in the workplace were immediately given a briefing on the use of personal protective equipment. Suitable measures for identifying risks include inspections and risk assessments, as well as themed workshops and the reporting of near accidents.

External audits

of the integrated management system 2015/16



Various changes in standards became effective in 2014 and 2015. In particular, these relate to the social standard SA8000 and the ISO standards 9001 and 14001. Miele has started to gradually integrate the changed requirements into its processes. The respective adaptation audits for SA8000 have already been successfully completed at the Braşov, Bürmoos, Dongguan and Uničov locations. They are planned for May 2017 at the other company locations. SA8000, ISO 9001 and ISO 14001 recertifications are scheduled to be completed by the end of 2017.

### INTERNAL REVIEW: ANNUAL PROGRESS REVIEW AND INTERNAL AUDITS

The plant managers and department heads have appointed appropriately trained representatives to handle the various application areas of the management system. They provide the Executive Board with regular progress reports. The integrated management system is subjected to an annual assessment across all plants by the Executive Board, based on a defined system of key indicators.

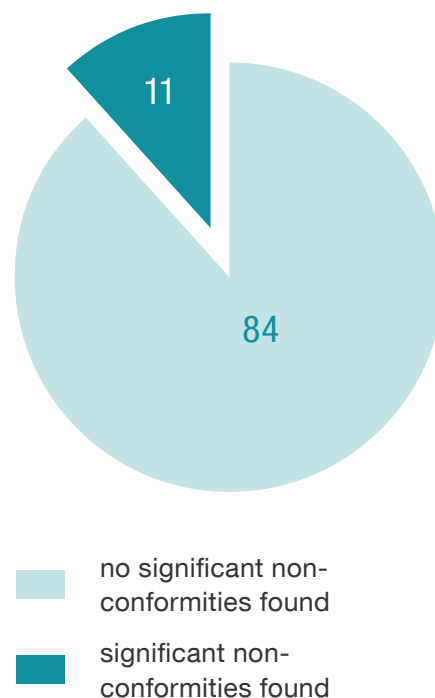
In addition to external auditing, Miele operates an [internal auditing](#) process. As a self-monitoring system, it allows Miele to detect non-conformities at an early stage and take corrective action. Miele auditors review the Miele management system, including the areas of quality management (including for medical products), environmental management, energy management, occupational health and safety and the social standard SA8000. They work through specific questions about the various processes and standards, and also examine the extent to which the legal and certification requirements, as well as those of Miele customers, are fulfilled. During the process, they note positive aspects, areas of improvement, observations and non-conformities. In addition, the internal auditors arrange for improvement measures and monitor them during the next audit. In order to ensure that audits are conducted in a competent manner, Miele employs experienced auditors who possess the necessary qualifications and extensive knowledge of the processes. The 95 internal audits which were performed in the reporting period did not find any critical non-conformities. There were eleven audits involving non-critical non-conformities.

### SUSTAINABILITY RISKS: ACTING WITH FORESIGHT

[GRI G4-2, G4-EC2] As a global company, Miele is exposed to a wide range of different risks in the course of its business operations. In order to identify, assess and eliminate these risks at an early stage, Miele has established a comprehensive risk management system. Up to

### Internal audits

of the integrated management system 2015/16





now, the system has focused on market, production and procurement risks, including the sustainability aspects relevant to each risk area.

Raw materials and substances are being traded on increasingly globalised markets. This also increases the risk for Miele that individual suppliers ignore the principles of sustainable corporate management. Certifications and the commitment to sustainable action therefore play a significant role in the decision to take on new suppliers.

There are also risks that are caused by climate change – above all due to the introduction of more demanding regulations on environmental and resource conservation, as well as rising raw material and energy prices. Miele is committed to the objective of limiting the rise in global warming to two degrees. As a manufacturing company, Miele is already well prepared with its focus on longevity, energy efficiency and resource efficiency. Many customers are now paying greater attention to energy efficiency when shopping for new domestic appliances. Miele recognised these developments early on and acted accordingly. In this context, a detailed assessment of the financial implications of climate change is not seen as a key priority at Miele.

#### **RISK MANAGEMENT: CENTRAL COORDINATION, DECENTRALISED IMPLEMENTATION**

[GRI G4-2] Miele's risk organisation is composed of central representatives for risk management and decentralised managers at the company locations. Central risk management forms part of the controlling division: it identifies and assesses risks to the company, and monitors the risk management measures. Risk management is actually implemented at a local level. Risk management applies equally to all locations worldwide. All German locations, the highest-grossing international sales subsidiaries and the plants in Austria, the Czech Republic and Romania are directly connected by a computerised system.

The risks are assessed annually according to the "potential loss" and "probability of occurrence" criteria. Based on this evaluation, specific countermeasures are developed for the risks identified.

The Miele logo is displayed in a bold, white, sans-serif font on a red rectangular background. The background of the entire page is a blurred image of a modern office interior with blue and white tones.

With regard to sustainability risks, the company's current focus is mainly on resource scarcity and issues related to procurement. Miele addresses market and production risks by providing innovative, high-quality products geared towards customer requirements. In addition, Miele is continuously improving productivity and cost-efficiency. The procurement risks are limited through close observation of the international markets, regular supplier audits, careful checking of the quality of the delivered products and the agreement of legally sound supply contracts. Adequate insurance cover is in place for risks arising from possible interruptions to production.

### COMPLIANCE MANAGEMENT: A HIGH LEVEL OF FAIR PLAY

[GRI G4-57, G4-58, G4-SO3, G4-SO7, G4-PR9] The corporate culture at Miele involves fair and cooperative conduct vis-à-vis customers, colleagues and business partners. All employees worldwide are obliged to abide by the law at all times, and to comply with internal guidelines as well as self-imposed social and ethical standards. The Miele Code of Conduct was introduced in 2008; it was revised and supplemented in 2012. The Code, which is available on the Miele intranet, contains provisions on bribery and corruption, as well as policies on proper conduct in relation to conflicts of interest, donations and sponsoring. It also calls for strict compliance with competition and antitrust law – with successful results: no antitrust proceedings took place against Miele during the reporting period. These requirements are specified in an additional instruction, which is obligatory for all employees. The Code of Conduct is based on the corporate philosophy, the ethical guidelines for procurement (which were introduced in 2006), the principles of the UN Global Compact, the social standard SA8000 and the CECED Code of Conduct.

Compliance with individual aspects of the Code of Conduct, such as the acceptance and giving of gifts, or conflicts of interest, are reviewed in internal audits. In the case of violations, the company will agree on corrective measures. As a rule, however, it is the responsibility of the functional managers to ensure that their employees' tasks are always carried out in compliance with applicable laws, internal rules and any self-imposed ethical and social standards.

### EMPLOYEE AWARENESS: ONLINE TRAINING AND EDUCATIONAL SOFTWARE

[GRI G4-57, G4-58, G4-HR2, G4-SO4] An online compliance training program on the Miele Code of Conduct was introduced worldwide in the 2014/15 business year. It is mandatory for relevant groups of employees to participate in the program. However, it is also open



2,792

employees participated in the online compliance training program.

to all other interested employees. New employees are automatically informed that they have to complete the program. A total of 2,792 employees worldwide have completed the learning program, 2,038 of these belonged to the target audience initially addressed.

In June 2016, self-learning software on the subject of competition and anti-trust legislation was introduced in Germany. All employees involved in issues relating to competition and anti-trust law are obliged to use this self-learning software. The program ends with a test. Records are kept on whether tests were passed. By October 2016, Miele had introduced the software at all its locations, also those outside Germany. During the reporting period, a legal management system covering environmental protection, energy, occupational health and safety, and an information management software addressing product-related regulation worldwide was introduced.

### **OMBUDSMAN: CONTACT PERSON FOR SUSPECT CASES**

[GRI G4-57, G4-58, G4-SO5, G4-SO8] Since 2010, an external ombudsman can be contacted if there is a suspicion of corruption, fraud, or theft in any Miele location. Employees, suppliers and third parties all over the world are able to consult the ombudsman. One report was made to the ombudsman in 2015, and two in 2014, on account of suspected corruption or personal gain. However, these reports could not be confirmed in the ensuing review. All employees throughout the world, and all suppliers in Germany, are informed about the existence of the ombudsman upon starting work or entering into a relationship with the company. There were no instances of contracts with business partners being terminated or failing to be extended due to corruption-related violations.



The integrated Miele management system combines the certifications of all Miele plants – an aspect which is also valued by Miele’s business partners.

# Stakeholder engagement

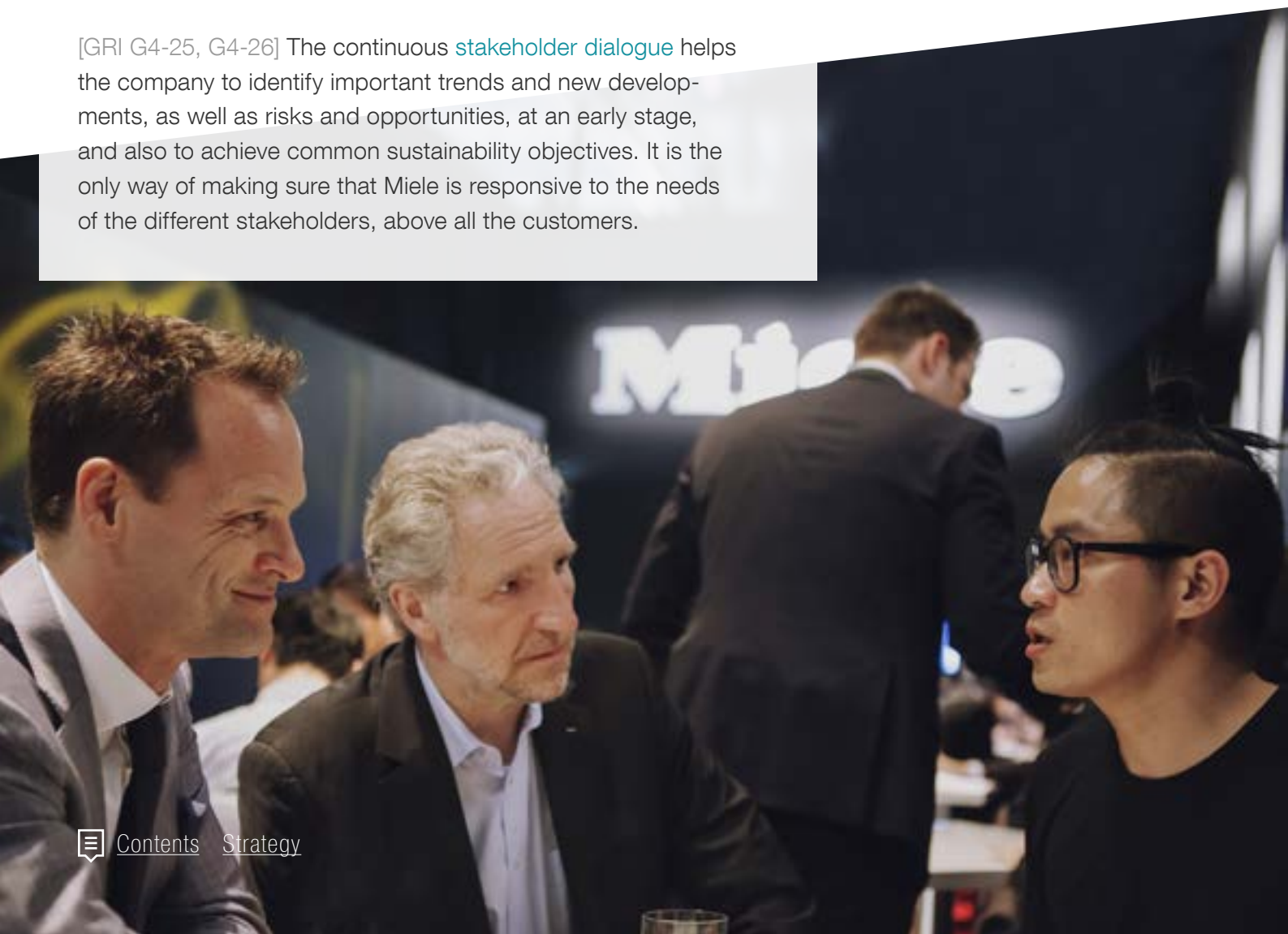
A dialogue based on mutual trust

Miele's products and production processes have different impacts on people and the environment. At the same time, the success and reputation of the company is also strongly influenced by the expectations, needs and decisions of its stakeholders. Therefore, Miele participates in an ongoing dialogue with all relevant stakeholder groups: with employees, customers, business partners, associations and interest groups, as well as with scientists and researchers, the general public, policy makers and legislators. [GRI G4-24, G4-25]

## STAKEHOLDER MANAGEMENT: OBJECTIVES AND RESPONSIBILITY

[GRI G4-25, G4-26] The continuous [stakeholder dialogue](#) helps the company to identify important trends and new developments, as well as risks and opportunities, at an early stage, and also to achieve common sustainability objectives. It is the only way of making sure that Miele is responsive to the needs of the different stakeholders, above all the customers.

In conversation at the Eurocucina (left to right): Dr Axel Kniehl, Executive Director Marketing and Sales, with Andreas Enslin, chief designer at Miele, and a media representative



Furthermore, Miele uses the stakeholder dialogue to give an account of how its own actions affect human beings and the environment. Usually, the exchange consists of a direct discussion between a specialist department at Miele and the special interest group in question. The Executive Board also seeks contact with the stakeholders on a regular basis to advocate sustainability.



## Dialogue at a glance

Overview of dialogues conducted

The Press and Public Relations and the Technical Product Management/Environmental Office departments are responsible for managing the stakeholder dialogue at Miele. The Press and Public Relations department receives queries and requests from Germany and, on occasion, from abroad. These are answered in consultation with the specialist departments. The Technical Product Management and Environmental Office (TPE) maintains numerous expert contacts, is active at an EU level, and actively shapes the stakeholder dialogue. In the international company locations, the dialogue is steered by the managers of the sales subsidiaries – and always in close consultation with the Executive Board.

In addition to the continuous dialogue, Miele conducts regular stakeholder surveys as part of its strategy review and when preparing the Sustainability Report. Miele created a stakeholder database in 2009 for this purpose.

### **CUSTOMER SURVEYS: CONFIRMING MIELE'S SUSTAINABILITY PERFORMANCE**

As part of the stakeholder survey in 2014, the participants were also asked to evaluate Miele's sustainability performance. The online public survey was completed by 570 customers whose ages ranged from 18 to over 80. Of these participants, 99 percent (45 percent women/55 percent men) reported that they were owners of a Miele appliance at the time of the survey. Over 90 percent of the respondents rated Miele's sustainability performance as either "high" or "very high". 88 percent of all respondents ranked Miele as the leading domestic appliance manufacturer in terms of sustainability.

Miele also conducts brand positioning surveys, where customers are asked, among other things, to rate whether Miele fulfils its ecological requirements and is committed to sustainability. On average in all the countries surveyed, Miele achieved a total score of 3.3 with a maximum score of 4 (= full agreement) for the evaluation of its sustainability performance between 2012 and 2016. This confirms that Miele's sustainability performance is perceived positively on a global scale.

## EXPERT EVALUATION: SUGGESTIONS FOR THE FUTURE

[GRI G4-27] In 2016, Miele conducted expert interviews to evaluate its sustainability performance, and to further elaborate on the experts' expectations regarding specific topics. Among other things, the respondents rated the Miele product brand as very strong, acknowledged the data security of networked household appliances, and confirmed the high level of operational environmental protection. At the same time, they made suggestions for Miele's future development. For example, they recommended a supra-regional strengthening of the employer brand or the testing of innovative service-oriented business models. To some extent, Miele is already working intensively on these developments, such as in the human resources division, or with the development of new services. In some cases, for example in product development, there are conflicting objectives which must be solved first.

## CRITICAL STAKEHOLDERS: CONSTRUCTIVE DIALOGUE

[GRI G4-27] In December 2015, the German Environmental Aid (Deutsche Umwelthilfe – DUH) claimed that refrigerator manufacturers in Germany were contributing to climate change because the disposal techniques for their appliances did not correspond to the state of the art. Miele has been in a continuous dialogue with DUH for several years. For example, the manufacturer diligently answered a DUH questionnaire from April 2014 concerning the

### Example of a dialogue: an informal discussion with Miele

In February 2015, Dr Eduard Sailer, in his former capacity as Technical Director, was guest speaker at an informal discussion group in Bonn on the subject of "Sustainability & brands – companies on the road to a new brand consensus". The participants from companies, NGOs and research were invited by a communication agency to discuss issues such as whether sustainability is financially rewarding for companies. The audience had a very encouraging outlook: sustainability does have a positive economic effect if customers are sufficiently informed about the company's approach. In his presentation, Dr Sailer highlighted the importance of sustainability for Miele's founders. They made sure that their products were constructed in a durable and solid manner from the outset. It was, therefore, a logical consequence that ecological considerations were integrated into the selection of materials and technical innovations.



disposal of CFC-containing refrigerators, and provided detailed information on the corresponding control processes.

In May 2015, DUH asked Miele to provide audit reports from plant operators. However, due to mandatory contractual confidentiality agreements with regard to plant-related data, Miele could not comply with this request for inspection. This would have been a violation of contract. However, the company pointed out that adherence to the applicable standard forms the subject of their agreements with the disposal partners, and that this explicitly includes the participating subcontractors. The audit process as such is described in the Products chapter. In July 2015, Miele also wrote to invite the DUH representatives to a personal discussion in Gütersloh.

### **COMMITTEES AND ASSOCIATIONS: BRINGING IN EXPERTISE, REPRESENTING COMPANY INTERESTS**

[GRI G4-16] As a domestic appliance manufacturer, Miele is also influenced by political decisions and legal requirements. Corresponding directives, for example on energy labels, Ecodesign, hazardous substances, or the circular economy, are designed to a large extent at the European level. Since the end of 2015, Miele has been registered in the public transparency register for interest groups in Brussels. This is intended to provide an insight into which representatives of the EU commissions, EU Parliament and the European Council are in direct contact with Miele.

Corporate representatives bring their expertise to [national and international committees](#), commissions and associations. They also advocate central corporate values such as quality, longevity, as well as resource and energy efficiency. One of the two executive directors, Dr Markus Miele or Dr Reinhard Zinkann, is also represented on each of the boards of the European Committee of Domestic Equipment Manufacturers CECED, the German Central Association of the Electrical and Electronics Industry ZVEI, the German Brands Association, the Stifterverband für die Deutsche Wissenschaft (Donors' association for the promotion of humanities and sciences) and – at a regional level – the Chamber of Commerce and Industry and the trade association.

### **KEY POINTS IN THE REPORTING PERIOD: FROM DISPOSAL TO CLIMATE PROTECTION**

[GRI G4-16, G4-27] In the 2014/15 and 2015/16 business years, Miele participated in various committee and association activities on numerous topics, including:



## Memberships

Overview of Miele memberships

- Disposal of Waste Electrical and Electronic Equipment (WEEE): Miele has actively participated in the development of the EN 50625 (as yet incomplete) series of standards for the collection, logistics and treatment of WEEE. Miele representatives attended a number of conferences: for example, on the topic of “Restricting illegal trade in waste equipment” in June 2015, or the Round Tables at the European Commission in February 2016, with representatives of waste management companies/associations and operators of reprocessing facilities. As a member of the European Committee of Domestic Equipment Manufacturers (CECED), Miele is involved in specific working groups at the European level. Focus areas also include the implementation of the WEEE Directive in the individual Member States, as well as the appropriate treatment standards for the various product groups. Further national and international association work focuses on regulations or amendments; for example, with regard to the Waste Framework Directive or product-related issues such as plastic recyclates, batteries and labelling.
- High energy efficiency standards: in the political debate, Miele continues to advocate an environmentally friendly design for products that consume energy. In the reporting period, this mainly concerned the discussion on the revision of the EU Energy Labelling Framework Directive, the Ecodesign Framework Directive and the discussion on preparing possible new labels and requirements for placing products on the market.
- Climate protection: in the reporting period, Miele also participated in the development of the [North Rhine-Westphalian climate protection plan](#) that was adopted on 17 December 2015. Miele experts participated in two working groups (industry/manufacturing and private households).

Miele has been a member of the European Association for Sustainable Laboratory Technologies (EGNATON) since 2014. As a supplier of medical devices, the company (represented by its Professional division) has been involved for quite some time in the Association’s work to establish criteria for a sustainability label for medical laboratories. The aim of the initiative is to contribute to the promotion of Germany and Europe as highly efficient scientific sites with excellent and sustainable laboratory facilities.

## POLITICS: COMPANY VISITS PROVIDE INSIGHTS

Miele maintains a continuous exchange of information with political representatives and regularly welcomes regional, national, or European politicians. Dr Barbara Hendricks, the Federal Minister for the Environment, Nature Conservation and Nuclear Safety, and Klaus Müller, Executive Director of The Federation of German Consumer Organisations (vzbv), visited Miele in August 2015. The topics of service life and wear (obsolescence), as well as the Ecodesign guideline were the focus of their visit. Günther Oettinger, European Commissioner for the Digital Economy and Society portfolio, visited the company at the Trade Show for Consumer Electronics & Home Appliances (IFA) in Berlin in September 2015, and at the end of 2015 at the company's location in Gütersloh. The opportunities and challenges of digital transformation made up a large part of this discussion. In March 2016, Dr Thomas Gambke, member of the German Parliament for Alliance90/The Greens, met with Miele representatives to discuss corporate sustainability.

In August 2015, Miele hosted Minister for the Environment Barbara Hendricks in Gütersloh. Here they are riding historic Miele bicycles across the Gütersloh location.



# Outlook

With the comprehensive review process and the update of the sustainability strategy, Miele created the basis for further sustainable corporate development by 2025. Miele began implementing the new structure in the autumn of 2016. This new structure has redefined the process of setting and elaborating objectives. It will be rolled out to the whole company by the end of 2018: first in the German and international plants, then in all the headquarter departments which are directly affected, and finally in the international sales subsidiaries. Specific sustainability programmes are being elaborated and adopted at all levels, which take into account Miele's sustainability strategy as well as the local framework conditions.

In order to ensure the success of the agreed measures, there will be more of a focus on managing Miele's sustainability performance at a company-wide level. Central sustainability KPIs (key performance indicators) will therefore be included in the annual plant reviews and reports.

Miele wants to continue  
growing from strength  
to strength and operate  
in a sustainable way.





# 2 | Products

2.1 Remit

2.2 Product portfolio and quality

2.3 Development and innovation

2.4 Sales

2.5 Recycling and disposal

2.6 Outlook

## Methodical development

In the washing laboratory of the Product engineering and development department in Gütersloh, Hildtrud Rohde (left) and Christiane Langenbach test new washing methods and components. There are similar research facilities in all product areas.





# The remit: increasingly sustainable products

**M**iele adopts a holistic approach in developing its products. All products, whether for domestic or commercial use, are durable and consume as little energy, water and chemicals as possible – while offering high performance and the best possible results. In accordance with the guiding principle “Forever Better”, Miele is developing innovative concepts to enable the consumption of resources to be reduced even further. Above all in the laundry-care and dishwashing sectors, Miele increasingly offers system solutions in which appliances, programmes, detergents and accessories are perfectly matched. Even the connectivity of domestic appliances contributes towards a more efficient use of resources. On the path towards achieving a circular economy, Miele is already experimenting with the use of high-quality materials from old appliances.

## What Miele has already achieved

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Savings on specific electricity consumption of up to

70 %

achieved with Miele tumble dryers since 2000

Tested appliances for the equivalent of up to

20 years'

use

A+++

-20%: best energy label values for Premium class dishwashers

400

network-enabled domestic appliances in the range

High recyclability as metal content is up to

90 %

for commercial appliances

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## Strategic objectives by 2025

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### Networking

Trust in Miele is secured, even in an interconnected world.

### Holism

Miele appliances are the benchmark for sustainable product design and holistic efficiency.

### Innovation

Miele is the industry leader in terms of product innovations and business models with a focus on sustainability.

“The aim of Miele product development is to constantly improve our products – ensuring they are long-lasting, without compromise and of the highest quality. We are working passionately to achieve this.”

Sabine Bivolarevic,  
Director Floor Care, Bielefeld



# Product portfolio and quality

## Efficient and long-lasting

From day one, the core of the Miele product philosophy has been to manufacture products of exceptionally high quality and with a particularly long service life. Great attention is also paid to energy efficiency, as approximately three quarters of the energy that domestic and commercial appliances need from development to disposal is consumed during the usage phase.

### EFFICIENCY: SAVING RESOURCES AND ENERGY

Miele develops and produces resource-conserving and energy-saving products. In doing so, the manufacturer follows a holistic approach: in addition to energy demand, water consumption and the use of chemicals such as detergents also play a major role.

This means that all programmes and functions in Miele appliances are designed with maximum efficiency in mind – and not just the level required to achieve the energy label. What's more, Miele appliances have a range of [consumption-reducing functions](#). Additional potential for saving resources is opened up by [networking](#) and incorporation into a smart home concept, for example through the use of renewable energy sources.

In order to promote acceptance of high-efficiency domestic appliances, Miele makes sure that low consumption does not come at the expense of practical benefit – for example with respect to programme duration, noise levels, and the results achieved when cooking, cleaning, washing and vacuuming.

### DOMESTIC APPLIANCES: INNOVATIONS AND RESULTS

[GRI G4-EN7, G4-EN27] In the reporting period, Miele has been able to make improvements regarding results and efficiency in the relevant product groups. New and further developed

## Reduction in energy consumption

of domestic appliances since 2000  
(status: business year 2015/16)

Washing machines



Tumble dryers



Cookers and ovens



Dishwashers



Refrigerators with freezer compartment<sup>1)</sup>



Refrigerators without freezer compartment<sup>2)</sup>



Freezers<sup>2)</sup>



Comparison of the most energy-efficient Miele appliances available on the market in the 2015/16 business year with the most energy-efficient Miele appliances from 2000.

<sup>1)</sup> 151 l - 300 l of usable capacity

<sup>2)</sup> up to 150 l of usable capacity





technologies are supporting Miele on the path towards becoming the most sustainable company in the industry.

Quick and convenient: the new generation of washer-dryers can wash and dry up to five kilograms of laundry in three-and-a-half hours.

### **WASHING MACHINES: POWERWASH 2.0**

Miele developed PowerWash – an exceptionally water-saving and efficient washing procedure – back in 2013. An additional circulation pump and a special rotating rhythm enhance cleaning performance by at least 10 percent. Two years later, the company presented the next development: PowerWash 2.0 requires even less water and energy – and operates with short cycle times and even with small loads, as are commonplace in the home. The renowned Oeko-Institut in the German city of Freiburg carried out a comparative test with appliances from other manufacturers and confirmed that Miele washing machines with PowerWash 2.0 technology “wash up to 40 percent faster while also saving up to 25 percent on electricity, depending on the programme”. They therefore demonstrated the “best washing performance and lowest water consumption”. What’s more, in the test conducted by the

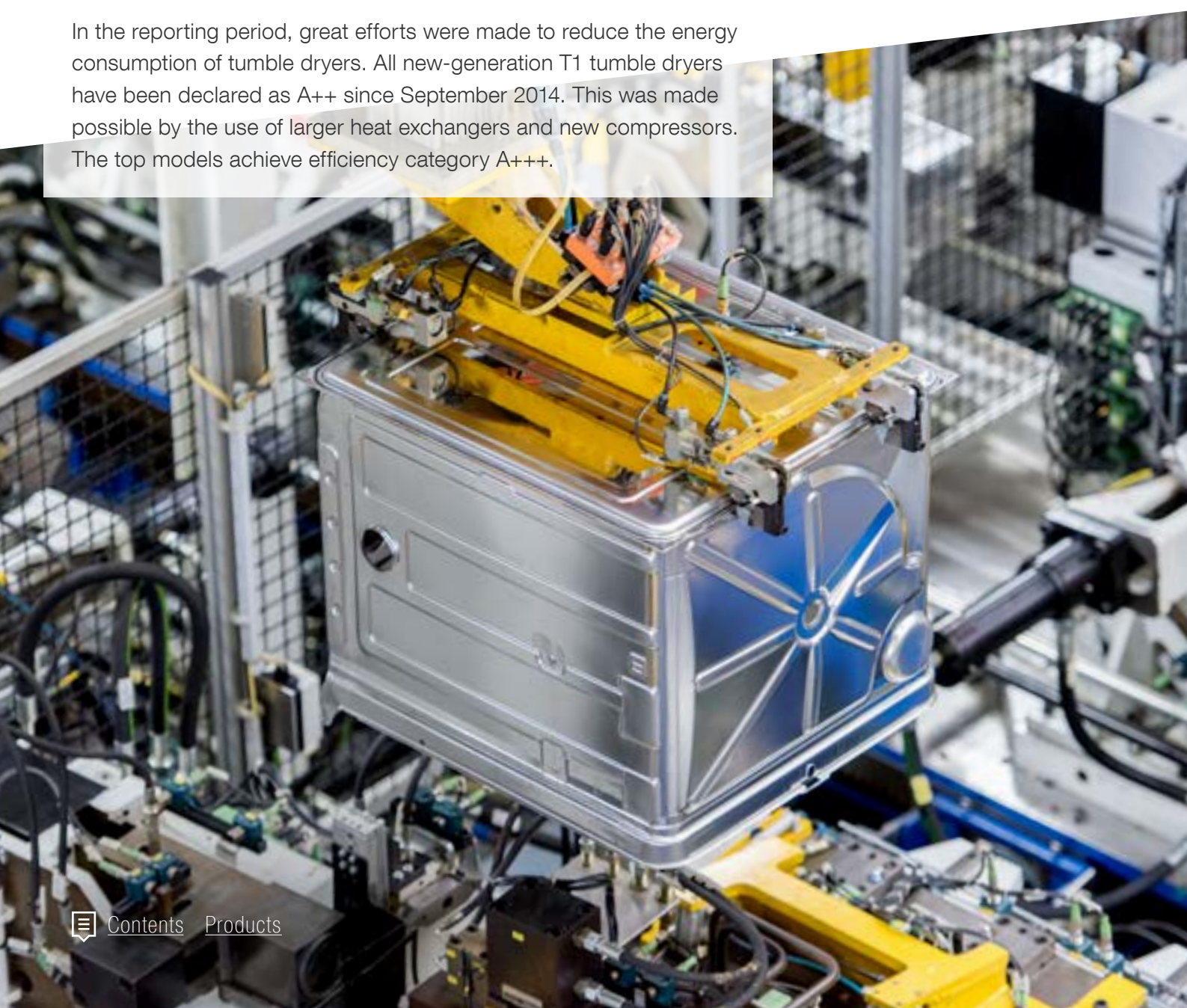
German consumer watchdog Stiftung Warentest, the Miele WMF 111 WPS front-loading washing machine with PowerWash 2.0 came out on top with an overall score of 1.6. In the test (edition 11/2016), the testers highlighted the environmental protection and electricity savings.

During the 2015/16 business year, **93 percent** of all washing machines subject to energy labelling fell into the top A+++ category, undercutting the borderline value by up to 40 percent (depending on model). In the 2013/14 business year, 63 percent of all Miele washing machines sold in EU member states had the highest A+++ energy efficiency rating. In the case of other appliances, a similar significant rise in the share of products in the highest efficiency category was also achieved: the increase with respect to tumble dryers was from 1 percent (BY 2013/14) to 8 percent, while dishwashers rose from 30 percent to 39 percent. As a result, Miele has been able to achieve its objective of further increasing its sales of consumption-optimised products.

### **TUMBLE DRYERS: TECHNICAL OPTIMISATION**

In the reporting period, great efforts were made to reduce the energy consumption of tumble dryers. All new-generation T1 tumble dryers have been declared as A++ since September 2014. This was made possible by the use of larger heat exchangers and new compressors. The top models achieve efficiency category A+++.

The inner cabinets of the dishwashers are manufactured in the Bielefeld factory using a unique, patented method.





What's more, the price of entry-level appliances in efficiency categories A++ and A+++ has been reduced, meaning that these energy-saving appliances now appeal to a broader target group.

### DISHWASHERS: ECOTECH HEAT RESERVOIR

The new dishwashers in the G 6000 EcoFlex series surpass the required value for a top A+++ energy efficiency rating by 10 percent, and for some appliances, even by 20 percent. The series has been on the market since April 2016. The high level of efficiency is achieved by using the new EcoTech heat reservoir.

The EcoTech heat reservoir consists of two separate water circuits. One of these circuits transports fresh tap water; the other constitutes a series of loops. The latter contains hot water from the last programme stage which circulates to pre-heat the fresh water in the reservoir. This means that less electricity is required to heat the incoming water to the required temperature, improving the energy efficiency rating from A+++ to A+++ -20 %. The dishwashers from the G6000 EcoFlex series also clean dishes very quickly: less than one hour is needed to achieve A-rated cleaning performance in the QuickPower-Wash programme – and this is supported by new, particularly fast-dissolving dishwasher tabs (UltraTabs Multi), which Miele has tailored to the series and the QuickPowerWash programme.

Certain G 6000 EcoFlex dishwasher models can also be directly linked to the Internet via a home's WLAN router, without the need for additional modules. Using the free [Miele@mobile](#) app, machines can be monitored and controlled from a smartphone or tablet.

Models from the G 6000 series were the exclusive test winners of the Stiftung Warentest test (edition 06/2016). The combination of design, convenience, energy consumption and cleaning performance provided the basis of the assessment.

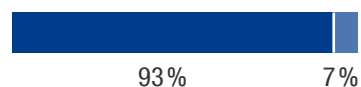
### REFRIGERATORS AND FREEZERS: BETTER THAN A+++

With respect to refrigerators and freezers, new [products are in development](#), which will demonstrate up to 20 percent lower consumption than appliances with the A+++ energy efficiency rating. Following the introduction of the new freestanding appliances of the K 20.000 series, numerous new A+++ appliances were launched in 2015/16. A number of entry-level appliances from the series continue to meet the standard of the A++ efficiency category.

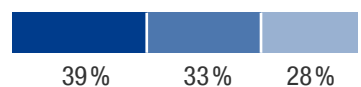
## Energy efficiency ratings

for each product group in percent

### Washing machines



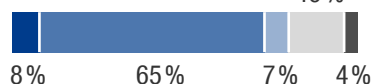
### Dishwashers



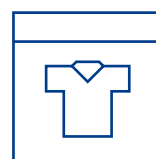
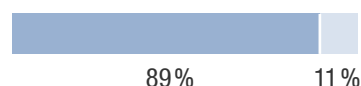
### Refrigerators and freezers



### Tumble dryers



### Cookers and ovens



# 93 %

of all Miele washing machines sold achieve the highest efficiency category available on the market.

## Current EU energy consumption labelling

on the product

Energy label	Appliance	Introduction of energy label	Current Miele measures
A+++ to D	Ovens	Updated in 2015	In the reporting period, the optimisation processes relating to this were a priority.
A to G, from 01.01.2016 A+ to F from 01.01.2018 A++ to E from 01.01.2020 A+++ to D	Cooker hoods	2015	Miele is taking advantage of the opportunity of having all cooker hoods compliant with the more stringent specifications from January 2015, even though these only became binding at the start of 2016. This concerns ratings from A+ to D. In the reporting period, more than 50 percent of the hoods had the energy label A or A+.
A+++ to D	Dishwashers	Updated in 2011	In the reporting period, the optimisation processes relating to this were a priority.
A+++ to D	Refrigerators and freezers	Updated in 2011	In the reporting period, the optimisation processes relating to this were a priority.
A to G, from 01.09.2017 A+++ to D	Vacuum cleaners	2014	In the reporting period, the optimisation processes relating to this were a priority.
A+++ to D	Tumble dryers	Updated in 2013	In the reporting period, the optimisation processes relating to this were a priority.
A+++ to D	Washing machines	Updated in 2011	In the reporting period, the optimisation processes relating to this were a priority.
A+++ to G	Wine conditioning units	2011	In the reporting period, the optimisation processes relating to this were a priority.

### COOKER HOODS: TEST WINNERS

Over recent years, Miele has been able to significantly improve the energy efficiency of its cooker hoods. Gradually, the fans have been converted from alternating current to direct current. Associated with this has also been the switch from halogen lighting to LEDs. In 2016, Miele cooker hoods were the exclusive winners of the Stiftung Warentest test in all three of the tested appliance categories (edition 03/2016).



### THE EU LABEL: PROVEN EFFICIENCY

[GRI G4-PR3] The currently valid EU energy consumption labelling can be found on many Miele appliances (see table). Legal requirements also have an influence on product development.

### ECO FUNCTIONS: TAPPING INTO FURTHER POTENTIAL FOR SAVINGS

Across all products, Miele appliances are equipped with a range of eco functions, which enable the user to tap into further potential for savings. These were primarily introduced in the past reporting period and have been extended to include further appliances and appliance categories in recent years.

Many oven models include a function that allows residual heat to be used, ensuring that energy is handled as efficiently as possible.

### Correctly declared

[GRI G4-PR3, G4-PR4] In order to check whether the energy label and other labels are applied correctly, Miele has carried out a self-test during the reporting period. Various Miele appliances (washing machines, tumble dryers, dishwashers, vacuum cleaners, cooker hoods, ovens, refrigerators/freezers) were purchased covertly on the market – similar to the procedure followed by a market surveillance authority. The appliances were then tested by independent test laboratories to check their compliance with the specified data, which included energy and water consumption, spin efficiency, noise and programme duration. All the results received up to now show that the measured values are within the permitted tolerances for the declared information. Miele provides correct declarations and does not use tolerances to the detriment of customers.

## Eco functions

(in excerpts)

Eco function	How it works	Development in the reporting period
EcoFeedback (dishwashers)	With the EcoFeedback function, users have the current consumption values of their dishwasher under control. Even before the cycle starts, they receive a forecast on the water and electricity consumption for the selected programme. They can therefore find out at a glance, for example, that a programme operating at a longer cycle time or lower temperature will require less energy. At the end of the programme, the appliance displays the actual consumption in kilowatt-hours and litres.	Proportion of dishwashers sold with EcoFeedback function as a percentage of total sales: BY 2014/15: 35 % BY 2015/16: 30 %
FlexiTimer with EcoStart/SmartStart (dishwashers)	Start selection for times at which the electricity tariff is the lowest	Proportion of dishwashers sold with FlexiTimer as a percentage of total sales: BY 2014/15: 35 % BY 2015/16: 30 %
SolarSave (dishwashers)	Wash programme where warm water already available in the household (solar thermal system, heat reservoir, or gas/oil heating) is used. The programme uses only the heat provided by the incoming water supply. The electricity consumption is reduced to 0.05 kWh per cycle.	Proportion of dishwashers sold with SolarSave as a percentage of total sales: BY 2014/15: 35 % BY 2015/16: 30 %
EcoTech heat reservoir (dishwashers)	See <a href="#">Dishwashers: EcoTech heat reservoir</a>	Worldwide launch April 2016
Residual heat utilisation (ovens and steam ovens)	Five minutes before the end of the cooking time, only existing heat is used.	Expansion in product range
Induction (hobs and CombiSets)	30 % less energy used to heat up compared with conventional systems	Proportion of products continually increasing
LED spotlights (cooker hoods)		Expansion of the product range
Eco motor (direct current) (cooker hoods)	70 % saving compared with conventional motors	Expansion of the product range
Conn@ctivity (cooker hoods)	The automatic function Con@ctivity 2.0 allows the values selected at the hob to be captured and communicated to the control of the cooker hood.	Expansion of the product range For example, 60 % of all hobs and hoods are now networked wirelessly.
Eco mode (coffee machines)	Heat-up only directly before the first drink is dispensed	All models have the feature.

Eco function	How it works	Development in the reporting period
EcoFeedback (washing machines)	See Dishwashers	Proportion of washing machines sold with EcoFeedback: BY 2014/15: 25 % 2015: 31 % BY 2015/16: 34 %
TwinDos (washing machines)	Integrated, automatic detergent dosing system: the two Miele detergents UltraPhase 1 (acting against fats and proteins) and UltraPhase 2 (acting against stubborn stains) are dosed via TwinDos in consecutive programme stages. TwinDos saves up to 30 % on detergent; confirmed in 2013 by the independent Oeko-Institut.	The portfolio has been enhanced further. In BY 2014/15, 15 % of the washing machines sold had TwinDos; in BY 2015/16 18 %.
AllWater (washing machines)	Miele AllWater washing machines can be used with service water or hot water. The appliances are equipped with two water connections for this purpose. The use of an existing hot water supply can result in energy savings of up to 43 %.	Integration in one model
EcoFeedback (tumble dryers)	See Dishwashers	Proportion of tumble dryers sold with EcoFeedback 2015: 20 % BY 2015/16: 20 %
Heat pump (tumble dryers)	See <a href="#">Tumble dryers: optimisation with heat pumps</a>	
ProfiEco motor (tumble dryers)	Wear-free, economical and quiet thanks to electronic controls	Proportion of tumble dryers sold with ProfiEco motor: BY 2014/15: 50 % BY 2015/16: 60 %
EcoTeQ floorhead (vacuum cleaners)	Efficient floorheads which achieve perfect cleaning results even with the lowest power setting	In Europe, 50 % of all vacuum cleaners below 1,000 watts sold in the reporting period are equipped with this feature. Latest model launched in 2015 in order to meet new label values.

## COMMERCIAL MACHINES: VARIOUS MEASURES TO INCREASE EFFICIENCY

The Professional division manufactures commercial machines for areas including the hotel/catering industry and for medical facilities. At the Lehrte plant, a new tumble dryer was developed and brought to market during the reporting period. This is heated exclusively via a heat pump. In addition, the washing machine product range has been revised. In the new appliances with the “Benchmark” designation (Performance and Performance Plus models), energy consumption has been reduced thanks to measures including improved process technology. The appliances were presented for the first time in March 2017.

Enamelling makes washing machine front panels highly resistant to scratches and impacts. This testing investigates the resilience of the surface.







## **LONGEVITY: ENVIRONMENTALLY BENEFICIAL PRODUCT SERVICE LIFE**

[GRI G4-EN27] The exceptional durability of Miele products is the result of sturdy construction, the use of high-quality materials and demanding load and endurance tests. Miele is the only manufacturer in the industry who tests its products to last up to 20 years. This is also worthwhile from an ecological perspective: recently, a study conducted by the German Environment Agency (UBA) and the Oeko-Institut in February 2016 regarding the influence of the service life of products on their environmental impact confirmed that durable appliances perform better from an ecological point of view.

The study entitled “Considerations regarding Product Service Life and Alternative Strategies for Miele Domestic Appliances”, which was conducted by the Oeko-Institut on behalf of Miele in 2014 and published in 2015 also came to a similar conclusion, as it stated that it certainly makes sense to use domestic appliances for as long as possible. The study confirmed that this is particularly true for washing machines and dishwashers and generally for tumble dryers as well as refrigerators and freezers too. Only in the case of very old tumble dryers and refrigerators/freezers may it be worthwhile to replace the appliances, as huge increases in efficiency have been achieved in these product groups as a result of technological advances in recent years. If we look to the future from today’s standpoint, according to one conclusion of the study, long-term use is something that can be aspired to more than ever before, as further increases in efficiency within the appliance are expected to be on a smaller scale than those seen recently.

Only Miele tests its domestic appliances to a service life of up to 20 years.

## SERVICE LIFE: MIELE APPLIANCES REMAIN A PART OF THE HOME FOR LONGER

In order to benefit from the ecological advantages of durability, however, the appliances must be used by consumers for long enough. In actual fact, Miele domestic appliances are used in the home for longer than appliances from other manufacturers before they are either sold on or replaced due to a defect. This has been revealed in several studies in the past.

Customer satisfaction is a factor that is not to be underestimated when it comes to ensuring that domestic appliances are used for as long as possible. If a domestic appliance does its job reliably and delivers the results, user convenience, energy efficiency and design that customers ask for, a functioning appliance will very rarely be replaced early. Key focal points for product development at Miele are therefore time-less design, ease of repair and the option to update control software.

## FUTURE VIABILITY: SOFTWARE UPDATES INCLUDING FOR OLDER APPLIANCES

The increasing importance of software in domestic appliances offers the opportunity to improve functions over the long utilisation phase of Miele appliances or to adapt them to new customer requirements. Standardised Miele diagnostic support offers approximately 2,200 updates for more than 1,300 different electronics components. It is used by almost 3,000 technicians worldwide and therefore contributes to the continual improvement of Miele appliances. Developed back in 2004, the programme can be used for the latest and most innovative products as well as for older appliances.



# 15,000

A Miele dishwasher must deliver 15,000 operating hours.

### Durability tests: clear requirements

The requirements that Miele appliances must satisfy in the service life tests are defined in a separate plant standard. For a washing machine, Miele assumes five programme cycles are performed each week. Over 20 years, this results in 5,000 washing cycles, i.e. 10,000 operating hours in testing. 5,000 cycles are also applied for tumble dryers, which, due to shorter programme durations, results in a test period of 7,500 operating hours. For dishwashers, Miele assumes daily use; this equates to 7,500 programmes over 20 years or **15,000 operating hours**.

## Awards: international recognition

Various awards regularly confirm the reliability of Miele's appliances and customer service. These include the following:

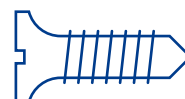
- KVA Service Award 2015 (from the Austrian Association for Customer Service) – in the B2C and B2B categories for the first time
- The British NGO Which? assessed Miele as a manufacturer in various appliance categories in January 2015. Over 10,000 Which? members were surveyed on ten appliance categories. Miele was rated the “best brand” in five of the categories. Particular focal points here were reliability, customer loyalty and value for money.
- In June 2015, Which? investigated the extent to which washing machines can be repaired and how easy this process is. The latest washing machines from seven manufacturers were compared against each other and against old models. Miele achieved the highest reliability rating and best customer satisfaction scores.
- The New Zealand customer magazine consumer announced the winners of its Top Brand award in summer 2016. Miele came out on top in the vacuum cleaner, tumble dryer, washing machine, dishwasher and oven product categories.

## EASE OF REPAIR: DESIGN ENABLES SIMPLE REPAIR

Miele domestic appliances are renowned for their reliability. Nevertheless, over the course of a long appliance life, faults may occur that require the assistance of the service team. In order to keep costs low in such cases, the appliances are designed to be “repair-friendly”. This means that as little effort as possible should be required to repair or replace a component. As Miele assumes a service life of up to 20 years for its products, its supply of spare parts is organised with this in mind. Around **63,000 different original Miele spare parts** are therefore permanently held in stock in the central warehouse in Gütersloh. From there, these are then dispatched as required to locations all over the world and are available for many years after production of the particular appliance has ceased.

## CUSTOMER SERVICE: HIGH SERVICE QUALITY ENDORSED

Miele Service technicians undergo rigorous training in internal instructional courses, and they complete their service calls with the help of extensively equipped service vans. The “first-call completion rate” (percentage of service requests complete after the first service call) for Miele Service is above the industry average. In Germany, a rate of 90 percent has already been achieved. This high level has been verified



# 63,000

spare parts are held in stock 15 years after production of the particular appliance series.

by several sources, including the “Kundenmonitor Deutschland 2015”, a comparative market research study conducted in Germany. The study named Miele Service the best in the industry for the 19<sup>th</sup> time. In the telephone survey which took place between August 2014 and August 2015 as part of the study, 76 percent of the customers surveyed stated that they were “completely satisfied” with Miele’s service, with 20 percent saying that they were “satisfied”. As a result, Miele was able to improve its scores further compared with the previous study.

### **GENTLE PROCESSES: INCREASED SERVICE LIFE OF TEXTILES AND CROCKERY**

Durability in the broader sense of the word also includes the gentle treatment of textiles and the care of valuable cutlery and crockery in the dishwasher. In the case of washing machines, shorter programme durations, for example, protect the laundry and extend the life of the garments. In Miele washing machines, the duration of the energy label programme is limited to three hours, whereas it can last for up to five-and-a-half hours for other manufacturers. For its dishwashers, Miele has developed a wash programme that treats even high-quality glasses very gently and provides them with lasting protection against glass corrosion. In the reporting period, Miele has worked on new materials for the basket and on a silicone protector to prevent glass from breaking in the dishwasher.

### **PRODUCT SAFETY: EXTENSIVE TESTING**

[GRI G4-PR1] As a general rule, all Miele products are extensively tested with respect to health and safety risks to the consumer. Compliance with product safety aspects is tested by independent bodies such as VDE, DEKRA, or TÜV, and the products certified accordingly. In addition to laws and standards, in-house Miele standards apply in all areas, and in some cases have even higher requirements with respect to product safety. Extensive tests and service life inspections also contribute to product safety as do findings from customer service callouts.

In an industry comparison, Miele has a very high level of vertical integration – up to **50 percent** depending on the product. This makes an important contribution when it comes to differentiating the core components from the competition, strongly influencing the quality of these components, and therefore also enhancing product safety. Ensuring product safety is also a process that involves several areas, as the Technical Product Management and Environmental Office, design/development departments and Quality Management all work in close cooperation with each other. Certain sources of



Cookers and ovens are developed and tested at the Oelde plant.



Vertical integration of up to

**50 %**



faults are carefully identified and assessed using targeted, global market monitoring, customer service feedback, product recalls, or spare parts sales (field monitoring). Influences from modified user behaviour can also be identified in this way. An additional factor is preventive quality work, which accompanies new products as early as the product development phase with the aid of series of tests, and which can therefore have an influence at an early stage.

## **RECALL CAMPAIGNS: DETAILED CONTINGENCY PLANS**

[GRI G4-PR2] If field monitoring establishes that a product recall is required, detailed contingency plans are available with the names of the persons responsible for taking prompt action. Experience from such recalls is intensively analysed and considered for future developments. In the reporting period, three minor product recalls occurred, which have now largely been concluded. Miele contacted the customers affected directly and the problems were resolved by providing a spare part, replacing the affected appliance, or by taking other measures.

## **HYGIENE: HIGH STANDARDS ENSURED**

Miele Professional appliances offer special programmes to suit the particular hygiene requirements of establishments such as retirement homes, hospitals, or hotels. Similar considerations are also made for commercial dishwashers. These appliances meet significantly higher hygiene standards than models with a tank system, as fresh water is used for each rinse cycle. They also offer special programmes with high final rinse temperatures (over 83 °C) and long temperature holding times. This combination of high temperatures and long holding times produces particularly hygienic cleaning results. The hygiene requirements in the medical technology sector are even higher. As a certified medical product manufacturer, Miele meets all statutory hygiene standards. For example, this also includes the full and reproducible documentation of each individual batch of sterile products.

Professional applications entail special requirements for programmes, speed and hygiene.



Miele also ensures high hygiene standards with respect to laundry care in the home, for instance with the special “Hygiene 60 °C” wash programme, which is available in a range of models. A defined wash temperature combined with a long temperature holding time prevents the spread of germs throughout the laundry in this programme. For several years, a tendency to wash laundry at low temperatures can be observed. This is generally to be welcomed, as less energy is needed to heat up the suds. However, frequent washing at low temperatures can also lead to the buildup of germs and odours in the washing machine. In order to prevent this, Miele has developed “Hygiene Info”: if a washing programme with a temperature of 60 degrees Celsius or higher has not been started for an extended period of time, the “Hygiene Info” warning appears on the appliance display. The user is then prompted to start a one-off programme with a higher temperature and universal powder detergent or Miele machine cleaner.



40 dB(A)  
quieter than a whisper

### **POLLUTANT-FREE PRODUCTS: STRICT STANDARDS**

[GRI G4-14, G4-EN27] As a matter of principle, Miele avoids the use of critical substances, wherever possible. Many substances of this nature were therefore never used or were substituted years ahead of being banned. Before any substances are used, Miele establishes whether they are considered critical by experts, and whether avoiding their use could benefit the environment and/or human health. With this in mind, critical substances are defined in specifications that apply across the entire company, such as internal [Miele plant standards](#). The Miele plant standard for limiting the use of substances was recently adapted during the reporting period to comply with the level of expert knowledge. Exceptions are only permitted after intensive discussions and approval by the head of Product Engineering or the Plant Manager concerned. Compliance with relevant legal standards is second nature to Miele. This includes, for example, the EU chemicals regulation (REACH) and the EU directive on the restriction of the use of certain hazardous substances (RoHS). Compliance is monitored through continuous analysis of products and components.

### **EMISSIONS: CONSISTENTLY OPTIMISED APPLIANCES**

[GRI G4-EN27] Miele appliances are optimised in every conceivable way so that emissions like noise, odours and moisture are also kept to a minimum. Accordingly, Miele dishwashers and cooker hoods are among the quietest products on the market. Even in open-plan kitchens, the operating noises are rarely regarded as a nuisance. The advantage of this is that the dishwashers can be operated outside of electricity peaks and at off-peak tariffs, where applicable.



With the launch of the new K 20,000 freestanding refrigerators and fridge-freezers in 2015/16, all new fridge-freezers achieved noise levels of below 40 decibels (dB(A)). This is an improvement of between two and five decibels. Among its vacuum cleaners, at the start of 2016, Miele was once again able to reduce the noise level of its quietest appliance – the Complete C3 Silence – from 69 dB(A) to 68 dB(A). Cooker hoods and ovens are equipped with filters or catalysts (depending on the model for ovens) to minimise odours and prevent greasy vapours from entering the ambient air. Miele tumble dryers operate highly efficiently and with the lowest condensate losses in the industry, meaning that they release little moisture into the ambient air. This is advantageous both in terms of energy efficiency and for health reasons because high air humidity often causes mildew to grow in rooms without sufficient ventilation.

A wide range of vacuum cleaners are manufactured in the Bielefeld plant.



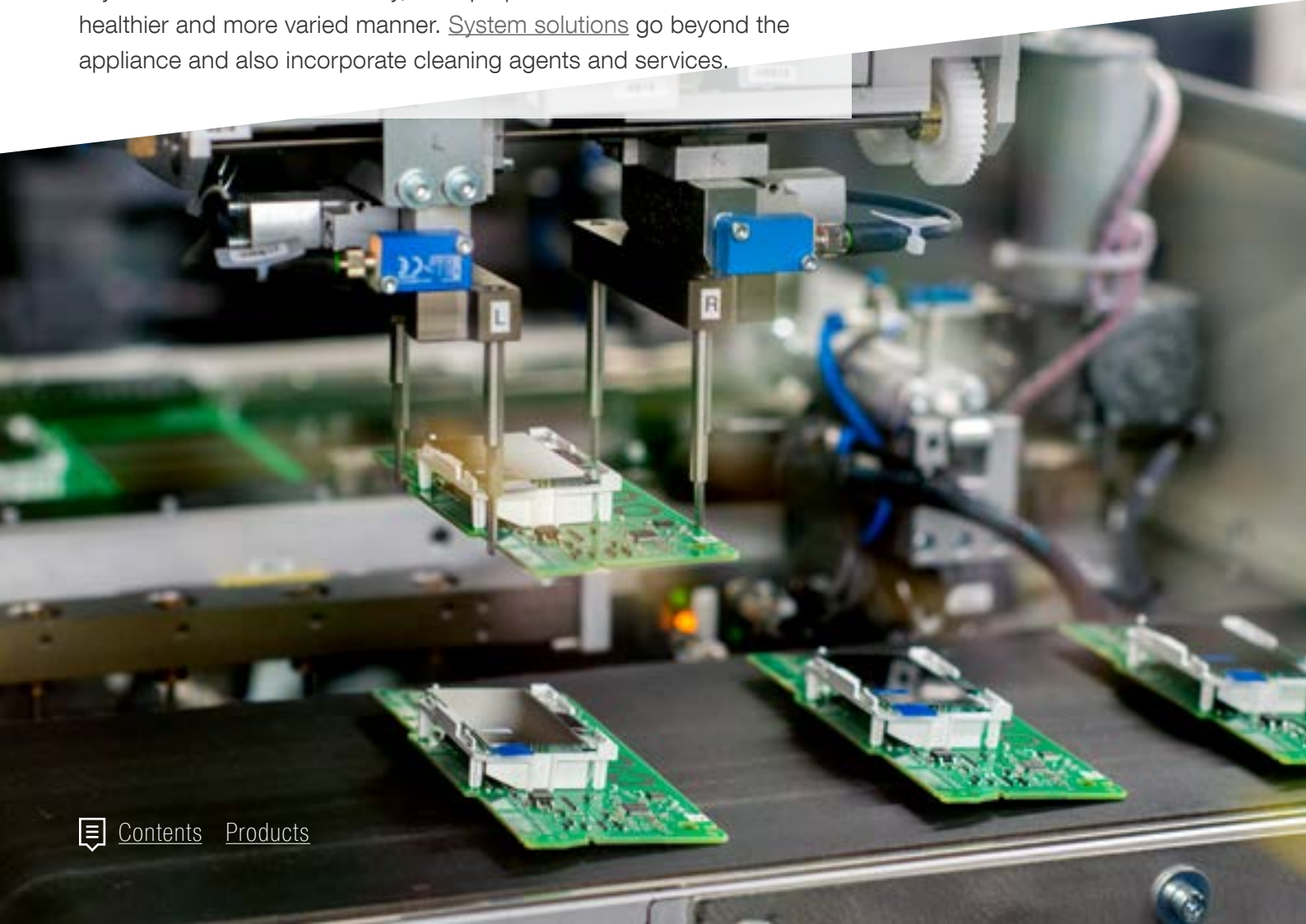
# Development and innovation

## The Miele product philosophy

**M**iele develops durable and consumption-efficient products. They aim to provide great benefit to customers and have as little impact as possible on the environment – whether during production, use, or disposal. Regulatory developments such as [EU energy consumption labelling](#) and internal sustainability criteria such as recyclability, energy efficiency and resource efficiency provide the framework and are taken into consideration from an early development stage. [GRI G4-EN27]

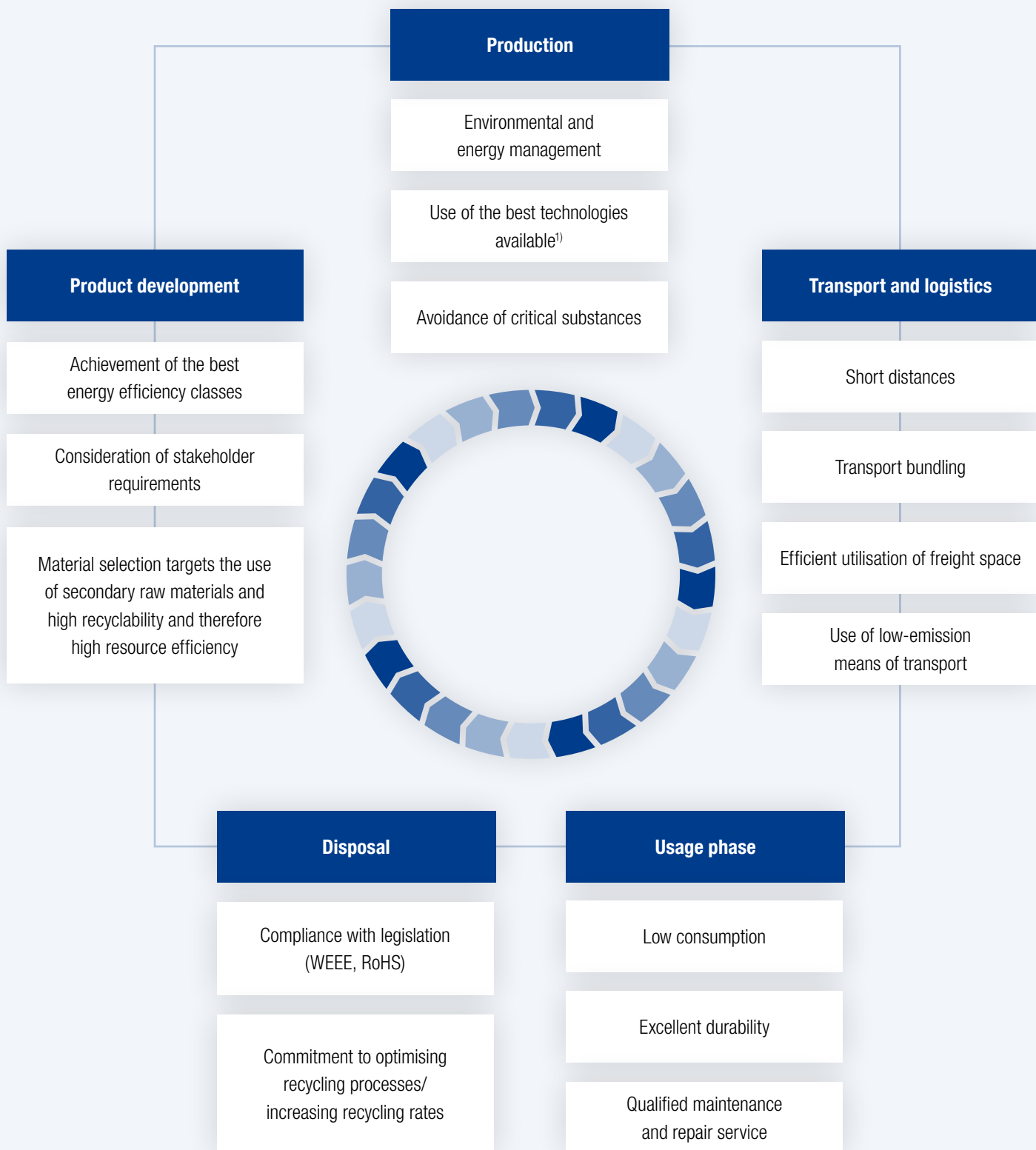
The aim of technical innovations is, for example, to wash laundry even faster, more economically and more gently, to rinse and dry dishes even more carefully, or to prepare meals in an even healthier and more varied manner. [System solutions](#) go beyond the appliance and also incorporate cleaning agents and services.

Miele develops and produces the electronic controllers of the domestic appliances itself.



# Measures to reduce environmental impact

in each phase of the product life cycle



<sup>1)</sup> Taking into account all circumstances and giving due consideration to quality and commercial aspects.

Miele is constantly striving to achieve the right balance between quality of results, operating convenience and environmental compatibility. The aim is to offer the best appliance on the market taking this holistic approach. Miele appliances stand out from the crowd thanks to their timeless design and aim to be intuitive and as accessible as possible (universal design).

## **SUSTAINABLE INNOVATIONS: TAPPING INTO NEW BUSINESS POTENTIAL**

[GRI G4-EC8, G4-EN27] Miele has set itself the goal of developing innovative business models geared towards sustainability. A large number of approaches have already been applied to a whole host of appliances. Miele offers its customers more than simply domestic and commercial appliances – it also offers them a wide variety of system solutions. These system solutions consist of the appliance itself, matching accessories, cleaning agents, and a growing portfolio of services. The accessories range from oven dishes, cookware and basket systems in the domestic sector to water treatment systems in the commercial sector. All elements are coordinated with one another, thereby enabling the best results with the most efficient use of resources possible. A current example of this are the detergents for Miele Professional dishwashers, launched in January 2016. The formulations are

Miele dishwashers combine the very best in cleaning and drying results with low power and water consumption.







phosphate-free and easy to use. With economical dosing and tested machine compatibility, they ensure optimum cleaning results. In the dental sector, systems consisting of the appliance, baskets/ inserts and process chemicals have been proving their worth since 2011. What's more, Miele Professional has been offering corresponding solutions for the laboratory sector since 2016, and is set to make an offering for the medical sector from 2018.

Find the best washing programme with interactive guidance or order the Miele detergent online: examples of useful domestic appliance networking.

### **DOMESTIC APPLIANCE NETWORKING: CONVENIENT, RELIABLE AND EFFICIENT**

When it comes to networking domestic appliances with other building technology components and the Internet, Miele is an industry pioneer. As a result of networking, more and more new applications are emerging, which also bring about benefits in terms of sustainability: interactive assistants, for example, can calculate the most suitable programme with the lowest consumption. Thanks to functions such as SmartStart, appliances start when the electricity from the photovoltaic system on the roof is able to deliver enough power. A further example are technical assistance systems, which enable older people to live independently in their own homes for longer. At the same time, however, networking also poses new challenges, such as how to protect sensitive customer data.

Under the umbrella term, Miele@home, the company currently already has around **400 network-enabled domestic appliances** in its programme worldwide. They aim to offer customers clear added value and be reliable to use. In the reporting period, remote



# 400

Miele domestic appliances were network-enabled in 2015/16.

monitoring and the mobile control of appliances as well as new assistance systems were central topics for product development.

## RESEARCH: DIGITAL APPLICATION SCENARIOS

Since 2014, Miele has participated in the KogniHome research cluster. The overarching question is as follows: How can technical assistance systems contribute to allow people to live independently and autonomously in their familiar environment for as long as possible?

As part of their research cooperation, Miele is developing KogniChef, an intelligent assistance system for cooking. This assistance system considers the cooking process as a whole. It detects who is active in the kitchen and, if necessary, can prevent a child from using the hob, or provide active support by offering assistance with the individual stages involved in preparing a meal. For example, the fact that people exhibiting the first signs of dementia will need more support than an experienced cook is also taken into account. Any knowledge that may be required can be conveyed by projecting videos on the worktop, for example. If something is threatening to boil over, KogniChef intervenes and switches the hob off. In addition, the assistance system provides inspiration by suggesting recipes, putting together a menu from the ingredients available, or creating a meal plan for a balanced diet. The KogniChef communicates with the user via voice and gesture control.

KogniHome is a collaborative project of 14 partners from Germany's Ostwestfalen-Lippe region. It is led by CITEC, the cluster of excellence at Bielefeld University. The German Federal Ministry of Education and Research (BMBF) has made available EUR 11.3 million in funds for KogniHome. The project is set to run from August 2014 to July 2017.

## DATA SECURITY: PROTECTIVE SYSTEMS FOR THE SENSITIVE HANDLING OF CUSTOMER DATA

[GRI G4-PR8] For Miele, protection of the Miele@home infrastructure and the secure handling of customer data are of the utmost importance. With this in mind, the company takes a whole host of precautions and works tirelessly in conjunction with external experts to make further improvements to the security architecture. This is based on the same technology that is also applied in online banking. There have been no substantiated complaints regarding data protection or privacy infringements among customers in the reporting period. There were also no cases of data theft or loss of customer data.



The advantages for the customer are in focus during development.





## DESIGN AND STYLE: DEMOGRAPHIC CHANGE DEMANDS NEW CONCEPTS

[GRI G4-EC8] In addition to timelessness and aesthetic appeal, the company's understanding of design comprises intuitive, self-explanatory and accessible handling geared towards customers' needs. Accordingly, demographic change in industrialised nations has already been a key focus for Miele product development for some time. As a result, right from the development of the appliances, attention is paid to ensuring that they are easy to use – regardless of the age or the physical capabilities of the user. The aim is to reduce the complexity which people face in everyday life and to ensure that no one is excluded by applying a consistent design to all appliances in one product group and using a universal operating logic. The technical term for this is “universal design” or “design for all”.

### UNIVERSAL DESIGN: EXAMPLES OF USE

The rules of universal design ensure that the following performance characteristics are incorporated: broad usability, flexibility, simple and intuitive handling, sensory perception of information, fault tolerance, minimum physical effort, convenience and accessibility. For Miele domestic appliances, this means the following, to name but a few examples:

- Functions and programmes are displayed in large font on the control panel.
- Easy-to-identify descriptions (symbol with plain text) are used on the displays.

Symbols and plain text are elements of the standardised operating concept.



### Design awards

International Design awards attest to the success of Miele's design strategy.

- TFT appliance displays (thin-film transistor displays) offer high resolution and contrast (for example in dishwashers from the G 6000 series).
- If requested, the height can be increased by means of a built-in base.
- For dishwashers, Miele offers fully integrated models where the door can be opened by briefly knocking twice on the front (Knock2open).
- Operation is also possible for visually impaired users: for example, with self-adhesive Braille films for appliance panels or special controls such as metal rotary knobs on selected induction hobs.

## ERGONOMICS AND HAPTICS: GUIDELINES FOR DEVELOPMENT

The Miele Ergonomic Index and the Haptics Guideline provide assistance when it comes to ensuring a product design that has been optimised in terms of ergonomics and haptics. The Ergonomic Index is a measurement method that Miele has developed itself. It allows for the objective assessment of operating concepts with respect to fulfilling basic ergonomic requirements. The aspects assessed include the size of controls, their position, and the type of response generated when a user makes an entry. The Ergonomic Index enables various design concepts, as well as competing products, to be compared with respect to their ergonomic quality. At the same time, this systematic approach is used to train developers. For the assessment of complex operations, Miele has been using simulation tools since the start of 2014, which imitate customer behaviour and make it much easier to develop appliance operations. The Haptics Guideline contains specifications relating to the haptic, acoustic and visual requirements placed on the controls of Miele appliances. Measuring robots designed in-house can, for example, record the operating forces that are required to open and close washing machine doors.

## PRODUCT DEVELOPMENT: INSTRUMENTS FOR MORE SUSTAINABLE DESIGN

In order to keep all the key aspects in mind from pre-development to series maturity, Miele works with its IMNU 2.0 product development system. Part of this system is the environmental checklist. Using the checklist, the company controls compliance with all the relevant statutory regulations regarding substances and materials – as well as complying with the Miele-specific requirements that go even further. In addition, Miele incorporates



Simple and intuitive: operation of Miele domestic appliances.

scenario planning into the individual product groups. With this, trends and likely developments – including a sustainability context – are systematically devised and regularly checked.

In order to integrate sustainability aspects in the product development process right from the start, Miele also produces corresponding life cycle assessments for relevant technological modifications. In the reporting period, an externally commissioned institute prepared an assessment entitled “[Reflections on product lifetime and replacement strategies for Miele domestic appliances](#)”. Furthermore, Miele has produced internal assessment in accordance with standards ISO 14040 and 14044 relating to topics including “heat pumps in the washing machine” or “transport packaging for electronics”.



You can view all domestic appliances even while on the go with a smartphone or tablet using the Miele@mobile app.

### **FURTHER DEVELOPMENT: DIALOGUE AS A DRIVER OF INNOVATION**

Many Miele departments work hand in hand on product development: the Design Centre and the marketing and market research departments study [customer needs](#), analyse potential for improvement for existing appliances and assess opportunities for new products. Designers and developers devote themselves to ideas and concepts. Close cooperation flourishes with suppliers and the toolshop, prefabrication and assembly areas right from the early phases of development.

Employees also play their part when it comes to proposing improvements: for example, at the Gütersloh production plant, product ideas can be submitted via the “GO IDEA” ideas platform as well as through the [company suggestion scheme](#). Colleagues from other departments, particularly development, marketing and the Design Centre, can give their comments on and assess the suggestions, providing a way to progress an idea further. The platform was launched in 2015 for the domestic laundry care area and has gradually also been incorporated in other plants. Each of the different product groups has its own “ideas scout” who manages the ideas and decision-making via a committee. In addition, the ideas scouts regularly keep employees up to date regarding new ideas and campaigns.

Thanks to regular dialogue with interest groups and expert partners, such as the Oeko-Institut Freiburg, external requirements are incorporated into the product creation process from a very early stage. This means that more sustainable solutions are often available to customers much earlier than required either by law or other specifications. Supplier expertise is also highly sought after in the development process, especially when new materials or the

challenging field of electro mechanics is involved. Regular product innovation workshops held jointly with suppliers help to identify potential issues that are essential to product quality early on.

### **CUSTOMER REQUIREMENTS: SURVEYS AND TESTS HIGHLIGHT NEEDS**

[GRI G4-PR5] Miele market research has been conducting customer surveys in Germany and many other countries for over 30 years. As a result, it receives more than **25,000 consumer opinions** every year from across the globe. In addition to quantitative surveys, these also include numerous qualitative studies such as in-home interviews and work with focus groups. Consequently, Miele acquires informative findings on market perception, purchasing decisions and user behaviour.

An integral part of the work that Miele's designers do is the direct contact they have with consumers as well as with organisations such as the German Federation of the Blind and Partially Sighted. With the aid of trend analyses, user models, the latest UX (user experience) methods, as well as observations and surveys, they develop future scenarios to enable them to identify the needs of tomorrow's households today.

At the Gütersloh site, Miele has its own test studio which is used to perform usability tests. Here, a representative selection of consumers is given the opportunity to extensively test new domestic appliances. Miele also works in cooperation with national and international market research institutes such as GfK. The dealers who are in daily contact with customers receive direct and reliable feedback and pass this on to the company. Miele then carefully evaluates this information.

### **COMMERCIAL APPLICATIONS: VARIED REQUIREMENTS**

Appliances for commercial applications (Miele Professional) are used in an extremely wide range of areas: from the classic launderette, hotel/catering industry, care facilities, medical facilities and laboratories, right the way up to fire stations, riding stables and even offshore oil rigs.

In the reporting period, surveys were once again conducted with commercial customers: among the target groups were hotels, restaurants and catering establishments in Germany, which were interviewed in July 2015. In March 2016, a market analysis was conducted among retirement/care homes, nurseries and hospitals in Germany. Market analyses were also carried out in Italy and Poland. Miele therefore acquired a detailed picture of the expectations that customers have with regard to Miele products and services.

☆☆☆☆☆  
**25,000**  
consumer opinions  
are collected and  
evaluated annually.



Among other aspects, the company was able to establish what types of contamination its appliances have to be able to cope with, what is currently causing problems for commercial customers, and what expectations they have in terms of cycle time, performance, operation and durability. A total of 384 interviews were carried out.

Standard products are unable to fully satisfy the varied requirements of the commercial sector. The appliances of more recent generations are therefore tailored to individual customers' needs. This mainly concerns the electronics used in the appliances, but can also relate to the equipment, such as the use of special inserts to enable appliances to be loaded as the customer requires. In addition, where particularly cost-intensive appliances are involved in the medical technology sector, it is important that the customer's existing accessories can continue to be used alongside a new appliance. This saves costs – and dramatically reduces the proportion of materials that need to be disposed of or recycled.

The Miele plant in Bielefeld is the company's second-largest and second-oldest plant, and is a centre of expertise for dishwashers, vacuum cleaners and washer-disinfectors.





# Sales

## Dealers ensure quality

In order to also ensure high quality with respect to marketing, Miele distributes its appliances in Germany and many other European countries exclusively via authorised dealers. In the 2015/16 business year, Miele supplied around 13,000 dealers in the domestic appliances sector, which are looked after by a comprehensive field sales team. The dealers are committed to upholding the standards of the Miele brand, particularly with respect to the range, product availability, advice and service they offer (“selective sales system”). This also applies to online business. In return, Miele supports its sales partners in various ways, for example, in structuring their businesses, training sales personnel and providing ideas and materials for advertising.

The personalised advice offered here at the Gütersloh location is an excellent resource for helping many customers reach decisions.





Miele places great value on establishing long-term partnerships wherever possible in order to guarantee that customers receive expert advice and the best possible service both when they make their purchase and afterwards too. Internationally, and depending on the structure in each country, Miele relies on dealers, but also uses other sales channels such as agency systems or web shops. The distribution partners are key multipliers when it comes to conveying the advantages of reliable, durable and consumption-efficient products for people and the environment. This is why Miele is striving to make people aware of sustainability as a topic, for example in training sessions.

Almost 3,000 customer service technicians are on call worldwide for Miele.

#### **NEW BUSINESS MODELS: POTENTIAL FOR DEALERS**

Despite the fact that the Internet is increasing its market share as a sales channel, the value of dealers continues to shine through. The three main factors driving Internet sales are price, convenience and availability. The more consumers demand advice and additional services, the greater the opportunity for brick-and-mortar specialist dealers have to play to their traditional strengths. This makes it easier for Miele partners to calculate stable and sufficient margins and, therefore, to keep track of their business. One example is the concept of the smart home. Here in particular, dealers have the opportunity to use their expertise in advice and installation to establish themselves as innovative service providers that are geared towards adding value. The dealers, too, have shown their



# 13,000

dealers specialising in domestic appliances for Miele



Virtual-reality solutions are no longer the preserve of product development: instead, they are now also put to use when providing guidance on Professional appliances.

appreciation for this sales relationship, for example, by repeatedly voting Miele the “no. 1 specialist retail partner” in the performance rankings compiled by the prestigious dealer information service of the German industry publisher “markt intern”. These rankings are based on criteria such as product quality, communication with dealers, support from field sales representatives, sales support and conduct in the event of complaints. According to GfK, Miele is also a market leader in terms of value for both electronics and kitchen retailers (as of January to September 2016).

## **SUSTAINABILITY: INFORMING CUSTOMERS**

[GRI G4-PR3] In many countries, Miele is registering a growing interest in sustainability among customers, especially with respect to consumption. Efficiency values for electricity, water and gas



have become a key argument when it comes to making the decision to purchase. Miele informs its customers about such matters via various channels, including information provided on the product ([EU energy consumption labelling](#)), operating instructions, product brochures, consultations with dealers, company websites, trade fairs and showrooms. Aspects relating to sustainability are also particularly highlighted in public relations work.

### **COMMERCIAL CUSTOMERS: NEW SALES CHANNELS THROUGH VIRTUAL REALITY**

[GRI G4-EN27] When it comes to selling Miele solutions in the medical sector, it is not just a case of conveying information and advice, but also of providing training to users. In the past, presenting the system solutions for instrument reprocessing in hospitals and training personnel accordingly required a lot of resources and time. Customers previously learnt which cleaning, disinfection and sterilisation techniques were required at Miele production sites or reference customers – at locations where large-scale products have been installed. However, it is much simpler to learn about the products and their features with the aid of virtual reality. Miele has already trialled this form of demonstration at trade fairs: at the WFHSS Congress (World Federation for Hospital Sterilisation Sciences) in Brisbane and the Medica trade fair in Düsseldorf, interested visitors from the industry were able to experience the innovative Miele system solutions by taking a virtual trip through a central sterile supply department.



Parts from the new spare-parts warehouse in Gütersloh reach the majority of their recipients within 24 hours.

# Recycling and disposal

Improving systems, creating closed material cycles

**A**fter using the appliances for a long period of time, as is typical for Miele, the products are introduced into return systems and primarily sent for recycling and other disposal methods at the end of their lives. Here, the challenges predominantly relate to logistics, working conditions and environmental protection. Miele is actively involved in ensuring the continuous improvement of return systems. [GRI G4-EN27]

Recyclability is an important topic in the development of products right from the outset. Wherever it may be possible and practical without affecting quality, Miele investigates whether recycles or alternative materials can be used. When new products are launched, Miele consults with waste management companies to examine in advance what effects the products may have in terms of disposal or recycling. In addition, consideration is paid to whether the products may pose challenges to the operators of treatment facilities at the end of their lifecycle.

Establishing cradle to cradle when recycling domestic appliances in an environmentally friendly manner is an ongoing process. In the reporting period, pilot projects were initiated and positions assumed.

## **RECYCLABILITY: ENSURED BY USING THE PROPER SELECTION OF MATERIALS**

Both domestic and commercial appliances from Miele are characterised by a very high level of recyclability when compared against the rest of the industry. The most prominent feature in this regard is the high proportion of metal, accounts for up to 85 percent in domestic appliances and 90 percent in commercial ones. The metals used are virtually 100 percent recyclable. The other materials and bonding techniques used also influence the recyclability of the products.

With this in mind, Miele takes care to use plastics of the same type, wherever possible, in order make recycling easier or to even make





Washing machine drums and suds containers are made from stainless steel and are therefore fully recyclable.

it possible at all. Composite materials, i.e. non-separable materials that cannot be recycled together, are avoided as far as possible. For this reason, the proportion of recyclable materials used in the appliances is still over the proportion of metal in the appliances.

To facilitate disassembly and separation, Miele keeps the number of materials and screw varieties to a minimum. Plastic parts are labelled according to the international standard ISO 11469. These measures are especially relevant with respect to manual disassembly and sorting, however. According to current practice, old appliances are primarily crushed and sorted by machine.

The recyclability of packaging materials is taken into consideration, as it is for all materials, right from the outset. Miele primarily uses cardboard, wood and EPS as well as polyethylene films.

### **Second life: recyclable cast iron**

[GRI G4-EN27] Mainly in washing machines, Miele uses counterweights made from cast iron. The high proportion of metal is a starting point for a pilot project, which Miele intends to use to achieve a circular economy (cradle to cradle) – a *former and new objective*: Together with the recycling company Coolrec, Miele has been working to recover valuable metals from old appliances since the end of 2014. Miele washing machines are dismantled on a specially equipped processing line at the Coolrec plant in the Dutch city of Dordrecht, and the material is sent to the Miele foundry at the Gütersloh site. There, it is used to manufacture new parts such as brackets and counterweights. The major advantage of this is that the origin and composition of the metal are known. The quality of the sample supply was so good that further cooperation has been agreed.

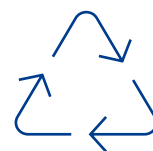
## CIRCULAR ECONOMY: OPPORTUNITIES AND CHALLENGES AT A GLANCE

Miele has a strong interest in the reuse of components from old Miele appliances. However, as Miele appliances have long service lives, the technology used in the components or electronics is often obsolete when they reach the end of their useful life. More stringent regulations regarding new appliances also make it difficult to find a use for them that would be economically viable. In the reporting period, the Technical Product Management and Environmental Office has joined forces with an external service provider to investigate the advanced options for returning old appliances. Following an economic and ecological assessment, however, accepting returns across the board is not a favourable option at the present time.

In the Netherlands, Miele is getting involved in events and networks with the primary intention of learning from other industries. Miele Netherlands has contributed its expertise with the presentation “Recycling starts before production” in June and the report “Money makes the world go round (and will it help to make the economy circular as well?)” from March 2016.

## RETURNS AND DISPOSAL: ENGAGEMENT FOR AMBITIOUS STANDARDS

[GRI G4-EN28] In the EU, the return and recycling of waste electrical and electronic equipment is regulated by the [WEEE Directive](#). In Germany, the Electrical and Electronic Equipment Act (ElektroG) transposes the WEEE Directive into German law. The German national register for waste electric equipment (known as the stiftung ear) is the body in charge of its implementation. Among other things, it is responsible for registering manufacturers, coordinating the provision of collection containers and arranging to pick up old appliances. Miele partners with waste management companies to pick up and properly dispose of the quantities of waste equipment that stiftung ear has assigned to the company. A particular focus is placed on the environmentally friendly disposal of refrigeration equipment. In other EU countries, Miele uses similar – and in some cases state-run – return and recycling systems, such as Recupel in Belgium, Eco-systèmes in France and UFH in Austria. Outside the EU, Miele makes use of the established disposal systems already in place. Throughout the world, Miele strives to ensure that its materials are recycled in an environmentally friendly manner along the entire waste management chain. As a result, the company actively advocates ambitious quality standards with respect to recycling and supports the fight against illegal trade involving waste electrical appliances. All in all, Miele calls for the same requirements for all parties.



WEEE

Waste Electrical and Electronic Equipment; the directive was last revised in 2012.

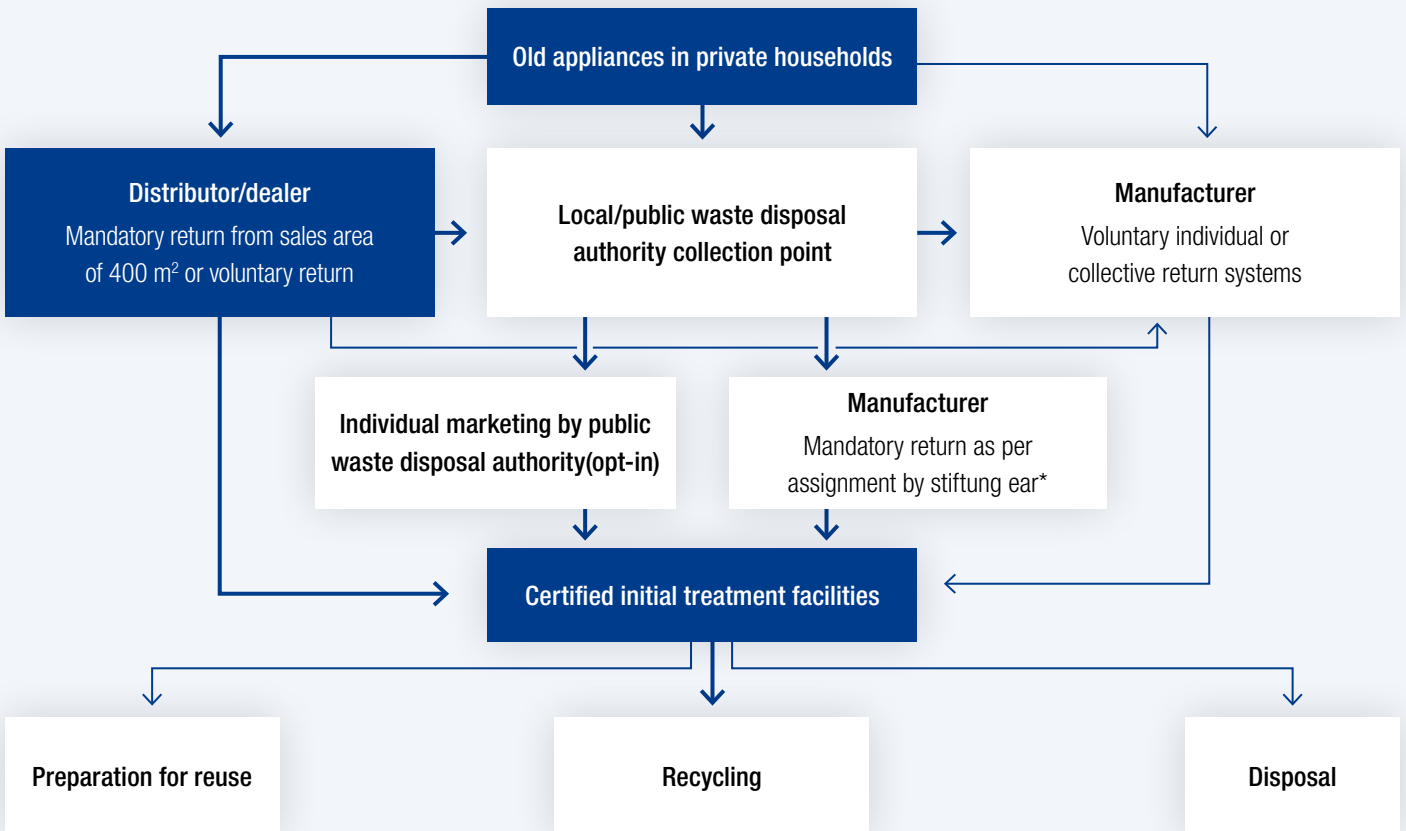
**GERMANY: RETURN TO MANUFACTURER**

The revised ElektroG came into force in October 2015. The amendments it includes were a focal point in the reporting period and include the obligation of dealers to take back appliances, adaptations regarding recycling by local authorities, the increase in the recycling rates and the further restriction of illegal “electrical waste” exports.

With respect to recycling carried out by local authorities, the current ElektroG has led to amendments: local authorities now have to notify stiftung ear of the quantities they recycle and participate in the fee structure. In Germany too, brick-and-mortar dealers and online distributors with a sales area or storage/ dispatch area of 400 square metres or more are now obligated to accept the return of old appliances. In the reporting period,

Flow diagram

for the return and disposal of old appliances in private households  
 Framework: ElektroG (2015) in Germany



\* The German national register for waste electric equipment (stiftung ear) is the “clearing house for manufacturers”, which also performs the sovereign duties entrusted to it by the German Environment Agency.

Miele's Gütersloh and Munich sites were therefore registered as return points by stiftung ear. Miele sent a newsletter out to dealers in November 2015 to inform them of their new legal obligations.

[GRI G4-EN28] The remaining quantities that have to be taken back and disposed of by manufacturers remain low in Germany: while the number of [pick-ups at registered collection points](#) was around 90,500 in 2009 and 2010, this figure stagnated after returns at approximately 48,300 in 2014 and 2015. The total return requirement in the appliance categories/collection groups is calculated based on the quantities brought into circulation. In the 2015 calendar year, the quantity of Miele waste equipment returned via stiftung ear in the appliance categories concerned amounted to around 6,400 tonnes across Germany.

### GERMANY: RECLAIMED PACKAGING

[GRI G4-EN28] In order to ensure proper disposal and together with other manufacturers of domestic appliances, kitchen fittings and accessories across Germany, Miele complies with the legal obligation to also take back transport packaging materials via a service provider. The sales packaging is collected via the dual system for packaging recycling. The annual disposal of sales and transport packaging causes waste management companies to accrue greenhouse gas emissions. In order to offset these emissions by contributing to climate protection projects, Miele chose to offset transport packaging amounting to 433 tonnes of CO<sub>2</sub>-equivalent and sales packaging amounting to 148 tonnes of CO<sub>2</sub>-equivalent in 2015 in a forest and species conservation project in Brazil.

### REFRIGERANTS: ENVIRONMENTALLY FRIENDLY SUBSTITUTES

[GRI G4-EN27] The use of environmentally friendly substitutes for refrigerants is a high priority for Miele. As part of the EU regulation to reduce fluorinated greenhouse gases (F-gas Regulation), the use of hydrofluorocarbons is gradually being restricted by 2030. Alternatives and applications are being discussed at Miele jointly between the development, quality management and procurement departments. Until this point, activities relating to environmentally friendly substitutes have been carried out in a decentralised manner within the respective projects.

### NEW MATERIALS: CHALLENGES DURING DISPOSAL

[GRI G4-EN27, G4-PR3] New products, too, are tested with a view to their future disposal. Particular consideration is given here to



[Registered pick-ups](#)  
by stiftung ear

Miele's "Blackboard edition" of fridge-freezer combinations creates a communication hub in the kitchen with its write-on surfaces.



## **Focussing on CFCs**

Older refrigerators often still contain refrigerants and insulants such as chlorofluorocarbons (CFCs) that are harmful to the environment and which must be recovered to the greatest extent possible at the disposal stage. In Germany, the methods for doing this, operators and treatment facilities are subject to strict controls and approvals by state regulatory authorities. As a manufacturer, Miele assumes responsibility for ensuring proper disposal.

### **PROCEDURE IN GERMANY**

In Germany, Miele participates in external audits with other manufacturers. This consortium places an obligation on its waste management service providers to also have their refrigeration treatment facilities audited by an accredited institution. The “dual audit” applied by the consortium the only one of its kind in the industry. Compliance with standard DIN EN 50574 (in future EN 50625) is explicitly covered by the contract with the waste management company and also includes participating subcontractors. Owing to the dual audit system, the treatment facilities were audited four to five times on average per facility in the 2015 calendar year. If non-compliance is identified, the process comprises escalation levels. Immediate measures can often remedy any problems. Critical instances of non-compliance result in the deliveries being stopped at the facility until a follow-up audit has been performed and the necessary measures have been accepted by the auditor. Regular tightness tests (100 appliance test as per the German Technical Instructions on Air Quality Control (TA Luft)), 1,000 appliance performance tests and self-checks carried out by the operators of the facilities complement the quality endeavours to ensure environmentally friendly treatment and disposal.

innovative insulating materials like vacuum insulation panels (VIP), which are required in order to achieve energy efficiency ratings A++ and particularly A+++ in domestic refrigerators. There are various types of VIP available on the market. If incorrectly disposed of, some types can result in emissions of dust that is harmful to health. That is why the internal Miele plant standard prohibits the use of these types of VIP in its appliances. In order to generate further awareness of the particular nature of VIP, in 2016, Miele worked in conjunction with another company active in the industry to draft a recycling information sheet and distribute this to operators of treatment facilities. This information sheet also explained the labelling on the appliance data plate. With this, Miele is also satisfying the requests of waste management companies who demand that information is provided to them at an early stage. This topic was discussed, for example, at the first European [round table](#) between manufacturers, waste management companies and recycling organisations, which was organised by the European Engineering Industries Association (ORGALIME).



# Outlook

**M**iele develops its domestic and commercial appliances by giving methodical consideration to the entire product life cycle. This creates the basis that will enable the company to continue to offer the best possible products in terms of use, environmental-friendliness and costs. As the scope for achieving further improvements in efficiency is getting smaller and smaller, Miele is making every effort to get the most out of these. In this respect, for example, it is important to offer more high-efficiency technologies in the lower price categories. In addition, existing technologies are continually developed further and research is carried out into fundamentally new processes.

## 2017 FOCUS: OPTIMISATIONS AND INNOVATIONS

The optimisation of labelling which has been brought about by the update to the EU framework direction will require lots of resource in product development and production over the coming years. The directive intends to adjust the scale used in energy consumption labelling from A to G, which will also affect many Miele appliances: the EU energy consumption labelling is to be altered in stages over the coming years, starting with the product groups washing machines, dishwashers, refrigerators/freezers and tumble dryers. In the transitional phases, this will result in additional workload due to the need for new test standards and when completing the declaration, to name but a few examples. Appliance, technology, thermodynamic and programme design will

Customer advantages, quality of results, but also recyclability are important factors even in the product development stage.

have to be retested and revised. Miele has set itself this task, as the new specifications promise to generate positive effects in terms of resource conservation and climate protection. Miele is actively promoting specifications which are based on real-life operations.

The EU Commission has initiated the introduction of eco-design specifications for commercial dishwashers, washing machines and tumble dryers too. Preliminary studies on this subject have been completed and reveal potential for saving energy. The standardisation organisations CEN and CENELEC were tasked by the EU Commission to establish suitable test methods. Representatives from Miele Professional are members of the standardisation committees and are therefore involved in developing relevant test methods and drafting the corresponding European and international standards.

A number of product innovations were brought to market at the end of the 2015/16 business year:

### **ENERGY EFFICIENCY AND LABELLING**

With respect to refrigerators and freezers, new products were launched in spring 2017, which demonstrate up to 20 percent lower consumption than appliances with the A+++ energy efficiency rating. This involved the development of freezers that are 70 centimetres wide. In these appliances with very large volumes, the high efficiency class has a huge impact.

### **PERFORMANCE AND HYGIENE**

The Blizzard CX1 is the perfect addition to Miele's range of vacuum cleaners. The company's first bagless vacuum cleaner, it was unveiled at the IFA 2016 trade fair in Berlin. Using a mono-cyclone design and innovative details, the developers have achieved outstanding cleaning performance combined with low noise levels – and the vacuum cleaner's hygienic emptying method makes it easy to operate.

### **UNIVERSAL DESIGN**

The Miele W1 Classic washing machine was adapted to the needs of visually impaired people and presented at the IFA 2016 trade show: an adhesive film is attached to the front, which enables users to operate the appliance using their sense of hearing and touch alone. The temperature keys have sounds assigned to them – the lower the tone, the cooler the washing cycle, and the higher the tone, the hotter it is. The same applies to spin revolutions. This special model was launched on the market in March 2017.



**The Blizzard CX1: Miele's first bagless vacuum cleaner**

## NETWORKING

In the second half of 2016, the company extended the Miele@ mobile app to include washing assistants. Subject to the load, these provide tips on selecting the optimum washing programme. A washing lexicon is also incorporated.

## SYSTEM SOLUTIONS

Since September 2016, Miele has also been committed to developing integrated system solutions in the coffee preparation product group. For the first time, Miele now also offers its own coffee. The Black Edition N°1 blend of coffee is organically grown and ethically sourced. The way the Miele coffee is used with the coffee machine provides customers with additional convenience.

## DISPOSAL AND RECYCLING: CLOSING THE LOOP

The European Commission's Circular Economy Package will also require Miele to make a large number of modifications over the coming years. The package of measures involves changes to several directives and plans relating specifically to waste in order to regulate material efficiency as part of the Ecodesign Directive. It aims to enable further steps towards achieving a fully circular economy. This is set to place further requirements on Miele and its products in the future.

Miele is continuing to commit to the further development and harmonisation of disposal standards – with the aim of upholding high quality requirements and creating uniform competitive conditions for all parties involved. An essential element of this is to have a compulsory framework for everyone involved, which, in the long term, could also mean that audits do not have to be carried out as frequently in treatment facilities.

Building a completely circular economy poses enormous challenges for manufacturers like Miele.





# 3 | Supply chain

3.1 Remit

3.2 Resources and materials

3.3 Supplier management

3.4 Outlook

## Systematic evaluation

When selecting suppliers and holding annual reviews of them, purchasers such as Ursula Schubert (right) and Souhail El Matri assess the quality, supply capability and pricing, while also evaluating the adherence to environmental and social standards.





### LIEFERANTENMANAGEMENT

### PROJEKTE & PROZESSE

### ABWEICHUNGEN

Projekte	Kosten	Termine/Versorgung
2024-01-15		
2024-02-01		
2024-02-15		
2024-03-01		
2024-03-15		
2024-04-01		
2024-04-15		
2024-05-01		
2024-05-15		
2024-06-01		
2024-06-15		
2024-07-01		
2024-07-15		
2024-08-01		
2024-08-15		
2024-09-01		
2024-09-15		
2024-10-01		
2024-10-15		
2024-11-01		
2024-11-15		
2024-12-01		
2024-12-15		

### Gespräche



### Verträge



Forderung

# The remit: reducing risks, ensuring supply

Consistently high product quality and a stable flow of materials are essential prerequisites for Miele in order to ensure the company's long-term success. To ensure supply security with high-quality materials and components in the long term, the company relies on efficient use of materials. Miele attaches great importance to establishing cooperative and long-term relationships with its suppliers. A great deal of care is taken when selecting suppliers. As well as meeting key purchasing criteria such as quality, supply availability and price, Miele also requires its suppliers to comply with environmental and social standards. Potential and existing suppliers are regularly assessed to ensure compliance. This process is managed using a comprehensive supplier management system.

What Miele has already achieved (2015/16)

---

85 %

of Miele suppliers  
come from Europe.

131

trained Miele employees  
carry out supplier audits.

5,245

suppliers have been providing products to Miele  
continuously for at least four business years.

525

suppliers provide  
products to at least  
four Miele plants.

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## Strategic objective by 2025

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High environmental and social standards

Minimising supply risks and full compliance with environmental and social standards

“We cultivate trusting, long-term partnerships with our suppliers. We face the challenges in the supply chain together.”

Hans Krug, Corporate Director  
Procurement, Gütersloh



# Resources and materials

Transparent procurement, efficient use

It takes many thousands of different natural resources, materials and components to produce Miele appliances: for example, raw steel for washing machines, plastic granulate for vacuum cleaners or glass plates for hobs. By the time these items arrive at the Miele locations, they have already undergone a multitude of process steps. Different sustainability considerations apply to these upstream value creation stages depending on the material. The extraction of raw materials uses up natural resources and energy is required for the further processing of components. The consumption of resources is a particular priority for Miele: as global demand is growing and resources are becoming scarcer, long-term availability and supply security are becoming increasingly important. [GRI G4-EN32, G4-EN33, G4-LA15]

Miele carries out regular checks to ensure that its direct suppliers ([First Tier](#)) are complying with environmental and [social standards](#) and determines the origin of individual raw materials such as [stainless steel and plastic](#) when necessary. Despite the effort afforded by Miele in this regard, it is currently not possible to ensure complete traceability of all materials, given the globalised procurement markets and complex supply chains. The company does, however, ask its own suppliers to confirm that their upstream suppliers are obliged to comply with the specifications.

## USE OF RESOURCES AND MATERIALS: OVERVIEW

[GRI G4-EN1] Miele obtains both raw materials such as stainless steel or plastic granulate and components such as hoses and ball bearings from its suppliers in order to produce its products. Entire products such as refrigerators, automatic coffee machines or microwaves ovens are also supplied by external manufacturing partners in accordance with Miele's specifications. In the 2015/16 business year, Miele obtained



### First Tier

is a supplier who provides raw materials or components directly to Miele.





Stainless steel is an important material for Miele appliances. This is supplied in rolls known as coils.





In terms of packaging, Miele relies on stable materials such as solid wood and cardboard, but also film packaging. Reusable solutions are put to use in the spare-parts warehouse.

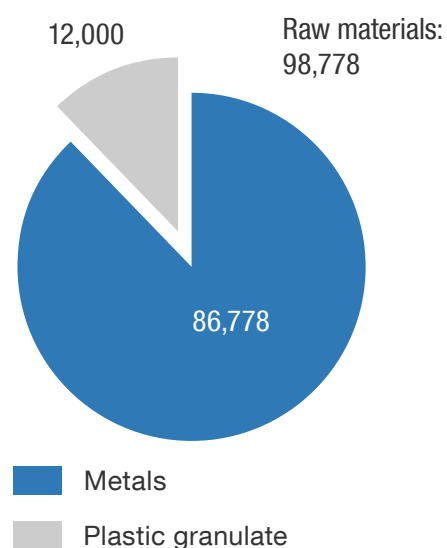
materials, components and domestic appliances with a value of around EUR 1.6 billion from other companies, including manufacturing materials with a value of around EUR 1 billion.

In the 2015/16 business year, Miele used a total of 98,778 tonnes of raw materials. The majority of these were metals (88 percent) in the form of iron and non-ferrous metals, steel and its alloys. Apart from metals, Miele's other main raw material is plastic granulate (12 percent). The company also uses auxiliary and operating materials such as paints and oils as well as electronic components.

The packaging of Miele domestic appliances must be sufficiently stable in order to withstand the high weight of the products during transportation. The packaging is primarily made of solid wood and cardboard, but plastic moulded parts, polyethylene (PE) films and foams are also used. In the 2015/16 business year, the proportion of packaging weight in relation to all appliances produced by Miele was 8.5 percent (2014/15: 8.2 percent).

## Production materials used

in tonnes, in the 2015/16 business year



## SUPPLY SECURITY: CONTINUOUS MARKET OBSERVATION

Miele is dependent on the provision of the necessary resources, materials and components to all manufacturing sites at the right time, in the right quantity and in compliance with Miele's high quality requirements. To ensure that this is the case, Miele has integrated early warning indicators for supply security into its supplier management system.

These indicators make it possible to identify potential risks which might jeopardise supply security at an early stage. A software solution is used to record various hazards such as forces of nature (for example earthquakes, floods) or political risks and these hazards are then weighted on the basis of indicators. This process takes into account both country-specific and geographical risks as well as supplier-related risks such as credit-worthiness. In the 2014/15 business year, Miele integrated the early warning indicators into the supplier management system for 100 suppliers initially as part of a pilot project. From the end of 2016, this was extended to around 2,000 suppliers – covering around 95 percent of the purchasing volume.

As soon as a possible gap in supplies becomes apparent, appropriate measures are taken – for example, raw materials are put into storage at the supplier's premises. The increasing use of recycled materials is also helping to ensure the supply of necessary raw materials in the long term.

Metal can be recycled to outstanding quality. Miele therefore uses valuable secondary raw materials in its own foundry at the Gütersloh site.

## ORIGIN OF RESOURCES: ANALYSING THE SUPPLY CHAINS

In the 2013/14 business year, Miele and its suppliers analysed the supply chains of two important components as examples. The aim of this analysis was to find out key information about the producing countries and the associated sustainability issues. The focus was on stainless steel, its alloying agents and plastic. These materials are typical examples of the two main product groups in Miele material purchasing.





The main countries of origin for these materials were assessed on the basis of defined criteria in the fields of environment, economics and society, including aspects such as biodiversity, land utilisation, human rights, labour standards, corruption and supply security. Potential sustainability risks were then identified. The analysis was completed in December 2014 and showed, among other things, that the respective value chains are extremely complex, making it very difficult to trace the materials back to their origin. The results are being incorporated into the development and evaluation of the procurement processes.

### USE OF MATERIALS: ENSURING EFFICIENCY WITHOUT COMPROMISING ON QUALITY

[GRI G4-EN2, G4-EN27] Improving resource efficiency is an important strategic objective for Miele. It not only protects the environment, but also saves money and helps to secure the long-term availability of valuable raw materials. Miele therefore strives to ensure efficient use of materials in production and uses a high proportion of recyclable materials and secondary raw materials – i.e. raw materials which have already undergone a recycling process.

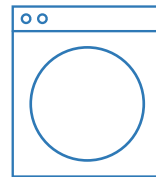
When it comes to resource efficiency, however, Miele is often faced with the challenge of reconciling conflicting objectives: using composite materials, for example, can save material but can also result in disadvantages for the recycling process. Furthermore, not every material that can be easily recycled satisfies Miele's requirements in relation to quality, durability and performance. Miele constantly has to weigh up the advantages and disadvantages in order to maximise resource efficiency without compromising on quality.

### METAL: HIGH PROPORTION OF SECONDARY RAW MATERIALS

[GRI G4-EN27] The use of recycled materials minimises the consumption of primary raw materials and the associated environmental impact – in processes such as the extraction of raw materials. The majority of stainless steel, for example, can be recycled. Miele therefore explicitly welcomes efforts from its suppliers to process the highest possible proportion of recycled steel – whilst always complying with quality requirements. The proportion of secondary raw materials used in (commercial) washing machines can be up to 50 percent.

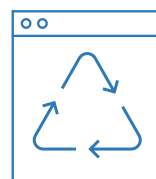
### PLASTIC: USE OF RECYCLED MATERIAL IS CAREFULLY EXAMINED

[GRI G4-EN27] The use of plastic and composite materials is increasing in the domestic appliance industry. This allows money



Metal content of a Miele washing machine (domestic): up to

85 %



Proportion of recycled materials (secondary raw materials) in a Miele washing machine (commercial): up to

50 %

to be saved in manufacturing, but these materials present more problems than metals when it comes to recycling management. In order to reduce consumption of primary plastics, Miele is looking for solutions which will enable the use of recycled materials. Up to now, however, the proportion of plastic recyclates in Miele appliances has been relatively low. And with good reason: there is currently a lack of standardised recycled plastic suitable for demanding technical applications which can be used over a long period and maintain the same high level of quality. Miele will be monitoring future developments closely. The aim is to roll out the use of recycled materials wherever it is possible without compromising on quality. For example, plastic recyclates made from the remnants of industrial production processes are already used in the cable rewind in Miele vacuum cleaners. High levels of precision in plastic manufacturing and a stable production process result in a low reject rate at Miele, which also helps to minimise resource consumption.

A variety of different plastics are used in Miele vacuum cleaners such as the new bagless Blizzard CX1.



# Supplier management

Fair partnership with high standards

Miele sets high requirements for its suppliers in terms of quality and performance and expects them to comply with social and ecological standards. In return, Miele understands that these requirements must be economically viable for the suppliers. The aim is to establish long-term business relationships characterised by fair, trusting cooperation and collaborative partnerships. This collaboration often starts in the product development phase. Miele is constantly developing its supplier management system and adapting it to changes in peripheral conditions. This guarantees consistently high product quality and long-term supply security. Furthermore, it ensures compliance with current sustainability requirements.



85 %

of deliveries to Miele plants – based on the purchasing volume – come from Europe.

## PROCUREMENT: GOOD SUPPLY CONCEPT

[GRI G4-EC9] Miele products are mainly produced in Germany and Europe, and **85 percent** of deliveries to Miele plants – based on the purchasing volume – come from Europe. In conjunction with optimised transport logistics and the bundling of goods flows, this saves on transport costs and reduces transport-related CO<sub>2</sub> emissions.

Due to their distance from the other manufacturing locations, local procurement is particularly important for the plants in China and the Czech Republic. To this end, Miele established the “local to local” principle for selected groups of goods in these countries in the 2014/15 business year: in the interest of keeping transport routes as short as possible, packaging materials for the Czech plant in Uničov, for example, are obtained from the local region. Similarly, at the Dongguan plant, as many materials as possible are obtained from China or elsewhere in Asia: based on the external purchasing volume, Chinese suppliers made up over 50 percent of deliveries in the 2015/16 business year, while Asian suppliers as a whole made up 70 percent.

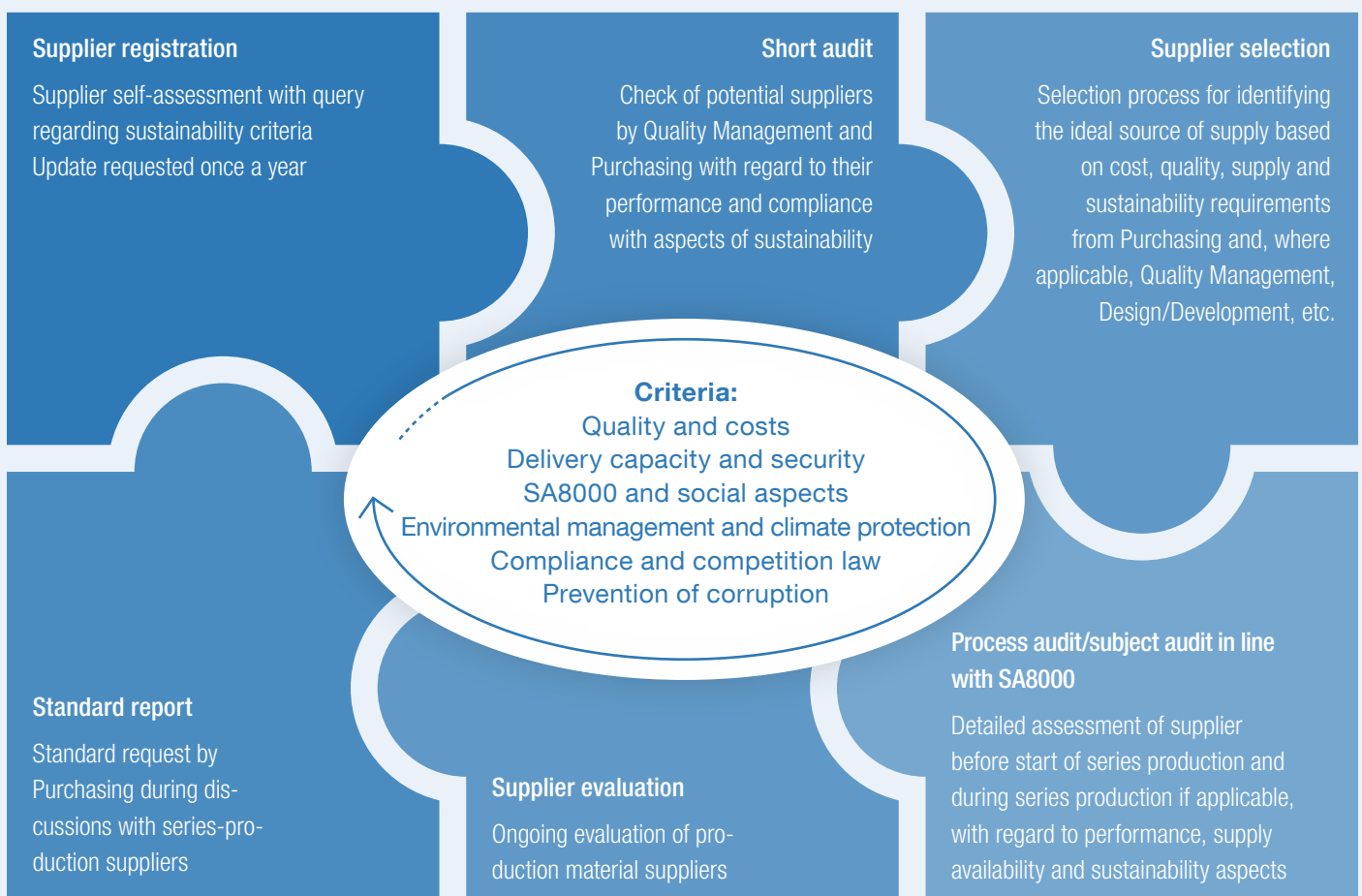


## SUPPLIER MANAGEMENT: CHECKING SUSTAINABILITY CRITERIA

Miele manages the selection of new suppliers and monitors existing suppliers with the aid of a comprehensive supplier management system. The focus is not just on aspects such as supply availability, quality and price but also on compliance with Miele's sustainability criteria. In this process, Miele differentiates between suppliers for manufacturing materials (all materials required for production) and suppliers for non-manufacturing materials (including services or operating materials, for example). Compliance with environmental, social and economic sustainability criteria is monitored and verified several times over the course of a business relationship. At the beginning of the selection process, prospective suppliers must fill in a self-declaration. Manufacturing suppliers are asked to update their information every year. Furthermore, audits are carried out on a regular basis.

### Sustainable supplier management

Multi-stage process





For purchasing staff, the results of the supplier audits are important factors when making a decision.

Miele helps its purchasers and plants to assess new suppliers by providing local support through its International Purchasing Offices (IPO): in addition to the existing IPO in Asia, a second opened in Eastern Europe in July 2015.

### **SELECTING NEW SUPPLIERS: SELF-DECLARATIONS AND BRIEF AUDITS**

[GRI G4-EN32, G4-EN33, G4-LA14, G4-LA15, G4-HR10, G4-HR11, G4-SO9, G4-SO10] A supplier's performance capability and supply availability are crucial factors when it comes to awarding a contract. Alongside criteria such as technical equipment and standardised, stable processes, Miele's Purchasing department checks whether potential suppliers meet the social standards and environmental requirements defined by Miele. All suppliers, regardless of where they are, are subject to the same sustainability standards. In order to contribute to inclusion and integration, Miele also works with social workshops in Germany. 16 of these facilities are currently performing tasks such as sorting, picking and assembly for Miele.

Suppliers who wish to enter into a business relationship with Miele must first submit a self-declaration online via a supplier management portal. This enables Miele to carry out an initial assessment of the potential supplier. The criteria include business/company data, products, technology, certifications, SA8000 and other employee issues, compliance, corruption prevention, environmental management and climate protection. The material group managers in Purchasing check whether the self-declarations are complete and plausible. In the event of non-compliance, the potential supplier is given the opportunity to implement the necessary corrective measures within a reasonable amount of time in order to meet the requirements. If this does not happen, Miele will not consider entering into a business relationship. Of a total of 491 new suppliers who expressed interest in establishing a business relationship with Miele in the 2015/16 business year, 484 participated in the selection process; 100 of the potential suppliers were identified by Miele as unsuitable from the outset, a further nine (1.9 percent) failed to provide information about at least one aspect of compliance with the social standards.

Before taking on a new manufacturing material supplier, a brief audit is carried out on site in order to assess compliance with process quality and sustainability standards. If Miele identifies non-conformities but feels that the supplier would otherwise be a useful partner, it works together with the supplier to find solutions. If there is no improvement, the applicant is blocked for Miele.

#### **ACTIVE SUPPLIERS: REGULAR MONITORING AND PROCESS AUDITS**

Once a supplier has been taken on, Miele carries out regular monitoring over the course of the business relationship to ensure that the supplier still meets the required sustainability standards. A key tool in this process is a supplier portal which prompts the registered suppliers to update their self-declaration online every year.

Process audits are carried out for all suppliers who provide materials for a product series to ensure their performance capability and supply availability. These audits take place before production starts and while it is ongoing. Sustainability criteria are also monitored as part of these process audits. At the end of 2016, Miele had 131 trained and [active process auditors](#).

#### **SOCIAL STANDARDS: COMPLIANCE WITH SA8000 CRITERIA**

[G4-LA15, G4-HR4, G4-HR5, G4-HR6, G4-HR11, G4-SO10] Miele also places particular emphasis on social requirements. All suppliers



Number of  
trained and active  
process auditors:

131

around the world must agree to comply with social criteria in their own companies and to ensure that their upstream suppliers do the same.

Miele demands compliance with the following criteria in accordance with SA8000, the internationally recognised social standard:

- No child labour or forced labour
- Safe and healthy work environment
- Freedom of association
- No discrimination
- No disciplinary measures such as corporal punishment, psychological or physical sanctions or verbal abuse
- Adherence to legislation and industry standards on working hours
- Adherence to payment legislation

The staff in the Purchasing department carries out a general risk classification for all suppliers on the basis of the SA8000 criteria. Depending on the country and industrial sector, the supplier is classified as low-, medium- or high-risk. Only a small number of Miele suppliers are classified as high-risk. These suppliers are monitored continually and assessed once a year by purchasing staff with measures including audits based on SA8000. If this assessment produces negative results – for example, with regard to previous non-conformities which have not been sufficiently rectified – the business relationship is terminated. This did not happen to any suppliers during the reporting period.

An updated version of the SA8000 standard was published in 2014. 28 Miele employees were given training on the revised content in September 2015. They are responsible for implementing the new version at Miele's different sites in time for a company-wide certification based on the new standard in autumn 2017.

In addition to the criteria derived from SA8000, Miele requires its suppliers to provide information about which forms of employee participation the company has implemented and whether it has taken measures to ensure occupational health and safety and provide employees with additional training and support.



Purchasers and suppliers maintain a cooperative relationship. The aim is always to find a common solution for requirements or conflicting objectives.

## **ECOLOGICAL STANDARDS: ASSESSMENT OF THE ENVIRONMENTAL MANAGEMENT**

[G4-EN33] In order to ensure that ecological standards are maintained, Miele assesses its suppliers on the basis of whether an environmental management system has been implemented; for example, in accordance with ISO 14001. The central supplier assessment system also includes information on whether the supplier uses resources in a sustainable manner and complies with local environment and climate protection laws. Environmental requirements for materials and components are continually adjusted to comply with legislation (such as the German Hazardous Materials Ordinance) and Miele's internal regulations. To this end, Miele has its own company standard, which limits the use of certain substances in materials and components. Manufacturing material suppliers will only be awarded contracts if they can confirm compliance with this company standard.

## **ECONOMIC CRITERIA: CORRUPTION PREVENTION AND COMPLIANCE**

Miele's economic sustainability criteria include corruption prevention and compliance. The criteria are based on the principles of the Global Compact of the United Nations (UN) and other international guidelines. The suppliers state whether their company participates in international or industry-related compliance initiatives and whether they take measures to prevent corruption – for example, by providing an ombudsman for employees or considering the Corruption Perceptions Index (CPI) of Transparency International when selecting their upstream suppliers.

## **RISK MANAGEMENT: ESCALATION PROCESS FOR SUSPECTED VIOLATIONS**

[G4-EN33, G4-LA14, G4-LA15, G4-HR11, G4-SO10] If it is suspected or there is evidence that a supplier is violating SA8000 criteria or environmental standards, a multi-stage escalation process is initiated. This can culminate in the supplier being struck off the list and blocked for the future. Serious violations will generally lead to absolute and immediate termination of the contract. During the reporting period, 23 suppliers were inspected according to the escalation plan. The inspections showed no abnormalities; no suppliers were placed under embargo.

A supplier whose inspection reveals abnormalities may be able to continue working with Miele, depending on the supplier's subsequent development and improvement. The supplier in question must draw up a plan of measures in collaboration with Miele's Purchasing and Quality Management departments and rectify the non-conformities in full within the specified period.



# Outlook

One of Miele's fundamental strategic challenges is ensuring a long-term supply of high-quality raw materials, particularly as some of them are becoming scarcer. The company will therefore intensify its efforts in future to improve material efficiency and create closed raw material cycles through the increased use of recycled materials.

Miele is constantly adapting its supplier management system to changes in peripheral conditions. In order to ensure supply security at a consistently high level of quality, Miele will continue to focus on collaborative, trusting relationships with its suppliers. Miele is working on further optimising compliance with ecological and social standards in the value chain in line with the company's guiding principle – "Forever Better".

Supplier management is controlled from the company's headquarters in Gütersloh. It poses high requirements that are subject to constant change – these are also affected by the conditions faced by society as a whole.



# 4 | Environment

4.1 Remit

4.2 Environmental management

4.3 Resource efficiency

4.4 Energy use and emissions

4.5 Transport and logistics

4.6 Outlook

## Efficient control

Rainer Mammel responsible for energy and environment at the Bielefeld plant (right) and shop mechanic Thomas Czerner regularly monitor and evaluate the consumption values of the ventilation, air conditioning and heating systems.





# The remit: industry leader in environmental protection

**A** further key element of Miele's sustainability strategy is protecting the environment. Within the scope of its strategy update, the company has set itself the objective of being a world leader in environmental protection in its industry. It also intends to make this objective quantifiable. In addition to complying with environmental standards, Miele is therefore continually working to conserve resources, save energy and reduce emissions. The company applies the precautionary principle and takes environmental protection into account right from the beginning when designing plants and processes. Miele uses a comprehensive environmental and energy management system to assess its progress. [GRI G4-14]

## What Miele has already achieved (2015/16)

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**ISO 14001**

certification for all plant locations

**ISO 50001**

certification for all European plant locations

**53 %**

reduction in energy-related CO<sub>2</sub> emissions since 2000

**25,000 m<sup>2</sup>**

square metres of nature-oriented green space designed in Gütersloh

More than

**80 %**

of the transport volume in sales is by ship

**2**

cogeneration plants in operation at the Bünde location



## Strategic objectives for 2025

Miele is the sector leader for environmental performance.

Energy efficiency and CO<sub>2</sub> reduction

Miele is continuing its efforts to improve efficiency in production, and these are supplemented by key climate indicators. Miele has reduced its CO<sub>2</sub> emissions.

Resource efficiency

Miele is aiming to close material cycles in production and for products, wherever this is possible and economically viable (cradle to cradle).

High environmental and social standards

Minimising supply risks and full compliance with environmental and social standards

“Our environmental management system doesn’t just ensure that regulations are observed – it also strives to reduce any impact on the environment and save resources.”

Karin Fahrendorf, responsible for safety and environmental protection in the Oelde plant



# Environmental management

## Integrated control

**M**iele's environmental management includes its operational environmental protection and its energy management system. The company is working to reduce the environmental impact caused by waste water, waste and emissions as well as energy-intensive processes and logistics at its sites. It produces all of its products in a resource-friendly manner, using as little energy as possible. Thanks to its exceptionally high level of vertical integration – depending on the product, the company manufactures up to 50 percent of all components itself – Miele is also able to influence the environmental impact of these production steps. [GRI G4-14]

### **CERTIFIED MANAGEMENT SYSTEMS: MONITOR PROGRESS, SET OBJECTIVES**

Miele uses an integrated management system to manage operational environmental protection throughout the company. An important component of this management system is the environmental management system, which is certified according to ISO 14001 at all Miele production locations worldwide. It includes guidelines for dealing with materials, water and waste as well as emissions. Miele manages and monitors its environmental performance with the help of environmental performance indicators. The management system is reviewed at the beginning of each business year and progress is measured based on the results of individual reviews conducted at the various Miele plants. The responsible officers set new objectives based on these results. The internal reviews are supplemented every year by external monitoring audits.

A further component of the integrated management system is an energy management system, which is certified according to ISO 50001 at all European locations. Recertification is required once every three years. The energy management system at the Dongguan location in China is also based on ISO 50001. The system helps



the locations to identify potential for further energy savings and to implement appropriate measures. The officers regularly exchange best practice information on a cross-plant basis. Miele reviews its energy management system on a yearly basis by means of internal audits which are carried out by six specially trained employees. The audits performed in the 2014/15 and 2015/16 business years did not find any non-conformities. They merely recommended further employee training and measures to improve individual process descriptions. The responsible officers have begun to implement appropriate improvement measures. With the audits, Miele also fulfils the national implementation of the 2014 Energy Efficiency Directive (EED), which requires companies to carry out an energy audit every four years.

In September 2015, the ISO 9001 and ISO 14001 standards were revised. A total of 50 people (auditors and experts including officers from the areas of quality and environmental management) received training on the standard revisions during the reporting period. This created the basis for identifying new requirements for the management system. Miele will carry out the necessary improvements at its locations in time for the upcoming recertification in autumn 2017.

The energy management staff from the plants regularly meet at the block-type thermal power station in Bünde to exchange views.

### **Award for Miele's energy management system**

In 2015, Miele was awarded the Best Practice Label by the German Energy Agency (dena) for its successful energy management system. As part of the nationwide "Initiative EnergieEffizienz" (Energy Efficiency Initiative) campaign, Miele was recognised as a leading company in the energy management category. The dena praised the organisational implementation of the standard within the Miele Group.

## ENVIRONMENTAL PROTECTION AND ENERGY MANAGEMENT: ORGANISATION AND AUDITING

The organisation of Miele's environmental responsibilities is divided into operational environmental protection and energy management – in accordance with the requirements of the ISO 14001 and ISO 50001 standard systems. Each area has its own responsible officers at the Miele headquarters and in the individual plants. All of the plant officers report to the headquarters in Gütersloh. There is a continuous exchange of information across all plants: the teams for operational environmental protection and energy management meet two times a year at one of the German locations. These meetings are used to discuss individual efficiency projects, to provide information about changes in the legal framework, and for further training.

Since 2015, the energy management team has also been organised as an [internal network](#). Since 2011, the energy management and operational environmental protection representatives from the European plants have regularly participated in workshops in Germany. They have been joined by the representatives from Dongguan in China since 2015.

### Raising awareness among the employees in Braşov

Resource and climate protection is also a key priority at Miele locations outside of Germany. Therefore, a comprehensive project was carried out from July 2014 to June 2016 to raise awareness among employees at the Miele location in Braşov, Romania. This included the following measures:

- **Tree planting event:** in the municipality of Feldioara, Miele employees and their families planted 1,000 trees and collected 242 plastic bags full of rubbish. The trees not only contribute to climate protection, but also help to secure the soil and thus prevent landslides. 170 people participated in the project.
- **Paperless office:** requests for holidays or IT equipment are now all electronic in order to reduce paper consumption.
- **Creation of a collection point for small electrical appliances, batteries and light bulbs:** employees can now dispose of these at a collection point. In the course of this project, the employees were also informed about the advantages of recycling.

[GRI G4-EN29] There were no recorded infringements of environmental regulations in the reporting period. In the 2014/15 business year, Miele introduced a unified legal management system for operational environmental protection, energy management and occupational health and safety across all of its German plants. This monitors whether the company complies with requirements. The



system launches were completed during the reporting period, and the responsibility for implementing operational environmental protection lies with the individual plants. Miele has also introduced another system: a compliance tool for product-related environmental regulation.

### **COMPLAINT MANAGEMENT: TRANSPARENT COMMUNICATION, FAST HANDLING**

[GRI G4-EN34, G4-SO1, G4-SO2, G4-SO11] Employees, residents, business partners, or other persons can file complaints about the company's activities at any time by telephone, e-mail, or letter to Miele. The headquarters or the plants are the main contacts for this purpose. The responsible department or the plant management will examine the situation and clarify or eliminate the causes. In the event of a serious complaint, the company management will be involved at an early stage. No significant complaints concerning environmental emissions were received in the reporting period. Two minor complaints about noise due to activities at night, as well as noise from construction vehicles, were dealt with immediately, and their causes have been remedied.

Control centre of the iron foundry at the Gütersloh site





# Resource efficiency

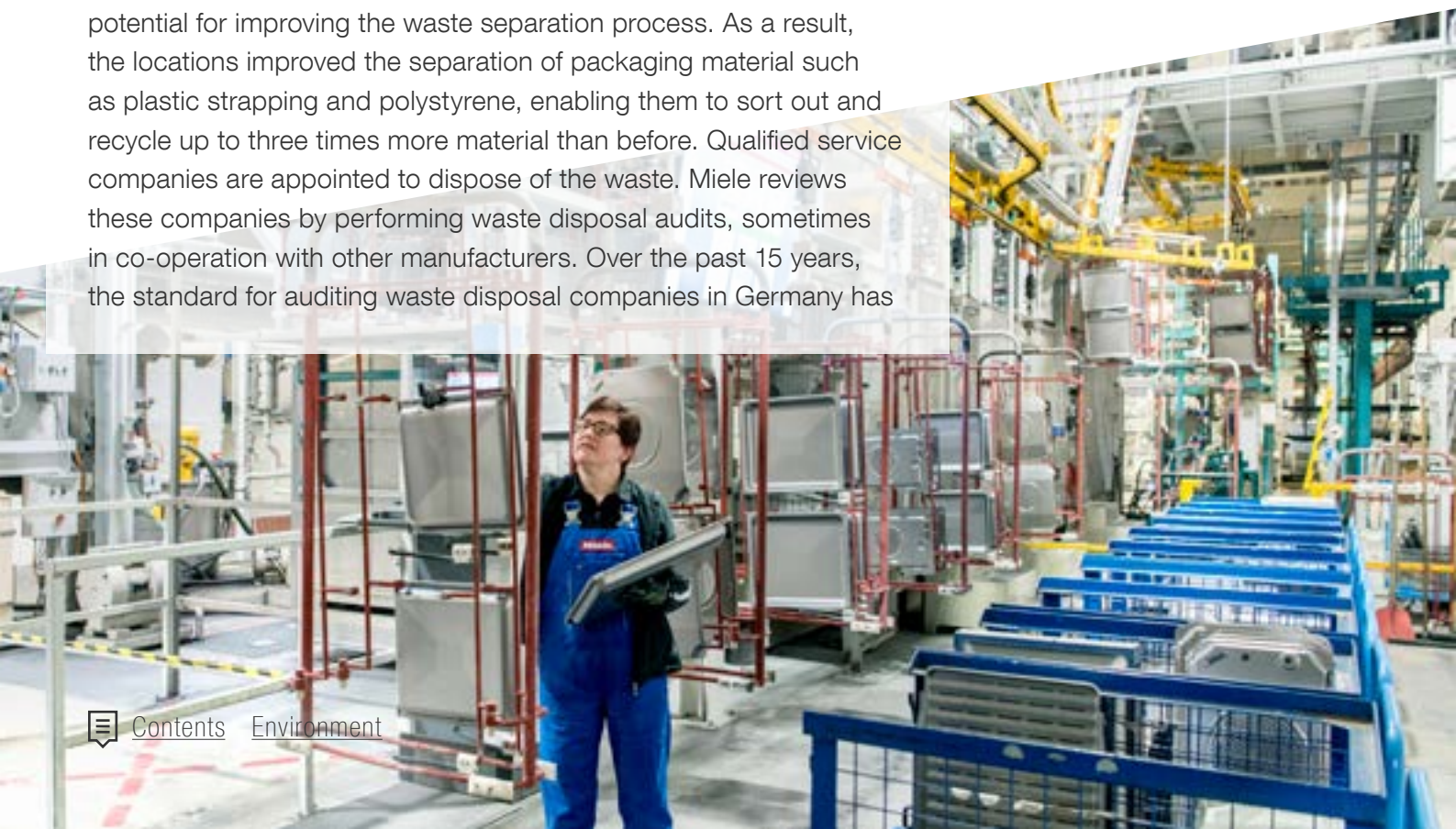
## Waste avoidance and water management

The responsible use of natural resources is a key objective and an established practice at Miele. This not only protects the environment, but also helps to secure a long-term supply of important raw materials and to reduce costs. To this end, Miele is committed to efficient material use, avoiding waste and minimising its water consumption.

### WASTE AVOIDANCE: MAXIMISING RECYCLING

[GRI G4-EN23, G4-EN25] Miele pursues a defined strategy of avoiding waste as far as possible. The company therefore seeks to continuously improve its production processes. Materials are reused wherever possible or recycled. In order to close material cycles, Miele uses not only recyclable materials, but also secondary raw materials. As a general rule, unavoidable waste is carefully separated and recycled as much as possible. During the reporting period, the locations carried out detailed analyses which identified potential for improving the waste separation process. As a result, the locations improved the separation of packaging material such as plastic strapping and polystyrene, enabling them to sort out and recycle up to three times more material than before. Qualified service companies are appointed to dispose of the waste. Miele reviews these companies by performing waste disposal audits, sometimes in co-operation with other manufacturers. Over the past 15 years, the standard for auditing waste disposal companies in Germany has

Conserving resources in production, like in the production of ovens in Oelde, is an important factor from an economic and environmental perspective.





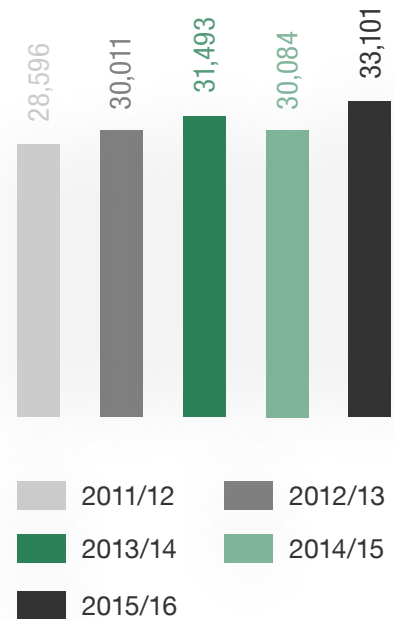
Even in the production of small parts, efforts are made to keep waste to a minimum during manufacturing.

continuously developed. All of the Miele plants follow this standard. Both in Germany and abroad, no waste is exported. When it comes to transporting its hazardous waste within Germany and at the international sites, Miele exclusively uses companies specialised in this field.

The amount of waste produced by the company in the 2015/16 business year was 33,101 tonnes. This represents a 10 percent increase compared to the previous year (30,084 tonnes). Miele was therefore unable to achieve its objective to reduce the amount of mixed waste produced at the locations in Germany and Austria from 877 tonnes per year to 745 tonnes per year by the end of the 2015/16 business year, which would have signified a decrease of 15 percent compared to the 2012/13 business year. Instead, the amount of mixed waste rose by 13 percent during this period. The increase in total waste and mixed waste is mainly due to the fact that both production volumes and the workforce have grown significantly at almost all the plants over the same period, combined with a resulting increase in construction activity. The transition to new appliance generations in the production plants also led to more material consumption and waste; for example, due to the manufacturing of new and old appliance series in parallel. All of the relevant departments are working strenuously to find solutions in order to minimise this type of transitional effect. Furthermore, Miele is increasingly promoting the separation of waste on site. In addition, waste from external services was increasingly disposed of through the Miele disposal systems. Finally, there were technical problems during the reporting period at the waste collection plant at the Gütersloh location. As a result, a large number of foils were misrouted.

## Total waste produced

in tonnes



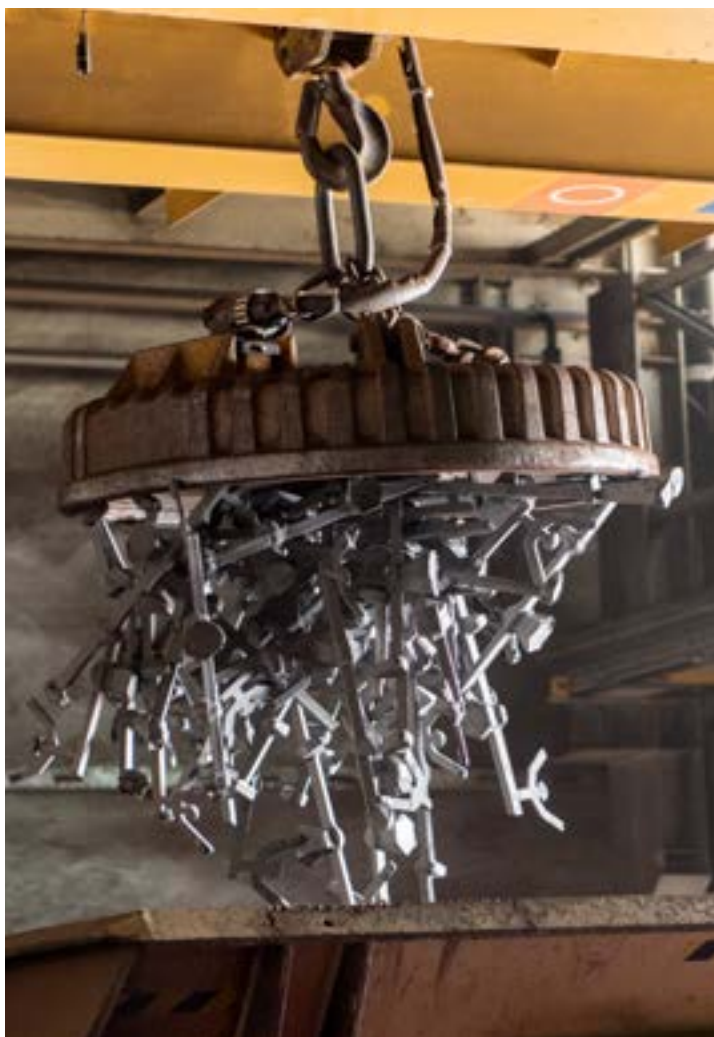
On the other hand, the amount of liquid waste that had to be disposed of was reduced from 1,342 tonnes in the 2013/14 business year to 317 tonnes in the 2015/16 business year. At the Bielefeld plant, rinsing fluids from the wash cabinet production process for dishwashers have been recycled in a physicochemical process since 2014/15. By commissioning a water treatment plant for the production of dryer drums, the Uničov plant was able to avoid disposing of around 350 tonnes of oil-containing waste water per year.



148 kg

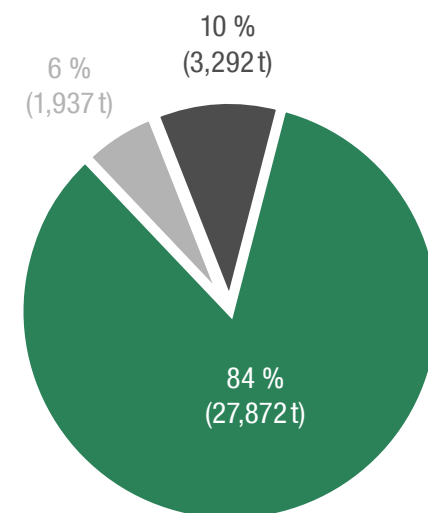
Production waste per tonne of product (2015/16)

The rate and capacity for cast-iron recycling is unrivalled. High-quality iron, even in the form of industrial waste, goes into the production process.



### Source areas of total waste

in tonnes and percentages



- Waste from production, product parts
- Waste from operational plants, administration and development areas
- Waste from buildings, grounds



More than 96 percent of all waste was recycled; less than 5 percent of the waste had to be disposed of. The production waste in kilograms per tonne of product increased slightly in the 2015/16 business year compared with the previous year (approx. 1 percent). However, in the 2014/15 business year it decreased by around 7 percent compared to 2013/14. In the 2015/16 business year, the amount of hazardous waste produced fell to 2,110 tonnes, a decrease of 173 tonnes from the previous year.

### PAPER CONSUMPTION: CHANGING TO RECYCLED PAPER AT ALL GERMAN LOCATIONS

For half of 2015, the Gütersloh headquarters exclusively used recycled paper in some of its printers as a trial run. Printers with particularly high printing volumes were selected for the trial. Following the successful test phase, all the locations in Germany have switched to using only recycled paper with the Blue Angel label. This measure saves around 45 tonnes of fresh fibre paper every year. Since 2012, Miele has been using a secure printing solution which enables employees to access their print jobs on any printer in order to reduce energy consumption and improve resource protection. This led to the replacement of numerous workplace printers and resulted in energy savings in administration. The company has also saved paper as a side effect: as employees now need to log in personally for each operation, they are more aware of their consumption of paper. The international sales subsidiaries are also continually working to reduce their paper consumption by, for example, printing on both sides or re-using paper.

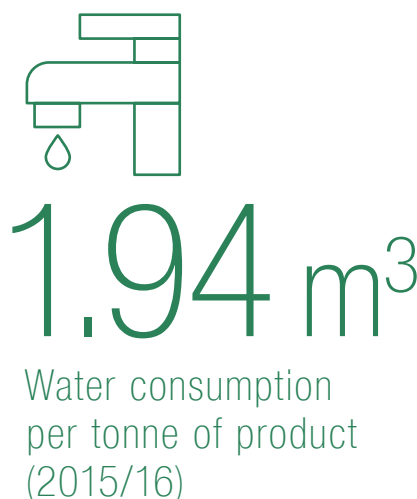
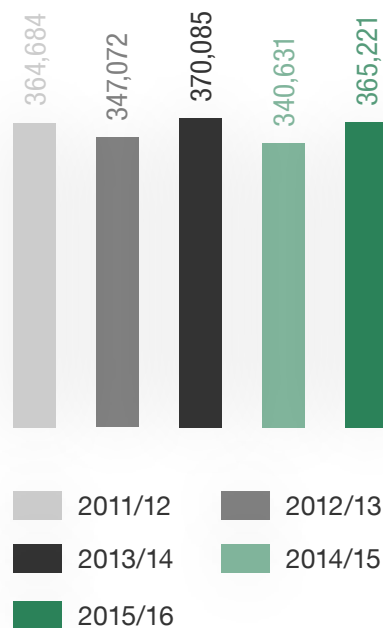
### WATER CONSUMPTION: SYSTEMATIC WATER MANAGEMENT

[GRI G4-EN8, G4-EN9] Miele strives to consistently reduce its water consumption through systematic water management. All of the water-saving measures are implemented in such a way that drinking water hygiene is ensured at all times. Miele does not have any locations in regions which experience water shortages.

As an overall trend, the company has reduced its water consumption per tonne of product over the last years. However, the absolute water demand rose in the 2015/16 business year from 340,631 cubic metres to 365,221 cubic metres. This is mainly due to installation work to improve the water supply at the Gütersloh, Oelde, Euskirchen and Uničov locations, as well as changing production processes to adapt to new appliance generations. In order to reduce consumption and achieve savings in the future, the company continued to renew its supply networks over the reporting period. In many parts of the

### Water consumption

in cubic metres





Gütersloh plant, the drinking water pipelines and fire-extinguishing pipelines were separated from each other. The new drinking water pipes have a smaller diameter and therefore require less frequent rinsing in order to avoid germ formation. During the reporting period, approximately 300,000 euros were invested in the pipe renewal, and the company is planning further investments of 200,000 euros for the coming years. However, the water savings achieved so far were not able to compensate for the increase in demand during the reporting period. One of the reasons for this is that pipes broke during the course of the construction work, which had a negative effect on water consumption. After the construction work is completed and the production processes have been converted, the company expects to see a reduction in the water demand in the coming years.

Miele has also established a water management system in its international plants, and has implemented measures such as new pipelines. The Chinese plant of Dongguan, for example, installed new water metres and set target values for its water consumption. The values are now monitored continuously, and measures will be taken if they exceed the average value.

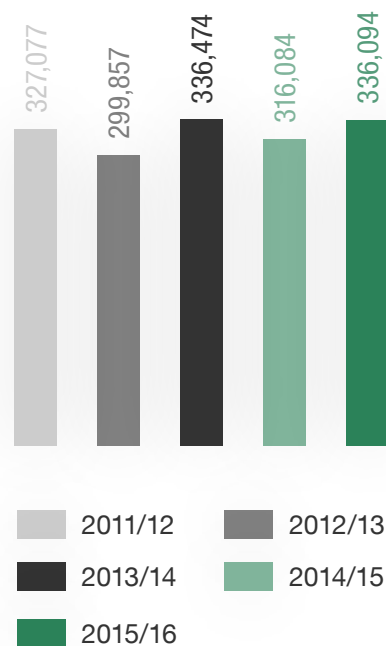
### WASTE WATER: REGULAR MEASUREMENTS

[GRI G4-EN22] The plants in Gütersloh, Oelde, Lehrte and Bürmoos are able to discharge their waste water into the public sewer system due to its high quality. These indirect discharges are subject to the waste water regulations of the respective municipalities. The waste water is treated prior to discharge: heavy metals are precipitated by means of lime milk so that they can be filtered out of the waste water. Precipitation is a chemical process for isolating a dissolved substance from a solution. The heavy metals are reformed as a solid substance and can therefore be filtered out of the waste water. In addition, the waste water is also neutralised. This ensures that Miele complies with the limit values stipulated in the municipal waste water regulations. Waste water measurements are performed and documented on a regular basis. In the reporting period, there were no notable or significant cases where the municipal limit values were exceeded.

At the Braşov plant, the domestic waste water is treated in the plant's own biological treatment plant and is then discharged into the Bârsa stream. As at all other Miele plant locations, regular samples are taken to ensure that the water quality is perfect. In the future, the waste water from the Braşov plant will also be discharged into the public sewer system. The approval procedure was still ongoing during the reporting period. Miele asked for approval for the

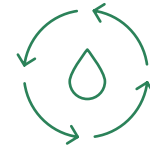
## Waste water

in cubic metres



necessary construction work, which would connect the plant to the sewer line. The public waste water pipeline was originally planned for 2016 and was postponed to mid-2017 by the authorities.

Due to the introduction of new generations of appliances and the construction work at the Gütersloh plant, the total amount of waste water produced in the 2015/16 business year rose by 6.3 percent to 336,094 cubic metres (2014/15 business year: 316,084 cubic metres). As a result, the **volume of waste water per tonne of product** increased slightly compared to the 2013/14 business year. On the other hand, water savings were achieved at locations such as the surface plant in Gütersloh due to the reuse of rinsing water. As a result, approximately 25 percent of waste water was saved from rinsing processes.



1.79 m<sup>3</sup>

Waste water per tonne  
of product (2015/16)

During surface finishing with Perfect-Clean, the baking trays are subjected to a complex process that produces waste water, which can be passed into the public sewer system owing to its high quality.



# Energy use and emissions

## Measures for climate protection

**M**iele considers the reduction of CO<sub>2</sub> emissions by means of energy efficiency improvements as its most ecologically and economically effective contribution to climate protection. In the reporting period, the company began to implement various efficiency measures which were assessed in a potential and feasibility analysis between 2012 and 2014. Because these measures involve significant investments with long-term implementation timelines, they are divided up into sub-steps and individual projects at a location level. In addition to optimising the production processes with regard to energy usage, the measures are mainly aimed at creating building and infrastructure designs that are as energy-efficient as possible. Miele promotes the use of renewable energies at individual locations.



1,228 kWh

Energy consumption  
per tonne of product  
(2015/16)

### ENERGY: RELATIVE CONSUMPTION CONTINUALLY DECREASING

[GRI G4-EN3, G4-EN5, G4-EN6] The total energy consumption in the 2015/16 business year was 230,990 MWh. Therefore, absolute consumption increased slightly compared to the 2014/15 business year (223,389 MWh). The main reason for the increase is higher electricity consumption as a result of an expansion in production. In addition, a plant that is located outside the Gütersloh location was added to the reporting framework. On the other hand, Miele has been able to continuously reduce the **relative energy consumption per tonne of product** in recent years. The objective of reducing the specific energy consumption of 1,368 kWh/tonne of product (2011/12) by 4 percent was surpassed 2.5 times with a reduction of 10 percent. Compared to the base year 2000, this consumption has declined by around 16 percent.

Energy consumption is made up of direct energy consumption (heating oil, natural gas) and indirect energy consumption (district heating and electrical energy) as outlined in the diagram. The natural gas demand at Miele has increased due to the operation of two cogeneration plants at the Bünde plant, and the construction of new buildings.

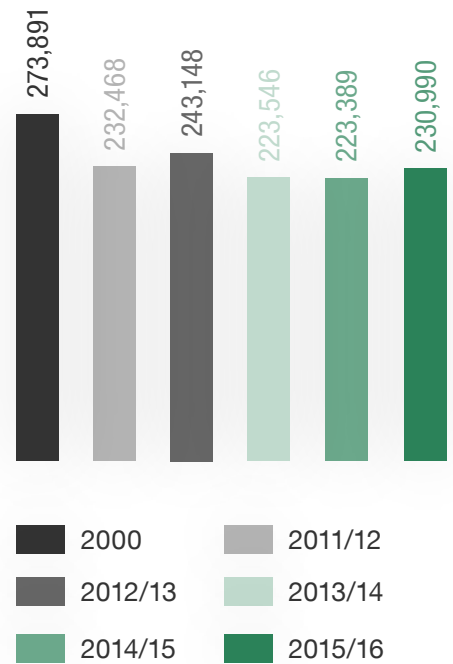
Dust emissions in the Gütersloh iron foundry fall well below the prescribed limit. On the ventilation stack on the roof, a dust density measurement is performed automatically.

## Networks for increased energy efficiency

During the reporting period, Miele established an internal network to improve the company-wide exchange of information on the topic of energy efficiency. Experts are grouped into specialist groups for specific topics; for example, for compressed air and cooling plants. The network meets up to three times a year, while the specialist groups meet as required. During the reporting period, the first network meeting took place with participants from all of the Miele plants. In this meeting, representatives from Bünde, for example, reported on their experiences with their plant's [new energy concept](#). The Miele internal network replaces the previous participation in the cross-company "Learning Energy Efficiency Network" (LEEN), which included Miele and other East-Westphalian companies. Good experiences with this type of exchange and collaboration, combined with the company's size and structure, led to the decision to set up a Miele network. Supported by the central material group management, this is intended to create greater synergy effects at the international level.

## Total energy consumption

in MWh



## ENERGY EFFICIENCY: MEASURES AT THE LOCATIONS

[GRI G4-EN6, G4-EN19] To further improve the energy efficiency of its production operations, Miele is investing in numerous energy-saving measures. Various efficiency measures were implemented at all Miele locations during the reporting period. In the 2014/15 and 2015/16 business years, Miele achieved total savings of 3,800 MWh of electricity, 1,000 MWh of heat, 18 MWh of natural gas and 1,200,000 cubic metres of compressed air. Thanks to a new and more efficient data centre, for example, the company saved 727 MWh of electricity a year. The ventilation system was changed at the



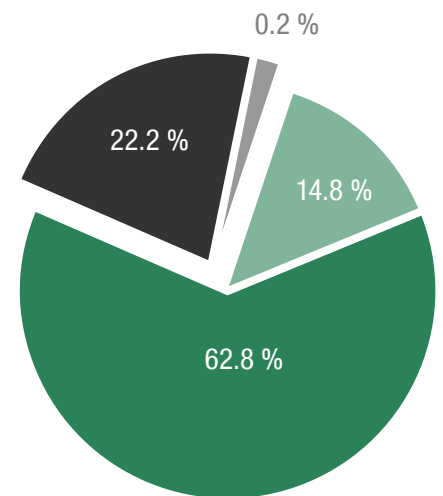


Bielefeld and Gütersloh locations, which led to annual energy savings of around 730 MWh. In addition, Miele switched to LED lighting for the production and toolmaking areas and for exterior lighting at various locations and in the sales subsidiaries. In the autumn of 2014, for example, the Chinese plant in Dongguan switched to LED lighting in the office buildings, sleeping areas and on the streets, thereby saving more than 50 MWh of energy per year. The canteen at the Bielefeld plant was renovated in 2015/16: by converting the kitchen and dining room, as well as replacing the ventilation and cooling systems in the social building, the plant saved 300 MWh of heat per year. During the reporting period, motion detectors and twilight sensors were installed in the public areas of the Romanian plant in Braşov for automatic lighting control. The employees were encouraged to switch off unused equipment during breaks and over the weekend. As a result, in the 2014/15 and 2015/16 business years, the plant saved 4 percent of energy compared to the previous year. The Dongguan plant in China started to replace the plastic injection moulding machines in May 2015. The project, which will be completed in 2018, reduces the energy consumption of the machines by 40 percent.

In addition, during the reporting period, various locations renovated buildings and implemented measures for thermal insulation, among other things. The Bürmoos plant also improved a measuring system which can now assess the energy requirements of individual systems more precisely. In the Swiss sales subsidiary, an energy consumption analysis was carried out for the site in Spreitenbach in 2015. The resulting list of measures is to be implemented by 2019.

## Distribution of energy consumption

in percentages



Direct energy consumption

- Natural gas consumption
- Heating oil consumption

Indirect energy consumption

- District heating
- Electrical energy



In the Bünde plant, a block-type thermal power station with a modular system of combined heat, power and cooling is operated. The heat generated by the power plant is used to heat and cool buildings and production facilities.

## Energy and heat savings

to discipline; in the 2014/15 and 2015/16 business years<sup>1)</sup>

	<b>Total electricity (MWh/a)</b>	<b>Total heat (MWh/a)</b>
Lighting	613	-
Drives/pumps	122	-
Compressed air technology	330	-
Production	104	-
Refrigeration technology	192	-
Laboratory	26	-
Ventilation technology	734	400
Heat recovery/heating	55	297
<b>Total</b>	<b>2,176</b>	<b>697</b>

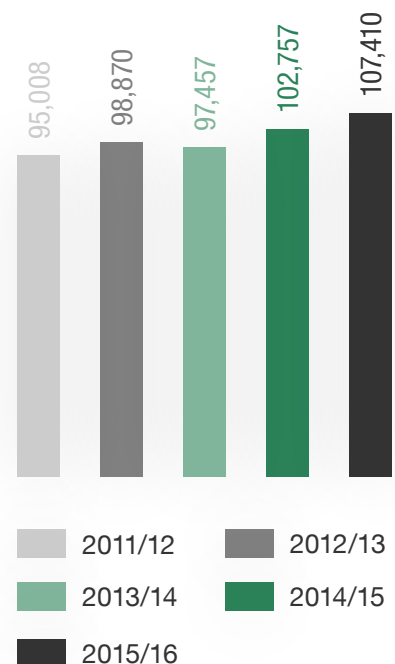
<sup>1)</sup> These are project-related details, which were achieved through measures taken by the production sites.

### ALTERNATIVE ENERGY CONCEPTS: FROM COGENERATION PLANTS TO SOLAR ENERGY

[GRI G4-EN3] The reporting period saw further developments to the new energy concept at the Bünde plant, which has been undergoing successive implementation since 2012. The core of this concept consists of two cogeneration plants (CHP) with modular heat, power and refrigeration systems. The generated heat is used to heat or cool buildings and production plants. The latter is possible with the help of adsorption chillers, which convert the waste heat of the CHP into cold. The CHPs were supplemented with adsorption chillers in the reporting period, leading to better utilisation of the aggregates. In addition, this also avoids the use of environmentally harmful refrigerants and reduces emissions from electricity generation. The CHP plants in Bünde are the only energy generation plants operated by Miele to date. The amount of self-generated

## Total CO<sub>2</sub> emissions

in tonnes of CO<sub>2</sub>



electricity across the company is 1,560 MWh, which corresponds to around 1.1 percent of Miele's total energy consumption.

Since 2014, the Dutch sales subsidiary has been using an aquifer thermal energy storage system (ATES). Pumps are used to extract ground water and the energy contained therein is then removed via a heat pump. The energy obtained can then be used to heat or cool buildings. As a result, the Dutch sales subsidiary saves around 35,000 cubic metres of gas per year, compared to the base year 2013.

During the reporting period, the South African sales subsidiary initiated a process which will convert the headquarters in Bryanston, Johannesburg, into a green building. A potential analysis was carried out for this purpose. The analysis revealed that the electricity demand for the entire building can be covered by solar energy. The project moved into the coordination phase after the reporting period.

### CARBON FOOTPRINT: RISE IN TRANSPORT-RELATED EMISSIONS

[GRI G4-EN15, G4-EN16, G4-EN17, G4-EN18] Despite the reported measures to improve energy efficiency, it was not possible to prevent the total CO<sub>2</sub> emissions increasing by 4.5 percent to 107,410 tonnes (2014/15: 102,757 tonnes) in the 2015/16 business year: the positive sales development led to an expansion of the logistics operations and therefore to an increase in transport-related CO<sub>2</sub> emissions. In particular, the increase in overseas sales had an impact due to the longer transport routes. As a result of higher production volumes, electricity consumption and therefore CO<sub>2</sub> emissions rose at the locations. The changeover to the new generation of washing machines also had an impact, as this required both old and new series to be produced in parallel. However, the CO<sub>2</sub> emissions from heating oil, natural gas, electricity and district heating were more than halved in comparison to the year 2000.

Due to the increase in transport-related CO<sub>2</sub> emissions – particularly as a result of the extensive overseas transport routes – the relative CO<sub>2</sub> emissions also rose from around 560 kilograms/tonne of product (2011/12) to approximately 570 kilograms/tonne of product (2015/16). Therefore, Miele did not achieve its objective of reducing the relative CO<sub>2</sub> emissions by 3 percent. On the other hand, the relative CO<sub>2</sub> emissions in relation to turnover have been decreasing continually in recent years.

Miele's carbon footprint is determined based on the international standard of the Greenhouse Gas Protocol (GHG). The emissions



## Overseas

= Asia, North and South America, Australia, New Zealand and South Africa



# 0.57 t

CO<sub>2</sub> emissions per tonne of product (2015/16)

consist of direct emissions from oil and gas consumption as well as Miele's fleet of vehicles (scope 1), indirect emissions from electricity and district heating (scope 2) and indirect emissions from transport and logistics (scope 3). More detailed information on this topic can be found in the [Transport and logistics](#) section.

### OTHER EMISSIONS: AN OVERVIEW

[GRI G4-EN20, G4-EN21] In addition to CO<sub>2</sub> emissions, Miele strives to reduce other greenhouse gases and harmful emissions. This applies in particular to sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and chlorofluorocarbons (CFCs). The commissioning of the cogeneration plants at the Bünde site led to an increase in SO<sub>2</sub> and NO<sub>x</sub> emissions due to the additional use of natural gas as fuel. Motor production at the Euskirchen site does produce volatile organic compounds (VOCs), but these pollutants are eliminated by a post-combustion process and the amount therefore falls below the legal limit values.

CFC-containing refrigerants are still occasionally used at the Miele plants: for example for air-conditioning technology, compressed air dryers and small-scale systems such as climate-controlled chests. These refrigerants are gradually being replaced by more climate-friendly alternatives. At Gütersloh, for example, Miele is planning to replace the last major building technology plant that uses CFC-containing refrigerants in the 2016/17 business year.

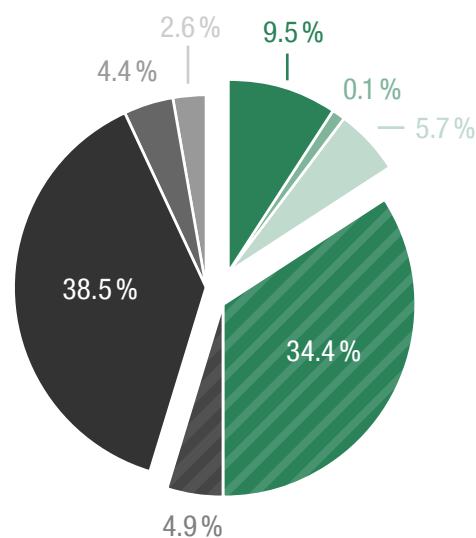
In addition, small amounts of ozone-depleting substances are released at the Chinese plant in Dongguan when organic solvents are used. These are used, among other things, for printing processes and cleaning work tools.

### ENERGY CONSERVATION: RAISING EMPLOYEE AWARENESS

In order to motivate employees to save energy, Miele provides annual training, some of which is conducted as part of the mandatory occupational safety training. In addition, Miele offers an e-learning module. Employees can also find comprehensive information on how to save energy in their day-to-day work on the company Intranet. The plant employees are also encouraged to save energy by means of flyers and posters which, in addition to specific tips, also contain the CO<sub>2</sub> reduction objectives. At the plants in Oelde, Warendorf and Braşov in Romania, new employees receive training on energy management according to ISO 50001 as part of their introduction to the company.

## Carbon footprint

Scope 1, 2 & 3 in percentages<sup>1)</sup>



#### Scope 1

- Natural gas
- Heating oil
- Fleet

#### Scope 2

- Electricity
- District heating

#### Scope 3

- Outbound
- Distribution in Germany
- Business trips

<sup>1)</sup> Rounding differences.



# 28.9 t

CO<sub>2</sub> emissions per million euros of turnover (2015/16)



# Transport and logistics

Optimising processes, reducing emissions

**M**iele appliances, production materials and replacement parts are regularly transported around a hundred different countries worldwide. The task of the logistics department is to ensure the availability of Miele products, and to ensure that customers and sales subsidiaries receive their deliveries on time. Miele has set itself the objective of minimising the impact of this traffic volume on the environment and the climate as much as possible, as well as optimising the necessary transports. This is done using state-of-the-art logistics processes from the central Miele logistics centre in Gütersloh.

Eight out of twelve production sites are located in Germany, with the furthest 215 kilometres away from Gütersloh. Therefore, most delivery routes are relatively short. The transport volumes are bundled together with the help of an IT program to ensure that the means of transport are used as efficiently as possible. Europe continues to be the most important market for Miele products, with 75 percent of sales generated in Germany, its immediate neighbours, the UK and Scandinavia. In addition to efficiently utilising its means of transport, Miele strives to use transport modes with the lowest possible emissions.

The distribution centre in Gütersloh has space for 188,000 domestic appliances. Products are shipped from here to locations across the entire globe on a daily basis.





Every day, around 6,000 packages leave the new warehouse for spare parts and accessories in Gütersloh.

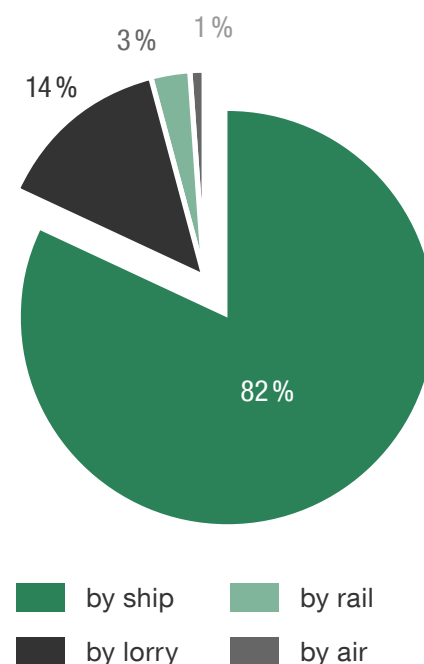
## VOLUMES AND MEANS OF TRANSPORT: MORE THAN 80 PERCENT BY SHIP

In the 2015/16 business year, transport volumes rose by 11.8 percent to 744.2 million tonne-kilometres (compared to the 2013/14 business year). This includes distribution in Germany as well as delivery to the Miele sales subsidiaries from the central warehouse in Gütersloh or from the plants (outbound). The increase is mainly due to the positive sales development in the overseas sales subsidiaries. Miele was able to maintain a high proportion of environmentally-friendly means of transport.

Miele considers CO<sub>2</sub> emissions to be an important criterion when selecting its transport services. The company avoids the use of air freight as far as possible. As a result, Miele's objective of transporting 80 percent of its transport volume by ship and rail was actually exceeded with a total amount of 85 percent. The objective of transporting less than 1.5 percent of goods by air was also achieved with a figure of 1.1 percent (2015/16). Since the summer of 2016, Miele has employed a new combined means of transport to bring its freight to the seaports of Bremerhaven and Hamburg: the containers are transported by lorry to the nearest freight yard,

## Outbound transport volume

in percentages (based on tonne-kilometres)



and then by rail to the seaports. This increases the proportion of transport by rail. Lorry transports may only be carried out with vehicles meeting the limits of the Euro 5 pollution class or higher.

### TRANSPORT: CARBON FOOTPRINT AND OTHER EMISSIONS

[GRI G4-EN17, G4-EN30, G4-SO2] Miele determines the environmental impact of its transport logistics using a piece of software which calculates the transport volume and greenhouse gas emissions according to the EN 16258 CEN standard. In the 2015/16 business year, transport-related CO<sub>2</sub> emissions rose by 15.7 percent compared to 2013/14. This is primarily because the increase in overseas sales has led to a disproportionate increase in CO<sub>2</sub> emissions as the transport routes are significantly longer.

Noise also forms part of transport-related emissions. Noise emissions are legally regulated in Germany and in many other countries. To protect the public and the areas around the plants from harmful environmental effects, certain noise thresholds must not be exceeded, especially at night. This is monitored on the basis of a noise register containing all noise sources. Miele adhered to all these requirements during the reporting period.

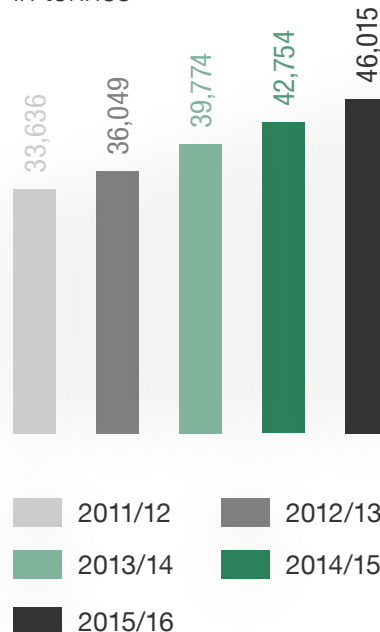
### TRANSPORT VEHICLES: OPTIMUM UTILISATION THROUGH ACCURATE PLANNING

A key way of reducing the environmental impact of transport is the optimal utilisation of the means of transport in procurement and distribution logistics. In procurement logistics, Miele has improved the efficiency of handling incoming goods by further expanding the regional forwarding network. The network now includes around 300 suppliers. The mega trailers used for this purpose (lorries with a higher cargo volume) are efficiently utilised with a rate of 90 percent on average.

In distribution logistics (outgoing goods), transport utilisation between the central Gütersloh warehouse and the transshipment points of the freight forwarders increased by 4.5 percent to 92 percent during the reporting period. In general, the sales subsidiaries are only supplied using fully loaded containers or vehicles. In the case of customer deliveries, Miele continuously analyses requirements and capacities and makes last-minute adaptations if necessary. The European plants usually deliver their products to the central warehouse in Gütersloh, where they are bundled for transport to the destination areas. This is different for the Chinese plant in Dongguan: due to the distance from

### CO<sub>2</sub> emissions from distribution logistics

in tonnes

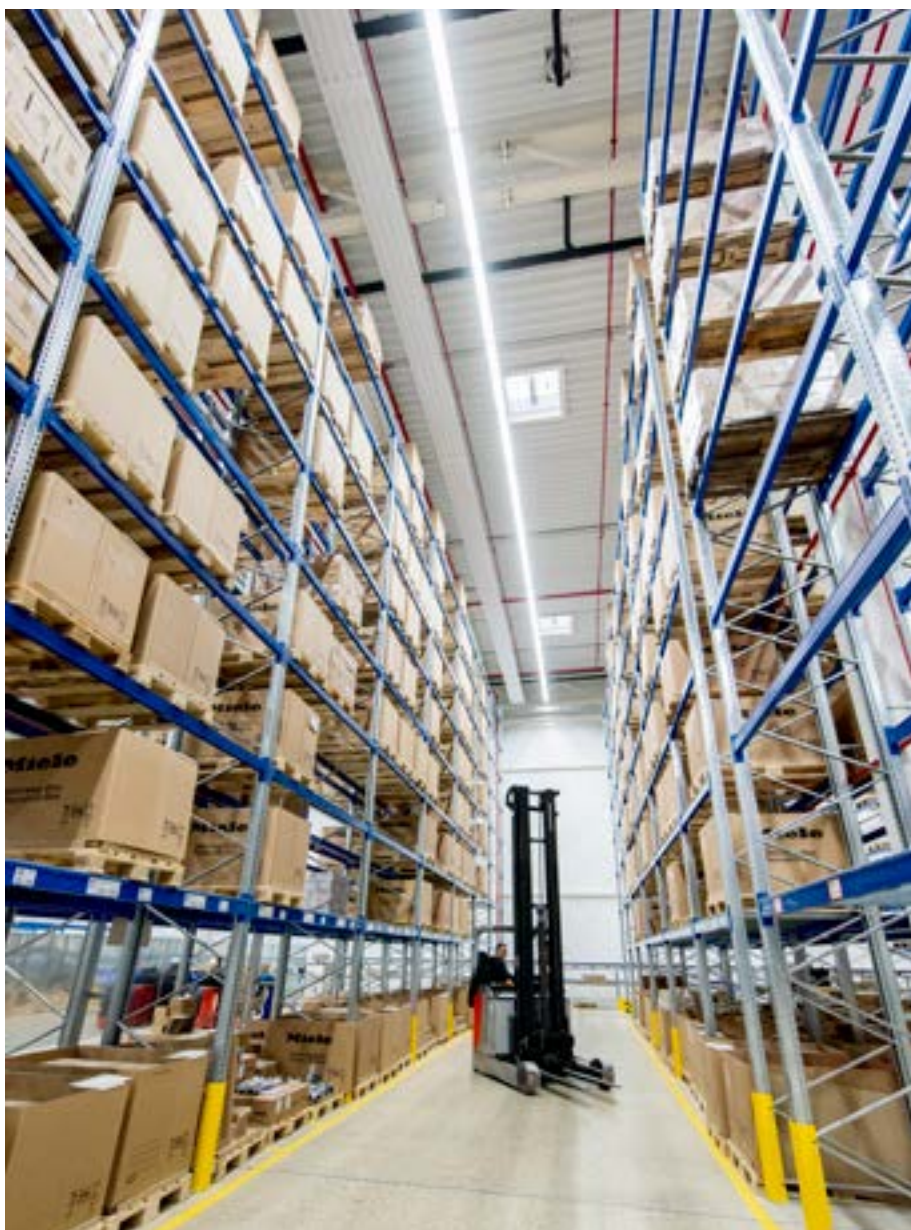




the central warehouse, the destination areas are generally supplied directly and, if possible, with fully loaded means of transport.

### **DISTRIBUTION LOGISTICS: EXPANDING STORAGE CAPACITIES**

[GRI G4-13] One of the most important innovations in the area of distribution logistics is the expansion of the goods distribution centre in Gütersloh by 80 percent. In the summer of 2015, Miele added about 80,000 spaces for storing washing machines, dryers, dishwashers, cookers, and ovens in the central warehouse. This increased the handling capacity from 12,000 to 20,000 domestic appliances per day. During the reporting period, Miele also built a new central warehouse for spare parts and accessories in the immediate vicinity

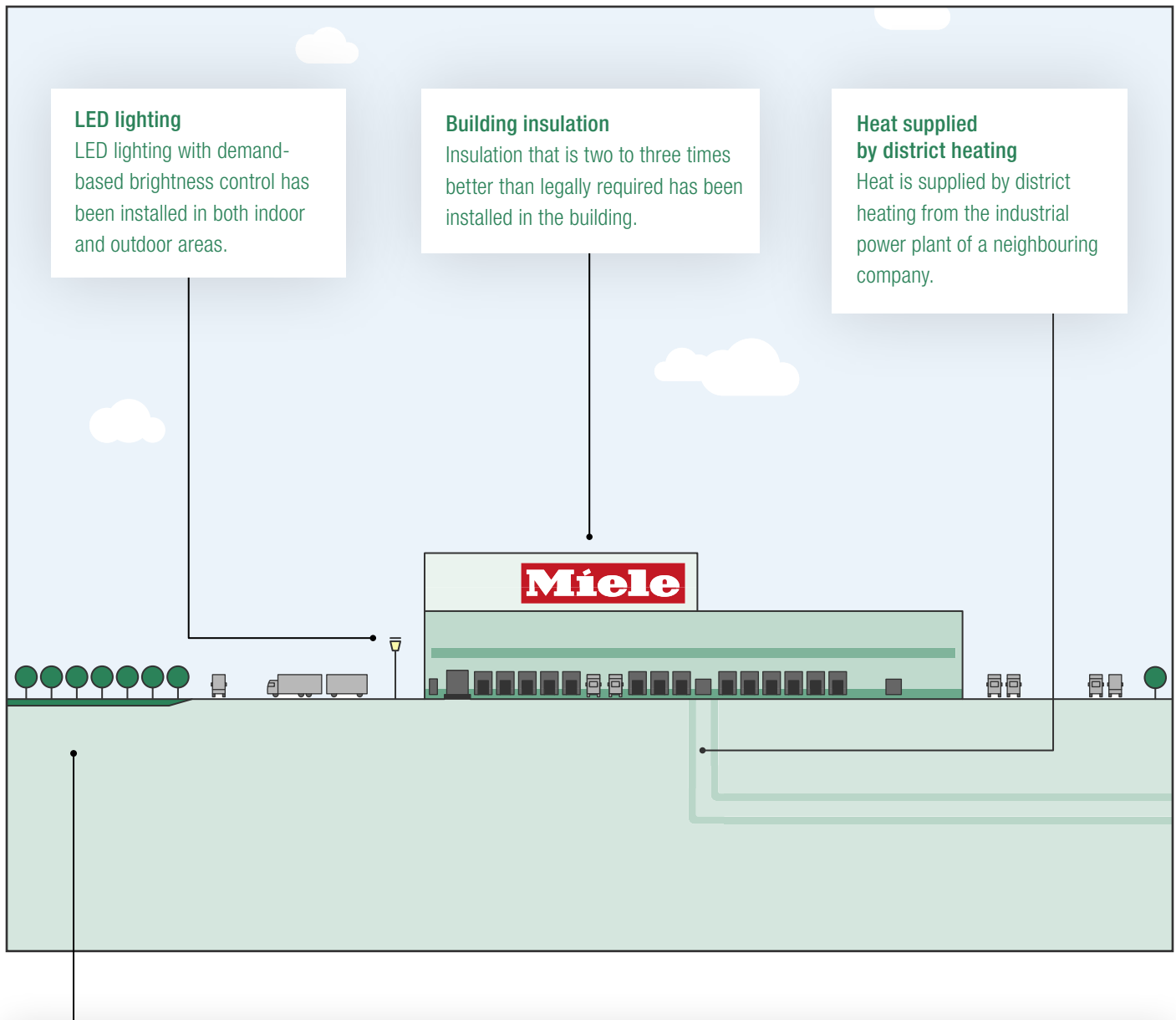


Modern material flow technology is put to use in the spare parts warehouse in order to ensure smooth processing. Goods are supplied directly from here to 1,300 customer service technicians in Europe.



## New building of central warehouse

for spare parts and accessories from ecological aspects



### Close to nature: contributing to the protection of biodiversity

When constructing the new spare parts warehouse at the Gütersloh location, Miele worked with a nature gardener to design the outdoor area in a nature-oriented manner. The company was also advised by the Global Nature Fund. The approximately 25,000 square metres outdoor area is designed to create a diverse habitat for native flora and fauna. To this end, the company planted free-growing, species-rich wild hedges as well as meagre grassland and a fertile meadow full of flowers. As well as creating an ecologically valuable habitat for a wide range of animal and plant species, the large variety of flowers also delights employees, visitors and passers-by. In this way, Miele is participating in the nationwide “Greening of Company Premises” project as part of the Business & Biodiversity Initiative.

## CO<sub>2</sub> emissions of the Miele fleet

current status and objectives in g/km<sup>1)</sup>

	2015/16	Objectives by 2020/21
Cars		
Entire fleet	120	110
New vehicles	110	95
Light commercial vehicles		
Entire fleet	183	165
New vehicles	161	147

<sup>1)</sup> CO<sub>2</sub>-emissions are calculated on the basis of the mileage and the CO<sub>2</sub> data provided by the manufacturers.

of the Gütersloh plant. Operation began at the end of 2016. Thanks to these expansions in close proximity to the plant, Miele has no need to use external storage and shipping locations and can continue to ensure short transport distances and fully utilised capacity.

### MIELE FLEET: NEW EMISSION LIMITS

[GRI G4-EN15, G4-EN30] The Miele fleet includes company cars, vans for customer service, as well as a few lorries. 99 percent of the fleet consists of diesel vehicles. Alternative fuel concepts have been considered for the demanding distribution and customer service operations, but are not yet viable. Miele is still monitoring and evaluating alternative solutions. The high costs and the lack of infrastructure for large-scale use remain problematic in this regard. However, all new cars and

This customer service work is highly demanding: technicians all over the world are en route quickly and reliably whenever they are needed.



commercial vehicles purchased for the Miele fleet are required to have low CO<sub>2</sub> emissions in line with the EU requirements. Miele has also defined clear limit values to be met by 2020/21 for the average CO<sub>2</sub> emissions of the fleet for all plants and German sales subsidiaries regarding passenger cars and light commercial vehicles (see table).

### **EMPLOYEE MOBILITY: CO<sub>2</sub>-FREE TRAIN TRAVEL AND ECO-DRIVING TRAINING**

[GRI G4-EN17, G4-EN30] Miele employees are encouraged to choose public transport for business trips whenever possible. They should use rail connections on longer business trips and avoid air travel unless it is strictly necessary due to time constraints or for scheduling reasons. Long-distance journeys with Deutsche Bahn as part of the “bahn.corporate” corporate customer programme are CO<sub>2</sub>-free. For several years now, Miele has also been offering environmental driving training (eco-driving training) at irregular intervals and alternating with other focus points in the context of the [Open Training Programme](#). 119 employees participated in this training programme in the reporting period.

The mobility team is developing solutions to make the use of public transport more attractive, promote cycling, and support the formation of carpooling networks.



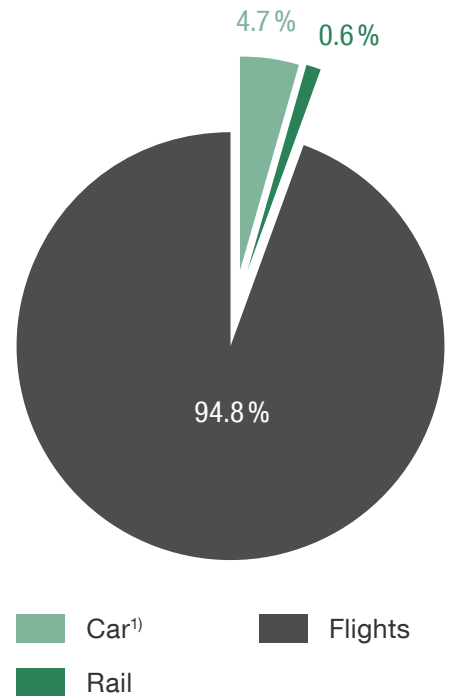
## Participating in the nationwide model project on mobility

In 2016, Miele took part in the nationwide model project Mobil.Pro.Fit. – a joint project with B.A.U.M., the German Environmental Management Association. The aim of the project was to create a company mobility concept and to implement sustainable and environmentally friendly mobility measures. One of the first measures was to set up a cross-department mobility team at Miele. The team, comprising the Technical Product Management and Environmental Office, Fleet Management, Purchasing, Energy Management, Personnel and the Works Council, is working to make transport and travel at Miele more efficient and environmentally friendly. The company is also planning to conduct an employee survey on mobility patterns.



## CO<sub>2</sub> emissions from business trips

with externally purchased transport services (2015/16), in percentages



<sup>1)</sup> The car percentage refers to journeys in hire cars. Business trips with company cars are included in the CO<sub>2</sub> emissions of the Miele fleet; taxi journeys and business trips in employees' own cars are not.

Miele also encourages its employees to travel to work using public transport. Employees at the Gütersloh and Bielefeld sites are therefore offered a discounted job ticket. In 2015/16, over 900 employees used this ticket to get to work. The ticket is set to be introduced in Bünde in the next reporting year. Subsidised public transport tickets are also available to employees in Austria, China and at the Danish sales subsidiary. In Bürmoos, Braşov and Dongguan, Miele provides a dedicated bus service for its employees. Furthermore, all trainees in Bürmoos are given a card which entitles them to free public transport throughout the state of Salzburg – both for commuting and for personal use. The Bürmoos site has also provided extra covered bike racks to make commuting by bike a more attractive option. The USA sales subsidiary, meanwhile, is using measures such as video conferencing and telecommuting to reduce its CO<sub>2</sub> emissions.



# Outlook

Climate protection will continue to grow in importance over the coming years. Miele is currently playing its part by taking measures to improve its energy efficiency. Miele's plans for 2017 include developing a climate strategy that will define concrete future targets for reducing CO<sub>2</sub> emissions. This will be directly related to the objective of the UN Climate Change Conference held in Paris, which is to limit global warming to less than 2 °C.

## **ENERGY MANAGEMENT: EXPANDING THE NEW ENERGY CONCEPT**

The internal energy efficiency network which was set up during the reporting period will continue to promote the exchange of knowledge and experiences between the different Miele plants. Following the successful implementation of the new energy concept at the Bünde plant, it will now be rolled out to other sites. Measures planned for the next few years include building refurbishments at the Lehrte plant and improvements to the energy infrastructure in Bielefeld.

Miele is currently looking into how renewable energy sources can be incorporated into the energy concepts at its sites in future. Cogeneration plants like those already in use at the Bünde plant will be considered as a bridge technology.

## **RESOURCE EFFICIENCY: CLOSING MATERIAL CYCLES**

The central challenge is to keep reducing the use of resources without compromising on the quality of Miele's products. Miele is constantly looking into ways of further closing material cycles. The company will continue to pursue this strategy in collaboration with its partners; for example, in a [pilot project](#) which is aiming to recycle metals from old machines.

## **TRANSPORT AND LOGISTICS: CONTINUOUSLY OPTIMISING PROCESSES**

A particular challenge in this area is the above-average level of growth in the overseas markets. Miele is striving to make all of its transport operations as efficient as possible and to minimise the use of air freight.



In the future, material cycles will be closed in production and for products. The major issues in this regard are energy efficiency, resource conservation and CO<sub>2</sub> emissions.

# 5 | People

5.1 Remit

5.2 Human resources management

5.3 Vocational training and development

5.4 Occupational health and safety

5.5 Diversity and equal opportunity

5.6 Social engagement

5.7 Outlook

## Growing together

Michael Blöte (right) has been at Miele in Bielefeld for over 40 years, and is very happy to share his vast wealth of experience with younger colleagues such as Andreas Ott. From generation to generation, a willingness to learn is a key characteristic of Miele employees.





Miele  
EF-3100



# The remit: to be a reliable partner

**S**ocial changes have an effect on the world of work. In particular, the effects of the demographic change and the increasing shortage of skilled workers are also felt at Miele. In addition, the company's increased international focus and rapidly advancing digitalisation are having an effect on all areas of life. This results in new requirements, not only in terms of employees' qualifications but also in terms of human resources management. In this environment shaped by change, Miele is a reliable employer for a lot of people. Even for the company founders, it was clear that this responsibility did not stop at the factory gates. This is why Miele has always been actively involved in projects for people in the region.

What Miele has already achieved (2015/16)

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472  
apprentices

555  
members of staff celebrating  
an anniversary

18,370  
employees worldwide

Miele invested

17.6  
million €  
into vocational training  
and development for its  
employees.

181,000 €  
donated by the  
company and  
94,000 €  
by the Miele Foundation

## Strategic objectives by 2025

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Occupational health and safety	Miele sets an example for occupational health and safety.
Awareness for sustainability	Employees and managers are aware of and engaged in sustainable behaviour based on values.
Diversity and equal opportunity	Diversity is made possible through respect and equal opportunity. Miele is considered a role model when it comes to balancing work life and family.
Ensuring recruitment of young talent and opportunity for qualifications	Miele ensures the recruitment of young talent and the opportunity for qualifications at all locations.
Promoting an attractive community	Miele helps to maintain a sound, attractive environment at all locations.

“Miele has lots to offer to its staff members. We are committed to ensuring a good work-life balance and nurture young talent.”

Sabine Kumlehn, Director HR Development, Gütersloh



# Human resources management

## Partnership and appreciation

Around the world, Miele employees are at the heart of the company and help to drive it forwards. Miele offers them a working environment guided by partnership and appreciation. This trusting cooperation has always been an important part of the company's culture. Since its earliest days, Miele has strived to maintain high social and ethical standards for its employees. This consistent orientation towards its employees makes Miele an attractive employer for applicants and strengthens identification with the company. Miele is traditionally characterised by a high rate of staff retention and low levels of staff turnover.

The demographic change intensifies the competition for well-trained specialists in industrialised countries. Added to this are the globally oriented markets and digital networking in all areas of life. This therefore changes the demands placed on employees. Miele wishes to fulfil its remit to be a leading innovator within the industry today and in the future too. In order to achieve this, the company must continually succeed in attracting qualified, creative and enthusiastic people and ensure their long-term loyalty. Strategic human resources management therefore aims to meet the short, mid-term and long-term needs of employees in all areas of the company.

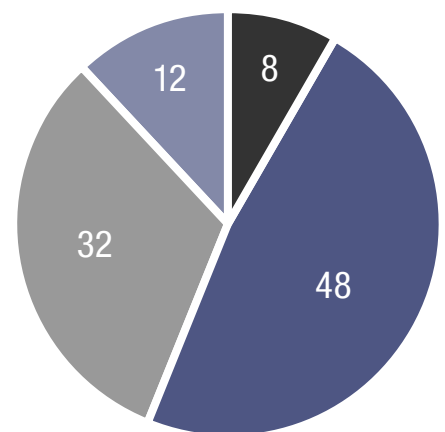
### **ORGANISATION: CLEAR RESPONSIBILITY AND STRATEGIC OBJECTIVES ENSURE SUCCESS**

[GRI G4-9, G4-10] As at 30 June 2016, Miele employed 18,370 employees worldwide. This is equal to a growth of 709 employees or around four percent compared to 30 June 2014. Around 56 percent of the workforce (10,326 employees) are employed in Germany.

The head of the central HR department reports directly to the Managing Director of Finance and Central Administration. Based in Gütersloh, the department performs the associated tasks on

### Distribution of employees

as a percentage, 2015/16



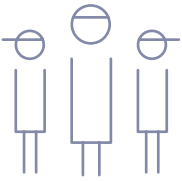
- Sales subsidiary Germany
- Production sites in Germany
- Sales subsidiaries outside of Germany
- Production sites outside of Germany



a Group-wide basis. This includes identifying and employing suitable applicants, training, qualifications and talent management, as well as HR administration. The central HR department performs these duties in regular coordination with the heads of the various departments, the plant HR managers, the heads of the Sales and Service Centres, the heads of the sales subsidiaries and the works council. Whilst HR managers are also in charge at approximately half of the international sales subsidiaries, these duties are bundled with other administrative tasks at the other, smaller subsidiaries.

The central HR department has the authority to set guidelines for HR departments at locations in Germany and at the plants and sales subsidiaries outside of Germany. This is carried out in close collaboration with the local employees in charge of HR matters. HR planning and the recruitment of employees are handled by the HR departments at the plants and sales subsidiaries. However, the heads of the subsidiaries and plants are hired directly by the central HR department.

Miele offers young and well trained experts a working environment guided by appreciation.



709

new employees  
compared with 2014



Annual objectives are coordinated between the Executive Board and the head of the central HR department, who then agrees objectives with the managers who are directly accountable to the central position. Agreeing upon these objectives helps Miele to track the success of strategic human resources planning and to continuously improve their work. During meetings dedicated to the annual objectives, the HR manager and the Executive Board assess the achievement of objectives and determine new measures and objectives.

### **GLOBAL EMPLOYER BRAND: ATTRACTING HIGHLY QUALIFIED YOUNG TALENT**

How can Miele meet the expectations of the potential employees of tomorrow? The company is currently dealing intensively with this question. The aim is to define a strong employer brand, known as the Miele Employer Brand, across the globe by the end of 2018. This should contribute to making Miele even more attractive to highly qualified young talent from the technical sector, for example.

Modern recruiting, such as career campaigns on the Internet, will also play a bigger role in the future. The first projects have been up and running on the social careers networks XING and LinkedIn since the end of 2016, and the careers homepage is also being given a makeover. These measures taken by Miele are largely a reaction to the demographic change which is having an effect on the age structure of the workforce.

### **EMPLOYEE SATISFACTION: STRONG IDENTIFICATION WITH MIELE**

Since 2012, Miele has repeatedly carried out employee surveys to measure how satisfied employees are in their workplace and how strongly they identify with the company. Most recently, employees from 18 sales subsidiaries were surveyed in 2014/15. The result: 89 percent of all respondents are proud to work at Miele. Almost as many (79 percent) reported to be carrying out challenging and interesting tasks. The response rate to the survey was 84 percent. The survey was advertised on the Intranet and on notices, among other avenues. Employees of the sales subsidiaries are surveyed with a standardised questionnaire which they usually fill out online. In order to further improve cooperation or the processes at the location, each manager is required to derive specific measures from the results of the survey, as necessary.

Surveys within the scope of corporate [health management](#) and the advancement of women currently supplement the



# 89 %

of all respondents are proud to work at Miele.

portfolio. From 2018 onwards, employee surveys are to be conducted globally in accordance with a uniform concept.

**CORPORATE SUGGESTION SCHEME:  
EMPLOYEE IDEAS PAY OFF**

Company culture at Miele is underpinned by flat hierarchies and short communication paths. The corporate suggestion scheme is among the opportunities offered to employees to actively help shape the company and to participate in its further development. This has a long tradition within the company: as early as 1951, employees were first called upon to submit their ideas for improvements.

In the business year 2015/16, almost all the employees at plants in Germany contributed to submitting a total of 2,007 suggestions. The following numbers demonstrate the potential of the ideas from the workforce: more than 30 percent of the ideas submitted were implemented in the reporting period – this led to savings of over two million euros. Most suggestions for improvements and saving money related to production/manufacturing (33.8 percent), followed by products (16.8 percent) and organisation/administration. 10.7 percent of suggestions for improvement related to occupational safety, and 4.6 percent concerned the interrelated topics of environment, energy and resources. Other areas include image, ergonomics, logistics, customer service and quality. The employees receive a bonus if the suggestion is successfully put into practice. A total of 264,854 euros were paid out as bonuses in the business year 2015/2016 (2014/2015: 226,683 euros).

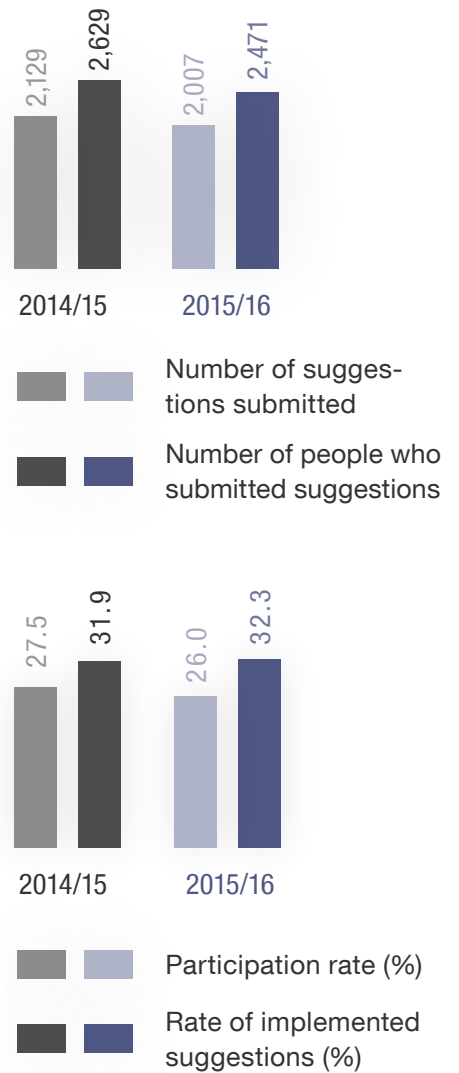
Miele would like to make even more use of employees’ knowledge to improve processes. Potential participants are inspired to take part through various communication channels which report on results and activities. We are using the potential of employee ideas, not only nationally but also internationally. The suggestions for improvement are collated, selected and rewarded in accordance with country-specific rules. For example, employees at the Czech plant in Uničov submitted 707 suggestions for improvement in the reporting period; the ideas at the Chinese plant in Dongguan are collated using a suggestions box in the canteen.

**STAFF RETENTION: LOW TURNOVER RATES,  
LOTS OF ANNIVERSARIES**

[GRI G4-LA1] Miele is traditionally characterised by a high rate of staff retention. Most employees stay with Miele for many years. Until now, the staff turnover rate at the German locations was

Corporate  
suggestion scheme

at Miele & Cie. KG  
(Germany)



consistently below 1 percent; in the business year 2015/16, the rate rose to around 2 percent. This was caused by the one-time effect of merging of backoffice operations in the sales and service departments of the German subsidiary at the company headquarters in Gütersloh (see the following section). In the course of this, all employees who were previously based at local subsidiaries were offered the opportunity to continue working for Miele in Gütersloh.

Numerous anniversaries were celebrated in the reporting period: in the business year 2015/16, 555 employees celebrated 25, 40 and even 50 years with the company (2014/15: 484 employees with anniversaries). The special value of anniversary celebrations for the workforce is demonstrated in many ways, including by the following tradition in Gütersloh: for many decades, colleagues have creatively transformed the workstations of those celebrating anniversaries into scenes relating to particular free time activities, holiday passions, or even professional interests. The festivities are rounded off by an anniversary celebration in the Miele Forum, personal congratulations from the Executive Directors and lunch together in the town hall.

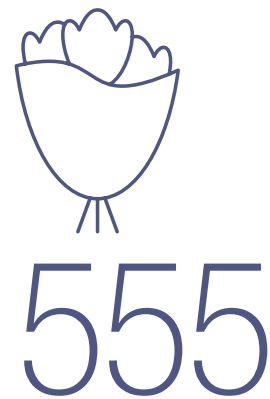
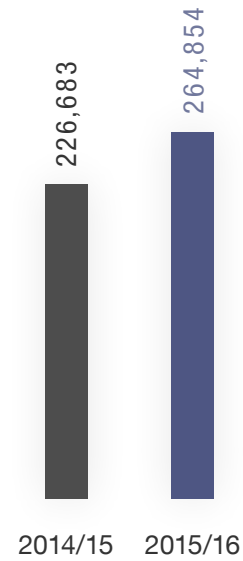
**STRUCTURAL CHANGE: SALES AND SERVICE CENTRALISED**

[GRI G4-13] At the end of 2015, Miele merged the German backoffice operations in sales and service in Gütersloh. This enables the company to accommodate far-reaching changes with respect to logistics, communication technology and in commerce, with a decreasing number of dealers and the rapid rise in the significance of the Internet. All this means that customer service and delivery from a single source is now essential.

In the course of this centralisation, the regional Sales and Service Centres in Hamburg, Bochum, Frankfurt and Karlsruhe, as well as the Service Centre in Berlin were all closed in the fourth quarter of 2015. While this did not have an impact on jobs in the sales force, all 300 employees involved in backoffice operations were offered the opportunity to continue working for Miele in Gütersloh. 89 employees chose this option, and a further 120 opted for the alternative option agreed in the redundancy programme to transfer to an internal unit for professional reorientation. This guaranteed remuneration beyond the course of the individual notice period and offered means of gaining qualifications to make it easier to move on to other employment. 45 people left the company without switching to the transfer company. The remaining employees continued to work for Miele in the same way from home. The former Sales and Service Centre in Munich will continue to operate as a Service Centre until at least 1 January 2020.

Profit-sharing

Corporate suggestion scheme (Germany), in euros



555 anniversaries were celebrated in 2015/16.

## Employee participation: close and trusting collaboration

[GRI G4-11, G4-LA4] For decades, Miele has had a close and trusting relationship when working with the company's workers' representatives. The Executive Board promptly provides the workers' representatives with extensive information concerning all relevant decisions, developments and processes. The collaboration goes beyond the requirements of the German Works Constitution Act. An example of this is the annual conference of all works councils. On their first day with the company, new employees are immediately informed of their co-determination rights as part of the "Welcome@Miele" programme (orientation events and informational documents). New employees also receive information about these rights in their welcome e-mail.

Employees are represented by unions in Germany (IG Metall), Austria (PROGE) and the Czech Republic (KOVO). At the Braşov plant in Romania, a collective labour agreement is in place which governs the fundamental demands, the organisation and the structure of employment relationships. Working conditions for employees in Germany, Austria, the Czech Republic and Romania are thus all regulated in collective bargaining agreements. This is equal to a 63.6 percent share of all Miele employees (as of 30 June 2016). The employment relationship between Miele and the temporary agency workers employed at Miele's German locations is governed by the collective wage agreements concluded by the agencies themselves.

Works councils do not only look after the interests of employees in Germany, but also of those at the Czech plant, as well as in some of the sales subsidiaries, such as in France, Italy, the Netherlands and Spain. At the Chinese plant in Dongguan, for example, employees have enjoyed representation since 2009 – something which is not mandatory under local law. These workers' representatives sit down with the HR department on a monthly basis to discuss suggestions and deal with potential areas of conflict. As a result, a new working hours regulation was passed, for example, which has applied since September 2016 and which is intended to contribute to a better work-life balance for the workforce. The daily working hours were redistributed in such a way that employees now start the weekend earlier on a Friday and can therefore avoid rush hour. The interests of employees at the Uničov plant in the Czech Republic are represented not only by the KOVO union, but also by internal workers' representatives at regular meetings with plant management. At smaller sales subsidiaries, such as those in Poland or Ireland, the dialogue between employees and management is a direct and ongoing process without any formal structure.

## SOCIAL AND ETHICAL STANDARDS: SA8000 CERTIFICATION FOR THE CHINESE PLANT

[GRI G4-HR1, G4-HR2, G4-HR4, G4-HR5, G4-HR9] Miele treats its employees with respect and deals with them in a responsible manner. This pledge has been underlined since 2004 by the obligation to meet the internationally recognised social accountability standard SA8000. The standard includes the requirement to observe decent working conditions, to guarantee



freedom of association and the prohibition of child labour and discrimination. An external service provider checks compliance with the standard every six months in a surveillance audit. In addition, recertification is undertaken once every three years.

All European locations are certified according to SA8000. Recertification is due in 2017. At the Chinese plant in Dongguan, the certification audit for SA8000 took place at the end of 2016.

It goes without saying that Miele respects human rights in all its business activities. Miele conveys this pledge to employees as part of the company philosophy right from the beginning of their employment. In the reporting period, 168 managers and employees from HR were trained with an online learning programme on the German General Act on Equal Treatment. Since the programme was introduced, a total of 1,302 employees have completed the qualification. Software-based training is also held on the company's code of conduct. To date, 2,706 people have been trained worldwide.

Miele also requires that its suppliers comply with social criteria. In the reporting period, 28 employees were trained on the revision of the SA8000 as well as on conducting SA8000 issue audits for suppliers.

### **COMPLAINTS OFFICE: TRANSPARENT PROCESS, CONFIDENTIAL TREATMENT**

[GRI G4-LA16, G4-HR3] Every employee in Germany has the right to turn to a complaints office, which offers help as the first point of call in the case of suspected discrimination. In accordance with the General Act on Equal Treatment, the works council is involved in handling and evaluating incoming complaints. Miele has set up dedicated complaints offices, each of which is run by one man and one woman, at every company location in Germany. All complaints are confidential. The complaints office works closely with the aggrieved person to review the circumstances surrounding the complaint. Wherever possible, the results of the review are disclosed to the person within one month.

A total of four complaints were submitted to the complaints offices in the reporting period. In 2014/15, there were two complaints relating to the General Act on Equal Treatment (age, origin); in 2015/16, there were two complaints due to sexual harassment. In every case, remedial measures were taken and the employees were offered further support. Similar systems are in place at the international sites. No data is available for these locations at the present time.



A pleasant working environment in which employees feel valued helps to ensure that staff turnover at Miele has always remained very low.

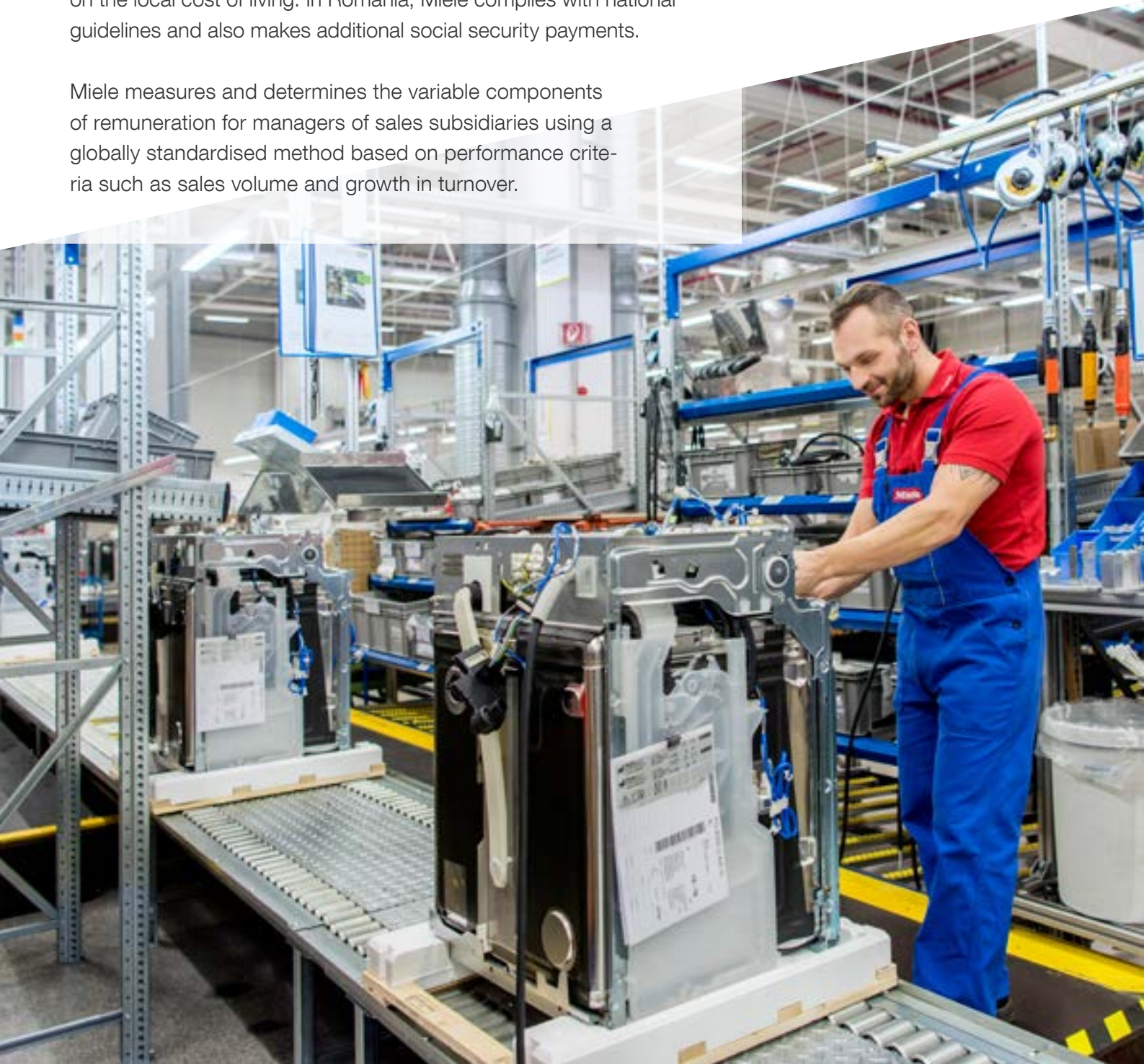
## REMUNERATION: A FAIR INCOME – NATURALLY

[GRI G4-EC5, G4-LA13] Miele ensures that all employees are paid a fair income which is based on collective and corporate agreements. It also includes a series of voluntary welfare payments, such as the Miele Family Service, life coaching and addiction counselling, grants, anniversary bonuses, the Open Training Programme and fitness classes. The company is sticking to its pledge to be an attractive employer, even – and especially – in tough economic times.

It was several years ago that Miele commissioned a study of the minimum wage and the local cost of living at its Dongguan site in China. As a result, employee pay was raised above the minimum wage to an appropriate living wage, which, unlike the former, covers the cost of living. Employee pay in the Czech Republic is also based on the local cost of living. In Romania, Miele complies with national guidelines and also makes additional social security payments.

Miele measures and determines the variable components of remuneration for managers of sales subsidiaries using a globally standardised method based on performance criteria such as sales volume and growth in turnover.

Employees receive appropriate remuneration and a range of welfare payments.



## WELFARE PAYMENTS: FROM COMPANY PENSION SCHEMES TO SUBSIDISED INSURANCE

[GRI G4-EC3, G4-LA2] Since 1929, Miele has offered its employees a company pension scheme. This supplements the statutory pension scheme and private insurance. Miele supports its employees in Germany with different pension plans:

- The traditional direct-commitment employer contribution plan (“Betriebsrente”), which grants employees an entitlement to one pension unit for each year of employment with the company for workers aged 25 and up
- Contributions to private pension schemes (“altersvorsorgewirksame Leistungen”)
- Deferred compensation (via the “MetallRente”<sup>1)</sup> private pension scheme only)

In Germany, based on the company agreement and collective wage agreement, employees can place up to four percent of the contribution assessment ceiling for pension insurance (Western states) in a tax-privileged pension insurance fund.

As of July 2016, the pension scheme was replaced by a new one for employees who started at the company after 30 June 2016. All other employees are not affected by any changes. With the involvement of the Group works council, the objective is to develop a new pension plan for future employees that will remain both financially attractive and in line with the market.

In addition, individual sales subsidiaries offer local pension schemes. Among the international production sites, these options are only available at the plant in Bürmoos (Austria).

Miele grants its employees in Germany financial assistance that goes above and beyond statutory requirements, for example, in the form of allowances for health treatments and dental prostheses. Payments are also made in the event of a birth, marriage, or death, and for milestone birthdays and work anniversaries. In addition to this, the company offers voluntary welfare payments and individually negotiated benefits such as meal subsidies and coverage of travel expenses. The sales subsidiaries provide their employees with the option of discounted supplemental insurance policies, such as denture insurance. In some cases, this also includes pension, health, invalidity and survivors insurance.



1929 was the year in which company retirement benefits were introduced.



Both in Germany and internationally, the company contribution is granted regardless of the employees' working agreement (full or part time, temporary or permanent contract).

### **TEMPORARY EMPLOYEES: INTEGRATION INTO THE COMPANY**

In the business year 2014/15, the proportion of temporary employees in Germany was 4.4 percent, while in the business year 2015/16, this figure was at 4.8 percent. In a company-wide agreement signed in 2007, Miele committed to only work with recruitment agencies that have concluded a collective wage agreement. This regulates remuneration and the industry supplement, which is between 15 and 30 percent for the metal industry. In the company-wide agreement, Miele also determined that remuneration is being increased by a further 6 to 8 percent (scaled according to duration of the employment period). In the reporting period, Miele employed a total of 217 new temporary workers in Germany.

### **AWARDS: RECOGNITION FOR HR POLICIES**

- Universum Top 100 – Germany's most popular employers – Engineering Edition 2015 & 2016
- Karriere.de – University work experience – Fair Company 2015 & 2016
- Trendence Graduate Barometer 2016 – Germany's top 100 employers – Engineering Edition 2015 & 2016
- Austrian Federal Ministry of Labour, Social Affairs and Consumer Protection – seal of approval for health promotion in the workplace for 2016 to 2018 (Bürmoos plant in Austria)
- Employer's association – Sodexo regional employer of the year 2015 and 2016 for up to 5,000 employees for the region of Olomouc (Uničov plant in the Czech Republic)

The employee retention level is high. Many employees spend almost their entire working lives at Miele.





# Vocational training and development

## Attracting and promoting talent

Working at Miele is a fascinating and diverse experience. All areas of the company require skilled professionals – from experienced specialists to young talent. Miele would like to attract talented professionals to the company and identify and encourage their abilities and aptitudes. One of our important objectives is to be an attractive employer for young talent. This is why the company offers diverse entry-level and promotional opportunities.

All Miele employees benefit from a broad range of training and qualification opportunities. Against a backdrop of an aging population, the company is increasingly focused on measures which help to ensure long-term performance and employability. In the business year 2015/16, the company invested approximately 17.6 million euros in vocational training and further development for its employees.

### **ORGANISATION OF VOCATIONAL TRAINING AND FURTHER DEVELOPMENT: INTERNATIONAL FOCUS**

Numerous training programmes make a valuable contribution to ensuring the future of the company. The responsibility for this lies with the training division. Miele is involved in various different initiatives focused on getting potential young talent interested in the company at an early stage. The new internationally oriented trainee programme is one way in which Miele puts its international focus into practice.

This part-time further training is the responsibility of the HR development division. This has a special strategic significance for Miele: Miele can only fulfil its remit to be a future technology leader in the industry if the development of its employees is promoted in a targeted manner.



17.6

million euros were invested by Miele in vocational training and development during 2015/16.

# Miele

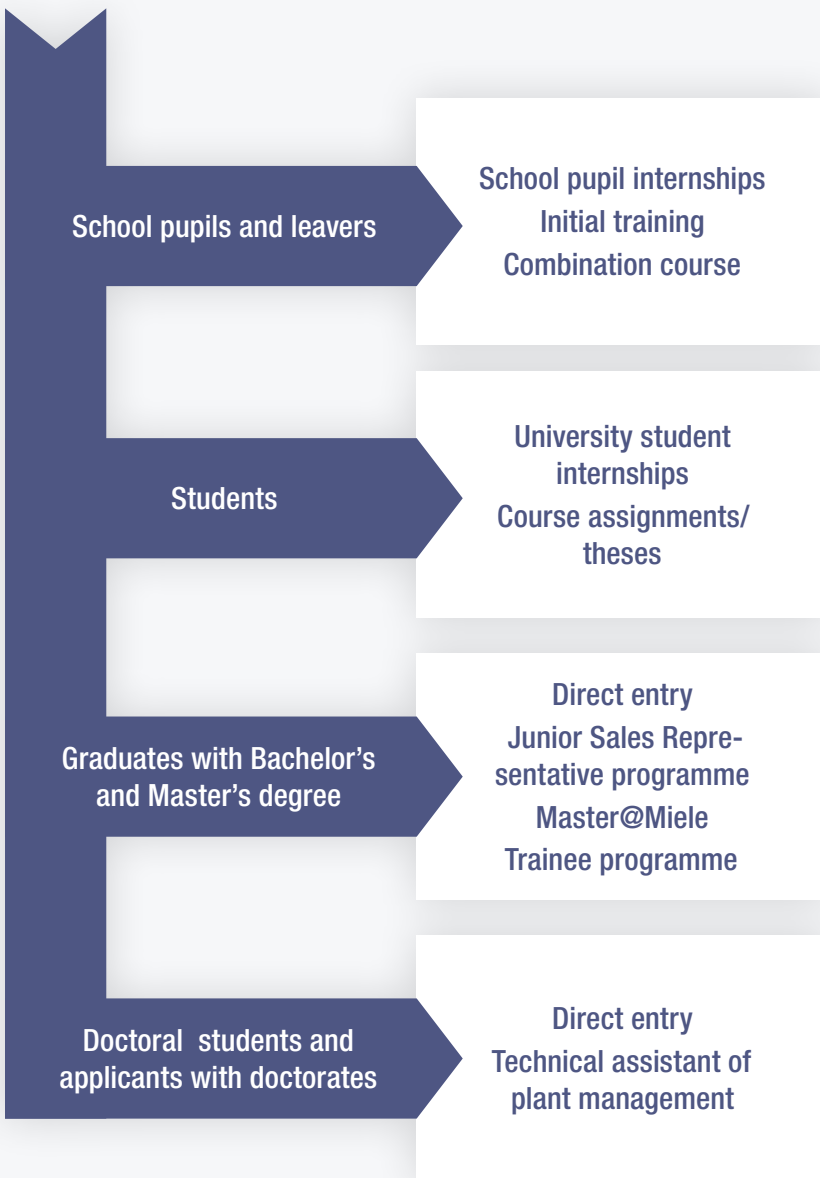
## Ausbildung



The tasks of this division cover six fields of activity:

- Succession management = systematic succession plans and goal-oriented development of managers and high-potential employees using consistent methods around the world
- Learning management = initiatives for further training
- Attraction management = positioning the company as an attractive employer
- Potential management = identification and promotion of internal talent
- Retention management = measures to ensure that employees stay with the company
- Organisational management = working with employees through structural changes

Apprentices like those here in Oelde receive training from Miele which is recognised for its high quality and diversity.



Miele is constantly reviewing the HR development methods in the six fields of activity and adapting them as necessary. HR development methods are agreed upon in specific meetings between the head of HR development and the Executive Board. The budget for further training initiatives and key qualifications is determined in the meetings.

HR development at Miele has an international focus. Succession management, for example, follows a globally uniform, IT-based process. This allows an overall view of all management positions and makes it possible to plan the best successors for certain people or positions early on. Miele also puts the company's international focus

into practice with relevant further training, such as in foreign languages. Key development programmes for talented professionals and to provide training for managers are also being expanded internationally.

### **ENTRY-LEVEL OPPORTUNITIES FOR SCHOOL AND UNIVERSITY GRADUATES: DIVERSE OPPORTUNITIES FOR YOUNG TALENT**

Miele offers talented young professionals numerous opportunities for joining the company. The options range from trial internships for school pupils right up to programmes for PhD students. Using various methods, Miele would like to reach potential young talent with information about the company's attractive professional fields even before they enter a vocational training programme or begin their studies. For this reason, Miele continues to collaborate with schools and universities in the vicinity of the locations.

### **APPRENTICESHIPS: MORE INTERNATIONAL OPPORTUNITIES FOR APPRENTICES**

Miele provides its apprentices with a systematic and well-rounded basic education in 38 vocational trades. The number of apprenticeships at Miele is determined according to requirements; following completion of the apprenticeship, each new starter is offered an employment contract for a minimum of one year or even a permanent contract.

Gathering international experience is playing an ever greater role in training at Miele. This is why more assignments abroad are to be made available to apprentices. In the reporting period, seven technical apprentices had the opportunity to gain experience in the sales subsidiaries in Ireland and Italy, as well as in the Bürmoos plant (Austria) for the first time.



# 472

apprentices

# 4.6 %

of the workforce  
is made up of  
apprentices 2015/16.

### **Apprenticeship Open Days**

Once a year, Miele organises its "Apprenticeship Open Days" at the Gütersloh, Bielefeld and Oelde plants. In June 2016, Miele welcomed around 500 visitors in Gütersloh alone – school pupils, parents and teachers. They learned about commercial and technical jobs, as well as dual study options. Moreover, pupils were able to gather their first practical experience and construct an electronic circuit or weld a tool out of scrap metal, for example. The information day was rounded off with job application training.



The high quality of training at Miele is regularly confirmed externally. In the business years 2014/15 and 2015/16, 37 apprentices were honoured with the title of “Kammerbeste” (best in the chamber) by the German Chambers of Commerce and Industry. A young electrical systems installer was even awarded the title of “Landesbester” (best in the country). Miele apprentices regularly take part successfully in national foreign language competitions in Germany and therefore prove that they can communicate successfully in an international world of work. The Miele apprentices were also among the best in 2015 and were invited to the “Tag der Talente 2015” (a day celebrating young talent) by the German Federal Ministry of Education and Research in Berlin.

As part of the “Collective Labour Agreement for the Promotion of Apprenticeship Proficiency”, Miele offers internships to disadvantaged young people or those with lower academic performance. The objective is to open up a path for them into vocational training. Since 2009, nine young people have successfully been prepared for an apprenticeship at Miele in this way. In the business year 2015/16, two young men successfully completed this internship and have been training at Miele as an electrical systems installer and industrial mechanic respectively since September 2015.

#### **DUAL STUDY PROGRAMMES: 50 SUCCESSFUL GRADUATES**

The dual study programme consists of periods of practical work and theoretical study at a (technical) university. Since 1995, Miele has offered the opportunity to complete various commercial and technical dual study programmes in fields such as mechanical engineering, electrical engineering, or business informatics.

Mechanical engineering and electrical engineering are two areas in which demand for young, well-qualified talent is particularly high.



In the reporting period, 50 graduates successfully completed the dual study programme and the initial training in parallel.

## UNIVERSITY GRADUATES: A DIVERSE ARRAY OF PROGRAMMES

Miele offers attractive entry-level opportunities to academic experts and managers.

Along with direct entry, there are two further entry-level programmes for **graduates with bachelor's degrees**:

- **Master@Miele programme:** the objective here is to complete a part-time master's degree programme, which is usually in a technical subject. The advantage of this option is that students are financially secure during their course of study whilst continuing to gain practical experience at Miele. In the reporting period, twelve bachelor's-level graduates began the two-year Master@Miele programme.
- **Junior Sales Representative Programme:** the programme for entry into sales at Miele is also open to recruits who have not followed a traditional career path. Within a year, they are trained to become junior sales representatives. Participants become familiar with areas of the business including field service and office work, as well as the various central and marketing roles. In 2016, two graduates took part in the Junior Sales Representative Programme.

Miele offers a trainee programme for **graduates with master's degrees**. In 2016, an 18-month international programme began for the first time which aims at developing young, international managers from an early stage. It takes a "4-3-2-1 approach": by working in four different company divisions, the trainees become familiar with at least three countries and two aspects of the company (central/local). The international trainee programme supplements the one-year option which has been offered until now. Four trainees began at Miele in the reporting period.

By the business year 2015/16, a total of 125 graduates with diplomas or master's degrees had completed a trainee programme at Miele. Miele usually accepts trainees once they have successfully completed their studies. Of the 125 former trainees, 74 are still employed by the company and 39 of these now hold managerial positions.



# 125

participants in the  
trainee programme

For **applicants with a doctorate** and a degree in a technical subject, Miele offers direct entry to technical assistance positions within plant management or the Executive Board. Since the programme began in 2007, 18 assistants have used this entry opportunity to make a start in their individual careers. One of them is currently managing one of Miele's German plants.

Miele offers similar entry programmes at the international sites. To date, 16 successful applicants have taken part in local programmes, including programmes at the plant in Braşov as well as at the sales subsidiaries in the Netherlands and Switzerland. The number of positions advertised annually for the entry-level programmes and traineeships is determined according to requirements.

### **UNIVERSITY PROJECTS: INTERNSHIPS, SCHOLARSHIPS AND COOPERATION**

In the reporting period, around 250 students from various different faculties completed an internship at Miele or wrote their final thesis with us. In the business years 2014/15 and 2015/16, Miele also offered financial support to 26 outstanding students from mechanical engineering, electrical engineering, engineering management and business informatics who applied for the "[Deutschlandstipendium](#)" scholarship. In addition to monetary support, this scholarship also includes the opportunity to gain practical and international experience at Miele and other companies during the students' programme of study.

Miele stays in close contact with selected technical and business-oriented universities around the world with the aim of contacting future applicants at an early stage and in a targeted manner. For example, practical projects are assigned to student groups, application and assessment-centre training is organised, and excursions are offered. In the reporting period, Miele was represented once more at numerous trade fairs for students, graduates and young professionals.

Miele has also increased its university contacts at the production sites located outside of Germany. Local activities are independently directed by the international sites themselves. For example, the plant in Braşov works closely with Romanian universities and also offers internships. In October 2015, Miele organised the "Symposium for Design and Technology in Electronic Packaging" in Braşov in collaboration with two universities. This involved discussing strategic partnerships between universities and companies. The Chinese plant in Dongguan awards four scholarships every year to students from the Dongguan Technology College who stand out as a result of their outstanding

The outstanding achievements of Miele apprentices often lead them to attract attention in competitions.





<sup>1)</sup> LMS: Learning Management System

performance. Priority is given to students from less privileged backgrounds who perform at the same level. The Uničov plant has continued its intensive collaboration with three universities. For example, the Czech plant offers students internships, holiday jobs and the opportunity to complete their final theses.

### **FURTHER TRAINING: A BROAD RANGE OF TOPICS, TARGETED OPPORTUNITIES**

[GRI G4-LA9, G4-LA10] In order to ensure that the company is fit for the future, it is of central importance to us to continually promote the development of our employees. HR development and further training at Miele covers a broad range of topics and is also extremely targeted. This means that Miele does not only take the specific requirements of tasks into account, but also considers employees' individual capabilities and aptitudes.





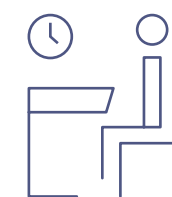
The key points of the HR development strategy at Miele include:

- Systematic further training and advancement of skilled personnel and managers from within the company
- Continuous development and expansion of an international talent management process
- Goal-oriented HR development measures for specific target groups
- Guaranteed internal knowledge management and employee networking
- Standardisation of learning processes across all locations

Internal development is varied and oriented to the type of activities carried out.

In the business year 2015/16, each employee in Germany received on average **seven hours** of training. The average number of hours spent on vocational training and development at the international production sites is higher than the German figure. However, a direct comparison is not possible due to the different calculation methods applied.

Further training at Miele is a standardised process and is supported by the “Learning Management System” (LMS) software solution. Opportunities for further training are planned and documented via the LMS. Managers are able to find out the progress that employees are making with their further training. In the reporting period, Miele has introduced learning plans into the LMS. This provides employees with a compact overview of all the compulsory qualifications that are planned for them within a pre-defined time period. This also simplifies the internal administration related to further training. For the business year 2016/17, Miele is planning to carry out a standardised online evaluation of further training opportunities in the LMS.



**7** hours

were spent on average by Miele employees on development during 2015/16.

## **INTERNAL AND EXTERNAL FURTHER TRAINING: SUPPORT DRIVEN BY REQUIREMENTS**

[GRI G4-LA10] Within the scope of its internal further training programmes, Miele provides qualification opportunities for various fields such as management, project management, or IT applications. Furthermore, employees may attend external training events in their relevant special fields. In the business year 2015/16, around 1.02 million euros were spent on external training. Almost 68 percent of all demand-driven training was completed internally.

Miele fully supports any employees who wish to take part in part-time further training on their own initiative. The company provides financial support for accredited, part-time further training courses or degree programmes. In the business years 2014/2015 and 2015/2016, 84 employees took advantage of this opportunity.

## **THE OPEN TRAINING PROGRAMME: A WIDE-RANGING PROGRAMME WITH VARYING FOCAL POINTS**

[GRI G4-LA10] The Open Training Programme is another important pillar of the further training opportunities. Unlike the other training options provided, these sessions are held during the employees' free time. Each Open Training Programme has a focal point which relates to daily life in the company. In the business year 2015/16,

### **The Competitiveness Symposium celebrates its tenth anniversary**

The Competitiveness Symposium has established itself as a successful network for sharing information across plants and borders. Since 2006, around 250 specialists and managers from development/construction, production, design, purchasing and controlling have met each year in Gütersloh. The symposium aims to act as a platform for sharing information and to enable specialists from different Miele plants to network. Renowned speakers from business and science give all in attendance a chance to see the "bigger picture". The symposium celebrated its tenth anniversary in summer 2015. The anniversary event focused on the topic of "Leadership in change" and its significance for Miele. In 2016, the motto of the symposium was "Wachstum gestalten – Shaping growth".

the motto was “Stay active for your health”. The programme was closely related to the activities of corporate health management. From active sporting activities, nutritional tips, self-management, or fitness – Miele employees were able to choose from almost 50 different opportunities. In the business year 2014/15, the focus was on “lean office” and “internationality”. Miele covers the cost for all of these training sessions. This opportunity was very well received: in the business year 2015/16, 2,558 employees took part in Gütersloh alone, and this figure was 2,615 in the business year 2014/15.

## **MANAGEMENT TRAINING: ESTABLISHING THE INTERNATIONAL MIELE BUSINESS ACADEMY**

Filling at least three of the four available managerial positions from within the company is one of Miele’s stated goals. Particular attention is therefore paid to promoting the development of managers. Employees who take on a managerial position for the first time are prepared extensively for their new role with the help of a binding qualification programme. Further opportunities for learning and gaining experience are available to experienced managers and focus on transferring practical experience and feedback. All qualifications are conceived specific to the target group and established with the participants and real-life practice in mind. Modern forms of learning, such as e-learning, are used frequently. From the business year 2016/17, seminars on “Healthy management” will be added to the already wide range of topics.

In the reporting period, an important focal point was on improving the development of international managers within the scope of the Miele Business Academy. Participants come from all corners of the world of Miele; the seminar language is English. Five different training sessions were conceived for different management levels and implemented in the business years 2014/15 and 2015/16 as a pilot project. A total of 83 participants took part in nine training sessions (this is equivalent to 665 participant days).

From 2012, the level of team and shift managers was introduced into production. These managers were trained on a further training programme that was specially designed for that purpose. In the reporting period, 167 participants completed the qualification at 15 events.

As part of the Miele Mentoring Programme, experienced employees are matched with junior managers to provide them with advice. These mentors establish contacts, assist with project development and give feedback – thereby helping to provide

career guidance. A survey carried out in 2015 revealed that participants are extremely satisfied with the programme and almost 100 percent would recommend it. Since 2014, twelve international mentees have taken part in the programme.

### **PROJECT MANAGERS: CERTIFIED FURTHER TRAINING**

Miele's careers in project management offer highly qualified experts and motivated project leaders an alternative option for personal development. Project managers complete a multi-stage qualification which is based on the content and specifications of the International Project Management Association (IPMA). Successful completion results in an internationally recognised certificate. The programme represents an important step towards a standardised, efficient and promising approach to managing national and international projects at Miele. The pool of certified project managers comprised 120 people in the business years 2015/16 – 13 percent of which were women.

All employees have opportunities for continuing development in their chosen field of expertise.





# Occupational health and safety

A focus on prevention

A healthy workforce is the foundation of long-term success for any company. Miele would like to contribute to promoting and sustaining the physical and mental performance of its employees. A well-conceived, prevention-based health management system and safe workstations play a big part in satisfying this requirement. These jobs are not only intended to be increasingly age-appropriate and therefore adapted to the different capabilities of older employees, but they should also respect the aging process. This means that Miele takes its employees' entire working life into account and suitable programmes are developed for each phase of life. At Miele, the areas of occupational health and safety are regulated by the company's management system. This ensures a continuous improvement process and helps with the continual analysis of accident data, for example.

In the "active break" held in the Oelde plant, you have the opportunity of doing special exercises for relaxing muscles and strengthening your back.



## MANAGEMENT: RISK ANALYSIS EXTENDED, WORKFLOWS ADAPTED

[GRI G4-LA6, G4-LA7] Some of the jobs at Miele carry health risks or are particularly hazardous, such as those involved in the surface treatment of materials and in metalworking. Miele takes numerous measures in order to rule out these risks or at least to minimise them: the spectrum ranges from protective clothing and accident-prevention training sessions right up to the legally mandated job hazard and strain assessments in Germany. This hazard analysis was extended in the reporting period to include a psychological strain assessment. With 9.5 workplace accidents per every one million working hours (in the business year 2015/16), this is well below the industry average of 14.5 (2015) as reported by German professional associations.

Age-appropriateness is an increasingly important factor in workstation design for Miele. Currently, roughly 38 percent of all employees in Germany are more than 50 years old, with an average age of 45. The workflows have been redesigned in some plants. For example, employees at these sites no longer work on production lines but at U-shaped islands instead. This means that one employee is responsible for assembling and inspecting the entire appliance. Furthermore, Miele is implementing an ergonomic workstation design using methods derived from occupational safety. Regardless of age, employees were predominantly very positive about the changes in ergonomics and workplace design. In the Romanian city of Braşov, employees are encouraged to suggest ideas for improvements. Some suggestions, such as workstation optimisation, have already been put into practice. Improvements to the working conditions in the materials warehouse, the fitting of lifting devices and further enhancements are currently in progress.

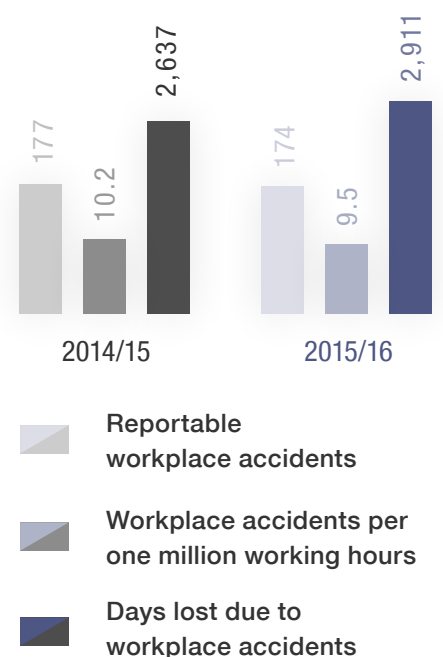
## ORGANISATION: CERTIFICATION ENSURES HIGH STANDARDS

[GRI G4-LA5] As an employer, Miele is responsible for its employees' safety. To ensure that this is a reality, all Miele plants around the world are certified in accordance with the internationally recognised OHSAS 18001 occupational health and safety management system. The German locations were recertified at the end of 2014. The next recertification for the German and international locations is scheduled for the end of 2017; in March 2017, Dongguan was recertified. 22 dedicated specialists are employed solely for the purpose of ensuring occupational safety in the plants (in the business year 2015/16). In addition, we also have 219 safety officers who perform these tasks alongside their



In some areas, such as here in the foundry, safety and protective clothing is a matter of course.

## Workplace accidents



regular company duties. These include providing advice during the planning and realisation of plant systems or when workstations are being designed. The safety officers receive regular training on various safety topics ranging from hazardous substances to noise. Furthermore, regular instruction takes place at all locations. Extensive checklists are available for daily work activities.

Regular safety meetings are held at all plants and all departments are frequently inspected. This ensures that necessary measures are taken diligently. Approximately 20 to 25 inspections per year are conducted in Gütersloh alone. There, all safety officers complete four training sessions each year. With the aim of increasing the safety awareness of all employees in the workplace and to regularly update knowledge, around 900 external training courses and specialised instruction sessions are held in almost all departments each year.

In addition, the [Work Safety Committee](#) at each plant meets four times a year. Approximately four percent of the entire company workforce at Miele is directly involved with this committee. In Germany, these bodies include not only the occupational safety department, but also the plant and functional management, the company doctor, the works council and safety officers as required by law. These responsibilities are handled in a similar fashion at the international plants. In Germany, the Works Council Constitution Act governs how the works councils of the plants should be involved in matters of workplace health and safety. On the international front, there are also corresponding regulations that govern employee involvement and that of their representatives.

#### **CORPORATE HEALTH MANAGEMENT: EMPLOYEE SURVEY DETERMINES FOCAL POINTS**

Corporate health management (BGM) has been in development at the German locations since the business year 2012/13 and is coordinated by the central HR department in Gütersloh. Since then, organisational structures for BGM have been created and projects have begun at all German Miele plants.

In order to find out which are the most important topics for employees, Miele carried out the first employee survey on BGM in April 2015 in Gütersloh. 4,511 employees were asked a total of 110 questions, divided into six categories, on topics including individual job situations, cooperation within the team and health and well-being. The response rate was 82.4 percent. On the whole, employees evaluated their health as relatively good, although a



4 %

of the total workforce is involved in the occupational safety works council committee.





In some areas, such as here in the new spare-parts warehouse, lifting aids are installed which are used for moving heavy packages easily.

need for action was also identified. Focus groups including the workforce then worked on specific topics and developed measures.

The first results are already evident: Miele has set up fitness rooms in Bielefeld, Euskirchen, Gütersloh, Oelde and Warendorf. Shift workers have received a new information brochure in which they can learn about specific health topics. Campaigns on healthy eating have been run in the canteens. Furthermore, Miele is subsidising initial membership to a sports club. A BGM newsletter published every two months informs employees in Gütersloh of the current health topics and projects.

The BGM employee surveys have also been conducted at the other German locations in the meantime. The measures that were derived from this are currently being implemented. The next survey of this kind, albeit in a slightly modified form, is planned at all German locations in 2018.



The BGM is constantly being developed. From 2016 to 2018, Miele will focus on certain points, which include the following:

- Further training on “healthy management”, which is aimed at all managers. The first events have already been planned.
- Extending the range of fitness opportunities for employees working in production.

The Company Integration Management system (BEM), which is closely associated with BGM, has been in place at all German sites (plants, Sales and Service Centres) since 2013. It is intended to make it easier for employees who have suffered from lengthy periods of illness to return to their jobs.

### **LIFE COACHING AND ADDICTION COUNSELLING: EXTENDED SERVICE IN GÜTERSLOH**

Since the beginning of 2014, employees at the German Miele plants and – until their closure at the end of 2015 – the Sales and Service Centres are able to turn to trained contacts for life coaching and addiction counselling. In addition, a 24-hour counselling hotline is also available through a service provider to handle crisis situations. In 2016, the service in Gütersloh became more comprehensive: the personal advice service provided by a life coach and addiction counsellor was extended to four days a week. Furthermore, additional rooms are now available for this service.

Since the service was started in spring 2014, 279 employees have had a personal meeting with the counsellor at Gütersloh. It goes without saying that these were all strictly confidential. Topics frequently addressed primarily include incidents in the workplace, as well as psychological or familial problems.

### **MEDICAL CARE: FIRST AID IN EMERGENCIES AND ACUTE CASES**

A plant medical service has been in place since 1973 in Gütersloh, Miele’s largest site. Along with the legal duties which result from the Occupational Safety Act, the plant medical service also takes care of first aid in the event of emergencies and acute illnesses. They work together with the Miele company insurance provider BKK to provide and actively promote the annual flu vaccine. At all other sites, insurance-accredited physicians and medical personnel ensure that employees receive proper care.

## AZUBI FIT: SPECIAL PROGRAMME FOR APPRENTICES

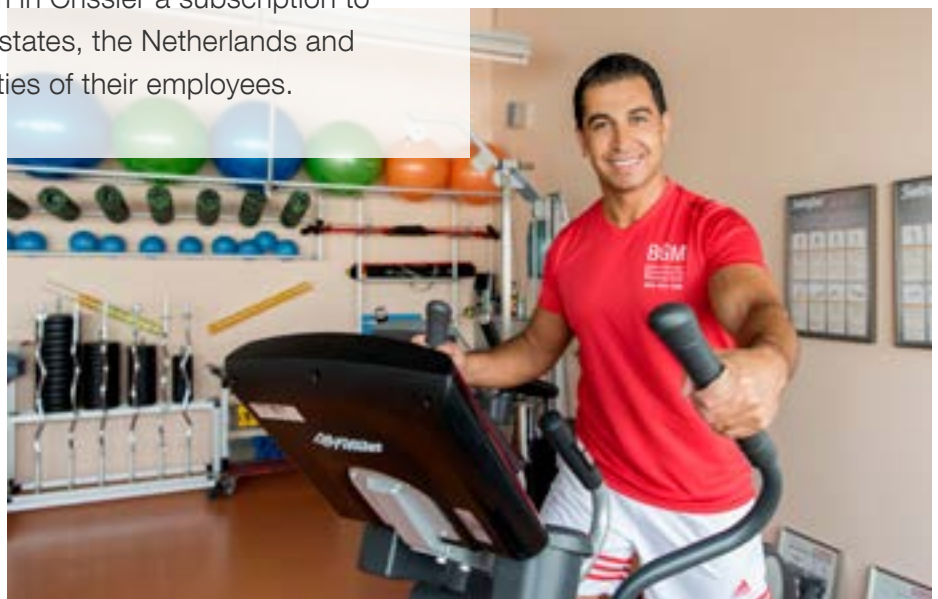
Promoting a healthy lifestyle is also an integral part of training at Miele. Every apprentice attends five mandatory events as part of the “Azubi fit” (“Fit Apprentices”) programme organised by the company insurance provider. These include an introduction to occupational health and a seminar on maintaining a healthy back. Technical apprentices also attend training sessions offered by professional associations.

## INTERNATIONAL LOCATIONS: A DIVERSE RANGE OF OPPORTUNITIES

The international plant sites also pursue a health management strategy that is focused on prevention. The Austrian plant in Bürmoos has been awarded the “Betriebliche Gesundheitsförderung” seal of approval for excellent promotion of health in the workplace for the period 2016 to 2018. Under the project title “Immer gesünder mit Miele” (“Getting healthier with Miele”), the plant established an extensive programme for promoting health in the workplace between 2013 and 2015. 127 activities and initiatives were available and most of these have been continued. This includes Nordic walking or cycling, courses for maintaining a healthy back and a free selection of fruit. Employees were happy to take up such initiatives – the participation rate was 75 percent during the introductory period. Consequently, project management resolved to introduce a corporate health management programme and implemented this in the reporting period. Corporate health management at the Austrian plant is now regularly evaluated – this includes conducting employee surveys every three years.

The sales subsidiaries employ a wide range of measures to promote employee health. For example, the Swiss subsidiary offers its workforce at the showroom in Crissier a subscription to a fitness studio. Sweden, the Baltic states, the Netherlands and China also support the sports activities of their employees.

Employees have access to active rooms in the plants. What's more, qualified trainers also offer classes.



# Diversity and equal opportunity

## Enrichment and the competitive factor

All Miele employees and applicants are valued and supported in equal measure. Everyone should have equal opportunities, regardless of their nationality, skin colour, gender, religion, sexual orientation, or physical disabilities. This is not just a requirement of law, integrity and fairness. Internationality and diversity in the workforce are enriching both personally and professionally. And it is precisely in a global company such as Miele that this diversity is also an important competitive factor to say the least.

### MANAGEMENT: PROMOTING DIVERSITY, PREVENTING DISCRIMINATION

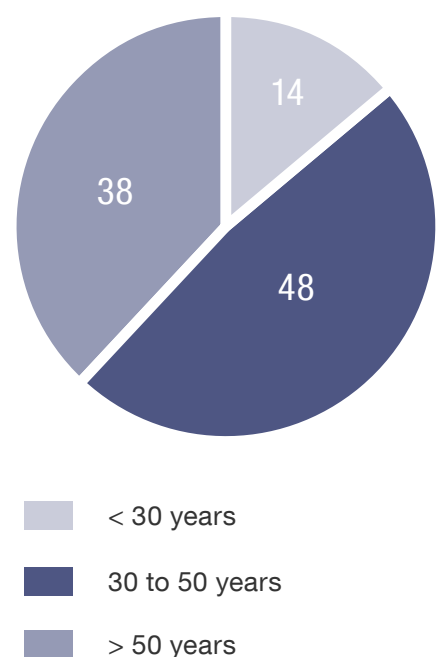
[GRI G4-LA12] Miele would like to raise awareness throughout the company for the potential of diverse life and work experiences, perspectives and values. Miele's corporate philosophy, its Code of Conduct and the Company-Wide Collective Agreement on the German General Act on Equal Treatment represent company-wide guidelines for promoting diversity and equality of opportunity as well as ensuring an effective anti-discrimination policy. The company demonstrated its adherence to this idea by obtaining SA8000 certification and signing the [Diversity Charter](#) in 2012.

Miele takes action against any form of discrimination. If a suspected case arises then there is the option to turn to the [complaints office](#).

In the business year 2015/16, 5.3 percent (5.1 percent in 2014/15) of Miele employees in Germany were citizens of a country other than Germany. Citizens of Turkey, Greece, Italy and Great Britain accounted for the largest share. At the Austrian plant, the share of employees of a nationality other than Austrian amounted to 21 percent. At all other plant sites, this figure was below the average value for Germany. Employees with disabilities made up 6 percent of all Miele workers in Germany (in the business years 2014/15 and 2015/16). By comparison, fewer people with disabilities have worked at the international plants up until now.

### Proportion of employees according to age group

in Germany 2015/16  
as a percentage





Each year, Miele also takes part in the German Diversity Day. In addition, all managers at Miele complete qualifications on the topic of diversity during a one-day comprehensive programme. New managers undergo a two-day training course known as “Diversity – Vielfalt führen”, in which they learn how to manage a diverse workforce.

### **ADVANCING WOMEN: THE “DIVERSITY: FOCUS ON WOMEN” PROJECT CONTINUES**

The advancement of women has been anchored as a strategic objective in Miele’s company strategy since 2016. Therefore, diversity measures focus particularly on projects aimed at advancing women. For several years now, the company has striven to further advance women’s careers in various projects.

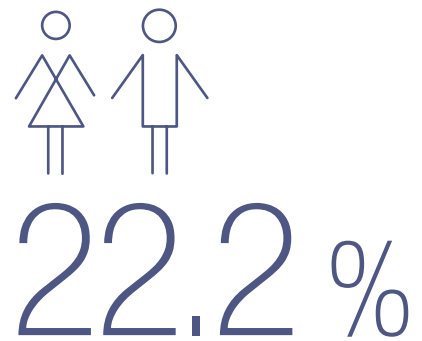
In the reporting period, the Germany-wide “Diversity: Focus on Women” project was among the main activities in the area of diversity and equal opportunity. It began in 2013 and ran for

As is the case here at the Bielefeld plant, teams from various countries around the world work together successfully regardless of their background.



three years. In 2014 and for the second time since 2012, over 100 female specialists and managers were asked to describe their attitudes and expectations on the topics of work and career in order to guide the project. They evaluated the existing options and measures as very good and confirmed that they have seen a positive development. At the same time, the respondents also referred to the remaining potential for the advancement of women, such as with respect to flexibility in working hours.

Miele has initiated additional measures, due in part to the survey. These include a regular array of events on the topic of diversity as part of the Open Training Programme and the promotion of Miele-internal women's networks.



of the total Miele workforce in 2015/16 were women.

### **Cross-mentoring programme**

The targeted professional development of female employees to prepare them for management roles has been supported by a cross-mentoring programme for the Ostwestfalen-Lippe region in Germany, in which Miele has taken part since 2007. The mentor – an experienced female manager – and her mentee, each coming from different companies, form a tandem team. They meet with one another once a month over the course of a year to share their reflections on current work situations and answer questions about career management. In the business years 2014/15 and 2015/16, two mentees and two mentors from Miele participated in the programme.

### **Miele's network for female engineers celebrates its anniversary**

Since 2007, Miele has actively supported internal exchange between highly qualified women in technology. With its 50<sup>th</sup> meeting in 2016, the "M.I.T." (Miele-Ingenieurinnen-Treff) network for female engineers celebrated a special anniversary. As well as looking back over recent years, the discussion with the Executive Director Dr Markus Miele was the focus of the event. Across Germany, the technical women's network at Miele consists of 75 women who have studied STEM subjects (science, technology, engineering and mathematics). They meet every two months to share experiences and to promote women's careers in technical fields. Networking events with women's networks from other companies are currently being planned.

## WOMEN IN MANAGEMENT: A TARGETED ADDRESS TO YOUNG TALENT

[GRI G4-LA12] In the business year 2014/2015, women made up 23.2 percent of the entire Miele workforce in Germany; this was 22.2 percent in the following year. In the business year 2015/16, women held 9.4 percent of the management positions<sup>1)</sup> in Germany. This proportion is 22 percent globally.

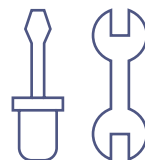
Increasing the number of women in management positions is a stated goal of Miele's HR policy. Female candidates displaying high potential are specifically supported and encouraged to set ambitious professional goals, as well as to keep pursuing these goals after having children, if they choose to do so. Miele helps to accommodate this with its family-friendly working conditions. The company is also a participant in the "Frauen-Karriere-Index" ("Women's Career Index"), a project funded by the German Federal Ministry of Family Affairs, Senior Citizens, Women and Youth with the aim of creating transparency on the issue of career advancement opportunities for women.

Miele does not consider it appropriate to define a fixed quota for increasing the proportion of women in managerial positions. To officially ensure equality of opportunity, Miele instead strives to recruit the most qualified candidate for each position that must be filled, regardless of gender.

## REMUNERATION: NO DIFFERENCES IN THE SALARIES RECEIVED BY WOMEN AND MEN

[GRI G4-LA13] Employees at the Miele sites in Germany are paid based on the valuation of their work tasks in accordance with the framework agreement on pay and collective wage agreement in the metalworking and electronics industries. Therefore, there are no differences in the remuneration of women and men at Miele. Merit pay is categorised and calculated strictly based on the specific task and actual performance and does not take gender or other irrelevant criteria into account. Measures to ensure that employee pay does not differ based on gender are also in place at the company's international production sites.

<sup>1)</sup> From the business year 2015/16, the term "manager" applies to all management levels globally. Previously, the term covered the Executive Board, company officials with power of attorney and authorised agents.



9 %

of the technical apprenticeship scheme are women.



50 %

of the commercial apprenticeship scheme are women (2015/16).

## EMPLOYMENT MODELS WITH FLEXIBLE WORKING HOURS: ENHANCING THE COMPATIBILITY OF WORK AND FAMILY LIFE

[GRI G4-LA3] To make it possible for its employees to maintain a harmonious work-life balance while ensuring that its production requirements are met, Miele offers employment models with flexible working hours. These models provide various part-time or full-time employment arrangements, as well as flexible shift systems and the option of semi-retirement for older employees. Solutions are aligned with the requirements of the company and – wherever possible – the needs of the individual and are equally available to both

Cutting the first sod for the new  
Miele daycare centre in Gütersloh  
with the architect and daycare centre  
staff, representatives of the city of  
Gütersloh, and Miele staff in July 2016



men and women. The plants and sales subsidiaries also promote employment models with flexible working hours. For example, Miele Belgium offers the option to work from home, and in the Austrian Bürmoos plant, over 20 employment models for working hours are currently in use, which are aligned with the needs of the individual.

In the business year 2014/15, 49.5 percent of employees in Germany had flexible work schedules; this figure rose to 55.1 percent in 2015/16. The share of employees in semi-retirement fell from 4.7 percent in the business year 2014/15 to 4.0 percent in 2015/16. During the entire reporting period, 388 Miele employees in Germany took parental leave, 215 of which were men (who, however, tended to take off shorter periods of time). On 30 June 2016, 100 employees continued to take parental leave; 87 women and 179 men continued to work at Miele following their parental leave; 22 employees left the company (16 women, 6 men).



It is often difficult, particularly for women, to juggle career and family priorities.

#### **CHILDCARE: MIELE NURSERY IN GÜTERSLOH UNDER CONSTRUCTION**

In cooperation with a daycare centre located close to the Gütersloh site, Miele offers its employees eleven childcare spots for children under the age of three, as well as emergency care. The company began constructing a Miele nursery for the Gütersloh site in summer 2016 in order to continue improving the compatibility of work and family life.

During the school summer holidays in 2014 and 2015, the Miele Family Service organised care for the employees' children on a farm in the neighbouring town of Harsewinkel. In summer 2015, the number of participants was increased and the duration of care was extended from one to two weeks.

#### **MIELE FAMILY SERVICE: PROVIDING SUPPORT IN VARIOUS CIRCUMSTANCES**

The Miele Family Service was introduced in 2012 as a comprehensive programme designed to help employees arrange care for their children and other family members in need of assistance. To provide this support, Miele has teamed up with the care provider pme Familienservice. These service offerings make it possible for employees to achieve a better balance between their work and personal lives.



# Social engagement

## Promoting regional appeal

**A**s one of the largest employers in the region, Miele is traditionally closely associated with Gütersloh and Ostwestfalen-Lippe – the region which it calls home. Shaped by their humanistic Christian world view, the company founders felt responsible for the well-being of their employees and families. A wide-ranging social engagement initiative has developed over the decades as a result of this care. Activities are largely focused on the regions surrounding the company sites. In this way, Miele helps to maintain a smooth-running, attractive environment. In 2016, as the Miele sustainability strategy was updated, social engagement was reinforced as a defined objective. [GRI G4-SO1, G4-SO2, G4-EC7]

### **APPROACH: ENGAGEMENT BY THE COMPANY AND THE MIELE FOUNDATION**

[GRI G4-SO6] Miele's social engagement extends over three main areas: youth and family, education and culture. This does not only apply to Miele as a company, but also to the foundation of the same name, which was established in 1974. While the explicit development goal of the Miele Foundation's charter is the promotion of public welfare in the German city of Gütersloh, the company itself addresses a broader range of needs and also pursues active social engagement at other plant sites.

The international sales subsidiaries also engage in diverse initiatives. Miele's guidelines for the social engagement of the international sales subsidiaries specify the basic course of action. For example, donations may only be made to charitable organisations. The responsible parties at the sales subsidiaries identify suitable projects themselves. In doing so, they take into account the circumstances of the country and its people.

Miele is in close communication with local people at all its locations and therefore has a good understanding of their needs. Miele wishes



Many of the 2,500 employees brought their children to celebrate the family day at the Uničov plant.

to be a reliable partner for the local authorities, associations and initiatives. With this in mind, it aims to support projects on a long-term basis, wherever possible. In special cases, this engagement, which is focused on continuity, is supplemented by flexible, short-term support.

#### **DONATIONS IN THE REPORTING PERIOD**

[GRI G4-EC1] Traditionally, Miele supports a series of regional charities with an annual donation of money or items. The projects to be supported are decided upon by the responsible division depending on the urgency and requirements of the requests. Large donations need to be approved by the Executive Board.

In the business year 2015/16, Miele & Cie. KG donated a total of 181,169 euros in Germany (2014/15: 214,804 euros).

Compared to the level of donations in the business year 2013/14 (277,379 euros), which was significantly higher, the amount of donations during the reporting period once again reached the average level seen in previous years. The short-term increase was the result of a substantial one-off donation.

Outside of Germany, the international plants and sales subsidiaries raised a total of 227,879 euros in donations in the business year 2015/16.

In 2016, the Miele Foundation took part in social projects and initiatives amounting to around 94,000 euros.

As part of the Gütersloh “Hand in Hand” project supported by Miele, trained family carers provide advice to parents living in a variety of different circumstances.



## YOUTH AND FAMILY: PROVIDING RELIEF FOR FAMILIES

Supporting and improving the opportunities of young people from the areas surrounding the Miele sites – this has always been a key aspect of Miele’s social engagement.

Since 1976, the Miele Foundation has offered significant financial support to initiatives such as the Gütersloh Holiday Games for children between the ages of 5 and 17. Every year, this opportunity includes many different and various activities that provide care during school holidays. In the 2016 summer holidays, more than 100 activities were offered – from programming workshops and skating courses, right up to excursions to the animal sanctuary.

Support for the project “Jugendintegration durch Sport” (integrating young people through sport) is also planned in the longer term. This project has been supported by the department for children and youth development in the city of Gütersloh since 2009. The project aims to promote social skills in young people that are rarely gained from usual sporting activity. Activities include hip-hop courses for girls or mixed indoor football, for example. The Miele Foundation supports the project with an annual donation.

Since 2014, the company has supported the Gütersloh Association for the Prevention of Cruelty to Children with its “Hand in Hand” family mentors project. Within the scope of this project, voluntary female family mentors visit families for a few hours each week to support the children and parents in difficult times. In 2015 alone, support was able to be provided to 17 families including 33 children.

The Miele plant in the Romanian city of Braşov makes an annual donation to the “Schuhe für die Schule” (Shoes for School) project, which provides underprivileged children starting school for the first time with shoes and rucksacks. In addition, an orphanage has been fitted with a modern kitchen. Each Christmas, Miele Uničov sends gifts to local orphans with the “Baum der erfüllten Wünsche” (Tree of Fulfilled Wishes). The Austrian plant in Bürmoos donates to causes such as “Kinderkrebshilfe”, which offers support to children with cancer and SOS Kinderdorf, which provides shelter for children in poverty.

The international sales subsidiaries are also involved in helping children and young people. In the reporting period, Miele Austria was involved in the “Young Heroes Day” campaign run by Caritas, for example. For one day, school pupils had the opportunity to



The surfaces of the “Blackboard edition” refrigerators, which are suitable for writing on, have become an art exhibition in the “Werkstattkunst BUNTspecht” project in Gütersloh.



swap the classroom for a workstation in a company. In return, participating companies made donations to children and young people in need. The sales subsidiary in Russia took part in a sponsored run for children with severe kidney diseases. The sales subsidiaries in Sweden and Turkey made donations for children suffering from cancer. And subsidiaries in China, the Czech Republic and Spain supported children's homes.

## **EDUCATION: AWAKENING ENTHUSIASM FOR TECHNOLOGY**

A significant objective of Miele's involvement in education is to inspire children and young people to get involved in technology and to introduce young adults to technical professional fields.

In the reporting period, Miele got involved in local projects such as BINGO and BINGO for kids. BINGO stands for "Berufsoffene für IngenieurInnen in Ostwestfalen/Lippe" and is a careers campaign for engineers in Ostwestfalen/Lippe. Its objective is to awaken interest in technical applications and to introduce suitable vocational training. With the aim of demonstrating to schoolgirls just how exciting technical professions can be, a number of Miele sites regularly take part in the national Girls' Day. 2016 marked the 13<sup>th</sup> occasion the event was held.

Miele supports students from engineering subjects with the Deutschlandstipendium scholarship, which was initiated by the German Federal Ministry of Education and Research. A total of 26 students are currently being supported. To be awarded for the scholarship, the nine young women and 17 young men not only had to prove extraordinary capabilities and aptitudes, but also that they are engaged in social activities.

The plants in Bielefeld, Oelde, Lehrte, Bürmoos, Braşov and Uničov are also involved in cooperation with schools with the aim of bringing the field of technology closer to children and young people. In the reporting period, for example, the plant in Uničov made it possible for talented pupils to participate in the RobotChallenge competition in Vienna.

In 2015, the Miele sales subsidiary in Austria was involved in a project on health education. It donated a high-quality kitchen to the "Stadtstall" project in Salzburg. The concept allows children and young people to grow and cook food together. The sales subsidiary in South Africa also supported a sponsored cycling race, the proceeds of which were used to benefit local schools.

### The project of Czech pupils for the RobotChallenge 2016



## CULTURE: MUSIC AND THEATRE FOR THE REGION

Diverse cultural opportunities contribute significantly to making a region attractive and increasing the local quality of life. Therefore, an important element of Miele's engagement has traditionally been to promote culture.

This is why Miele has supported the Westfälische Kammerphilharmonie (the Westphalian chamber philharmonic orchestra) since 2001. The orchestra consists of members from renowned German orchestras, self-employed musicians and highly qualified students. It has therefore made a special name for itself in the world of German orchestras.

Since it was founded in 2007, the Miele Foundation has supported the boys' choir in Gütersloh. The choir currently consists of around 60 boys between the ages of 6 and 13 and of a group of 20 young male voices. Along with appearances in North Rhine-Westphalia, the choir also regularly organises concert tours.

The Miele Foundation also supports the annual children's cultural festival in Gütersloh, which is known as "Donnerlüttken". This is aimed at four to twelve-year-olds and is designed to take the children on an exciting discovery tour of art and culture. The festival is held on the first Sunday following the summer holidays, both inside and in front of the theatre in Gütersloh, and therefore acts as a prelude to the new theatre season.



Miele has a long-standing collaboration with the Gütersloh philharmonic chamber orchestra.

# Outlook

The increasing lack of highly qualified junior talent will remain a key challenge for companies driven by innovation, such as Miele, in the coming years.

Miele counters the effects of demographic change through relevant measures taken by corporate health management, for example. These are aimed at retaining staff members for their entire working life, if possible. Managers are also being made more aware of the real impact of demographic change. The heads of the plants and departments are required to prepare a strategic HR plan by 2025 which takes this into account. The intention is to ascertain future gaps in the number and qualifications of employees now so that these issues are prevented from ever arising. In order to position itself as an attractive graduate employer in particular, Miele will work on developing a global employer brand until the end of 2018.

Continuing to improve the compatibility of work and family life is also on Miele's strategic agenda for the coming years. In summer 2015, the decision was taken to construct a daycare centre directly next to the plant in Gütersloh, in order to provide the children of employees' families, in particular, with high-quality care. The groundbreaking ceremony took place in July 2016 and the opening is planned for 2018. The nursery will offer places for around 65 children – from babies to six-year-olds. The pedagogical concept will focus on promoting topics such as science and technology. Miele's social engagement will be continued in the future, working on the basis of its current scope and the resources it has in place.





At all production facilities, Miele maintains a good relationship with the surrounding residents based on trust.



# 6 | Facts & figures

## 6.1 Key figures

6.1.1 Company

6.1.2 Strategy

6.1.3 Products

6.1.4 Supply chain

6.1.5 Environment

6.1.6 People

## 6.2 Objectives

6.2.1 Comparing objectives

6.2.2 New objectives

6.3 Dialogue

6.4 GRI Index





### **At a glance**

In the following section, you will find all the key figures relevant to the Sustainability Report 2017 as well as an overview of old and new objectives. The “Dialogue” section indicates with whom Miele is in dialogue and regarding which topics. The GRI index shows the standard requirements which have been taken into account.

# Key figures

## Company

### Total Miele turnover

in billion euros [GRI G4-9, G4-EC1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	3.04	3.15	3.22	3.49	3.71
Germany <sup>1)</sup>	0.93	0.98	1.01	1.05	1.12
Abroad	2.11	2.17	2.21	2.44	2.59
Foreign share (%)	69	69	69	70	70

In Germany, Miele achieved sales of 1.1 billion euros, representing an increase of 6.9 percent. Miele has expanded its position as the brand for large domestic appliances with the highest turnover through electrical goods retailers and is now even no. 1 in the specialist kitchen trade as well. Outside Germany, sales grew by 6.3 percent, particularly in the USA, Australia, Great Britain and China.

<sup>1)</sup> Encompasses other sources of turnover, including revenue generated by the German plants, such as from sales of enclosures, scrap, electronics, licenses, advertising material, plastic parts and seminar fees.

### Turnover by region

as a percentage [GRI G4-8, G4-9]

	2011/12	2012/13	2013/14	2014/15	2015/16
Germany <sup>1)</sup>	31	31	31	30	30
Southern, Eastern and Central Europe	21	21	21	21	20
Northwest Europe	28	28	27	26	25
North and South America, Australia, New Zealand and South Africa	16	17	16	18	19
Asia	4	4	5	5	6

The turnover in the overseas markets (Asia, North and South America, Australia, New Zealand and South Africa) has increased more than others over recent years. In Russia, despite political instability and currency drops, sales were maintained on a par with the previous year in local currency. In Southern Europe, the upward trend was consolidated, despite the continuing debt crisis.

<sup>1)</sup> Encompasses other sources of turnover (see total Miele turnover).

## Turnover by business areas

as a percentage [GRI G4-9]

	2011/12	2012/13	2013/14	2014/15	2015/16
Laundry care	26	26	26	25	24
Cooking <sup>1)</sup>	20	20	20	21	21
Dishwashers	13	13	13	13	14
Floor care	8	9	9	9	9
Refrigerators and freezers	8	8	8	8	8
Drinks preparation	2	2	2	2	2
<b>Domestic appliances total</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>77</b>	<b>77</b>
<b>Professional<sup>2)</sup></b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>13</b>	<b>13</b>
<b>Customer service</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>6</b>
<b>Care products and accessories</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>4</b>	<b>4</b>

<sup>1)</sup> Includes cookers/ovens, steam cookers, hobs/cooking zones, cooker hoods. <sup>2)</sup> Commercial machines, service, and spare parts.

## Sales

in thousands [GRI G4-9]

	2011/12	2012/13	2013/14	2014/15	2015/16
Dishwashers	587	610	607	652	770
Cookers/ovens	269	287	290	296	311
Refrigerators and freezers	306	310	302	289	303
Vacuum cleaners	2,012	2,085	2,151	2,204	2,319
Washing machines	781	801	782	835	860
Tumble dryers	338	343	338	362	388
Others <sup>1)</sup>	577	638	633	635	645
<b>Domestic appliances total</b>	<b>4,870</b>	<b>5,074</b>	<b>5,103</b>	<b>5,273</b>	<b>5,596</b>
<b>Commercial machines</b>	<b>87</b>	<b>87</b>	<b>87</b>	<b>96</b>	<b>96</b>
<b>Domestic appliances and commercial machines</b>	<b>4,957</b>	<b>5,161</b>	<b>5,190</b>	<b>5,364</b>	<b>5,692</b>

<sup>1)</sup> Hobs/cooking zones, cooker hoods, microwaves ovens, steam cookers, coffee machines, rotary ironers.



## Investments

in millions of euros [GRI G4-EC1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Germany	124	150	142	110	140
Europe	35	53	35	27	25
Overseas	27	11	10	14	19
Total investments	186	213	188	150	184

During the past business year, Miele invested approximately 34 million euros or 23 percent more than in the previous year. This significant increase is the result of investments in the development of new model series, extension or conversion work at various production sites, and an expansion of sales and logistics facilities in Gütersloh, including extension to the goods distribution centre, the new central spare part warehouse and a new office wing. New or completely refurbished showrooms were inaugurated in metropolises such as Beijing, New York, Miami, Johannesburg, Vilnius, Bucharest, London and Vancouver.

## Expenditures for research and development

as a percentage

	2011/12	2012/13	2013/14	2014/15	2015/16
Share of total turnover	5.6	5.4	5.4	5.4	5.5

The expense for research and development is continuously kept at around a 5.5 percent share of the total turnover.

## Personnel costs

in millions of euros and percentages [GRI G4-EC1]

	2011/12	2012/13	2013/14	2014/15	2015/16
In millions of euros	886	956	971	1,026	1,079
In relation to the total turnover (%)	29	30	30	29	29

The personnel costs developed in proportion to the total turnover.

## Pension provisions

in millions of euros [GRI G4-EC3]

	2011/12	2012/13	2013/14	2014/15	2015/16
	365	372	376	396	446

Pension provisions rose significantly, largely owing to the considerable drop in the discounting interest rate under commercial law included in the calculation. This is a consequence of the continuously low market interest rate.

## Payments to suppliers for production materials

in millions of euros [GRI G4-EC1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Germany	545	544	507	490	543
Europe	216	226	272	284	308
Overseas	66	101	112	127	150
Total payments to suppliers	827	871	892	902	1,001

The payments to suppliers rose by 109 million euros in the reporting period. This was caused by the increased production volumes and the associated higher demand for production materials.

## Strategy

### Audits of the integrated management system

Quantity [GRI G4-HR9]

	2011/12	2012/13	2013/14	2014/15	2015/16
External audits	35	22	39	32	32
No significant non-conformities found <sup>1)</sup>	33	22	37	26	28
Significant non-conformities found <sup>1)</sup>	2	0	2	6	4
Internal audits	92	108	100	77	95
No significant non-conformities found <sup>1)</sup>	76	97	90	69	84
Significant non-conformities found <sup>1)</sup>	16	11	10	8	11

The methods of the external and internal audit processes function congruently, i.e. using the same scale of evaluation. As an important part of the matrix certification method, the internal audits as preventative methods improve the results. Thereby, the number of significant discrepancies found is lower in external audits performed by a certifier. Miele employs extensively trained auditors to carry out the internal audits. These auditors identify problems in preparation for external audits and introduce countermeasures.

<sup>1)</sup> These instances exclusively concerned non-critical non-conformities. Critical non-conformities that could jeopardize certification have not occurred at Miele since the 1990s.

# Products

## Energy consumption labelling

[GRI G4-EN4, G4-EN7, G4-PR3] The values refer to devices sold in EU countries in which the energy label is mandatory, as well as in Croatia, Norway, and Switzerland. As a deviation from the five-year trend of other key figures, the values from the three previous sustainability reports are listed here with the latest corresponding business year.

### Energy label: washing machines

as a percentage

	2011/12	2013/14	2015/16
A+++	54	63	93
A++	17	27	7
A+	29	10	0

93 percent of the washing machines sold in the business year 2015/16 are classified as A+++, which is the best energy efficiency rating of the energy label. 39 percent fall short of the threshold value for the A+++ rating by 10 percent, 8 percent fell short by 20 percent, 9 percent by 30 percent, and 2 percent even fell short by 40 percent. The washing machines achieved the best values when they used the new [PowerWash 2.0](#) technology.

### Energy label: tumble dryers

as a percentage

	2011/12 <sup>1) 2)</sup>	2013/14 <sup>2)</sup>	2015/16
A+++	-	1	8
A++	-	3	65
A+	-	70	7
A	58	4	-
B	33	18	16
C	10	5	4

In the reporting period, great efforts were made to reduce the energy consumption of tumble dryers. All new-generation T1 tumble dryers have been declared as A++ since September 2014. This was made possible by the use of larger heat exchangers in particular.

<sup>1)</sup> The energy label for tumble dryers was updated in 2013. The values for 2011/12 and 2013/14 therefore cannot be directly compared with one another.

<sup>2)</sup> Deviations as a result of rounding the figures.

## Energy label: dishwashers

as a percentage

	2011/12	2013/14	2015/16
A+++	22	30	39
A++	30	30	33
A+	42	39	28
A	6	1	-

3 percent of the dishwashers sold fall short of the threshold value for the A+++ rating. The best values for dishwashers are achieved by using the new EcoTech heat reservoir.

## Energy label: cookers and ovens

as a percentage

	2011/12	2013/14 <sup>1)</sup>	2015/16
A+	-	-	89
A	99	99	11
B	1	1	-

<sup>1)</sup>The energy label for ovens and steam cookers was updated in the reporting period. The values therefore cannot be directly compared with one another.

## Energy label: refrigerators and freezers

as a percentage

	2011/12	2013/14	2015/16
A+++	3	8	13
A++	35	59	70
A+	58	33	17
A	4	-	-

Following the introduction of the new freestanding appliances of the K 20.000 series, numerous new A+++ devices were launched in 2016.



## Consumption efficiency

[GRI G4-EN4, G4-EN7, G4-EN27] The values show the Miele appliance with the highest energy and water savings that was available in the market for a particular year.

### Power consumption energy label

in kWh

	2000	2011/12	2013/14	2015/16
Washing machines <sup>1)</sup> , Power consumption in kWh/kg of laundry	0.19	0.11	0.10	<b>0.09</b>
Dishwashers, Power consumption in kWh/place setting	0.09	0.06	0.06	<b>0.05</b>
Refrigerators with up to and including 150 l of usable capacity and a freezer compartment Power consumption in kWh/100 l over 24 hours	0.40	0.21	0.21	<b>0.19</b>
Refrigerators with up to and including 150 l of usable capacity without a freezer compartment Power consumption in kWh/100 l over 24 hours	0.26	0.18	0.12	<b>0.12</b>
Refrigerators with 151 l to 300 l of usable capacity with a freezer compartment Power consumption in kWh/100 l over 24 hours	0.29	0.16	0.14	<b>0.14</b>
Refrigerators with 151 l to 300 l of usable capacity without a freezer compartment Power consumption in kWh/100 l over 24 hours	0.18	0.09	0.09	<b>0.09</b>
Freezers with up to and including 150 l of usable capacity Power consumption in kWh/100 l over 24 hours	0.47	0.27	0.27	<b>0.27</b>
Freezers with 151 l to 300 l of usable capacity Power consumption in kWh/100 l over 24 hours	0.23	0.14	0.14	<b>0.13</b>
Cookers and ovens, Power consumption in kWh	1.20	0.67	0.67	<b>0.61</b>
Tumble dryers <sup>2)</sup> , Power consumption in kWh/kg of laundry	0.59	0.26	0.18	<b>0.17</b>

<sup>1)</sup> Cottons 60 °C, full load.

<sup>2)</sup> Cottons Normal Dry, full load.

### Water consumption energy label

in litres

	2000	2011/12	2013/14	2015/16
Washing machines <sup>1)</sup> , Water consumption in l/kg of laundry	9.80	6.88	6.11	<b>6.00</b>
Dishwashers, Water consumption in l/place setting	1.08	0.71	0.71	<b>0.69</b>

<sup>1)</sup> Cottons 60 °C, full load.

# Supply chain

## Natural resources and materials

### Production materials used

in tonnes [GRI G4-EN1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Raw materials	101,337	112,413	106,123	99,251	98,778
Metals	91,100	102,671	95,123	88,251	86,778
Plastic granulate	10,237	9,742	11,000	11,000	12,000
Processing materials	6,913	7,541	6,979	7,233	8,736
Paints, varnishes, enamels	1,211	1,332	1,118	1,254	1,368
Oils, greases, lubricants	188	217	232	206	201
Acids, lye, solvents	151	158	220	215	172
Others <sup>1)</sup>	5,363	5,834	5,409	5,558	6,995
Electronics	1,594	1,964	2,123	2,026	2,143

The total of all production materials used does not equal the total weight of all appliances produced. This is explained by the use of purchased parts and materials which are not ultimately part of the products at delivery, such as acids, lyes and solvents. The weight accounted for by waste, e.g. by cutting scraps, also factors into the difference.

<sup>1)</sup>The majority of other processing materials are casting materials for the manufacture of mass-balancing weights.

### Devices produced

in tonnes [GRI G4-EN1]

2011/12	2012/13	2013/14	2014/15	2015/16
169,983	171,891	175,297	177,263	188,133

### Packaging per kilogram of product

in grams [GRI G4-EN1]

2011/12	2012/13	2013/14	2014/15	2015/16
93	92	90	90	93

## Packaging materials used

in tonnes [GRI G4-EN1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	15,776	15,796	15,708	15,880	17,464
Solid wood	9,118	9,152	9,056	9,075	10,134
Cardboard/corrugated paper	4,676	4,664	4,595	4,707	5,140
Moulded plastic parts (EPS)	1,678	1,674	1,749	1,788	1,851
PE film/strapping (PP/steel)	302	303	306	308	339
Encased PU foam/PE film	3	3	2	2	1

The increase in packaging material is for the most part a result of the increased production volume.

## Supplier management

### Purchasing volume<sup>1)</sup>

as a percentage [GRI G4-12, G4-EC9]

	2011/12	2012/13	2013/14	2014/15	2015/16
Germany	65.9	62.5	56.9	54.4	54.2
Europe	26.1	26.0	30.5	31.5	30.8
Overseas	8.0	11.6	12.6	14.1	15.0

Miele production plants that procure a lot overseas recorded more growth than others in the business year 2015/16.

<sup>1)</sup> Payments to suppliers.

### Suppliers of production materials

Number [GRI G4-12]

	2011/12	2012/13	2013/14	2014/15	2015/16
	2,287	2,324	2,328	2,277	2,443 <sup>1)</sup>

<sup>1)</sup> Suppliers from Spares Logistics were included in the calculation for the first time in the business year 2015/16.

## Self-assessment on compliance with social standards by potential suppliers

Number [GRI G4-LA14, G4-HR10, G4-SO9]

	2011/12	2012/13	2013/14	2014/15	2015/16
Compliance confirmed	935	433	555	968	475
Compliance not confirmed	8	12	15	6	9
Total	943	445	570	974	484

## Environment

### Resource management

#### Waste for recycling and disposal by type

in tonnes [GRI G4-EN23, G4-EN25]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total waste produced	28,596	30,011	31,493	30,084	33,101
Scrap metal	17,063	17,507	18,533	17,566	18,885
Waste for recycling	26,984	27,864	29,310	28,655	31,619
Hazardous waste	1,109	1,305	1,167	1,363	1,347
Waste for disposal	1,612	2,147	2,183	1,430	1,482
Hazardous waste	1,235	1,762	1,653	920	762

The increase in total waste is caused by the increase in production across all plants, by the greater number of Miele employees and the increased construction activity. A greater number of defective products were created due to the production of new device generations and the associated changeover of production processes. This increased the volume of scrap metal in particular. In addition, waste from external services was increasingly disposed of through the Miele disposal systems. Finally, there were technical problems during the reporting period at the waste collection plant at the Gütersloh site. As a result, a large number of foils were misrouted.



## Waste for recycling and disposal by type (solid/liquid)

in tonnes [GRI G4-EN23]

	2011/12	2012/13	2013/14	2014/15	2015/16
Solid waste for recycling	26,418	27,000	28,490	27,661	30,655
Liquid waste for recycling	566	864	819	994	964
Solid waste for disposal	873	833	840	754	1,165
Liquid waste for disposal	739	1,315	1,342	676	317

In total, approx. 96 percent of the waste produced at Miele can be recycled. For causes of the increase in the amount of waste, see [Waste for recycling and disposal by type](#). The quantities of liquid waste for disposal have decreased, as rinsing fluids from the wash cabinet production process for dishwashers have been recycled in a physicochemical process since the business year 2014/15 at the Bielefeld plant. By commissioning a water treatment plant for the production of dryer drums, the Uničov plant was able to avoid disposing of around 350 tonnes of oil-containing waste water per year.

## Source areas of total waste

in tonnes [GRI G4-EN23]

	2011/12	2012/13	2013/14	2014/15	2015/16
Waste from production, product parts <sup>1)</sup>	24,273	26,082	27,502	26,039	27,872
Waste from operational plants, administration and development areas <sup>2)</sup>	3,228	3,246	3,283	3,306	3,292
Waste from buildings, ground <sup>3)</sup>	1,095	701	718	739	1,937

For causes of the increase in the amount of waste, see [Waste for recycling and disposal by type](#).

<sup>1)</sup>A waste type is allocated to a source area if at least 80 percent of the waste type comes from the area concerned. Production waste includes: product and production parts such as scrap metal, foundry waste, acids, waste from the treatment of technical waste water and plastic parts.

<sup>2)</sup>Examples of waste from operational plants, administration and the development areas: scrap disposal of outdated production facilities, cable remains, spent oils, cardboard and paper, wood, pallets and general waste.

<sup>3)</sup>Waste from buildings and grounds includes, for example, building rubble, excavated soil, stones, neon tubes, flooring, waste from green areas and sewer cleaning, rubbish.

## Production waste per tonne of product<sup>1)</sup>

in kilograms [GRI G4-EN23]

2011/12	2012/13	2013/14	2014/15	2015/16
143	152	157	147	148

<sup>1)</sup>Waste that is directly related to production activities, such as scrap metal, foundry waste and acids, is expressed in relation to tonnes of product. The amounts of waste from "Buildings/grounds" and "Operations facilities, administration and development areas" are not included here (see source areas of total waste).

## Destination of total waste

in tonnes [GRI G4-EN23]

	2011/12	2012/13	2013/14	2014/15	2015/16
Materials recycling, processing <sup>1)</sup>	25,102	25,523	26,789	26,305	29,200
Energy recovery, incineration <sup>2)</sup>	1,538	1,796	2,115	1,774	1,976
Physicochemical treatment <sup>3)</sup>	1,241	2,076	2,122	1,615	1,149
Dumping <sup>4)</sup>	714	638	476	390	775

The share of waste for dumping increased in the business year 2015/16 as a result of the remediation of industrial flooring with asbestos in the course of the new build activities.

<sup>1)</sup> Recovery, conditioning methods, processing of sludge into building materials.

<sup>2)</sup> Thermal recovery of highly calorific waste with a gross calorific value of > 11,000 kJ and special waste incineration.

<sup>3)</sup> Treatment of waste from surface and waste water treatment, sewer-cleaning activities and emulsion drilling.

<sup>4)</sup> Rubble and soil from construction work are normally disposed of at dumpsites.

## Water consumption

in cubic metres [GRI G4-EN8]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	364,684	347,072	370,085	340,631	365,221
Water from the public system	220,605	183,080	210,963	205,160	224,470
Water from own supply	144,079	163,992	159,122	135,471	140,751
Surface water <sup>1)</sup>	0	0	0	0	0

Water consumption increased as a result of broken pipes during construction work to improve the water supply and as a result of the changeover of production processes.

<sup>1)</sup> Rainwater which is stored in cisterns or other similar containers and fed into a separate water system.

## Water consumption per tonne of product

in cubic metres [GRI G4-EN8]

	2011/12	2012/13	2013/14	2014/15	2015/16
	2.15	2.02	2.11	1.92	1.94

## Waste water

in cubic metres [GRI G4-EN22]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	327,077	299,857	336,474	316,084	336,094
Technical waste water <sup>1)</sup>	54,717	48,802	46,866	45,261	53,393
Other waste water <sup>2)</sup>	272,360	251,055	289,608	270,823	282,701

Waste water quantities are not identical to the quantities of water withdrawn, since water evaporates in some technical processes. The increased amount of waste water in 2015/16 is due to increased water consumption caused by the increase in production.

<sup>1)</sup> Technical waste water is treated mechanically, chemically, or biologically before being discharged into the public sewer system.

<sup>2)</sup> Standard household dirty water as an indirect discharge into the local sewer for local waste water treatment (the [Braşov plant](#) remains an exception).

## Waste water per tonne of product

in cubic metres [GRI G4-EN22]

	2011/12	2012/13	2013/14	2014/15	2015/16
	1.92	1.74	1.92	1.78	1.79

## Energy use and emissions

### Energy consumption

in megawatt-hours [GRI G4-EN3, G4-EN6]

	2011/12	2012/13	2013/14	2014/15	2015/16
Direct energy consumption	52,778	57,876	51,390	50,723	51,647
Heating oil	1,051	834	653	569	382
Natural gas	51,727	57,042	50,737	50,154	51,265
Indirect energy consumption	179,690	185,272	172,156	172,666	179,343
District heating	38,729	42,149	33,429	34,643	34,093
Electricity	140,961	143,123	138,727	138,023	145,250
Total energy consumption	232,468	243,148	223,546	223,389	230,990

The demand for natural gas has increased, as heating oil has continually been replaced by natural gas. Other causes include the operation of two cogeneration plants in Bünde and the construction of new buildings. The increase in the electricity demand is a result of increased production and the extension of the reporting framework (plant located outside the Gütersloh site). An additional cause for the increased electricity consumption is the parallel operation of production plants when changing over the generations of washing machines.

## Energy consumption per tonne of product

in kilowatt-hours [GRI G4-EN5]

	2011/12	2012/13	2013/14	2014/15	2015/16
	1,368	1,415	1,275	1,260	1,228

## Energy mix<sup>1)</sup> of electricity purchased worldwide

as a percentage [GRI G4-EN3]

	2011/12	2012/13	2013/14	2014/15	2015/16
Renewable energy	22	37	36	28	28
Energy from fossil fuels	30	27	26	28	29
Nuclear energy	48	34	36	41	40
Other	1	2	3	3	3

<sup>1)</sup>The energy mix illustrated here represents the mix of all electricity purchased by Miele. The individual energy mixes of local electricity providers were included in proportion to the providers' respective shares of the total Miele electricity supply.

## Energy-related CO<sub>2</sub> emissions

in tonnes [GRI G4-EN15, G4-EN16]

	2011/12	2012/13	2013/14	2014/15	2015/16
Heating oil and natural gas	10,941	11,921	10,625	10,558	10,309
Electricity and district heating	40,848	42,217	38,100	40,817	42,189
Total	51,789	54,138	48,725	51,375	52,498

The increase in energy-related emissions is a result of the increased electricity consumption, see [energy consumption](#). In contrast to this development, specific energy-related emissions decreased per tonne of product (see the following table).

## Energy-related CO<sub>2</sub> emissions per tonne of product

in kilograms [GRI G4-EN18]

	2011/12	2012/13	2013/14	2014/15	2015/16
Heating oil and natural gas	64	69	61	60	55
Electricity and district heating	240	246	217	230	224
Total	305	315	278	290	279



## The corporate carbon footprint

in tonnes of CO<sub>2</sub> [GRI G4-EN15, G4-EN16, G4-EN17, G4-EN19]

	2011/12	2012/13	2013/14	2014/15	2015/16
Scope 1 – Direct CO <sub>2</sub> emissions	17,725	18,392	16,912	16,635	<b>16,395</b>
Natural gas	10,661	11,756	10,457	10,381	<b>10,207</b>
Heating oil	280	165	168	177	<b>102</b>
Fleet	6,784	6,471	6,287	6,254	<b>6,086</b>
Scope 2 – Indirect CO <sub>2</sub> emissions	40,848	42,217	38,100	40,817	<b>42,189</b>
Electricity	34,361	35,248	32,860	35,430	<b>36,926</b>
District heating	6,487	6,969	5,240	5,387	<b>5,263</b>
Scope 3 – Indirect CO <sub>2</sub> emissions	36,435	38,261	42,446	45,305	<b>48,826</b>
Logistics	33,636	36,049	39,774	42,754	<b>46,015</b>
Outbound transport <sup>1)</sup>	28,953	31,152	35,531	38,456	<b>41,303</b>
Distribution in Germany	4,683	4,897	4,243	4,298	<b>4,712</b>
Business trips	2,799	2,212	2,672	2,551	<b>2,811</b>
Total CO <sub>2</sub> emissions	95,008	98,870	97,457	102,757	<b>107,410</b>
CO <sub>2</sub> emissions/employee	5.68	5.73	5.52	5.79	<b>5.85</b>
CO <sub>2</sub> emissions/million euros of turnover	31.29	31.39	30.26	29.44	<b>28.94</b>
CO <sub>2</sub> emissions/tonne of product	0.56	0.58	0.56	0.58	<b>0.57</b>

The corporate carbon footprint was compiled according to the standards of the Greenhouse Gas (GHG) protocol. The total emissions in the business year 2015/16 were 4.5 percent higher in comparison to the business year 2014/15. The main reason for this is the positive sales development, which led to an expansion of logistics activities and to an increase in transport-related CO<sub>2</sub> emissions. In particular, the increase in overseas sales led to a disproportionate increase in CO<sub>2</sub> emissions due to the longer transport routes. Electricity consumption at the sites also increased slightly due to higher production quantities and the parallel production of old and new washing machine series as part of the generational change – this is reflected in an increase in the energy-related CO<sub>2</sub> emissions.

<sup>1)</sup> Supply of subsidiaries or direct supply of international customers with finished products and spare parts from the central warehouse or directly ex works.

## SO<sub>2</sub> and NO<sub>x</sub> emissions<sup>1)</sup>

in tonnes [GRI G4-EN21]

	2011/12	2012/13	2013/14	2014/15	2015/16
Direct emissions at the sites					
SO <sub>2</sub> emissions	6	7	6	6	6
NO <sub>x</sub> emissions	8	7	6	6	6
Indirect emissions from power generation					
SO <sub>2</sub> emissions	72	73	82	79	86
NO <sub>x</sub> emissions	128	133	149	153	155

<sup>1)</sup>The emission factors for calculating the SO<sub>2</sub> and NO<sub>x</sub> emissions are derived from publicly available sources.

## Transport and logistics

### Transport volume

in million tonne-kilometres and percentages [GRI G4-EN30]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	575.6	601.1	665.3	694.4	744.2
Outbound <sup>1)</sup>	528.3	552.1	618.7	646.8	692.7
By ship (%)	80.2	80.9	81.5	81.3	81.7
By lorry (%)	15.1	14.4	14.1	14.1	14.2
By rail (%)	4.0	3.9	3.4	3.3	3.0
By air (%)	0.6	0.8	1.0	1.3	1.1
Distribution Germany	47.3	49.1	46.6	47.5	51.5

The transport volume has continually increased in recent years. This is due to the positive sales development, especially in the overseas markets. The increase in air freight in 2014/15 is largely due to a single large air freight consignment by the Australian sales subsidiary. By checking all air freight, this proportion could be reduced again in the year 2015/16.

<sup>1)</sup>Supply of subsidiaries or direct supply of international customers with finished products and spare parts from the central warehouse or directly ex works.

## Transport-related CO<sub>2</sub> emissions – TTW<sup>1)</sup>

in tonnes and percentages [GRI G4-EN17, G4-EN30]

	2011/12	2012/13	2013/14	2014/15	2015/16
Gesamt	33,636	36,049	39,774	42,754	46,015
Outbound	28,953	31,152	35,531	38,456	41,303
By ship (%)	66.9	65.9	65.1	62.5	64.3
By lorry (%)	25.7	25.3	24.1	23.4	24.2
By air (%)	7.3	8.4	10.5	13.8	11.2
By rail (%)	0.1	0.3	0.3	0.3	0.4
Distribution Germany	4,683	4,897	4,243	4,298	4,712

For causes of the increase in transport-related CO<sub>2</sub> emissions, see the corporate [carbon footprint](#).

<sup>1)</sup>Tank-to-wheel representation.

## CO<sub>2</sub> emissions of the Miele fleet – TTW<sup>1)</sup>

in tonnes and percentages [GRI G4-EN15, G4-EN30]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	6,784	6,471	6,287	6,254	6,086
By car (%)	36.4	35.8	37.6	36.2	36.6
By LCV <sup>2)</sup> (customer service) (%)	61.5	62.0	60.3	61.9	61.3
By lorry (%)	2.2	2.2	2.1	1.9	2.1

The CO<sub>2</sub> emissions in the Miele fleet have been able to be continually reduced in recent years. This resulted from a consistent changeover to vehicles with low CO<sub>2</sub> emissions as new vehicles were purchased.

<sup>1)</sup>Tank-to-wheel representation.

<sup>2)</sup>Light commercial vehicles.

## Relative CO<sub>2</sub> emissions

in grams per kilometre [GRI G4-EN15, G4-EN30]

	2011/12	2012/13	2013/14	2014/15	2015/16
Cars	138	132	128	124	120
LCV <sup>1)</sup> (customer service)	214	203	194	190	183

<sup>1)</sup>Light commercial vehicles.

## CO<sub>2</sub> emissions from business trips

with externally purchased transport services<sup>1)</sup>, in tonnes [GRI G4-EN17, G4-EN30]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	2,799	2,212	2,671	2,551	2,811
Car	13	123	117	124	131
Rail <sup>2)</sup>	-	-	-	-	16
Flights	2,660	2,089	2,554	2,427	2,664

In 2015/16, 1,744,705 CO<sub>2</sub>-free passenger kilometres were covered in long-distance rail journeys. The CO<sub>2</sub> emissions for rail transport resulted from 251,477 passenger kilometres in short-distance journeys.

<sup>1)</sup> CO<sub>2</sub> emissions resulting from business trips with vehicles from the Miele fleet are recorded separately.

<sup>2)</sup> In recent years, long-distance journeys by rail were CO<sub>2</sub>-free as part of the "bahn.corporate" programme. Emissions arising from short-distance journeys were not recorded separately prior to 2016 and cannot be calculated in retrospect.

## Using the job ticket for public transport for the Gütersloh and Bielefeld plants

Number

	2011/12	2012/13	2013/14	2014/15	2015/16
	1,218	955	957	940	915

## Areas

### Area covered and not covered by structures

in square metres

	2012/13	2013/14	2014 <sup>1)</sup>	2015	2016
Total	1,463,458	1,471,086	1,714,024	1,733,214	1,733,214
Area covered by structures	535,435	530,383	530,918	534,550	547,473
Area not covered by structures	928,023	940,703	1,183,106	1,198,664	1,185,741
Green areas	529,916	527,643	769,596	773,589	750,108
Surfaced area	398,107	413,060	413,510	425,075	435,633

New areas are always measured once a construction project is completed. The respective areas therefore only change on completion of construction activities. The increase in areas covered by structures in the 2016 calendar year is mainly a result of the construction of the new spare parts warehouse at the site in Gütersloh.

<sup>1)</sup> Area and time period for report changed in 2014. The areas are now reported on the basis of calendar years, as this complies with the public tax law. In addition, rented areas at the production sites are now also taken into account.



## Investments and ongoing expenditures

### Investments in environmental protection at the production plants

in thousands of euros [GRI G4-EN31]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	823	2,722	1,602	2,032	904
Waste management	115	13	13	20	72
Water pollution control	200	684	388	150	113
Climate protection/ energy efficiency	333	1,002	740	1,638	605
Noise control	7	1	22	0	23
Air pollution control	168	1,018	392	219	87
Nature conservation and landscape maintenance	0	4	48	5	5

Investments in environmental protection are subject to significant annual fluctuation as they include one-off investments in new plants and equipment based on current requirements.

### Ongoing environmental expenditures at the production plants

in thousands of euros [GRI G4-EN31]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	6,552	6,777	7,365	6,841	6,711
Waste management	2,125	2,513	2,955	2,621	2,592
Soil remediation	394	282	123	99	132
Water pollution control	2,351	2,371	2,446	2,277	2,272
Noise control	101	92	74	62	61
Air pollution control	1,576	1,511	1,763	1,746	1,621
Nature conservation and landscape maintenance	4	8	4	36	33

# People

## Human resources management

The numbers refer exclusively to Germany, unless otherwise specified.

### Employees

Number [GRI G4-LA1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Total	16,716	17,251	17,660	17,741	18,370
in Germany	10,327	10,379	10,411	10,346	10,326
Outside of Germany	6,389	6,872	7,249	7,395	8,044

### Distribution of employees

as a percentage [GRI G4-10]

	2015/16
Sales subsidiary Germany	8
Production sites in Germany <sup>1)</sup>	48
Sales subsidiaries outside of Germany	32
Production sites outside of Germany	12

<sup>1)</sup> This also includes employees of central administration at the Gütersloh site.

### Contract employees

Number and percentage

	2011/12	2012/13	2013/14	2014/15	2015/16
Number	374	400	332	453	498
Proportion of the entire workforce (%)	3.6	3.9	3.2	4.4	4.8 <sup>1)</sup>

<sup>1)</sup> The Company-Wide Collective Agreement specifies the conditions under which the rate of 4.5 percent (also determined in the Agreement) can be deviated from. These deviations are agreed with the works council in special regulations and employer/works council agreements.

## Employee turnover<sup>1)</sup>

[GRI G4-LA1]

	2011/12	2012/13	2013/14	2014/15	2015/16
Number of resignations	104	95	93	99	229
Rate of turnover (%)	1.01	0.92	0.89	0.96	2.22

The increase in the fluctuation rate in the business year 2015/16 is related to the merging of the German back-office operations in sales and service in Gütersloh.

<sup>1)</sup> Temporary employment contracts are not included. Terminations issued by the company are included in the calculation.

## Ideas submitted as part of the suggestion scheme<sup>1)</sup>

Number

2011/12	2012/13	2013/14	2014/15	2015/16
2,174	2,263	2,083	2,129	2,007

<sup>1)</sup> These figures refer to all German plants and distribution and service centres, excluding the Bünde and Arnberg locations of imperial-Werke, a Miele affiliate.

## Total savings from implemented employee ideas<sup>1)</sup>

in thousands of euros

2011/12	2012/13	2013/14	2014/15	2015/16
2,675	2,880	3,302	2,256	2,159

The three-year value (business year 2013/14 – 2015/16) of the implemented suggestions totalled 2.2 million euros in the business year 2015/16.

<sup>1)</sup> These figures refer to all German plants and distribution and service centres, excluding the Bünde and Arnberg locations of imperial-Werke, a Miele affiliate.

## Vocational training and development

The numbers refer exclusively to Germany, unless otherwise specified.

### Cost of vocational training and development

in millions of euros [GRI G4-LA9]

2011/12	2012/13	2013/14	2014/15	2015/16
16.4	16.7	16.5	16.8	17.6

The commercial and technical apprenticeship scheme, along with internal and external advanced training programmes, accounted for the largest portion of the expenses in the business year 2015/16. Additional expenses were incurred, for example, for initial training programmes and advanced customer service training.

### Advanced training time frames

Number of hours per employee [GRI G4-LA9]

2011/12	2012/13	2013/14	2014/15	2015/16
8.4	5.1	6.2	7.1	7.1

The number of advanced training hours per employee has decreased from eight hours in 2011/12 to seven hours in 2015/16. Part of the reason for this is the increased use of e-learning components which supplement and/or replace the training phases requiring the learner's presence. The amount of time needed by employees to work through the e-learning components is not recorded.

### Apprentices<sup>1)</sup>

Number and percentage [GRI G4-10]

	2011/12	2012/13	2013/14	2014/15	2015/16
Number	496	487	483	481	472
Proportion (%)	4.8	4.7	4.6	4.7	4.6

<sup>1)</sup>The reference date for each year is 1 September, as this date provides a better representation of actual apprentices figures than does the previous date of 30 June (business year end). The reason for this is that many apprentices have already completed their exams by the end of the business year and are therefore not formally considered apprentices, although they are still employed by the company and the new apprentices have not yet begun their programme.



## Women and men in the technical and commercial apprenticeship scheme

as a percentage [GRI G4-10]

	2011/12	2012/13	2013/14	2014/15	2015/16
Technical apprenticeship					
Women	12	11	12	12	9
Men	88	89	88	88	91
Commercial apprenticeship					
Women	57	55	55	55	50
Men	43	45	45	45	50

## Occupational health and safety

The figures on occupational health and safety refer to all production sites, the sales subsidiary in Germany and the five German distribution and service centres, four of which closed in the third quarter of 2015/16 and distribution and service was centralised in Gütersloh.

### Reportable<sup>1)</sup> workplace and commuting accidents

Number [GRI G4-LA6]

	2011/12	2012/13	2013/14	2014/15	2015/16
Workplace accidents	161	161	236	177	174
Commuting accidents	44	50	48	44	46
Total	205	211	284	221	220

In the business year 2014/15, an employee was involved in a fatal traffic accident on their way to work in the Dongguan plant. As of business year 2013/14, accidents occurring at the German sales subsidiary and at the five German Sales and Service Centres are also being included.

<sup>1)</sup> All accidents resulting in an absence of three or more workdays must be disclosed in detail to the insurer. Incidents involving an absence of less than three days are covered by accident notifications.

## Reportable<sup>1)</sup> workplace and commuting accidents

Number per 1 million work hours (injury frequency) [GRI G4-LA6]

	2011/12	2012/13	2013/14	2014/15	2015/16
Workplace accidents	11.1	11.1	13.6	10.2	9.5
Commuting accidents	3.0	3.4	2.8	2.5	2.5
Total	14.1	14.5	16.3	12.7	12.1

<sup>1)</sup>All accidents resulting in an absence of three or more workdays must be disclosed in detail to the insurer. Incidents involving an absence of less than three days are covered by accident notifications.

## Reportable<sup>1)</sup> workplace and commuting accidents

Number per 1000 employees ("thousand-man rate") [GRI G4-LA6]

	2011/12	2012/13	2013/14	2014/15	2015/16
Workplace accidents	16.1	15.5	19.2	14.5	13.9
Commuting accidents	4.4	4.8	3.9	3.6	3.7
Total	20.5	20.4	23.1	18.1	17.6

<sup>1)</sup>All accidents resulting in an absence of three or more workdays must be disclosed in detail to the insurer. Incidents involving an absence of less than three days are covered by accident notifications.

## Lost days<sup>1)</sup> due to a workplace or commuting accident

Number [GRI G4-LA6]

	2011/12	2012/13	2013/14	2014/15	2015/16
Lost days due to a workplace accident	1,676	2,019	3,811	2,637	2,911
Lost days due to a commuting accident	636	952	1,331	1,125	995
Total	2,312	2,971	5,142	3,762	3,906

As of business year 2013/14, accidents occurring at the German sales subsidiary and at the five German Sales and Service Centres are also being included.

<sup>1)</sup>"Lost days" denotes the number of scheduled workdays lost, starting from the time of the accident.

## Training sessions on occupational safety

Number of participants

2011/12	2012/13	2013/14	2014/15	2015/16
643	684	896	1,725	1,215

In the business year 2015/16, a total of 1,215 employees underwent training on the topic of occupational safety. Participants included both managers and manufacturing employees.

## Diversity and equal opportunity

The numbers refer exclusively to Germany, unless otherwise specified.

### Employees according to age group

as a percentage [GRI G4-LA12]

	2015/16
< 30 years	14
30 to 50 years	48
> 50 years	38

### Women and men in the Miele workforce in Germany

Number [GRI G4-LA12]

	2011/12	2012/13	2013/14	2014/15	2015/16
Women	2,393	2,404	2,404	2,399	2,289
Men	7,934	7,975	8,008	7,947	8,037

### Women and men in the Miele workforce in Germany

as a percentage [GRI G4-LA12]

	2011/12	2012/13	2013/14	2014/15	2015/16
Women	23.2	23.2	23.1	23.2	22.2
Men	76.8	76.8	76.9	76.8	77.8

## Women and men in management positions

as a percentage [GRI G4-LA12]

	2011/12	2012/13	2013/14	2014/15	2015/16 <sup>1)</sup>
Women	8	9	10	12	22
Men	92	91	90	88	78

<sup>1)</sup> From the business year 2015/16, the term “manager” applies to all management levels (M0–M5) globally. Previously, the term covered the Executive Board, company officials with power of attorney and authorised agents.

## Employees with disabilities<sup>1)</sup>

[GRI G4-LA12]

	2011/12	2012/13	2013/14	2014/15	2015/16
Number of employees with disabilities	469	471	480	582	578
Proportion of employees with disabilities (%)	5	5	5	6	6

<sup>1)</sup> The definition of “employees with disabilities” follows the legal definition of disability in social legislation – Article 2 of the Social Code (SGB) IX.

## Full-time and part-time workers

[GRI G4-10]

	2011/12	2012/13	2013/14	2014/15	2015/16
Number of full-time workers	9,689	9,682	9,677	9,559	9,585
Proportion of full-time workers (%)	93.8	93.3	92.3	92.4	92.8
Number of part-time workers	639	697	735	787	741
Proportion of part-time workers (%)	6.2	6.7	7.1	7.6	7.2

## Employees with and without flexitime

as a percentage

	2011/12	2012/13	2013/14	2014/15	2015/16
With flexitime	46.1	47.7	48.4	49.5	55.1
Without flexitime	51.9	52.3	51.7	50.5	44.9



## Foreign employees in Germany<sup>1)</sup>

[GRI G4-LA12]

	2011/12	2012/13	2013/14	2014/15	2015/16
Number	524	526	526	530	550
Proportion (%)	5.1	5.1	5.1	5.1	5.3

<sup>1)</sup> "Foreign employees" denotes all employees who do not have German citizenship.

## Social engagement

Amount of financial donations to charitable projects made by Miele & Cie. KG

in thousands of euros [GRI G4-EC1]

2011/12	2012/13	2013/14	2014/15	2015/16
207	154	277	215	181

Amount of financial donations to charitable projects made by the Miele Foundation<sup>1)</sup>

in thousands of euros [GRI G4-EC1]

2012	2013	2014	2015	2016
100	97	81	81	94




Due to the unfavourable development of interest and the resultant lower revenue, the expenditure for public welfare reduced to 81,000 euros in the calendar years 2014 and 2015. The Foundation only invests its interest profit. The basic amount is 2.5 million euros.

<sup>1)</sup> Data for the Miele Foundation refers to calendar years.





# Objectives






## Comparing objectives

Miele reconsiders its objectives each year. Here, the degree of performance for the objectives drawn from the Sustainability Report 2015 is displayed. Some objectives have been completely fulfilled in the meantime, but with some delay.


-  Objective achieved
-  Objective partly achieved
-  Objective not achieved

## Strategy and management






Strategic objective	Measures	Comment	Deadline/ Status
<b>Sustainability strategy</b> The Miele sustainability strategy is developed and implemented cyclically.	Annual strategy reviews including the involved functions	In the business years 2014/15 and 2015/16, the objectives, measures, and key figures of the Miele sustainability strategy were monitored and checked by the Technical Product Management and Environmental Office, taking into account all the departments involved. In addition, workshops were held in the reporting period on the internal evaluation of key sustainability topics, as well as external stakeholder surveys, see also the <a href="#">Strategy chapter</a> .	30.06.2016 
<b>Sustainability management</b> The monitoring and reporting of important sustainability indicators has been optimised.	Expand the IT system for key figures for sustainability and use of targeted guidance of activities	The target was not fully reached by 30 June 2015. New key figures from the revised Miele sustainability strategy were recorded in the IT system on 30 June 2016 in order to capture the key figures for sustainability.	30.06.2015 
<b>Management system</b> Relevant management systems have been implemented and certified at all Miele sites.	Certify the Dongguan plant in accordance with the SA8000 standard	The target was delayed and achieved in November 2016. Certification started in the reporting period. The pre-audit and review documentation on SA8000 took place in September 2016.	31.12.2015 
<b>Management system</b> External auditing and re-certification of all European Miele sites in accordance with ISO 9001, ISO 14001, ISO 50001, OHSAS 18001 and SA8000	Auditing by an external certifier  Issue a new certificate which is valid for 3 years from 15 December 2014	The Group certificate 9/14/18/50, which is valid from 15 December 2014 to 14 December 2017 is available to Miele.	14.12.2017 

Strategic objective	Measures	Comment	Deadline/ Status
<b>Stakeholder dialogue</b> Systematic stakeholder management processes have been introduced.	Observation of the stakeholder environment and regular communication with key stakeholders	Communication with key stakeholders has taken place. In addition, nine topic-specific telephone interviews were held for the Sustainability Report 2017, see the <a href="#">Strategy chapter</a> .	30.06.2016 
<b>Compliance Management</b> Further improvements have been made to the existing compliance management system.	Implementation of educational software for the Miele Code of Conduct	The educational software for the Miele Code of Conduct was implemented.	30.06.2016 
	Introduction of educational software on the subject of competition and anti-trust legislation	The educational software on the subject of competition and anti-trust legislation was introduced.	30.06.2016 
	Introduction of compliance software on the topics of corporate environmental protection, energy, occupational health and safety and product-related regulations	The new compliance software on the topics of corporate environmental protection, energy, occupational health and safety and product-related regulations was introduced.	30.06.2016 
<b>CR risk management</b> Miele risk management has been expanded to include relevant sustainability aspects from the sustainability strategy.	Significant risks related to sustainability which could affect Miele will be identified, evaluated and integrated in the existing risk management system	This is continuously monitored. The target was achieved in the reporting period.	Continually 

## Products

Strategic objective	Measures	Comment	Deadline/ Status
<b>Products with optimised consumption</b> The percentage of European washing machines, tumble dryers, dishwashers, cookers/ovens and refrigerators and freezers with the best energy efficiency rating is being further increased compared to business year 2013/14.	Offer highly efficient technologies in lower price ranges	<p>Washing machines From 63 % (2013/14) to 93 % (2015/16) at A+++</p> <p>Tumble dryers From 1 % (2013/14) to 8 % (2015/16) at A+++</p> <p>Dishwashers From 30 % (2013/14) auf 39 % (2015/16) at A+++</p> <p>Refrigerators and freezers From 8 % (2013/14) to 13 % (2015/16) at A+++</p>	30.06.2016 


## Products

Strategic objective	Measures	Comment	Deadline/ Status
<p><b>Products with optimised consumption</b></p> <p>The range of models across all product categories with the best energy efficiency rating and which have an energy label (EU) is being further expanded compared to the business year 2013/14.</p>	<p>Continued development of existing technologies and the use of new technologies</p>	<p>The range of models with the highest energy efficiency rating was further extended in the reporting period across all product categories.</p>	<p>30.06.2016</p> <p></p>
<p><b>Products with optimised consumption</b></p> <p>More users of Miele washing machines are able to further reduce the amount of laundry detergent they use.</p>	<p>Expansion of the product line of automatic washing machines with automatic detergent dosing systems</p>	<p>The product line of automatic washing machines with automatic detergent dosing systems was further expanded. In the business year 2014/15, 15 % of the washing machines sold had TwinDos; in the business year 2015/16, this figure was 18 %.</p>	<p>30.06.2016</p> <p></p>
<p><b>Products with optimised consumption</b></p> <p>Increased numbers of Miele appliance users have the opportunity to actively and spontaneously reduce their consumption of resources even further.</p>	<p>Expansion of the line of appliances offered with the EcoFeedback function for a transparent display of current energy and water consumption depending on the programme selected</p>	<p>The proportion of washing machines sold with the EcoFeedback function was 34 % in the business year 2015/16; for tumble dryers, this figure was 20 % in the same time period.</p>	<p>30.06.2016</p> <p></p>
<p><b>Durability and reliability</b></p> <p>Long service life and reliability still provide a guaranteed contribution to resource conservation and climate protection, even in new model lines.</p>	<p>Carry out and publish a study on the ecological benefits of a long service life</p> <p>Proven appliance requirements, such as a service life of up to 20 years owing to appropriate construction and the use of high-quality materials are still a part of the process. Durability tests are continued as confirmation of the required properties.</p>	<p>A study on the ecological benefits of a long service life was carried out and published.</p> <p>The appliances continue to be built to last up to 20 years.</p>	<p>30.06.2016</p> <p></p>
<p><b>Operating comfort</b></p> <p>Uncomplicated and intuitive operability for various groups of Miele product users remains the standard in new model lines.</p>	<p>Design and develop simple, intuitive operation. Provide option for feedback from the device to the user, e.g. via acoustic or optical signals, and enable retrofitting in addition, if necessary.</p>	<p>Uniform device operation across all products is provided in new model lines. This also includes acoustic and optical signals.</p>	<p>30.06.2016</p> <p></p>



Strategic objective	Measures	Comment	Deadline/ Status
<p><b>Networking</b> Domestic appliance networking enables convenience, safety and energy savings.</p>	<p>Expansion of the network capability of Miele products: the devices can be networked with other communication networks, components and products. The target here is also to reduce the primary energy consumption and CO<sub>2</sub> emissions for the entire system.</p>	<p>Numerous built-in appliances, washing machines, and tumble dryers, as well as many fridges, cooker hoods and hob units are network-enabled: for example, in the business year 2015/16, 60 % of all hob units and hoods were networked. Repurchasable WLAN modules, Con@ctivity 2.0 and ShopConn@ect increase the network capability and options for mobile application.</p>	<p>30.06.2016 </p>
<p><b>Pollutant-free products</b> Continue to manufacture products free of critical substances in the future</p>	<p>As in the past, the internal guidelines (Miele plant standard) for limiting the use of substances is adapted in cycles to the level of expert knowledge.</p>	<p>The Miele plant standard was modified.</p>	<p>30.06.2016 </p>
<p><b>Resource-efficient products</b> Products will continue to be durable, easy to repair, efficient and largely recyclable in the future.</p>	<p>The existing requirements continue to be acknowledged, the products are further developed within the scope of the options, and also improved in terms of resource efficiency as a result.</p>	<p>Miele continues to deal with conflicts of interest between targets including consumption efficiency, ease of recycling, design and customer requirements. For example, glass fronts are analysed in detail in terms of how easy they are to recycle.</p>	<p>30.06.2016 </p>
<p><b>Recycling/disposal</b> Establish cradle to cradle when recycling Miele products in an environmentally friendly manner</p>	<p>Check the product-return solutions in light of the amendment to the ElektroG</p> <p>Monitor the closing of material cycles and initiate pilot projects</p>	<p>The amendment to the ElektroG was completed on 20 October 2015. In line with § 17 of the ElektroG, it is now obligatory for distributors (dealers) to return old devices depending on the area of sale, stock and logistics. Miele initiated a study in advance to check for a possible return by the dealer. The externally conducted study came to the conclusion that such solutions cannot be implemented in line with Miele's targets.</p> <p>The use of recyclable cast iron was successfully tested in the Miele foundry at the Gütersloh site. In particular, parts from washing machines were used to manufacture new cast-iron weights. The waste management service provider is registered as a Miele supplier for cast iron; further cooperation options are currently being tested.</p>	<p>30.06.2016 </p>










## Supply chain





Strategic objective	Measures	Comment	Deadline/ Status
<p><b>High environmental and social standards</b> Recognised environmental and social standards are complied with in the Miele supply chain.</p>	<p>Early warning indicators as part of a pilot project in the existing supplier management system, in order to identify risks in procurement and to evaluate them accordingly</p>	<p>The pilot project was completed. The early warning system is continued with approx. 2000 suppliers (manufacturing materials and non-manufacturing materials).</p>	<p>30.06.2016 </p>

## Processes

Strategic objective	Measures	Comment	Deadline/ Status
<p><b>Energy efficiency</b> The specific energy consumption of 1368 kWh/t of product (2011/12) has decreased by 4 %.</p>	<p>Implementation of further site-specific individual measures from the analysis of potential, which was carried out in the business year 2012/13 for the infrastructure facilities such as heating and ventilation</p>	<p>The specific energy consumption could be further reduced:</p> <ul style="list-style-type: none"> <li>- From 52 kWh/item of product to 44 kWh/item of product; this corresponds to a reduction of 15 %.</li> <li>- From 1368 kWh/t of product to 1228 kWh/t of product; this corresponds to a reduction of 10 %.</li> </ul> <p>A reduction of the primary energy requirement by 4 % was also achieved.</p>	<p>30.06.2016 </p>
<p><b>CO<sub>2</sub> reduction</b> The average CO<sub>2</sub> emissions for the entire car and light commercial vehicle fleet are to be reduced by the business year 2020/21 to 110 g/km for cars and 165 g/km for LCV (light commercial vehicles).</p>	<p>Miele fleet changed to vehicles with low CO<sub>2</sub> emissions as new vehicles are purchased. A progress check is carried out annually on 30 June.</p>	<p>Average CO<sub>2</sub> emissions for the Miele car and LCV fleet were further reduced in the reporting period. For cars, the average CO<sub>2</sub> emissions were 120 g/km in the business year 2015/16 (business year 2013/14: 128 g/km).</p> <p>For LCV, the average CO<sub>2</sub> emissions were 183 g/km in the business year 2015/16 (business year 2013/14: 194 g/km).</p> <p>In the business year 2015/16, this value was 110 g/km for new cars and 161 g/km for new LCVs. The target is to reduce this value to 95 g/km for new cars and to 147 g/km for LCVs by the business year 2020/21.</p>	<p>30.06.2021</p>
<p><b>CO<sub>2</sub> reduction</b> At least 80 % of the outbound shipping volume is carried using sea or rail transport, with a maximum of 1.5 % being carried by air freight.</p>	<p>Select environmentally friendly transport modes using the CO<sub>2</sub> calculation tool in accordance with the Miele directive for choosing transport services. A progress check is carried out annually on 30 June.</p>	<p>With 1.1 % transport volume via air freight and 84.7 % via ship and rail, the target could be achieved in the business year 2015/16.</p>	<p>Continually </p>

Strategic objective	Measures	Comment	Deadline/ Status
<p><b>CO<sub>2</sub> reduction</b> Company CO<sub>2</sub> emissions, which were at 556 kg/t of product (2011/12), have been reduced by 3 %.</p>	<p>Establish and implement all initiatives aimed at reducing CO<sub>2</sub> emissions, such as reducing the amount of energy used at company sites and engineering the low-carbon distribution of goods</p>	<p>Company CO<sub>2</sub> emissions have increased to 571 kg/t of product (2015/16) which is equivalent to 2 %. The reason for this increase was the positive sales development, which resulted in an expansion of logistics activities and therefore to an increase in transport-related CO<sub>2</sub> emissions. In particular, the increase in overseas sales led to a disproportionate increase in CO<sub>2</sub> emissions due to the longer transport routes.</p>	<p>30.06.2016 </p>
<p><b>Resource efficiency</b> The mixed waste was reduced by 15 % compared to the business year 2012/13</p>	<p>Increase sorting rates for cardboard/paper and foils</p> <p>Optimise processes and container systems</p>	<p>Mixed waste increased by 13 % in total due to the increase in the cross-plant production volume and the number of employees, as well as an increase in construction activity, the change-over of device generations, and the misrouting of foils (caused by technical problems).</p> <p>Waste fractions such as plastic strapping and polystyrene were separated more successfully than in previous years; employee awareness is making an impact. Work continues to improve waste separation on site.</p>	<p>30.06.2016 </p>
<p><b>Resource efficiency</b> Resource efficiency in administration has improved.</p>	<p>Check for applications for recycling paper or other environmentally friendly alternatives; subsequent preparation of a pilot phase</p>	<p>The printers/copiers at all German sites have been changed to recycling paper. Further areas of application for recycling paper are being tested.</p>	<p>30.06.2015 </p>

Strategic objective	Measures	Comment	Deadline/ Status
<p><b>Ensuring recruitment of young talent and providing them with qualifications</b> Develop a concept for strategic personnel planning.</p>	<p>Carry out an age-structure analysis and resignation analysis for all sites</p>	<p>The analysis is completed. It led to strategic personnel planning which was conducted across Germany in 2016, with the aim of deriving a personnel portfolio for 2025. This portfolio will form the basis for the orientation of various HR disciplines. Planning should be conducted regularly. The idea behind this concept is still being developed.</p>	<p>30.06.2015 </p>
<p><b>Ensuring recruitment of young talent and providing them with qualifications</b> Managers are more aware of the real impact of demographic change.</p>	<p>Hold workshops with plant and departmental management at the sites in order to develop ideas</p>	<p>The activities were not yet fully completed on 30 June 2016. The current activities now extend beyond the target, as the focus is not only on awareness, but also on developing strategic personnel planning at each plant for 2025 as a result; also see previous target.</p>	<p>30.06.2016 </p>
<p><b>Diversity and equal opportunity</b> Requirements for the future advancement of women is established.</p>	<p>Questionnaire among female managers, engineers and candidates in the business year 2014/15</p> <p>Participation in the "Frauen-Karriere-Index" ("Women's Career Index"), a project funded by the German Federal Ministry of Family Affairs, Senior Citizens, Women and Youth with the aim of creating transparency on the issue of career advancement opportunities for women</p>	<p>In 2014, over 100 female specialists and managers were asked to describe their attitudes and expectations on the topics of work and career in order to guide the Germany-wide "Diversity: Focus on Women" project.</p> <p>Miele participates in the "Frauen-Karriere-Index" ("Women's Career Index") project.</p>	<p>30.06.2016 </p>
<p><b>Occupational health and safety</b> Health promotion and the design of age-appropriate workplaces have been further improved and optimised.</p>	<p>Form project teams at all production sites on the topic of corporate health management</p> <p>Introduce the "Körperliche Fitness" ("Physical fitness") concept with an external partner (calculate Work Ability Index, diagnostics and analysis, develop individual training plans for employees)</p> <p>Conduct an employee questionnaire on the topic of health together with an external partner</p> <p>Offer various options for advice and information events/materials</p>	<p>Since then, organisational structures for corporate health management have been created and projects have begun at all German Miele plants, see also <a href="#">People chapter</a>.</p>	<p>30.06.2016 </p>

Strategic objective	Measures	Comment	Deadline/ Status
<p><b>Occupational health and safety</b></p> <p>The company's IF – injury frequency (not including commuting accidents) – has been reduced by 10 % compared to the business year 2011/12.</p>	<p>Update hazard analyses and analyse accidents intensively</p>	<p>The injury frequency of 11.1 (business year 2011/12) was reduced by 14 % to 9.5 (business year 2015/16).</p>	<p>30.06.2016</p> <p></p>
<p><b>Awareness for sustainability</b></p> <p>Miele employees are aware of sustainability issues.</p>	<p>Optimise internal communication on the sustainability strategy, including exchanging information on lighthouse projects at the various sites and on company sustainability activities across the plants</p>	<p>The Sustainability Action Team was founded. Meetings were held between the Technical Product Management and Environmental Office (TPE) and specialist departments in order to establish a strategy. This contributed to awareness of this topic. Plant meetings, notices and news on the intranet covering, for example, mobility management topics, recycling paper, or the natural design of company groundsall increased awareness.</p>	<p>30.06.2016</p> <p></p>
<p><b>Employee satisfaction</b></p> <p>Miele employees value the company as an employer that acts with integrity.</p>	<p>Continue employee questionnaires (Employee Engagement Survey) at the sales subsidiaries</p> <p>Follow-up questionnaires in the business year 2015/16</p>	<p>Recently, an employee questionnaire was conducted in Germany with a focus on corporate health management in Germany. Global follow-up questionnaires are being planned.</p>	<p>30.06.2016</p> <p></p>
<p><b>Promotion of community</b></p> <p>Company involvement in the areas of learning/ education and art/ culture will continue at its current level.</p>	<p>Further support for projects/facilities for children and young people in the district of Gütersloh, support for not-for-profit facilities, support for the Studiefonds OWL scholarships, financing the holiday games through the Miele Foundation</p>	<p>In the reporting period, numerous projects and facilities were once more supported in the areas of learning/education and art/culture, see <a href="#">People chapter</a>.</p>	<p>Continually</p> <p></p>

# New objectives

with time frame up to 2025

Cluster/issue	Strategic objective
Management & processes	<p>The long-term financial success of Miele is ensured through sustainability.</p> <p>Miele is recognised and valued worldwide as the most sustainable company in the industry. Sustainability is an integral part of its brand identity.</p>
Stakeholder dialogue	<p>Sustainability communication with stakeholders is tailored to the target audience and international.</p>
Risk management	<p>In addition to legal requirements, risk management also takes into account the expectations of stakeholders.</p>
Products & services	<p>Miele appliances are the benchmark for sustainable product design and holistic efficiency.</p> <p>Miele is the industry leader in terms of product innovations and business models with a focus on sustainability.</p> <p>Trust in Miele is secured, even in an interconnected world.</p>
Supply chain & production	<p>Minimising supply risks and full compliance with environmental and social standards</p> <p>Miele is the sector leader for environmental performance, in particular for CO<sub>2</sub> emissions, energy efficiency and resource efficiency.</p>
Employees & society	<p>Miele is considered a role model when it comes to balancing work life and family.</p> <p>Miele sets an example for occupational health and safety.</p> <p>Miele ensures the recruitment of young talent and the opportunity for qualifications at all locations.</p> <p>Diversity is made possible through respect and equal opportunity.</p> <p>Employees and managers are aware of and engaged in sustainable behaviour based on values.</p> <p>Miele helps to maintain a sound, attractive environment at all locations.</p>



# Dialogue

## Overview of stakeholder engagement

[GRI G4-24, G4-26, G4-27]

Form of dialogue	Topics	Measures
<p><b>Customers</b></p> <ul style="list-style-type: none"> <li>• Continuous dialogue with customers of domestic appliances and commercial equipment via Miele Customer Service and sales talks</li> <li>• Customer hotline</li> <li>• Private and commercial customer surveys by in-house market research; on the topic of sustainability within the framework of the strategy update</li> <li>• Usability tests in the test studio</li> </ul>	<ul style="list-style-type: none"> <li>• Product quality/durability</li> <li>• Consumption efficiency</li> <li>• Dealing with own employees as well as work practices</li> <li>• Product origin</li> <li>• Compliance with human rights</li> <li>• Enquiries from customers and institutes in the 2015/16 business year including the following topics: current changes within the EU RoHS and REACH directives; microfibre inputs from washing machines; waste electrical and electronic equipment (WEEE) returned goods/distributor obligations</li> </ul>	<p><a href="#">Products chapter</a></p> <p><a href="#">People chapter</a></p> <p><a href="#">Supply chain chapter</a></p>
<p><b>Dealers</b></p> <ul style="list-style-type: none"> <li>• Continuous dialogue with dealers of domestic appliances and commercial equipment, especially concerning customer requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Product quality and durability</li> <li>• Consumption efficiency</li> <li>• Dealing with own employees, work practices</li> <li>• Product origin</li> <li>• Compliance with human rights in the supply chains</li> </ul>	<p><a href="#">Products chapter</a></p> <p><a href="#">People chapter</a></p> <p><a href="#">Supply chain chapter</a></p>

Form of dialogue	Topics	Measures
<p><b>Suppliers and service providers</b></p> <ul style="list-style-type: none"> <li>• Joint elaboration of concepts and proposals for solutions in working groups, several times a year</li> <li>• Regular exchange with employees of the purchasing department</li> <li>• Exchange in the context of audits and training</li> <li>• Supplier and service provider surveys on the topic of sustainability within the framework of the strategy update</li> <li>• Product innovation workshops</li> </ul>	<ul style="list-style-type: none"> <li>• Implementing environmental and social standards in the supply chain</li> <li>• Environmental protection in the entire product life cycle, in particular for energy efficiency</li> <li>• Common solutions for the implementation of different directives</li> </ul>	<p><a href="#">Products chapter</a></p> <p><a href="#">Supply chain chapter</a></p>
<p><b>Employees</b></p> <ul style="list-style-type: none"> <li>• Involvement in important decisions through worker participation policy</li> <li>• Regular employee meetings</li> <li>• Corporate suggestion scheme/idea management</li> <li>• Employee surveys</li> <li>• Complaints office</li> <li>• “Apprenticeship Open Days” at the Gütersloh, Bielefeld and Oelde plants</li> <li>• Girl’s Days</li> </ul>	<ul style="list-style-type: none"> <li>• All employee needs</li> </ul>	<p><a href="#">People chapter</a></p>
<p><b>Associations and interest groups</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Membership and active participation</a> in national and international associations and interest groups, such as the German Central Association of the Electrical and Electronics Industry (ZVEI) and CECED</li> <li>• Conference participation</li> </ul>	<ul style="list-style-type: none"> <li>• The focus is on sector-specific EU regulations in the fields of energy and performance, safety, substances and materials, disposal and general environmental issues.</li> </ul>	<p><a href="#">Products chapter</a></p>
<p><b>Science and research</b></p> <ul style="list-style-type: none"> <li>• Long-standing collaboration with various scientific institutions such as the universities in Bielefeld, Paderborn and Munich, as well as the Fraunhofer-Gesellschaft on issues such as product development and optimisation</li> <li>• Commissioning of studies on specialist topics</li> <li>• General exchange/Oeko-Institut</li> </ul>	<ul style="list-style-type: none"> <li>• Investigating, for example, ways to make washing machines and tumble dryers even more energy-efficient, along with the components and sensors they require.</li> <li>• Further topics include resource management as well as management systems and certifications.</li> <li>• Life cycle assessments/studies</li> </ul>	<p>Miele adopts the research results as solutions for operational practice.</p> <p><a href="#">Products chapter</a></p>

Form of dialogue	Topics	Measures
<p><b>Non-governmental organisations</b></p> <ul style="list-style-type: none"> <li>Dialogue with non-governmental organisations (NGOs) on relevant topics in the sector</li> </ul>	<ul style="list-style-type: none"> <li>Energy and water consumption of the appliances, waste water contamination (for example, with detergents), disposal of refrigerators</li> <li>In addition, NGOs address the extraction and processing of the raw materials used. Depending on the country of origin, the focus is on environmental issues such as the protection of water reserves and the management of soils/land, as well as compliance with labour and human rights.</li> </ul>	<p><a href="#">Supply chain chapter</a></p> <p><a href="#">Environment chapter</a></p> <p><a href="#">Products chapter</a></p>
<p><b>Local communities</b></p> <ul style="list-style-type: none"> <li>Close and direct exchange with the citizens at the locations and at cooperations/events</li> <li>Social engagement at the locations</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining local jobs</li> <li>Cultural engagement</li> </ul>	<p>Miele is a major taxpayer and employer at its locations.</p> <p><a href="#">People chapter</a></p>
<p><b>Policy makers and legislators</b></p> <ul style="list-style-type: none"> <li>Continuous dialogue with policy makers at national and European level by participating in committees, working groups and conferences</li> <li>International dialogue with the sales subsidiaries, which in turn are represented in working groups and committees</li> <li>Dialogue at the regional level, characterised by personal exchange</li> </ul>	<ul style="list-style-type: none"> <li>Energy efficiency and resource conservation</li> <li>Occupational safety and product safety</li> </ul>	<p><a href="#">Strategy chapter</a></p>
<p><b>Society/public/media</b></p> <ul style="list-style-type: none"> <li>Answering questions on sustainability topics</li> <li>Active sustainability communication</li> <li>Sustainability reporting</li> </ul>	<ul style="list-style-type: none"> <li>Product topics, e.g. environmental aspects, recycling/disposal</li> <li>Employee topics</li> <li>Supply chain topics</li> <li>Site-specific topics</li> </ul>	<p>Queries are answered as soon as possible. If necessary, the specialist departments are consulted for this purpose.</p>

# Miele's membership

of sustainability-related organisations

[GRI G4-16]

Organisation	Function/committee	Main focus(es)
B.A.U.M.	Member of the supporting group	
Bundesverband der Deutschen Industrie (BDI – Federation of German Industries)	Chair of the product testing working group  Participation in the subcommittee on environmental product policy  Board member of the Committee for Consumer Goods and Consumer Policy  Participation in working groups	Sustainability management
Bundesverband für Materialwirtschaft, Einkauf und Logistik (Association for Supply Chain Management, Procurement and Logistics)	Member	Purchasing, logistics, climate protection, resource efficiency
Bundesvereinigung Logistik (German Logistics Association)	Member	Logistics, climate protection
Deutsche Kommission Elektrotechnik Elektronik Informationstechnik (DKE – German Commission for Electrical, Electronic & Information Technologies)	Member  Chairing and participating in committees and working groups	Product safety  Energy efficiency  Dust emissions  Recycling
Deutsches Institut für Normung (DIN – German Institute for Standardization)	Participation in working groups	Principles of barrier-free design  Hygiene requirements  Care labelling for textiles  Acoustics
Deutscher Verein des Gas- und Wasserfaches (DVGW – German Association of Gas and Water Specialists)	Participation in working groups	Water safety, gas applications

Organisation	Function/committee	Main focus(es)
European Committee of Domestic Equipment Manufacturers (CECED)	Presidency Member of all management committees Spokesman of the Technical Committee Participation in working groups	Control of the association work Coordination of the association work Technical regulation Corporate Social Responsibility Ecodesign/energy label Energy labelling market surveillance Smart Grid Product safety Materials usage and waste Operation adapted to the needs of the disabled (usability, disability) Fair Trade
European Committee for Standardization (CEN)	Participation in working groups	Performance of disinfectors, gas applications
European Committee for Electrotechnical Standardization (CENELEC)	Participation in committees and working groups	Product safety, energy efficiency, noise, environment
French Association of Manufacturers of Household Appliances (GIFAM)	Presidency	Customer communication and awareness, for example during the national “maintenance day”
Industrie- und Handelskammer Bielefeld (IHK – German Chamber of Commerce and Industry)	Participation in the exchange of experiences and in the Environmental Committee	
Institute for Productivity and Quality (IPQ)	Head of the technical group for quality management	
International Electrotechnical Commission (IEC)	Chair of committees and working groups as well as participation	Product safety Energy efficiency Smart Grid Dust emissions Accessibility and usability Noise
North Rhine-Westphalian (NRW) climate protection dialogue	Participation in working groups	Climate protection strategy



Organisation	Function/committee	Main focus(es)
The German Brands Association	Vice-Presidency	
	Participation in working groups	Sustainability
NVMP/Witgoed foundation	Presidency (foundation)	Disposal, recycling economy
Ministry for Environment, Energy and Climate Protection (Lower Saxony)	Participation in working groups	Electrical appliances and product responsibility
stiftung elektro-altgeräte register (ear – German National Register for Waste Electric Equipment)	Deputy chair	Disposal of waste electrical and electronic equipment (WEEE)
	Product Range Association	
	Participation in working groups	
	Advisory board member	
Umweltinitiative der Wirtschaft im Kreis Gütersloh (environmental business initiative in the district of Gütersloh)	Founding member	Climate protection, resource efficiency, energy efficiency
	Executive Board (spokesman of the initiative)	
Zentralverband Elektrotechnik- und Elektronikindustrie (ZVEI – German Central Association of the Electrical and Electronics Industry)	Executive Board member; Board for environmental, energy and climate policies	
	Participation in board meetings	Disposal of waste electrical and electronic equipment (WEEE)
	Chairmanship and participation in working groups (chair of the “Task Force for Disposal of Household Appliances”)	Environmentally friendly design of electrical products
	Chair of the working group	Disposal and environment, electrical household appliances
	Participation in working groups	Corporate Social Responsibility Product-related environmental protection Energy efficiency Environmental protection Chemicals policy Technical regulation on product safety
	Chair of the trade association	Large electrical household appliances

# GRI Index

Miele's 2017 Sustainability Report meets the core requirements ("Core" option) of the internationally recognised G4 Guidelines issued by the Global Reporting Initiative (GRI). [GRI G4-32]

Information that is required for fulfilling the indicators is available on the linked pages. Where an indicator is not completely covered by this information, we have included supplementary data directly in the Index.

## General standard information

GRI indicator	References	Comments	
<b>STRATEGY AND ANALYSIS</b>			
G4-1	Statement by the most senior decision-maker in the organisation	<a href="#">Foreword</a>	
G4-2	Impacts, risks and opportunities	<a href="#">Sustainability strategy</a> <a href="#">Sustainability objectives</a> <a href="#">Sustainability risks</a>	Further information on the effects, approach and goals can be found in each chapter.
<b>ORGANISATIONAL PROFILE</b>			
G4-3	Organisation's name	<a href="#">The Miele Group</a>	
G4-4	Primary brands, products and services	<a href="#">Product groups</a>	
G4-5	Location of the organisation's headquarters	<a href="#">The Miele Group</a>	
G4-6	Countries where the company has significant operations	<a href="#">Locations</a>	
G4-7	Nature of ownership and legal form	<a href="#">The Miele Group</a>	Since its founding in 1899, Miele has been owned by the Miele family (51 percent) and the Zinkann family (49 percent).
G4-8	The markets served	<a href="#">Sales by regions</a> <a href="#">Facts &amp; Figures &gt; Company &gt; Sales by regions</a>	

<b>GRI indicator</b>	<b>References</b>	<b>Comments</b>
<b>G4-9</b> Scale of the organisation	<a href="#">Miele at a glance</a> <a href="#">Organisation</a> <a href="#">Facts &amp; Figures &gt; Company</a>	As a family-owned company with the legal form of a “Kommanditgesellschaft” (private limited partnership), Miele does not issue any information regarding total capitalisation.
<b>G4-10</b> Total workforce	<a href="#">The Miele Group</a> <a href="#">Organisation</a> <a href="#">Facts &amp; Figures &gt; Apprentices</a> <a href="#">Facts &amp; Figures &gt; Full &amp; Part-Time Employment</a>	The breakdown of workforce figures by category and gender required for full compliance with this indicator and figures from our international offices are not currently used by HR management for steering purposes. Staff levels do not fluctuate on a season-by-season basis.
<b>G4-11</b> Percentage of employees covered by collective bargaining agreements	<a href="#">Employee co-determination</a>	
<b>G4-12</b> Description of the supply chain	<a href="#">Value chain</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Facts &amp; Figures &gt; Supplier management</a>	
<b>G4-13</b> Significant changes during the reporting period	<a href="#">About the report</a> <a href="#">Structural change</a> <a href="#">Distribution logistics</a>	
<b>G4-14</b> Application of the precautionary approach	<a href="#">Sustainability management</a> <a href="#">The remit (Environment)</a> <a href="#">Products free of harmful substances</a>	
<b>G4-15</b> Commitments to external initiatives	<a href="#">Internal and external guidelines and standards</a>	
<b>G4-16</b> Memberships of associations or advocacy organisations	<a href="#">Committee and association work</a> <a href="#">Facts &amp; Figures &gt; Miele’s memberships</a>	
<b>IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES</b>		
<b>G4-17</b> List of all entities included in the financial statements/ scope of reporting	<a href="#">About the report</a>	The entities included in the sustainability report deviate from those in the consolidated financial statements and annual financial statements, particularly the information on foreign subsidiaries provided as an example (see consolidated annual statements and annual accounts).
<b>G4-18</b> Definition of the report content	<a href="#">Materiality process</a>	
<b>G4-19</b> List of all material aspects	<a href="#">Materiality analysis 2014</a>	
<b>G4-20</b> Material aspects within the organisation	<a href="#">Value chain</a> <a href="#">Materiality analysis 2014</a>	In general, material aspects within the organisation are relevant to all locations, unless specified in the text.

<b>GRI indicator</b>	<b>References</b>	<b>Comments</b>
<b>G4-21</b> Material aspects outside the organisation	<a href="#">Value chain</a> <a href="#">Materiality analysis 2014</a>	The presentation of material aspects along the value chain indicates the phase in which these are relevant. If an aspect is only relevant for a certain geographical region or stakeholder group, it is specified in the text.
<b>G4-22</b> Restatements – comparison with previous reports		In cases where the presentation format has been modified, it is specified in the text.
<b>G4-23</b> Significant changes from the reporting scope and aspect boundaries		If the report boundaries, methods of measurement or reporting periods have changed, it is specified in the text.
<b>STAKEHOLDER ENGAGEMENT</b>		
<b>G4-24</b> Stakeholder groups engaged by the organisation	<a href="#">Process 2014</a> <a href="#">Stakeholder engagement</a> <a href="#">Facts &amp; Figures &gt; Overview of stakeholder engagement</a>	
<b>G4-25</b> Identification and selection of stakeholders	<a href="#">Stakeholder engagement</a>	
<b>G4-26</b> Type and frequency of stakeholder engagement	<a href="#">Materiality process</a> <a href="#">Expert interviews</a> <a href="#">Stakeholder management</a> <a href="#">Facts &amp; Figures &gt; Overview of stakeholder engagement</a>	
<b>G4-27</b> Key topics raised by stakeholders	<a href="#">Expert appraisal</a> <a href="#">Major areas of focus in the reporting period</a> <a href="#">Facts &amp; Figures &gt; Overview of stakeholder engagement</a>	
<b>REPORT PROFILE</b>		
<b>G4-28</b> Reporting period	<a href="#">About the report</a>	
<b>G4-29</b> Date of most recent previous report	<a href="#">About the report</a>	
<b>G4-30</b> Reporting cycle	<a href="#">About the report</a>	
<b>G4-31</b> Contact person	<a href="#">Imprint</a>	
<b>G4-32</b> GRI Index	<a href="#">Facts &amp; Figures &gt; GRI Index</a> <a href="#">About the report</a>	
<b>G4-33</b> Assurance		External assurance for the report has not been sought and is not yet planned.

GRI indicator	References	Comments
<b>GOVERNANCE</b>		
<b>G4-34</b>	The organisation's governance structure	<a href="#">Executive Board</a> <a href="#">Sustainability: systematic control</a>
<b>G4-36</b>	Responsibility for economic, environmental and social issues	<a href="#">Sustainability: systematic control</a>
<b>ETHICS AND INTEGRITY</b>		
<b>G4-56</b>	The organisation's values, principles and standards	<a href="#">Philosophy</a> <a href="#">Internal and external guidelines and standards</a>
<b>G4-57</b>	Mechanisms for seeking advice on ethical and lawful behaviour	<a href="#">Compliance management</a>
<b>G4-58</b>	Mechanisms for reporting concerns about unethical or unlawful behaviour	<a href="#">Compliance management</a>



## Specific standard disclosures

GRI indicator		References	Comments
<b>ECONOMIC</b>			
<b>Management approach:</b> Economic performance		<a href="#">Locations</a> <a href="#">Vocational training</a>	
<b>G4-EC1</b>	Direct economic value generated and distributed	<a href="#">Donations during the reporting period</a> <a href="#">Facts &amp; Figures &gt; Company</a> <a href="#">Facts &amp; Figures &gt; Social engagement</a>	Miele has recorded investments in the community as voluntary donations.
<b>G4-EC2</b>	Financial implications and other risks and opportunities resulting from climate change	<a href="#">Sustainability risks</a>	
<b>G4-EC3</b>	Coverage of the organisation's defined benefit plan obligations	<a href="#">Social benefits</a> <a href="#">Facts &amp; Figures &gt; Pension provisions</a>	
<b>G4-EC4</b>	Financial assistance received from government		Miele applies for the proportional reimbursement of power and energy tax for the production industry. For certain processes and methods (including generating own power in combined heat and power units), Miele applies for full tax relief on power and energy. This is based on the period of purchase/ consumption. It received tax relief of € 994,000 in 2014. Tax relief amount to € 1,055,000 in 2015.
<b>Management approach:</b> Market presence		<a href="#">Miele at a glance</a> <a href="#">Social engagement</a>	See management approach Economic performance
<b>G4-EC5</b>	Ratios of standard entry level wage by gender compared to local minimum wage	<a href="#">Remuneration</a>	As a party to collective wage agreements, Miele is obliged to pay the agreed wages. In Germany, this concerns 90 % of the workforce in all plants and in the central office. 10 % of the workforce are paid wages outside the scope of the agreed wage, in other words they receive more than the agreed wage.
<b>G4-EC6</b>	Proportion of senior management hired from the local community at significant locations of operation		Miele does not use the proportion of local managers for central steering purposes so this figure is not recorded.

GRI indicator		References	Comments
<b>Management approach:</b> Indirect economic impact			Through a regular dialogue with community stakeholders, policy-makers and unions, Miele is able to observe the indirect consequences of the company's business activity. A comprehensive, systematic analysis has not been conducted by Miele. See management approach Economic performance for further information.
<b>G4-EC8</b>	Indirect economic impacts	<a href="#">Locations</a> <a href="#">Sustainable innovation</a> <a href="#">Design</a>	See management approach Indirect economic impacts
<b>Management approach:</b> Procurement practices		<a href="#">Supply chain</a> <a href="#">Supplier management</a> <a href="#">Natural resources &amp; materials</a>	The approach is monitored and enhanced on an ongoing basis. Systematic evaluation has yet to take place in any of the areas required under the GRI.
<b>G4-EC9</b>	Proportion of spending on local suppliers at significant locations of operation	<a href="#">Procurement</a> <a href="#">Facts &amp; Figures &gt;</a> <a href="#">Purchasing volume</a>	Miele reports company-wide purchasing volumes by region.
<b>ENVIRONMENTAL</b>			
<b>Management approach:</b> Materials		<a href="#">Integrated management system</a> <a href="#">Environment management</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Facts &amp; Figures &gt; Strategy</a>	
<b>G4-EN1</b>	Materials used by weight or volume	<a href="#">Use of resources and materials</a> <a href="#">Facts &amp; Figures &gt; Natural resources &amp; materials</a>	
<b>G4-EN2</b>	Percentage of materials used that are recycled input materials	<a href="#">Use of materials</a>	The percentage of materials that are recycled input materials can only be measured for certain materials. This figure is not available for all materials used.
<b>Management approach:</b> Energy		<a href="#">Integrated management system</a> <a href="#">Certified management systems</a> <a href="#">Energy use &amp; emissions</a> <a href="#">Networks for increased energy efficiency</a> <a href="#">Saving energy</a> <a href="#">EU energy regulations</a>	
<b>G4-EN3</b>	Energy consumption within the organisation	<a href="#">Energy</a> <a href="#">Alternative energy concepts</a> <a href="#">Facts &amp; Figures &gt; Energy use &amp; emissions</a>	Miele records energy consumption in megawatt hours (MWh). One MWh is equivalent to 3.6 gigajoules (GJ).

GRI indicator	References	Comments
<b>G4-EN4</b> Energy consumption outside of the organisation	<a href="#">Facts &amp; Figures &gt; Consumption efficiency</a>	A key factor in energy consumption is the products' usage phase (see G4-EN7). Furthermore, Miele calculates the CO <sub>2</sub> emissions generated by power consumption (see G4-EN16) and transport (see G4-EN17). Miele has yet to record any further energy consumption outside the organisation.
<b>G4-EN5</b> Energy intensity	<a href="#">Energy</a> <a href="#">Facts &amp; Figures &gt; Energy consumption per tonne of product</a>	
<b>G4-EN6</b> Reduction of energy consumption	<a href="#">Energy</a> <a href="#">Energy efficiency</a> <a href="#">Facts &amp; Figures &gt; Energy consumption</a>	
<b>G4-EN7</b> Reductions in energy requirements of products and services	<a href="#">Domestic appliances</a> <a href="#">Facts &amp; Figures &gt; Products</a>	
<b>Management approach:</b> Water	<a href="#">Integrated management system</a> <a href="#">Environment management</a>	
<b>G4-EN8</b> Total water withdrawal by source	<a href="#">Water consumption</a> <a href="#">Facts &amp; Figures &gt; Water consumption</a>	
<b>G4-EN9</b> Water sources significantly affected by withdrawal of water	<a href="#">Water consumption</a>	The water sources used by Miele are not significantly affected by the withdrawal of water.
<b>Management approach:</b> Emissions	<a href="#">Integrated management system</a> <a href="#">Environment management</a> <a href="#">Energy use &amp; emissions</a> <a href="#">Networks for increased energy efficiency</a> <a href="#">Germany: return to producer</a>	Miele primarily contributes to protecting the environment by improving energy efficiency. GHG emissions are offset in individual cases, e.g. emissions that are generated during the disposal of Miele sales and transport packaging or on business trips using Deutsche Bahn railway network.
<b>G4-EN15</b> Direct greenhouse gas (GHG) emissions (Scope 1)	<a href="#">Carbon footprint</a> <a href="#">Miele fleet</a> <a href="#">Facts &amp; Figures &gt; Energy-related CO<sub>2</sub> emissions</a> <a href="#">Facts &amp; Figures &gt; The corporate carbon footprint</a> <a href="#">Facts &amp; Figures &gt; CO<sub>2</sub> emissions of the Miele fleet – TTW</a>	The carbon footprint only takes CO <sub>2</sub> emissions into account. Further GHG emissions and volatile CO <sub>2</sub> emissions have yet to be recorded. Biogenic CO <sub>2</sub> emissions are not relevant at Miele as no biogenic fuels are used.

GRI indicator	References	Comments
<b>G4-EN16</b> Indirect greenhouse gas (GHG) emissions (Scope 2)	<a href="#">Carbon footprint</a> <a href="#">Facts &amp; Figures &gt; Energy-related CO<sub>2</sub> emissions</a> <a href="#">Facts &amp; Figures &gt; The corporate carbon footprint</a>	For further information see G4-EN15: Direct GHG emissions
<b>G4-EN17</b> Other indirect greenhouse gas (GHG) emissions (Scope 3)	<a href="#">Carbon footprint</a> <a href="#">Transport</a> <a href="#">Workforce mobility</a> <a href="#">Facts &amp; Figures &gt; The corporate carbon footprint</a> <a href="#">Facts &amp; Figures &gt; Transport-related CO<sub>2</sub> emissions – TTW</a> <a href="#">Facts &amp; Figures &gt; CO<sub>2</sub> emissions from business trips</a>	For further information see G4-EN15: Direct GHG emissions
<b>G4-EN18</b> Greenhouse gas (GHG) emissions intensity	<a href="#">Carbon footprint</a> <a href="#">Facts &amp; Figures &gt; Energy-related CO<sub>2</sub> emissions per tonne of product</a>	For further information see G4-EN15: Direct GHG emissions
<b>G4-EN19</b> Reduction of greenhouse gas (GHG) emissions	<a href="#">Energy efficiency</a> <a href="#">Facts &amp; Figures &gt; The corporate carbon footprint</a>	Miele primarily contributes to protecting the environment by improving energy efficiency. As a result, a total of 1,200 tonnes of CO <sub>2</sub> could be saved during the reporting period.
<b>G4-EN20</b> Emissions of ozone-depleting substances	<a href="#">Other emissions</a>	Miele does not manufacture, import or export ozone-depleting substances.
<b>G4-EN21</b> NO <sub>x</sub> , SO <sub>x</sub> and other significant air emissions	<a href="#">Other emissions</a> <a href="#">Facts &amp; Figures &gt; SO<sub>2</sub> and NO<sub>x</sub> emissions</a>	The foundry and surface treatment plants in Gütersloh are subject to the reporting requirements of the German Pollutant Release and Transfer Register (PRTR). The foundry falls below the dust limits (10 mg/cbm air emissions) by around 70 %.
<b>Management approach:</b> Effluents and waste	<a href="#">Integrated management system</a> <a href="#">Environment management</a>	
<b>G4-EN22</b> Total water discharge by quality and destination	<a href="#">Waste water</a> <a href="#">Facts &amp; Figures &gt; Waste water</a>	
<b>G4-EN23</b> Total weight of waste by type and disposal method	<a href="#">Waste avoidance</a> <a href="#">Facts &amp; Figures &gt; Resource management</a>	By selecting and monitoring its waste disposal service providers, Miele is able to influence the disposal methods and their quality.

GRI indicator	References	Comments
<b>G4-EN24</b> Total number and volume of significant spills		No significant spills took place at any of the production sites during the reporting period.
<b>G4-EN25</b> Weight of transported, imported, exported, or treated hazardous waste	<a href="#">Waste avoidance</a> <a href="#">Facts &amp; Figures &gt; Waste for recycling and disposal by type</a>	
<b>Management approach:</b> Products and services	<a href="#">Integrated management system</a> <a href="#">Environment management</a> <a href="#">Product portfolio &amp; quality</a> <a href="#">Development &amp; innovation</a> <a href="#">Recycling &amp; disposal</a>	
<b>G4-EN27</b> Extent of impact mitigation of environmental impacts of products and services	<a href="#">Domestic appliances</a> <a href="#">Longevity</a> <a href="#">Products free of harmful substances</a> <a href="#">Development &amp; innovation</a> <a href="#">Commercial customers</a> <a href="#">Recycling &amp; disposal</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Facts &amp; Figures &gt;</a> <a href="#">Consumption efficiency</a>	Examples of the most important measures are explained in the report.
<b>G4-EN28</b> Reclaimed products and packaging materials	<a href="#">Returns and disposal</a> <a href="#">Germany: return to producer</a>	In terms of products, Miele focuses on its main sales market, Germany. For this sales market, the percentage of packaging reclaimed does not have to be recorded for the specific manufacturer as reclaiming takes place on a collective basis with other manufacturers. The company is unable to make any significant statement on an international level based on the information available.
<b>Management approach:</b> Compliance	<a href="#">Environmental protection and energy management</a>	
<b>G4-EN29</b> Significant fines and total number of non-monetary sanctions	<a href="#">Environmental protection and energy management</a>	There were no infringements of environmental regulations by the company in the reporting period.
<b>Management approach:</b> Transport	<a href="#">Transport &amp; Logistics</a> <a href="#">Transport</a> <a href="#">Transport vehicles</a>	



GRI indicator	References	Comments
<b>G4-EN30</b> Significant environmental impacts of transporting products and other goods and materials	<a href="#">Transport</a> <a href="#">Miele fleet</a> <a href="#">Facts &amp; Figures &gt; Transport &amp; Logistics</a>	
<b>Management approach:</b> Overall	<a href="#">Environment management</a>	
<b>G4-EN31</b> Environmental protection expenditures and investments	<a href="#">Facts &amp; Figures &gt; Investments and ongoing expenditures</a>	
<b>Management approach:</b> Supplier environmental assessment	<a href="#">Integrated management system</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Supplier management</a>	No potential environmental impacts have been systematically recorded in the supply chain nor any real impacts caused by links either side of our direct suppliers.
<b>G4-EN32</b> Percentage of new suppliers that were screened using environmental criteria	<a href="#">Selecting new suppliers</a>	All potential suppliers are required to complete a self-assessment, which contains criteria on environment management and climate protection. All production material suppliers considered for a business relationship are also subjected to a short on-site audit.
<b>G4-EN33</b> Significant negative environmental impacts in the supply chain	<a href="#">Natural resources &amp; materials</a> <a href="#">Selecting new suppliers</a> <a href="#">Environmental standards</a> <a href="#">Risk management</a>	Miele checks for compliance with environmental criteria during its supplier assessment. Miele does not publish the detailed results. An environmental compatibility inspection does not form part of this check.
<b>Management approach:</b> Environmental grievance mechanisms	<a href="#">Complaints management</a>	The complaints office's main purpose is to record complaints related to the company but not activities concerning its direct suppliers. The approach is monitored and enhanced on an ongoing basis. Systematic evaluation involving stakeholders has yet to take place.
<b>G4-EN34</b> Grievances about environmental impacts	<a href="#">Complaints management</a>	No significant complaints concerning environmental emissions were received in the reporting period. Two minor complaints about noise due to activities at night, as well as from construction vehicle, were dealt with immediately, and their causes have been remedied.
<b>SOCIAL: LABOUR PRACTICES AND DECENT WORK</b>		
<b>Management approach:</b> Employment	<a href="#">Supplier management</a> <a href="#">Social standards</a> <a href="#">HR management</a>	

GRI indicator	References	Comments
<b>G4-LA1</b> Total number of new employee hires and employee turnover	<a href="#">Employee integration</a> <a href="#">Facts &amp; Figures &gt;</a> <a href="#">HR management</a>	The evaluation and publication of information on employee turnover and new employees by age, gender, region is not relevant for governance at Miele so these figures are not recorded.
<b>G4-LA2</b> Benefits provided to full-time employees	<a href="#">Social benefits</a>	
<b>G4-LA3</b> Return to work and retention rates after parental leave	<a href="#">Flexible working hours</a>	The number of employees entitled to parental leave is not currently recorded.
<b>Management approach:</b> Labour/management relations	<a href="#">Employee co-determination</a>	
<b>G4-LA4</b> Minimum notice periods regarding operational changes	<a href="#">Employee co-determination</a>	In German company locations, minimum periods of notice for informing the works council regarding measures affecting the workforce are regulated in the Works Constitution Act. Miele Executive Board goes beyond the statutory requirements, working closely with the works councils and providing extensive information concerning all relevant decisions, developments and processes.
<b>Management approach:</b> Occupational health and safety	<a href="#">Integrated management system</a> <a href="#">Occupational health &amp; safety</a> <a href="#">Miele family service</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	
<b>G4-LA5</b> Percentage of workforce represented in health and safety committees	<a href="#">Organisation</a>	
<b>G4-LA6</b> Rates of injury, occupational diseases, lost days and total number of work-related fatalities	<a href="#">Steering</a> <a href="#">Facts &amp; Figures &gt;</a> <a href="#">Occupational health &amp; safety</a>	The figures on injuries, occupational diseases, lost days and absenteeism have never been broken down by gender or region as they are not used for central steering purposes. Accident statistics are based on the regulations issued by the German Social Accident Insurance (DGUV), Directive 1.
<b>G4-LA7</b> Workers with high incidence or high risk of diseases	<a href="#">Steering</a>	

GRI indicator	References	Comments
<b>G4-LA8</b> Health and safety topics covered in formal agreements with trade unions		Agreements signed with the trade unions in Germany, Austria and the Czech Republic also cover occupational safety. Joint occupational health and safety inspections are also carried out. In addition, there is a works council committee on occupational health and safety, a general works agreement on VDU work and a company agreement on protective clothing/work clothing.
<b>Management approach:</b> Training and education	<a href="#">Vocational training and development</a>	
<b>G4-LA9</b> Average hours of training	<a href="#">Professional development</a> <a href="#">Facts &amp; Figures &gt; Vocational training &amp; development</a>	The breakdown of training hours by employee category and gender required for full compliance with this indicator is not currently used centrally for steering purposes. For this reason, these figures are not recorded.
<b>G4-LA10</b> Programmes for skills management and lifelong learning	<a href="#">Structural change</a> <a href="#">Professional development</a>	Miele does not have any rules on sabbaticals.
<b>G4-LA11</b> Percentage of employees receiving regular performance and career development reviews		All employees are entitled to an annual employee review. The number of employee reviews actually performed is not recorded.
<b>Management approach:</b> Diversity and equal opportunity	<a href="#">Integrated management system</a> <a href="#">Diversity &amp; equal opportunities</a>	The approach is monitored and enhanced on an ongoing basis. Systematic evaluation has yet to take place in any of the areas required under the GRI.
<b>G4-LA12</b> Composition of governance bodies and breakdown of employees by indicators of diversity	<a href="#">Governance</a> <a href="#">Women in management</a> <a href="#">Facts &amp; Figures &gt; Diversity &amp; equal opportunities</a>	The breakdown of employees by minority status and other diversity indicators required for full compliance with this indicator is not currently used centrally for steering purposes. For this reason, these figures are not recorded. The same applies to the breakdown of employees by age groups and gender at locations outside of Germany.  During the reporting period, the Executive Board was made up of five members, none of whom were women. Two of the members were between the age of 30 and 50 and three were over the age of 50.
<b>Management approach:</b> Equal remuneration for women and men	<a href="#">Diversity &amp; equal opportunities</a> <a href="#">Remuneration</a>	
<b>G4-LA13</b> Ratio of basic salary and remuneration of women to men	<a href="#">Diversity &amp; equal opportunities</a> <a href="#">Remuneration</a>	

GRI indicator	References	Comments
<b>Management approach:</b> Supplier assessment for labour practices	<a href="#">Integrated management system</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Supplier management</a> <a href="#">Social standards</a>	Status is the same as the management approach for Supplier environmental assessment
<b>G4-LA14</b> Percentage of new suppliers that were screened using labor practices criteria	<a href="#">Selecting new suppliers</a> <a href="#">Facts &amp; Figures &gt; Self-assessment on compliance with social standards by potential suppliers</a>	Approach is the same as indicator G4-EN32: Percentage of new suppliers that were screened using environmental criteria
<b>G4-LA15</b> Significant negative impacts for labour practices in the supply chain	<a href="#">Selecting new suppliers</a> <a href="#">Social standards</a> <a href="#">Risk management</a>	Same approach as indicator G4-EN33: Significant negative environmental impacts in the supply chain
<b>Management approach:</b> Labour practices grievance mechanisms	<a href="#">Complaints office</a>	The complaints office's main purpose is to record complaints about discrimination related to the company but not activities concerning its direct suppliers. The approach is monitored and enhanced on an ongoing basis. Systematic evaluation involving stakeholders has yet to take place.
<b>G4-LA16</b> Grievances about labour practices	<a href="#">Complaints office</a>	
<b>SOCIAL: HUMAN RIGHTS</b>		
<b>Management approach:</b> Investment	<a href="#">Integrated management system</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	Miele does not have any joint ventures.
<b>G4-HR2</b> Employee training on human rights policies	<a href="#">Raising employee awareness</a> <a href="#">Social and ethical standards</a>	Miele reports on the number of employees who received training during the period under review. The number of training hours and the percentage of employees who received training are not used centrally for steering purposes. For this reason, these figures are not recorded or calculated.
<b>Management approach:</b> Non-discrimination	<a href="#">Integrated management system</a> <a href="#">Social and ethical standards</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	
<b>G4-HR3</b> Total number of incidents of discrimination and corrective actions taken	<a href="#">Complaints office</a>	

GRI indicator	References	Comments
<b>Management approach:</b> Freedom of association and collective bargaining	<a href="#">Integrated management system</a> <a href="#">Social and ethical standards</a> <a href="#">Supplier management</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	
<b>G4-HR4</b> Violations of the right to exercise freedom of association and collective bargaining	<a href="#">Social and ethical standards</a> <a href="#">Social standards</a>	To date, no operations or suppliers have been identified which could significantly affect the freedom of association and the right to collective bargaining.
<b>Management approach:</b> Child labour	<a href="#">Integrated management system</a> <a href="#">Social standards</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	
<b>G4-HR5</b> Risk for incidents of child labour and measures taken	<a href="#">Social and ethical standards</a> <a href="#">Social standards</a>	To date, no operations or suppliers have been identified that have a significant risk of child labour or the employment of young persons under dangerous conditions.
<b>Management approach:</b> Forced or compulsory labour	<a href="#">Integrated management system</a> <a href="#">Social and ethical standards</a> <a href="#">Social standards</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	
<b>G4-HR6</b> Risk for incidents of forced or compulsory labour and measures taken	<a href="#">Social standards</a>	To date, no operations or suppliers have been identified that have a significant risk of forced or compulsory labour.
<b>Management approach:</b> Assessment	<a href="#">Integrated management system</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	
<b>G4-HR9</b> Operations that have been subject to human rights reviews	<a href="#">Social and ethical standards</a> <a href="#">Facts &amp; Figures &gt; Audit of the integrated management system</a>	Miele does not conduct any separate reviews on human rights. Aspects related to human rights are checked as part of evaluations for the SA8000 social standard.
<b>Management approach:</b> Supplier human rights assessments	<a href="#">Integrated management system</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Supplier management</a>	Status is the same as the management approach for Supplier environmental Assessment
<b>G4-HR10</b> Percentage of new suppliers that were screened using human rights criteria	<a href="#">Selecting new suppliers</a> <a href="#">Facts &amp; Figures &gt; Self-assessment on compliance with social standards by potential suppliers</a>	Approach is the same as indicator G4-EN32: Percentage of new suppliers that were screened using environmental criteria



GRI indicator	References	Comments
<b>G4-HR11</b> Significant negative human rights impacts in the supply chain	<a href="#">Selecting new suppliers</a> <a href="#">Social standards</a> <a href="#">Risk management</a>	Same approach as indicator G4-EN33: Significant negative environmental impacts in the supply chain
<b>Management approach:</b> Human rights grievance mechanisms	<a href="#">Complaints office</a>	Status is the same as the management approach Labour practices grievance mechanisms
<b>G4-HR12</b> Number of grievances about human rights impacts		No complaints were received in the reporting period.
<b>SOCIAL: SOCIETY</b>		
<b>Management approach:</b> Local communities	<a href="#">Social engagement</a>	So far, no programmes or systematic procedures have been introduced to evaluate the impact of the business activities on the community. However, beyond existing laws and regulations, Miele is committed to protecting the health and safety of its employees and of the local communities. The business activity also provides strong growth stimuli for purchasing power and tax earnings in the locations. By maintaining an intensive dialogue with the communities, Miele receives regular feedback on any impact by the business activities.
<b>G4-S01</b> Measures for local community engagement, impact assessments and development programmes	<a href="#">Social engagement</a> <a href="#">Complaints management</a>	Measures for engaging local communities are applied on time by the company's locations and are not systematically steered and analysed. The percentage of sites that implement such measures is not recorded by Miele.
<b>G4-S02</b> Negative impacts on local communities	<a href="#">Complaints management</a> <a href="#">Transport</a>	See management approach Local communities
<b>Management approach:</b> Anti-corruption	<a href="#">Compliance management</a> <a href="#">Internal and external guidelines and standards</a> <a href="#">Social and ethical standards</a>	With its internal donation policy and code of conduct, Miele makes sure that donations cannot be used as a hidden form of corruption.
<b>G4-S03</b> Percentage of operations assessed for risks related to corruption and the significant risks identified	<a href="#">Integrated management system</a> <a href="#">Compliance management</a>	Potential cases of corruption are checked as part of the global audits. Potential risks arise from the violation of tendering regulations.
<b>G4-S04</b> Communication and training on anti-corruption policies and procedures	<a href="#">Raising employee awareness</a>	Miele records the total number of employees who receive training on the code of conduct. Miele does not record the total number and percentage of business partners receiving information.

GRI indicator	References	Comments
<b>G4-S05</b> Confirmed incidents of corruption and actions taken	<a href="#">Ombudsman</a>	
<b>Management approach:</b> Public policy	<a href="#">Committee and association work</a> <a href="#">The EU label</a> <a href="#">Facts &amp; Figures &gt; Dialogue</a>	The approach is monitored and enhanced on an ongoing basis. Systematic evaluation has yet to take place in any of the areas required under the GRI.
<b>G4-S06</b> Total value of political contributions		In the business years 2014/15 and 2015/16, Miele & Cie KG donated € 5,000 per financial year to political parties in Germany. Miele treats information concerning the recipients of such donations as confidential.
<b>Management approach:</b> Anti-competitive behaviour	<a href="#">Internal and external guidelines and standards</a> <a href="#">Compliance management</a>	
<b>G4-S07</b> Legal actions for anti-competitive behaviour and anti-trust practices	<a href="#">Compliance management</a>	No complaints were raised in the reporting period about anti-competitive behaviour, cartels or monopolies by the company.
<b>Management approach:</b> Compliance	<a href="#">Sustainability management</a>	
<b>G4-S08</b> Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	<a href="#">Ombudsman</a>	The company was not fined for infringements in the reporting period.
<b>Management approach:</b> Supplier assessment for impacts on society	<a href="#">Integrated management system</a> <a href="#">Natural resources &amp; materials</a> <a href="#">Supplier management</a>	Status is the same as the management approach for Supplier environmental assessment

GRI indicator	References	Comments
<b>G4-S09</b> Percentage of new suppliers that were screened using criteria for impacts on society	<a href="#">Selecting new suppliers</a> <a href="#">Facts &amp; Figures &gt; Self-assessment on compliance with social standards by potential suppliers</a>	Approach is the same as indicator G4-EN32: Percentage of new suppliers that were screened using environmental criteria
<b>G4-S010</b> Negative impacts on society in the supply chain and actions taken	<a href="#">Selecting new suppliers</a> <a href="#">Social standards</a> <a href="#">Risk management</a>	Same approach as indicator G4-EN33: Significant negative environmental impacts in the supply chain
<b>Management approach:</b> Grievance mechanisms for impacts on society	<a href="#">Complaints management</a>	Status is the same as the management approach Environmental grievance mechanisms
<b>G4-S011</b> Number of grievances about impacts on society	<a href="#">Complaints management</a>	
<b>SOCIAL: PRODUCT RESPONSIBILITY</b>		
<b>Management approach:</b> Customer health and safety	<a href="#">Product safety</a> <a href="#">Development &amp; innovation</a>	
<b>G4-PR1</b> Percentage of significant product and service categories for which health and safety impacts are assessed	<a href="#">Product safety</a>	
<b>G4-PR2</b> Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services	<a href="#">Recall campaigns</a>	
<b>Management approach:</b> Product and service labelling	<a href="#">The EU label</a> <a href="#">Sustainability: informing customers</a>	In some areas, specific customer satisfaction surveys are conducted using an online tool while other areas use a standardised form.
<b>G4-PR3</b> Procedures for product and service information and labelling, and percentage of significant products and service categories subject to such information requirements	<a href="#">The EU label</a> <a href="#">Sustainability: informing customers</a> <a href="#">New materials</a> <a href="#">Facts &amp; Figures &gt; Energy consumption labelling</a>	

GRI indicator	References	Comments
<b>G4-PR4</b> Incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling	<a href="#">Correct declarations</a>	There were no relevant incidents of non-compliance with regulations and voluntary codes concerning product and service information and labelling during the reporting period.
<b>G4-PR5</b> Results of surveys measuring customer satisfaction	<a href="#">Customer demands</a>	In some areas, specific customer satisfaction surveys are conducted using an online tool while other areas use a standardised form.
<b>Management approach:</b> Customer privacy	<a href="#">Data protection</a>	The protection of personal customer data is a matter of course to Miele. The collection, storage, processing and use of all personal customer data are performed according to data protection rules.
<b>G4-PR8</b> Substantiated complaints regarding breaches of customer privacy	<a href="#">Data protection</a>	
<b>Management approach:</b> Compliance	<a href="#">Compliance management</a>	
<b>G4-PR9</b> Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	<a href="#">Compliance management</a>	No sanctions or major fines due to breaches of international conventions, contracts or national law were imposed on Miele in the reporting period.

# About this report

[GRI G4-13, G4-17, G4-28, G4-29, G4-30, G4-32]

Miele has been publishing sustainability reports since 2002. This report, the eighth of its kind, documents the company's progress in line with the guiding principle "Forever Better". The objective of the 2017 report is to make the performance of the company in sustainability-related issues transparent to stakeholders such as sustainability experts, customers, employees and business partners. The content reflects the main sustainability issues affecting the company. These issues were identified in the course of a materiality process in collaboration with the stakeholders and were weighted according to their relevance for Miele.

The 2017 Miele Sustainability Report was compiled in accordance with the guidelines of the Global Reporting Initiative (GRI) and in compliance with Core Requirements according to G4. Where possible, further information is provided in addition to the "Core" requirements in order to best meet shareholders' needs. A reference to the relevant GRI G4 indicator is included with the key figures and in the text. This document concludes with the GRI Content Index.

The structure of the report has been largely retained from the 2015 Sustainability Report with three changes: the Products chapter has been extended significantly – reflecting the focus of Miele's sustainability activities. This chapter includes comprehensive information about all product-related subjects, from development to disposal. The Employees and Society sections have been merged into the People chapter, while Transport and Logistics have been integrated back into the Environment chapter. The reason for the changes to the structure is that this year's report is designed as a PDF document, replacing the online version used for the previous report.

The reporting period covers the 2014/15 and 2015/16 business years ending on June 30 of the respective year. The editorial deadline was March 2017. Unless otherwise stated, all information provided



in this Sustainability Report, including figures, refers to Miele & Cie. KG with its imperial-Werke oHG subsidiary. This includes all German production and administration locations as well as the German sales subsidiary. This also includes the production sites of Bürmoos (Austria), Uničov (Czech Republic), Braşov (Romania) and Dongguan (China), under the management of Miele Beteiligungs-GmbH. International subsidiaries are cited as examples.

In the course of the reporting period, it became necessary to close the Sales and Service Centres in Bochum, Frankfurt, Hamburg, Karlsruhe and Berlin due to changes in the business landscape (October to December 2015). The goods distribution centre was expanded in 2015 and the new Spare Parts Warehouse was built in 2016, both in Gütersloh. Apart from these developments, there were no major changes with regard to size, structure or supply chain.

The Miele Sustainability Report is available online as a PDF file. The key figures for the reporting period are included in the appendix of the document and are available separately online. The sustainability section of the Miele website provides an overview of the sustainability philosophy and implementation measures for customers and other interested parties. It is available at [www.miele-sustainability.com](http://www.miele-sustainability.com) and via [www.miele.com](http://www.miele.com).

The use of the legal form has been avoided for the sake of greater readability. Unlike in previous reports, we have used gender-specific designations, apart from in lists or in the case of linguistically justified exceptions. This is intended to boost awareness of gender equality.

This report replaces the 2015 Miele Sustainability Report. Given the 2-year reporting cycle, the next Sustainability Report is due to appear in 2019.

# Imprint

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The current report is also available in German. In case of deviations from the English version, the German version will remain the authoritative version.

Miele would like to thank all members of staff and all other personnel involved in the creation of this report.

