

SUSTAINABILITY REPORT 2016 | 2017

LANDIS+GYR AT A GLANCE

Landis+Gyr helps people, organizations and communities around the globe to “manage energy better”. Given the growing global demand for energy and increasing complexity of energy management, Landis+Gyr is committed to providing energy utilities with smart solutions that help to successfully address these challenges while at the same time contributing to preserving natural resources by constantly seeking to reduce its environmental impact.

	2012/13	2013/14	2014/15	2015/16	2016/17
Turnover in USD billion	1.7	1.5	1.5	1.6	1.7
Employees	5,313	5,527	5,755	6,036	5,919
m ³ water	132,710	135,395	107,265	116,340	116,520
t waste	2,441	3,104	2,771	3,949	3,874
t chemicals	23.2	21.0	17.4	13.6	11.7
t CO ₂ e	33,921	34,600	34,005	32,296	31,594
Kg CO ₂ e/USD 100 turnover	1.7	1.8	1.8	1.7	1.5
t CO ₂ e per employee	5.4	5.1	4.8	4.3	4.2

Landis+Gyr Group's fiscal year runs from April 1 to March 31.

ABOUT LANDIS+GYR

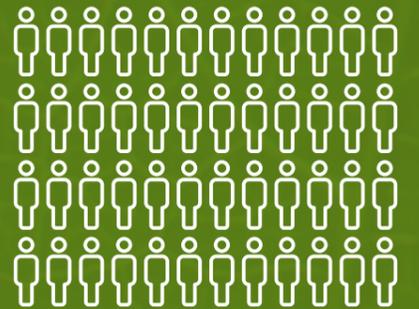
Landis+Gyr is the leading global provider of integrated energy management solutions for the utility sector. Offering one of the broadest portfolios of products and services to address complex industry challenges, the Company delivers comprehensive solutions for the foundation of a smarter grid, including Smart Metering, distribution network sensing and automation tools, load control, analytics and energy storage. Landis+Gyr operates in over 30 countries across five continents.

With sales of approximately USD 1.7 billion, the Company employs some 6,000 people whose sole mission is to help the world manage energy better. More information is available at: www.landisgyr.com

Financial data of the Landis+Gyr Group AG can be found at: www.landisgyr.eu/investors/financial-information

THE GLOBAL INDUSTRY LEADER IN METERING SOLUTIONS

5900+
TOTAL EMPLOYEES



72 LOCATIONS
ISO CERTIFIED

3000000001+
ELECTRICITY METERS
INSTALLED BASE



120 YEARS
IN BUSINESS

**1400+ R & D AND
PRODUCT MANAGEMENT
SPECIALISTS**

27 YEARS OF SMART METERING INNOVATION

1.3 BILLION METER DATASETS PROCESSED DAILY

USD 1.700.000.000 TOTAL SALES

2016/17 SUSTAINABILITY KEY FIGURES



WATER
+0.2%*

Consumption stabilized using alternative water sources



LANDFILL
-26.6%*

As a result of recycling efforts



CHEMICALS
-14.3%*

Replacement of chemicals identified as hazardous



CO₂E
-2.2%*

Overall CO₂ emissions decreased by another 2.2%. Since the program inception in 2007, the reduction amounts to 20.1%



WOMEN
42.8%

Share of women throughout the entire staff



APPRENTICES
1.7%

Number of people on formalized full apprentice programs through a recognized governmental body

ENVIRONMENTAL GOALS FOR THE PERIOD 2017-2019

[TARGETS PER FY, COMPARED TO 2016/17 AMOUNTS]



TOTAL AMOUNT OF WASTE: -2.0%
LANDFILL RATIO: -2.0%



OVERALL CO₂ EMISSIONS: -2.0%
CO₂ EMISSIONS PER UNIT PRODUCED: -1.5%

*Compared to previous year

THE GLOBAL INDUSTRY LEADER IN METERING SOLUTIONS



Energy meters and load management solutions for electricity, gas and heat



Tools for network and infrastructure management and control



Communication networks and modules



Value adding data management and data analytics software



Cloud-based software and services offerings



Managed services

COMPREHENSIVE COMPLIANCE WITH LAW AND LEADING STANDARDS

Landis+Gyr Group operates in full compliance with the laws, rules and regulations of the countries in which it is active. The Company has implemented a set of internal and external control measures and does not tolerate any corruption and violations of the principles of fair competition and human rights. To ensure socially balanced, healthy and safe working conditions, Landis+Gyr has established a set of stringent standards within the Group's operations and its supply chain. The suppliers comply and provide evidence of their compliance with Landis+Gyr's Quality, Environmental, Health and Safety Policy, and Code of Business Conduct and Ethics. These include declarations of compliance, self- and third-party assessment and auditing. In addition to ISO 9001, 14001 and 18001 certifications throughout the Company, Landis+Gyr requires its tier one suppliers to sign the Landis+Gyr supplier code of conduct or to provide evidence of equivalent standards like the EICC (Electronics Industry Citizenship Coalition) Code of Conduct.

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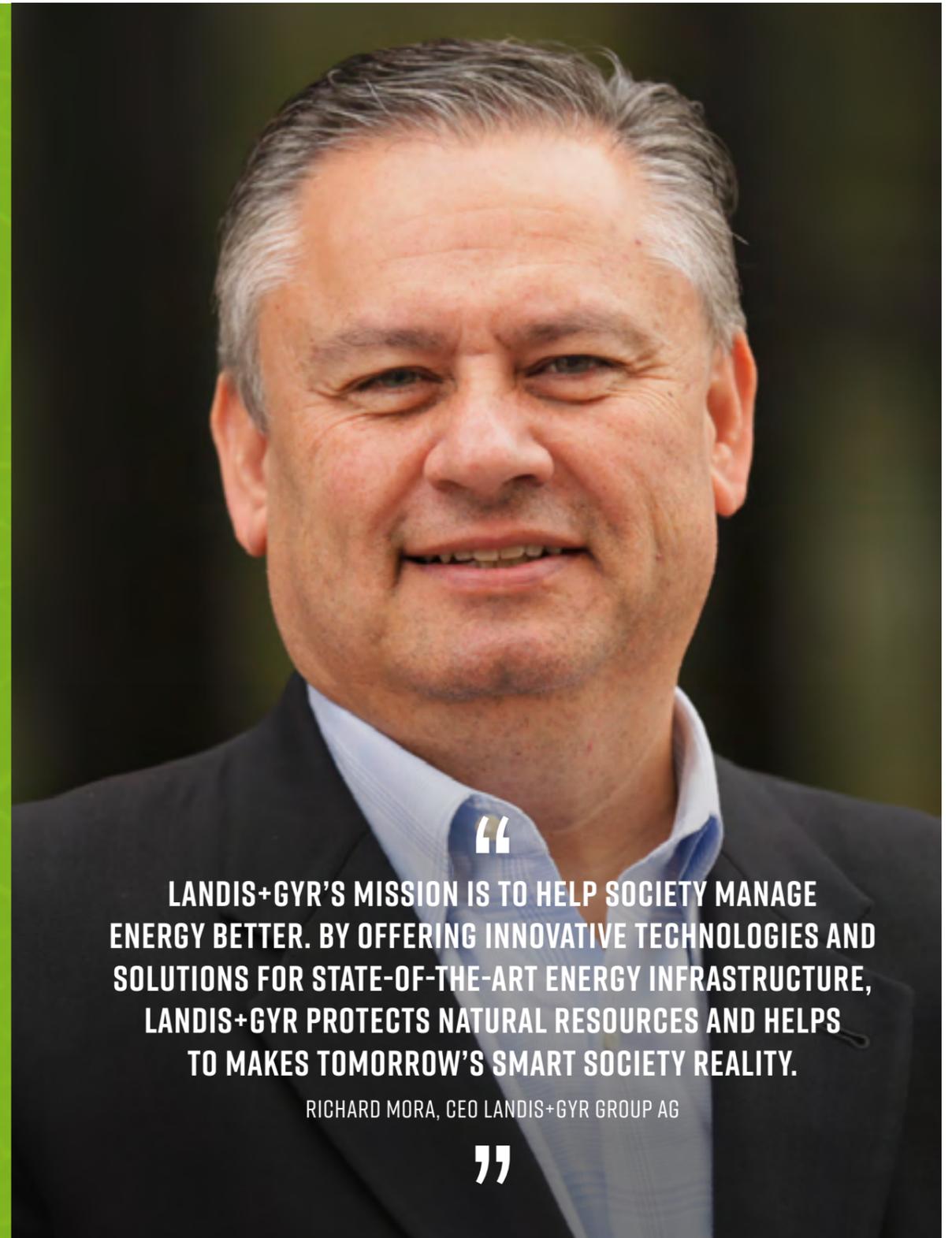
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FOREWORD

COMMITTED TO THE ENVIRONMENT, EMPLOYEES AND SOCIETY



“
LANDIS+GYR'S MISSION IS TO HELP SOCIETY MANAGE ENERGY BETTER. BY OFFERING INNOVATIVE TECHNOLOGIES AND SOLUTIONS FOR STATE-OF-THE-ART ENERGY INFRASTRUCTURE, LANDIS+GYR PROTECTS NATURAL RESOURCES AND HELPS TO MAKES TOMORROW'S SMART SOCIETY REALITY.

RICHARD MORA, CEO LANDIS+GYR GROUP AG

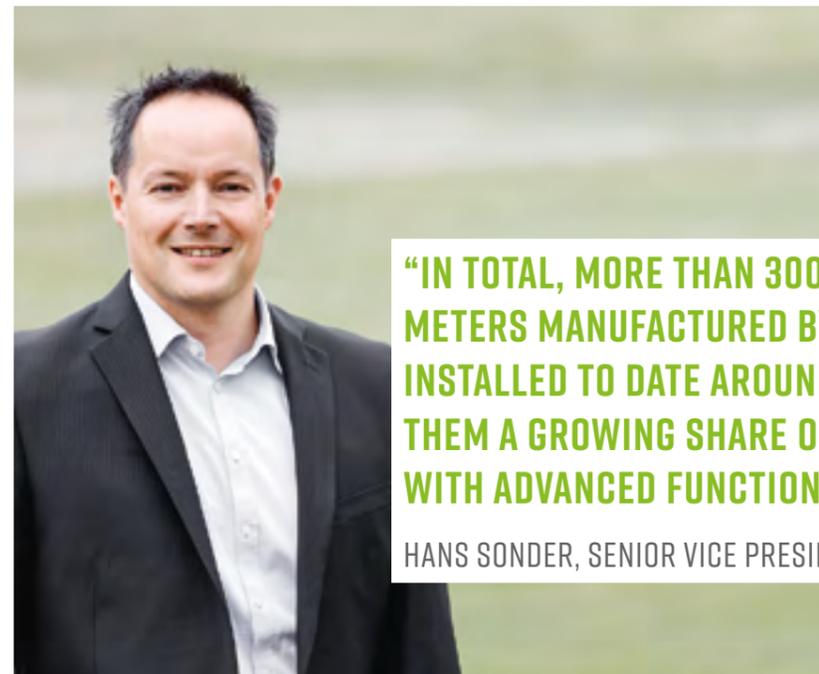
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In the financial year 2016/17, Landis+Gyr continued to undertake major efforts to meet the highest standards in environmental awareness as well as in business ethics concerning all of its corporate activities and along the entire value chain. The entire staff works extremely hard to preserve limited resources and promote the sustainable use of energy, thereby contributing to society's collective welfare both today and in the future.

Technological, economic, social and demographic developments spurred by megatrends such as decarbonization, decentralization and digitalization of energy production and supply, are having a transformative impact on the energy sector. Most notably are the increasing digitalization of business models and myriad facets of life, the growing awareness of environmental impact and sustainability, the rising importance of urban areas led by the emergence of megacities and the empowerment of consumers. Landis+Gyr, in its commitment to create an ever-evolving Company, has made numerous forward-looking investments and developed smart solutions that enable utilities and end-users to overcome today's challenges.

MAJOR CONTRIBUTION TO A GREEN AND SUSTAINABLE FUTURE

Landis+Gyr is helping to mitigate climate change on a global scale by developing state-of-the-art technologies and solutions. Smart Meters enable considerable energy efficiency gains and the integration of renewable resources from decentralized generation into the energy network, which in turn make it possible for utilities and end-consumers to reduce their CO₂ emissions substantially. In total, more than 300 million Electricity Meters manufactured by Landis+Gyr have been installed to date around the globe, among them a growing share of



“IN TOTAL, MORE THAN 300 MILLION ELECTRICITY METERS MANUFACTURED BY LANDIS+GYR HAVE BEEN INSTALLED TO DATE AROUND THE GLOBE, AMONG THEM A GROWING SHARE OF SMART METERS EQUIPPED WITH ADVANCED FUNCTIONALITIES.”

HANS SONDER, SENIOR VICE PRESIDENT AND ENVIRONMENTAL OFFICER

Smart Meters equipped with advanced functionalities. Landis+Gyr's Advanced Metering portfolio complements a full range of energy management and capacity optimization solutions, which include advanced analytics, load management, energy storage and increased consumer engagement solutions. Various studies have concluded that the estimated energy savings of Advanced Meters vary between 2–10% of baseline consumption. Actual results depend on utility and end-consumer behavior changes and the electricity mix offered. Therefore, savings vary by customer and by country.

CONSTANT EXPANSION OF SUSTAINABILITY MANAGEMENT FRAMEWORK

Landis+Gyr strives to strengthen its group-wide sustainability management systems on an ongoing basis. For this purpose, the Company has established standards to ensure social, healthy and safe working conditions throughout the Group's operations and its supply chain. These principles set the framework for an environmentally responsible and ethical business conduct in which employees are treated with respect and dignity. The common mind-set at Landis+Gyr has been a catalyst for the impressive performance improvements achieved over time. As part of this framework, Landis+Gyr started measuring its carbon footprint back in 2007. Since then, the Company has expanded the monitoring of its environmental impact. In parallel, management began introducing measures to increase the awareness of and engagement for sustainability topics among its teams. This has been achieved through direct input from employees, improving their work environment, minimizing risks and investing in education, training, health and safety. Furthermore, Landis+Gyr and its employees are increasingly engaged in a wide range of activities to strengthen relationships with local communities, customers, business partners, employees and other important stakeholders.

CONTINUED IMPROVEMENTS

AND FUTURE GOALS

The execution of existing programs as well as new initiatives contributed to lowering the Group's environmental footprint, by further reducing greenhouse gas emissions and the use of hazardous chemical substances. Resources were devoted to the training of all staff members. Landis+Gyr routinely monitored the performance of its waste treatment and emission control systems in order to ensure their effectiveness and to identify potential improvements. In 2016/17, water consumption within the Landis+Gyr Group marginally increased by 0.2%, clearly below the sales growth of 5.45%. Management continues to promote several initiatives aiming to reduce water consumption and increase the use of alternative water resources by expanding the capacity for collecting rain water. The total waste produced in 2016/17 slightly decreased by 1.9%. Overall landfill volumes were reduced significantly in all regions by a total of 26.6% compared to the previous year. The reduction was primarily a result of improved waste sorting and recycling. The total use of chemicals decreased by another 11.6% in 2016/17, reducing the overall use to almost 12.2 metric tons during the past five years. Further improvements were also achieved regarding the Group's total CO₂ emissions, which fell by another 2.2% in 2016/17. Since it began measuring its carbon footprint in 2007, Landis+Gyr has lowered its CO₂ emissions on a per-turnover basis by 46% from 2.8 kg per 100USD to 1.5.

The constant diminution of its carbon footprint throughout the entire value chain and lifecycle of Landis+Gyr's products and services is an essential target of the Group. Looking forward, it is Landis+Gyr's goal to reduce overall CO₂ emissions by 2% and CO₂ emissions per unit produced by 1.5% in the upcoming three fiscal years. To curb the harmful effects of waste, Landis+Gyr aims to achieve new operational improvements through design and in-process modifications, reuse and recycling. In the period 2017-2019, the Company plans to reduce the total amount of waste and the landfill ratio by 2% each year.

GREEN BUSINESS MODEL ADDRESSING TODAY'S CHALLENGES



For more than a century, Landis+Gyr has helped the world manage energy better. Now the Company is addressing current challenges such as the integration of renewable sources, consumer engagement, data security and privacy concepts with its innovative solutions, paving the way to a more sustainable energy future.

Key components for reducing the environmental impact of energy production and consumption include energy efficiency – the so-called 'fifth fuel' – mature renewable technologies and greater consumer engagement. To realize efficiency gains and successfully integrate renewable sources, grids need to become highly flexible. This calls for dynamic bi-directional grids with virtual architecture.

As a global leading designer and manufacturer of Smart Metering equipment and solutions, Landis+Gyr today enables utilities and consumers to make better informed decisions about energy usage, improve their energy efficiency and contribute to the sustainable use of resources based on advanced analytic tools. Smart Metering systems

are an essential component of global efforts to upgrade energy distribution systems and master the transition towards an increasingly decentralized grid architecture. By offering the suitable hardware and software, Landis+Gyr provides utilities around the world with the tools to address the energy challenges of today and tomorrow as well as to meet and further raise their sustainability targets by enhancing the efficiency and reliability of power distribution, intelligently managing demand response, and increasing network protection. These tools empower the consumer base, which is showing a growing interest in having greater control over its power consumption, thereby reducing carbon emissions while benefiting from lower energy costs.

Gridstream

Gridstream®, Landis+Gyr's comprehensive solution suite, progressively evolved from insights and requirements identified within the global market place to provider of a range of flexible tools tailored to meet energy utilities' unique needs. This suite of proven solutions encompasses two-way data flow, real-time analytics, applications, infrastructure and expertise, bringing intelligence to all levels of the utility universe. It supports utilities and grows with them as they adapt their business models for the future. A future that is more connected and sustainable, while ensuring that people around the world have access to clean, affordable and reliable energy. By offering flexibility, scalability, interoperability, common and open standards, reliability and security, Landis+Gyr's comprehensive Gridstream® Advanced Metering and intelligence solutions provide the tools utilities need for mastering the transition to an energy world driven by innovative technology and data as well as ecological requirements and social trends.

Customer Intelligence

Enables greater engagement with utility customers through shared insights and control capabilities.
▶ [Read more](#)

Advanced Metering Infrastructure

Focuses on operating the dynamic distribution system most effectively, from modeling and controls processes to intelligent asset management.
▶ [Read more](#)

Distribution Intelligence

Provides comprehensive, real-time access to information from the edge of the distribution network: energy use data, outage metrics and more.
▶ [Read more](#)

HIGHLIGHT 2016 | 17: FAIR METERING INITIATIVE

LANDIS+GYR'S FAIRNESS COMMITMENT TO BRING METER CIRCULARITY TO THE NEXT LEVEL



Project team at the Landis+Gyr site in Northfields (UK) with Product Manager Joe Andrews, holding a fair meter in his hands.

In 2013, Landis+Gyr launched the Fair Meter Initiative with the aim of ensuring that its processes and products are 'fair'. The initiative focuses on eight areas, namely: energy and emissions, circularity, fair materials (conflict materials), international labour standards, transparency, energy use of the meter, scarcity of resources and raw materials, and software and data privacy. The Fair Meter Initiative is Landis+Gyr's answer to the importance attached to smart meters in European policy addressing climate change.

Landis+Gyr started a Smart Meter Pilot in close collaboration with the Dutch utilities Alliander and Stedin in 2015. The target was to identify design features that could improve the circularity of the new E360 smart electricity meter. The first year focused on the analysis of the current situation and the creation of a baseline. Initial breakthroughs were achieved

in a relatively short time. During the financial year 2016/17, the Landis+Gyr development team made considerable progress, especially in terms of reducing the amount of raw materials used to manufacture the new E360 e-meter compared to a directly equivalent previous meter type. Among other achievements, the pilot project led to a remarkable reduction in the use of plastic and metal in both the 1-phase and 3-phase E360 meters. After the new meters were launched with the Dutch consortium, the total improvements in material and energy usage in the new E360 meter became even more striking. 143.18 tons less PC GF10% plastic, 14.49 tons less copper and 37.68 tons less steel. These results are particularly important in the context of Landis+Gyr's environmental goals. The PC GF10% plastic savings alone will reduce CO₂e emissions by more than 1,100 tons over the next four years.



Components of a fair meter.



COMMITTED TO THE ENVIRONMENT



“LANDIS+GYR MITIGATES THE GROUP’S ENVIRONMENTAL IMPACT THROUGHOUT THE ENTIRE PRODUCT LIFE CYCLE TO PROTECT AND PRESERVE NATURAL RESOURCES FOR CURRENT AND FUTURE GENERATIONS.”

BODO ZEUG, EXECUTIVE VICE PRESIDENT SUPPLY CHAIN AND OPERATION

ENVIRONMENTAL REPORTING GUIDELINES

REGULAR REVIEWS TO ACHIEVE CONSTANT IMPROVEMENTS



Landis+Gyr has implemented a Quality and Environmental, Health and Safety Policy based on references to international standards. They include directives related to the sustainable use of resources, to the prevention of emissions and pollution by modification of design and production processes, and to the substitution, recycling and re-use of materials in order to mitigate the environmental impact of its business activities.

Landis+Gyr aims to cover all employees, business activities and locations worldwide in its sustainability reporting, including wholly owned subsidiaries. The environmental reporting covers all CO₂

emissions, whereas data for waste and the use of chemicals exclude the group's level-3 sites, which account for negligible amounts. Data recording activities for waste and the use of chemicals were expanded from level-1 to level-2 sites (all 26 major sites) in 2013/14. Recording of water consumption data was already expanded to include all production levels in 2012/13.

Landis+Gyr's sustainability report focuses on the activities in financial year 2016/17 within the period from April 1, 2016 to March 31, 2017. Progress is monitored by collecting and constantly analyzing detailed information to identify further potential for

improvement. A web-based software and reporting system is used for data collection, aggregation and analysis. The system is well integrated into the Landis+Gyr Group and its sites worldwide. Data collection coverage was expanded during recent years to capture a broader range of sustainability indicators.

CALCULATING THE CARBON FOOTPRINT

In quantifying its carbon footprint, Landis+Gyr is guided by the Greenhouse Gas Protocol, which distinguishes between direct and indirect emissions and categorizes them into three broad scopes. Scope 1 includes direct emissions from sources

that are owned or controlled by the Company. Scope 2 comprises indirect emissions associated with the generation of purchased electricity consumed by the Company as well as district heating and process steam. Scope 3 measures all other indirect emissions that occur as a consequence of the activities of the Company from sources not owned or controlled by the Company. The carbon footprint is calculated by converting all GHG emissions to metric tons expressed in CO₂ equivalents (CO₂e), using appropriate GWP (Global Warming Potential) factors as published by the Intergovernmental Panel on Climate Change (IPCC).

WATER USING ALTERNATIVE WATER SOURCES



Fresh water is a shared and finite resource that is becoming scarce. Therefore, Landis+Gyr continues its efforts to expand its capacities for collecting rain water as well as for recycling and reusing water.

Although water covers about 71% of the earth's surface, less than 3% is fresh water. Of that amount, two-thirds is locked up in ice caps and glaciers. Growing populations, expanding cities and climate change are fueling an exponential increase in demand for water, while supply has become more erratic and uncertain. Therefore, resource efficiency and conservation of water are of vital importance.

In 2016/17, Landis+Gyr continued its efforts to reduce water withdrawals and consumption within all its business activities. Water consumption within the Group marginally increased by 0.2% to 116,520 m³ from 116,340 m³ in the prior year and despite significant sales growth of 5.45%. Looking at the entire 2011–2016/17 period, Landis+Gyr successfully managed to reduce its water consumption by 30%, whilst growing its employee base from 5200 to almost 6000 over the period.

In the reported period, 63.6% (2015/16: 68.4%) of total water consumption was attributed to level-1 sites and 29.9% to level-2 sites (2015/16: 24.6%). Level-3 sites accounted for 6.5% of the total amount (2015/16: 7.0%). Landis+Gyr successfully reused 2,322 m³ of water, +93% compared to the previous year.

Looking at the business regions, in the Americas and EMEA regions water consumption increased by 8% and 7%, respectively, compared to the previous year. The dryer weather conditions in both regions made more irrigation necessary in the year 2016/17. Meanwhile, water consumption in Asia Pacific decreased by 11%. The reduction was mainly due to the closing down of the Baddi site.

	2011	2012/13	2013/14	2014/15	2015/16	2016/17
Total m³	167,239	132,710	135,395	107,265	116,340	116,520

CUBIC METERS PER REGION

Americas	32,945	35,299	29,324	27,091	27,832	30,261
APAC	81,726	64,323	64,427	44,566	51,205	46,095
EMEA	52,568	33,088	41,644	35,609	37,303	40,163

CUBIC METERS PER SITE LEVEL

Level 1	107,963	86,986	89,089	67,678	79,573	74,138
Level 2	32,571	37,480	32,730	31,246	28,568	34,781
Level 3	26,705	8,244	13,576	8,342	8,199	7,602

Water used from public water supply (in m³)	85,700	66,753	66,848	61,483	64,314	73,906
Water used from own wells	68,809	56,040	51,234	33,907	35,379	36,731
Rain water collected	12,761	9,917	13,855	11,875	16,646	5,884**
Total waste water	56,457	65,043	68,949	70,635	89,397	97,100
Water reused	n.a.*	0	0	0	1,199	2,322
Water recycled	n.a.*	9,494	10,443	5,499	891	746

* Data collection since 2012/13

** The lower consumption of rain water for the period 2016/17 can be traced to the Corinth factory. The precedent years, the site inadvertently reported its own water source as 'rain water' instead of 'own wells'.

WASTE RESPONSIBLE RESOURCE MANAGEMENT

Waste accumulation is reaching threatening proportions worldwide. Waste treatment is an important component of responsible resource management. To curb the harmful effects of waste on the environment and on the health of its employees, Landis+Gyr constantly works to reduce and prevent waste across all its sites.

Private citizens, business and governments are increasingly putting efforts into waste management. Landis+Gyr is aware of the risks associated with contaminated structures, polluted soils and inadequately stored waste. Therefore, the Group constantly reviews its waste management processes in order to identify and implement opportunities for improvement in waste reduction, reuse and recycling. The total produced waste in 2016/17 decreased by 1.9% to 3,874 metric tons from 3,949 metric tons in the prior year.

The waste reduction during the reporting period was primarily a result of improved waste sorting and recycling at the Group's manufacturing sites. One of Landis+Gyr's key targets was and remains to reduce landfill waste. The actions taken during the past year focused on the Company's main landfill generators and produced the desired results. Overall, landfill volumes were reduced significantly in all regions by a total of 26.6% compared to the previous year. The sites of Kosmosdal, Corinth, Sydney, Melbourne and Curitiba played an important role in this achievement. Corinth and Curitiba also decreased their waste by selling scrap metal and e-waste.

80.8% of total waste produced in 2016/17 came from level-1 (2015/16: 78.9%) and 19.2% from level-2 sites (2015/16: 21.1%). Level 2 sites decreased their waste production by 10%.

Regionally, the greatest decrease in waste took place in the Americas. The efforts of the Curitiba site in Brazil and of the US level 2 sites Alpharetta, Lafayette and Pequot Lakes strongly contributed to this result. Over the last two to three years, they all took various measures to reduce waste and the outcome was reflected for the first time in the year 2016/17. Besides, the site in Reynosa omitted this year returnable cardboard boxes and wooden pallets from its waste reporting statistics in accordance with international practice. In the Asia Pacific and EMEA regions, waste increased by 31% and 24%, respectively. In Asia, the result for 2016/17 was affected by the fact that Melbourne reported its hazardous waste for the first time (around 90 t in the fiscal year 2016/17). In previous years, the site produced hazardous waste, but did not report it in the data collection. The increase in the EMEA region was generated by the expansion of production in Stockport, UK, and Montluçon, France, and by the expansion of the R&D department in Jyskä, Finland.



	2011*	2012/13**	2013/14	2014/15	2015/16	2016/17
Total t	2,319*	2,441	3,104	2,771	3,949	3,874
TONS PER REGION						
Americas	1,216	1,195	1,571	902	1,855	1,258
APAC	213	104	254	211	290	380
EMEA	890	1,142	1,279	1,658	1,804	2,236
TONS PER SITE LEVEL						
Level 1	1,811	2,441	2,409	1,936	3,118	3,130
Level 2	474	n.a.	695	835	831	744
Waste Treatment						
Sold	n.a.	1,122	694	961	1412	1369
Incinerated	n.a.	1	203	179***	193***	150***
Landfill	n.a.	612	544	654***	490***	360***
Recycled	n.a.	706	1,663	991	1864	2002

* Mixed site levels
** Level 1 sites only
*** Approx. 5% landfill ash added, previously not reported

CHEMICALS FROM 23.2 T TO 12.2 T IN THE PAST 5 YEARS

Virtually all manufacturing processes involve chemical usage. However, the economic role of chemicals need to be balanced with the recognition of their potential of damage for environment and human health. For Landis+Gyr, the sound management of chemicals throughout the entire value chain and life cycle of its products and services is important.

Hazardous chemicals can have harmful consequences for the environment as well as for the health of customers, employees and stakeholders throughout the entire value chain. The long-term effects they might have are often unknown. Therefore, Landis+Gyr is promoting chemical management projects to phase out the use of chemicals defined as hazardous and to minimize corresponding emissions. In 2016/17, the total use of chemicals decreased by another 11.6% to 12.2 metric tons in the prior year. Over the last five years, Landis+ succeeded in almost halving its use of chemicals.

Level-1 sites accounted for most of the chemicals impact, whereas use of chemicals at level-2 was negligible.

The Americas decreased chemical usage by 12% to 6.0 t, the EMEA region by 17% to 5.0 t. Instead, Asia Pacific increased its chemical use by 20% to 1.2 t.



	2011*	2012/13**	2013/14	2014/15	2015/16	2016/17
Total t	n.a.	23.2	21.0	17.4	13.8	12.2
TONS PER REGION						
Americas	n.a.	8.3	6.8	9.4	6.8	6.0
APAC	n.a.	0.5	1.1	0.9	1.0	1.2
EMEA	n.a.	14.4	13.1	7.1	6.0	5.0
TONS PER SITE LEVEL						
Level 1	n.a.	23.2	20.9	17.3	13.7	12.1
Level 2	n.a.	n.a.	0.1	0.1	0.1	0.1

* Data collection since 2012/13
** Level 1 sites only

CARBON FOOTPRINT ENGAGEMENT AGAINST CLIMATE CHANGE AND GLOBAL WARMING

Energy generation and consumption account for two-thirds of overall global greenhouse gas (GHG) emissions. Landis+Gyr, as a pioneer in the energy industry, started to record its carbon footprint in 2007, and since then the Company has decreased its total carbon emissions by 21.8%.

On 5 October 2016, 166 countries had adopted the Paris Agreement within the UN Convention on Climate Change, sending a clear signal stressing the importance of common action against climate change and global warming. Not only governments, but also industries, businesses and individuals are taking more and more steps to reduce greenhouse gas emissions. Landis+Gyr contributes to the reduction of GHG emissions not only through its smart and energy efficiency-improving products and solutions, but also by reducing the carbon footprint of its own operations. In the year 2016/17, the total CO₂ emissions within the Landis+Gyr Group amounted to 31,594 metric tons CO₂e, down by 2.2% compared to 32,296 metric tons CO₂e in 2015/16.

Between 2007 and 2016/17, Landis+Gyr achieved significant reductions in emissions related to its R&D and manufacturing processes. Since 2007, Scope-1 emissions have decreased by 56.7% and Scope-2 emissions by 21.4%. However, during the same period Scope-3 emissions increased by 21.1%. Business development activities were mainly responsible for this increase. Over the last 10 years, carbon emissions per-unit-of-production have been more than halved from 2.3 kg per product in 2007 to 1.1 kg in 2016/17. Similarly, average emissions per employee have decreased by 35% to 4.2 metric tons in 2016/17.

The overall decrease of emissions from 2015/16 to 2016/17 was mainly due to a reduction in direct emissions (Scope 1). They declined by 12.1% to 3,092 metric tons CO₂e. Reduced gasoline consumption of emergency power generators in India was a key factor. The power supply has become more reliable in the country, allowing the two Indian sites of Landis+Gyr to be less dependent on back-up generators. Another factor was a decrease in the distances driven by car in the Americas and in particular in the US.

From the previous year, the indirect emissions associated with the generation of purchased electricity or district heating (Scope 2) showed a slight improvement of 2.9% to 21,816 metric tons CO₂e. This result was mainly achieved through reductions in electricity and district heating consumption in Asia Pacific, North and South America.

The indirect emissions from sources neither owned nor controlled by the Company (Scope 3), such as business air travel, contributed 6,686 metric tons CO₂e, up 6.0%. The increase was mainly due to increased air travel in the Asia Pacific region related to supplier contracts. In contrast, selected travel restrictions led to less travel activities in the Americas region.



	2011	2012/13	2013/14	2014/15	2015/16	2016/17
Total t CO₂e	35,060	33,921	34,644	34,005	32,296	31,594

TONS CO₂E PER REGION

Americas	16,446	15,442	15,153	15,456	14,113	13,480
APAC	7,629	7,161	7,143	7,263	6,659	6,439
EMEA	10,985	11,318	12,348	11,286	11,524	11,675

TONS CO₂E PER SCOPE

Scope 1	5,690	5,585	5,911	4,809	3,516	3,092
Scope 2	24,133	22,869	22,508	22,774	22,470	21,816
Scope 3	5,237	5,467	6,225	6,421	6,311	6,686

TONS CO₂E PER ECONOMIC INTENSITY

kg CO₂e per product	1.8	1.6	1.6	1.5	1.5	1.1
t CO₂e per employee	5.7	5.4	5.1	4.8	4.3	4.2
t CO₂e per 10m² floor area	1.6	1.5	1.5	1.4	1.4	1.4
kg CO₂e per USD 100 turnover	1.9	1.7	1.8	1.8	1.7	1.5

Scope 1: Direct emissions from sources that are owned or controlled by the Company

Scope 2: Indirect emissions associated with the generation of purchased electricity consumed by the Company

Scope 3: Other indirect emissions that occur as a consequence of the activities of the Company from sources not owned or controlled by the Company

WATER: EVERY DROP COUNTS SAVING WATER ALL OVER THE WORLD

Looking at Landis+Gyr's global operations, some sites are taking local action to recycle or reuse water and to save significant volumes of this precious resource. Below are some examples of our water-conservation efforts in 2016/17.

In Reynosa, Mexico, 150m³ water per year are saved through the expanded recycling of condensed water and another 50m³ from the installation of reduced-flow faucets. Furthermore, the rain water collection system at the Landis+Gyr site has been improved and bottled water is being replaced by fresh drinking water from purifiers.

In Kosmosdal, South Africa, various activities are ongoing to save water and to comply with the provincial government's water regulations. These include an internal campaign to raise awareness about water usage and the monthly monitoring of water consumption levels. Another example is the site's outdoor water sprinkler system, which is being monitored and constantly improved.

In Pequot Lakes, Minnesota (USA), water use and waste water were both reduced by approximately 1,000 gallons (3,900 litres) when compared to 2015. These savings were achieved thanks to the increased awareness for water usage and waste water.

In Zhuhai, China, old pipelines and water meters have been replaced. The modernization of such infrastructure saves water.

In Northfields, United Kingdom, the re-use of stored grey water has been maximised.

Curitiba: Waste water treatment plant



Station for treatment of effluents



WASTE: REUSE, REDUCE, RECYCLE 2016 BEST WORKPLACE FOR WASTE PREVENTION AND RECYCLING

Landis+Gyr in Kirkland, Washington (USA) has been recognized by King County for the 4th year in a row as one of the Best Workplaces for Waste Prevention and Recycling. This was a substantial achievement for the Landis+Gyr organization and employees and is testimony to their extensive efforts to reduce the overall impact on the environment.

Since 2008, Landis+Gyr in Kirkland, outside of Seattle, has achieved significant reductions in working material use, waste to landfill and the amount of electronic waste and batteries sent to recycling. The cooperation and participation of every local employee was a crucial part of this accomplishment. There was an overall increase in working material and waste as a result of the increase in employee headcount and output levels. On a per-employee basis, however, the employees in Kirkland were credited with the following accomplishments in 2016.

Electricity Use	38% reduction in kWh
Natural Gas Use	54% reduction in CCF
Vehicle Gas Use	32% reduction in gallons
Water Use	12% reduction in gallons
Electronic Waste and Batteries	73% reduction in pounds
Solid Waste to Landfill	16% reduction in pounds

Landis+Gyr is convinced that reducing waste and promoting recycling helps to reduce the impacts of climate change. The Company is a certified Kirkland Green Business and has been recognized by Sustainable Seattle. Extensive efforts to re-use packaging materials and warehouse supplies has significantly reduced solid waste to landfill. A rechargeable battery station has been installed and the office composting program for paper towels, shredded paper and food waste helped to further reduce waste. The amount of office supplies containing recycled products has been increased by 25%.

Tool Board for Gas Module Retrofit
Process made of re-purposed gas
module packaging



Tote holder made of re-purposed
packaging materials



Plastics recycling center for gas
module bags



CO₂: CUTTING CARBON POLLUTION WHILE SUPPORTING LOCAL EMPLOYMENT

Landis+Gyr Oy in Finland supports the Jyväskylä-based Ketään ei jätetä rannalle association by giving some of its electrical and electronic waste to be recycled under the association's JALO initiative. This promotes local employment activities, while helping Landis+Gyr to reduce its carbon footprint.

Ketään ei jätetä rannalle is a non-profit association which, together with the city of Jyväskylä and local partners, organizes rehabilitative work activities for unemployed and disabled people. The JALO initiative employs 15 young people at risk of marginalization who disassemble and process electrical and electronic waste for recycling purposes. Landis+Gyr contributes to the initiative by giving some of the electrical and electronic waste generated by its operations to the non-profit association.

Landis+Gyr's electrical and electronic waste includes scrapped or defective metering devices that are taken to the Company's premises in Jyväskylä for inspection and repair. Some of the metering devices end up being destroyed, and that is where the JALO initiative steps in, disassembling them and recycling them properly along with other electrical and electronic waste.

"We have been transporting electronic waste hundreds of kilometers away to specialized centers in both Finland and abroad. By supporting this local organization, we can reduce the need for transportation," says Landis+Gyr's Quality Manager Ari Koskinen.

The premises of the Ketään ei jätetä rannalle association are located only a few hundred meters away from the Landis+Gyr premises, which means thousands of kilometers for waste transport can be saved, thus reducing CO₂ emissions substantially. Since March 2017, more than 3,200 kilograms of Landis+Gyr's e-waste has been recycled through this initiative.

"In addition to environmental aspects, we joined the JALO initiative for social reasons: it allows us to support the creation of jobs not only in our own industry, but also elsewhere in society and to combat marginalization by taking concrete action," says Arto Tolvanen from Landis+Gyr's Partner Management in Finland.



“WE DON’T JUST CARE ABOUT THE RESULTS WE REPORT, BUT ALSO ABOUT HOW THEY WERE OBTAINED.”

ARI TOLONEN, CEO NORTHERN EUROPE, JYSKÄ (FINLAND)

COMMITTED TO EMPLOYEES AND SOCIETY



“LANDIS+GYR’S CORPORATE CULTURE IS ADDRESSING THE CHALLENGES OF TODAY’S CHANGING WORLD AND AIMS TO CONTRIBUTE TO THE WELLBEING OF THE COMPANY’S EMPLOYEES AND STAKEHOLDERS.”

ADRIANA PAUN, SENIOR VICE PRESIDENT GLOBAL HUMAN RESOURCES

COMMITTED TO EMPLOYEES DEVELOPING SKILLS AND ENGAGEMENT

Landis+Gyr's employees have made the Company the frontrunner in the Smart Metering industry. Their creativity, expertise, know-how and dedication shape the success of each product and solution designed to create value for utilities and their customers worldwide.

Landis+Gyr is a global enterprise, actively competing in different geographies with well-qualified staff from a variety of origins. The Company promotes and strives to create an environment in which all employees can develop and perform to the best of their abilities.

EDUCATION AND TRAINING

In-depth knowledge and hence the motivation and development of employees are essential for Landis+Gyr's pioneering position and continued success in the Smart Metering and Energy Management industry. It is of crucial importance that employees are committed to their tasks and roles within Landis+Gyr's interdisciplinary teams. Therefore, the Company offers its qualified employees numerous opportunities to grow their competencies and qualifications in the areas of leadership, compliance, sustainability, health and safety, customer service, sales and marketing, professional development, management skills, and cultural and environmental awareness. A key element of Landis+Gyr's long-term plan for fostering its competitive market position is to attract and retain the brightest and most motivated talent worldwide, people who also bring a strong sense of commitment and passion to work.

A SAFE WORKPLACE

The safety and health of all employees, temporary workers and visitors is a top priority at Landis+Gyr. This is why the Company goes beyond legal requirements in the pursuit of its vision of healthy and safe workplaces. The Group and those responsible under the Code of Conduct are committed to maintaining clean workplace environments that reduce the risks of accidents, injuries and illnesses. To maintain and strengthen a high standard of workplace quality, Landis+Gyr provides employees with regular training and events to integrate job safety into daily work and ensure that everyone is safe and sound.

RESPECT AND DIVERSITY

The way employees treat each other and their work environment affects the way they do their jobs. All employees want and deserve a workplace where they are respected and appreciated. Landis+Gyr highly values and regards employee diversity in terms of backgrounds, skills and professional expertise. In addition to complying with applicable wage, labor and employment laws, it is the Company's policy to ensure equal employment opportunities without discrimination or harassment. The diversity of cultures, religions, nationalities, genders, and age groups is a valuable source of talent, creativity, and innovation.

	2012/13	2013/14	2014/15	2015/16	2016/17
Total Employees	5,313	5,527	5,755	6,068	5,919

EMPLOYEES PER REGION

Americas	2,085	2,092	2,141	2,241	2,166
APAC	1,182	1,228	1,342	1,305	1,219
EMEA	2,046	2,207	2,272	2,522	2,534

EMPLOYEES PER FUNCTION

Operations	3,073	3,309	3,417	3,618	3,383
R & D incl. Product Management	1,034	1,135	1,200	1,255	1,389
SG & A	1,206	1,083	1,138	1,195	1,147

CORRESPONDING DOCUMENTS

- Article of Association
- Code of Business Conduct and Ethics
- Corporate Social Responsibility
- Mission and Values
- Business Continuity Policy
- Quality, Occupational Health & Safety and Environmental Policy

All documents can be found at www.landisgyr.com

HUMAN CAPITAL DATA

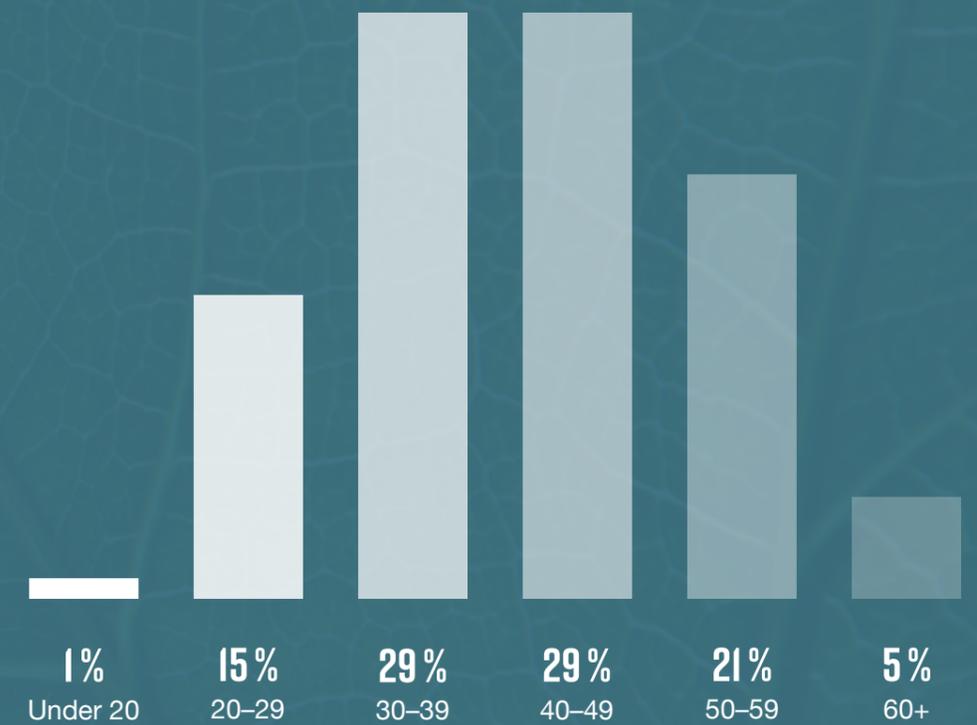
AGE RANGE (IN YEARS)	GLOBAL TOTAL
Under 20	41
20–29	877
30–39	1,724
40–49	1,720
50–59	1,227
60+	330

GENDER DISTRIBUTION	TOTAL	PERCENTAGE
Female	2,533	42.8%
Male	3,386	57.2%

OTHERS

Number of PhDs	48
Number of Apprentices	102
Number of Training and Education Programs	366
Number of Engagements in Community Projects	65

GLOBAL AGE DIVERSITY



THE ADVANTAGES OF DIVERSE AGES IN THE WORKPLACE

At Landis+Gyr the workforce has become increasingly diverse in age demographics, creating professional environments that are rich with experience and maturity as well as youthful exuberance.

The wide ranges of age offer the advantage of creating a dynamic, multi-generational workforce with a diverse range of skill sets where employees can learn from one another.

COMMITTED TO SOCIETY

As a corporate citizen, Landis+Gyr aims to meet the highest standards in social awareness as well as business ethics across all levels of the Group's worldwide organization and activities.

Landis+Gyr believes that further progress towards the realization of the Smart Society concept, which maximizes the use of innovative technologies and collaboration across multiple sectors to inform, engage and enhance life quality of its citizens, can only be achieved if international organisations as well as corporations worldwide increasingly consider ecological, economic and social concerns as a crucial part of their initiatives and actions.

Landis+Gyr promotes its commitment to society by giving top priority to quality of life, safety, and compliance aspects and by maintaining a regular dialogue with all stakeholders including customers, investors, suppliers, and employees around the globe to learn about their needs and to meet their expectations. To fulfil its role as a leading global enterprise, Landis+Gyr engages in human rights, labor standards, supply chain management, the environment, and anti-corruption.

RIGHTS AND REGULATIONS

As a global enterprise, Landis+Gyr conducts business in many countries in which business practices may vary greatly. Landis+Gyr succeeds in these markets on the basis and merits of its performance, compliance of all local laws, rules and regulations, and a code of business conduct defining the Company's standards of business conduct and ethics. The Company has implemented a set of internal and external control measures and does not tolerate any corruption and violations of the principles of fair competition and human rights. To ensure socially balanced, healthy and safe working conditions, Landis+Gyr has established a set of stringent standards within the Group's operations and its supply chain.

SUPPLIERS ASSESSMENT

By closely cooperating with its suppliers, Landis+Gyr ensures that they observe and provide evidence of their compliance with Landis+Gyr's Quality, Environmental, Health and Safety Policy, and Code of Business Conduct and Ethics. These include declarations of compliance, self-assessment and third-party assessment and auditing. In addition to ISO 9001, 14001 and 18001 certifications throughout the Company and for all its key suppliers, Landis+Gyr requires its tier one suppliers to acknowledge and implement the EICC (Electronics Industry Citizenship Coalition) Code of Conduct.

COMPLIANCE AND ETHICS

Landis+Gyr aims to act in an exemplary manner at all regional and organizational levels. The Company has therefore installed Regional Compliance Officers who ensure that the compliance program is implemented at operating level and directly report to Landis+Gyr's Chief Compliance Officer. The Company's stakeholders expect Landis+Gyr as a market and technology leader to uphold the highest of standards. The Chief Compliance Officer is responsible for assessing compliance risk to proactively identify and mitigate risk exposure, assures that compliance policies and training materials are up to date and handles all compliance topics. The Compliance Officer reports directly to the Audit and Risk Committee of the Board of Directors.



PRIVACY

At Landis+Gyr the privacy of all individuals is respected. Everyone in the Company has a role to play in protecting and securing personal information. Personal information and other data that is collected from employees, individual customers and consumers are subject to data protection laws in all countries in which the Company operates.

ANTI-CORRUPTION POLICY

Landis+Gyr works against bribery and corruption in any form and does not tolerate any such practices in any of its business dealings, whether with public officials or private sector business partners. Employees must not offer, give or receive any type of bribe, kickback or payoff either directly through personal involvement, or indirectly through a third party such as an agent or consultant acting on their behalf. The Company has implemented a third-party due diligence process and offers specialist training to all employees who deal directly with customers.

SPEAK-UP POLICY

Landis+Gyr fosters a speak-up culture. Therefore, the Company has installed multiple reporting channels for disclosing suspected violations. In addition to a 24-hour hotline and online reporting tools, the Company ensures that all employees can seek assistance from their Compliance Officer whenever needed. Landis+Gyr makes sure that any information reported is treated confidentially and does not condone any kind of retaliation for reporting or complaints made in good faith regarding misconduct.

PARTNER OF LOCAL COMMUNITIES

In its role as a corporate citizen, Landis+Gyr engages in a wide range of social activities and aims to contribute in solving issues in the local communities where it operates. In 2016/17, Landis+Gyr and its employees kept contributing to community projects and charities worldwide through donations and volunteering.

ENGAGEMENT FOR SOCIETY ARBOR DAY AND EARTH DAY, COMMUNITY SUSTAINABILITY EFFORT ADOPT-A-SPOT

Since 2008, Landis+Gyr in Lafayette (USA) has been a member of the "Adopt-A-Spot" program through which employees clean and maintain a public green space. Since 2013, Landis+Gyr's Lafayette organization has celebrated Earth Day and Arbor Day by distributing young trees to be planted by employees.

Earth Day and Arbor Day are annual events that highlight the interconnections between climate, environment, and society. Participants take part in celebrating by planting trees for the benefit of future generations, encouraging their fellow citizens to look forward instead of backward. At Landis+Gyr in Lafayette more than 120 trees were distributed on April 21, 2017 to interested employees and others working at the facility to plant in celebration of Earth and Arbor Day. The trees will support wildlife with their fruits and seeds.

The second local project in which Landis+Gyr actively participated also contributes to a cleaner and healthier community. Landis+Gyr "adopted" a public spot in the city with the objective of beautifying Lafayette. This sponsorship is an opportunity to demonstrate and grow pride in the community.

Landis+Gyr's Lafayette organisation plans to continue supporting environmental sustainability by participating in the Adopt-A-Spot, Earth Day and Arbor Day celebration activities during future years.



DEDICATED EMPLOYEES ENERGY EFFICIENCY AT HOME, HEALTH AND SAFETY AWARENESS WEEK

Launched in May 2016 at Landis+Gyr in Curitiba (Brazil), the Energy Efficiency Program at Home is designed to raise employee awareness of electric power consumption in their homes. Participating employees agree to have their energy consumption monitored and every quarter the 3 employees who reduced their consumption the most are awarded power-saving LED lamps in recognition of their efforts. Currently there are 21 employees enrolled in the program, and they have reduced their energy consumption on average by almost 10%. The next step will be honouring the Top Employee in terms of energy consumption reduction at an annual award ceremony. According to Adriano Baumgartner, quality inspector, this program has encouraged his entire family to cut back on their energy consumption. "Now even my daughters expect everyone to have a more energy-conscious attitude. The result of my participation in the program has been very positive."

In 2017, Landis+Gyr's Brazilian site hosted its annual Quality, Environment, Health and Safety (QEHS) week of awareness called SISPAT (its acronym in Portuguese), a tradition that goes back more than 25 years. Activities ranging from quizzes, physical fitness exercises, planting of tree seedlings, presentations and health exams were conducted with the objective of promoting employee awareness of these topics. In order to make SISPAT more effective, preparatory planning was aligned with the local management board and all activities were scheduled at the most appropriate times, suitable for employees. Marcelo Machado, CEO South America, officially opened the week with employees, highlighting the importance of this event. Employees have acknowledged that SISPAT is an excellent way of strengthening their commitment to these important issues. According to Cleudes Politta, a registered nurse, besides informing employees about these important concepts, SISPAT also promotes workforce integration. "We've discovered that this is a simple and objective way for employees to learn and retain important information. It is gratifying to see the lasting positive results of this week-long event."



AWARDS AND RECOGNITIONS



GLOBAL FROST & SULLIVAN AWARD

FOR TECHNOLOGY LEADERSHIP & GLOBAL COMPANY OF THE YEAR AWARD

In 2016 and 2017, Frost & Sullivan honoured Landis+Gyr with three awards – the 2016 Global Frost & Sullivan Award for Technology Leadership and the 2016 and 2017 Global Company of the Year Award. Frost & Sullivan Best Practices awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development.



2017 GRID EDGE AWARD

In June 2017, Landis+Gyr received the 2017 Grid Edge Award for a distributed intelligence application that increases energy efficiency, supports renewables integration and empowers consumers to better manage energy. The Greentech Media Grid Edge Awards seek to highlight industry leaders paving the way toward tomorrow's distributed energy system. Established in 2014, winners have included start-ups, established technology vendors, utilities and energy providers, among others.



PRESIDENT'S AWARD

BY ROSPA HEALTH AND SAFETY 2017

In April 2017 Landis+Gyr Limited won the Royal Society for the Prevention of Accidents' (RoSPA) Health and Safety Award 2017. The company, based in Stockport – UK, was granted the President's (11 consecutive Golds) award in the prestigious annual scheme run by RoSPA. Through the RoSPA Awards scheme, which is open to businesses and organisations of all types and sizes from across the UK and overseas, judges consider entrants' overarching occupational health and safety management systems, including best practices in fields such as leadership and workforce involvement.



GARTNER MAGIC QUADRANT

LEADER IN 2016

In early 2017 and for the second consecutive year, Landis+Gyr was designated a leader in Gartner, Inc.'s Magic Quadrant for MDM products. Gartner recognized Landis+Gyr for its completeness of vision and ability to execute in the areas of scalability, profitability, revenue growth and its presence in all major markets. This recognition confirms Landis+Gyr's readiness to meet the current and future needs of its customers. Gartner bases its leadership rankings on the ability of a vendor to pair advanced technology with the functionality and capabilities to configure a solution to a variety of needs.



BEST WORKPLACE 2016

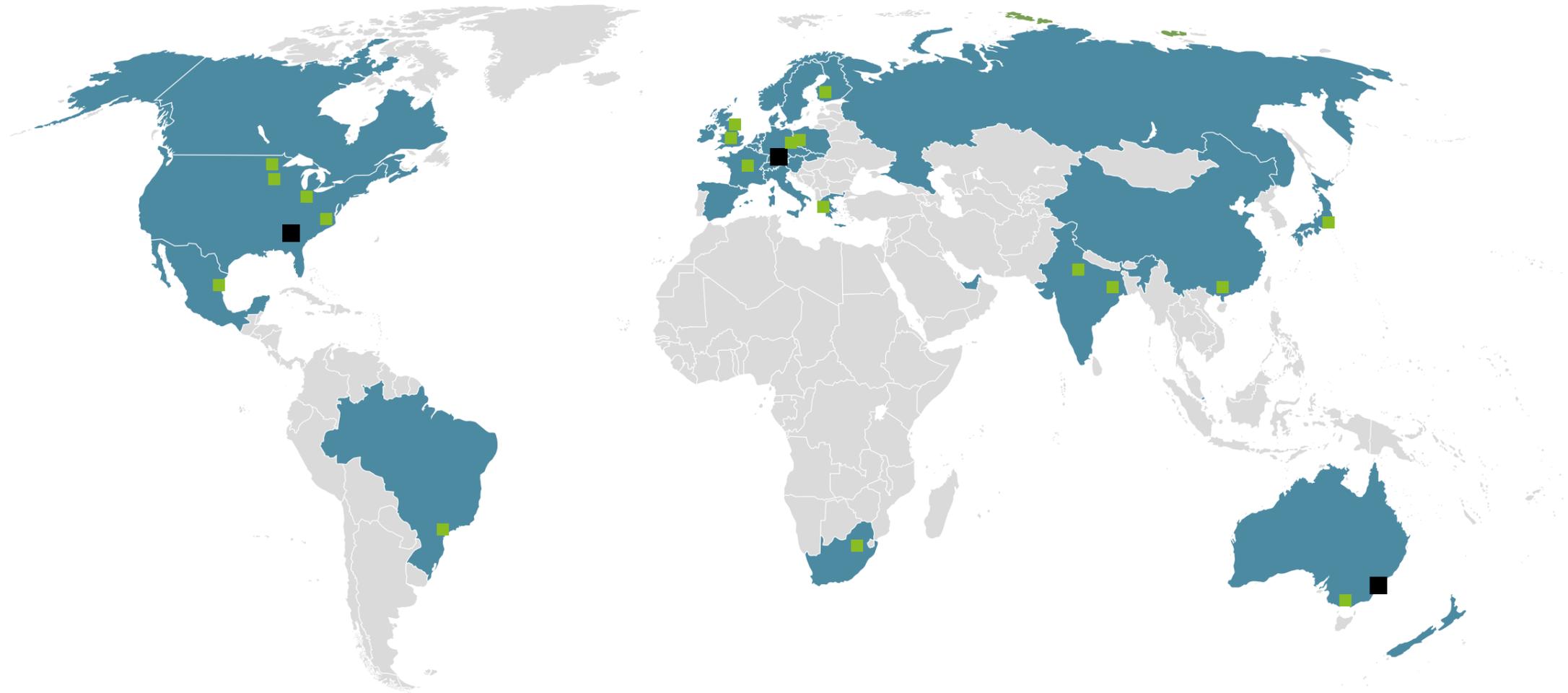
FOR WASTE PREVENTION AND RECYCLING

Landis+Gyr was listed among the Best Workplaces for the fourth time in 2016. King County, which includes the city of Seattle, names 112 local businesses to its list every year. Landis+Gyr was cited for its ISO14001 certification for environmental management systems, its Kirkland Green Business certification and its recognition by Sustainable Seattle. Moreover, the award recognizes Landis+Gyr's Waste Management and Minimization Plan, as well as its yearly environmental goals for waste reduction.



ASIAN UTILITY WEEK AWARDS 2017

In May 2017, Landis+Gyr won the Best IoT Network Rollout Project Award for its undertaking with the Tokyo Electric Power Company in building the largest IoT network in the world. Landis+Gyr also received the Best Customer Engagement Project 2017 Award for both its undertaking with Meralco and its AML-supported pre-paid solution, the so-called K-Load.



NORTH AMERICA

Regional HQ

Alpharetta (USA) ✓♥🌿

R&D Centers

Alpharetta (USA) ✓🛡️🌿
Bloomington (USA) ✓🛡️🌿
Lafayette (USA) ✓🛡️🌿
Pequot Lakes (USA) ✓🛡️🌿
Raleigh (USA) ✓🛡️🌿

Manufacturing

Reynosa (MEX) ✓🛡️🌿

Sales Offices

and Service Centers

Alpharetta (USA) ✓♥🌿
Austin (USA) ✓🛡️🌿
Bethlehem (USA) ✓🛡️🌿
Colorado Springs (USA) ✓🛡️🌿
Indianapolis (USA) ✓🛡️🌿
Jacksonville (USA) ✓🛡️🌿
Kirkland (USA) ✓🛡️🌿
Lenexa (USA) ✓🛡️🌿
(Network Operation Center)
Montréal (CAN) ✓🛡️🌿
Morrisville (USA) ✓🛡️🌿
Orange (USA) ✓🛡️🌿
Roseville (USA) ✓🛡️🌿
San Antonio (USA) ✓🛡️🌿
Waukesha (USA) ✓🛡️🌿

SOUTH AMERICA

R&D Centers

Curitiba (BRA) ✓🛡️🌿

Manufacturing

Curitiba (BRA) ✓🛡️🌿

Sales Offices

and Service Centers
Belém (BRA) ✓🛡️🌿
Curitiba (BRA) ✓🛡️🌿
Rio de Janeiro (BRA) ✓🛡️🌿
São João de Meriti (BRA) ✓🛡️🌿
São Paulo (BRA) ✓🛡️🌿

EMEA

Regional HQ

Zug (SUI) ✓🛡️🌿

R&D Centers

Dunfermline (GBR) ✓🛡️🌿
Gauteng (RSA) ✓🛡️🌿
Jyskä (FIN) ✓🛡️🌿
Manchester (GBR) ✓🛡️🌿
Montluçon (FRA) ✓🛡️🌿
Northfields (GBR) ✓🛡️🌿
Nuremberg (GER) ✓🛡️🌿
Prague (CZE) ✓🛡️🌿
Stockport (GBR) ✓🛡️🌿
Zug (SUI) ✓🛡️🌿

Manufacturing

Corinth (GRE) ✓🛡️🌿
Gauteng (RSA) ✓🛡️🌿
Montluçon (FRA) ✓🛡️🌿
Northfields (GBR) ✓🛡️🌿
Nuremberg (GER) ✓🛡️🌿
Stockport (GBR) ✓🛡️🌿

Sales Offices

Austria ✓🛡️🌿
Belgium ✓🛡️🌿
Czech Republic ✓🛡️🌿
Denmark ✓🛡️🌿
Finland ✓🛡️🌿
France ✓🛡️🌿
Germany ✓🛡️🌿
Greece ✓🛡️🌿
Italy ✓🛡️🌿
Netherlands ✓🛡️🌿
Poland ✓🛡️🌿
Russia ✓🛡️🌿
Slovakia ✓🛡️🌿
Slovenia ✓🛡️🌿
South Africa ✓🛡️🌿
Spain ✓🛡️🌿
Sweden ✓🛡️🌿
Switzerland ✓🛡️🌿
United Arab Emirates ✓🛡️🌿
United Kingdom ✓🛡️🌿

APAC

Regional HQ

Sydney (AUS) ✓🛡️🌿

R&D Centers

Noida (IND) ✓🛡️🌿
Sydney (AUS) ✓🛡️🌿
Tokyo (JAP) ✓🛡️🌿

Manufacturing

Joka (IND) ✓🛡️🌿
Laverton (AUS) ✓🛡️🌿
Zhuhai (CHN) ✓🛡️🌿

Sales Offices

Australia ✓🛡️🌿
China ✓🛡️🌿
Hong Kong ✓
India ✓🛡️🌿
Japan ✓🛡️🌿
New Zealand ✓🛡️🌿
Singapore ✓🛡️🌿

**TABLE 1:
GLOBAL ENERGY CONSUMPTION OF
LANDIS+GYR GROUP IN 2016/17**

ENERGY CONSUMPTION		L+G	AMERICAS	APAC	EMEA
Electricity (national grid mix) – daytime	MWh	26,020	12,316	3,808	9,896
Electricity (national grid mix) – nighttime	MWh	895	-	-	895
Electricity (renewable sources)	MWh	2,221	-	175	2,046
Electricity by on-site power generator	MWh	109	-	109	-
Steam (district heating)	MWh	2,484	-	-	2,484
Heavy fuel oil	MWh	-	-	-	-
Light fuel oil	MWh	100	-	-	100
Gasoline: not for vehicle	MWh	-	-	-	-
Emergency power diesel	MWh	19	18	-	1
Town gas (natural gas)	MWh	4,872	2,087	759	2,027
LPG (50/50)	MWh	-	-	-	-
LPG (70/30)	MWh	-	-	-	-

PROCESS EMISSION

CO ₂	kg	-	-	-	-
CH ₄	kg	3,959	-	-	3,959
N ₂ O	kg	-	-	-	-
HFC	kg	-	-	-	-
PFC	kg	-	-	-	-
SF ₆	kg	-	-	-	-

BUSINESS TRAVEL (OWN FLEET)

Gasoline consumption	m ₃	494	422	4	67
Diesel consumption	m ₃	205	10	0	195
CNG consumption	m ₃	-	-	-	-
Alcohol consumption	m ₃	-	-	-	-
Gasoline [< 1.4 l]	km	186,260	-	82,650	103,610
Gasoline [1.4 – 2.0 l]	km	154,882	-	36,600	118,282
Gasoline [> 2.0 l]	km	6,827	-	-	6,827
Diesel [1.4 – 2.0 l]	km	946,998	-	18,300	928,698
Diesel [> 2.0 l]	km	300,151	-	60,900	239,251
Truck Diesel [7.5 t]	km	-	-	-	-

BUSINESS TRAVEL (OTHER)

Airplane (short haul)	pkm	3,797,764	201,630	1,770,382	1,825,753
Airplane (long haul)	pkm	51,515,133	25,309,673	12,912,147	13,293,314

**TABLE 2:
TOTAL GROUP EMISSIONS
BY SCOPE AND SOURCE [T CO₂E]**

SCOPE 1	2011	2012/13	2013/14	2014/15	2015/16	2016/17	
Heavy fuel oil	33	42	41	21	-	0	
Light fuel oil	56	26	22	26	19	27	
Emergency power diesel	729	685	1,222	409	341	15	
Natural gas	957	941	995	987	903	991	
LPG (50/50)	37	0	0	-	-	0	
LPG (70/30)	41	43	43	36	0	0	
Process emissions	182	52	37	38	41	99	
Gasoline consumption	2,544	3,035	2,580	2,275	1,325	1,160	
Diesel consumption	511	489	503	607	676	548	
Gasoline: Not for vehicle	-	-	6	24	-	0	
Gasoline [< 1.4 l]	1	6	5	34	25	27	
Gasoline [1.4 – 2.0 l]	240	58	72	65	22	29	
Gasoline [> 2.0 l]	131	85	76	53	7	2	
Diesel [1.4 – 2.0 l]	176	78	232	223	130	135	
Diesel [> 2.0 l]	45	46	49	11	26	59	
CNG [1.4 - 2.0 l]	6	-	5	-	-	0	
CNG [< 1.4 l]	-	-	22	-	-	0	
Truck Diesel [7.5 t]	-	-	-	-	-	0	
Total [t CO₂e]	5,690	5,585	5,911	4,809	3,516	3,092	-12.1%

SCOPE 2

Electricity	23,387	22,018	21,659	21,956	21,636	21,098	
District heating	746	851	849	818	833	718	
Total [t CO₂e]	24,133	22,869	22,508	22,774	22,470	21,816	-2.9%

SCOPE 3

Airplane (short haul)	705	935	847	842	952	749	
Airplane (long haul)	4,532	4,532	5,379	5,579	5,358	5,938	
Total [t CO₂e]	5,237	5,467	6,225	6,421	6,311	6,686	6.0%

BY SOURCE

Electricity / District heating	24,133	22,869	22,508	22,774	22,470	21,816	
Fuels (diesel oil)	818	752	1,286	479	360	42	
Fuels (natural gas, LPG)	1,036	984	1,044	1,023	904	991	
Direct process emissions	182	52	37	38	41	99	
Road travel	3,654	3,797	3,545	3,270	2,211	1,960	
Air travel	5,237	5,467	6,225	6,421	6,311	6,686	
Total [t CO₂e]	35,060	33,921	34,644	34,005	32,296	31,594	-2.2%

**TABLE 3:
CARBON FOOTPRINT BY REGION
2011 – 2016/17 [T CO₂E]**

	2011	2012/13	2013/14	2014/15	2015/16	2016/17
Americas	16,446	15,442	15,153	15,456	14,113	13,480
Scope 1	3,196	3,060	2,813	2,454	1,714	1,458
Scope 2	10,725	9,962	9,254	9,701	9,331	9,065
Scope 3	2,525	2,420	3,086	3,301	3,068	2,957
APAC	7,629	7,161	7,143	7,263	6,659	6,439
Scope 1	970	866	707	630	489	199
Scope 2	5,423	4,719	5,001	5,012	4,746	4,403
Scope 3	1,236	1,576	1,435	1,621	1,424	1,837
EMEA	10,985	11,318	12,348	11,286	11,524	11,675
Scope 1	1,524	1,659	2,391	1,726	1,312	1,435
Scope 2	7,984	8,189	8,253	8,062	8,394	8,348
Scope 3	1,477	1,470	1,704	1,498	1,818	1,892
L+G Total	35,060	33,921	34,644	34,005	32,296	31,594
Percentage at Regional Level:						
Americas	46.9%	45.5%	43.7%	45.4%	43.7%	42.6%
APAC	21.8%	21.1%	20.6%	21.4%	20.6%	20.4%
EMEA	31.3%	33.4%	35.7%	33.2%	35.7%	37.0%

**TABLE 4:
WATER CONSUMPTION BY REGION
2011 – 2016/17 [M3]**

	2011	2012/13	2013/14	2014/15	2015/16	2016/17
Americas	32,946	35,299	29,324	27,091	27,832	30,261
Water consumption from public water supply system	28,831	34,060	24,091	23,710	20,835	24,133
Water from own wells (groundwater)	1,164	1,115	852	795	752	802
Water other (e.g. rain water)	2,951	124	2,558	2,585	6,245	5,327
Total waste water	17,567	18,084	15,765	15,923	15,032	18,937
Direct drain to public waters or ground	4,412	1,884	5,665	4,305	2,358	3,985
Water, to public sewage system (drain discharge)	13,155	16,200	10,100	11,618	12,674	14,952
Amount of water reused	-	-	-	-	1,199	2,322
Amount of water recycled	-	-	-	-	-	-
APAC	81,726	64,323	64,427	44,566	51,205	46,095
Water consumption from public water supply system	14,082	9,398	12,410	11,454	16,578	19,806
Water from own wells (groundwater)	67,645	54,925	50,382	33,112	34,627	26,289
Water other (e.g. rain water)	-	-	-	-	-	-
Total waste water	11,762	21,137	24,512	27,376	39,974	40,767
Direct drain to public waters or ground	416	-	-	-	-	-
Water, to public sewage system (drain discharge)	11,347	21,137	24,512	27,376	39,974	40,767
Amount of water reused	-	-	-	-	-	-
Amount of water recycled	-	9,494	10,443	5,499	891	746
EMEA	52,568	33,088	41,644	35,609	37,303	40,163
Water consumption from public water supply system	42,758	23,295	30,347	26,319	26,902	29,966
Water from own wells (groundwater)	-	-	-	-	-	9,640
Water other (e.g. rain water)	9,810	9,793	11,297	9,290	10,401	557
Total waste water	27,128	25,822	28,672	27,336	34,392	37,396
Direct drain to public waters or ground	20,198	15,820	13,715	9,895	10,486	12,556
Water, to public sewage system (drain discharge)	6,930	10,002	14,957	17,441	23,906	24,840
Amount of water reused	-	-	-	-	-	-
Amount of water recycled	-	-	-	-	-	-

**TABLE 5:
WASTE GENERATION BY REGION
2013/14 – 2016/17 [KG]**

	2013/14	2014/15	2015/16	2016/17
Americas	1,571,128	902,297	1,855,117	1,258,125
Wood scrap	973,150	106,495	516,890	20,199
General waste	225,368	247,159	258,319	234,281
Metal scrap	22,871	64,552	33,339	39,971
Paper (recycled)	71,819	206,872	526,767	610,800
Plastic waste	53,048	87,554	118,744	91,431
Food leftover	85,882	61,230	85,125	61,675
Electrical and electronic waste	81,600	53,289	113,529	92,374
Sludge	41,237	54,431	69,794	75,414
Hazardous waste	9,861	10,158	12,169	25,697
Debris	4,000	4,000	112,320	4,390
Oil waste	1,035	5,051	6,050	1,210
Textile waste	1,008	930	1,413	493
Alkali waste	-	-	-	-
Glass and ceramic waste	47	430	530	50
Acid waste	-	-	-	-
Medical waste	202	146	128	140
Mining waste	-	-	-	-
Cinder	-	-	-	-
Rubber waste	-	-	-	-
Soot & dust	-	-	-	-
Other waste	-	-	-	-

	2013/14	2014/15	2015/16	2016/17
APAC	254,127	210,679	289,690	380,303
Wood scrap	3,517	16,483	26,399	60,184
General waste	113,954	73,974	62,474	71,923
Metal scrap	14,083	2,223	62,648	40,988
Paper (recycled)	80,254	90,074	84,787	96,762
Plastic waste	26,516	20,585	26,938	11,935
Food leftover	13,934	5,676	6,799	5,754
Electrical and electronic waste	952	1,655	4,480	4,680
Sludge	-	-	-	-
Hazardous waste	147	9	-	87,561
Debris	-	-	-	-
Oil waste	535	-	165	20
Textile waste	235	-	-	496
Alkali waste	-	-	-	-
Glass and ceramic waste	-	-	-	-
Acid waste	-	-	-	-
Medical waste	-	-	-	-
Mining waste	-	-	-	-
Cinder	-	-	-	-
Rubber waste	-	-	-	-
Soot & dust	-	-	-	-
Other waste	-	-	15,000	-

	2013/14	2014/15	2015/16	2016/17
EMEA	1,278,898	1,657,776	1,804,620	2,236,057
Wood scrap	70,115	218,465	320,318	464,404
General waste	432,177	529,090	386,312	311,994
Metal scrap	411,894	500,433	458,980	616,483
Paper (recycled)	237,533	294,663	459,249	621,842
Plastic waste	92,636	88,135	104,907	133,017
Food leftover	5,522	4,280	4,860	4,960
Electrical and electronic waste	16,119	5,192	49,208	42,996
Sludge	3,615	8,844	-	11,450
Hazardous waste	2,195	4,745	11,581	20,795
Debris	-	-	-	-
Oil waste	1,245	2,565	620	440
Textile waste	-	-	-	-
Alkali waste	720	-	-	-
Glass and ceramic waste	317	200	7,195	5,269
Acid waste	320	-	-	-
Medical waste	-	82	-	-
Mining waste	-	-	-	-
Cinder	-	-	-	-
Rubber waste	-	1,082	1,391	2,407
Soot & dust	-	-	-	-
Other waste	4,490	-	-	-

**TABLE 6:
CHEMICALS HANDLED BY REGION
2013/14 – 2016/17 [KG]**

	2013/14	2014/15	2015/16	2016/17
Americas	6,779.5	9,434.6	6,868.8	6,001.4
Ethyl acrylate	-	-	-	-
Acrylic acid 2-hydroxyethyl	-	-	-	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	-	-	-	-
Ethylbenzene	-	-	-	-
Xylene	-	-	-	-
Silver and its water-soluble compounds	-	-	-	-
1,2-Dichloroethane	-	-	-	-
Dichloromethane (methylene chloride)	2,121.6	2,386.2	2,919.0	2,597.0
Tetrachloroethylene	-	-	-	-
Tetrahydromethylphthalic anhydride	-	-	-	-
Toluene	-	-	0.1	-
Bis (2-ethylhexyl) phthalate	-	-	-	-
n-Hexane	-	-	-	-
Manganese and its compounds	3.6	3.6	3.6	3.6
Acetone	6.8	5.4	5.8	5.7
Isobutane	-	-	-	-
Isobutyl alcohol	-	-	-	-
Isopropanol	58.7	2,035.5	3,170.2	2,650.0
Ethyl alcohol	64.6	42.7	78.2	48.5
Ethylene glycol	12.0	12.0	12.1	12.0
N-methyl-2-pyrrolidone	-	-	0.1	-
Hydrogen chloride	-	-	-	-
Chlorine	267.2	434.6	675.9	681.0
Paraffinic hydro-carbon	-	3.6	3.6	3.6
Cyclohexane	-	-	-	-
Tetrahydrofuran	-	-	-	-
n-Butane	4,245.0	4,511.0	0.1	-
Propylene glycol monomethyl ether	-	-	-	-
Methyl alcohol	-	-	0.1	-
Methyl ethyl ketone	-	-	-	-
Sulfuric acid	-	-	-	-

	2013/14	2014/15	2015/16	2016/17
APAC	1,153.2	935.0	994.6	1,210.8
Ethyl acrylate	-	-	-	-
Acrylic acid 2-hydroxyethyl	-	-	-	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	-	-	-	-
Ethylbenzene	-	-	27.8	60.3
Xylene	142.5	142.4	150.0	120.0
Silver and its water-soluble compounds	-	-	-	-
1,2-Dichloroethane	-	-	-	-
Dichloromethane (methylene chloride)	815.1	583.1	247.1	-
Tetrachloroethylene	-	-	-	-
Tetrahydromethylphthalic anhydride	-	-	-	-
Toluene	93.6	92.1	93.0	82.5
Bis (2-ethylhexyl) phthalate	-	-	-	-
n-Hexane	12.6	24.0	71.5	123.0
Manganese and its compounds	-	-	-	-
Acetone	6.8	12.2	4.5	-
Isobutane	-	-	-	-
Isobutyl alcohol	-	-	-	-
Isopropanol	-	-	-	-
Ethyl alcohol	48.9	46.0	40.0	30.0
Ethylene glycol	-	-	-	-
N-methyl-2-pyrrolidone	-	-	-	-
Hydrogen chloride	-	-	-	-
Chlorine	-	-	-	-
Paraffinic hydro-carbon	-	-	-	-
Cyclohexane	-	-	-	-
Tetrahydrofuran	-	-	185.0	463.0
n-Butane	-	-	-	-
Propylene glycol monomethyl ether	-	-	-	-
Methyl Alcohol	-	-	-	-
Methyl ethyl ketone	-	-	18.7	41.0
Sulfuric acid	33.7	35.2	157.0	291.0

	2013/14	2014/15	2015/16	2016/17
EMEA	13,087.4	7,078.9	5,953.9	4,930.7
Ethyl acrylate	-	-	-	-
Acrylic acid 2-hydroxyethyl	-	-	-	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	-	-	-	-
Ethylbenzene	-	-	-	-
Xylene	2,449.0	1,612.0	2,032.0	1,465.0
Silver and its water-soluble compounds	10.5	11.1	13.0	21.6
1,2-Dichloroethane	-	-	-	-
Dichloromethane (methylene chloride)	1,758.0	842.2	419.0	26.6
Tetrachloroethylene	2,970.0	845.0	220.0	250.0
Tetrahydromethylphthalic anhydride	1,220.0	1,044.0	1,216.0	2,342.0
Toluene	-	-	-	-
Bis (2-ethylhexyl) phthalate	-	-	-	-
n-Hexane	830.0	1,073.0	710.0	455.0
Manganese and its compounds	-	-	-	-
Acetone	-	-	-	-
Isobutane	-	-	-	-
Isobutyl alcohol	-	-	-	-
Isopropanol	1,766.1	248.0	135.3	34.0
Ethyl alcohol	888.8	702.6	404.6	53.5
Ethylene glycol	-	-	-	-
N-methyl-2-pyrrolidone	-	-	-	-
Hydrogen chloride	520.0	414.0	606.0	215.0
Chlorine	-	-	-	-
Paraffinic hydro-carbon	-	-	-	-
Cyclohexane	655.0	225.0	152.0	44.0
Tetrahydrofuran	-	-	-	-
n-Butane	-	-	-	-
Propylene glycol monomethyl ether	-	39.0	23.0	11.0
Methyl Alcohol	-	-	-	-
Methyl ethyl ketone	20.0	23.0	23.0	13.0
Sulfuric acid	-	-	-	-

