

# SUSTAINABILITY REPORT 2017 2018

### LANDIS+GYR AT A GLANCE

Landis+Gyr helps energy providers and consumers around the globe "manage energy better". With the growing demand for energy and increasing complexity of its management, the company is fully committed to providing its customers – primarily energy utilities – with smart and efficient solutions to measure and manage energy generation, distribution and consumption.

As well as helping customers successfully address these challenges the Company is at the same minimizing the environmental impact of its own operations. And acknowledging the importance of the expertise of its team members, Landis+Gyr strives to maintain a safe working environment, helping employees to fully develop and make the most of their skills.

Ultimately the Company is committed to ensuring that staff and consumers alike become better informed about how they use energy as a means of contributing to the general welfare of society.

Figures are unaudited.

	2013/14	2014/15	2015/16	2016/17	2017/18	
Turnover in USD billion	1.5	1.5	1.6	1.7	1.7	
Employees	5,527	5,755	6,036	5,919	5,915	
m <sup>3</sup> water	135,395	107,265	116,340	116,520	104,962	
t waste	3,104	2,771	3,949	3,874	4,083	
t chemicals	21.0	17.4	13.6	12.2	11.9	
t C0 <sub>2</sub> e	34,600	34,005	32,296	31,594	28,088	
Kg CO <sub>2</sub> e/USD 100 turnover	1.8	1.8	1.7	1.5	1.3	
t CO2e per employee	5.1	4.8	4.3	4.2	3.8	

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

Landis+Gyr is the leading global provider of integrated energy management solutions for the utility sector. Having created one of the broadest portfolios of products and services to address complex energy industry challenges, the Company delivers a comprehensive suite of solutions to help create a smarter grid, including smart metering, distribution network sensing and automation tools, grid management systems, load control and analytics. Landis+Gyr operates in over 30 countries across five continents, generates sales of USD 1.7 billion annually and employs approximately 6,000 people. More information is available at www.landisgyr.com

Financial data for Landis+Gyr Group AG can be found at: https://www.landisgyr.com/investors/financial-information/

THE GLOBAL INDUSTRY LEADER IN METERING SOLUTIONS

# **BODD** TOTAL EMPLOYEES

 $\hat{O}$  $\hat{O}$ 

### © 72 SITES IN OVER 30 COUNTRIES ISO CERTIFIED

### 3000000000 ELECTRICITY METERS INSTALLED BASE

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

R&D SPENDING 94% OF SALES

### **1,000,000,000+** DAILY METER READ TRANSFERS

#### 2017/18 KEY CSR FIGURES



**WATER** -9.9%

Reductions due to company efforts and headcount changes



Increase due to transfer of production lines

+5.4%



**CHEMICALS** -2.5 %

Mainly due to greater proportion of advanced meters and utilization of more environmentally friendly material



**CO₂E** −11.1 %

Overall CO<sub>2</sub> emissions significantly decreased. CO<sub>2</sub> emissions per unit were reduced by 9.9 %



#### **GENDER DIVERSITY** 344%

Over one third of employees are female

### 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 %

#### THE GLOBAL INDUSTRY LEADER IN METERING SOLUTIONS

Landis+Gyr is the leading global provider of smart metering solutions, helping more than 3,500 utilities and energy retailers around the globe to optimize their billing systems, maintain secure revenue flows, improve the efficiency of their networks, upgrade energy delivery infrastructure, reduce energy costs and contribute to the sustainable use of resources.





Communication Network



Connected Intelligent Devices

Software and Services



Stand-alone Devices

#### New CSR Strategy Builds on a Comprehensive Analysis

In July 2017, Landis+Gyr was listed on the SIX Swiss Exchange, as former shareholders Toshiba Corporation and Innovation Network Corporation of Japan sold all of their shares through an IPO process.

As a public company, Landis+Gyr is embracing the opportunity to further expand the scope and focus of its sustainability management efforts, ensuring the relevant environmental, social, governance and economic impacts of its activities are taken into consideration.

The launch of this revised Corporate Social Responsibility (CSR) initiative aims to help the company and its customers meet the needs of today's communities without compromising those of future. At the same time, it allows the company to create value by managing its corporate reputation, mitigating operational risks related to climate change, and by responding to regulatory opportunities and constraints. As a first key step towards realizing these goals Landis+Gyr's Executive Management has committed to define its own environmental and CSR strategy, reshaping the Group's sustainability vision and roadmap. The following tasks will be completed by March 31, 2019:

- Implementation of a cross-functional and cross-regional Sustainability Committee
- Identification and prioritization of key sustainability topics from an internal and external point of view (materiality concept)
- Setting a vision for all relevant topics or action areas, including current and future actions, goals, deliverables and Key Performance Indicators (KPIs).
- Sharpening the Company's recognition as a critical player in the drive towards sustainable development by mitigating risks and capitalizing on business opportunities.

# CONTENT

#### **KEY ACHIEVEMENTS**

**02** LANDIS+GYR AT A GLANCE

**05** DEFINITION OF NEW CSR STRATEGY BUILDING ON MATERIALITY ANALYSIS

**08** Foreword

**13** GREEN BUSINESS MODEL

**16** HIGHLIGHT 2017/18: FAIR METERING INITIATIVE

#### COMMITTED TO THE ENVIRONMENT

**20** ENVIRONMENTAL REPORTING GUIDELINES

**22** WATER

**24** WASTE

26 CHEMICALS

**28** CARBON FOOTPRINT

**30** CASE STUDIES

#### COMMITTED TO EMPLOYEES AND SOCIETY

**36** Committed to employees

40 COMMITTED TO SOCIETY

**42** CASE STORIES

#### APPENDIX

**46** AWARDS AND RECOGNITIONS

**48** GLOBAL REACH

**50** TABLE 1: GLOBAL ENERGY CONSUMPTION OF LANDIS+GYR GROUP IN 2017/18

**51** TABLE 2: TOTAL GROUP EMISSIONS, BY SCOPE AND SOURCE, 2012/13-2017/18

**52** TABLE 3: CARBON FOOTPRINT BY REGION, 2012/13-2017/18

**53** TABLE 4: water consumption by region, 2012-2017/18

**54** TABLE 5: waste generation by region, 2013/14-2017/18

**56** TABLE 6: CHEMICALS HANDLED BY REGION, 2013/14-2017/18

## FOREWORD COMMITTED TO THE ENVIRONMENT, EMPLOYEES AND SOCIETY



**"IN ITS COMMITMENT TO HELP ADDRESS SOCIETY'S EVER-EVOLVING ENERGY LANDSCAPE,** LANDIS+GYR HAS MADE NUMEROUS FORWARD-LOOKING **INVESTMENTS AS WE STRIVE TO CONTRIBUTE TO A MORE SUS-**TAINABLE WORLD. WE ARE **INVESTING HEAVILY IN SUSTAIN-ABILITY TO ADAPT TO AN ESG CONSCIOUS ECONOMY AND RE-**MAIN DEEPLY COMMITTED **TO DEVELOPING SMART SOLU-**TIONS THAT ENABLE UTILITIES AND END-USERS TO OVERCOME **TODAY AND TOMORROW'S ENERGY CHALLENGES.**"

RICHARD MORA, CEO LANDIS+GYR GROUP AG

### THINKING AHEAD To deliver continuous progress

Landis+Gyr continues to undertake major efforts to meet the challenges that have emerged as a result of climate change, technological innovations, and demographic and social change. The ambition is to increase awareness and promote active involvement and progress in all the Company's activities throughout the energy distribution and management value chain. Landis+Gyr's employees are committed to help preserve the world's limited resources and promote the sustainable use of energy, contributing to the general welfare of society both today and in the future.

In the financial year 2017/18 (ending March 31, 2018), technological, economic, social and demographic developments, spurred by mega-trends, had a transformative impact on the entire energy sector. Most notably, the increasing digitalization of society, the rising importance of urban areas, as well as the empowerment of consumers are altering the current business models of utilities and distribution system operators and placing new demands on them.

Effectively addressing the various economic, environmental and social aspects driving this evolution is necessary to meet and overcome today's challenges is crucial for achieving success in the fast changing and dynamic energy landscape of today.

#### **REVISION OF CSR STRATEGY**

As a public company whose shares were listed on the SIX Swiss Exchange in July 2017, Landis+Gyr is currently developing its revised CSR strategy. This landmark project aims to further expand and systematize the scope and focus of the company's sustainability management efforts, taking into consideration each of the ESG and economic impacts of its activities. The strategy centers on the unique position of the Company as the leading global provider of Smart Metering solutions helping 3,500 utilities and energy retailers around the globe to optimize their billing, maintain secure revenue flows, improve the efficiency of their networks, upgrade energy delivery infrastructure, reduce energy costs and contribute to the sustainable use of resources. Furthermore, it will enhance Landis+Gyr's reputation, mitigate operational risks and address new regulatory requirements and business opportunities, creating value for all stakeholders.

As a first step, the Executive Management has committed to identify and prioritize key sustainability topics from an internal and external point of view. Based on this approach, a newly established cross-functional and cross-regional Sustainability Committee will identify Landis+Gyr's current and future CSR priorities, deliverables, KPIs, budgets and responsibilities, which will then be reviewed by the Group Executive Management and Board of Directors.



#### **CONTINUOUS IMPROVEMENTS**

Landis+Gyr strives to strengthen its group-wide sustainability management systems on an ongoing basis and has established standards to ensure socially balanced, healthy and safe working conditions throughout its operations and supply chain.

These principles set the framework for an environmentally responsible and ethical business atmosphere in which employees are treated with respect and dignity has and have been a catalyst for the impressive performance Landis+Gyr has achieved in the past. "CORPORATE SOCIAL RESPON-SIBILITY IS A CENTRAL DRIVER OF SUSTAINABLE BUSINESS DEVELOPMENT AND AN INTE-GRATED ASPECT OF LANDIS+GYR'S COMPANY CULTURE."

HANS SONDER, SENIOR VICE PRESIDENT BUSINESS TRANSFORMATION AND ENVIRONMENTAL OFFICER



In recent years, the Company has steadily expanded monitoring of its environmental impact. In parallel, the management team has begun introducing measures and targets to increase awareness of sustainability and promote employee engagement in company initiatives.

These efforts have been introduced with direct input from employees, improving their work environment, minimizing risks and investing in education, training, health and safety. Simultaneously, Landis+Gyr and its employees are increasingly engaged in a wide range of activities aimed at strengthening relationships with local communities, customers, business partners, employees and other important stakeholders.

The successful delivery of a number of existing training and performance programs has continued to shrink the Group's environmental footprint, by further reducing greenhouse gas emissions, waste and the use of water and hazardous chemical substances.

Additionally, in 2017/18, water consumption within Landis+Gyr decreased by 9.9% and management continues to promote several initiatives aimed at limiting water consumption and increasing the use of alternative water resources by expanding rain water collection capacity.

Total waste produced increased by 5.3%, primarily due to the transfer of manufacturing capacities internally and to external partners. Total use of chemicals decreased by 2.5% in 2017/18 as a result of improved product mix and the replacement of outdated meter manufacturing operations in the EMEA region.

Further improvements were also achieved regarding the company's total  $CO_2$  emissions, which fell by 11.1% in 2017/18. Since it began measuring its carbon footprint in 2007, Landis+Gyr has lowered its  $CO_2$  emissions on a per-turnover basis by 53%.

### CONFIRMED ENVIRONMENTAL GOALS 2017–2019

In 2017/18, Landis+Gyr clearly exceeded its goal to reduce overall total greenhouse gas emissions by 2.0% and emissions for every unit produced by 1.5%. Overall CO<sub>2</sub> emissions decreased significantly by 11.1% total and emissions per unit produced by 9.9% in comparison to the previous year. Reductions were the result of lower electricity consumption, greater adoption of renewable energy in the EMEA region and new travel protocols. Conversely, landfill ratio increased by approximately 6%.

The continued reduction of its carbon footprint across the value chain and lifecycle of Landis+Gyr's products remains a primary aim of the company. Looking forward, the management team is committed to its goal to reduce overall  $CO_2$  emissions by 2% and  $CO_2$  emissions per unit produced by 1.5% in the coming years.

To curb the harmful effects of any 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 has committed 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. Today, the Company is redefining its CSR strategy and promoting initiatives that encourage its international teams and its business partners throughout the energy distribution value chain to contribute to an even more sustainable future by addressing current challenges, such as the integration of renewable resources, consumer engagement, data security and protection. 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 as well as the integration of renewable resources into the supply 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 around the globe, including a growing percentage of smart meters equipped with advanced functionalities. Landis+Gyr's advanced metering portfolio complements a full range of energy and assets monitoring, control and management solutions, which feature advanced analytics, load management, energy storage and increased consumer engagement solutions.

Data Validation and Analysis Meter data provides information for billing purposes and enables simulations and forecasting.

Monitoring and Control Near real-time data allows for monitoring and control of the distribution network and assets.

Planning and Supervision Stable and secure energy supply requires infrastructure supervision and timely planning to avoid bottlenecks.

Automation and Operation Smart grid and the Internet of Things combine supply and demand, generation and consumption, to manage energy better and at a lower cost.



#### Stand-alone Devices

Landis+Gyr sells some devices as standalone products without integrated communication capabilities. They include: - Non-AMI electricity meters

- Heat/cold meters
- Stand-alone gas meters

#### **Connected Intelligent Devices**

These devices form the basis of Advanced Metering Infrastructure (AMI) networks, providing utilities with near real-time access to information from the grid edge: - Residential AMI meters

- Industrial, commercial & grid metering
- Smart gas metering
- Advanced load management
- Other devices

#### Software & Services

An industry-leading suite of Smart Metering and Smart Grid enterprise IT-grade software and analytics products and a range of Managed Services solutions: - Services

- Head-End Systems and Network Management Solution
- Meter Data Management software
- Advanced Grid Analytics tools



Key components for reducing the environmental impact of energy production and consumption include energy efficiency – the so-called "fifth fuel" –, mature renewable technologies and solutions to allow for greater consumer engagement. Each requires sophisticated and dynamic bi-directional grids with smart architecture to operate efficiently, so smart meters are essential components of the 21st century energy system.

Thanks to its AMI and analytic tools, Landis+Gyr enables utilities and consumers to make more informed decisions about energy usage, improve their energy efficiency and contribute to the sustainable use of resources. While savings vary by customer and country, studies have concluded that the estimated energy savings of Advanced Meters vary between 2–10% of baseline consumption.

### 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 corruption or violations of the principles of fair competition and human rights.

To ensure socially balanced, healthy and safe working conditions, the company has established a set of stringent standards within its operations and supply chain and all suppliers comply with Landis+-Gyr's Quality, Environmental, Health and Safety Policy, and Code of Business Conduct and Ethics. These include declarations of compliance, and selfand third-party assessments 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.

### HIGHLIGHT 2017 | 18: **FAIR METER PROJECT SUCCESSFULLY COMPLETED**

In early September 2018 Landis+Gyr's new meter design for the E360 Fair Meter passed the final internal and external audits. This marked the completion of a ground-breaking landmark project with both the 1-phase and 3-phase meters now in full production.

The energy and electronics industries are attempting to solve the critical challenges of energy consumption, material utilization, e-waste, suppliers' sourcing and labor conditions. The Fair Meter Initiative introduced in the Netherlands supports this goal by creating a framework with standards that describe socially responsible work practices. Furthermore, the initiative aims to solve the challenges of materials, labor conditions, energy and toxicity by researching, developing and producing a Fair Smart Meter. As a vendor for smart energy solutions, the major contribution of Landis+Gyr towards a more sustainable world originates from the technologies and solutions provided. Smart meters enable considerable energy efficiency and the integration of renewable resources from decentralized energy generation into the energy network, resulting in substantially reduced CO<sub>2</sub> emissions.

The Fair Meter initiative was started in 2013. Participants in the consortium include Liander, Stedin, Delta and Westland Infra, managing electricity and gas supply for about 65 % of households in the Netherlands. The Dutch utility consortium, committed to providing energy in a socially responsible manner, chose Landis+Gyr to be a major meter vendor. The initiative focuses on eight areas, namely: energy and emissions, circularity, fair materials (conflict materials), international labor standards, transparency, energy use of the meter, scarcity of resources and raw materials, and software and data privacy.

#### FAIR PROCESS



Energy & Emissions

#### **FAIR PRODUCT**



Safety of Resources and Raw Materials



Fair Materials

Software and Data

**Use and Privacy** 



Transparency



Energy Use of the meter



Labour



Circularity of Resources and Raw Materials

During this groundbreaking pilot project, Landis+Gyr's development team achieved major breakthroughs and made stunning improvements, especially in reducing the amount of raw materials used to manufacture the new E360 meter compared to a equivalent predecessor model. In the design of the new 1 phase Smart Meter, the reduction of the metals sub-total was 10%, the reduction of plastic materials 21% and the reduction in the mechanical Bill of Material (BoM) overall was 20%. Some materials were eliminated completely. A marked

improvement was shown even during this first round. During the next development round, the 3 phase E360 meter, metals were reduced by 58%, plastics by 33% and the mechanical BoM by 38% overall. The number of materials was cut in half, from 14 different materials down to 7. One major step which contributed to the reduction in steel usage was the elimination of screws in the assembly process. Not only did it reduce the metal materials, but it made the end-of-life material recovery process much more streamlined.

#### RESULTS



Responding to the high ambitions of the Fair Metering project founders, the Landis+Gyr EMEA organization set up a brand-new production line in Corinth, Greece. At this new, modern facility, Landis+Gyr is now able to manufacture one million devices per year with a high degree of automation using stateof-the-art technology.



# COMMITTED TO THE ENVIRONMENT

In which areas is Landis+Gyr taking active steps towards reducing the environmental footprint?



"WE HAVE FORMULATED AM-BITIOUS OBJECTIVES FOCUSING ON WATER, WASTE, CO<sub>2</sub> AND CHEMICALS. TOGETHER, WE ARE CAPABLE OF TAKING STEPS TO-WARDS MAKING THE WORLD MORE SUSTAINABLE."

GERARD MEICHAN, HEAD QUALITY & BUSINESS EXCELLENCE ASIA PACIFIC, AUSTRALIA How does an environmentally friendly mindset influence the quality of Landis+Gyr products?



"COMPLIANCE WITH ENVIRON-MENTAL STANDARDS HELPS TO INCREASE THE QUALITY OF OUR OFFERINGS. A LONG-TERM PERSPECTIVE AND CON-TINUOUS RESEARCH LEAD TO CONSTANT IMPROVEMENTS IN OUR PRODUCTS, PRO-CESSES AND OPERATIONS."

MATTEO BIROLINI, VICE PRESIDENT QUALITY EMEA, SWITZERLAND What steps are being taken by Landis+Gyr to make its products more environmentally friendly?



"WE CONTINUE TO EXAMINE NOT ONLY OUR OPERATIONS, BUT THE ENTIRE SUPPLY CHAIN TO IDENTIFY NEW WAYS TO SAVE ENERGY AND REDUCE CO<sub>2</sub>, WASTE AND CHEMICALS."

AUBREY WILLIAMS, VICE PRESIDENT PRODUCT DELIVERY MEXICO

# ENVIRONMENTAL REPORTING GUIDELINES BASED ON INTER-

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

Landis+Gyr's sustainability report mainly focuses on its activities in the financial year 2017/18 from April 1, 2017 to March 31, 2018. Reporting covers all  $CO_2$  emissions, however, data for waste and chemical usage excludes the Group's level-3 sites, and therefore accounts for negligible amounts. Data recording for waste and the use of chemicals was expanded from level-1 to level-2 sites (covering all 26 major sites) in 2013/14.

Recording of water consumption was expanded to capture a broader range of criteria and include all production levels in 2012/13. Progress is monitored though continued collection and assessment of information to identify further potential for improvement. A web-based software and reporting system is used for data collection, aggregation and analysis and is integrated across the entire company's operations.

#### **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.

20



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 Company's activities from sources it does not own or control.

The company's carbon footprint is calculated by converting all GHG emissions to metric tons expressed in  $CO_2$  equivalents ( $CO_2e$ ), using appropriate GWP (Global Warming Potential) factors as published by the Intergovernmental Panel on Climate Change (IPCC).

### WATER PUSHING ALTERNATIVE WATER SOURCES

Sources of fresh water are increasingly being depleted, while rapid population growth across the globe is increasing demand for water, making it essential for companies to contribute to prudent management of fresh water. Collecting rain water and water recycling and reuse are a crucial aspect of Landis+Gyr's environmental programs.

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.

Landis+Gyr continued its efforts to reduce water withdrawals and consumption throughout all its business activities in 2017/18. Total water consumption within the Group decreased by 9.9% to 104,962 m<sup>3</sup> in 2017/18 from 116,520 m<sup>3</sup> in 2016/17. This reduction is due to staff reductions. In addition, sensor-controlled faucets were installed to save water at a number of sites, including Landis+Gyr's Pequot Lakes facility in Minnesota, US. In the reporting period 2017/18, 66.6% (2016/17: 63.6%) of water consumption was attributed to level-1 sites and 30.0% to level-2 sites (2016/17: 29.9%). Level-3 sites accounted for 3.4% of the total amount (2016/17: 6.5%). Landis+Gyr reused 1,432 m<sup>3</sup> of water, a reduction of 38.4% and collected 5,242 m<sup>3</sup> of rain water. The amount of rain water used decreased by 10.9% compared to the previous year, mainly due to dry summer weather and headcount reductions.

In the Americas region water consumption decreased by 1.5% to 29,793 m<sup>3</sup> (2016/17: 30,261 m<sup>3</sup>). In EMEA consumption fell by a more significant amount, 16.7% to 33,460 m<sup>3</sup> (2016/17: 40,163 m<sup>3</sup>). Meanwhile, water consumption in the Asia Pacific region decreased by 9.5% to 41,709 m<sup>3</sup> (2016/17: 46,095 m<sup>3</sup>) as a result of the closure of the Baddi site in India.



	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total m <sup>3</sup>	132,710	135,395	107,265	116,340	116,520	104,962
CUBIC METERS PER REGION						
Americas	35,299	29,324	27,091	27,832	30,261	29,793
APAC	64,323	64,427	44,566	51,205	46,095	41,709
EMEA	33,088	41,644	35,609	37,303	40,163	33,460
CUBIC METERS PER SITE LEVEL		6			18. P	
Level 1	86,986	89,089	67,678	79,573	74,138	69,882
Level 2	37,480	32,730	31,246	28,568	34,781	31,557
Level 3	8,244	13,576	8,342	8,199	7,602	3,524
Water used from public water supply (in m³)	66,753	66,848	61,483	64,314	73,906	65,291
Industrial water	n.a.	3,458	n.a.	n.a.	n.a.	44.5
Water used from own wells	56,040	51,234	33,907	35,379	36,731	34,384
Rain water collected	9,917	13,855	11,875	16,646	5,884*	5,242

\* 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'.

65,043

9,494

68,949

10,443

70,635

5,499

89,397

1,199

2,322

746

Total waste water

Water reused

Water recycled

23

90,152

1,432

......

## WASTE RESPONSIBLE RESOURCE MANAGEMENT

Increased waste worldwide poses challenges to politicians, governments, communities and, most of all, the environment. The harmful effects of waste on its surroundings call for new standards regarding its treatment. Landis+Gyr is committed to further reducing waste across all its sites and to raising awareness of this critical challenge.

Landis+Gyr is aware of the risks associated with contaminated structures, polluted soils and inadequately stored waste and constantly reviews its waste management processes to identify and implement opportunities for improvement in waste reduction, reuse and recycling.

Total produced waste in 2017/18 increased by 5.4% to 4,083 metric tons from 3,874 metric tons in the prior year, mainly due to the bundling of production lines in Corinth, Greece, and corresponding waste accumulation from the dismantling of production capacities at other EMEA sites.

Reduction efforts in the Americas and Asia Pacific regions had positive impacts, thanks to the efforts of various local teams; while the amount of waste generated in the EMEA region rose by 13.7% to 2,542 metric tons, it fell in the Americas region by 5.5% to 1,189 metric tons and in Asia Pacific by 7.4% to 352 metric tons.

The Group is focusing significant resources on waste sorting and recycling at all manufacturing sites. For example, Landis+Gyr's Laverton site in Australia recycled all paper waste and separated plastic and cardboard waste streams, whilst the Bloomington site in the US achieved Leadership in Energy and Environmental Design (LEED) Silver Status in 2017. Furthermore, all sites recycled or re-used paper bags. Landis+Gyr missed its landfill reduction target in 2017/18 primarily due to the consolidation of production lines in Corinth, Greece, and corresponding downsizing at other sites. Landfill waste increased by 11.9% with 84.4% of total waste produced in 2017/18 came from level-1 (2016/17: 80.8%) and 15.6% from level-2 sites (2016/17: 19.2%). Level 2 sites were able to reduce their waste production by 14.6%.

Regionally, the greatest decrease in waste was achieved by the Americas teams. The efforts of the level 2 sites located in Alpharetta, Lafayette and Pequot Lakes in the US and the level 1 Curitiba site in Brazil drove that reduction having implemented various measures to reduce waste over the past two to three years. The impact was already visible in 2016/17.

In addition to the bundling of production lines, increases in the EMEA region were the result of the launch of new production lines at the Stockport, UK, and Montluçon, France, sites and by the expansion of the R&D department in Jyskä, Finland. In Asia, reductions were the result of waste management initiatives that had been launched in the previous year.



	2012/13*	2013/14	2014/15	2015/16	2016/17	2017/18
Total t	2,441	3,104	2,771	3,949	3,874	4,083
				1000		
TONS PER REGION						
Americas	1,195	1,571	902	1,855	1,258	1,189
APAC	104	254	211	290	380	352
EMEA	1,142	1,279	1,658	1,804	2,236	2,542
TONS PER SITE LEVEL				Ser and		
Level 1	2,441	2,409	1,936	3,118	3,130	3,448
Level 2	n.a.	695	835	831	744	635
Sold	1,122	694	961	1412	1369	1,464
Incinerated	1	203	179**	193**	150**	101**
Landfill	612	544	654**	490**	360**	403**
Recycled	706	1,663	991	1864	2002	2,128

## CHEMICALS A 50 % REDUCTION IN THE LAST 5 YEARS

The usage of chemicals during any kind of manufacturing processes is very common. Minimizing or even phasing-out the use of harmful chemicals is a top priority at Landis+Gyr.

Hazardous chemicals can have harmful consequences on the environment as well as on the health of customers, employees and stakeholders throughout the entire value chain. Landis+Gyr is promoting chemical management projects to phase out the use of chemicals defined as hazardous and to minimize corresponding emissions.

In 2017/18, the total use of chemicals decreased by 2.5% to 11.9 metric tons from 12.2 metric tons in the prior year. EMEA continued to reduce its use

of chemicals, by 28.9%, mainly due to the greater proportion of advanced meters and utilization of more environmentally friendly materials and the corresponding phase-out of older meters.

The Americas region increased its use of chemicals by 18.2% as a result of Reynosa's usage of isopropanol for the cleaning of meters and tools. In Asia Pacific the use of chemicals increased by 8.3% due to production volume expansion at the Kolkata site in India.



6	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total t	23.2	21.0	17.4	13.8	12.2	11.9
TONS PER REGION	14	16	St- 10	and the second		
Americas	8.3	6.8	9.4	6.8	6.0	7.1
APAC	0.5	1.1	0.9	1.0	1.2	1.3
EMEA	14.4	13.1	7.1	6.0	5.0	3.5
TONS PER SITE LEVEL						
Level 1	23.2	20.9	17.3	13.7	12.1	11.8
Level 2	n.a.	0.1	0.1	0.1	0.1	1.1

## CARBON FOOTPRINT THE FIGHT AGAINST CLIMATE CHANGE

Energy generation and consumption account for two-thirds of overall global greenhouse gas (GHG) emissions. As a pioneer in the energy industry, Landis+Gyr began recording its carbon footprint in 2007 and has reduced its total carbon emissions by 31 % since.

In addition to contributing to the reduction of GHG emissions through its smart and energy efficiencyimproving products and solutions, Landis+Gyr is also addressing the carbon footprint of its own operations. In the year 2017/18, total CO<sub>2</sub> emissions within the company amounted to 28,088 metric tons  $CO_2e$ , a remarkable 11.1% lower than the 31,594 metric tons  $CO_2e$  reported in 2016/17.

Between 2007 and 2017/18, Landis+Gyr has achieved significant reductions in emissions related to its R&D and manufacturing processes decreasing Scope 1 'direct' emissions by 55.0% and Scope-2 'indirect power generation' emissions by 30.4%. During the same period 'additional indirect' Scope-3 emissions increased slightly by 0.4%.

Over the last eleven years, carbon emissions perunit-of-production have more than halved from 2.3 kg per product in 2007 to 1.0 kg in 2017/18. Similarly, average emissions per employee have decreased by 41% to 3.8 metric tons in 2017/18.

The overall decrease in emissions from 2016/17 to 2017/18 was – despite a slight increase of scope 1 emissions – mainly due to a reduction in indirect emissions (Scope 2 and 3) which declined by 11.4% to 19,333 metric tons CO<sub>2</sub>e and by 17.1% to 5,541 metric tons CO<sub>2</sub>e, respectively.

Scope 2 emissions declined primarily due to lower electricity consumption as well as a greater reliance on renewable energy in the EMEA region. Within Scope 3, airtravel could be minimized by usage of office automation tools. This resulted in a substantial decrease in emissions. In Scope 1, higher gasoline consumption for emergency power generators, use of natural gas and the consumption of gasoline for company vehicles led to a 4% increase in direct emissions.



	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total t CO₂e	33,921	34,644	34,005	32,296	31,594	28,088
TONS CO2E PER REGION			8			
Americas	15,442	15,153	15,456	14,113	13,480	13,616
APAC	7,161	7,143	7,263	6,659	6,439	5,718
EMEA	11,318	12,348	11,286	11,524	11,675	8,754
TONS CO2E PER SCOPE					LALZ I	~
Scope 1	5,585	5,911	4,809	3,516	3,092	3,215
Scope 2	22,869	22,508	22,774	22,470	21,816	19,333
Scope 3	5,467	6,225	6,421	6,311	6,686	5,541

#### TONS CO2E PER ECONOMIC INTENSITY

kg CO₂e per product	1.6	1.6	1.5	1.5	1.1	1.0
t CO2e per employee	5.4	5.1	4.8	4.3	4.2	3.8
t CO <sub>2</sub> e per 10m2 floor area	1.5	1.5	1.4	1.4	1.4	1.3
kg CO₂e per USD 100 turnover	1.7	1.8	1.8	1.7	1.5	1.3

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

Landis+Gyr site	Pequot Lakes, Minnesota, US (Landis+Gyr Americas region)
Activities of the site	Level 2 site: Design, development, marketing, sales, and deployment of Electricity Meters, Automated Meter Reading (AMR); Advanced Metering Infrastructure (AMI); Distribution Auto- mation (DA); and Supervisory Control and Data Acquisition (SCADA) utility data systems for electric, water and gas utilities.
Number of local employees	126
Undertaken initiative 2017/18	Installation of modern water fixtures designed to save water
Goals	Increase of water savings and water reuse
Achievements	7 % reduction in water usage in 2017 compared to the previous year





All sites within Landis+Gyr's global network are taking action to reduce their water usage, minimize the amount of grey water they produce by using environmentally friendly materials, and increase the volume of water they recycle or reuse. The common goal is to ensure the responsible use of this precious resource.

At the Pequot Lakes site in Minnesota, US, for example, new water fixtures designed to save water were installed in 2017. For example, new flush mechanisms for toilets reduce water consumption. The "dual flush technology" encompasses a built-in sensor and automatically dispenses the proper amount of water based on time spent in a stall once the flush button is pressed. The long-term goal is to replace all toilet fixtures with this new technology over time. Another example of how the site is reducing water usage and waste is by installing automatic faucets in all restrooms. The faucets are motion activated and will only dispense water when someone wants to wash their hands.

The site's water use decreased by 7% in 2017 compared to the previous year. In parallel, various internal campaigns were undertaken to raise awareness of water usage, to comply with water regulations and to increase the use of alternative water sources. These efforts were supported by the monitoring and communicating monthly water consumption levels.

# WASTE: LAVERTON **MANAGING WASTE BETTER**

Landis+Gyr site	Laverton, Melbourne, Australia (Landis+Gyr Asia Pacific region)
Activities of the site	Level 1 site: Gas and Electricity Meter Manufacturing
Number of local employees	90
Undertaken initiative 2017/18	Improved streaming of waste and enhanced recycling of waste timber
Goals	Continious advances in waste managment
Achievements	<ul> <li>Significant general waste reductions at lower cost</li> <li>100% timber pallets now recycled</li> </ul>

Landis+Gyr's waste minimization initiatives are conceived as enhancement programs aiming to reduce the overall impact on the environment. The Landis+-Gyr teams at the Laverton site in Melbourne, Australia, are pursuing a continuous improvement approach to waste management. Site management engages with staff to stress the importance of corporate social responsibility and responsible environmental behavior, for example through tool box talks and town hall meetings. In 2017/18, further improvements were achieved with the introduction of energy efficient waste compactors and enhanced streaming of plastic and cardboard waste, including corresponding secured rebates. An exchange system using 240liter wheeled bins instead of large dumpsters was introduced that improved general waste streaming capacity while lowering costs, and significantly reduced manual handling risks to the employees as a positive side effect. In addition, better waste streaming processes were established for prescribed waste, paper and timber recycling. All paper waste generated is now completely recycled after equipping all office workspaces with paper recycling bins.

Significant improvements were also made by redirecting waste timber (warehouse pallets) from landfill. In 2017, approximately 50,000 kilograms of waste timber were generated, of which 60% went directly into landfill. Since January 2018, 100% of all waste pallets have been diverted from landfill and are now recycled instead.

Recycling of waste timber



### CARBON FOOTPRINT: Continuous investment in energy efficiency

Landis+Gyr site	Kosmosdal, South Africa (Landis+Gyr EMEA region)
Activities of the site	Level 2 site: Development, assembly, marketing and sales of electricity credit and prepayment meters
Number of local employees	295
Undertaken initiative 2017/18	Light retrofit project
Goal	Significant reduction in electricity consumption



Entrance of the facility

Energy generation and consumption accounts for two-thirds of overall global greenhouse gas (GHG) emissions. Landis+Gyr is committed to contributing to the mitigation of climate change effects by limiting global warming. Landis+Gyr's greatest contribution to the reduction of GHG emissions is through its smart and energy efficiency-improving products and solutions. Additionally, with the support of all its employees, Landis+Gyr continues to work hard to reduce the carbon footprint of its own operations.

One important factor is the continuing modernization of its production buildings and plants worldwide. At the Kosmosdal site in South Africa, for example, a major light retrofit project was undertaken in 2017, resulting in a significant reduction in electricity consumption. The project included the replacement of all fluorescent bulbs with energy-saving LED lighting. The next step in the continuing energy consumption reduction plan will address the air conditioning system and will unlock additional, significant energy-saving potential.



**Energy-saving outdoor lighting** 



![](_page_32_Picture_2.jpeg)

# COMMITTED TO EMPLOYEES AND SOCIETY

How are you handling talent management at Landis+Gyr?

![](_page_33_Picture_3.jpeg)

**"TO HELP US ATTRACT AND RETAIN THE BEST TALENT IN THE INDUSTRY WE USE OUR GLOBAL FOOTPRINT TO CREATE DIVERSE AND INTERESTING DEVELOPMENT ASSIGNMENTS THAT EN-ABLE EMPLOYEES TO GROW THEIR CAREERS."** 

#### KATE JARROD,

GLOBAL HEAD OF TALENT MANAGEMENT AND ORGANIZATION DEVELOPMENT, SWITZERLAND How important is diversity at Landis+Gyr?

![](_page_34_Picture_2.jpeg)

"LANDIS+GYR HIGHLY VALUES AND RESPECTS EM-PLOYEE DIVERSITY IN TERMS OF CULTURE, GENDER, BACKGROUND, SKILLS AND PROFESSIONAL EXPERTISE. OUR STAFF IS ALSO EX-TREMELY DIVERSE AGE-WISE."

STEVE JESTON, REGIONAL DEPUTY HEAD APAC, AUSTRALIA for society?

What is Landis+Gyr doing

![](_page_34_Picture_6.jpeg)

**"BY WORKING TOGETHER WITH LOCAL PARTNERS, THE GROUP IDENTIFIES AND SUPPORTS PROJECTS THAT CONTRIBUTE TO FUTURE GENERATIONS AND LOCAL COMMUNITIES. OUR STRATEGY HINGES ON DOING BUSINESS IN A WAY THAT GENERATES ADDED VALUE FOR SOCIETY AT LARGE."** 

GARY HIGH, SENIOR VICE PRESIDENT MARKETING AND PRODUCT MANAGEMENT, USA

## COMMITTED TO EMPLOYEES CREATING A DIVERSE AND DYNAMIC WORKSPACE

Since its establishment, Landis+Gyr has been driving innovation within the energy industry thanks to its technical knowledge and expertise. The Company continues to seek intelligent solutions that create value for its customers and end-users worldwide. Landis+Gyr believes that its employees are its most important resource and that a safe working environment and an inclusive, inspiring corporate culture that encourages employees to develop their unique skills are of unparalleled importance.

#### **CHECKS AND BALANCES**

Landis+Gyr sees good corporate governance as an essential element of the company's vision and values and is committed to building trust with its customers and other stakeholders.

In the interests of checks and balances, the Board of Directors does not contain any members of the current management team and includes a Lead Independent Director. Further, the Chairman does not serve on any Board committee. These practices contribute to the Board's independence, enhance its ability to supervise the Executive Management team on strategy, risk, compensation, compliance and other matters.

Landis+Gyr is committed to ensure that its corporate governance efforts are guided by international best practice standards, such as maintaining a distinct compliance function in addition to an independent internal audit function.

#### **EDUCATION AND TRAINING**

Each employee's commitment to their tasks and roles within Landis+Gyr's interdisciplinary teams is essential for the company's pioneering position and continued success in the Smart Metering industry. Learning and Development is a fundamental component of Landis+Gyr's corporate culture and the foundation of the Group's successful strategic recruiting plan to attract and retain the brightest and most motivated people who also bring a strong sense of commitment and passion to their work.

The Company offers qualified employees a wide variety of workshops, coaching and mentoring programs as well as web-based training sessions covering leadership, compliance, health and safety, customer service, sales and marketing, management skills and cultural and environmental awareness programs, tailored to their individual responsibilities, tasks and.

#### **A SAFE WORKPLACE**

The safety and health of all employees, temporary workers and visitors is a top priority at Landis+Gyr and is why the Company goes beyond its legal requirements in pursuit of its vision for healthy and safe workplaces. The Group and all responsible parties designated by the Code of Conduct are committed to maintaining clean workplace environments that reduce the risk of accidents, injuries and illnesses.

To maintain and strengthen a high standard of workplace quality, Landis+Gyr provides employees with regular train and organizes events to integrate job safety into daily work and ensure that employees are safe while at work.

#### **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 values and respects 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 while preventing any form of discrimination or harassment. The diversity derived from different cultures, religions, nationalities, genders, and age groups is a valuable source of talent, creativity, and innovation.

	2013/14	2014/15	2015/16	2016/17	2017/18
Total Employees	5,527	5,755	6,068	5,919	5,915
•••••••••••••••••••••••••••••••••••••••	• • • • • • • • • • • • • • • • • • • •	•••••	•••••	•••••	•••••

#### **EMPLOYEES PER REGION**

Americas	2,092	2,141	2,241	2,166	2,223
EMEA	2,207	2,272	2,522	2,534	2,470
APAC	1,228	1,342	1,305	1,219	1,222

#### **EMPLOYEES PER FUNCTION**

Operations	3,309	3,417	3,618	3,383	3,473
R&D incl. Product Management	1,135	1,200	1,255	1,389	1,316
SG&A	1,083	1,138	1,195	1,147	1,126

#### **CORRESPONDING DOCUMENTS**

- Articles of Association
- Mission and Values

- Code of Conduct
- Corporate Governance

All documents can be found at www.landisgyr.com

#### HUMAN CAPITAL DATA

Under 20         41         1%         96         2%           20–29         877         15%         1,091         19%
<b>20–29</b> 877 15% 1,091 19%
**************************************
<b>30–39</b> 1,724 29% 1,609 27%
<b>40–49</b> 1,720 29% 1,480 25%
<b>50–59</b> 1,227 21% 1,064 18%
<b>60+</b> 330 5% 500 9%

#### **GENDER DISTRIBUTION**

Female	2,083	35%	2,009	34%
Male	3,909	65 %	3,831	66%

#### OTHERS

Number of Training and Education Programs	366	641
Number of Engagements in Community Projects	65	77

\* 2017/18 numbers refer to the cut day August 1, 2018 following a new HR data tool.

#### THE ADVANTAGES OF DIVERSE AGES In the workplace

Landis+Gyr's workforce has become increasingly diverse in terms of age demographics, creating professional environments that are rich with experience and maturity as well as youthful exuberance. The wide age spectrum offers the advantages of a dynamic, multi-generational workforce with a diverse range of skill sets and facilitates ongoing knowledge transfer. Data show also the long term committement of employees with their employer and a good balance of the length of their services.

LENGTH OF SERVICE*	COUNT
0-1 year	1,406
2–5 years	1,668
6–15 years	1,750
16–25 years	721
26+ years	295

\* Numbers refer to the cut day August 1, 2018, following a new HR data tool.

# COMMITTED TO SOCIETY

As a corporate citizen, Landis+Gyr strives to add economic and social value in the communities where it operates. By working together with local partners, the Group creates new business opportunities and supports projects that contribute to future generations.

The company's strategy hinges on doing business in a way that generates added value for society at large. 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 the quality of life of its citizens, can only be achieved if international organizations and corporations alike embrace ecological, economic and social concerns as a critical part of their business goals and operations.

Landis+Gyr upholds its commitment to society by ensuring that quality of life, safety, and compliance concerns are made a top priority and by maintaining a constant dialog with all stakeholders, including customers, investors, suppliers, and employees around the globe, to learn more about their needs and to meet their expectations. To fulfil its role as a leading global enterprise, Landis+Gyr is engaged in promoting human rights, labor standards, supply chain management, the environment, and anti-corruption efforts.

#### **RIGHTS & REGULATIONS**

As a global enterprise, Landis+Gyr conducts business in many countries in which business practices may vary greatly. The company succeeds in these markets on the basis and merits of its performance, and is compliant with all local laws, rules and regulations, upholding this Code as an incontrovertible standard of business conduct and behavior.

The Company has implemented a strong set of internal and external control measures and does not tolerate corruption or 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.

#### SUPPLIER ASSESSMENT

By closely cooperating with its suppliers Landis+Gyr ensures that they with Landis+Gyr's Quality, Environmental, Health and Safety Policy, and Code of Business Conduct and Ethics. These include declarations of compliance, self-assessments and thirdparty assessments and audits. In addition to ISO 9001, 14001 and 18001 certifications throughout the Company and at all its key suppliers, Landis+Gyr requires its tier one suppliers to acknowledge and implement the Code of Conduct of the Responsible Business Alliance (RBA), formerly the Electronic Industry Citizenship Coalition (EICC).

![](_page_39_Picture_11.jpeg)

![](_page_40_Picture_0.jpeg)

#### **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 the compliance program is implemented at operating level and who report directly 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 Company's stringent integrity standards contained in the Company's Code of Business Conduct and Ethics prohibit corruption and violations of the principles of fair competition and human rights.

The Chief Compliance Officer is responsible for assessing compliance risk to proactively identify and mitigate risk exposure, ensuring that compliance policies and training materials are up to date and managing all compliance matters. The Chief Compliance Officer reports directly to the Audit and Finance 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 as defined in the Group's Privacy Policy. 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. All these activities are overseen by a Data Privacy Officer.

#### ANTI-BRIBERY 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 thirdparty due diligence process for all its associated parties and offers specialist training to all employees who deal directly with customers.

#### **SPEAK-UP POLICY**

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

#### PARTNER OF LOCAL COMMUNITIES

In its role as a corporate citizen, Landis+Gyr addresses the needs of communities through specific fields of expertise and engages in a wide range of social activities. In 2017/18 Landis+Gyr and its staff again contributed to numerous community projects and charities globally through donations and volunteering efforts.

![](_page_40_Figure_12.jpeg)

### WINGS FOR LIFE WORLD RUN

![](_page_41_Picture_2.jpeg)

In spring 2018 Landis+Gyr supported the global charity run of Wings for Life, a non-profit foundation whose sole mission is to find a cure for spinal cord injury. This running and wheelchair event took place on May 6, 2018. All participants around the world started at the same time in their time zones and kept running until they were overtaken by a so-called catcher car. Participants who could not make it to an official event location could download the Wings for Life World Run app and were then chased by a virtual catcher car at the same time as all the other runners around the globe. Entry fees were paid by the participants themselves and Landis+Gyr made an additional company donation based on the number of participants. Wings for Life donated 100% of all entry fees to spinal cord research.

A total of 100,000 people worldwide participated in the various official events, including Landis+-Gyr employees in Zug and Vienna, or app runs. Among the roughly 50 Landis+Gyr colleagues were the Chief Financial Officer Jonathan Elmer and the Chief Strategy Officer Roger Amhof. At the global level, the run was won by a wheelchair adventurer who covered 89 kilometers, but Anders Jakobsson, Program Manager SCM at the Landis+Gyr EMEA organization, managed to run an impressive distance of 35.03 kilometers before getting caught by a catcher car.

Richard Mora, Chief Executive Officer commented:

"OUR TEAM SPIRIT DURING THIS EVENT WAS AMAZING. I WANT TO THANK ALL OF OUR LANDIS+GYR DONORS AND RUNNERS FOR THEIR CONTRIBUTION! WITH A TOTAL TEAM DISTANCE OF 277 KILOMETERS AND OUR GOLD SPONSOR STATUS, WE HAVE DEMONSTRATED WHAT WE CAN ACHIEVE AS A GLOBAL TEAM."

![](_page_42_Picture_1.jpeg)

![](_page_42_Picture_2.jpeg)

Wings For Life Charity Run: Let's run for those who can't!

# ENGAGEMENT FOR SOCIETY **VOLUNTEERING IN ZHUHAI**

![](_page_43_Picture_2.jpeg)

Landis+Gyr site	<b>Zhuhai, China</b> (Landis+Gyr Asia Pacific region)
Activities of the site	Level 2 site: Electricity Meter Manufacturing
Number of local employees	136
Undertaken initiative 2017/18	Community and donation projects
Goals	Demonstrate responsibility towards society, thereby strengthening the Company's reputation among custom- ers and endusersend-users
Achievements	Landis+Gyr Volunteer Team was hon- ored by local officials and the Compa- ny's reputation was strengthened

![](_page_43_Picture_4.jpeg)

Landis+Gyr lives up to its commitment to society by supporting projects that promote the quality of life, safety or well-being of the people in the communities where it is active. In order to fulfil its role as a responsible corporate citizen, Landis+Gyr's Zhuhai organization in China, for example, was engaged in various programs in 2017/18. Among these was a project in which young trees were distributed and planted by volunteers, highlighting the interconnections between climate, environment and society. At Landis+Gyr in Zhuhai more than 10 employees participated in the program and they planted more than 25 trees.

Other projects were dedicated to the safety and health of women and children, to the development of the professional skills of employees, to enhancing the spirit of the volunteer teams, and to protecting the environment and public lands.

### DEDICATED EMPLOYEES STRENGTHENING TEAM SKILLS AND DEDICATION

Landis+Gyr site	<b>Curitiba, Brazil</b> (Landis+Gyr Americas region)
Activities of the site	Level 1 site: Electricity Meter Manufacturing
Number of local employees	372
Undertaken initiative 2017/18	Employee engagement
Goals	Spread and cultivate an internal cul- ture of innovation and engagement
Achievements	Enhanced motivation and strength- ened team spirit

Landis+Gyr is committed to providing its customers with superior quality solutions and services and constantly strives to build up the skills and motivation levels of all employees to help them master current and future tasks and challenges. To this end, the management team of Landis+Gyr's South American operations based in Curitiba, Brazil, initiated a leadership program called "Team Program". It promoted an internal culture of innovation and engagement by drawing attention to the team's core values:

- Customer Focus: putting the customer first, actively listening to customers;
- Trusted Partner: developing long-term relationships and delivering what customers are promised;
- Innovative Spirit: thinking out of the box and generating ideas on how to create and deliver the best solutions to the market;
- Commitment to Quality: maintaining quality standards, regulatory certifications and minimizing defects (Zero Defect Programme)
- Caring for People and the Community: protecting, valuing and nurturing talents and diversity of local communities.

Each of these core values were assigned to a group of people from different areas across Landis+Gyr South America. Once a month, those groups get together to discuss a topic that is relevant to the values of the Company. These discussions aim to identify what can be done differently to meet customer needs even better and thereby create solid, collective progress towards continuous improvement.

Kick-off meeting of the Team Program

![](_page_44_Picture_11.jpeg)

Every action discussed in the groups is shared with all the employees

![](_page_44_Picture_13.jpeg)

### AWARDS AND RECOGNITIONS

![](_page_45_Picture_2.jpeg)

#### **LEED STATUS AWARD**

In 2017 the Landis+Gyr site in Bloomington, Minnesota, US, received the LEED certification following other Landis+Gyr US facilities for examples in in Alpharetta (2012) and St. Louis (2013). LEED or Leadership in Energy and Environmental Design is the most widely used green building rating system in the world. Available for virtually all building, community and home project types, LEED provides a framework to create healthy, highly efficient and cost-saving green buildings.

![](_page_45_Picture_5.jpeg)

#### PRESIDENT'S AWARD BY ROSPA Health and safety 2017

In September 2017, Landis+Gyr UK 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 award in the prestigious annual scheme run by RoSPA for winning eleven consecutive Gold Awards. 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.

![](_page_45_Picture_8.jpeg)

#### 2017 GRID EDGE AWARD

In June 2017, Landis+Gyr has been named a 2017 Grid Edge Award winner for a distributed intelligence application that increases energy efficiency, supports renewables integration and empowers consumers to better manage energy. The Alpharetta headquartered business for the Americas was selected as a 2017 winner for an innovative project that combines home-level distributed computing with an intelligent network of devices, to better control the home's energy usage based on both the needs of the home owner and the local electricity grid.

#### FROST & SULLIVAN

#### FROST & SULLIVAN GLOBAL COMPANY of the year 2017 Award

In November 2017, Frost & Sullivan recognized Landis+Gyr with the 2017 Global Company of the Year Award. Few competitors can truly call themselves global, but Landis+Gyr is able to compete in any region through its international network of offices and partners. Landis+Gyr was recognized for its groundbreaking technologies that bring distributed intelligence and connectivity to all points on the distribution grid. Specifically, the company's pursuit of innovation is exemplified by its IPv6 multi-technology network that is deployed by the millions all over the world.

![](_page_46_Picture_4.jpeg)

#### **2017 GARTNER MAGIC QUADRANT**

In early 2018 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.

![](_page_46_Picture_7.jpeg)

#### BBBEE COMPLIANCE CERTIFICATE

In May 2018, Landis+Gyr South Africa was awarded with the BBBEE compliance certificate. The BBBEE (Broad-Based Black Economic Empowerment) program was launched by South Africa's first elected democratic government in 2003 as a racially selective program to empower previously disadvantages groups and enhance economy. The mandate of Broad-Based Black Economic Empowerment is to increase the number of black people that own, manage, control and gain employment in South Africa's economy. South Africa went through a system of racial segregation from 1948 until 1994 called Apartheid (Afrikaans word meaning "separateness") where race determined social, economic and political advantages or disadvantages.

![](_page_47_Picture_1.jpeg)

#### **NORTH AMERICA**

Re	gi	on	al	HG	Ç
	<u> </u>				

Alpharetta (USA)	<b>~</b> •
Alpharetta (USA)	<b>~</b> •

Ø

#### **R&D Centers**

Alpharetta (USA)	~ • •
Bloomington (USA)	~ 00
Lafayette (USA)	~ 00
Pequot Lakes (USA)	~ 00
Raleigh (USA)	~ 00

#### Manufacturing

Reynosa (MEX) 🛛 🗸 👽 💋

#### Sales Offices and Service Centers

Alpharetta (USA)	<b>~ •</b> Ø
Austin (USA)	~ 00
Bethlehem (USA)	~ 00
Colorado Springs (USA)	~ 00
Indianapolis (USA)	~ 00
Jacksonville (USA)	~ 00
Kirkland (USA)	~ 00
Lenexa (USA) (Network Operation Center)	V 🗘 Ø
Montréal (CAN)	~ 00
Morrisville (USA)	~ 00
Orange (USA)	~ 00
Roseville (USA)	~ 00
San Antonio (USA)	~ 00
Waukesha (USA)	~ 00

#### **SOUTH AMERICA**

R&D Centers Curitiba (BRA) ✓ ♥ Ø

Manufacturing Curitiba (BRA) ✓ ♥ Ø

Sales Offices and Service Centers Belém (BRA) Curitiba (BRA) ✓ ♥ ∅ Rio de Janeiro (BRA) São João de Meriti (BRA) São Paulo (BRA)

Regional HQ Landis+Gyr Site

ISO 9001 (Quality Management)
 ISO 14001 (Environmental Management)
 OHSAS 18001 (Operational Health and Safety)

![](_page_48_Picture_1.jpeg)

#### **EMEA**

Reg	ional	HQ
Zug	(SUI)	

100

100

100

100

V 🗘 Ø

~ • •

100

~ • •

100

V 🗘 Ø

100

~ • •

~00

100

100

V 🗘

#### **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	<b>~ 0</b>
Belgium	<b>~ 0</b>
Czech Republic	<b>~ 0</b>
Denmark	<b>~ 0</b>
Finland	<b>~ 0</b>
France	~ 0
Germany	~ 0
Greece	<b>~ 0</b>
Italy	<b>~ 0</b>
Netherlands	<b>~ 0</b>
Poland	<b>~ 0</b>
Russia	<b>~ 0</b>
Slovakia	<b>~ 0</b>
Slovenia	<b>~ 0</b>
South Africa	<b>~ 0</b>
Spain	<b>~ 0</b>
Sweden	<b>~ 0</b>
Switzerland	~ 0
United Arab Emirates	~ 0
United Kingdom	~ 🕈

#### APAC

<b>Regional HQ</b> Sydney (AUS)	V 🗘 Ø
<b>R&amp;D Centers</b> Noida (IND) Sydney (AUS) Tokyo (JAP)	- 0 0 - 0 0 - 0 0
<b>Manufacturing</b> Joka (IND) Laverton (AUS) Zhuhai (CHN)	V 0 0 V 0 0 V 0 0
Sales Offices Australia China Hong Kong India Japan New Zealand Singapore	<ul> <li>0</li> </ul>

# TABLE 1:GLOBAL ENERGY CONSUMPTION OFLANDIS+GYR GROUP IN 2017/18

ENERGY CONSUMPTION		L+G	AMERICAS	APAC	EMEA
Electricity (national grid mix) - daytime	MWh	23,304	12,171	3,911	7,221
Electricity (national grid mix) - nighttime	MWh	224	-	-	224
Electricity (renewable sources)	MWh	4,731	-	155	4,576
Electricity by on-site power generator	MWh	95	-	95	-
Steam (district heating)	MWh	2,412	-	-	2,412
Heavy fuel oil	MWh	-	-	-	-
Light fuel oil	MWh	112	-	-	112
Gasoline: not for vehicle	MWh	-	-	-	-
Emergency power diesel	MWh	54	51	-	3
Town gas (natural gas)	MWh	5,247	2,367	958	1,923
LPG (50/50)	MWh	-	-	-	-
LPG (70/30)	MWh	-	-	-	-

#### **PROCESS EMISSION**

CO <sub>2</sub>	kg	-	-	-	-
CH <sub>4</sub>	kg	4,006	-	-	4,006
N <sub>2</sub> O	kg	-	-	-	-
HFC	kg	-	-	-	-
PFC	kg	-	-	-	-
SF <sub>6</sub>	kg	-	-	-	-

#### **BUSINESS TRAVEL (OWN FLEET)**

Gasoline consumption	m <sub>3</sub>	531	463	3	64
Diesel consumption	m <sub>3</sub>	198	7	1	190
CNG consumption	m <sub>3</sub>	-	-	-	-
Alcohol consumption	m <sub>3</sub>	-	-	-	-
Gasoline [< 1.4 l]	km	277,044	-	80,400	196,644
Gasoline [1.4 – 2.0 l]	km	51,381	-	34,800	16,581
Gasoline [> 2.0 I]	km	27,763	-	-	27,763
Diesel [1.4 – 2.0 l]	km	587,253	-	40,800	546,453
Diesel [> 2.0 I]	km	294,604	-	63,600	231,004
Truck Diesel [7.5 t]	km	-	-	-	-

#### **BUSINESS TRAVEL (OTHER)**

Airplane (short haul)	pkm	3,124,350	1,766,729	424,461	933,160
Airplane (long haul)	pkm	42,727,434	22,914,774	10,219,310	9,593,350

# TABLE 2:TOTAL GROUP EMISSIONSBY SCOPE AND SOURCE [T CO2E]

SCOPE I	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	
Heavy fuel oil	42	41	21	-	0	0	
Light fuel oil	26	22	26	19	27	30	
Emergency power diesel	685	1,222	409	341	15	41	
Natural gas	941	995	987	903	991	1,067	
LPG (50/50)	0	0	-	-	0	0	
LPG (70/30)	43	43	36	0	0	0	
Process emissions	52	37	38	41	99	100	
Gasoline consumption	3,035	2,580	2,275	1,325	1,160	1,248	
Diesel consumption	489	503	607	676	548	531	
Gasoline: Not for vehicle	-	6	24	-	0	0	
Gasoline [< 1.4 l]	6	5	34	25	27	40	
Gasoline [1.4 – 2.0 l]	58	72	65	22	29	10	
Gasoline [> 2.0 l]	85	76	53	7	2	7	
Diesel [1.4 – 2.0 l]	78	232	223	130	135	84	
Diesel [> 2.0 l]	46	49	11	26	59	58	
CNG [1.4 - 2.0  ]	-	5	-	-	0	0	
CNG [< 1.4  ]	-	22	-	-	0	0	
Truck Diesel [7.5 t]	-	-	-	-	0	0	
Total [t CO <sub>2</sub> e]	5,585	5,911	4,809	3,516	3,092	3,215	4%
SCOPE 2							
Electricity	22,018	21,659	21,956	21,636	21,098	18,635	
District heating	851	849	818	833	718	697	
Total [t CO <sub>2</sub> e]	22,869	22,508	22,774	22,470	21,816	19,333	-11.4%
SCOPE 3							
Airplane (short haul)	935	847	842	952	749	616	
Airplane (long haul)	4,532	5,379	5,579	5,358	5,938	4,925	
Total [t CO <sub>2</sub> e]	5,467	6,225	6,421	6,311	6,686	5,541	-17.1%
BY SOURCE							
Electricity / District heating	22,869	22,508	22,774	22,470	21,816	19,333	
Fuels (diesel oil)	752	1,286	479	360	42	71	
Fuels (natural gas, LPG)	984	1,044	1,023	904	991	1,067	
Direct process emissions	52	37	38	41	99	100	
Road travel	3,797	3,545	3,270	2,211	1,960	1,977	
Air travel	5,467	6,225	6,421	6,311	6,686	5,541	
Total [t CO <sub>2</sub> e]	33,921	34,644	34,005	32,296	31,594	28,088	-11.1%

#### TABLE 3: CARBON FOOTPRINT BY REGION 2012 – 2017/18 [T CO<sub>2</sub>E]

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Americas	15,442	15,153	15,456	14,113	13,480	13,616
Scope 1	3,060	2,813	2,454	1,714	1,458	1,628
Scope 2	9,962	9,254	9,701	9,331	9,065	8,999
Scope 3	2,420	3,086	3,301	3,068	2,957	2,989
APAC	7,161	7,143	7,263	6,659	6,439	5,718
Scope 1	866	707	630	489	199	243
Scope 2	4,719	5,001	5,012	4,746	4,403	4,214
Scope 3	1,576	1,435	1,621	1,424	1,837	1,261
EMEA	11,318	12,348	11,286	11,524	11,675	8,754
Scope 1	1,659	2,391	1,726	1,312	1,435	1,345
Scope 2	8,189	8,253	8,062	8,394	8,348	6,119
Scope 3	1,470	1,704	1,498	1,818	1,892	1,290
L+G Total	33,921	34,644	34,005	32,296	31,594	28,088

Percentage at Regional Lev	vel:					
Americas	45.5%	43.7%	45.4%	43.7%	42.6%	48.5%
APAC	21.1%	20.6%	21.4%	20.6%	20.4%	20.3%
EMEA	33.4%	35.7%	33.2%	35.7 %	37.0%	31.2%

# TABLE 4:WATER CONSUMPTION BY REGION2012 - 2017/18 [M³]

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Americas	35,299	29,324	27,090	27,832	30,262	29,793
Water consumption from public water supply system	34,060	24,091	23,710	20,835	24,133	24,043
Water from own wells (groundwater)	1,115	852	795	752	802	717
Water other (e.g. rain water)	124	2,558	2,585	6,245	5,327	5,033
Total waste water	18,084	15,765	15,923	15,032	18,937	17,588
Direct drain to public waters or ground	1,884	5,665	4,305	2,358	3,985	4,175
Water, to public sewage system (drain discharge)	16,200	10,100	11,618	12,674	14,952	13,413
Amount of water reused	-	-	-	1,199	2,322	1,432
Amount of water recycled	-	-	-	-	-	-
Industrial water	-	1,823	-	-	-	-
APAC	64,323	64,427	44,566	51,205	46,095	41,709
Water consumption from public water supply system	9,398	12,410	11,454	16,578	19,806	17,582
Water from own wells (groundwater)	54,925	50,382	33,112	34,627	26,289	24,127
Water other (e.g. rain water)	-	-	-	-	-	-
Total waste water	21,137	24,512	27,376	39,974	40,767	41,688
Direct drain to public waters or ground	-	-	-	-	-	-
Water, to public sewage system (drain discharge)	21,137	24,512	27,376	39,974	40,767	41,688
Amount of water reused	-	-	-	-	-	-
Amount of water recycled	9,494	10,443	5,499	891	746	-
Industrial water	-	1,635	-	-	-	-
EMEA	33,088	41,644	35,609	37,303	40,163	33,461
Water consumption from public water supply system	23,295	30,347	26,319	26,902	29,966	23,667
Water from own wells (groundwater)	-	-	-	-	9,640	9,540
Water other (e.g. rain water)	9,793	11,297	9,290	10,401	557	209
Total waste water	25,822	28,672	27,336	34,392	37,396	30,875
Direct drain to public waters or ground	15,820	13,715	9,895	10,486	12,556	9,268
Water, to public sewage system (drain discharge)	10,002	14,957	17,441	23,906	24,840	21,607
Amount of water reused	-	-	-	-	-	-
Amount of water recycled	-	-	-	-	-	-
Industrial water	-	-	-	-	-	45

# TABLE 5:WASTE GENERATION BY REGION2013/14 - 2017/18 [KG]

	2013/14	2014/15	2015/16	2016/17	2017/18
Americas	1,571,128	902,297	1,855,117	1,258,125	1,188,803
Wood scrap	973,150	106,495	516,890	20,199	13,168
General waste	225,368	247,159	258,319	234,281	243,330
Metal scrap	22,871	64,552	33,339	39,971	39,183
Paper (recycled)	71,819	206,872	526,767	610,800	593,730
Plastic waste	53,048	87,554	118,744	91,431	90,377
Food leftover	85,882	61,230	85,125	61,675	80,797
Electrical and electronic waste	81,600	53,289	113,529	92,374	60,425
Sludge	41,237	54,431	69,794	75,414	54,431
Hazardous waste	9,861	10,158	12,169	25,697	11,421
Debris	4,000	4,000	112,320	4,390	300
Oil waste	1,035	5,051	6,050	1,210	1,490
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	151
Mining waste	-	-	-	-	-
Cinder	-	-	-	-	-
Rubber waste	-	-	-	-	-
Soot & dust	-	-	-	-	-
Other waste	-	-	-	-	-

	2013/14	2014/15	2015/16	2016/17	2017/18
APAC	254,127	210,679	289,690	380,303	352,019
Wood scrap	3,517	16,483	26,399	60,184	48,585
General waste	113,954	73,974	62,474	71,923	44,916
Metal scrap	14,083	2,223	62,648	40,988	38,665
Paper (recycled)	80,254	90,074	84,787	96,762	118,539
Plastic waste	26,516	20,585	26,938	11,935	11,879
Food leftover	13,934	5,676	6,799	5,754	4,596
Electrical and electronic waste	952	1,655	4,480	4,680	8,392
Sludge	-	-	-	-	-
Hazardous waste	147	9	-	87,561	76,077
Debris	-	-	-	-	-
Oil waste	535	-	165	20	-
Textile waste	235	_	_	496	370
Alkali waste	_	_	_	_	-
Glass and ceramic waste	_	_	_	-	-
Acid waste	_	_	_	_	_
Medical waste	_	_	_		_
Mining waste	_	_	_	_	-
Cinder	-	-	_	-	-
Rubber waste	-	-	-	_	-
Soot & dust	_	-	-	_	-
Other waste	_	_	15 000	_	-
	•••••	•••••	10,000		
EMEA	1,278,898	1,657,776	1,804,621	2,236,057	2,541,890
Wood scrap	70,115	218,465	320,318	464,404	500,752
General waste	432,177	529,090	386,312	311,994	281,557
Metal scrap	411,894	500,433	458,980	616,483	823,010
Paper (recycled)	237,533	294,663	459,249	621,842	629,339
Plastic waste	92,636	88,135	104,907	133,017	232,907
Food leftover	5,522	4,280	4,860	4,960	4,960
Electrical and electronic waste	16,119	5,192	49,208	42,996	27,413
Sludge	3,615	8,844	-	11,450	6,110
Hazardous waste	2,195	4,745	11,581	20,795	14,013
Debris	-	-	-	-	-
Oil waste	1,245	2,565	620	440	4,130
Textile waste	-	-	-	-	-
Alkali waste	720	-	-	-	-
Glass and ceramic waste	317	200	7,195	5,269	4,397
Acid waste	320	-	-	-	-
Medical waste	-	82	-	-	-
Mining waste	-	-	-	-	-
Cinder	-	-	-	-	-
Rubber waste	-	1,082	1.391	2,407	1,060
Soot & dust	-	-	-	-	
Other waste	4.490	-	-	-	12.242
······	·	·····	·····	·····	· · · - ·

#### TABLE 6: CHEMICALS HANDLED BY REGION 2013/14 - 2017/18 [KG]

	2013/14	2014/15	2015/16	2016/17	2017/18
Americas	6,779.5	9,434.6	6,868.8	6,001.4	7,090.3
Ethyl acrylate	-	-	-	-	-
Acrylic acid 2-hydroxyethyl	-	-	-	-	-
3-lsocyanatomethyl-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	1,848.0
Tetrachloroethylene	-	-	-	-	-
Tetrahydromethylphthalic anhydride	-	-	-	-	-
Toluene	-	-	0.1	-	-
Lead	-	-	-	-	-
Bis (2-ethylhexyl) phthalate	-	-	-	-	-
n-Hexane	-	-	-	-	-
Manganese and its compounds	3.6	3.6	3.6	3.6	3.6
Acetone	6.8	5.4	5.8	5.7	7.6
Isobutane	-	-	-	-	-
Isobutyl alcohol	-	-	-	-	-
Isopropanol	58.7	2,035.5	3,170.2	2,650.0	4,301.0
Ethyl alcohol	64.6	42.7	78.2	48.5	115.0
Ethylene glycol	12.0	12.0	12.1	12.0	12.0
N-methyl-2-pyrrolidone	-	-	0.1	-	-
Hydrogen chloride	-	-	-	-	-
Chlorine	267.2	434.6	675.9	681.0	791.0
N-butyl-acetate	-	-	-	-	-
Paraffinic hydro-carbon	-	3.6	3.6	3.6	3.6
Cyclohexane	-	-	-	-	-
Tetrahydrofuran	-	-	-	-	8.5
n-Butane	4,245.0	4,511.0	0.1	-	-
Propylene glycol monomethyl ether	-	-	-	-	-
Propylene glycol monomethyl ether acetate	-	-	-	-	-
Methyl alcohol	-	-	0.1	-	-
Methyl isobutyl ketone	-	-	-	-	-
Methyl ethyl ketone	-	-	-	-	-
Methylcyclohexane	-	-	-	-	-
Sulfuric acid	-	-	-	-	-

	2013/14	2014/15	2015/16	2016/17	2017/18
APAC	1,153.2	935.0	1,034.2	1,279.4	1,321.9
Ethyl acrylate	-	-	-	-	-
Acrylic acid 2-hydroxyethyl	-	-	-	-	-
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	-	-	-	-	-
Ethylbenzene	-	-	27.8	60.3	47.5
Xylene	142.5	142.4	150.0	120.0	91.0
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	65.2
Lead	-	-	-	-	-
Bis (2-ethylhexyl) phthalate	-	-	-	-	-
n-Hexane	12.6	24.0	71.5	123.0	94.3
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	17.0
Ethylene glycol	-	-	-	-	-
N-methyl-2-pyrrolidone	-	-	-	-	-
Hydrogen chloride	-	-	-	-	-
Chlorine	-	-	-	-	-
N-butyl-acetate	-	-	8.8	16.8	12.0
Paraffinic hydro-carbon	-	-	-	-	-
Cyclohexane	-	-	-	-	-
Tetrahydrofuran	-	-	185.0	463.0	694
n-Butane	-	-	-	-	-
Propylene glycol monomethyl ether	-	-	-	-	-
Propylene glycol monomethyl ether acetate	-	-	2.7	1.4	-
Methyl alcohol	-	-	-	-	-
Methyl isobutyl ketone	-	-	6.6	3.5	-
Methyl ethyl ketone	-	-	18.7	41.0	32.1
Methylcyclohexane	-	-	21.5	46.9	36.8
Sulfuric acid	33.7	35.2	157.0	291.0	232.0

	2013/14	2014/15	2015/16	2016/17	2017/18
EMEA	13,087.4	7,078.9	5,953.9	4,930.7	3,508.4
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	649.0
Silver and its water-soluble compounds	10.5	11.1	13.0	21.6	1.1
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	210.0
Tetrahydromethylphthalic anhydride	1,220.0	1,044.0	1,216.0	2,342.0	1,984
Toluene	-	-	-	-	-
Lead	-	-	-	-	15.8
Bis (2-ethylhexyl) phthalate	-	-	-	-	-
n-Hexane	830.0	1,073.0	710.0	455.0	320.0
Manganese and its compounds	-	-	-	-	-
Acetone	-	-	-	-	-
Isobutane	-	-	-	-	-
Isobutyl alcohol	-	-	-	-	-
Isopropanol	1,766.1	248.0	135.3	34.0	8.5
Ethyl alcohol	888.8	702.6	404.6	53.5	132.0
Ethylene glycol	-	-	-	-	-
N-methyl-2-pyrrolidone	-	-	-	-	-
Hydrogen chloride	520.0	414.0	606.0	215.0	165.0
Chlorine	-	-	-	-	-
N-butyl-acetate	-	-	-	-	-
Paraffinic hydro-carbon	-	-	-	-	-
Cyclohexane	655.0	225.0	152.0	44.0	3.0
Tetrahydrofuran	-	-	-	-	-
n-Butane	-	-	-	-	-
Propylene glycol monomethyl ether	-	39.0	23.0	11.0	2.0
Propylene glycol monomethyl ether acetate	-	-	-	-	-
Methyl Alcohol	-	-	-	-	-
Methyl isobutyl ketone	-	-	-	-	-
Methyl ethyl ketone	20.0	23.0	23.0	13.0	18.0
Methylcyclohexane	-	-	-	-	-
Sulfuric acid	-	-	-	-	-

#### CONTACTS

#### Zug, Switzerland

Vice President Corporate Communications Phone +41 41 935 60 19 thomas.zehnder@landisgyr.com

#### New York, USA

Stan March Senior Vice President Corporate Communications Phone +1 678 258 1321 stan.march@landisgyr.com

#### Published by:

Landis+Gyr AG Theilerstrasse 1 6301 Zug, Switzerland www.landisgyr.com