
Landis+Gyr
manage energy better
13
14
Environmental
Profile

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2013/14 at a Glance

Landis+Gyr enables society to "manage energy better." This is the mission that the Company aims to accomplish in a deliberate and responsible manner. Today's demand for energy is growing and electricity generation resources will become increasingly stretched.

Landis+Gyr is proud to provide smart solutions that help to successfully overcome this challenge while at the same time contributing to preserving natural resources by constantly seeking to reduce emissions throughout the entire design and production process.

Water **+2%**

Primarily caused by increased volumes and construction works to expand existing and build up new production capacities.

Waste **+0.8%**

Comparison limited to level 1 sites

Chemicals **–9.5%**

Comparison limited to level 1 sites

CO_2 **+2%**

Overall CO_2 emissions slightly increased from 1.7 kg to 1.8 kg per USD 100 turnover, mainly due to large engineering efforts for the Japanese market. However, emissions per turnover have decreased by 33 % since the program's inception in 2007.

Landis+Gyr acts in accordance with all relevant health, safety and environmental regulations, codes and standards. In addition to requiring ISO 14001 certification throughout the Company and at all its key suppliers, Landis+Gyr addresses life cycle and recycling aspects as key ingredients of its product design process.

Five-year Key Figures

	2009	2010	2011	2012/13	2013/14
m^3 water	n.a.	n.a.	167,239	132,710	135,395
t waste	n.a.	n.a.	2,319	2,421	2,441
t chemicals	n.a.	n.a.	n.a.	23.2	21.0
kg CO_2e/USD 100 turnover	2.3	2.0	1.9	1.7	1.8
kg per product	2.2	2.1	1.8	1.6	1.6
Turnover in USD billion	1.4	1.5	1.6	1.7	1.5
Employees	4,850	5,140	5,210	5,300	5,500
t CO_2e *	35,461	35,238	35,060	33,921	34,600

*** Total Scope 1, Scope 2 and Scope 3**

As a consequence of the acquisition of the Landis+Gyr Group by the Toshiba Corporation in 2011, the reporting period was changed from the calendar year to Toshiba's fiscal year, which runs from 1 April to 31 March.

Landis+Gyr Group

Landis+Gyr is the leading global provider of integrated energy management products tailored to energy company needs and unique in its ability to deliver true end-to-end Advanced Metering solutions. Today, the Company offers the broadest portfolio of products and services in the electricity metering industry, and is paving the way for the next generation of the Smart Grid.

With annual sales of USD 1.5 billion, Landis+Gyr, an independent growth platform of the Toshiba Corporation (TKY:6502) and 40% owned by the Innovation Network Corporation of Japan, operates in more than 30 countries across five continents, and employs more than 5,500 people with the sole mission of helping the world manage energy better. More information is available at landisgyr.com.

Committed to Sustainability

“Landis+Gyr’s green product offering contributes to a sustainable society and the protection of natural resources for the well-being of current and future generations. Beyond reducing our carbon footprint, we mitigate the environmental impact of our development and manufacturing processes by reducing waste and encouraging the responsible use of water and chemicals.”

Andreas Umbach, President and CEO

Landis+Gyr's mission is to manage energy better, and the group's products and services allow utility customers to improve the efficiency of their operations and drive towards each firm's sustainability goals and begin implementing smarter electricity grids. This outcome will in turn benefit society. Smart grids and smart meters allow for efficiency gains and the integration of renewable energy resources, enabling end-consumers and utilities to reduce their CO_2 emissions considerably. Knowing that two-thirds of today’s electricity is generated from fossil resources, as statistics from the OECD and IEA show, these emission savings are relevant in the fight against climate change.

Thanks to the current deployment of smart meters and two-way communications with commercial and household customers, utilities are gaining new intelligence about consumer energy usage. More importantly, they are empowering their customers to take greater control over their energy usage with the deployment of next generation demand response programs.

Joining forces against climate change

It is Landis+Gyr and Toshiba Corporation’s ambition to contribute to tomorrow’s smart communities by pooling their expertise and corporate resources. The goal is to offer new technologies for secure and efficient energy infrastructure while protecting natural resources and fighting climate change. The reduction of CO_2 and associated pollutant generation from diminished coal consumption will improve global environmental protection. Meanwhile, the problems of waste generated as a result of economic development as well as problems arising from water scarcity and the use of chemicals are becoming increasingly serious. Besides protecting the environment, the two companies are committed to pushing the creation of sustainable, energy-saving communities, mainly by actively introducing renewable energy and energy management systems.

Greening the business

As an independent growth platform within Toshiba's group of companies, Landis+Gyr backs its parent company's goal to become one of the world's foremost eco-companies. With their "Greening of Products" initiative, Toshiba and Landis+Gyr aim to achieve the highest level of environmental performance for all products and reduce environmental impacts throughout product life cycles. With their "Greening by Technology" initiative, the two companies are working to provide a stable power supply and mitigate climate change on a global scale by developing low-carbon energy technologies. An important aspect of both initiatives is "Greening of Process", which aims to minimize inputs such as materials and energy in manufacturing processes globally, reducing the discharge of waste and chemical substances, and keeping environmental impacts at a minimum.

Expansion of data recording

In addition to the carbon footprint analysis prepared since 2007, Landis+Gyr expanded its reporting scope on water, waste and chemicals data in 2013/14. In the current reporting period, Landis+Gyr expanded the data recording for waste and the use of chemicals from its level 1 to its level 2 sites (all 26 major sites), accounting for 85% of all employees. Data recording of water use had been expanded to all production levels (1-3) in the year before.

This year's report therefore includes additional data expressing total originated waste, divided into the four categories of sold, incinerated, landfill and recycled. The presentation of the use of water specifies the amount of recycled water. The chemicals data serve to reduce the use of chemicals in general.

At Landis+Gyr, beyond the corporate initiatives, each employee is invited to contribute new ideas and proposals for process optimization that further enhance the Company's environmental profile. I am proud of the team's motivation and engagement. The common mind set at Landis+Gyr represents the basis for the impressive improvements the Company has achieved over the past few years. We've had a good start but there is much more to do. Let's continue our efforts with even more drive!

Andreas Umbach, President and CEO

The ultimate goal of Landis+Gyr is to make a substantial contribution to the conservation of natural resources and environments:

- **Avoiding the use of harmful materials, thereby minimizing pollution**
- **Integration of life cycle and recycling aspects as an integral factor of the product design process**
- **Reduction of waste to a minimum**
- **Compliance with relevant health, safety and environmental regulations and standards, among them ISO 9001, ISO 14001, BS 18001**

Landis+Gyr Joined the Carbon Disclosure Project

The Carbon Disclosure Project (CDP) is a globally active, non-profit organization that provides companies and cities with a platform to publish and compare environmental impact and resource consumption data. CDP helps companies, investors and cities to better mitigate risk, capitalize on opportunities and make investment decisions that drive action towards a more sustainable world. The organization is independent and funded by a wide range of partnerships and sponsors, as well as by membership fees and special projects.

CDP holds the largest collection globally of self reported climate change, water and forest-risk data. On a volunteer basis, a standardized questionnaire with more than one hundred questions is filled out annually. It covers the areas of carbon emissions, climate risks, reduction goals and according strategies.

Extended commitment of Landis+Gyr

CDP creates a universal standard for all contributing entities and allows comparability of environmental data across of environmental data across various businesses. Landis+Gyr is particularly using CDP to benchmark against peer industries and thus further develop its focus areas and initiatives. In the first half of 2014, Landis+Gyr provided information on, water and climate change data that will be published at the end of the year. Assessment of this data will support Landis+Gyr's efforts to continuously improve its environmental footprint and to set additional binding targets. Our customers and stakeholders can get access to Landis+Gyr information on CDP (https://www.cdp.net)

"Each company is faced with the challenge of reducing its carbon footprint while ensuring stable business growth. The CDP survey is an important benchmark to maintain and expand our dedication towards protecting the environment."

Hans Sonder, Director Technology Management & Process Excellence, Group Headquarters

Water Consumption

Fresh water is one of the most valuable resources on the planet, being essential and necessary for the survival of all living beings. Although a major part of the world's surface is covered with water, only 2.5% of the entire water on Earth is fresh water. Out of this 2.5% almost 70% is locked in glaciers. Worldwide, agriculture accounts for 70% of all water consumption, compared to 20% for industry and 10% for domestic use. In industrialized nations, however, industry consumes more than half of the water available for human use.

Sustainable development demands a consistent approach from all stakeholders. Landis+Gyr has undertaken several efforts to reduce water consumption. In India for example, Landis+Gyr harvests rain water, treats sewage as well as canteen waste water and holds competitions to raise the awareness levels among employees.

In terms of data recording across Landis+Gyr's locations, the assessment of water use was expanded to all sites compared to large production sites in former year only. The 2013/14 data are comparable with the prior year numbers.

In 2013/14 water consumption within the Landis+Gyr Group increased by 2.0% to 135,395m3 from 132,710 m3 in the prior year. The overall volume increase was primarily caused by an increase of produced volumes in combination with an expansion of manufacturing capacity. Whereas 67.5% of total water spending was used by level 1 sites (production and major R&D centers), consumption of level 2 sites (smaller production facilities) amounted to 24.2%. In 2012/13, water consumption at level 3 sites (sales offices) was accounting for only 8.4% of the total.

	2012/13	2013/14
Recycled	9,494	10,443
Total m³	**132,710**	**135,395**

Landis+Gyr India Has Committed to Water Consumption Reduction Plan

The project targets a reduction in water consumption by minimizing waste from various sources such as leakage, irresponsible use or overflowing tanks. The team project involves maintenance specialists, who provide all services required, supported by management. The overall goal is to reduce total water drawn at the site and water drawn per employee year over year.

The measures initiated by the project team under the lead of Prabir Chakraborty include the identification and elimination of all leakages in underground pipes and immediate repair of pipe bursts, the installation of automatic water level monitoring systems on water tanks, and the removal of old, unnecessary water pipelines for use elsewhere. In addition, various training sessions improved employee awareness of water scarcity and responsible water usage behavior.

“Water is an essential commodity and managing water is an essential component of Landis+Gyr’s ambition of Managing Energy Better. Landis+Gyr attaches considerable importance to water conservation and puts great efforts in achieving a ‘single drop control.’”

Vivek Namboodiripad, Deputy General Manager Quality Assurance, Landis+Gyr Kolkata, India

Waste

The environmental impact of waste is becoming increasingly problematic. The growing volumes of waste are driven by several factors including population growth rates, socio-economic developments and rising prosperity. Closely related to this is the increasing use of hazardous and non-hazardous materials. Negative impacts not only concern human health, e.g. the risk of epidemic diseases, but also the degradation of scenic landscapes. To reduce the environmental threats, new disposal, treatment and incineration sites are gaining importance. Moreover, physical, thermal, chemical or biological processes are continually evolving. They can change the characteristics of the waste in order to reduce volume or hazardous content, facilitate its handling or enhance recovery.

On the company level, Landis+Gyr aims for constant improvements that curb the harmful effects of the produced waste. Landis+Gyr seeks to reduce or prevent the production of waste through in-process modifications, reuse and recycling. Waste management operations also include the final treatment and disposal of waste at landfills and incineration facilities. Landis+Gyr assumes its responsibilities as a corporate citizen and has therefore set the ambitious goal of reducing total waste.

In 2013/14, Landis+Gyr expanded the data recording from its level 1 to its level 2 sites (all 26 major sites), accounting for 85 % of all employees. Total waste amounted to 3,131 tons. Thereof 78.0% came from level 1 and 22.0% from level 2 sites.

In prior years, only level 1 sites had been tracked, accounting for most of the waste impact. A year-over-year comparison is therefore limited to level 1 data, which showed an increase of 0.8%, from 2,421 to 2,441 tons due to higher volumes in combination with construction work to expand production capacities.

	2012/13*	2013/14*	2013/14
Level 1	2,421	2,441	2,441
Level 2	n.a.	n.a.	690
Total	**2,421**	**2,441**	**3,131**
Sold	n.a.		694
Incinerated	n.a.		215
Landfill	n.a.		550
Recycled	n.a.		1,672
Total t	**2,421**	**2,441**	**3,131**

* only site level 1 amounts

Landis+Gyr North America Has Committed to a Landfill Reduction Program

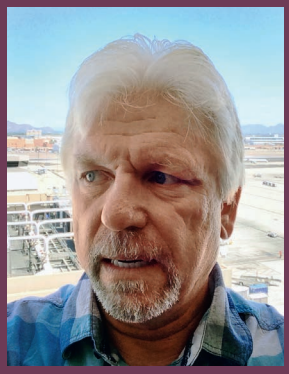
The goal is to reduce waste to landfill year over year by 1% throughout the organization (tons to landfill FY 13 versus FY 14).

For the current fiscal year 2014/15 (ending March 31, 2015), Landis+Gyr SA de CV in Reynosa, Mexico, has committed itself to a 2 t reduction in total waste to landfill by repurposing packaging corner cardboard (0.2 t), through the reuse of packing material (0.4 t), packaging plastic layers (0.35 t) and packaging rubber banding (0.35 t), and by starting a program for returning reusable shipping containers to suppliers (0.7 t). In addition, the Reynosa operation is planning for an additional 10,2 t reduction in total waste to landfill in FY 2015/16, by fully implementing the program for returning reusable shipping containers to suppliers (4 t), making use of plastic and reusable pallets (6 t), and implementing a cafeteria leftover composting program (0.2 t).

In parallel as an overall North American-wide effort, management is formalizing the organization's waste to landfill reduction program and developing the requisite processes, as well as setting new targets for the years to come. This program builds on Landis+Gyr and Toshiba Corporation's environmental policy and corresponding targets.

"We will continue our dialogue with all Landis+Gyr operations in North America and work on receiving new commitments for additional waste reduction in order to continually reduce our overall waste sent to landfill."

Don Roberts, Director QEHS , Landis+Gyr North America



Chemicals

Chemicals play an essential role in our everyday life. But they can also be harmful to nature and human health. Worldwide, more than 25% of the reported incidences of disease can be traced to environmental factors, which include exposure to chemicals. Especially in developing countries and economies in transition, the quantity and range of new and existing chemicals are rapidly growing. Therefore, the sound management of chemicals throughout their lifecycle is essential in order to avoid significant and increasingly complex risks to human health and ecosystems and substantial costs to national economies.

Even though metal treating operations were discontinued in 1994 and the Company's manufacturing processes fully comply with the latest quality and environmental standards, Landis+Gyr has been working and coordinating with local officials to determine adequate measures for soil decontamination. Various analyses are currently being carried out.

It is a priority of Landis+Gyr to minimize the use of chemicals in the entire value chain of the Group's products and services. The Company aims to reduce chemical emissions. Furthermore, the use of Dichlormethane (DCM) and Perchloroethylene (PCE) is planned to be phased out or significantly reduced in Stockport (UK), Joka (India) and Corinth (Greece) and new filtering systems will be deployed at sites with residual use.

In 2013/14, Landis+Gyr expanded the data recording from its level 1 to its level 2 sites (all 26 major sites), accounting for 85 % of all employees. However, the use of chemicals at the level 2 and 3 sites was negligible. Total use of chemicals amounted to 21 tons. In prior years, only level 1 sites had been tracked, accounting for most of the chemicals impact. A year-over-year comparison is therefore limited to level 1 data. Level 1 sites decreased the use of chemicals in 2013/14 to 21.0 tons from 23.2 tons in the prior year, which corresponds to a reduction of 9.5%. This substantial improvement is a significant milestone in optimizing processes to further reduce resolvent and other chemicals.

	2012/13*	2013/14*	2013/14
Level 1	23.2	21.0	21.0
Total t	**23.2**	**21.0**	**21.0**

* only site level 1 amounts

Landis+Gyr Banned the Use of DCM in its Gas Meter Manufacturing Process

In order to manufacture transducers for Gas Meters, the Landis+Gyr production specialists first need to create the rod using heavy metal fixtures. These fixtures are regularly cleaned using a release agent. The original release agent contained DCM (Dichloromethane, a banned substance under Toshiba's guidelines). Aiming to remove or at least substantially reduce the use of DCM, Landis+Gyr's Stockport (UK) operation initiated a project to review the fixtures cleaning process with a view to substituting the release agent that contained DCM whilst maintaining performance and quality of product.

As part of its validation processes Landis+Gyr contacted various suppliers, including the manufacturer of the DCM-containing product, who was able to provide the Company with alternative substances. Some of these substances were rejected after assessment tests. One substance containing two silicone additives plus a small amount of DCM mixed with 60% water caused production issues due to build-up of silicone residue on the fixtures. In a new effort aiming to completely eliminate DCM from the process, the specialists looked at alternative cleaning methods. They undertook experiments using different substances in varying quantities as well as the two original silicone additives in significantly smaller quantities. After twenty weeks of intensive trials, a new methodology was deemed successful and introduced into the production process.

Today the modified process is running well and results have been highly repeatable over several months. Rod production is stable and quality standards are being met. As a result, the remaining DCM has been removed from the site and blocked in the product data management (PDM) system to prevent inadvertent re-ordering.

"We have been trialing various alternative cleaning agents and processes. Eliminating DCM without any drawbacks by simply modifying the production process was a great achievement. "

Tony Fenwick, Engineering Manager, Landis+Gyr (Stockport), UK

Carbon Footprint

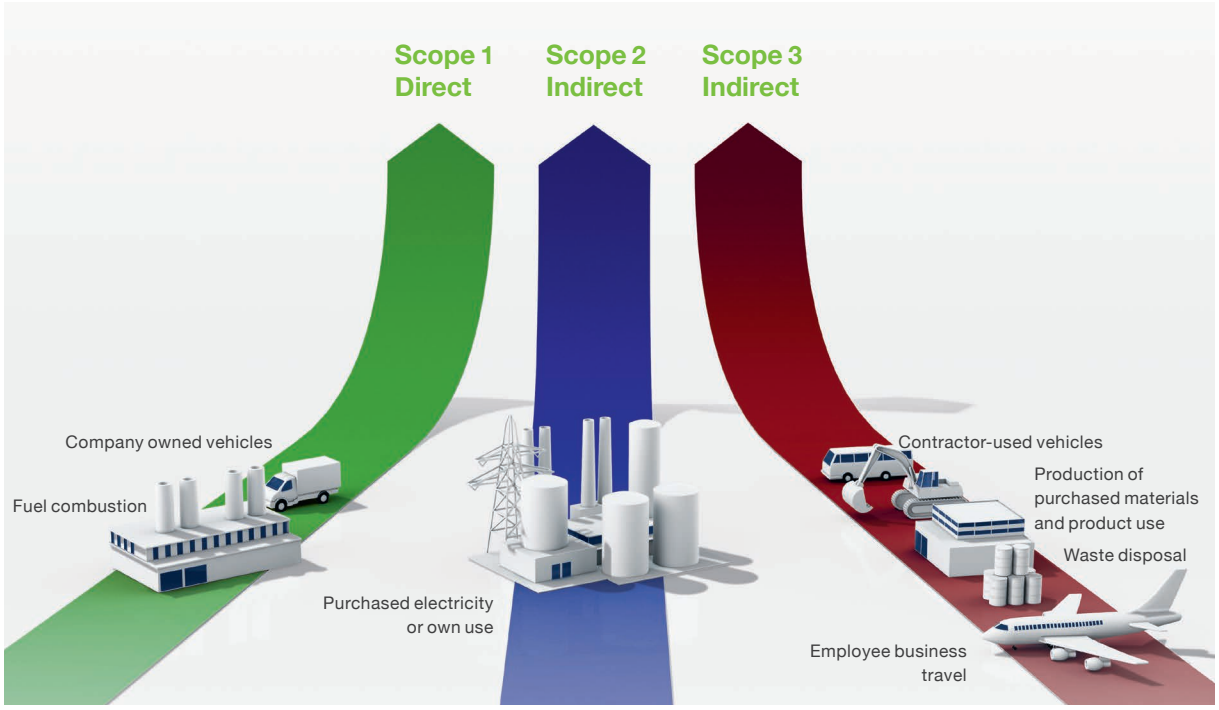
The carbon footprint analyses were undertaken for the seventh consecutive year (2007 to 2013/14) to quantify the greenhouse gas (GHG) emissions of Landis+Gyr. Progress is monitored by collecting detailed emission data and by constantly analyzing this data and defining further improvement potential. The web-based SoFi software and reporting system was used for data capture, aggregation and analysis. The SoFi system is now well integrated into the Landis+Gyr Group and its sites worldwide and is currently being expanded to capture a broader range of sustainability indicators.

Due to the acquisition of Landis+Gyr by the Toshiba Corporation in 2011, Landis+Gyr' activity data are consolidated and verified within Toshiba's controlling and auditing processes. In addition, own analysis included a thorough consistency check by PE INTERNATIONAL, a specialized consulting company in the area of sustainability management with all level 1 and 2 sites and some selected level 3 sites. The verification process confirmed that the entered data was found to be within the tolerance ranges.

Landis+Gyr selected the "operational control approach" to determine which sites are to be included in the corporate carbon footprint. The application of the operational control approach implies that GHG-relevant impacts of activities are accounted for at those sites, subsidiaries or operations which are controlled by the Company. Landis+Gyr's corporate carbon footprint includes all of its R&D, sales and manufacturing sites.

The GHG protocol provides the three "scopes" (scope 1, scope 2 and scope 3) in order to help delineate direct and indirect emission sources, improve transparency and provide utility for different types of organizations and different types of climate policies and business goals. The carbon footprint is expressed in CO_2 equivalents (CO_2e). The unit of measurement is metric tons, and all GHG emissions are converted to metric tons of CO_2e, using appropriate GWP (Global Warming Potential) factors as published by the Intergovernmental Panel on Climate Change (IPCC). This allows for the aggregation of all GHG emissions in one single indicator, expressed as the carbon footprint.

- **Landis+Gyr Group is a sustainable and environmentally conscious corporation to the benefit of customers, current and potential future shareholders, employees, suppliers and other stakeholders**
- **Carbon footprint records since 2007**
- **Constantly reduced the greenhouse emissions per unit since 2008, reaching a new low of 1.63 kg per device**



Scope 1

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

- Energy carriers for the generation of electricity, heat and steam
- Diesel for the operation of emergency generators
- Direct GHG emissions attributable to chemical/physical processing
- Energy carriers consumed in transportation (Landis+Gyr fleet only)

Scope 2

Indirect emissions associated with the generation of purchased electricity consumed by the Company as well as district heating and process steam.

Scope 3

All other indirect emissions that occur as a consequence of the activities of the Company from sources not owned or controlled by the Company. Landis+Gyr used business air travel as an indicator of its scope 3 emissions.

2013/14 Results in Brief

Slight Increase per USD 100 Turnover

In the financial year 2013/14, overall CO_2 emissions slightly increased from 1.7 kg to 1.8 kg per USD 100 turnover, mainly due to large engineering efforts for the Japanese market. This caused the first year-over-year increase in CO_2 generated based on sales after six consecutive years of improvement. Nevertheless, on a per-unit-of-production basis, the continuous downward trend of emissions remained intact, reaching a new low of 1.63 kg per device, a 33 % decrease since the program's inception in 2007. Total CO_2e emissions within the Landis+Gyr Group amounted to 34,600 tons CO_2e in 2013/14, up by 2.0 % compared to 33,900 tons CO_2e in 2012/13.

The increase of the overall emissions can mainly be attributed to Scope 3 (up from 5,400 tons CO_2e to 6,200 tons CO_2e) and was related to increased travel activities caused by the intensive joint business development projects with Toshiba. Scope 2 decreased by 1.7 % compared to the 2012/13 level thanks to production process improvements in the production sites. With 22,500 tons CO_2e it represented the largest component in 2013/14. Scope 1 went up by 5.8 %, with 5,900 tons CO_2e amounting for a small proportion of overall emissions. The higher emissions were caused by the increased use of emergency power generators in India and the extension of production capacity in South Africa.

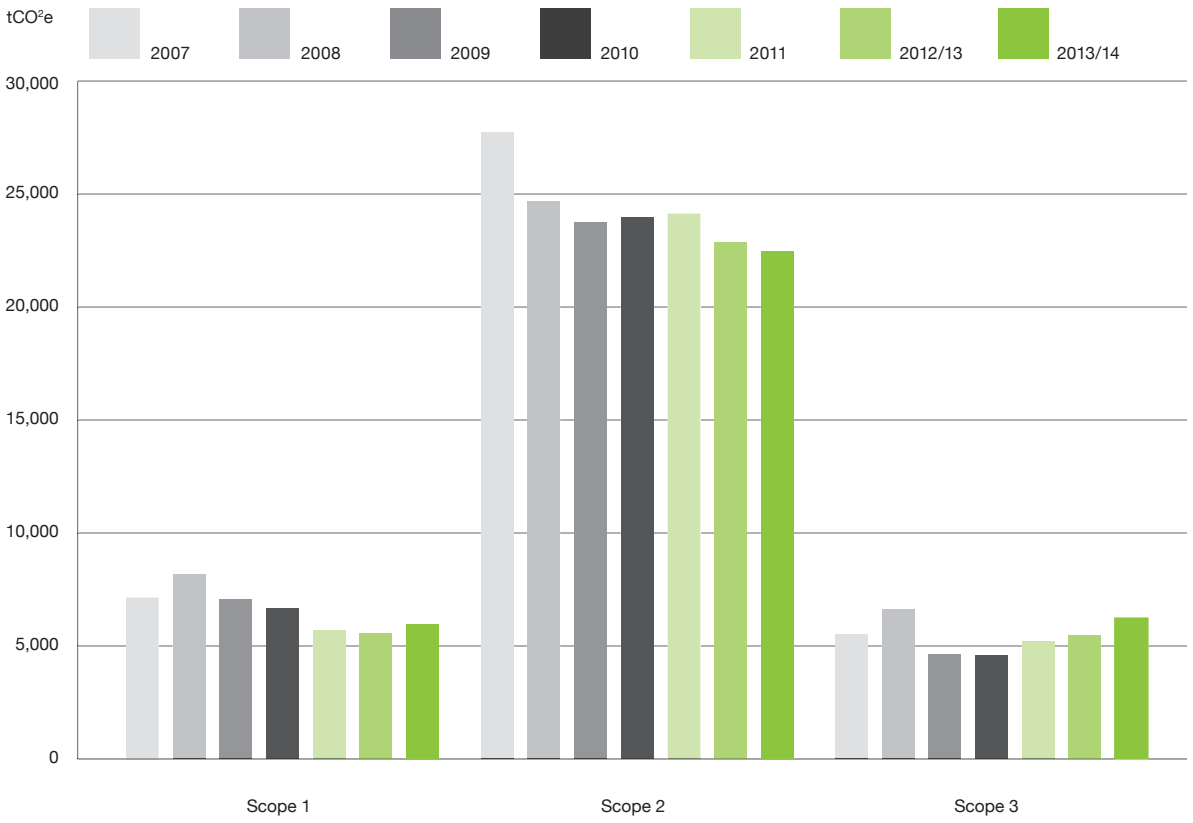
- **Scope 1 emissions increased by 5.8%**
- **Scope 2 emissions decreased by 1.7%**
- **Scope 3 emissions increased by 13.9%**
- **60% (21,600 t) of total scope 1+2+3 emissions stem from the Group's electricity consumption**
- **Within scope 1 ("direct emissions") 2,700 t CO_2e are attributable to gasoline consumption in company vehicles**

2013/14 Results in Details

In total, the Landis+Gyr Group emitted 34,600 tonnes of CO_2e in 2013/14. This is 700 t or 2% more than in 2012/13.

In accordance with accepted global standards, the carbon footprint has also been documented in "scopes": Scope 1 (direct emissions) amounts to 5,900 t CO_2e (17% of total). Scope 2 (indirect emissions) represents the largest component with 22,500 t CO_2e (65%). Business air travel, as part of scope 3, only contributes a relatively small component (6,200 t or 18%) to the total carbon footprint.

With around 13,500 t CO_2e, North America generates the largest proportion of overall emissions (39%), followed by EMEA with 12,300 t CO_2e (36%), the Asia-Pacific region with 7,100 t CO_2e (21%), and South America with 1,600 t (5%).



2013/14 Breakdown by Source

Global 1+2+3 emissions: 33,921 tCO_2e

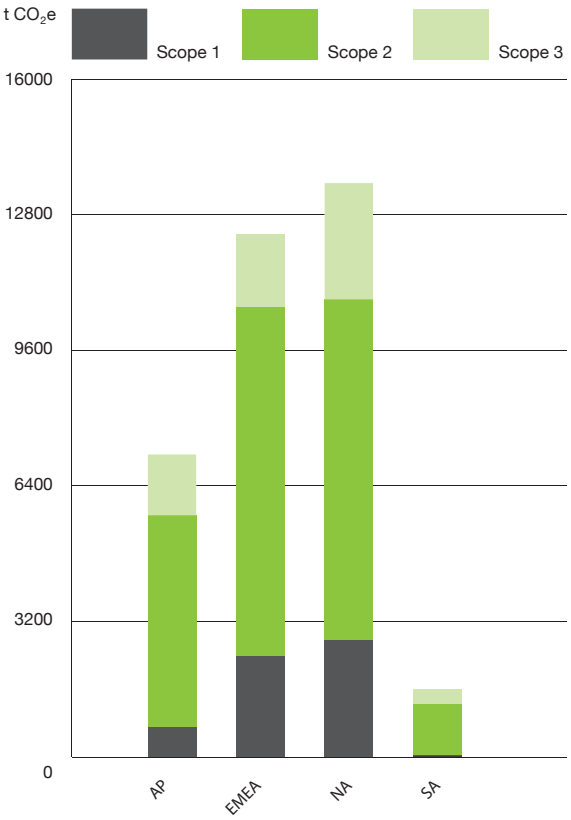
Electricity / District Heating	64.96 %
Fuels (diesel oil)	3.71 %
Fuels (natural gas, LPG)	3.00 %
Direct process emissions	0.11 %
Road travel	10.24 %
Air travel	17.98 %

65% (22,500 t) of total scope 1+2+3 emissions stem from the Group's electricity consumption. (Global tCO_2e Total 34,623 tCO_2e)

2013/14 Regional Breakdown

The Landis+Gyr Group has sites in its four regions worldwide: Asia-Pacific (AP), Europe, Middle East and Africa (EMEA), North America (NA) and South America (SA).

With around 13,500 t CO_2e, North America generates the largest proportion of overall emissions (39%), followed by EMEA with 12,300 t CO_2e (36%), the Asia-Pacific region with 7,100 t CO_2e (21%), and South America with 1,600 t (5%).

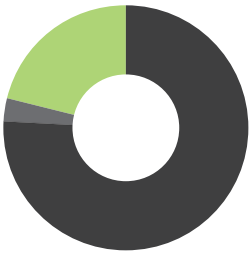


North America

Electricity / District Heating	59 %
Fuels	4 %
Process emissions	0 %
Road travel	17 %
Business air travel	20 %

Emissions in North America are dominated by electricity consumption (59%). Emissions from travel are fairly high (road travel as well as air travel with 37% in total) due to the significant service operations, which require higher deployment and field service work.

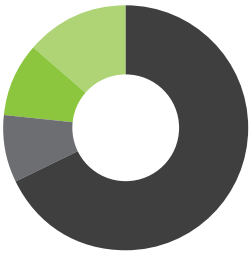
South America



Electricity / District Heating	76 %
Fuels	3 %
Process emissions	0 %
Road travel	0 %
Business air travel	21 %

South America shows that the electricity component represents 76%. Other sources except air travel (21%) are insignificant.

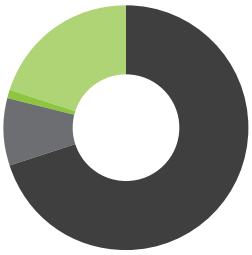
Europe / Middle East / Africa (EMEA)



Electricity / District Heating	67 %
Fuels	9 %
Process emissions	0 %
Road travel	10 %
Business air travel	14 %

In Europe/Middle East/Africa (EMEA), 67% of emissions are caused by the use of electricity and district heating. The use of fuels (stationary combustion) only accounts for 9%. On the other hand, with 10% of the total, road travel in the EU is much more significant than in Asia-Pacific. Air travel contributes 14% of emissions.

Asia-Pacific

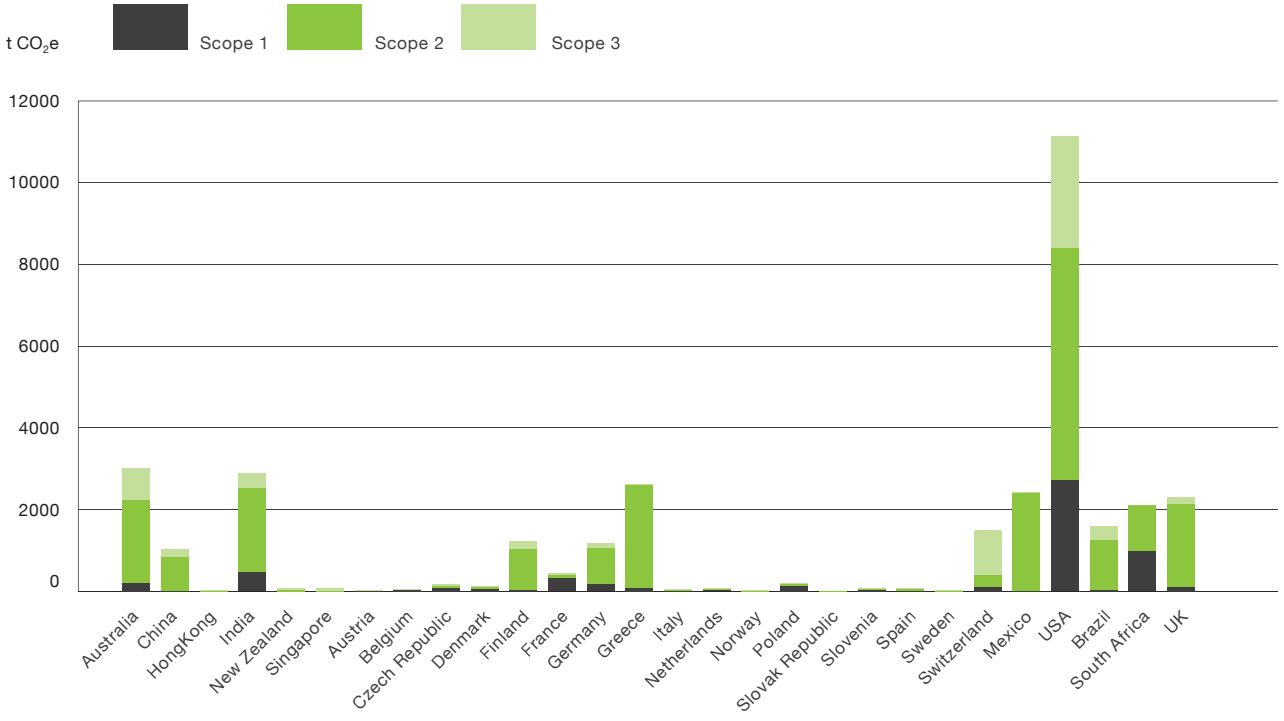


Electricity / District Heating	70 %
Fuels	9 %
Process emissions	0 %
Road travel	1 %
Business air travel	20 %

In the Asia-Pacific region, almost three-quarters (70%) of emissions are caused by consumption of electricity and district heating, followed by emissions caused by air travel (20%). The use of fuels for stationary power generation contributes 9% to the carbon footprint. Emissions from road travel amount to 1%, whereas direct process emissions are insignificant.

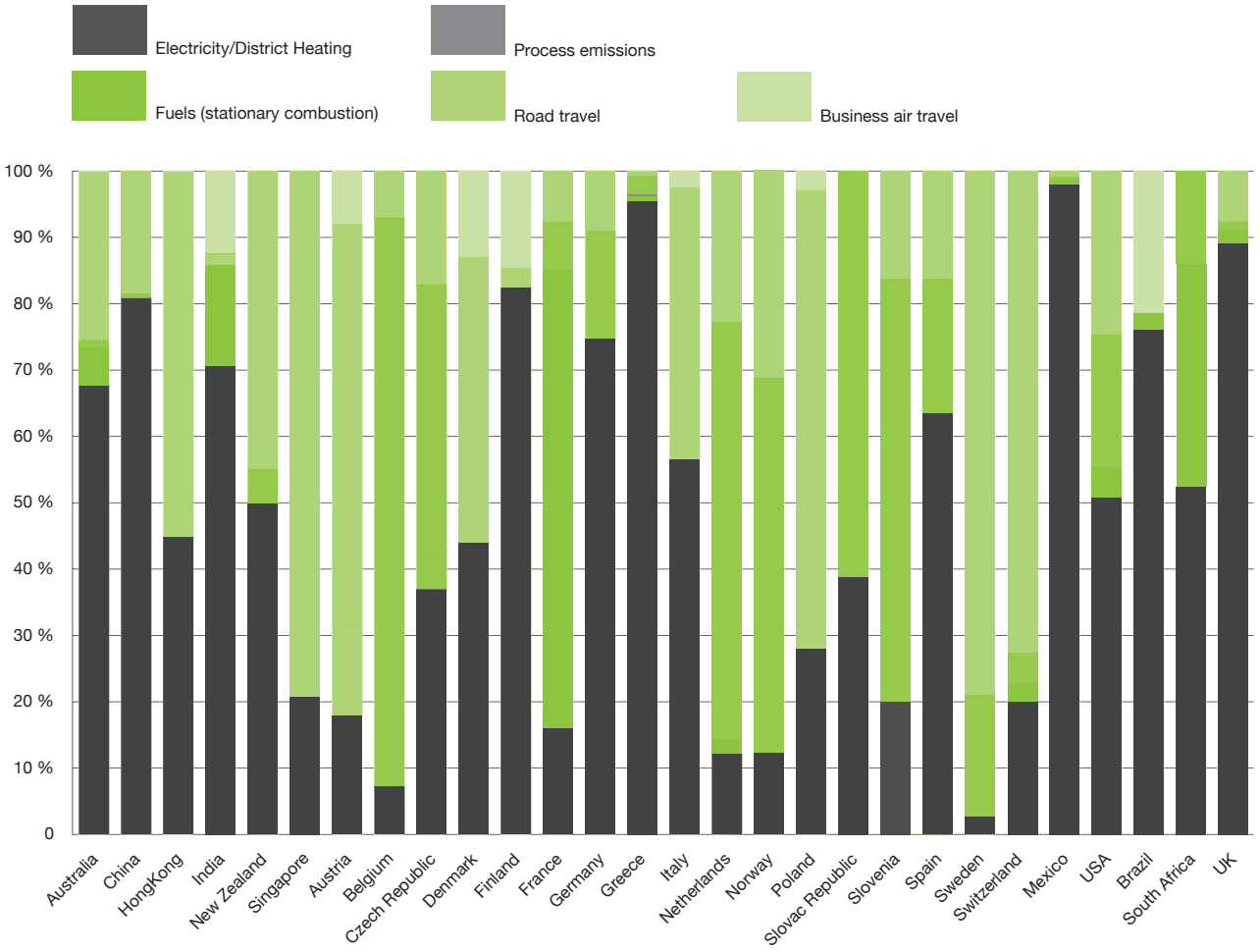
Carbon Footprint in Individual Countries

Due to the employee intensive service model used to meet utility operations requirements in the US, this country is the greatest emitter of GHG with 11,100 t of CO_2e followed by Australia with around 3,000 t of CO_2e. Next are India, Greece, Mexico, UK and South Africa with between 2,000 and 3,000 t, followed by Brazil, Switzerland, Finland, Germany, and China (between 1,000 and 2,000 t). The emissions of all remaining countries are very low.



Breakdown of Each Country's Carbon Footprint by Source

In the US, 51% of the emissions are caused by the consumption of electricity and almost 45% are attributable to road and air travel.



Economic Intensity Ratios

Ratio indicators provide information on performance relative to a business type and can facilitate comparisons between products and processes. Intensity ratios express the GHG impact per unit of physical activity or unit of economic output. In order to enable better comparison with other businesses, only scope 1 and scope 2 emissions have been used for the calculation of intensities. The indicators chosen to express GHG intensities are:

– Emissions per product
– Emissions per employee
– Emissions per 10 square meters of floor space
– Emissions per USD 100 of turnover.

	2007	2008	2009	2010	2011	2012/13	2013/14
kg per product	2.3	2.5	2.2	2.1	1.8	1.6	1.6
t per employee	6.5	6.5	6.4	6.0	5.7	5.4	5.1
t per 10 m^2 floorspace	1.8	1.5	1.7	1.5	1.6	1.5	1.5
kg CO_2e per USD 100 turnover	2.8	2.4	2.3	2.0	1.9	1.7	1.8

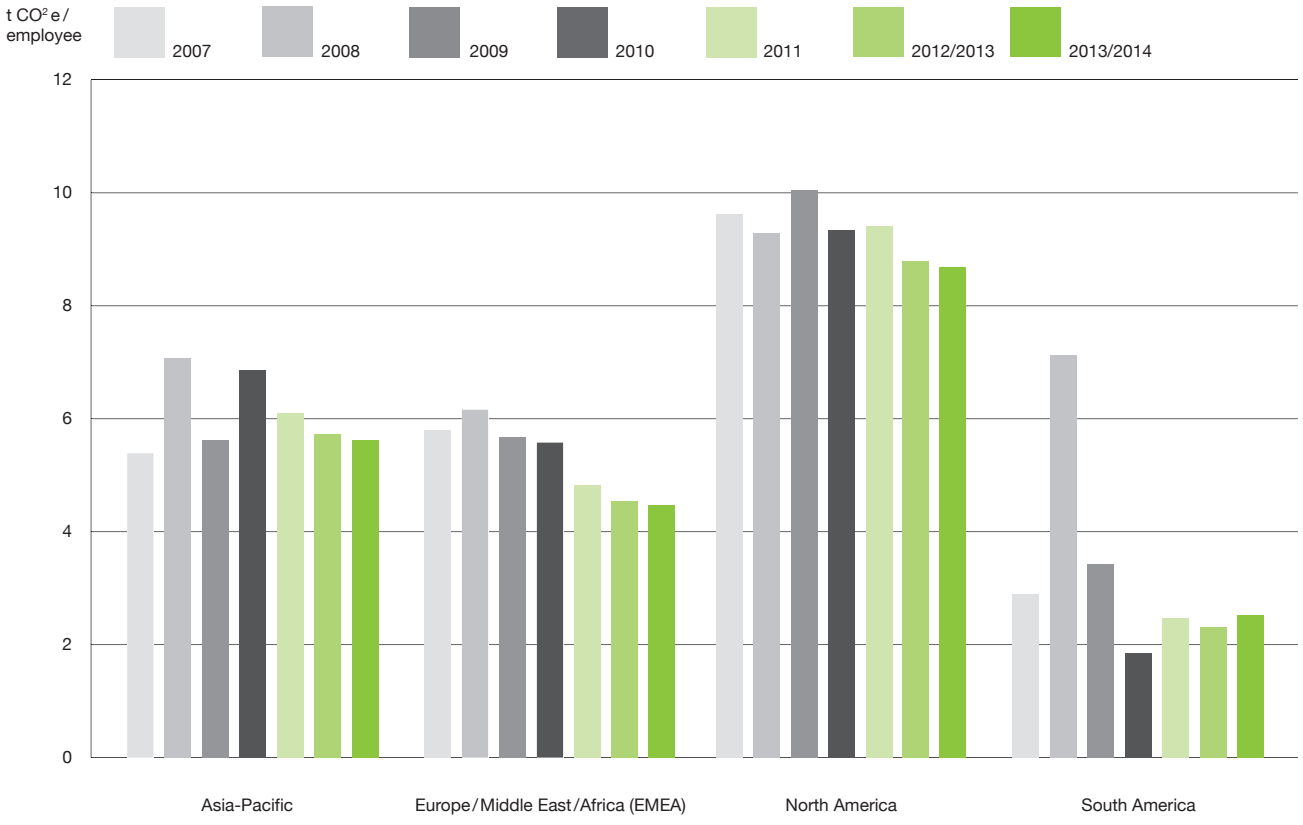
The average Group emissions are 1.6 kg per (average) product, 5.1 t per employee, 1.5 t per 100 m2 of floor space and 1.8 kg per USD 100 of turnover. The table also shows the values for the previous years.

Over the five year timeframe between 2007 and 2012/13, Landis+Gyr has reduced emissions on a "per turnover" basis from 2.8 kg per USD 100 of turnover (2007) to 1.7 kg per USD 100 (2012/13), or by 40%. In 2013/14 the emissions per turnover have risen slightly to 1.8 kg per USD 100. Compared to 2007, however, this still signifies a reduction by 36%.

The indicator "Emissions per employee" reduced (from 6.5 t in 2007 to 5.1 t in 2013/14). "Emissions per product" also noticeably decreased (from 2.3 kg in 2007 to 1.6 kg in 2013/14).

Economic Intensity Ratios per Region

Looking at emissions per turnover, a strong trend towards a more "carbon-efficient" performance is observable in the Asia-Pacific and North America regions (mainly between 2007 – 2011). This is likely in response to a combination of higher sales and increased energy efficiency. In 2013/14, emissions per turnover have risen in three regions mainly due to intensive travel activities resulting from joint business development projects with Toshiba. Compared to last year emissions per product have declined in all regions, with the largest decrease in North America (from 3.68 kg CO_2e in 2012/13 to 3.13 kg CO_2e per product in 2013/14.)



Reducing CO_2 Emissions Already During the Development Stage

With its "Greening of Products" initiative Landis+Gyr aim to achieve the highest level of environmental performance for all products and reduce environmental impacts throughout product life cycles. Its heat meter project shows that considerable savings can be reaped already during the product development process, for example by choosing the right materials.

The greatest opportunities for reducing the CO_2 emissions of heat meters arise during the development and manufacturing processes. No carbon dioxide is emitted during operation because these heat meters run on batteries and most countries have strict regulations for product disposal, recycling and landfilling, so the potential for reducing emissions is also limited at the end of the life cycle.

Building on this knowledge, Landis+Gyr made sure that green criteria were included in the specification profile for its next generation of heat meters right from the beginning. Environmental aspects therefore already figured prominently in the initial blueprints and in production planning. The materials used and the selection of partners and suppliers were key factors. For example, the casing material for the heat meters was identified as a CO_2-relevant material. The plastic material that was ultimately used for the casing had a carbon footprint of 6.01 kg CO_2 equivalent per kg of product, which was far superior to a different material whose properties were similar but which had a carbon footprint of 8.35 kg CO_2 equivalent per kg. With regard to manufacturing partners, for example the contractors who supplied instruction manuals and packaging materials, a key requirement was that they be located in the same region as the manufacturing sites. Short transport routes are another way of significantly reducing CO_2 emissions.

"The manufacturing phase is critical for reducing CO_2 emissions. Green manufacturing is assured over the long term by selecting the right materials in the first place."

Natali Reimer, Product Management Heat Metering, Landis+Gyr Nuremberg, Germany

Appendix

Table 1: Global energy consumption of Landis+Gyr Group in the fiscal year 2013/14

Energy consumption		L&G	AP	EMEA	NA	SA
Electricity (national grid mix) – daytime	[MWh]	27,317	4,239	10,557	10,776	1,746
Electricity (national grid mix) – nighttime	[MWh]	1,319	–	1,319	-	-
Electricity (renewable sources)	[MWh]	293	131	162	–	-
Electricity by on-site power generator	[MWh]	135	135	–	–	–
Steam (district heating)	[MWh]	2,937	–	2,937	–	–
Heavy fuel oil	[MWh]	144	–	144	–	–
Light fuel oil	[MWh]	83	–	83	–	–
Emergency power diesel	[MWh]	1,608	580	931	97	–
Town gas (natural gas)	[MWh]	4,890	881	1,741	2,269	–
LPG (50/50)	[MWh]	0,5	–	–	0,5	–
LPG (70/30)	[MWh]	184	–	–	–	184
Process emissions						
CO_2	[kg]	–	–	–	–	–
CH_4	[kg]	1,472	–	1,472	–	–
N_2O	[kg]	–	–	–	–	–
HFC	[kg]	–	–	–	–	–
PFC	[kg]	–	–	–	–	–
SF_6	[kg]	–	–	–	–	–
Business Travel (own fleet)						
Gasoline consumption	[m^3]	1,098	3	151	943	–
Diesel consumption	[m^3]	188	–	184	5	–
CNG consumption	[m^3]	–	–	–	–	–
Alcohol consumption	[m^3]	–	–	–	–	–
Gasoline (< 1.4 l)	[km]	36,205	33,450	2,755	–	–
Gasoline (1.4 – 2.0 l)	[km]	384,426	41,550	342,876	–	–
Gasoline (> 2.0 l)	[km]	303,362	134,011	169,351	–	–
Diesel (1.4 – 2.0 l)	[km]	1,628,628	215,583	1,413,045	–	–
Diesel (> 2.0 l)	[km]	250,216	9,723	240,493	–	–
Truck Diesel (7.5 t)	[km]	–	–	–	–	–
Business Travel (other)						
Airplane (short haul)	[pkm]	4,296,418	1,585,965	1,110,500	161,712	1,438,241
Airplane (long haul)	[pkm]	46,663,844	9,740,449	12,884,035	23,534,368	504,993

Table 2: Total group emissions, by scope and source (t CO_2e)

The table illustrates the contribution of individual energy sources to the global carbon footprint:

Electricity and district heating is the major contributor, accounting for 65% of the company's total emissions. On-site consumption of natural gas and other fuels accounts for an only minor part of overall GHG emissions.

Scope 1	2007	2008	2009	2010	2011	2012/13	2013/14	Increase
Heavy fuel oil	542	545	32	107	33	42	41	
Light fuel oil	81	55	77	45	56	26	22	
Emergency power diesel	675	1'031	827	793	729	685	1,222	
Natural gas	878	1'054	1'163	1'058	957	941	995	
LPG (50/50)	117	64	35	47	37	0	0	
LPG (70/30)	24	78	61	37	41	43	43	
Process emissions	157	242	304	350	182	52	37	
Gasoline consumption	3,130	3,346	3,484	2,958	2,544	3,035	2.580	
Diesel consumption	1,198	1,282	561	455	511	489	503	
Gasoline: Not for vehicle	0	0	0	0	0	0	6	
Gasoline (< 1.4 l)	2	17	21	0	1	6	6	
Gasoline (1.4 – 2.0 l)	74	112	122	452	240	58	5	
Gasoline (> 2.0 l)	145	202	193	177	131	85	72	
Diesel (1.4 – 2.0 l)	67	99	126	160	176	78	76	
Diesel (> 2.0 l)	44	29	14	40	45	46	232	
CNG (1.4 – 2.0 l)	0	0	0	0	6	0	49	
CNG (<1.4l)	0	0	0	0	0	0	22	
Truck Diesel (7.5 t)	10	21	37	0	0	0	5	
Total (t CO_2e)	7,142	8,177	7,057	6,680	5,690	5,585	5,911	**5,8 %**

Scope 2	2007	2008	2009	2010	2011	2012/13	2013/14	Reduction
Electricity	26,916	23,941	22,924	23,251	23,387	22,018	21,638	
District heating	847	756	846	725	746	851	849	
Total (t CO_2e)	27,762	24,698	23,770	23,976	24,133	22,869	22,487	**-1,7 %**

Scope 3	2007	2008	2009	2010	2011	2012/13	2013/14	Increase
Airplane (short haul)	973	1,969	619	566	705	935	847	
Airplane (long haul)	4,547	4,668	4,014	4,016	4,532	4,532	5,379	
Total (t CO_2e)	5,521	6,637	4,633	4,582	5,237	5,467	6,225	**13,9 %**

By source	2007	2008	2009	2010	2011	2012/13	2013/14	Increase
Electricity/ district heating	27,762	24,698	23,770	23,976	24,133	22,869	22,487	
Fuels (diesel oil)	1,298	1,631	936	945	818	752	1,292	
Fuels (natural gas, LPG)	1,019	1,196	1,258	1,143	1,036	984	1,038	
Direct process emissions	157	242	304	350	182	52	37	
Road travel	4,669	5,108	4,560	4,242	3,654	3,797	3,545	
Air travel	5,521	6,637	4,633	4,582	5,237	5,467	6,225	
Total (t CO_2e)	40,425	39,512	35,460	35,238	35,060	33,921	34,623	**2,1 %**

Table 3: Carbon footprint for the four regions, 2008–2013/14

	AP						EMEA					
	2008	2009	2010	2011	2012/13	2013/14	2008	2009	2010	2011	2012/13	2013/14
Scope 3	1,161	987	1,094	1,236	1,576	1,435	2,100	1,426	1,371	1,477	1,470	1,704
Scope 2	6,925	5,637	6,126	5,423	4,719	5,000	8,817	8,014	8,117	7,985	8,189	8,232
Scope 1	1,486	1,167	1,094	970	866	707	3,270	2,028	2,023	1,524	1,659	2,391

	NA						SA					
	2008	2009	2010	2011	2012/13	2013/14	2008	2009	2010	2011	2012/13	2013/14
Scope 3	1,976	1,821	1,771	2,009	1,949	2,744	1,401	399	348	515	471	342
Scope 2	7,626	9,144	8,580	9,427	8,728	8,033	1,329	975	1,152	1,298	1,234	1221
Scope 1	3,166	3,638	3,530	3,158	3,017	2,770	256	224	33	38	43	43

Table 4: Carbon footprint and percentage contribution of the four regions

Region	2008		2009		2010		2011		2012/13		2013/14	
	t CO_2e	%	t CO_2e	%	t CO_2e	%	t CO_2e	%	t CO_2e	%	t CO_2e	%
AP	9,571	24.2 %	7,791	22.0 %	8,314	23.6 %	7,629	21.8 %	7,161	21.1 %	7,143	20.6 %
EMEA	14,187	35.9 %	11,468	32.3 %	11,510	32.7 %	10,985	31.3 %	11,318	33.4 %	12,328	35.6 %
NA	12,768	32.3 %	14,603	41.2 %	13,881	39.4 %	14,594	41.6 %	13,694	40.4 %	13,547	39.1 %
SA	2,986	7.6 %	1,598	4.5 %	1,533	4.3 %	1,852	5.3 %	1,748	5.2 %	1,606	4.6 %
Total	**39,512**	100.0 %	**35,461**	100.0 %	**35,238**	100.0 %	**35,060**	100.0 %	**33,921**	100.0 %	**34,623**	100.0 %

Table 5: Individual greenhouse gases emitted by Landis+Gyr Group in 2013/14

Scope 1	CO_2 (t)	CH_4 (t)	N_2O (t)	SF_6 (t)	HFC (t)	PFC (t)
Heavy fuel oil	41.21	0.00	0.00	0.00	0.00	0.00
Light fuel oil	22.21	0.00	0.00	0.00	0.00	0.00
Emergency power diesel	1.215,83	0.05	0.02	0.00	0.00	0.00
Natural gas	989,37	0.05	0.01	0.00	0.00	0.00
LPG (50/50}	0.11	0.00	0.00	0.00	0.00	0.00
LPG (70/30)	41.77	0.04	0.00	0.00	0.00	0.00
Gasoline consumption	2.562.40	0.03	0.06	0.00	0.00	0.00
Diesel consumption	500.31	0.01	0.01	0.00	0.00	0.00
CNG consumption	0.00	0.00	0.00	0.00	0.00	0.00
Alcohol consumption	0.00	0.00	0.00	0.00	0.00	0.00
Gasoline (< 1.4 l)	3.84	0.00	0.00	0.00	0.00	0.00
Gasoline (1.4 – 2.0 l)	52.39	0.00	0.01	0.00	0.00	0.00
Gasoline (> 2.0 l)	55.51	0.00	0.00	0.00	0.00	0.00
Diesel (1.4 – 2.0 l)	192.16	0.00	0.01	0.00	0.00	0.00
Diesel (> 2.0 l)	40.86	0.00	0.00	0.00	0.00	0.00
Truck Diesel (7.5 t)	0.00	0.00	0.00	0.00	0.00	0.00
Process emissions	0.00	0.00	0.00	0.00	0.00	0.00
Scope 2						
Electricity (national grid mix)	21.395.77	1.35	0.34	0.00	0.00	0.00
Total	27.113.74	1.52	0.45	0.00	0.00	0.00

Note that not all emissions data is split up into the Kyoto gases. This is why the total in this table differs from the Group's total emissions.

Landis+Gyr
manage energy better

Contacts

Zug, Switzerland
Thomas Zehnder
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

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www.landisgyr.com