Landis+Gyr

manage energy better

15

16

Company Profile

Key Figures

Turnover:	USD 1.569 billion
R&D:	9.3 % of sales
Employees:	More than 6,000
Global footprint:	73 sites in 31 countries

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 it is paving the way for the next generation of the Smart Grid.

With annual sales of more than 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 (INCJ), operates in 31 countries across five continents, and employs more than 6,000 people whose sole mission is to help the world manage energy better. More information is available at www.landisgyr.com.

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Milestones 2015/16

JUNE

- USA: Landis+Gyr released Power Center 4.0, the Company's operating software for demand response and Load Management applications.
- Austria: Netz Burgenland Strom selected Landis+Gyr for the supply and rollout of Smart Electricity Meters utilizing cutting-edge G3 Power Line Communication (PLC) technology.

AUGUST

- EMEA: Landis+Gyr was the first company in EMEA to receive the G3 Alliance certification for its Smart Electricity Meters.

MAY

- Poland: Landis+Gyr won a major contract for the delivery of Smart Grid technology to four of the country's largest Distribution System Operators (DSOs).
- USA: PIDC, Philadelphia's public-private economic development corporation, selected Landis+Gyr to lay the foundation for a modern and comprehensive energy infrastructure at The Navy Yard in Philadelphia.

JULY

- Netherlands: Landis+Gyr was awarded a major contract by four Dutch distribution grid operators to supply at least 2.5 million Smart Meters.

SEPTEMBER

- USA: Landis+Gyr earned Oracle Exadata Optimized and Oracle SuperCluster Optimized status for its MDMS.
- USA: Landis+Gyr received the 2014 Frost & Sullivan Global AMI Company of the Year Award.

MARCH (2016)

- Germany: Landis+Gyr successfully completed one of the largest Smart Metering field tests.

FEBRUARY (2016)

- USA: Seattle City Light selected Landis+Gyr to provide Advanced Metering technology that will empower its customers with information about their energy use and offer enhanced services.
- USA: Westar Energy extended the contract with Landis+Gyr for full deployment of the utility's Advanced Metering Infrastructure.
- USA: Baldwin EMC began deploying Landis+Gyr's advanced Load Management system to support four unique residential demand response programs.
- Mexico: Landis+Gyr was selected to supply Advanced Metering Infrastructure technology to support grid modernization initiatives of Comisión Federal de Electricidad (CFE), the state-owned electric utility of Mexico.

NOVEMBER

- Switzerland: Landis+Gyr won a contract to support energy supplier Energie Thun AG with the rollout of Gridstream® end-to-end Smart Metering solution.

Message from the Chairman and the President:

Message from the Chairman and the President: Landis+Gyr, a profitable, independent growth platform within the Toshiba Corporation, is at the forefront of the megatrends that will shape the energy landscape of tomorrow. Based on both companies' unique technology portfolios and energy management expertise, Landis+Gyr addresses the needs of utilities in a changing market environment with a future-ready offering.

OWNERSHIP

Toshiba Corporation	60 %
Innovation Network Corporation of Japan	40 %

TOSHIBA
Leading Innovation

INCJ

Contributing to the Creation of Smart Cities

While the Toshiba Group is undergoing restructuring for recovery from a weakened financial base, it is focusing on three main business pillars: energy, infrastructure and storage. In an environment where the only certainty is change at an ever faster pace, the world must overcome many complex problems, including population growth, aging distribution systems and renewable energy integration, to name just a few. By combining their expertise, both companies, Toshiba Corporation and Landis+Gyr, have the know-how and capabilities to grow the seeds that will become next-generation solutions. These offerings will be the foundation to realize Smart Cities based on a safe, secure and stable energy supply framework.

« Based on our deepest commitment to people's well-being and to the future, the entire Toshiba Group aims to help create a better quality of life for all people by contributing to a thriving, healthy society. As the undisputed leader in the Smart Metering industry, Landis+Gyr is a key enabler of this vision. »

Hiroshi Kurihara,
Chairman Landis+Gyr AG

Megatrends Will Shape Industry Landscape

Landis+Gyr's intelligent approach to Smart Grids – measuring, analyzing and managing energy demand and matching it with supply – is a pivotal key enabler of both companies' joint Smart Community philosophy. As the undisputed leader in the Smart Metering industry, Landis+Gyr has operated as a profitable, independent growth platform within Toshiba Group ever since its acquisition in 2011 and maintained its own governance body, which includes representatives from the Innovation Network Corporation of Japan (INCJ), owner of a 40 % stake. Landis+Gyr is constantly expanding its technology portfolio, which is crucial in the light of ongoing structural change in the wake of economic, technological and social developments as well as the gradual replacement of fossil energy with renewables. By implementing innovative technology and modern infrastructure that enable "smart" and "intelligent" solutions, Landis+Gyr addresses groundbreaking megatrends in the energy markets such as digitalization, ecological awareness, urbanization and consumer engagement that are a harbinger of the upcoming challenges in the cities of tomorrow, and that are forcing utilities to change their business models. In such a transitional environment, smart and interconnected sensors, devices, buildings, vehicles and infrastructure will be the new key elements. Enabled by new measuring and communication technologies that are integral to Smart Meters, wireless sensor networks, high-speed broadband connections, open platforms and cloud services data will serve as new basic parameters that will empower the Internet of Things (IoT). This report highlights the Company's capabilities in this growing market.

« The energy landscape will drastically change in the wake of various megatrends that are shaping future expectations and needs of consumers requiring utilities, governments and regulatory bodies to adapt. This opens up attractive opportunities for companies like Landis+Gyr that are capable of helping society manage energy better. »

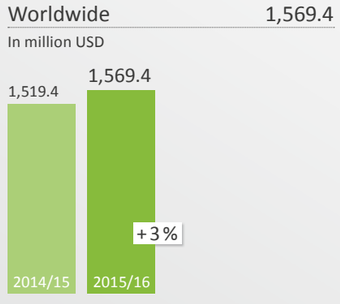
Andreas Umbach,
President and Chief Executive Officer

Landis+Gyr, its directors and shareholders are committed to an active, pioneering role as the energy industry undergoes this transformation, underlining the innovative entrepreneurial spirit which paved the past 120 years of Landis+Gyr's history and which will help to overcome all future challenges.

We would like to express our gratitude to all our employees and teams for their hard work and tremendous dedication as we help the world manage energy better.

Landis+Gyr Group: Landis+Gyr strengthened its market leadership position by improving its annual business performance while concurrently increasing the order backlog to a new record level of USD 2.9 billion. Key to this success was winning several large contracts mainly in the US and in Europe. The industry's broadest portfolio, in combination with proven technology, laid a solid foundation which will be pivotal for future advancements.

SALES 2015/16



Increasing Demand for Smart Applications

In the financial year 2015/16, the global Advanced Metering Infrastructure (AMI) industry faced several varied challenges, compelling market participants to adapt to new technological advances, specific demand requirements and new functional roles. Manufacturers and vendors of Smart Metering infrastructure are being asked to develop tailored solutions that allow energy utilities to integrate even more built-in intelligence in their grids. As a result, the relationship between utilities and consumers will continue to evolve into mutual partnerships, redefining the traditional roles of supplier and consumer. During this transformation period Landis+Gyr sees a growing interest in refining concepts and deploying technologies that go far beyond traditional metering. Adding complexity, regional approaches vary in maturity and rate of change. During the fiscal year the Americas market and portions of the Asia Pacific region continued to offer important opportunities as utilities focused on upgrading energy distribution infrastructure, adapting to advanced technologies and exploring new business models. The European market saw another year of no growth, as implementation of European legislation advanced more slowly and in a more patchwork fashion than expected. This impacted the pace and number of Smart Meter rollouts while putting additional competitive pressure on market participants.

In this challenging market environment, Landis+Gyr demonstrated its unique capabilities, unrivaled commitment to innovation and a clear understanding of the evolving, if uneven, market needs. The Group's targeted innovation initiatives focused on creating solutions based on the utilities' current and future needs such as new meter functionalities, network capability, analytics tools, data management, demand response or grid distribution management with both proven and future-ready offerings. Responding to the latest market requirements, the development teams successfully continued to expand the functionalities as well as the added value of the Gridstream® solution, which represents a cornerstone in building Smart Grids.

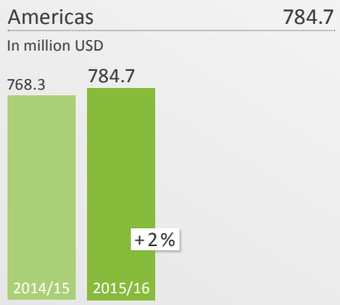
In its financial year ending March 31, 2016, Landis+Gyr, a platform within the Energy Systems and Solutions Company of Toshiba Corporation, increased sales by 3.3% to USD 1.569 billion (2014/15: USD 1.519 billion). In local currencies sales exceeded the previous year's level by more than 10%. Even more importantly, the Group topped the previous year's order intake by 53.4% reaching almost USD 2.0 billion (2014/15: USD 1.3 billion) and underlining the strong demand for the Company's state-of-the-art technology offering. This record-high intake raised the order backlog to a new record level of USD 2.9 billion (2014/15: USD 2.5 billion), paving the way for sustainable growth in the years to come. At the same time Landis+Gyr improved its profitability by further streamlining its operational processes and refining its R&D capabilities. Earnings before interest, taxes, depreciation and amortization (EBITDA), normalized to eliminate the effect of certain non-operating effects, amounted to USD 215.3 million (2014/15: USD 178.2 million), an increase of 20.8%. As well, driven by consistent cash flows of more than USD 100 million each year since the acquisition by Toshiba Group and the Innovation Network Corporation of Japan (INCJ) in 2011, Landis+Gyr has been able to reduce its net debt by approximately 75%, or USD 550 million. With an equity ratio of 62.8% (March 31, 2015: 62.0%), Landis+Gyr is very favorably positioned to finance its future growth strategies.

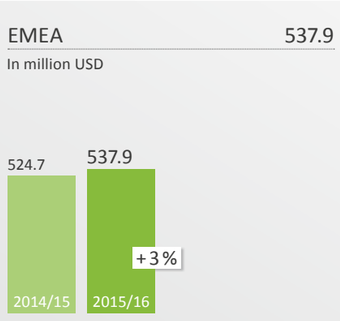
In the reporting period all sales regions were able to expand their outside sales, despite the challenging global business environment and structural changes brought on by developments such as intermittent renewable energy sources. This impressive performance establishes a firm foundation for future success across the Company's worldwide organization. For the Americas region sales grew by 2.1%, despite the successful completion of some very significant contracts. This growth was supported in general by further spending on Advanced Metering Infrastructure (AMI) installations and growing demand for Smart Grid applications. Sales in the EMEA region increased by 2.5%, exceeding management expectations. The implementation of European energy legislation is expected to accelerate in future years enabling major Smart Grid rollouts throughout Europe. In the Asia Pacific region, despite serious operational impacts caused by weather-related facility damage in Sydney, sales in the region exceeded the previous year's level by 9%. Growth was mainly driven by continued delivery for the TEPCO project in Japan. Spearheaded by the expertise and dedication of Landis+Gyr's North American technology teams, this immense deployment of Advanced Metering Infrastructure (AMI) networks and hardware has achieved all of its critical

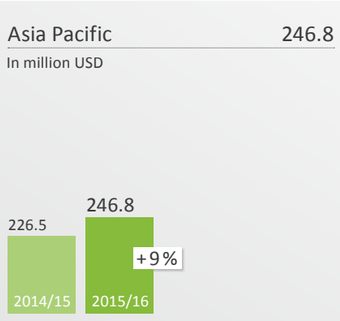
« Landis+Gyr is deeply committed to innovation and quality. Global collaboration and knowledge sharing lay the foundation of our operational excellence. Comprehensive analysis of our customers' current and future needs allow us to continuously advance our product and solution offering. »

Richard Mora,
Executive Vice President and Chief Operating Officer

SALES PER REGION







milestones, despite a very demanding schedule. Deployment of the Gridstream® solution at TEPCO surpassed 4.9 million end points. Upon completion the 27 million meters deployed will represent the largest Advanced Metering deployment in the world, reporting 1.3 billion interval meter reads per day, all on Landis+Gyr's open standard-based network and software.

With its strong industry-leading technology portfolio, Landis+Gyr is looking to the future with confidence. All regional organizations made good progress with major Advanced Metering Infrastructure (AMI) deployments and won other groundbreaking projects from renowned customers. In North America, Landis+Gyr signed 44 contracts for Smart Grid technology and services, mainly Advanced Metering Infrastructure (AMI) network deployments. The deployment at Hydro-Québec was successfully completed two years ahead of schedule. This project included deploying an RF mesh network and 3.6 million Advanced Meters throughout the province of Québec. In Brazil, the project at Light included the rollout of 1.1 million Advanced Meters in the city of Rio de Janeiro. Key milestones in Europe included a major win in the Netherlands for a comprehensive Smart Metering project, French national electricity distributor Enedis selected Landis+Gyr for its deployment of Linky meters and substantial mandates in both Poland and Austria.

Adding New Key Technologies to the Portfolio

In the financial year 2015/16, Landis+Gyr continued to strengthen its own state-of-the-art offering by spending USD 146.3 million or 9.3% of sales on Research & Development (R&D). The focus of the strategic roadmap was on identifying strategic growth areas at the junctions of software and hardware. New applications in the areas of distribution intelligence and customer intelligence are being emphasized to address new market needs and enhance customer engagement. Through these investments Landis+Gyr identifies emerging requirements in the market environment, while at the same time offering proven solutions, ensuring a strong linkage between utilities and consumers' needs. Among many other initiatives, the Group introduced a Smart Metering solution based on G3 PLC technology to its portfolio. With this technology, the Company provided the ability to host robust and high-performance energy management solutions in a cost- and resource-effective manner. It started technology field tests with G3 PLC at the beginning of 2015 in Norway and Switzerland, and rolled it out in May 2015. In June 2015, Landis+Gyr released Power Center 4.0, the Company's operating software for demand response and Load Management applications. Power Center allows utilities to operate a Virtual Peak Plant by aggregating a large number of loads into a dispatchable resource and delivers an enhanced user experience for utilities and their customers. Updates to the dashboard provide a concise view of load, system and device alarms available system-wide and at Group level, and cycling strategies for controlled appliance.

Landis+Gyr also expanded its distributed intelligence capabilities on the grid by introducing a grid router built on an open-platform Linux operating system. This is a major advancement in terms of adaptability and processing power for the network, which connects the Gridstream® suite of Advanced Metering Infrastructure (AMI), distribution intelligence and customer intelligence solutions. The open-platform Linux operating system acts as a grid-edge server. It routes and processes data and executes applications from multiple utility and Smart Community networks simultaneously. This new grid router brings connectivity to other related networks and devices, essentially serving the broader energy management goals of utilities and the communities they serve.

« Groundbreaking project wins from renowned customers in all sales regions will support continued growth in the years ahead, especially once markets in the EMEA and Asia Pacific regions regain business momentum. »

Jonathan Elmer,
Executive Vice President and Chief Financial Officer

The showcase technology product developed by the company is the Gridstream® solution currently being deployed in Japan, but available for global implementation. As a true open standard architecture communication network project, it brings RF mesh, PLC and cellular communications end points under the control of a single Head-End System (HES) and Meter Data Management System (MDMS). This market-leading scalability, advanced feature set and extensible performance are crucial for meeting the most demanding utility requirements. When completed, this Landis+Gyr-based network solution will be enabling one of the largest Internet of Things (IoT) systems ever created.

In addition, the company continued to enhance interoperability through the use of open platforms, thus providing greater flexibility to the customers. In the tradition of its pioneering role within the industry, the Company demonstrated leadership in helping develop and ratify standards, embrace the use of Application Programming Interfaces (APIs) and willingness to work with other industry players.

Based on the Group's achievements, Landis+Gyr received the 2014 Advanced Metering Infrastructure (AMI) Company of the Year Award at the Frost & Sullivan Growth, Innovation and Leadership Awards Gala held in Santa Clara, California, during September 2015. Landis+Gyr was awarded this distinguished recognition by Frost & Sullivan for the second year in a row, underlining the Group's outstanding achievements and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development.

Leveraging Global Capabilities

In response to ongoing structural change in the markets and increased competition, management also initiated various initiatives, all designed to improve time to market and the competitiveness of the product portfolio. One of these efforts focused on optimization of the operational footprint. A key target was the bundling of manufacturing activities, thereby benefiting from economy-of-scale effects and the utilization of existing capacity. To provide an example, Landis+Gyr opted to relocate its small-batch manufacturing activities for precision metering devices from Zug, Switzerland, to its site in Corinth, Greece. The relocation was completed at the end of 2015. In parallel, Landis+Gyr continued to streamline its innovation processes with a particular focus on the alignment of the Group's research and development capabilities across the globe. Principles of the global R&D initiative will enhance the global product offering by driving simplicity, ensuring proximity to the business and improving day-to-day management. At the organizational level, it combines regional R&D contacts and efficient governance of empowering technology assets under one roof, promoting global collaboration, knowledge sharing and pooling of resources, and is generating significant benefits in terms of product development efficiency. This is a major undertaking given that the Company currently employs more than 1,200 R&D experts and invests USD 146.3 million to enhance its technology portfolio and advance its product and solution offering.

Among other focus projects, management targeted further improvements and global coordination of quality and supply chain management operations. To ensure high quality on a competitive cost base, these projects screen and identify best-in-class suppliers and use intelligent tools for capacity planning, define and implement key performance indicators and realize economy-of-scale advantages. The Company's efforts were rewarded with the APICS Company of the Year Award, which honors Landis+Gyr's excellence in supply chain and operations management.

« We successfully advanced our well-directed procurement projects based on our proven, long-standing relationships with first-class quality suppliers, aiming to exploit additional efficiency gains and synergies for the Group's global operations network. »

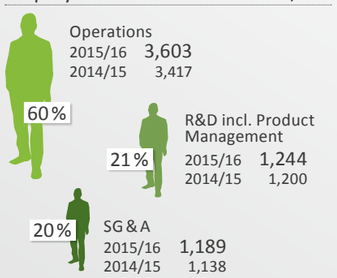
Dieter Hecht,
Executive Vice President and Chief Procurement Officer

« Leveraging our global capabilities is a key ingredient in our strategy. It allows for continued growth in our traditional markets through proven solutions, but also supporting our customers as they work to develop new offerings in this dynamic international marketplace. »

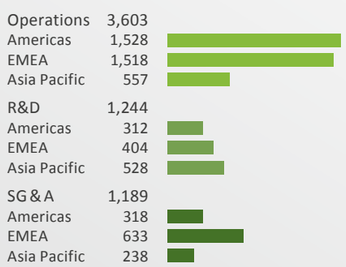
Roger Amhof,
Executive Vice President and Chief Strategy Officer

EMPLOYEES PER FUNCTION

Employees worldwide +281 **6,036**



Employees worldwide +281 **6,036**



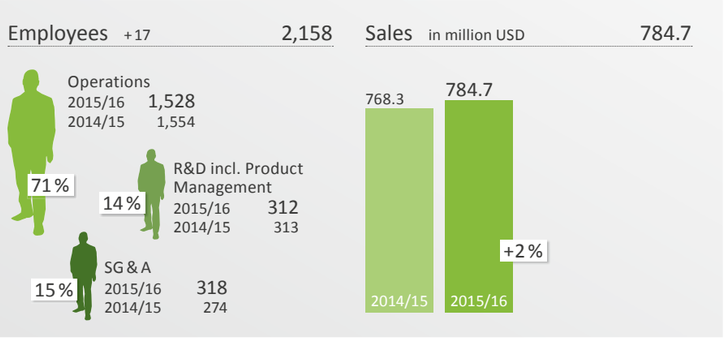
Americas: In a dynamic environment driven by evolving customer needs, Landis+Gyr continued to broaden its range of solutions and strengthen its leadership position. Sales in the Americas region increased by 2.1 % to USD 784.7 million in 2015/16. In addition, the region provided vital support that allowed for the successful transfer of technology and project implementation know-how to Japan.

Ongoing Success Through Innovation

Prasanna Venkatesan, Executive Vice President Americas

In the financial year 2015/16, the expansion of new energy applications and technologies continued to transform the industry. In this evolving market environment, Landis+Gyr reported substantial growth in new business and expanded its sales volume by 6.1 % in North America while sales in South America decreased by 24.0 % in the reporting currency USD mainly due to the depreciation of the local currency. Despite the deferred deployment of Advanced Metering Infrastructure (AMI) projects, which also reflects Brazil's current economic challenges, sales in local currency grew by 11.0 %.

The transformation of the energy sector is gaining further momentum in North America. Driven by technological innovations and supported by various megatrends such as digitalization and sustainability, utilities are confronted with requests to do more with less, deliver reliable power safely and economically, all while adapting to the technological advancements and integration of distributed generation resources and a more engaged consumer. Landis+Gyr North America signed more than 40 new contracts for Smart Grid technology and services partnering with existing and new customers ranging from investor-owned utilities to municipal and cooperatives. These new contracts primarily address Advanced Metering Infrastructure (AMI) deployments and services, which lay the foundation for additional functionality in the future. Although a number of large-scale programs were successfully completed during the reporting period, the team in North America managed to expand its sales volume. These achievements build on Landis+Gyr's industry-leading solution offering and its ability to help utilities solve complex customer challenges in an efficient and cost-effective manner.



« It was a landmark year. We saw success on many large projects while further improving and broadening our Gridstream® solution offerings in the areas of distribution intelligence, renewable integration and energy storage. We are seeing strong signals that utilities are ready to focus on the next wave of benefits from Smart Grid technology. »

Prasanna Venkatesan, Executive Vice President Americas

Landis+Gyr's innovative technology offerings and its promotion of open standards were positively received in the market. In the reporting period, Landis+Gyr began deployment of its latest IPv6 open standards-based platform in support of the utility IoT, and introduced a solution based on G3 PLC technology. The Company also expanded its distributed intelligence capabilities by introducing a network gateway built on an open-platform Linux operating system. Its commitment to innovation and quality was acknowledged by the various nominations and awards received from Frost & Sullivan (AMI Company of the Year), Greentech Media (Grid Edge 20), Gartner Inc. (MDMS Leader) and APICS (Company of the Year), which attest to Landis+Gyr's contribution to making the Smart Grid a cornerstone of future Smart Community concepts. Its support of Envision America, a nationwide nonprofit organization that brings together experts from industry, academia and politics to diagnose needs and coordinate efforts to help cities address energy and resource challenges, underlines Landis+Gyr's mission of helping society manage energy better.

In 2015/16, Landis+Gyr North America again won important new customer contracts in addition to managing various ongoing projects. New project wins include PIDC, Philadelphia's public-private economic development corporation, Puget Sound Energy (Washington), PPL Electric Utilities (Pennsylvania), Seattle City Light (Washington), Westar Energy (Kansas), PSEG Long Island (New York), EPCOR (Canada), and Comisión Federal de Electricidad (CFE), the state-owned electric utility of Mexico.

Ready for Market Recovery in South America

In South America, sales for the reporting period amounted to USD 77.5 million, a substantial decrease of 24.0 % compared to the previous year's level. However, sales in local currencies increased by 11.0 % despite economic turmoil in Brazil, stiff price competition in the traditional meters segment and the deferred deployment of AMI projects. Order intake exceeded management's expectations, delivering a positive outlook on the current business year.

Meanwhile, the pioneering Smart Grid partnership project with Brazilian utility, Light, is progressing and approaching the one-quarter completion point following the first full year of deployment. The five-year contract signed in 2014 covers the supply, implementation, operation and maintenance of Landis+Gyr's Gridstream® solution and includes deployment of 1.1 million advanced meters in the city of Rio de Janeiro.

EMEA: In 2015/16, sales in the EMEA region increased by 17.8 % to EUR 487.1 million (USD 537.9 million). Various major project wins offset the market stagnation caused by the pending implementation of regulatory directives in the European energy legislation.

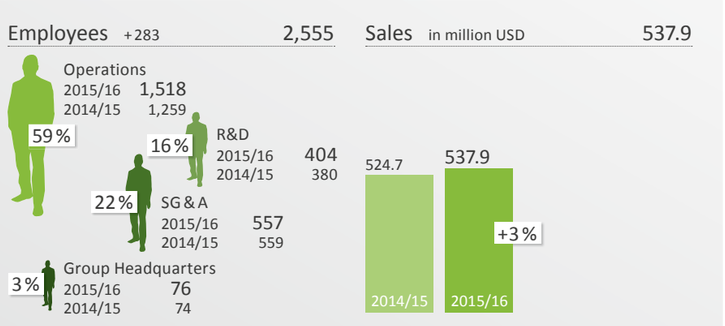
Ahead of the Expected Market Upturn

Oliver Iltisberger, Executive Vice President EMEA

Markets in the EMEA (Europe, Middle East and Africa) region remained soft in the financial year 2015/16 primarily due to restrained public investment spending in several countries as a result of the pending national energy legislation, which will provide a more clearly defined regulatory framework. While several Advanced Metering Infrastructure (AMI) projects across the region were delayed or postponed, Landis+Gyr outperformed the general market and surpassed its own sales target thanks to the successful implementation of current mandates and the acquisition of new AMI contracts. A major order won in the Netherlands and a range of further contracts across EMEA caused order intake to skyrocket past expectations and bolstered the backlog.

Building a Leadership Position

The landmark success in the period under review was the award of a major contract by the four Dutch distribution grid operators Alliander, Stedin, Enduris and Westland Infra for the supply of at least 2.5 million Smart Meters in the Netherlands. Most of the meters will be rolled out between 2016 and 2020. Landis+Gyr will supply both Smart Electricity Meters and Smart Gas Meters based on the Dutch Smart Meter SMR5 specifications to all four grid operators. In South Africa, the power utility Eskom will roll out prepayment Smart Metering technology by Landis+Gyr. The comprehensive end-to-end delivery is designed to meet the local regulatory and customer requirements, and the new E460 prepayment meters are developed and produced locally. In Finland, Landis+Gyr entered a new field in Smart Grid business as it delivered Toshiba Battery Energy Storage System (BESS) to Helen Ltd. The megawatt-class electricity storage facility is the largest of its kind in the Nordic countries and will be used to investigate further technical and business opportunities of the Smart Grid. In Germany, Landis+Gyr successfully completed one of the country's largest Smart Metering field tests, demonstrating that its technology, which includes meters, gateways, gateway administration software and SAP systems, seamlessly works together in practice. Started in 2015, the field test forms part of a cooperation agreement between Landis+Gyr and German utility EnBW signed in 2013.
In Switzerland, Landis+Gyr won a contract to support the Swiss energy supplier Energie Thun AG with the rollout of its Gridstream® solution, including communication options, software and services.
In the summer of 2015, Landis+Gyr was the first company in the EMEA region to receive the G3 Alliance certification for G3 PLC technologies attesting the implementation of latest specifications, full interoperability and robust performance.



Sales measured in the region's predominantly used currency euro grew by 17.8 % to EUR 487.1 million (2014/15: EUR 413.6 million).

« Partnering with leading utilities across the region, our teams were highly successful in helping them improve the efficiency of their energy networks, reduce costs, and promote the sustainable use of resources, ultimately helping them realize the full potential of the Smart Grid. »

Oliver Iltisberger, Executive Vice President EMEA

Focus on Business Model and Customer Segments

In advance of the assignment of major Smart Metering rollouts in many markets, and to better accommodate the needs and demands of the many utilities that are wielding their procurement power to request customized products and solutions, Landis+Gyr prepared its teams in the first quarter of 2016 for a realignment of its regional organization structure effective as of April 2016. The reorganization aims to better address the different needs and demands of customers by transforming the product-centric organizational structure to a business model and customer segment-oriented structure. The new structure will enable the EMEA operations to strengthen their customer and market focus, reduce complexity and empower the sales and product management teams to take greater responsibility for their markets. This will become even more important in the context of expected future growth.

Asia Pacific: Despite various challenges to the Asia Pacific teams and operations during the financial year 2015/16, including tough market environments, unfavorable currency effects and natural disasters impacting the business, the region increased sales by 9 % to USD 246.8 million. This performance was driven by both the expansion of the region's service and solution capabilities, as well as continued significant progress on the TEPCO project in Japan.

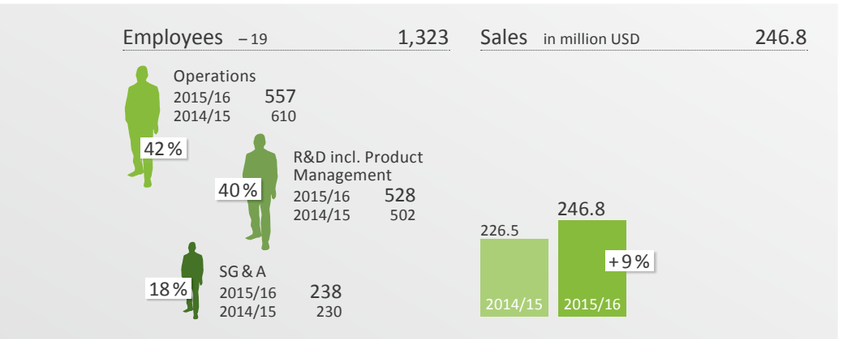
Strengthening the Regional Position

Ellie Doyle, Executive Vice President Asia Pacific

In the financial year 2015/16, Landis+Gyr's Asia Pacific teams recognized major accomplishments in key markets, despite the hailstorm and flooding damage to the manufacturing site in Sydney, Australia, in April 2015. So serious was that damage that the assembly lines needed to be shut down. Although a significant challenge, the natural disaster proved the efficacy of the contingency and disaster recovery plans and all employees responded to the challenge with creativity and strength. Landis+Gyr was able to mitigate the negative effect to customers and indeed used the disaster to improve its operations in several respects including consolidating manufacture and testing operations from New South Wales to the site in Laverton, Victoria.

Enabling Smart Megacities in Asia

In the reporting period, Landis+Gyr's Asia Pacific organization strengthened its local market presence and expanded its range of solutions to meet differing customer needs. In China, Landis+Gyr continued its success in serving customers with high-end grid meters, but also took significant steps to enter the domestic commercial/industrial meter segment. Landis+Gyr's Chinese business passed State Grid Corporation of China's (SGCC) factory audit. In the heat meter market, it saw increased competition from local players and continued to focus on this segment with its high-quality, differentiated products.



« Urbanization is progressing quickly in the Asia Pacific region with 70 % of all people expected to live in megacities within the next 15 years. With our smart solution offering, Landis+Gyr is proud to support utilities all over the region in their transition to a smart and sustainable energy future. »

Ellie Doyle, Executive Vice President Asia Pacific

In South East Asia, Landis+Gyr successfully optimized its operations by establishing country managers in Malaysia and Vietnam. As a result, local customer relationships were strengthened. This realignment has already led to some initial successes. The team signed a contract with the largest Malaysian utility, Tenaga Nasional Berhad (TNB). More importantly, Landis+Gyr also received an initial order for the PowerSense solution, featuring Distribution Automation, paving the way for the country's future smart grid plans. Further, the largest power company in Vietnam, Vietnam Electricity (EVN), awarded Landis+Gyr an important strategic mandate. EVN will use Landis+Gyr's MDMS solution for five of its subsidiaries, with a contract covering approximately 1 million end points in the initial stage. In Singapore, Landis+Gyr was awarded an important contract with Singapore Power Group.

Indian markets were characterized by pricing pressure and increased competition from local metering players. Landis+Gyr's smart and future-oriented offering, however, was honored with the Best Product Award for end-to-end solutions integrating mobile functionality at ELECRAMA, the world's largest annual electricity and energy solutions exhibition, held in February 2016. This award especially reflects Landis+Gyr's capability to meet demand for infrastructure that increases consumer engagement and paves the way for future Smart Megacities to emerge all over the continent in the coming years. Landis+Gyr continues to have a strong local presence in India and is investing in the AMI future of the country.

A Pioneer in the Pacific Region

In Japan, the demanding deployment schedule for our Gridstream® Advanced Metering Infrastructure (AMI) contract for Tokyo Electric Power Corporation (TEPCO) saw more than 4.9 million end points installed by the end of the reporting period. In the face of this rapid deployment, extremely high network performance and read success rates were achieved. When complete, the 27-million-meter deployment will be the largest advanced metering roll-out in the world, reporting 1.3 billion interval meter reads per day on Landis+Gyr's open standards-based IPv6 network and software.

In Australia, sales of gas meters continued to show strong growth. The investments Landis+Gyr has made in services reached a point of market readiness, whereby the services business received its accreditation as a Meter and Meter Data Service Provider from the Australian Energy Market Operator (AEMO). This business was established to cater specifically to the regulatory changes in the Australian electricity market. Looking forward, Landis+Gyr's Australian business can now offer an end-to-end, flexible product and solutions suite – as a service. This achievement has already seen agreements signed with significant retail businesses, and Landis+Gyr is well positioned for future major deployments once the National Electricity Market (NEM) final rule changes are enforced at the end of 2017.

The energy system of tomorrow will not be the energy system of today. The energy world is facing major changes that are putting the current business models of utilities at risk. Technological, economic, social and demographic developments spurred by megatrends are having a transformative impact on the sector. Market disruption is gaining momentum around the globe. To adapt to the changing reality utilities need to invest in new technologies which will enable them to modify their traditional business models by expanding services and developing additional capabilities as new requirements and competition emerge.

To remain competitive, utilities need to transform by:

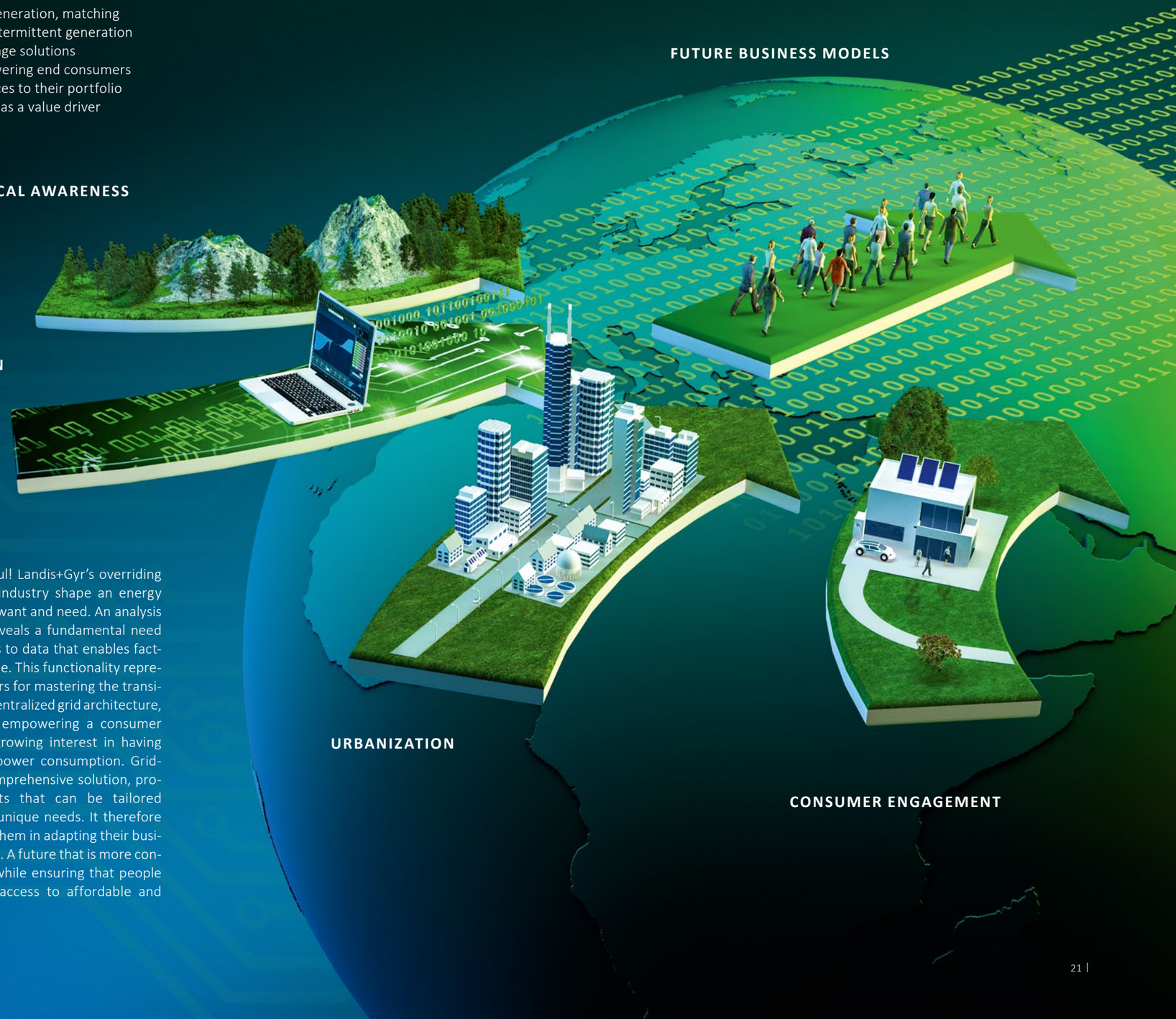
- Relying more on data and information and communication technologies
- Optimizing management of generation and distribution assets
- Managing distributed generation, matching demand and absorbing intermittent generation
- Integrating energy storage solutions
- Focusing on and empowering end consumers
- Adding new value services to their portfolio
- Approaching regulation as a value driver

Shaping the Energy Future With Landis+Gyr

Four secular trends are driving the transformation: the increasingly comprehensive digitalization of all sectors and areas of life, a growing awareness of environmental impact and sustainability, the rising importance of urban areas led by the emergence of megacities, and the empowerment of consumers.

Trends apart: An efficient, reliable and affordable energy system will remain of crucial importance for economies and societies. Meanwhile demand for efficient and sustainable generation, distribution and usage of power is expected to continue rising. And it will be inherent to regulatory and customer requirements. With regulatory, business and consumer expectations increasing in complexity, the utility industry will need to become more agile. A sense of urgency to establish new business areas without displacing the current business model basics is building in the industry.

That is definitely a handful! Landis+Gyr's overriding objective is to help the industry shape an energy future that its customers want and need. An analysis of the changing needs reveals a fundamental need for utilities to have access to data that enables fact-based decisions in real time. This functionality represents one of the key factors for mastering the transition to an increasingly decentralized grid architecture, while at the same time empowering a consumer base that is showing a growing interest in having greater control over its power consumption. Gridstream®, Landis+Gyr's comprehensive solution, provides flexible ingredients that can be tailored to meet energy utilities' unique needs. It therefore supports and grows with them in adapting their business models for the future. A future that is more connected and sustainable, while ensuring that people around the world have access to affordable and reliable energy.



DIGITALIZATION

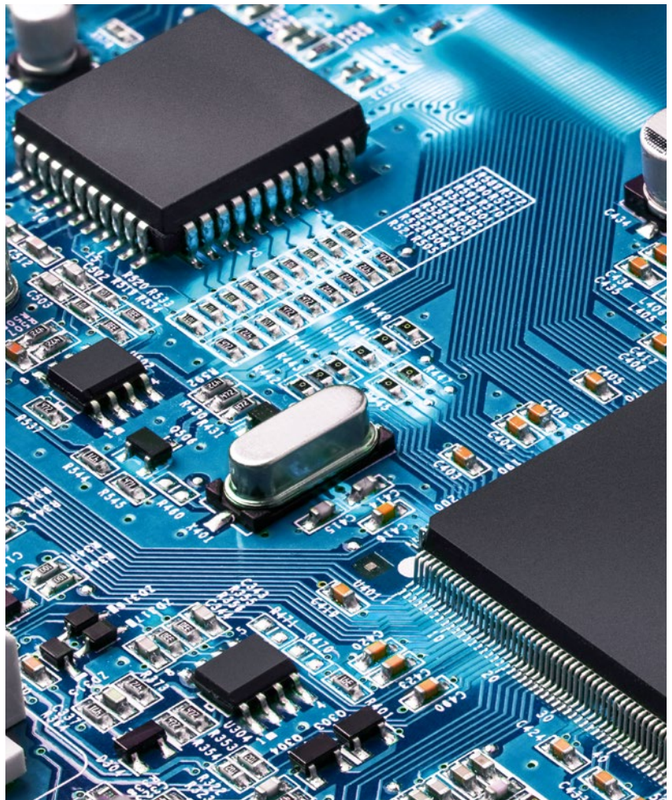
Digital Is Pivotal: Disruption is the term of the season. At its core is digitalization, which is driving an immense transformation of business activities, processes, competencies and models as companies seek to fully leverage the changes and opportunities of technologies and their associated impacts across society. Fueled by the convergence of social, mobile, cloud and big data and by growing demand for access to information, digital technologies are creating innovative business opportunities across all industries and in all geographies. A challenge for all companies, particularly those that are more accustomed to working with heavy equipment than with miniature chips and code.

Digital transformation is at the heart of the energy system of the future. The digitalization process itself depends on a secure and reliable supply with energy. Significantly increased numbers of intelligent, connected and communicating sensors and devices that are able to exchange data both with each other and with a central system will allow utilities to better monitor and control grid operations at generation, transmission and distribution levels. They will also create new possibilities for customer engagement. In turn, distributed energy technologies will enable customers to participate directly in grid operations, providing utilities with a new potential source of supply, thus increasing complexity throughout the energy value chain.

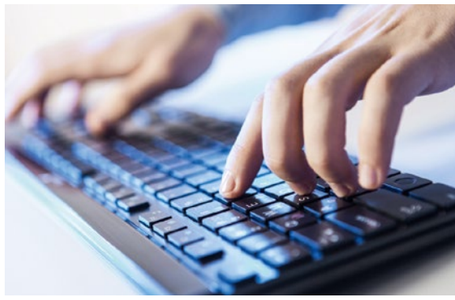
Landis+Gyr

Landis+Gyr's Gridstream® solutions help utilities and their electricity, heat and gas customers gain access to better, faster, more actionable data as well as command and control applications to ultimately manage energy better. Key functionalities include:

- Secure AMI communication network monitoring and management
- Visualization tools for optimized command and control of grid assets
- Advanced grid and data analytics allowing forecasting and simulations
- Optimized demand response and flexible pricing models
- Software and cloud-based services



Digitalization offers Landis+Gyr significant opportunities for creating value for utilities and the energy industry and society as a whole. The ongoing evolution of the Internet of Things (IoT) and implementation of related know-how, combined with big data analysis, will lead to much higher quantitative and qualitative capabilities. The interconnection of smart devices unlocks their ability to interact and collaborate with human beings like never before. As a tangible example for utilities, the benefits of implementing Landis+Gyr's interoperable Gridstream® Advanced Metering and intelligence solutions include software options that provide efficient grid visualization, monitoring and control, enhanced real-time decision-making, improved asset management and reduction of supply chain risks and operating costs. By offering a secure, standard-based two-way communications system with state-of-the-art security, utilities will be confronted by the requirements of a grid that will become more integrated and managed via connected devices. At the same time, they highlight the strategic role of energy infrastructure.



Distribution Automation in the Netherlands: Enexis, one of the largest Distribution System Operators (DSOs) in the Netherlands, retrofits its existing and new substations with a standardized Distribution Automation (DA) solution to enhance power distribution quality and improve operational efficiency of its network.

ABOUT ENEXIS

Enexis is an independent grid operator active in the provinces of Groningen, Friesland, Drenthe, Flevoland (Noordoostpolder), Overijssel, North Brabant and Limburg. The company is responsible for developing, constructing, managing and maintaining energy distribution networks across 130 municipalities, providing a link between its 2.6 million customers and the energy suppliers. Every year, Enexis supplies its customers with 32,350 GWh of electricity through 44,000 km of MV cables and 90,000 km of LV cables, connected and controlled by more than 52,000 substations.

In 2010, Enexis sought expert advice on how to improve operational efficiency across their power grid from PowerSense, now a Landis+Gyr Group company. To achieve this goal, Enexis set the initial target of enhancing the quality of power distribution by reducing the system average interruption duration index (SAIDI) from 87 minutes to 5 minutes per customer, for customers supplied by automated medium- and low-voltage networks.
Since no “off the shelf” solution was available on the market in 2010 and following a successfully completed pilot, PowerSence was able to provide a customized solution with its S760 Smart Grid Device Integrator. The S760 Distribution Automation solution included full-cycle services from project management to on-site support and personnel training. The S760 boxes are connected to the servomotors of the switchgear to open and close the ring. Built-in Uninterruptible Power Supply (UPS) supports a minimum of four hours of operation when the mains network is down. A number of interfacing sensors inform the control center when a fault has occurred, to allow errors to be located and fixed.

Benefits of the Landis+Gyr Solution

- Existing Ring Main Units (RMUs) were upgraded with secondary equipment to detect faults and to allow remote control of the switches. In case of an outage, RMUs can now be opened or closed remotely, allowing the problem to be isolated in minutes and to get the majority of customers back online in a fraction of the time this would take in a manually operated network.
- Remote firmware updates allow Enexis to implement necessary security upgrades in order to meet new regulatory requirements.
- Outage reduction has exceeded expectations: Customer Minutes Lost (CML) was reduced from 87+ minutes to 3–5 minutes per customer for first recovered connections.

Benefits of the Landis+Gyr Solution

- Landis+Gyr provides an open, secure and interoperable platform to support the microgrid needs of today and can grow as needs change in the future.
The two-way wireless communications network allows optimized grid visualization, enhanced monitoring and control, real-time decision-making, and improved asset management.
- Landis+Gyr’s Load Management, analytics, storage options, renewable energy integration capability and sensor expertise offer solutions to significantly improve grid reliability and support the changing electricity grid.

Microgrid for a Mini Smart City in Philadelphia, USA: PIDC selected Landis+Gyr to realize a new energy vision for The Navy Yard, Philadelphia’s urban business campus committed to smart energy innovation and sustainability, as a means to achieve higher energy efficiency and more resilience.

ABOUT PIDC

PIDC is Philadelphia’s public-private economic development corporation. A nonprofit founded in 1958 by the City of Philadelphia and the Greater Philadelphia Chamber of Commerce, PIDC’s mission is to spur investment, support business growth, and foster developments that create jobs, revitalize neighborhoods, and drive growth to every corner of Philadelphia.

The Navy Yard, Philadelphia’s dynamic, modern campus, is home to more than 11,500 employees and 145 companies in the office, industrial and manufacturing, and R&D sectors. In its master developer role, PIDC handles all aspects of the property’s management and development, including master planning, infrastructure development and utility operation. PIDC selected Landis+Gyr to lay the foundation for a modern and comprehensive energy infrastructure at The Navy Yard for its continued development efforts focused on implementing the latest in Smart Grid technologies.
The project envisages the deployment of Advanced Metering Infrastructure solution elements, including both a Gridstream® solution that includes Smart Meters, a communications network, Meter Data Management software and associated cloud-based services. Follow-on efforts will include adding Smart Building technology, energy storage systems, integration of renewable energy offerings including wind and solar, Distribution Automation capability and electric vehicle support.
PIDC’s vision for creating a Smart Community is perfectly aligned with Landis+Gyr’s capability to help manage their facilities’ energy better far into the future. By combining Landis+Gyr’s software and hardware technologies, the microgrid will offer solutions to better integrate renewable and local energy sources, reduce losses in transmission and distribution systems and allow flexible pricing to finally achieve higher efficiency and more resilience. With a collective demand of about 28 megawatts, The Navy Yard will be able to design its own tariff system to reward customers for conserving power or for shifting load.

URBANIZATION

Big City Life: The economic power and social importance of urban areas – especially of megacities – are undisputed. They will continue to grow in the coming years. Today, more than 80 % of global gross domestic product is generated in cities. Since 2008, a majority of the world's population has been living in urban areas. According to the United Nations, 1.5 million people are added to the urban population every week. By 2050, about two out of three people are expected to be living in metropolitan areas.

Landis+Gyr

Landis+Gyr's Gridstream® solutions enable utilities to model, operate, and control their processes and assets by offering a smart, scalable and comprehensive network that addresses the increasing complexity and interconnectivity of future urban areas. Key functionalities include:

- Distributed energy resource management, including generation, distribution and storage
- Distribution Automation, grid monitoring, visualization and management
- Grid optimization through analytics-aided planning and controlling
- Scalability and interoperability
- Outage management and restoration

What we are witnessing today is but a preview of the future: Cities are becoming crowded places. This poses enormous challenges – and offers a variety of business opportunities for those who see and seize them. Urbanization requires intelligent planning to cope with the complexity of cities' growing demand for clean air and water, reliable energy supply, building space, constructions and efficient transportation systems. Cities already account for about 75 % of global energy consumption and global carbon emissions. The transition to smarter cities calls for innovative concepts which include upgrading existing systems and infrastructure. Novel ideas will help to conserve resources and minimize environmental impact and ultimately provide a better quality of life to the inhabitants of the cities of tomorrow.

Energy will be a key ingredient in sustainable urban planning. Urbanization that is inclusive, resilient, low-carbon and livable will holistically interconnect renewable energy sources, distribution networks, energy storage solutions such as electric vehicles, smart sensors, devices and buildings with predictive data analysis. Landis+Gyr's Gridstream® solution is designed to help utilities manage the challenge of creating, maintaining and optimizing sustainable and interconnected infrastructure for the cities of tomorrow. It is applicable to micro and large-scale grids, allowing for two-way energy flows. The universal, open-system architecture and secure and reliable communication technology facilitate data collection and analysis. It enables enhanced demand forecasting, grid reliability and operational efficiency.

Largest Advanced Metering Deployment in Japan and the World:

TEPCO deploys Landis+Gyr's Gridstream® solution, building the world's largest utility IoT communications network. The deployment brings RF mesh, PLC and public network end points under the control of a single Head-End System (HES) and a Meter Data Management System (MDMS).

ABOUT TEPCO

Tokyo Electric Power Company (TEPCO) is the largest electric utility in Japan, bringing electricity to over 27 million service locations in the greater Tokyo area, serving a population of over 45 million people.

One of TEPCO's top priorities is to deliver services and efficient energy use for each customer, while becoming a forward-looking infrastructure company that contributes to a safe and comfortable Smart Community. In pursuing this vision, TEPCO aims to establish a new electricity business model in response to Japan's efforts to reform its electricity system. In addition to the Smart Meter Infrastructure rollout, the company is making progress on various fronts for renewable energy integration, battery storage and microgrid integration into its electricity grid.

Landis+Gyr, in close collaboration with Toshiba as the prime contractor and system integrator, is successfully deploying its latest Gridstream® solution with more than 4.9 million meters installed to date and billions of readings supported in the Meter Data Management System. Landis+Gyr's smart technology supports TEPCO in better managing supply, demand and frequency by offering systems and tools for advanced distribution network monitoring and control. Key functionalities address surplus electricity countermeasures through active demand control and include night-time demand creation, demand shift, solar energy output control, battery storage as well as incentivized demand response.

With 27 million meters upon completion in 2020, it will be the largest Advanced Metering deployment in the world, reporting 1.3 billion interval meter reads per day on Landis+Gyr's open standards-based network and software.

Benefits of the Landis+Gyr Solution

- One communications network backbone servicing all metering points regardless of topography combining RF mesh, PLC and GSM/GPRS technology.
- Common Head-End System to manage the network, collect data and interface with other utility systems, including seamless MDMS interfaces that provide system-wide validation, estimation and editing functionality.
- Home area network support that facilitates energy customer efficiency decisions and opens the door to new service offerings.

Benefits of the Landis+Gyr Solution

- Landis+Gyr's Advanced Metering Infrastructure (AMI) solution helps Ameren Illinois to achieve aggressive performance improvement goals for gas and electricity businesses. Landis+Gyr offers Ameren a migration strategy for adopting new technology without stranding existing assets.
- The state-of-the-art AMI solution allows Ameren Illinois to meet the anticipated data and communications requirements of future Smart Grid applications.

Multi-Purpose Network in Illinois, USA:

Ameren Illinois selected Landis+Gyr to provide a comprehensive Advanced Metering and Meter Data Management solution for the utility's comprehensive grid modernization initiative, positioning the utility to meet operational efficiency and customer service needs of today and tomorrow.

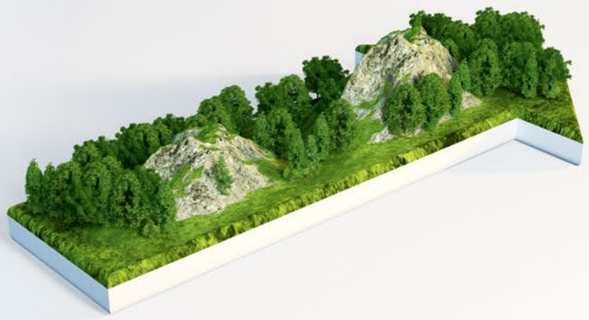
ABOUT AMEREN

Ameren Illinois provides electric service to 1.2 million customers and gas service to 813,000 customers across central and southern Illinois. Ameren's service area covers more than 1,200 communities and 43,700 square miles. It is the company's mission to meet the needs of its customers in a safe, reliable, efficient and environmentally responsible manner.

The Ameren Illinois grid initiative – the Modernization Action Plan – was made possible by a 2011 state law that provides incentives for participating utilities to make significant upgrades to the century-old energy delivery system under a formal ratemaking process. In addition to Advanced Metering, Ameren Illinois plans to implement new outage-sensing technologies and fortify the existing distribution infrastructure, benefitting customers, utility operations and investors.

The action plan serves as the blueprint that will guide Ameren Illinois throughout its ten-year grid modernization program. Ameren Illinois is deploying Landis+Gyr's Gridstream® RF mesh solution to enable two-way Advanced Metering. The Gridstream® network supports a variety of Smart Grid and Advanced Metering functions that help utilities manage peak energy loads, improve outage response and promote energy efficiency. The platform is fundamentally designed to support true interoperability while also maintaining industry-leading scalability. Complementing the multi-purpose communications network, Ameren Illinois is also deploying Landis+Gyr's Meter Data Management Systems to facilitate solid business processes, data management and enterprise integration.

ECOLOGICAL AWARENESS



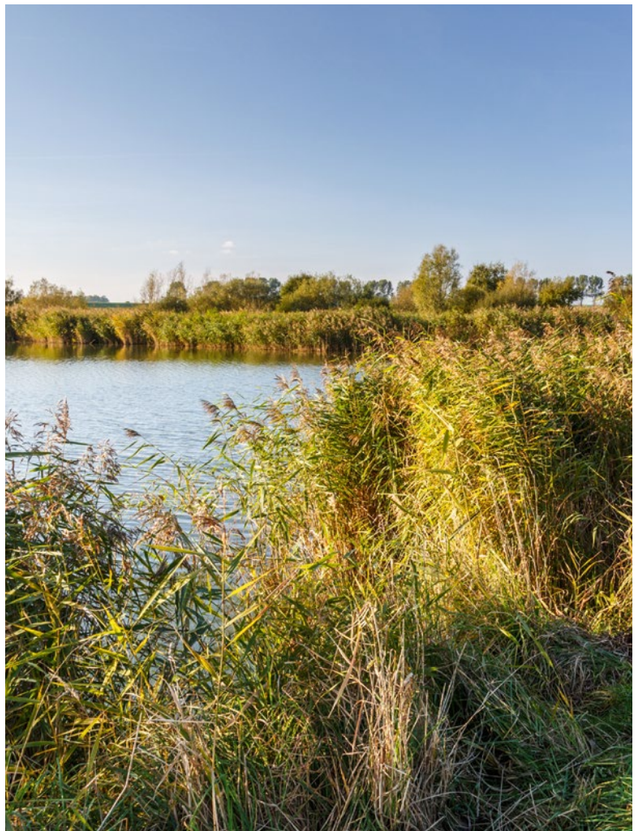
The Future is Bright, the Future is Green: Worldwide demand for resources – both renewable and non-renewable – is growing rapidly. Whether it is population growth, economic development or the increasing number of consumers joining the energy system – the factors for this growth are many. While technological innovation and investments in technology and capacity are required to ensure a stable supply of energy, concerns about supply, stability and environmental impacts are mounting.

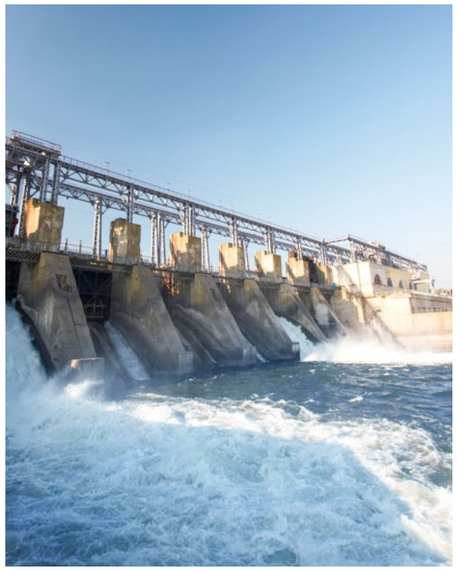
Mitigation of climate change effects by limiting global warming is part of the agreement reached by participants at the 2015 UN Climate Change Conference in Paris. Energy generation and consumption account for two-thirds of overall global greenhouse gas emissions. About two-thirds of global power production comes from fossil fuels. The transition from a traditional one-way energy system relying on large-scale power plants to a flexible, bi-directional and smart energy reality that integrates renewable energy sources is viewed as a promising path to an energy system that enables economic growth and promotes social welfare while significantly reducing the environmental impact.

Landis+Gyr

Landis+Gyr's consistently invests in its state-of-the-art technology offering in order to develop and deliver market-leading, intelligent technologies and products to society with the aim of improving quality of life and minimizing the public's use of resources and its environmental impact. Key functionalities include:

- Distributed energy resource management, including integration of renewable energy sources and electric vehicles for storage
- Distribution Automation, grid monitoring, visualization and management
- Virtual Power Plant services to monitor and adjust system load
- Microgrid management including control functionalities for prosumers
- Predictive analytics integrating external data, e.g. weather forecasts





How to increase energy efficiency? Efficiency, the so-called fifth fuel, is a key component to achieving a reduction of the environmental impact of energy production and consumption. Another is the maturing renewable technologies and their rapidly improving cost-to-performance metrics. To achieve efficiency gains and successfully integrate renewable sources, grids need to become highly flexible. This calls for dynamic bi-directional grids with virtual grid architecture and higher consumer engagement. Landis+Gyr's Gridstream® solutions offer utilities and end consumers the suitable hardware and software to achieve efficiency gains. They enable utilities to operate and control their distribution assets and energy flows intelligently. They manage intermittent generation from renewable sources, balance supply and demand by means of microgrid management and predictive data analysis and by integrating energy storage resources such as electric vehicles. Last but not least, they enable end consumers to better control their energy consumption and costs through enhanced monitoring functionality.

Grid Management to Harness Solar Power in Arizona, USA:

Acknowledging the growing importance of solar energy, APS has selected Landis+Gyr as its partner for a comprehensive grid management project that includes Advanced Metering and Meter Data Management, enabling distributed energy resource integration and paving the way to Arizona's energy future.

ABOUT APS

Arizona Public Service Company (APS) is Arizona's largest and longest-serving electricity utility. With headquarters in Phoenix, APS serves nearly 1.2 million customers in 11 of the state's 15 counties and is the principal subsidiary of Pinnacle West Capital Corp.

With more than 300 days of sunshine per year, Arizona is among the areas with the highest potential for harnessing solar energy worldwide. To meet expected growth of demand in energy and Arizona's long-term clean-energy and energy-efficiency goals, APS is strengthening the state's infrastructure. APS plans to add 1,600 megawatts of renewable resources to its generation portfolio within the next 15 years and increase energy efficiency by using state-of-the-art technology that makes the grid more flexible and maintains reliability.

To achieve the goals of its broad modernization initiative, APS has selected Landis+Gyr for a comprehensive solution that enables Advanced Metering and grid management applications. The contract includes deployment of Landis+Gyr's Gridstream® solution for Advanced Metering Infrastructure (AMI), a Meter Data Management System (MDMS), RF network equipment and 140,000 E-350 FOCUS AX-SD meters to support energy management and distributed generation initiatives. The MDMS installation will validate metering data and provide integration with existing utility software applications.

In further steps, APS plans to explore the grid management and Distribution Automation capabilities of the network such as smart invertors. Landis+Gyr's technology will support APS in its efforts to effectively manage existing grid operations, seize new opportunities with distributed solar resources, and meet the changing energy needs of its customers.

Benefits of the Landis+Gyr Solution

- Landis+Gyr's Gridstream® solution enables control and data collection from critical points across the distribution system from the substation all the way to the grid edge.
- Landis+Gyr's interoperable and scalable solution allows validation of metering data and provides integration with existing utility software applications to more effectively manage billing, operations, engineering and customer service.
- Support of APS's vision for clean, efficient and reliable delivery of energy in a way that prepares the utility for future challenges.

Benefits of the Landis+Gyr Solution

- The information generated by the Landis+Gyr Smart Meters can be used to review and analyze performance, to perform predictive analytics, to drive change and to adapt to the needs of future Smart Communities.
- Alliander, Stedin and Landis+Gyr signed a Green Deal Fair Meter contract based on an agreement between Alliander, Stedin and the Dutch government.

The program includes obligations on traceability and transparency regarding the components used in Landis+Gyr products as well as quality, labor conditions and recyclability requirements. The implementation of the program will also entail a pilot, improvement plans, regular consultations, workshops and meetings.

Realizing the Smart Grid in the Netherlands:

Alliander, one of the biggest energy network companies in the Netherlands, together with three partner grid operators, took another step toward realizing the Smart Grid by installing Smart Meters in every consumer's home.

ABOUT ALLIANDER

Alliander distributes electricity to 3 million customers and gas to 2.9 million customers in an area covering over a third of the country, including the provinces Gelderland, Noord-Holland and part of Zuid-Holland, Friesland, Flevoland and Noord-Brabant. Alliander successfully built the first fully fledged Smart Grid in the area of Amsterdam, allowing 35,000 end users new services and energy choices, such as a renewable energy option. The company also founded a number of independent start-ups to investigate local energy trading, e-vehicle charging, the Internet of Things (IoT) and micro grids.

With its latest tender, a joint project with Stedin, Enduris and Westland, Alliander and its partners comply with the legal obligation to offer a Smart Meter to every household in the Netherlands by the end of 2020. The Smart Meters being installed will feature a communication port that enables consumers to display their energy consumption on an in-home display or alternatively, connect to a Home Energy Management System (HEMS). They will give consumers the ability to have direct control over their energy usage, e.g. by deciding to use more energy when their own photovoltaic facility is supplying a lot of energy.

Prior to the large-scale roll-out, Alliander has installed about 1 million Smart Meters. Landis+Gyr products accounted for approximately half of the installations. In the time period from 2016 to 2020 it will be supplying grid operators with at least 2.5 million Smart Electricity Meters and Smart Gas Meters based on the Dutch Smart Meter SMR5 specifications. Completing these orders represents a significant step towards making every home in the Netherlands a Smart Home by adding new functionalities and energy supplier services and connecting it to an open, generic, secure scalable and independent Internet of Things (IoT) platform.

CONSUMER ENGAGEMENT

The Rise of Informed Consumerism: Full control at everybody's fingertips: Armed with innovative digital and technological possibilities, people's expectations of providers of all sorts have increased exponentially. Everything, everywhere, at any time! Online experiences in areas such as travel, retail or media are raising the bar for customer services. And the sharing economy is creating a new means of competition for companies disrupting entire markets. They are empowering consumers and transforming them into potential producers, or in other words: prosumers.

In the energy sector, the traditional business model has consisted of a relationship based on supplying end consumers with power and then billing for payment. This is still the rule today. But the status quo is progressively being challenged by lawmakers as well as by advancements in both power and digital technology. Self-generation and energy storage are giving end consumers more freedom to create their own energy solutions and participate directly in grid operations by offering a number of different services such as energy trading or frequency regulation to any other participants, including utilities, industrial and residential customers. Said another way: There is a shift of power in the world of power. A new relationship between consumer and utility is evolving. New challenges on how to manage energy grids in terms of safety and reliability are emerging.

Landis+Gyr

Landis+Gyr's Advanced Metering Infrastructure (AMI) Gridstream® solutions enable both utilities and consumers to monitor, track and share information, enhancing the understanding and responsiveness of the power delivery system. Key functionalities include:

- Network, supply and consumption analytics, near-real-time data access and management
- Microgrid management, including microgeneration monitoring and control
- In-home displays and control devices enabling consumers to monitor and control consumption in real-time and increasing their energy awareness

Customers are no longer merely consumers and energy not just energy. While one customer wants to be supplied with cheap energy, another one wants to cover its consumption with energy from renewable sources. And a third one wants maximum control over its energy consumption, self-generation and energy storage systems, and all remotely controllable via a smartphone. The magic words are consumer engagement and customization. Customers want to be able to choose and participate. Landis+Gyr's Gridstream® Advanced Metering and intelligence solutionsoffer utilities and service providers tools for enhancing customer relations. Smart Meters, sensing devices and energy portals give consumers the data they need to make informed decisions about their energy usage. Utilities gain insights from data, which enable them to better manage and shift loads, balance demand and supply and integrate behind-the-meter services.

Smart Prepayment in South Africa: Eskom, a South African state-owned power utility, is rolling out Smart Prepayment Meters in various regions of Gauteng, one of the nine provinces of South Africa and home to the cities of Johannesburg and Pretoria, to ensure upfront cash collection and further improve the performance and reliability of its power generation and distribution network.

ABOUT ESKOM

Eskom generates approximately 95 % of the electricity used in South Africa and approximately 45 % of the electricity used in Africa. Eskom generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers and redistributors. Additional power stations and major power lines are being built to meet rising electricity demand in South Africa.

In South Africa, the government's National Treasury recently put into place legislation to regulate the procurement of residential Prepayment and Smart Meters. The legislation compels municipalities and utilities in South Africa to specify a minimum local content of 50 % for Smart Meters and 70 % for Prepayment Meters. Therefore adaption to market conditions as well as local design and production is a critical differentiator for Landis+Gyr.

Out of several bidders, Landis+Gyr was the selected bidder requested to provide a detailed end-to-end demonstration of the offered smart solution. Landis+Gyr subsequently secured a contract that entails the supply and installation of 17,100 E460 single-phase, 15,785 E460 3-phase G3 PLC Smart Meters and more than 1,000 DC450 G3 PLC Data Concentrators as well as 32,885 P160 Customer Interface Units with an Advanced Metering Infrastructure system licensed to manage 45,000 devices. The Smart Prepayment Meter installation for the communities of Sandton and Midrand started from January 2016 and will end in March 2017. The success of the project is expected to lay the platform for national roll-out mandates from 2017 onwards. Landis+Gyr developed and produced the E460 Smart Metering solution in South Africa, thereby demonstrating its commitment to local development and manufacturing operations as well as technical support services – an essential part of the successful implementation of Smart Metering solutions.

Benefits of the Landis+Gyr Solution

- The benefits of installing Smart Prepayment Meters include savings on meter reading, improved technical performance and enhanced community safety.
- These Smart Prepayment Meters will enable Eskom to remotely disconnect consumers in case of nonpayment and reduce nontechnical losses through online monitoring and tamper detection.
- The Smart technology allows Eskom upfront cash collection that will enhance the cash flow, improve the certainty of collecting revenues and address the utility's debt collection challenges.
- Landis+Gyr's technology is a crucial new component that improves the performance and reliability of Eskom's power-generating units and distribution network.

Benefits of the Landis+Gyr Solution

- Landis+Gyr provides network management and data hosting services. These services reduce implementation risks and the operational burden on utility staff, allowing them to focus on the delivery of safe and reliable power. Landis+Gyr's Gridstream® solution is scalable and includes the possibility to expand the use of the network and data for a variety of other distribution grid management applications.
- Helps the utility deliver more options to consumers for better understanding of their energy use, while at the same time improving reliability and operational efficiency.

Partnering to Deliver the Smart Grid in Kansas, USA: Supported by Landis+Gyr, Westar Energy is leading the way to an affordable, cleaner and more customer-focused energy future in Kansas by increasing operational efficiency, enabling renewable generation and expanding consumer involvement.

ABOUT WESTAR ENERGY .

Westar Energy is the largest electric utility in Kansas. For more than a century, the company has provided Kansans with safe, reliable electricity needed to power their businesses and homes. With 7,200 MW of electric generation capacity fueled by coal, uranium, natural gas, wind and landfill gas, Westar provides service to nearly 700,000 customers.

Driven by advancements in technology, environmental concerns and growing customer expectations, the energy industry is becoming more complex and is forcing utilities to rethink their business models. To achieve the transition to a smart and future-oriented provider of energy, Westar Energy partnered with Landis+Gyr in October 2014, on a comprehensive Smart Grid infrastructure and services contract to support the utility's grid modernization and consumer choice initiatives within the Wichita, Kansas service area. In December 2015, persuaded by the value added and success of the initial implementation, Westar extended the contract with Landis+Gyr to cover all territories served by the utility.

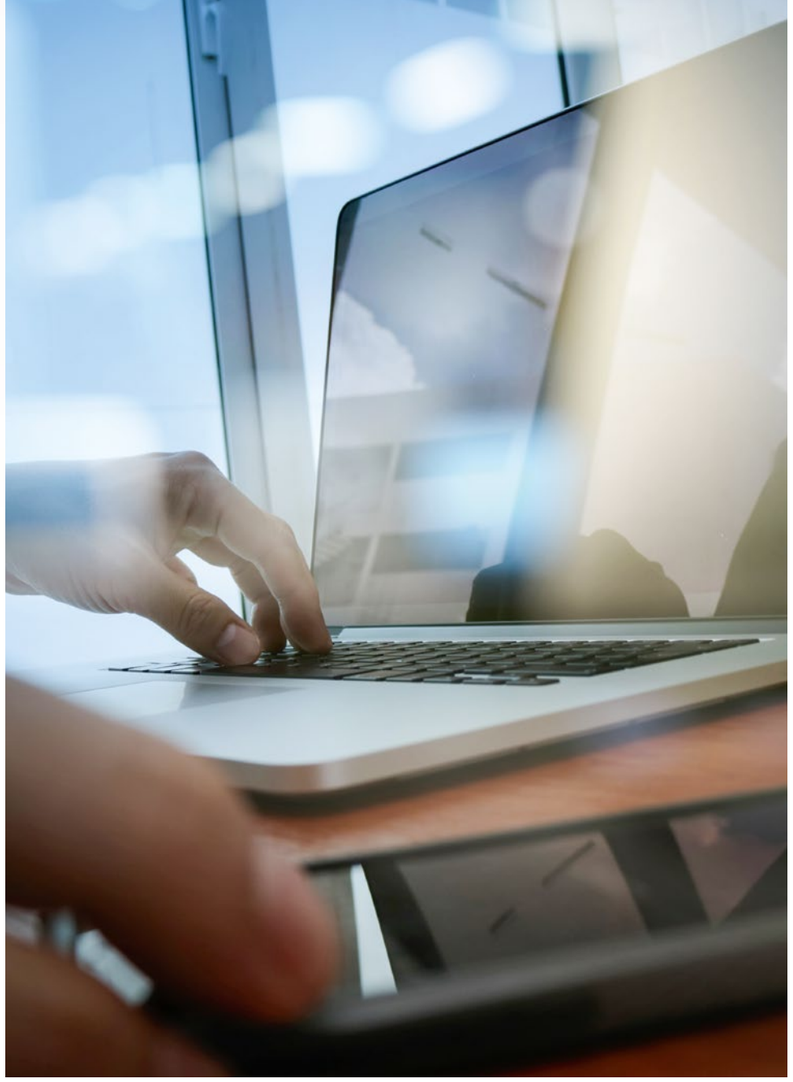
The contract involves full deployment of the utility's Advanced Metering Infrastructure (AMI) and management of its AMI network, including daily maintenance, cloud services for software and data, and integration support. Landis+Gyr's services group functions as an extension of Westar's Smart Grid team, providing increasingly valuable insights and operating support in a timely manner. The technology deployment supports Westar's existing prepayment and variable pricing programs, delivery of energy usage information to consumers through the Internet, and support of outage management and power quality operations. Additionally, remote meter connection capabilities reduce miles driven by utility personnel.

FUTURE BUSINESS MODELS

No More Business as Usual: The traditional one-way power flow business model of energy utilities is not history but it's safe to say that changes are coming. The energy world is in a state of transformation. Developments in power technology, new laws and four megatrends – digitalization, ecological awareness, urbanization and the shift in consumer power – are driving this transformation.

A new class of energy technologies is on the rise. They are enabling innovative solutions in the fields of distributed energy generation, behind-the-meter storage, energy management and intelligent load controls. And they are transforming traditional end-consumers into prosumers by offering various options for participating in energy trading and other services. At the same time, they are adding complexity to the system, increasing demand for grid resiliency and directly impacting the operations and revenues of utilities.

More dramatically, the energy providers of the future do not necessarily have to be the energy providers of today. Coming more from the bottom up than top down, these changes are acting as a catalyst for market disruption and disintermediation. Hence, it's not unreasonable to imagine the energy market being revolutionized in the same pervasive manner by new competitors that introducing sharing economy marketplace concepts have in other industries. Unlike the traditional business model of utilities, which relies heavily on expensive infrastructure, these "sharing" business models are distinguished by significantly lower entry barriers. Competition might also evolve from providers of vertically integrated solutions such as solar panels, batteries or electric vehicles, which are playing a very important role in making this transformation possible.



On the Way to the Smart Grid

The future energy market is likely to be highly interconnected and fragmented at the same time. A dynamic and bi-directional grid equipped with a significant number of Smart Meters and sensing devices will lay the foundation for integrating local and microgrids and distributed assets. The Internet of Things (IoT), and smart devices, buildings and cities will create a wealth of new business opportunities throughout the value chain. Real-time data management, predictive analysis and machine learning will improve grid reliability and efficiency by including information such as weather or traffic data. An increasingly virtual grid architecture, two-way communication as well as open and common standards that enable programmatic marketplaces will be the key to balancing and managing demand and supply.

For more than a century, Landis+Gyr has helped the world manage energy better and it is ready to guide utilities on their way to the energy future. By offering flexibility, scalability, interoperability, common and open standards, reliability and security, Landis+Gyr's comprehensive Gridstream® Advanced Metering and intelligence solutions provide the tools utilities need for mastering the transition to an energy world driven by innovative technology and data as well as ecological requirements and social trends.

The transformation is creating both threats to and opportunities for change. Even if the pace of change will vary across different countries and markets, utilities can't afford to wait any longer to address this challenge. They might opt for capturing opportunities downstream in the value chain by vertically integrating their business. Or they might build on their existing customer base and simultaneously enter new segments and partnerships for adding value. In the new energy future, they need to align their ambitions with those of their customers and develop innovative, relevant and cost-effective products and services that enhance consumer engagement. At the same time, they must continue supplying consumers and businesses with secure, reliable and affordable energy while fulfilling both legislative and self-defined sustainability requirements. Due to the strategic relevance of energy, legislators are sharply watching and actively involved in shaping the transformation process.

Smart Grid Development in Poland:
Four of the largest Distribution System Operators (DSOs) in Poland joined forces to modernize their power grid and prepare for future business opportunities. The four DSOs acted ahead of upcoming changes in national energy laws and regulations and amidst the country's ongoing efforts to develop a Smart Grid environment.

PARTICIPATING UTILITIES

- RWE Stoen Operator serves 964,000 customers in and around Warsaw.
- Enea Operator provides electricity to customers in six provinces over an area of 58,213 km².
- Tauron Dystrybucja delivers 45,000 GWh of electricity to customers across an area of 57,940 km² or 18.5% of the country.
- PGE Dystrybucja supplies 423,000 customers in the southeast of Poland with electricity, covering 15,283 km².

In Europe-wide assessments of grid stability, Poland often scores below average, with a System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI) both significantly higher than the EU average. Poland's national regulator has ordered Distribution System Operators (DSOs) to increase their power quality and network efficiency levels.
In May 2015, Landis+Gyr won a major contract with four of the largest Polish DSOs to supply a total of 36,000 S650 Smart Grid Terminals for the medium- and low-voltage network. In addition to balancing functionalities, the terminals provide network monitoring and control, which allows utilities to visualize power quality issues and minimize customer outages, thus reducing SAIDI and SAIFI indices. The terminals act as network "eyes" and their energy balancing and power quality measurement functions help utilities to immediately locate and solve problems when they occur. Moreover, the deployment will enable the DSOs to identify areas where upgrade investments are needed and potential new business opportunities arise along the power industry value chain. The next step would be to install further advanced Smart Grid technology, to achieve greater grid resilience and power supply reliability.
The delivery of 36,000 S650 Smart Grid Terminals is just the first step towards a grid that will be smarter, more efficient and able to support a variety of Internet of Things (IoT) devices and solutions. At the end of the year the DSOs agreed to use the option in the contract and extended the volume by 14,000 S650 devices. Deliveries will be made in 2016.

Benefits of the Landis+Gyr Solution

- By acting jointly and deploying the same Landis+Gyr technology, the four utilities established a unified data collection standard for their networks and leveraged both the operational benefits and costs while achieving higher levels of interoperability.
- Landis+Gyr's state-of-the-art technology enables Polish network operators to gradually build up distribution intelligence and new Smart Grid capabilities through the deployment of a scalable solution in which the functionality can be extended to meet new market and regulatory requirements.

Benefits of the Landis+Gyr Solution

- The benefits of the Battery Energy Storage System (BESS) include its instant start-up and easy controls. It is used as a controllable energy resource in a Virtual Power Plant solution.
- With intermediate storage of electricity, supply and demand can be adjusted more flexibly and peak curves can be smoothed.
- The battery-operated electricity storage facility helps improve grid stability by enhancing frequency control, adding automated voltage regulation and offering back-up capacity during fault and disaster situations.

New Business Models Investigated in Finland:
A pilot project by Helen Ltd investigates new business opportunities provided by a megawatt-scale energy storage system delivered by Landis+Gyr and Toshiba. Flexible intermediate electricity storage solutions will be studied and tested and market-based pricing and business models for stored energy developed.

ABOUT HELEN LTD

Helen Ltd is one of the largest energy companies in Finland and a forerunner in energy storage on the global scale. Its energy production has been recognized as the most efficient in the world. Helen Ltd has around 400,000 customers throughout Finland. It develops increasingly eco-friendly and innovative solutions and aims to achieve 100 % carbon neutrality in its energy production.

The significance of energy storage is increasing with the growing diffusion of renewable energy resources. In a pilot project in Helsinki, new opportunities offered by a megawatt-scale electricity storage facility are being tested by distribution system operator Helen Sähköverkko Oy, in cooperation with the Finnish grid operator Fingrid. The main scope of the project is twofold: studying the optimal timing for loading and unloading the stored energy in a Smart Grid environment and investigating new business models that can be developed by storing electricity.
The Battery Energy Storage System (BESS) will be installed on a site adjacent to the company's Suvilahti solar power plant, built as part of a Smart Community project that Helen Ltd is developing in Helsinki. The storage facility delivered by Landis+Gyr and Toshiba will consist of more than 13,000 lithium-ion battery cells that can temporarily store the electricity generated by Helen's solar power plants in Suvilahti and in Kivikko. The rated power output of the electricity storage facility will be 1.2 megawatts and its energy capacity over 600 kWh, making it the largest of its kind in the Nordic countries.
The facility will be part of the developing Smart Grid of the future. By addressing the technical, operational and business challenges deriving from the integration of distributed energy resources coming from renewable generation into existing distribution networks, this project will help to increase grid stability in a dynamic environment. And by studying and testing when it is worth charging and discharging the batteries and who is prepared to pay for it at any given time and according to which logic, it will deliver valuable insights to the utility so it can efficiently adapt its business operations for the energy future.

Our Global Network: Our people make Landis+Gyr the front runner in our industry. Their creativity, expertise, know-how and dedication stand at the beginning of each of our products and solutions. As members of a global network they jointly strive for outcomes helping us, our customers and society manage energy better.

« Our experience in network and grid analytics will help accelerate the transition to a more intelligent and responsive grid for improved customer engagement, reliability and operational efficiency. »

Chad Kehn,
Head of Advanced Applications North America, Bloomington

« The South American markets are changing as utilities focus on reducing commercial losses and improving operational efficiency. At Landis+Gyr we support our customers in many ways as the Smart Grid becomes reality. »

Cristiano Bonanno,
Sales Director South America, São Paulo

« Quality first. That's why we rely on first-class R&D and manufacturing processes, partner with proven suppliers and develop monitoring and control systems that give our customers true peace of mind. »

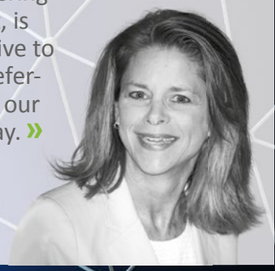
Bob Nies,
Vice President Quality North America, Pequot Lakes

« Our intelligent Gridstream®solution offers improved measurement and automated management functions on a single secure platform, which also facilitates the integration of distributed energy resources such as solar microgeneration systems and electric vehicles. »

Marcio Sciamana,
Director Product Management & Marketing South America, Curitiba

« Our involvement in TEPCO's Smart Metering project, the world's largest such project, is obviously a special highlight. But we strive to make every single customer project a reference project for Landis+Gyr by meeting our customers' expectations every single day. »

Rebecca Lorentz,
Director Order Fulfillment, Pequot Lakes



Our Products and Capabilities: The energy industry is changing rapidly. New technologies allow collecting and analyzing data like never before. Advanced systems provide remarkable command and control functionalities. The promise of a smarter grid with greater efficiency, better insights, and a more conscious use of resources is within reach. Utilities require confidence in a partner who can build and manage an increasingly intelligent grid, able to provide reliable and interoperable products and solutions based on state-of-the-art technology. In support, we heavily invest in our offering to help our customers master the challenges throughout an evolutionary journey.

- Products
- Gridstream® Distribution Intelligence
- Gridstream® Advanced Metering Infrastructure
- Gridstream® Customer Intelligence
- Services

MEASURE

ELECTRICITY
- Meters for residential, commercial, industrial and grid applications with modular or integrated communication
- Meters with credit or prepayment functionality
- Interoperable devices with industry-leading security and sophisticated fraud-detection features

GAS
- A full complement of modular metering solutions including superior ultrasonic technology with modular or integrated communication for billing and cost allocation in industrial, commercial and residential applications
- Credit and prepayment
- Ready for integration in a multi-energy environment

HEAT/COLD
- District heating/cooling products with modular or integrated communication for billing and cost allocation in industrial, commercial and residential applications

COMMUNICATE

NETWORK
- RF Mesh
- Cellular
- PLC
- Blended Network solutions combining various communication technologies

GATEWAYS
- Data concentrators
- Routers and repeaters as key elements of communication networks

COMMUNICATION MODULES
For electricity, gas, heat and water meters including:
- PSTN, GPRS, LTE
- PLC including PST, OFDM
- RF Mesh
- M-Bus, Wireless, Ethernet
- ZigBee, WiFi

MONITOR

AMI SYSTEM PERFORMANCE
- Head-End System (HES) software
- Market-leading security implementation
- Proven scalability to support the world's largest utilities

CONSUMER PORTALS
- Secure web portal
- Mobile applications

GRID SENSORS AND VISUALIZATION TOOLS
- Sensors and sensing solutions
- Integrators and solutions for mv/lv network monitoring and supervision

IN-HOME DEVICES AND SMART THERMOSTATS
- In-Home Displays and control devices
- Programmable and communicating thermostats, providing Advanced Load Management capabilities
- A secure web portal and optional mobile application allowing to adjust settings remotely

DEMAND RESPONSE
- Monitoring and sensing devices
- Switches and other Load Control devices
- Communication networks and software for sending pricing signals for implementing events

ASSET MANAGEMENT
- Sensors and software solutions for asset monitoring and control
- Tracking multiple parameters and performance characteristics

DISTRIBUTED ENERGY RESOURCE MANAGEMENT
- Sensors and actuators
- Communication networks and devices
- Monitoring and control software
- Micro Energy Management Solutions

POWER QUALITY
- Sensor- and software-based information
- Tracking intermittent source impacts
- Monitoring RMS trends, harmonics and voltage dynamics

OUTAGE MANAGEMENT AND RESTORATION
- Sensors and repeaters
- Communication networks and devices
- Software for optimized distribution network management

ADVANCED GRID AND DATA ANALYTICS
Advanced analytics system software for
- Forecasting and simulations
- Network performance analysis and modeling
- Grid situational awareness

METER DATA MANAGEMENT
- Software for validation, estimation and editing as well as processing and storage of meter data
- Integrating with systems including HES

ACT

SUPPLY SIDE MANAGEMENT
- Sensors and actuators
- Communication networks and devices
- Monitoring and control software
- Micro Energy Management solutions

CONTROL

AUTOMATE

OPERATE

DATA CENTER HOSTING
- Fully staffed, round-the-clock data warehousing
- Offering primary hosting, data backup or full outsourced solutions

MANAGED SERVICES
- Meter reading from one provider, across the entire utility's customer base
- Installation management and logistics, meter maintenance and disaster recovery services
- Configurable system and individual ownership models

VIRTUAL POWER PLANT
- Products and solutions allowing utilities to monitor and adjust system load from the substation to the consumer
- Total solutions and services ensuring energy savings and protecting power quality

SOFTWARE AS A SERVICE
- As an alternative to a fully owned and operated model, Landis+Gyr Cloud offerings provide the flexibility to outsource portions of system support and management to our subject matter experts

Gridstream

Our Solution Suite: Gridstream®
For utilities seeking a flexible partner to build and manage an increasingly intelligent grid, Gridstream is the interoperable, future-ready suite of solutions delivering proven Advanced Metering Infrastructure, Distribution Intelligence and Customer Intelligence applications for today and tomorrow. Gridstream helps utilities and their electricity, heat and gas customers confidently realize the full potential of an investment by providing access to better, faster, more actionable data and the command and control applications to ultimately manage energy better.

GRIDSTREAM® DISTRIBUTION INTELLIGENCE

Distribution Intelligence solutions that enable utilities to model, operate and control their processes and assets

BENEFITS

- Grid security and data privacy
- Enhanced demand forecasting
- Improved power quality
- Effective asset lifecycle management
- Grid resilience and reliability
- Enhanced distribution grid planning
- Grid operational efficiency
- Regulatory compliance and monitoring
- Microgrid management
- Renewables and low-carbon technologies integration
- Transactive energy enablement

KEY FUNCTIONALITIES

- Outage management and restoration after failure on transmission or distribution level
- Distribution Automation
- Distributed energy resource management
- Dynamic voltage management (Volt/VAR)
- Distribution grid visualization of grid processes or status
- Energy storage
- Grid optimization and planning through analytics-aided planning, managing and controlling
- Grid monitoring and management
- Electric vehicle integration
- Demand Side Management to relieve capacity constraints due to limited network capacity

GRIDSTREAM® ADVANCED METERING INFRASTRUCTURE

Advanced Metering Infrastructure solutions for electricity, heat, gas and multi-energy projects that provide real-time, unprecedented access to energy usage data

BENEFITS

- Infrastructure advancement
- Billing accuracy
- Infrastructure communication and integration
- Revenue protection
- Operational efficiency
- Advanced grid functionality enablement
- Regulatory compliance
- Data privacy and security

KEY FUNCTIONALITIES

- Meter Data Management
- Data collection
- Command and control grid assets and selected appliances
- Monitoring consumption and voltage quality by measuring energy usage and supply at the consumer level
- AMI communication network monitoring and management
- Consumer connection and tariff management

GRIDSTREAM® CUSTOMER INTELLIGENCE

Customer Intelligence solutions that enable utilities to create greater engagement with their customers

BENEFITS

- Energy usage awareness
- Flexible pricing
- Improved customer satisfaction
- Data privacy and security

KEY FUNCTIONALITIES

- On-premise energy storage installed in end-consumer homes
- Prepayment
- Consumer consumption data to increase awareness of consumption
- Microgeneration monitoring and control for prosumers
- Demand-side-driven home automation of in-home high-consumption devices by integrating them in a Virtual Peak Plant solution
- Consumer connection and tariff management

The Segments We Serve: Our offerings help energy utilities meet their customers' needs reliably, efficiently and effectively. Our sensors and metering devices, communication technology, networks and software applications meet the vast array of industry requirements.

DISTRIBUTED GENERATION FROM RENEWABLE ENERGY SOURCES

- Measurement
- Power quality
- Demand supply balancing
- Micro Energy Management System including storage

CENTRALIZED LARGE-SCALE GENERATION

- Measurement
- Forecasting
- Billing
- Power quality

PEAK GENERATION

- Forecasting and load shedding
- Demand supply balancing
- Virtual Peak Plant and other types of storage
- Infrastructure monitoring and management
- Capacity response and supply response
- Billing

COMMERCIAL ENERGY CONSUMERS

- Metering devices for electricity, heat and gas
- Load Management and scheduling
- Tariff management and simulation
- Energy consulting and services
- Virtual Peak Plant services

PLUG-IN ELECTRIC VEHICLES (PEVS)

- Distributed Load Control (charging and feed-in cycle)
- Billing

STREET LIGHTING

- Controls, switches and software to manage public lighting

TRANSMISSION AND DISTRIBUTION NETWORKS

- Distribution Automation
- Meters, sensors and other devices for infrastructure monitoring and control
- Load Management and scheduling
- Power quality
- Outage management and restoration
- Demand Response and capacity response

ENERGY UTILITIES

- Planning and forecasting
- Network operations
- Infrastructure protection, management and restoration
- Demand Response
- Energy services and Advanced Metering Management
- Virtual Peak Plant (SM)
- Billing

RESIDENTIAL ENERGY CONSUMERS

- Electricity, heat and gas meters for Time-of-Use / dynamic pricing
- Demand Response / load shedding
- Management and control of microgeneration
- Personal Energy Management tools
- Smart Home applications
- Virtual Peak Plant solutions
- Energy services
- Billing of electricity, heat and gas

LARGE INDUSTRIAL CONSUMERS

- Energy metering for electricity, heat and gas
- Load Management and scheduling
- Tariff management and simulation
- Power quality
- Billing

BIG BUILDINGS

- Energy metering for electricity, heat and gas
- Billing
- Power quality and power factor
- Energy services
- Micro Energy Management including storage
- Virtual Peak Plant solutions

MICROGENERATION FROM RENEWABLES

- Demand supply balancing
- Transformer monitoring and control
- Micro Energy Management including storage
- Billing

MICROGRID

- Metering devices for Time-of-Use / dynamic pricing
- Demand Response
- Load shedding
- Virtual Peak Plant and storage
- Management and control of the operational aspects of microgeneration
- Personal Energy Management and Smart Home applications
- Energy services
- Billing

Our Global Network

« We are very proud to contribute to the Smart Meter rollout in the Netherlands, which will bring tangible benefits to Dutch consumers and strengthen the country's energy supply system. »

Remco Zinkweg,
Sales Director Netherlands, Gouda

« We initiated new supply chain optimization projects based on our expertise and first-class industry contacts to exploit additional synergy and cost-savings potentials. »

Matteo Birolini,
Vice President Quality Management EMEA, Zug

« Rapid and sometimes radical changes fuel uncertainty. We overcome that uncertainty by harmonizing tools and processes to ensure interoperability, improve quality and give utilities more flexibility to meet changing customer requirements. »

Bruno Ricciardi,
Head of GRD Device Governance, Zug

« Combining smart electricity and gas metering solutions represents a significant step towards helping society manage energy better. »

Paul Blackburn,
Head of Research & Development Gas Metering, Stockport

« Smart solutions are created by smart people. That's why Landis+Gyr invests in talent development initiatives that enable us to attract, grow and retain the best people in the industry. »

Kate Jarrod,
Head of Talent Management & Organization Development EMEA, Zug

« As a solutions provider, we don't just sell products. We also deliver, install and operate solutions that help our customers to train their employees and re-engineer their processes so they can gain the optimal benefit from their Landis+Gyr solution. »

Juha Torstensson,
Vice President Projects and Services, Jyskä

« Smart Grid solutions are revolutionizing the power industry's business practices by making the effective and efficient management of electricity supply and demand much easier to achieve. »

Thierry Pollet,
Strategy & Business Development Smart Grid EMEA, Zug

Corporate Social Responsibility
Landis+Gyr understands its responsibilities as a corporate citizen and continues to drive a number of major efforts to meet the highest standards in environmental awareness as well as business ethics across the entire value chain of the Group's products and services. The entire staff works extremely hard to preserve limited resources and promote the sustainable use of energy, thereby contributing to both today's and the future's collective welfare.

Demonstrating Responsibility

Andreas Umbach, President and Chief Executive Officer

In the financial year 2015/16, the execution of existing programs as well as new initiatives resulted in the further reduction of greenhouse gas emissions and use of hazardous chemical substances. Landis+Gyr will continue its untiring and extensive efforts to mitigate the Group's environmental impact throughout the entire design and production process, and to develop as well as deliver market leading, environmentally conscious technologies and products.

Safeguarding Health and Safety

Landis+Gyr has well established standards to ensure socially balanced, healthy and safe working conditions within the Group's operations and its supply chain. Landis+Gyr operates in full compliance with the laws, rules and regulations of the countries in which it is active. Life-cycle and recycling considerations are integral factors used for the design and production processes in the entire value chain of the Group's products and services. In addition to ISO 14001 certification throughout the Company and at all its key suppliers, Landis+Gyr requires its tier two suppliers to acknowledge and implement the EICC (Electronics Industry Citizenship Coalition) Code of Conduct.

Constant Reduction of Emissions and Pollution

In 2015/16, Landis+Gyr continued to harmonize its social and environmental activities, which are fully aligned with Toshiba Corporation's CSR strategy. In parallel, additional resources were devoted to the environmental training of employees.

Landis+Gyr routine monitors the performance of its waste treatment and emission control systems in order to ensure their effectiveness and to identify potential improvement. Additionally, Landis+Gyr works closely with its suppliers to ensure that they comply with and provide evidence of their compliance with the Landis+Gyr Quality, Environmental, Health & Savety Policy through the use of agreed policies and procedures. These include declarations of compliance, self-assessment and third-party reviews and auditing.

Water: Increased Use of Alternative Water Sources

Landis+Gyr undertook several projects to reduce water consumption in the reporting period. However, more water was used than in the previous year due to higher production volumes in certain facilities where product volumes grew significantly. In 2015/16, water consumption within the Landis+Gyr Group increased by 8.5 % to 116,340 m³ from 107,226 m³ in the prior year. While 68.4 % (2014/15: 63.1 %) of total water spending was used by level-1 sites, consumption of level-2 sites amounted to 24.6 % (2014/15: 29.1 %). Level-3 sites accounted for 7.0 % of the total amount (2014/15: 7.8 %).

Importantly, the amount of rain water collected and used onsite increased by 12.5 % to 16,646 m³ in 2015/16 from 14,793 m³ in 2014/15. In Brazil, Landis+Gyr installed meters to measure the exact rain water intake. Additionally, the water consumed from own wells increased slightly by 2.2 % to 35,379 m³ in 2015/16 from 34,627 m³ in 2014/15.

Waste: Focus on Landfill Reduction

Landis+Gyr seeks to reduce or prevent waste through in-process modifications, reuse and recycling. Waste management also includes the final treatment and disposal of waste at landfills and incineration facilities.

One of the key targets in Toshiba's Environmental Action Plan during recent years was to bring the landfill ratio down. As part of a multi-year effort to address our landfill ratio, particularly focusing on main landfill generators, the Company can now report that the actions initiated, such as further waste segregation, have at last led to success. Overall landfill volumes were reduced significantly, 25.1 %, compared to the previous year – driven by sites such as Melbourne, Corinth, Curitiba, Stockport and Northfields.

The total produced waste in 2015/16 on the other hand increased by 42.5 % to 3,949 metric tons from 2,771 metric tons in the prior year. 78.9 % of total waste came from level-1 (2014/15: 69.9 %) and

« We are pursuing new technologies and green energy management solutions that contribute to a safe, secure and comfortable future for society. Landis+Gyr measures and actively manages our operational processes to improve the quality of life for our employees, customers and the public. »

Andreas Umbach,
President and Chief Executive Officer

2015/16 ENVIRONMENTAL KEY FIGURES

WATER	+8.5 %	As a result of increased consumption at level-1 sites due to higher intensity production processes (product mix change)
LANDFILL	– 25.1 %	As a result of various local measures
CHEMICALS	– 21.9 %	As a result of further reduction of chemicals identified as hazardous
CO_2E	CO_2 – 5.0 %	Overall CO_2 emissions further decreased by 5.0 %. Since the program's inception in 2007, the reduction amounts to 20.1 %.

ENVIRONMENTAL IMPACT

WATER

		TOTAL
2012/13	56,040 m³ groundwater	132,710 m³
2013/14	51,234 m³ groundwater	135,395 m³
2014/15	34,627 m³ groundwater	107,226 m³
2015/16	35,379 m³ groundwater	116,340 m³

Overall totals of level-1, level-2 and level-3 sites

WASTE

	Level-1	Level-2	Landfill volume	Landfill ratio	TOTAL
2012/13	2,421 t	n.a.	n.a.	n.a.	2,421 t
2013/14	2,441 t	690 t	534 t	18 %	3,131 t
2014/15	1,936 t	835 t	654 t	24 %	2,771 t
2015/16	3,118 t	832 t	490 t	12 %	3,949 t

CHEMICALS

		TOTAL
2012/13	23.2 t	23.2 t
2013/14	20.9 t	21.0 t
2014/15	17.3 t	17.4 t
2015/16	13.5 t	13.6 t

Level-1 data

Level-1 sites: production and major R&D centers
Level-2 sites: smaller production facilities
Level-3 sites: sales offices

CO_2 PER SCOPE

CO_2	SCOPE 1	SCOPE 2	SCOPE 3	TOTAL
2007	7,143 t	27,762 t	5,521 t	40,426 t
2008	8,178 t	24,698 t	6,637 t	39,513 t
2009	7,058 t	23,770 t	4,633 t	35,461 t
2010	6,680 t	23,976 t	4,582 t	35,238 t
2011	5,690 t	24,133 t	5,237 t	35,060 t
2012/13	5,585 t	22,869 t	5,467 t	33,921 t
2013/14	5,911 t	22,487 t	6,225 t	34,623 t
2014/15	4,809 t	22,774 t	6,421 t	34,005 t
2015/16	3,516 t	22,470 t	6,311 t	32,296 t

Scope 1: all direct GHG emissions
Scope 2: indirect GHG emissions from consumption of purchased electricity, heat or steam
Scope 3: other indirect emissions

21.1 % from level-2 sites (2014/15: 30.1 %). The significant volume increase is primarily due to production increase (metal, e-waste in Corinth, Stockport and Reynosa).

Chemicals: Downward Trend Continues

Landis+Gyr aims to minimize the use of chemicals and corresponding emissions in the entire value chain of the Group's products and services. Therefore, Landis+Gyr is promoting chemical management projects to phase out the use of chemicals identified as hazardous.

In 2015/16, the total use of chemicals decreased by 21.9 % to 13.6 metric tons from 17.4 metric tons in the prior year. Level-1 sites accounted for most of the chemicals impact, whereas use of chemicals at level-2 and level-3 sites was negligible. Since beginning this effort in 2012/13, the use of chemicals has decreased notably, by 9.6 metric tons, which is equivalent to a reduction of 41.2 %.

Carbon Footprint:

Further Decrease in Average Emissions per Product

Since 2007, Landis+Gyr has recorded its carbon footprint in collaboration with an independent company that supports the process and validates the greenhouse gas (GHG) emissions. The 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). Besides the GHG Protocol, the Carbon Disclosure Project (CDP) is an important reporting standard for Landis+Gyr. Total CO_2 emissions within the Landis+Gyr Group amounted to 32,296 metric tons CO_2e in 2015/16, down by 5.0 % compared to 34,005 metric tons CO_2e in 2014/15.

2015/16 by Scope

In accordance with accepted global standards, the carbon footprint has also been documented in scopes. The decrease in the overall emissions can mainly be attributed to Scope 1 (direct emissions, down by 26.9 % to 3,516 metric tons CO_2e accounting for 10.9 % of total) and was mainly related to reduced gasoline consumption in company vehicles. Scope 2 (indirect emissions associated with the generation of purchased electricity or district heating) showed a slight improvement of 1.3 % to 22,470 metric tons CO_2e or 69.6 % of the total. The improvement is attributed to reductions in electricity and district heating consumption in Asia Pacific, North and South America. Business air travel, as part of Scope 3 (indirect emissions from sources neither owned nor controlled by the Company), contributed 6,311 metric tons CO_2e, down by 1.7 % whilst amounting to 20.0 % of Landis+Gyr's total carbon footprint.

Between 2007 and 2015/16, Landis+Gyr has achieved significant reductions in emissions related to its R&D and manufacturing processes. Since 2007, Scope-1 emissions decreased by 50.8 %, whereas Scope-2 emissions dropped by 19.0 %. However, during the same period Scope-3 emissions increased by 14.3 % due to augmented joint business development activities with Toshiba Corporation.

2015/16 by Economic Intensity Ratios

Ratio indicators provide information on performance relative to a business type. The indicators chosen to express GHG intensities are:
- emissions per product
- emissions per employee
- emissions per 10 m² of floor area
- emissions per USD 100 turnover

In 2015/16, the average Group emissions amounted to 1.5 kg per product, 4.3 metric tons per employee, 1.4 metric tons per 10 m² of floor area and 1.7 kg per USD 100 of turnover. The charts also show the values for the previous years.
Between 2007 and 2015/16, Landis+Gyr has achieved significant reductions in emissions. A comparison on a per-unit-of-production basis reveals a reduction in emissions from 2.3 kg per product in 2007 to 1.5 kg in 2015/16, signifying an improvement of 34.8 %. Similarly, average emissions per employee decreased by 33.8 % to 4.3 metric tons in 2015/16 from 6.5 metric tons in 2007, and emissions per 10 m² of floor area decreased by 22.2 % and stabilized in 2015/16 at 1.4 metric tons. On a per-turnover basis, emissions decreased from 2.8 kg per USD 100 turnover in 2007 to 1.7 kg in 2015/16, which is equivalent to a reduction of 39.3 %.

CO_2E BY ECONOMIC INTENSITY RATIOS

CO_2 KG CO_2 PER PRODUCT

2007	2.3 kg
2008	2.5 kg
2009	2.2 kg
2010	2.1 kg
2011	1.8 kg
2012/13	1.6 kg
2013/14	1.6 kg
2014/15	1.5 kg
2015/16	1.5 kg

METRIC T CO_2 PER EMPLOYEE

2007	6.5 t
2008	6.5 t
2009	6.4 t
2010	6.0 t
2011	5.7 t
2012/13	5.4 t
2013/14	5.1 t
2014/15	4.8 t
2015/16	4.3 t

METRIC T CO_2 PER 10 M² FLOOR AREA

2007	1.8 t
2008	1.5 t
2009	1.7 t
2010	1.5 t
2011	1.6 t
2012/13	1.5 t
2013/14	1.5 t
2014/15	1.4 t
2015/16	1.4 t

KG CO_2 PER USD 100 TURNOVER

2007	2.8 kg
2008	2.4 kg
2009	2.3 kg
2010	2.0 kg
2011	1.9 kg
2012/13	1.7 kg
2013/14	1.8 kg
2014/15	1.8 kg
2015/16	1.7 kg

Our Global Network

« We successfully extended our range of solutions to meet developing customer needs by adding new control and steering functions that improve the management of energy consumption. »

Jamal Cheema,
GM Solutions & Customer Delivery Asia Pacific, Sydney

« We've been highly successful at helping utilities make their energy networks more efficient and promoting the sustainable use of resources by realizing the full potential of the Smart Grid. »

Jay Lasseter,
Regional Sales Director North America, Alpharetta

« We are proud to support utilities as they rise to the challenge of maintaining an efficient, reliable and adaptive grid while managing demanding consumer requirements and transforming their business models. »

Ganesh Kashyap,
VP Customer Operations North America, Alpharetta

« We expanded our Advanced Metering Infrastructure (AMI) solutions by adding data management and analytics functionalities, thereby leading the way to new added value for our customers. »

Matt Hyne,
Head R&D Asia Pacific, Sydney

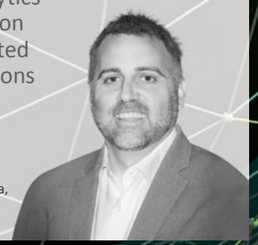
« With the accreditation of Landis+Gyr's intelliHUB metering platform, we are well positioned to offer Smart Metering services in response to reforms within the Australian Energy market. »

Andrew Halliday,
GM Portfolio Management Australia New Zealand, Sydney

« Our customers expect ultra-high stability and reliability from Landis+Gyr technology. To make sure we meet their expectations we invest approximately USD 150 million in R&D year after year. »

Brendan Hearn,
Vice President Finance Americas, Alpharetta

« Data management services and analytics are the key catalysts driving innovation and they are now being widely adopted by utilities to transform their operations and managerial capabilities. »



John Radgowski,
Vice President Solutions Product Management North America, Alpharetta

Executive Management: For 120 years Landis+Gyr has had a proven, winning formula. Our values are dedicated to customer focus, having an innovative spirit, remaining a trusted partner and being committed to quality. Our mission has been to help the world manage energy better. This solid foundation will ensure that no matter what technological, economic, social or demographic developments drive transformation in the utilities industry, Landis+Gyr will be shaping the products, solutions and services that our customers rely on.

Andreas Umbach
President and Chief Executive Officer

- Appointed in 2000; Swiss and German
- Various executive positions within Siemens
- Master's degree in Mechanical Engineering, TU Berlin; MBA University of Texas, Austin

Hiroshi Kurihara
Chairman of the Board of Directors

- Appointed in 2013; Japanese
- Executive Officer and corporate Vice President Toshiba Corporation; Chairman of the Board of Directors of Landis+Gyr
- BA in Instrument Technology, Keio University

Richard Mora
Executive Vice President and Chief Operating Officer

- Appointed in 2014; American
- 2000–2013 Executive Vice President Landis+Gyr Americas; previously various management positions within Siemens and GE Capital
- BA in Economics, Stanford University

Jonathan Elmer
Executive Vice President and Chief Financial Officer

- Appointed in 2012; British
- Formerly CFO of Landis+Gyr EMEA and CEO of AMPY Metering
- Degree in Economics and Politics, University of Exeter; Member of the Institute of Chartered Accountants in England and Wales

Roger Amhof
Executive Vice President and Chief Strategy Officer

- Appointed in 2014; Swiss
- Formerly Senior Partner of Ernst & Young (EY) Switzerland and Global Client Service Partner for selected major key accounts of EY Global
- Master in Economics, University of Fribourg, Switzerland

Dieter Hecht
Executive Vice President and Chief Procurement Officer

- Appointed in 2003; German
- Former Executive Board Member E.ON (Sales, Power Trade) and GE ITS Europe
- Degree in Marketing and HR, University of Applied Sciences Munich; Executive Program at GE University

Prasanna Venkatesan
Executive Vice President Americas

- Appointed in 2014; American
- Previously Senior Vice President & General Manager for Landis+Gyr North America and various senior management positions within Cellnet and Schlumberger
- Master of Science in Industrial Engineering from University of Oklahoma, Norman

Oliver Iltisberger
Executive Vice President EMEA

- Appointed in 2014; German
- Most recently Executive Vice President Asia Pacific and various management positions within Landis+Gyr and Siemens
- Joint Master's degree in Mechanical Engineering and Business Administration, TU Darmstadt

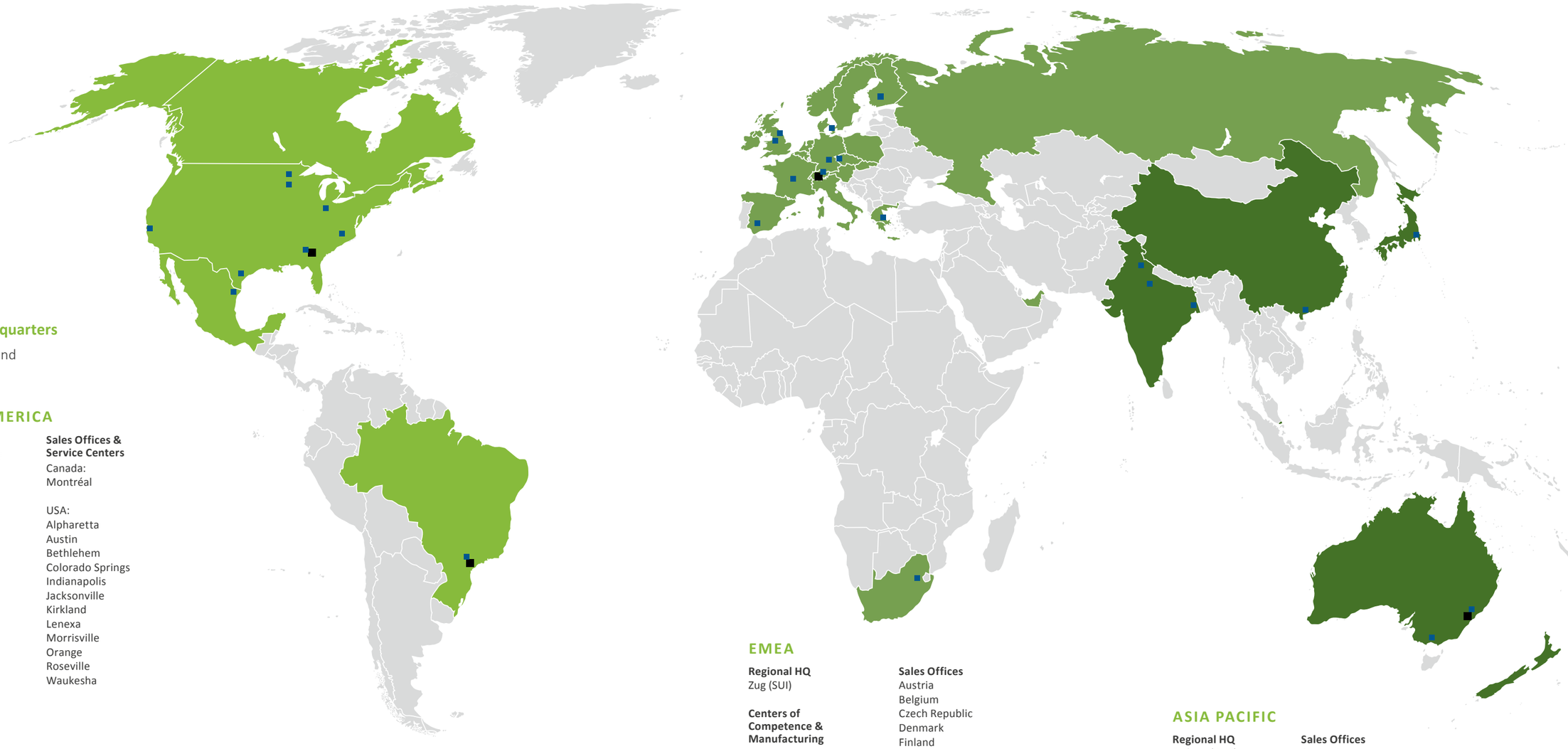
Ellie Doyle
Executive Vice President Asia Pacific

- Appointed in 2014; American
- Most recently Senior Vice President for Strategy and Growth Landis+Gyr Americas, following 15 years of various management positions within Landis+Gyr and Siemens
- JD from University of Virginia School of Law

Oliver Iltisberger — Executive Vice President EMEA
Jonathan Elmer — Executive Vice President and Chief Financial Officer
Dieter Hecht — Executive Vice President and Chief Procurement Officer
Roger Amhof — Executive Vice President and Chief Strategy Officer

Ellie Doyle — Executive Vice President Asia Pacific
Hiroshi Kurihara — Chairman
Andreas Umbach — President and Chief Executive Officer
Richard Mora — Executive Vice President and Chief Operating Officer
Prasanna Venkatesan — Executive Vice President Americas

Group Companies



Group Headquarters

Zug, Switzerland

NORTH AMERICA

Regional HQ
Alpharetta (USA)

Centers of Competence
Alpharetta
Bloomington
Lafayette
Pequot Lakes
San Antonio

Manufacturing
Reynosa (MEX)

Sales Offices & Service Centers
Canada:
Montréal

USA:
Alpharetta
Austin
Bethlehem
Colorado Springs
Indianapolis
Jacksonville
Kirkland
Lenexa
Morrisville
Orange
Roseville
Waukesha

SOUTH AMERICA

Regional HQ
Curitiba (BRA)

Center of Competence & Manufacturing
Curitiba (BRA)

Sales Offices & Service Centers
Brazil:
Belem
Curitiba
Rio de Janeiro
São Paulo
São João de Meriti

EMEA

Regional HQ
Zug (SUI)

Centers of Competence & Manufacturing
Corinth (GRE)
Dunfermline (GBR)
Holte (DAN)
Johannesburg (RSA)
Jyskä (FIN)
Manchester (GBR)
Montluçon (FRA)
Northfields (GBR)
Nuremberg (GER)
Prague (CZE)
Sevilla (ESP)
Stockport (GBR)
Zug (SUI)

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

ASIA PACIFIC

Regional HQ
Sydney (AUS)

Centers of Competence
Melbourne (AUS)
Noida (IND)
Sydney (AUS)
Tokyo (JAP)
Zhuhai (CHN)

Manufacturing
Baddi (IND)
Joka (IND)
Melbourne (AUS)
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New Zealand
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