





Transforming energy delivery

The grid of yesterday and today is rapidly changing. New strategies for the generation, transmission and distribution of energy promise greater efficiency and reliability. At the core of this transformation is the smart grid technology that enables integration of new energy resources. This unprecedented connectivity and access to data is bringing the Internet of Things to the energy sector. Advanced energy management systems can now deliver remarkable control, with greater efficiency, better insights and a more conscious use of resources.

However, these opportunities come with challenges. Regulations are changing, customer expectations are growing and integration of distributed energy resources is becoming the norm. Solutions that assemble and manage increasingly intelligent and complex systems are required. As a result, utilities need a knowledgeable partner with deep expertise who can provide the confidence and scale to realize these opportunities and face any challenges head on.

At Landis+Gyr, our mission is to help energy utilities, their customers and communities manage energy better.

This is a new world of energy, and we are ready for it.

Let us show you how.

‘Smart Grids open up unprecedented possibilities for consumers... Smart Grids will be the backbone of the future decarbonised power system. They will enable the integration of vast amounts of both on-shore and off-shore renewable energy and electric vehicles, while maintaining availability for conventional power generation and power system adequacy.’

European Commission: ‘Smart Grids from Innovation to Deployment’

‘Smart Grid technologies will allow the grid to better adapt to the dynamics of renewable energy and distributed generation, helping utilities and consumers more easily access these resources and reap the benefits.’

U.S. Department of Energy Electricity Advisory Committee

Gridstream[®]: Our solution for an intelligent grid

Our answer to the current and coming challenges is Gridstream. It's a combination of technology and services that help utilities manage energy better. At Landis+Gyr, we have been investing in it and shaping its evolution in the global marketplace for more than a decade. Our unique suite of proven solutions encompasses big data, infrastructure, applications and expertise, bringing intelligence to all levels of the utility universe. From generation, to distribution, to consumption, we provide the tools to address the challenges of today and tomorrow.

The Gridstream Suite

- Customer
- Intelligence

Enables greater engagement with utility customers through shared insights and control capabilities.

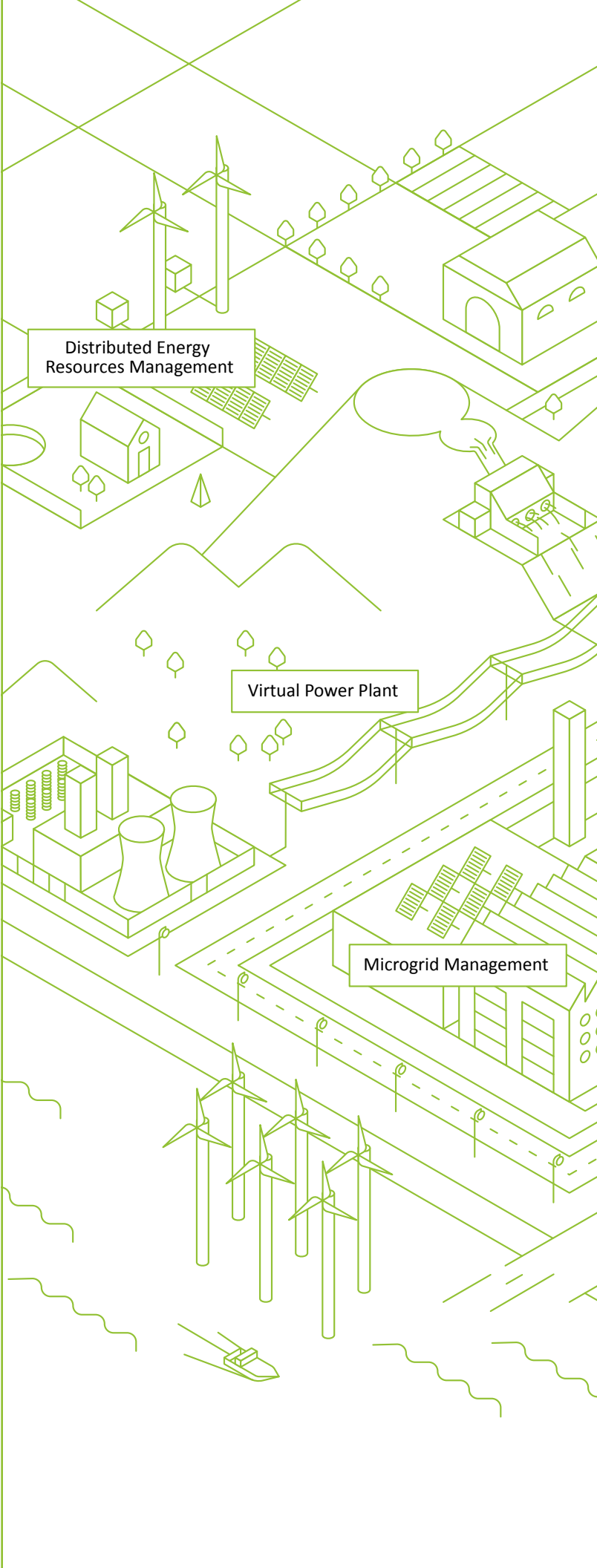
- Advanced
- Metering
- Infrastructure

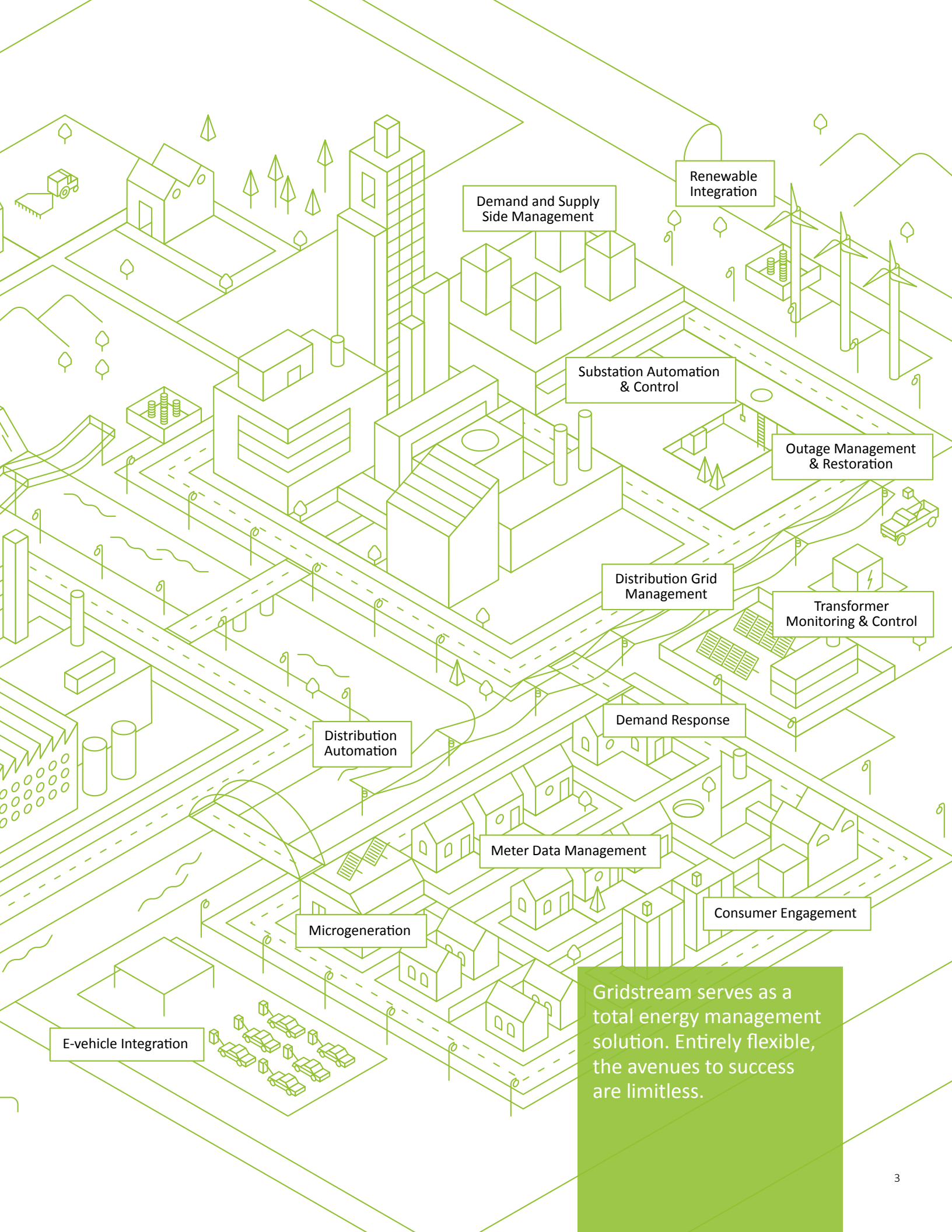
Provides comprehensive, real-time access to information from the edge of the distribution network: energy usage data, outage metrics and more.

- Distribution
- Intelligence

Focuses on operating the dynamic distribution system most effectively, from modeling and controls processes to intelligent asset management.

Gridstream is interoperable, expandable and future proof – providing utilities with a solution that meets their specific needs and priorities. This offers utilities a modular approach to configure a tailored solution of products that work intelligently together.





Demand and Supply Side Management

Renewable Integration

Substation Automation & Control

Outage Management & Restoration

Distribution Grid Management

Transformer Monitoring & Control

Distribution Automation

Demand Response

Meter Data Management

Consumer Engagement

Microgeneration

E-vehicle Integration

Gridstream serves as a total energy management solution. Entirely flexible, the avenues to success are limitless.

Gridstream delivers: Customer Intelligence

In the digital age, utility customers demand more visibility into, insight around and control over their energy usage.

That's why Landis+Gyr invests in technologies that enable utilities to engage better with their customers and meet end customer needs via software, platforms and products that help them manage their energy usage better.

Functions include:

- Access to energy usage data
- Billing options, prepayment and tariff management
- Microgeneration management
- Home automation
- Consumer engagement programs

'Now, with all smart meters installed, Helen's customers enjoy the benefits of smart metering. Access to precise hourly reporting of electricity usage as a whole enables them to improve energy efficiency in their homes. New services, like load controls based on electricity market price, make further cost savings possible for Helen's customers.'

Manager of Customer Relationship Management at Helen Electricity Network, Finland

'Customers, for the most part, want to help utilities conserve resources. We selected Landis+Gyr because we had a strong AMI network already deployed and wanted to leverage our network to add other devices, such as thermostats, load control switches and eventually some distribution automation equipment.'

Smart Grid Project Manager Colorado Springs Utilities, United States



Engaging consumers with better technology

Survival in a competitive environment depends on how successfully utilities manage existing customers, satisfying their demands, all while striving to gain new business.

Good customer engagement tools enable utilities to meet these demands.

At Landis+Gyr, we invest in technology, tools and solutions to create energy usage awareness and allow for the flexible and customizable pricing end customers want. Only informed consumers can understand the results of a specific behavior or action. Those who are well-informed tend to be more tolerant in responding to their utility's operational needs.

Customer Intelligence functionalities and features include prepayment meters for electricity and gas that allow for different consumption models and access to usage data. Tools for microgeneration monitoring give prosumers avenues to visualize and manage their own production.

Home automation products facilitate demand side driven load management through the automation of in-home, high consumption devices and smart thermostats. Customer tariff and connection management allows for intelligent processing of user related energy data to enable customer-centric applications such as segmentation, tariff schemes or demand forecasting.

Our solution streamlines the utility-consumer relationship, while delivering benefits to both.

Gridstream delivers: Advanced Metering Infrastructure

Advanced metering goes far beyond the simple reading of a meter. It sends and receives information from every touchpoint on the distribution system – enabling big data for intelligent operation.

Landis+Gyr offerings allow for real-time communication and control of smart meters for electricity, heat and gas. At the same time, sensing devices and data management software ensure data is available and correct for analysis and billing.

Functions include:

- Measurement and monitoring
- Communications network monitoring and management
- Command and control
- Data collection
- Meter data management
- Customer connection and tariff management

‘Smart Meters are central components of intelligent networks. I am delighted that we are involved in the development of these metering systems with Landis+Gyr, an experienced and capable partner.’

Member of the Board of Directors
at EnBW Regional, Germany

‘We are very glad to have partnered with Landis+Gyr for our smart meter deployment because they offer the best value proposition in the market.’

Directeur Infrastructure de Mesurage
Avancée Hydro-Quebec, Canada



Improving management of your operation and resources

Advanced Metering Infrastructure solutions provide unprecedented, real time access to energy usage data.

Billing accuracy, revenue protection, and operational efficiency – these are some of the requirements of utilities that strive to be more competitive and meet customer expectations. Furthermore, infrastructure advances and new grid functionality call for a communication network able to handle an influx of data, while ensuring privacy and security.

Gridstream Advanced Metering Infrastructure is the answer.

Smart meters for electricity, gas and heat work alongside switches and monitoring devices to collect the granular information necessary to create relevant offers and to fulfill specific command and control tasks. Multilayer and multi technology communication networks enable a new level of operational efficiency, leading to a deeper understanding of the grid. Reliable data collection and powerful meter data management solutions effectively manage big data. At last, utility companies have the data to make better business decisions.

Gridstream delivers: Distribution Intelligence

Distribution Intelligence is about seeing what is happening on the grid and providing utilities with the tools to take action, as needed, to ensure the reliable and efficient delivery of energy in a dynamic environment.

In a word, Gridstream makes distribution systems smarter. An increasingly intelligent grid that can model, control, and seamlessly optimize assets is required to manage supply and demand, adjust to two-way power flow from distributed generation, and ensure power quality remains high. Gridstream provides a combination of intelligent sensors, storage, communications and software technologies to get the job done.

Functions include:

- Outage and restoration management
- Distribution automation
- Distributed energy resource management
- Distribution grid visualization and optimization
- Energy storage
- Grid planning, monitoring and management
- Electric vehicle integration
- Demand and supply side management

‘This is the first and only internationally-backed project in the U.S. to demonstrate how to provide a significant proportion of renewable power on the grid to meet a community’s residential needs.’

Utility Manager Department of Public Utilities
County of Los Alamos, USA

‘Burbank has ushered in the new era of prediction by utilizing data analytics. The days of taking best guess estimates to manage grid assets are over.’

Electrical Engineering Associate
Burbank Water and Power, USA



Connecting distribution assets for better integration and control

Distribution Intelligence solutions enable utilities to model, operate and control their processes and assets in smarter ways.

Utility investments need clear priorities: boosting grid operational efficiency, solving future problems, and providing grid security and data privacy – all in accordance with local law and regulations.

Distributed generation from renewables makes demand forecasting and distribution grid planning more important than ever. Transactive energy enablement, microgrid management and asset lifecycle management become essential for grid resilience and reliability. In addition, utilities must prepare for the integration of low carbon technologies and the continuous improvement to power quality.

Landis+Gyr's Gridstream Distribution Intelligence solutions meet these needs, modeling, controlling and operating utilities distribution processes and assets in dynamic, intelligent ways. Our software offerings allow for utilities to easily take actionable decisions based on the input of their assets' big data.

As a result, our utility customers can develop genuinely intelligent distribution grids.

The Gridstream advantage

For access to better, faster, more actionable data and the command and control applications to ultimately manage energy better, we developed and will continuously evolve the Gridstream solution suite. Gridstream is ready to face utility challenges – today and into the future.

- **Interoperable** – an open solution that integrates with other third party vendors
- **Proven** – with a clear and successful track record across the whole spectrum of energy management
- **Future-ready** – we're always developing and employing the next generation of energy technology
- **Flexible** – with tailored and modular solutions to meet unique utility needs and challenges



Customizable solutions to meet utilities' unique needs and challenges.



At Landis+Gyr, our mission is to help energy utilities, their customers and society manage energy better.

For our customers, it means peace of mind, the kind that comes from streamlined processes that deliver increased precision, reliability and energy efficiency.

To customers of energy it means the ability to monitor and manage their energy usage and to reduce their environmental footprint for the benefit of the society. To each of us at Landis+Gyr, it means harnessing the power of our creative energy to design, develop and market industry leading products and solutions that deliver real business value!



What we believe in

We adhere to the values that drive our business and our people. They are alive in everything we do, from the most complex technology, to everyday contact with our customers.

■ Customer focus

Every action we take focuses on the customer as our number one priority. We offer them the peace of mind that a century of experience provides

■ Innovative spirit

Our people, knowledge and resources give us the creative edge to design products and solutions that move the industry forward

■ Trusted partner

We prove to our customers – through every interaction – that we are committed to developing long-term relationships

■ Committed to quality

In every process, our entire staff effort is focused on standards-based quality and flawless execution

Gridstream can help you rise above the challenges of today and tomorrow.

Visit landisgyr.com to learn more.

A world leader in energy management

- More than **5,700 employees**
- Operating in over **30 countries** across **5 continents**
- Installed and operating smart metering systems for more than **1,000 energy companies**
- Installed base of more than **300 million electricity meters**
- Providing managed services to over **15 million homes and businesses**
- **Serving over 250 utilities** with hosted, SaaS and managed service support



