iskraemeco
BY ELSEWEDY ELECTRIC

# Innovating for **Life.**

Company profile

# Innovating for **Life.**

# Content

# Innovating for **Life.**

Innovation is the engine that drives growth, competitiveness, and the capacity to better serve our customers and address global challenges. While preparing for the future, we are rethinking the energy and water industries, creating digital platforms, and exploring new possibilities.

Using the power of data and the latest technology, we create digital platforms that enables cities, businesses, and individuals across the globe to optimize their energy and water consumption by ensuring safety, reliability, and cybersecurity. We act as enablers of the green and digital transformation. Utilizing technology and services, we facilitate demand-side flexibility and active market participation to optimize energy and water efficiency. Our pursuit of net-zero emissions is ultimately leading to environmental protection and more sustainable living in the future.

- With cutting-edge technology at its core, we integrate all the devices, systems, and services into comprehensive and customized end-to-end solutions that optimize processes, costs, and resource usage.

- We develop digital platforms that translate data into knowledge and wisdom. Our applications empower utilities and cities to make smart decisions ensuring a better life and future for their businesses and customers.

- Our customers are empowered throughout the world to overcome challenges by turning them into new opportunities for efficient energy and water consumption.

## Mission.

**Iskraemeco supports its customers in mastering their digital transformation journey toward a more sustainable and efficient future.**

## Vision.

**We aim to be one of the most innovative platform companies in tackling energy, water, and cities challenges while advancing sustainable living.**

# About us.

Iskraemeco stands as a globally renowned brand in energy and water management solutions, spanning the globe with its impactful offerings.

Leveraging over almost 80 years of extensive, hands-on experience, we've developed an in-depth understanding of customer challenges, which enables us to consistently deliver superior products, ingenious solutions, and impeccable services. Our influence extends across more than 80 countries, which is a testament to our far-reaching impact. Since 2007, we have been a vital subsidiary of the renowned Elsewedy Electric Group, sharing same vision for a smart, digital, and energy-efficient future. Collaboratively, the two entities strive to engineer innovative solutions to meet the world's growing energy and water demands.

As an industry pioneer, Iskraemeco is unwavering in its dedication to innovative digital products and services. Our cutting-edge offerings are tailored to resolve the most fundamental challenges faced by our valued customers. We are reimagining the energy and water industries, expending territories, always keeping an eye on the future.

Our forte lies in crafting smart solutions and services tailored or the energy and water industries. By synergizing our extensive experience and industry acumen with cutting-edge IoT and AI technologies, we enable our customers to harness the potential of data, thereby facilitating their digital transformation journey and seizing opportunities.

Today, Iskraemeco is embracing the limitless realm of digitalization and software development of energy and water industry. We place consumers at the center of our efforts and empower them with information that helps them reduce energy costs through enhanced efficiency and flexible demand response mechanisms. Moreover, our solutions improve the energy efficiency and resilience of communities by aligning environmental sustainability and digital transformation with pioneering technology and innovative strategies.

Through digitalization we are substantially reducing Non-Revenue Water (NRW), helping water companies to optimize their operations and empowering communities to conserve this scarce resource.

By expanding our focus to software solutions, Iskraemeco asserts itself at the forefront of the digital transformation. Our commitment to innovation and cutting-edge technologies paves the way for new growth and prosperity. Central to our operations is the integration of digital platforms, which equips us with a robust data management framework. This catalyzes value creation and stimulates new initiatives. We wholeheartedly exploit data science initiatives that drive innovative solutions for energy consumption optimization, grid modernization, NRW reduction, streamlining operations, and the dual digital-green transformation.

Together with our partners, utilities and cities, we co-create sustainable networks that act as pivotal drivers of the green transition. We innovate for Life.

# We are Iskraemeco.

A successful company is fueled by a world-class talent pool. In Iskraemeco, we are building unique competitive advantages and strengthening our leading position in the industry through innovation, flexibility, agility, ownership, and empowerment.

Iskraemeco professionals have been transforming their invaluable expertise, ingenuity, and thorough understanding of our customers' needs into comprehensive energy and water management solutions.

Commitment, integrity, and learning spirit are essential to our growth-oriented corporate culture. Our employees consistently exceed customer expectations. We focus on building long-term relationships to achieve sustainable business growth. Through our relentless efforts and unwavering commitment to our employees, partners, and customers, we endeavor to make the energy and water markets smart and efficient, therefore creating a world in which technology meets the needs of nature.

Teamwork, experience, and partnership are the pillars that enable us to achieve shared goals and build a successful company — together, we can accomplish anything!
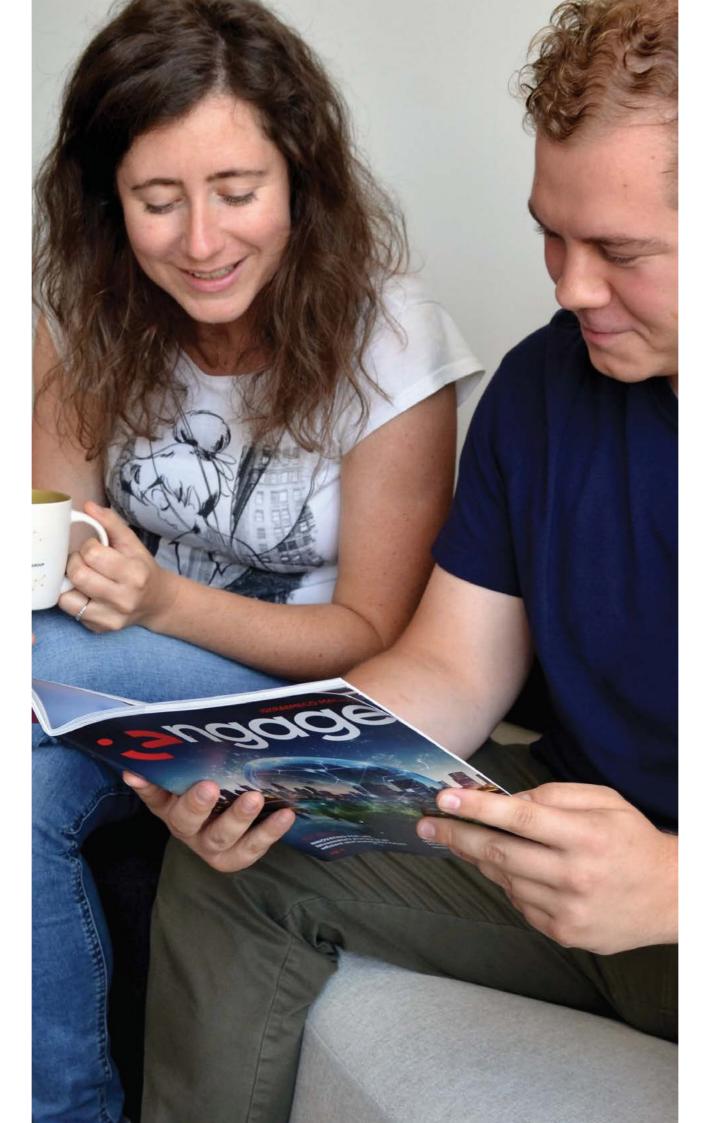
# Our values drive us.

**01**

### We foster cultural diversity, collaboration and teamwork.

By embracing diversity and promoting inclusiveness, we inspire creativity, ignite passion, and boost performance. We are bringing together individuals from different cultural backgrounds, with various work experiences and distinct perspectives. We learn from, encourage, trust and respect one another. **We are one team, strengthened by passion and talent.**

**02**

### We act with integrity.

What we do, and how we do it, defines us. We communicate openly and we are responsible for our actions. We display reliability and trustworthiness, and we have high moral and ethical standards. We operate with respect, we listen with empathy, we care for and support each other. **We treat our business partners, consumers, and one another with trust, honesty, and courtesy.**

**03**

### We strive for excellence.

By chasing perfection, we catch excellence. As a company, we aim to deliver top-quality products, advanced solutions, and superior services. We continuously strive for new ways to perform and to improve. Our philosophy is to simplify the lives of our customers and make them more efficient. **We always strive to add value to our products and services and exceed expectations.**

**04**

### We commit to win.

We are empowered, accountable, and committed to success. We passionately pursue our goals; we seek and grow competitive advantages, and we are determined to win. We transform our experience into learning and growth, and we courageously advance towards the future. **We are eager and brave in our pursuit of designing game-changing solutions and empowered to reach our full potential.**

**05**

### We innovate to make a difference.

Innovation, agility, and creativity are fundamental elements of our culture. Our success and competitive edge rely on innovation in all aspects of our business and daily lives. **We are flexible and quick to seize on new trends, technologies, and possibilities. We build a better, more sustainable future and enhance the lives of people and communities while preserving our planet.**
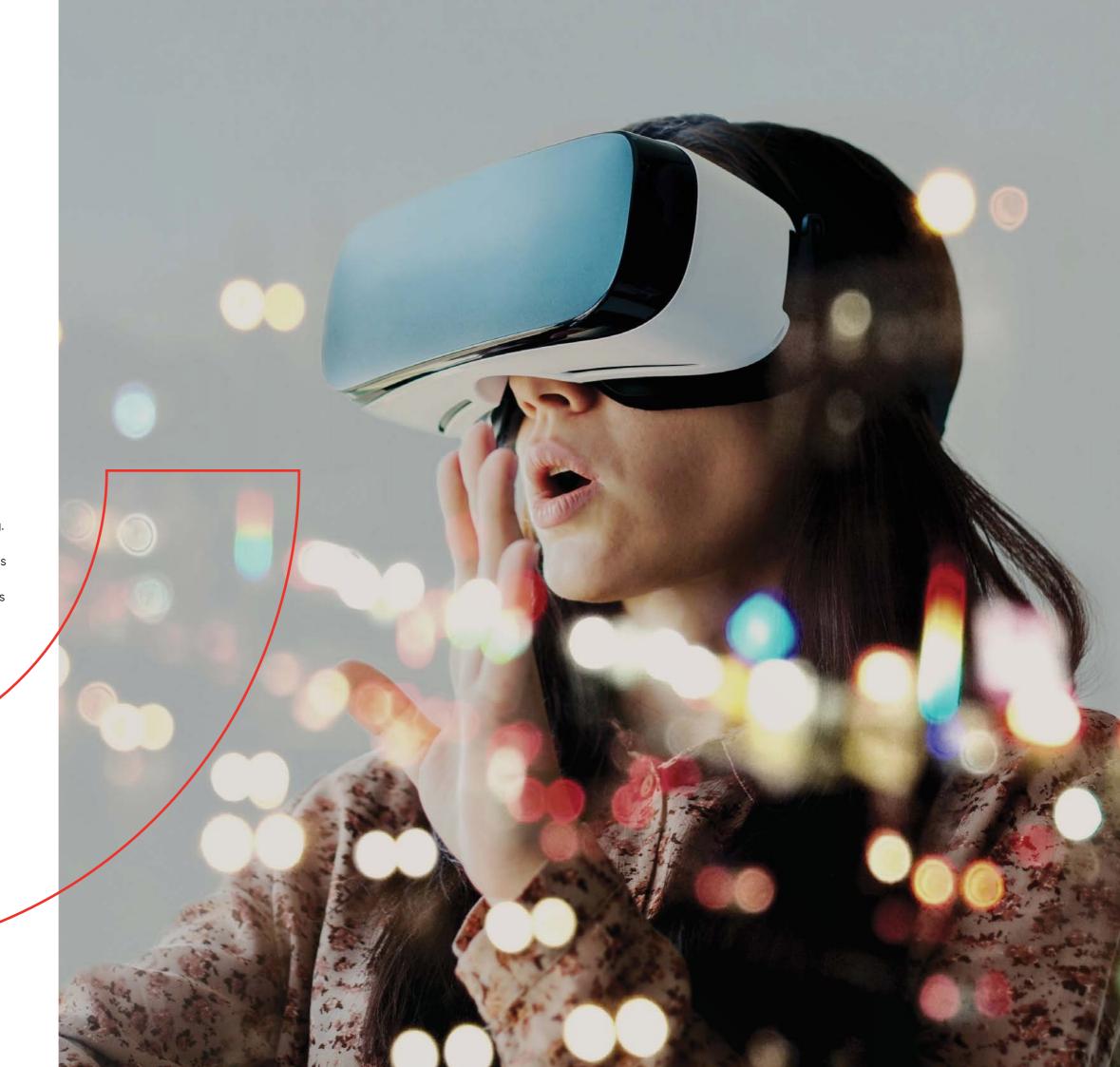
# Sustainability in business language.

Inspired by our motto, 'Actions first, excuses never,' we have been the drivers of sustainable change in the energy industry since our very beginning. In the pursuit of a better tomorrow, Iskraemeco is actively engaged in improving its environmental and social footprint by providing sustainable solutions.

In the field of sustainable development, we hold ourselves, our communities, and all industry stakeholders accountable for delivering significant benefits that extend far beyond the boundaries of our own businesses and result in meaningful, long-lasting change that leaves the world better for future generations.

In Iskraemeco, we encourage sustainable development initiatives that advocate economic growth in harmony with the environment. Our smart products, solutions and services foster the responsible use of natural resources and encourage consumers to make sustainable energy consumption decisions in their everyday lives. We design our solutions and manage our business processes in a way that minimizes the environmental impact, improve energy efficiency, preserve water usage, and mitigate emissions to the maximum extent practicable.

# Innovation and technology.

New trends, customer needs and constantly evolving technology compel businesses to embrace changes, develop agility, and act swiftly.

Iskraemeco has utilized its inventive abilities to create cutting-edge energy and water solutions, digital platforms, and services, employing emerging technologies such as artificial intelligence, rapid data transfer, reliable communication, and edge-computing. The digital transformation has prompted revolutionary changes in business models and technological solutions and became the driving force behind Iskraemeco's constant progress and a vital element of our company's success.

## Innovation is in our DNA

For decades, Iskraemeco has been strategically investing into innovative energy and water management solutions, leading by example in designing new standards. We strive to remain ahead of industry trends and develop solutions that cater to our customers' needs. We foster an innovative culture where dedication, synergy, creativity, ambition, and out-of-the-box thinking are encouraged and valued. Cooperation within the teams as well as with our partners, external professionals, and other stakeholders is the key to a successful execution of our ideas that help us bring new and improved products and solutions to life.

## Validation and lab services

Iskraemeco's teams are advancing the testing process by combining their efforts, industry knowledge, and customer insights. With its three components, the new testing center closely resembles environmental conditions.

- The **validation entity** will allow us to test hundreds of products concurrently and simulate our customers' grids. It helps us discover and prevent potential system vulnerabilities.

- With an unbiased **testing environment** in the lab, we are now able to provide services, solutions, and products that meet factory acceptance and customer requirements. The newly planned environment produces improved outcomes, lowers costs, and increases confidence in the performance of the tested solutions.

- In the **demonstration area**, guests may engage with an exhibition of market-ready, connected applications.

**Our contemporary Validation and lab center offers variety of services from electromagnetic compatibility (EMC), accelerated lifetime tests (ALT) to calibration of the metering equipment to any interested stakeholders.**

## Technology design center

We established a Technology design center that strategically manages future technology trends, enhances design processes, encourages creativity, and steers the global development of energy and water solutions. The Technology design center enables us to pool the best resources, bring diverse ideas and perspectives together and concentrate on key development efforts in a more effective manner. We encourage the use of innovative technologies to turn the findings into energy and water infrastructure transformations. We continuously use our knowledge and expertise for the creation of integrated solutions designed that surpass the demands of individual customers in the energy and water management industries.

# Manufacturing the future.

By leveraging years of experience, knowledge, and boundless invention, we built an agile, global manufacturing ecosystem focused on flexibility, quality, and continuity of supply.

As a global manufacturer of electricity and water meters, we are accredited to a variety of standards and certificates. Our forward-thinking approach allows us to be efficient, by harnessing the power of technology to protect the environment for the future.

## Localizing production

By localizing production, we can be more flexible, respond faster, assure short delivery times, and serve local demand more efficiently. We are closer to the markets where production is needed; we are growing regions and we are reducing risks to mission-critical infrastructure.

From Slovenia to Egypt, Malaysia, Argentina, Bosnia and Herzegovina, Nigeria, Zambia, and Tanzania, we have expanded our production footprint to all continents with a production area of over 100,000 square meters. Our standardized manufacturing approach allows us to support all our customers equally from any location, ensuring the same level of service and product quality.

Focused on end-to-end production, we offer a highly customized product that is designed, developed, and produced in-house. We adopted several emerging technologies that are geared toward automation and data sharing, including big data analytics and cloud computing combined with an IoT environment, advanced robotics, 3D printing, Mini Lab and the Augmented reality (AR). With computer vision technology and mixed reality, we are reshaping our customer experience and further boosting productivity.
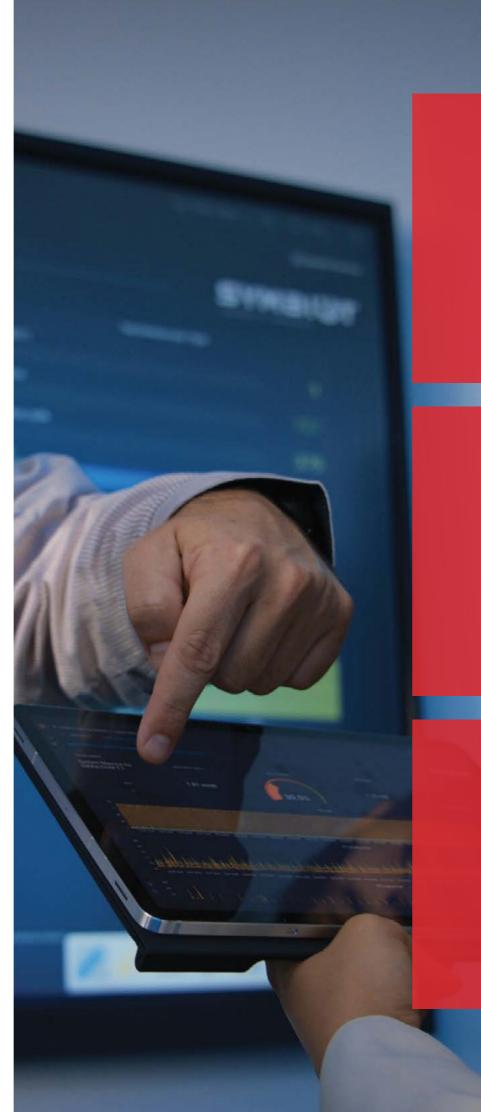
# Driving force behind our business decisions.

**Making communities more resilient and energy efficient in the face of environmental change needs digital transformation, help from cutting-edge technology and innovative thinking.**

At Iskraemeco, we believe that digital solutions serve as levers to accelerate benefits for utilities, cities, and communities. We provide digital solutions that enable and safeguard data-driven energy and water management and enhance service effectiveness.

Through the integration of digital platforms into the heart of our business operations, we can now serve our customers with a reliable, robust data management foundation that opens up new value creation opportunities. To optimize energy and water consumption, streamline operations more efficiently, and propel green and digital transformation, we are investing in initiatives and services that employ data science to create innovative solutions.

Using new technologies and big data analytics, we focus on the need to modernize the grid and make infrastructure more reliable. At Iskraemeco we are committed to achieving operational excellence, the highest possible quality, seamless connectivity, and the utmost data privacy and cybersecurity to bring about an environmentally friendly and technologically advanced future.

## Quality

Consistent adherence to customers specifications and needs, as well as thorough testing at every stage, are the hallmarks of a high-quality product. Iskraemeco is not a place where excellence happens by chance. It is the foundation of our business and is used in everything we do. Our mission is to offer each customer top-tier service and a timely resolution to their challenges by reacting with swift, strategic, and open-minded decision-making process.

## Data privacy and cybersecurity

With the rising prevalence of digital technologies, it is important to ensure that all data related to digital operations is secured and protected from cyber threats. Iskraemeco consistently integrates and enhances multilayer end-to-end security throughout the whole communication chain. Cybersecurity and data privacy are at the center of all layers and represent vital components of our products and digital solutions. We offer a comprehensive metering service and data environment that functions as a secure union, for which we have developed a key management system in respect of our customers' requirements.

## Connectivity

With increasing globalization, we design each of our products and solutions with connectivity in mind, allowing them to integrate seamlessly with preexisting infrastructures, technologies, and protocols. Our objective is to create a partner ecosystem that connects diverse meters and other IoT devices to the Iskraemeco network. For centralized data management, our partners' products, solutions, interfaces, and systems will be connected via the Symbiot infrastructure. This will accelerate the development of smart cities by facilitating digital transformation for utilities and municipalities and delivering data for better decision-making, faster problem resolution, and more sustainable operations.

# Diverse offering for brilliant business.

As one of the leading energy and water solutions providers as well as a digital platform company, our aim is to provide our customers with products and services that help them overcome the challenges that lie ahead.

Iskraemeco has committed to always delivering high-quality, customized solutions and services. Our robust portfolio of smart meters, communication tools, software suites, and services lets us predict future needs for efficient energy and water management.

## Meters and devices

**Smartness begins here.**

Connecting diverse networks and applications is only possible with support of wide variety of smart meters, devices, and sensors for energy and water. Whether they are intended for residential or industrial environments, smart or prepayment meters, customized or turnkey energy and water solutions represent the beginning of the digital journey. Iskraemeco smart meters utilize the energy Measuring Operating System (eMOS) as the underlying structure for the meter firmware. eMOS serves as an energy IoT platform foundational framework for applications that seamlessly integrate our products into a broader energy IoT system. It combines operating system technology and software development for metering solutions, enabling a comprehensive energy IoT experience.

## Communication products

**Leveraging the technology to succeed.**

Using IoT devices with connected sensors, electricity, water, and gas usage data is monitored and collected. The collected data must subsequently be transmitted to a central exchange as quickly, accurately, and securely as possible. Iskraemeco's tools and accessories turn data into meaningful tool for future decisions.

## Proffesional services

**Delivering the results you expect.**

Iskraemeco's rich portfolio of services supports every step of customers' project. Our expert teams are specialized in design, deployment, maintenance, and key upgrades. With our support the infrastructure of the utility is transformed into the powerful tool that frees up time and resources for core operations.

## Managed services

**Streamlined solutions for maximum efficiency.**

Managed services address many challenges of digital transformations and represents a more holistic approach. Adopting our managed services will assist in minimizing price sensitivity, decreasing deployment time, enhancing cybersecurity, and mitigating AMI expenses. We support a broad range of advanced capabilities, including meter data collection, analytics, meter data management, customer interaction, and workforce management. As modern utilities increasingly use subscription-based business models, we offer three managed service solutions:

- Software-as-a-Service (SaaS)
- Smart Metering-as-a-Service (SMaaS) and
- Infrastructure-as-a-Service (IaaS).

# Innovating for **Life.**

**Energy solutions**

**Digital platforms**

**Water solutions**

## Smart infrastructure solutions.

In today's dynamic world, we continually encounter new and exciting opportunities. As the world shifts towards a more sustainable future, the significance of energy and water solutions is steadily growing. By integrating current industry trends into our strategy, we constantly bring innovative solutions and technologies to the market.

Cities have always played a pivotal role in driving change and innovation. Urbanization and digitalization are now presenting us with a multitude of opportunities as well as challenges.

Iskraemeco's smart city approach represents an ecosystem of solutions that seamlessly integrates smart devices, digital technology, services, and human interactions into intricate networks. These networks function cohesively, leveraging data to generate value across various domains, from asset management to smart homes, smart lighting, EV charging, parking, waste and water management, and more. In Iskraemeco, we foster innovative digital platforms to craft holistic solutions aimed at reducing energy consumption and preserving our water resources. By harnessing emerging technologies, we customize solutions to cater to the unique requirements of our customers, offering substantial benefits and providing them with the tools necessary to transform the way we harness energy and water. This transformation makes energy and water utilization not only more efficient but also more cost-effective.

# Energy solutions

Digitalization, cutting-edge technologies, and new business models are reshaping the energy industry, presenting numerous opportunities. At Iskraemeco, we are focused on providing advanced and innovative solutions for efficient electricity management. With a strong emphasis on sustainability and energy efficiency, we offer smart metering solutions, grid management solutions, and other innovative products and services to help our customers optimize their electricity consumption, reduce their carbon footprint, and empower their end users.

## Digital grid

### Grid monitoring

Iskraemeco's Grid monitoring (GM) system is designed to monitor critical grid parameters such as current, voltage, power, and frequency. It is integral to maintaining utility stability, ensuring parameters remain within set safety and performance ranges. The system features smart meter integration, data aggregation, and an alarm system for rapid issue resolution.

### Grid observability

Centralized control systems frequently struggle with the required agility to respond to fluctuating consumption patterns across the network. Iskraemeco's Grid observability application is engineered to navigate these complexities, employing technologies that enhance responsiveness and reliability. The application offers detailed, near real-time insight into grid performance. It supports prompt operational adjustments based on continuous data analysis, enhancing grid stability in response to fluctuating consumption patterns and potential disturbances.

### Grid flexibility

Our Grid flexibility solution advocates for a user-centric approach over costly infrastructure overhauls, engaging both residential and public sectors in peak demand management. Smart meters on low-voltage networks are leveraged to mitigate the impacts of PVs, EV-chargers, and heat pumps, benefiting both utility providers and consumers. Additionally, it emphasizes the connection to the energy market, facilitating efficient energy trading and consumption forecasting, which is essential for adapting to the evolving energy landscape and optimizing resource use.

### Grid topology

The solution serves as a crucial analytical tool, offering a detailed understanding of the electrical grid's structure. It plays a vital role in various applications, such as fault detection, load balancing, and optimization of electricity flow paths. By leveraging real-time meter data, Grid topology aids in making informed decisions across diverse grid management areas, including network configuration analysis, efficient integration of distributed resources, and strategic planning for grid enhancements. This comprehensive approach ensures its applicability across a wide range of grid management tasks and systems.

## Smart prepayment

Our smart prepayment solutions integrate a vending system with powerful AMI infrastructure. Using advanced communication and metering technologies, our smart prepayment solutions measure, detect, collect, manage, and analyze energy data automatically, providing valuable insight to both utilities and customers. We provide a meter-agnostic solution by utilizing AMI infrastructure to provide the prepayment function.

## Smart metering

With Iskraemeco's end-to-end, customer-specific smart metering solutions, we strive to address global challenges in energy, water, gas, and heat. Exceptional metering devices supported by superior software and IoT connectivity create future-proof and secure solutions. In the vast array of I&C+G (industrial, commercial, and grid) and residential applications, they are founded on proven communication technologies and high-quality metering devices.

# Digital platforms

As data becomes the driving force of the modern world, our company is at the forefront of data management innovation. We develop digital platforms that transform data into knowledge, empowering our customers to make data-driven decisions to enhance efficiency, performance, and sustainability across various industries. By seamlessly collecting, processing, and analyzing data using interconnected applications, our customers gain valuable insights into the rapidly evolving behavior and interactions of end users, allowing them to make informed decisions.

Digitization of the energy industry is vital since it places the energy consumer at the center and reduces energy prices through energy efficiency and participation in flexible demand response mechanisms. Environmental change and digital transformation, supported by advanced technology and an innovative approach, go hand in hand when it comes to making communities more resilient and energy efficient.

## eIoT EDGE compute module

Enhanced data generation and evolution platform enables the digitalization of grids and the transition to advanced energy services. It builds on the smart energy meter, which in this case acts as a data source and as an accelerator for advanced energy services. It incorporates powerful machine learning and artificial intelligence applications. It enables external partners to develop applications on an open development and technology platform, fostering the development of an innovation ecosystem within and outside the power engineering domain.

## Symbiot

Data streams are meaningless without powerful tools to manage and analyze them. We leveraged our expertise to develop a specialized software suite and a comprehensive program suite that helps maximizing the value of the data. Combined with hardware for water, gas, electricity, and heat, as well as the integration to upper layers, the digital platform offers unique solutions for distinct areas of utility services. Our specialized software suite, Symbiot, is a flexible platform that enables simple, highly secure, and automated management of the energy and water businesses.

Meaningful data streams require powerful management and analysis tools. Leveraging our expertise, we have developed Symbiot, a flexible software suite, and a comprehensive program package to maximize data value. Paired with hardware for monitoring utilities like water, gas, electricity, and heat, and seamless integration into upper-level systems, our digital platform offers unique utility service solutions. Symbiot is a versatile, secure, and automated platform for energy and water management, featuring modularity, scalability, and customizable add-on modules for various functionalities. Thus, we offer a technology solution that is modular, open, universal, highly configurable, scalable, robust, and reliable. It is a multi-service, multi-utility, vendor-independent software platform. As a bespoke software solution, it permits the development of customer-specific add-on modules allowing multiple functionalities.

## SYMBIOT
### POWERED BY ISKRAEMECO

Symbiot is a trademark of Iskraemeco.

## Symbiot HES

Focused on multi-source data collection, a meter-agnostic approach with the ability to process any competitive device (electricity, water, gas, heat) is utilizing various communication technologies.

## Symbiot MDM

Provides functionality to analyze data from multiple sources (multiple HES systems) and prepares it for other higher-level systems (ERP, billing, customer portal). Provides validation, aggregation, estimation, and prediction at the point of consumption level.

## Symbiot Water

The software suite enables seamless integration with Iskraemeco water meters and third-party devices through a robust software development kit or API, facilitating meter installation, remote reading, maintenance and configuration. Symbiot Water includes Symbiot Aqua, Non-Revenue Water and Pumping Optimization applications which increase customers operational efficiency and enable a consolidated data flow that includes smart water meters, data management and analytics systems.

## Symbiot FieldAssist

Fieldwork simplification solution provides field workers with a clear overview of the tasks to be completed on a daily basis. It possesses the capability to configure fieldwork, create work orders, and facilitate walk-by and drive-by solutions for data collection using battery-powered meters.

## Symbiot Billing

The software provides features for managing customers, meters, invoices, payments, and reporting, while offering seamless integration with diverse utility infrastructures, including photovoltaic systems. Symbiot Billing streamlines billing processes and ensures full control and transparency over financial and consumption data. It is adaptable for utilities and other recurring service providers, supporting business growth and evolving operational needs.

## Symbiot Energy 360

A customer application that connects with Symbiot Billing to provide end-users with real-time insights into energy consumption, billing, and payments — all from their mobile devices. The application offers usage analytics, historical data, personalized insights, and convenient bill payment options. For utilities, Symbiot Energy 360 enables better resource planning, lowers operational costs, and strengthens customer engagement through improved service and transparency.

# Water solutions

Water scarcity and management challenges are pressing issues globally, and Iskraemeco is dedicated to addressing them with innovative solutions. We offer smart water metering solutions, leak detection systems, operational efficiency monitoring, revenue protection, and other technologies to enable efficient water management, conservation, and sustainability for cities, municipalities, and industries around the world.

Digitalized water solutions based on the Internet of Things (IoT) provide the necessary tools to address the most important challenges facing modern water utilities. To maintain a sustainable technical and financial operation of water utilities, we offer a variety of technological components and services tailored to today's and tomorrow's needs. Utilizing digital technology and data-driven solutions has redefined business procedures and processes. On the water market, the adoption of data-driven solutions is influenced by three factors: increasing efficiency, reducing costs, and complying with regulations. To create value for utilities, our digital solutions focus on two main areas: operational efficiency and revenue protection.

## Operational efficiency

Utilities are constantly seeking ways to optimize all aspects of their operations, ranging from the treatment process to network management to customer interaction. Our solutions in this area include:

- Smart pumping optimization
- Operational visibility
- Asset management
- Digital leak management

## Revenue protection

The market for meter reading and customer service is evolving toward smart meters. The ability to remotely read meters increases consumer transparency and enables ongoing monitoring of utility revenues. We offer the following solutions:

- Meter data asset management
- Key customer monitoring
- Billing/Commercial system
- Meter data collection
- Customer portal
- Prepayment

# Markets of influence.

## Quick facts.

- **Global company with local footprint**
- **Sharing expertise since 1945**
- **Transforming data into actionable insights through digital platforms**
- **Offering end-to-end solutions for energy and water**
- **Operates 9 regional production facilities and service centers**
- **Technology design centers located in Slovenia, India, and Egypt**
- **Sustainable innovation trendsetter**
- **Supporting digital and green transformation**
- **Partner of choice**
- **Committed to innovation, constantly refining our products and services**
- **Exporting to over 80 countries**
- **Employing over 1500 individuals globally**

### Iskraemeco company

- Argentina
- Austria
- Belgium
- China
- Columbia
- Egypt
- France
- Germany
- India
- Italy
- Malaysia
- Netherlands
- Poland
- Russia
- Slovenia
- Sweden
- Switzerland
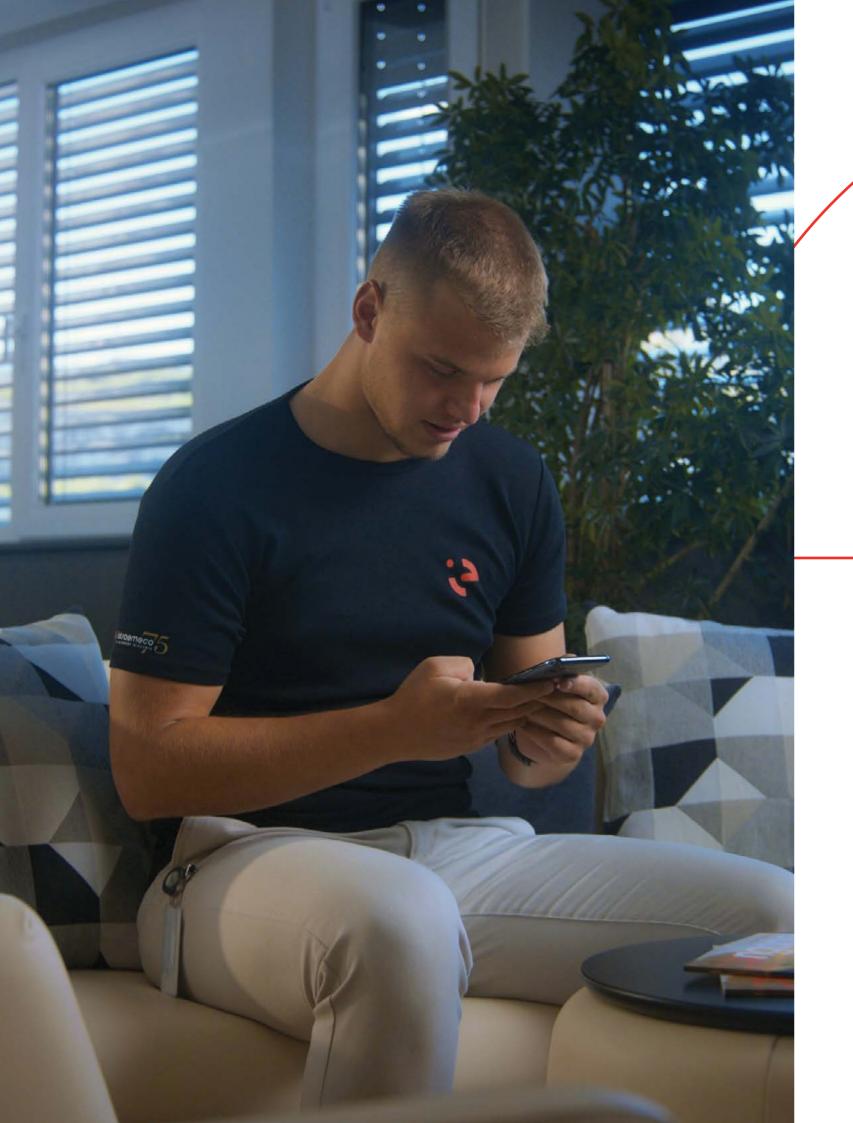- United Arab Emirates
- United Kingdom

### Production facility

- Argentina
- BiH
- Egypt
- Malaysia
- Nigeria
- Slovenia
- Tanzanija
- Zambia

### Technology design centers

- Egypt
- India
- Slovenia

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