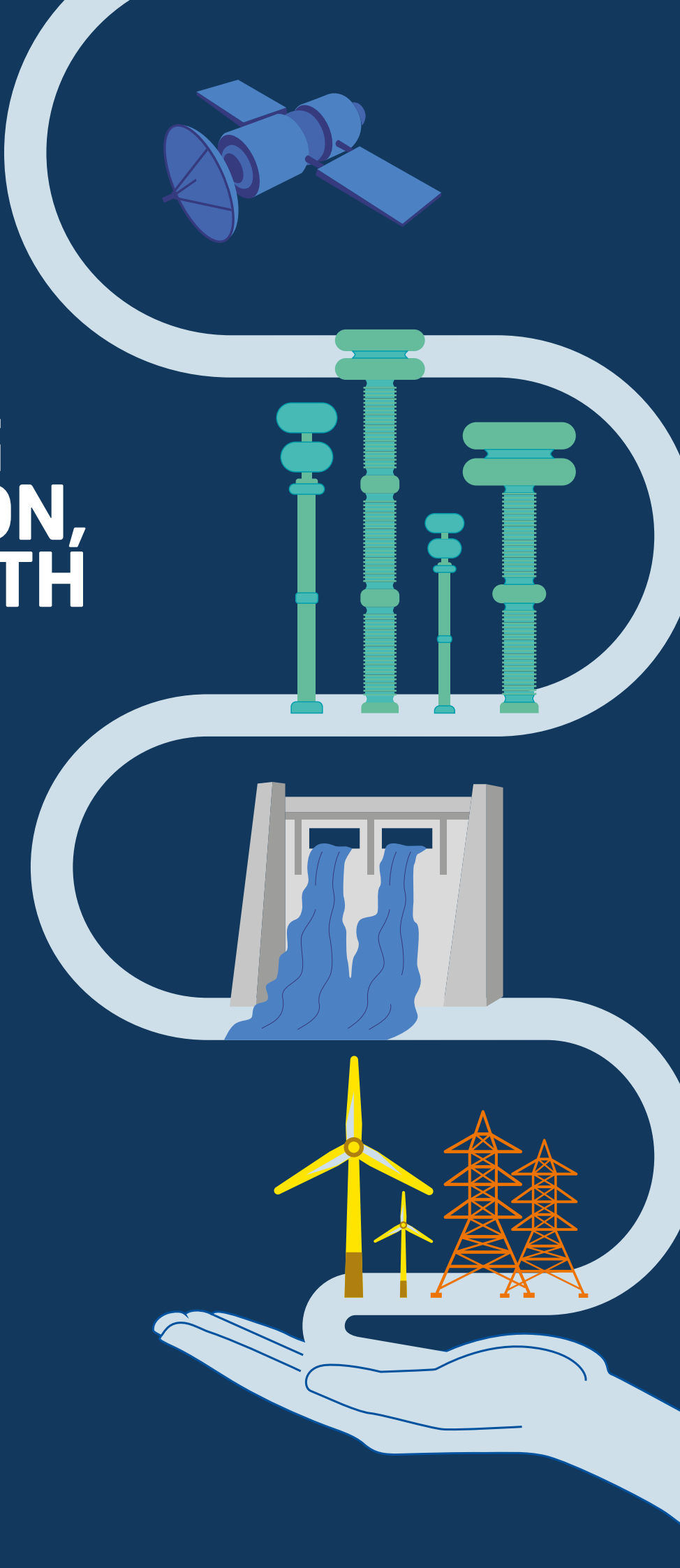
CESI
1956 -2026
Inspired with innovation

POWERING INNOVATION, FROM EARTH TO SPACE.

With expertise and innovation, we drive leading solutions for your needs



70 CESI
1956 - 2026
Inspired with innovation

CESI Group

KEMA Labs

CESI Consulting

CESI Space

70 years of knowledge, passion, and progress lead us into what's next.

At CESI, we keep turning complexity into opportunity, connecting people, ideas, and technology to help power the future.

CESI is a global group working across innovation, consulting, engineering, and testing to address complex system and technology challenges. With 70 years of experience, CESI combines deep expertise and a constant drive to innovate.
KEMA Labs strengthens the CESI Group as a global leader in independent Testing, Inspection, and Certification services for power equipment and systems, helping manufacturers, utilities, and system operators bring safe, high-performance solutions to market. Through CESI Consulting, CESI delivers engineering, advisory, and digital services across energy and infrastructure projects, supporting clients throughout the full project lifecycle. CESI Space further expands the Group's innovation footprint, developing advanced solar cells for space applications.
Headquartered in Milan, CESI has facilities in the Netherlands, United States, Germany, United Arab Emirates, Saudi Arabia, Oman, China, and Czech Republic.
To learn more, please check our references on **www.cesi.it.**

Group's history. More than 70 years of innovation

1956

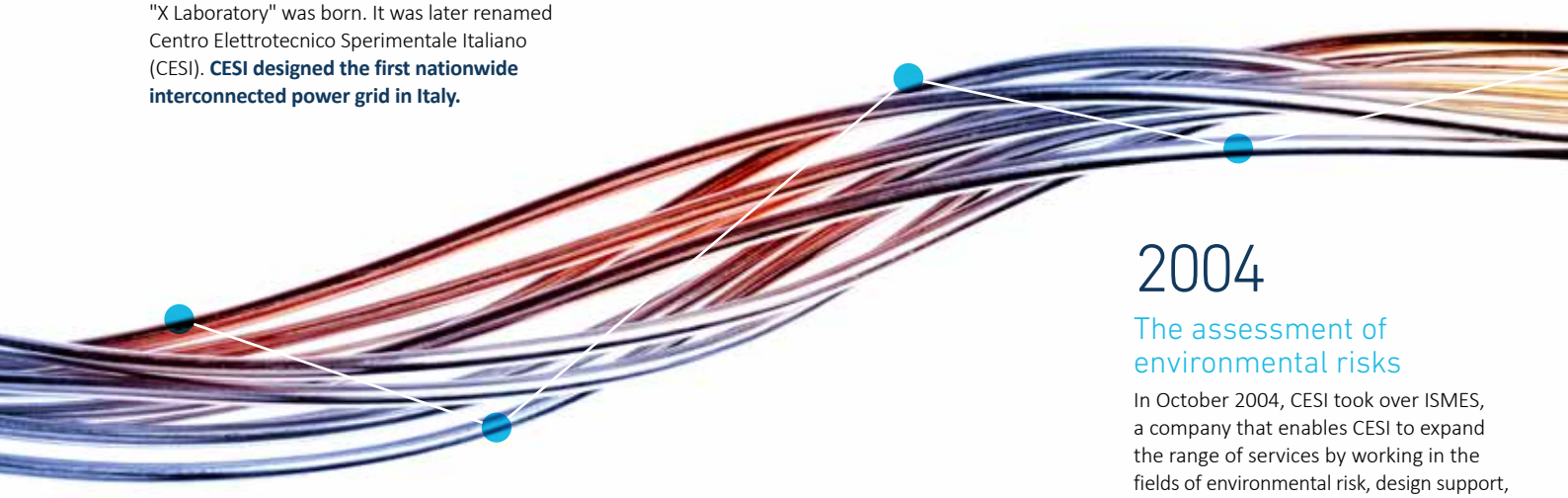
CESI is founded

The need to conduct research, tests, and network studies persuaded Italy's large electromechanical companies, along with the leading Italian electricity distribution companies, that they needed a "Great Power Laboratory" to guarantee the quality and efficiency of the Italian electricity sector. In the early 50s, the "X Laboratory" was born. It was later renamed Centro Elettrotecnico Sperimentale Italiano (CESI). **CESI designed the first nationwide interconnected power grid in Italy.**

2000

Enel digital meter is engineered and tested with CESI

Since 2000, CESI has broadened its fields of activity, covering all electric energy sectors, from generation to transmission, distribution, end-use of electricity, as well as environment and renewable energies. **With a groundbreaking approach for the time, in the early 2000s, CESI has also begun to support Enel in implementing and testing smart meters.**



1962-1980s

CESI, a key player in the energy sector development

Enel became a shareholder of CESI. In response to the rise in electricity usage, CESI led the "1000 kV's Project", which was realized for the transportation of high voltage energy on the Italian electrical networks. A step in the history of electrical industry research, not only in Italy but also worldwide. In 1982, the Synthetic Laboratory went live.

2004

The assessment of environmental risks

In October 2004, CESI took over ISMES, a company that enables CESI to expand the range of services by working in the fields of environmental risk, design support, and structural assessment on buildings and structures, with tests and studies on mechanical and industrial components.

2018

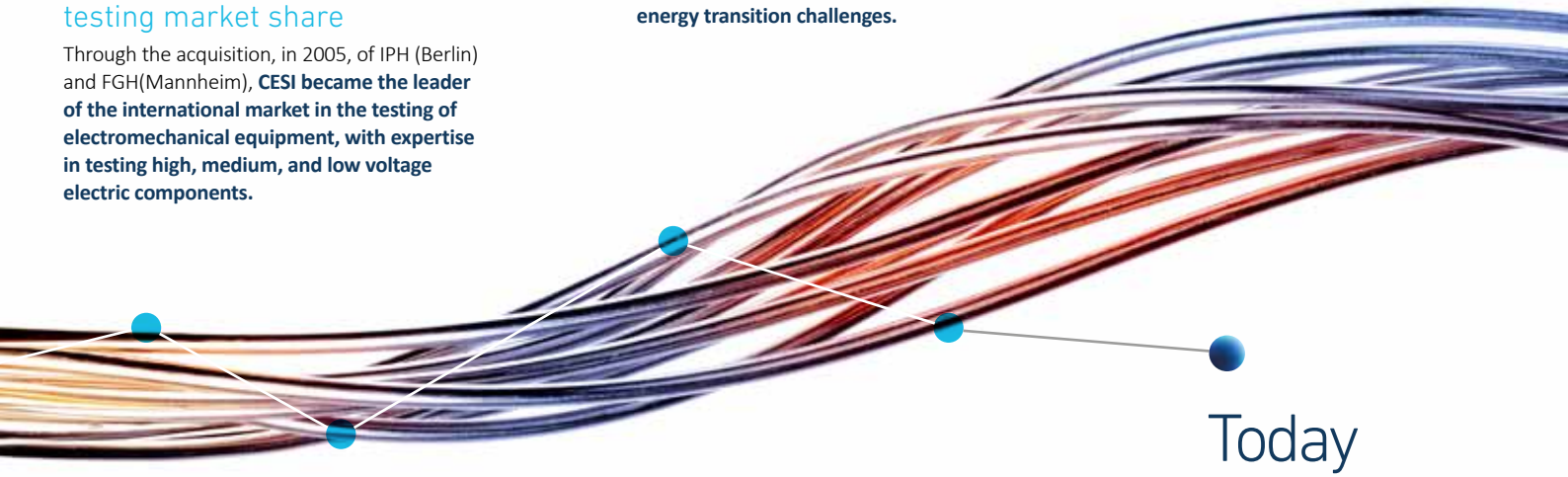
The modernization of electric grids with EnerNex

Following the 2018 acquisition of the U.S. company EnerNex, CESI expanded its portfolio of engineering and power system consulting services. EnerNex is a leading U.S. electric power engineering and consulting firm that provides top-quality services in grid modernization, cybersecurity, and power systems consulting. **The combination of CESI and EnerNex portfolios bolsters planning, implementing, and operating power assets and electric infrastructures, offering our clients a one-stop shop solution for all their needs related to energy transition challenges.**

2005

CESI expands its international testing market share

Through the acquisition, in 2005, of IPH (Berlin) and FGH(Mannheim), **CESI became the leader of the international market in the testing of electromechanical equipment, with expertise in testing high, medium, and low voltage electric components.**



2012

CESI bolsters its worldwide presence

In 2012 and 2013, CESI opened its regional headquarters in the UAE and Brazil, enhancing the effectiveness and responsiveness in these areas, symptomatic of a long-term commitment to these important, dynamic, and highly attractive regions.

2019

KEMA Labs joins CESI: The testing world leader is born

The acquired KEMA Labs testing and inspections facilities include the world's largest high-power laboratory, with the highest short circuit power of 10,000 MVA, and the world's first laboratory capable of testing ultra-high voltage components for super grids, as well as the Flex Power Grid Laboratory, for advanced testing of smart grid components. **The acquisition of KEMA Laboratories makes CESI the world's leading provider of independent testing of power components.**

Today

Innovation never stands still

Today, we keep looking ahead. Innovation is not a destination—it's a continuous journey. We evolve with the world, shaping smarter solutions for the challenges of tomorrow. The future doesn't pause, and neither do we.

Business Unit

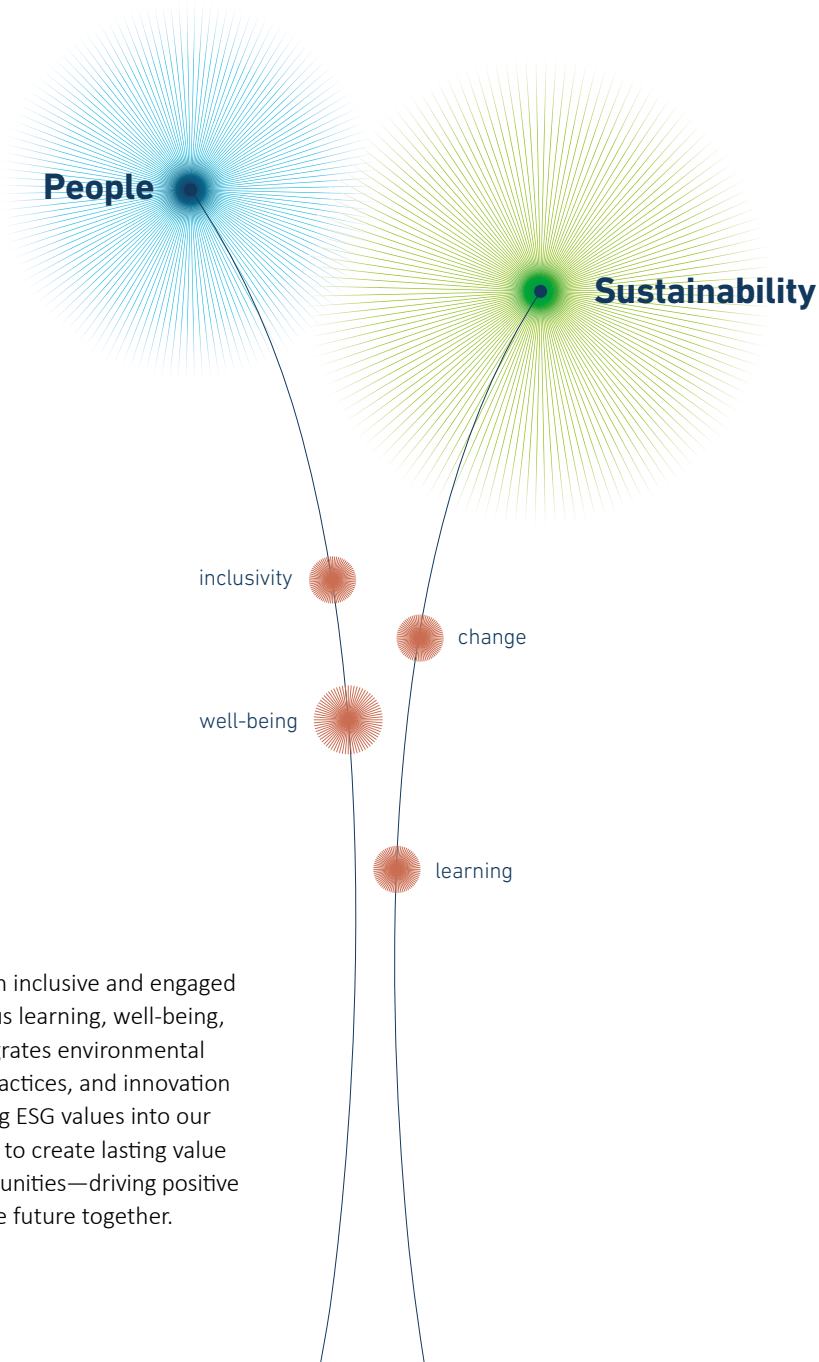
CESI is a world-leading technical consulting and engineering company in the fields of technology and innovation for the electric power sector. The Group provides strategic and technical advisory services for energy systems and major infrastructure, carries out independent testing, inspection and certification activities, and develops advanced technologies for satellite and space applications.

Mission

Our mission is to help build, step by step, a better energy future for everyone. This is a challenging task, but advanced and digital technologies will enable us to build a new energy era based on sustainability. Our core areas of expertise—consultancy, testing, and engineering services for the energy sector—are the perfect tools to help our clients around the world meet their needs. We facilitate and catalyze our clients' technical decisions, helping them to create value.

People & Sustainability

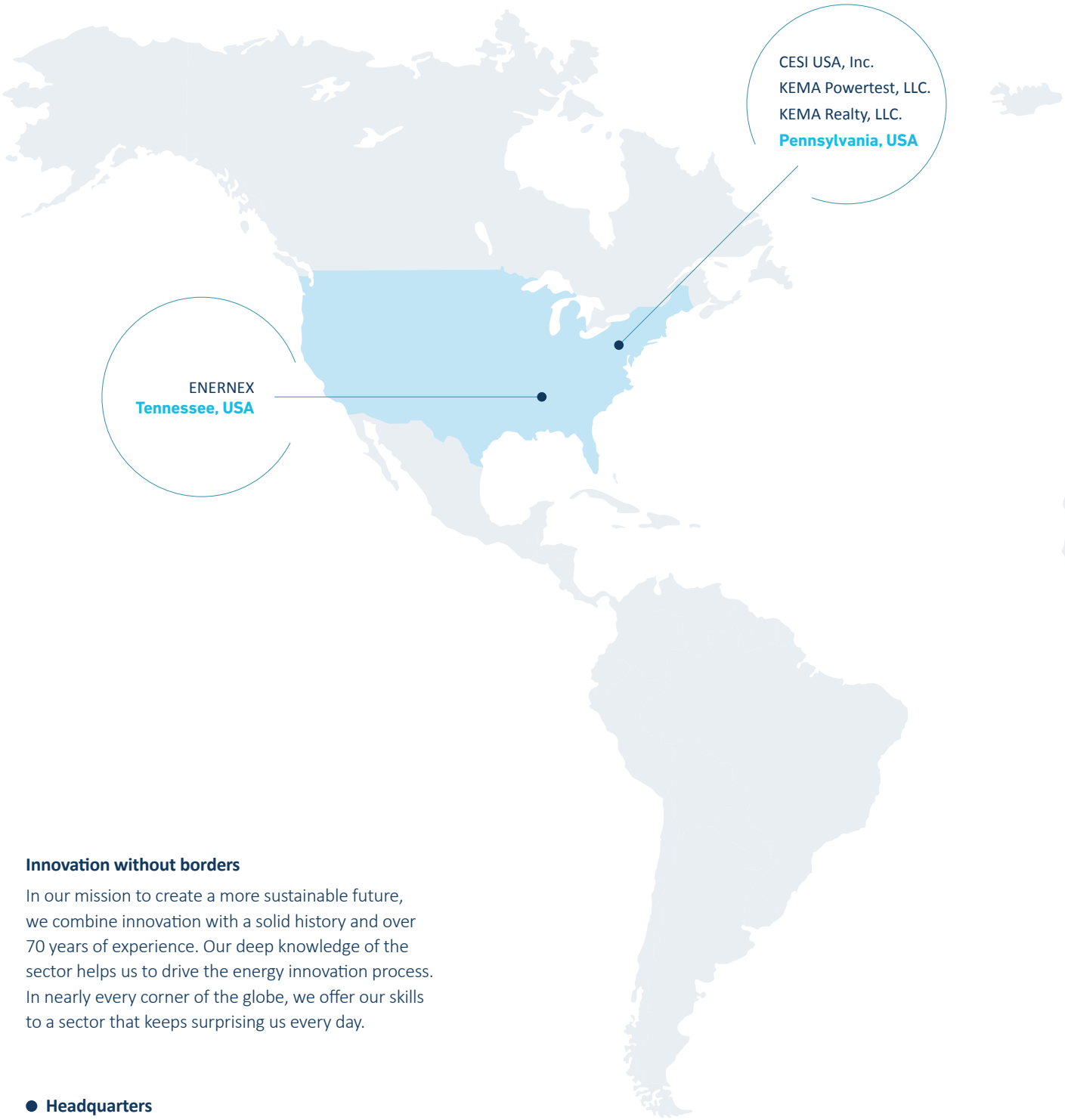
At CESI, people and sustainability are at the core of our vision for responsible growth



Responsible vision

We are committed to fostering an inclusive and engaged workforce, investing in continuous learning, well-being, and diversity. Our approach integrates environmental responsibility, ethical business practices, and innovation across all activities. By embedding ESG values into our culture and operations, we strive to create lasting value for our people, clients, and communities—driving positive change and building a sustainable future together.

Worldwide presence



Innovation without borders

In our mission to create a more sustainable future, we combine innovation with a solid history and over 70 years of experience. Our deep knowledge of the sector helps us to drive the energy innovation process. In nearly every corner of the globe, we offer our skills to a sector that keeps surprising us every day.

- **Headquarters**
- **Branch**


KEMA B.V.
KEMA Generators B.V.
Netherlands
FGH GmbH
IPH GmbH
Germany
Zkušebnictví, a.s.
Czech Republic
CESI S.p.A.
ITALY
CESI Middle East
Masdar, UAE
ISMES S.p.A.
Static & Dynamic
Testing Laboratories
Italy
KEMA Technology
Consulting Company Ltd
Shanghai, China
CESI Middle East FZE
Dubai, UAE
CESI Middle East
KSA


KEMA Labs
CESI Group

KEMA Labs

CESI Group

Testing, Inspection & Certification

The new giant of testing, inspection, and certification

KEMA Labs is CESI's world-leading testing, inspection, and certification division. With sites across the globe, we offer a combination of tradition and experience allied to state-of-the-art testing equipment. This enables us to test all kinds of grid equipment from low- to ultra-high-voltage so that our clients can meet today's increasingly demanding performance and safety requirements.

Utilities face the challenging task of ensuring their grids operate reliably, while product manufacturers must ensure their equipment performs to the highest standards. KEMA Labs offers vast expertise, impartiality, and a long history of technical experience gained through our testing activities and participation in technical committees. It makes us the ideal partner and the benchmark for testing in your sector. KEMA Labs has test locations around the world and has been testing products for more than 100 years. We have the strongest facilities ever built, and we test more than 200,000 products every year. It is no surprise we are the market leader. As the energy business undergoes a profound transformation towards greener, smarter grids, KEMA Labs is focused on emerging technologies. We play a crucial role in supporting our customers during the R&D phase at our state-of-the-art facilities, including our Flex Power Grid Laboratory.

CESI has 30 years of experience in the research, development, and production of high-efficiency solar cells for space applications and is one of the top global suppliers of multi-junction cells using materials such as GaAs (Gallium Arsenide) and InGaP (Indium Gallium Phosphide). In the frame of the ESA European space programs, CESI is well regarded for its expertise in the development of advanced devices and in the production of space-proven solar cells. More than 70 satellites powered by CESI solar cells are orbiting the Earth.

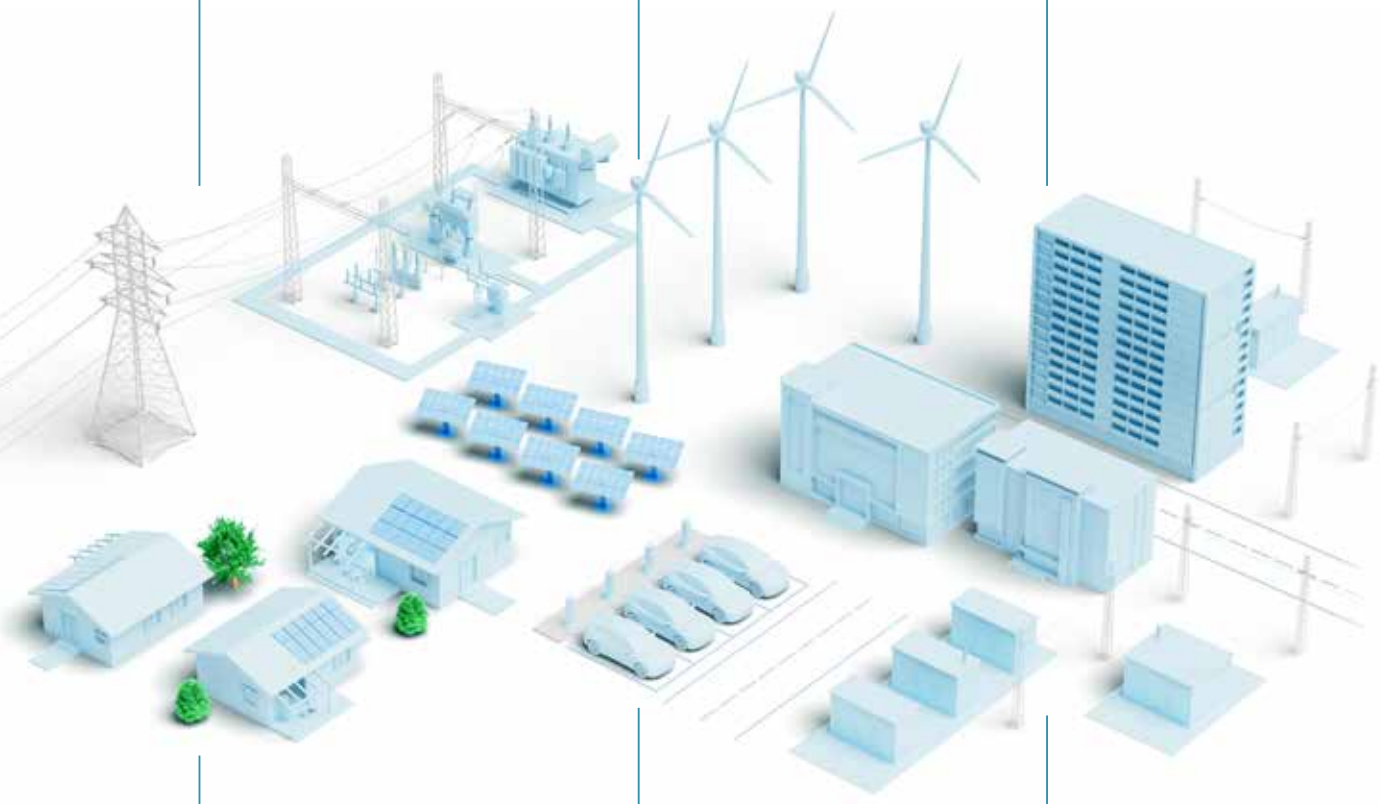
Your value chain, our value driver

Multiple industries

Energy Transmission

Renewables

Energy Distribution

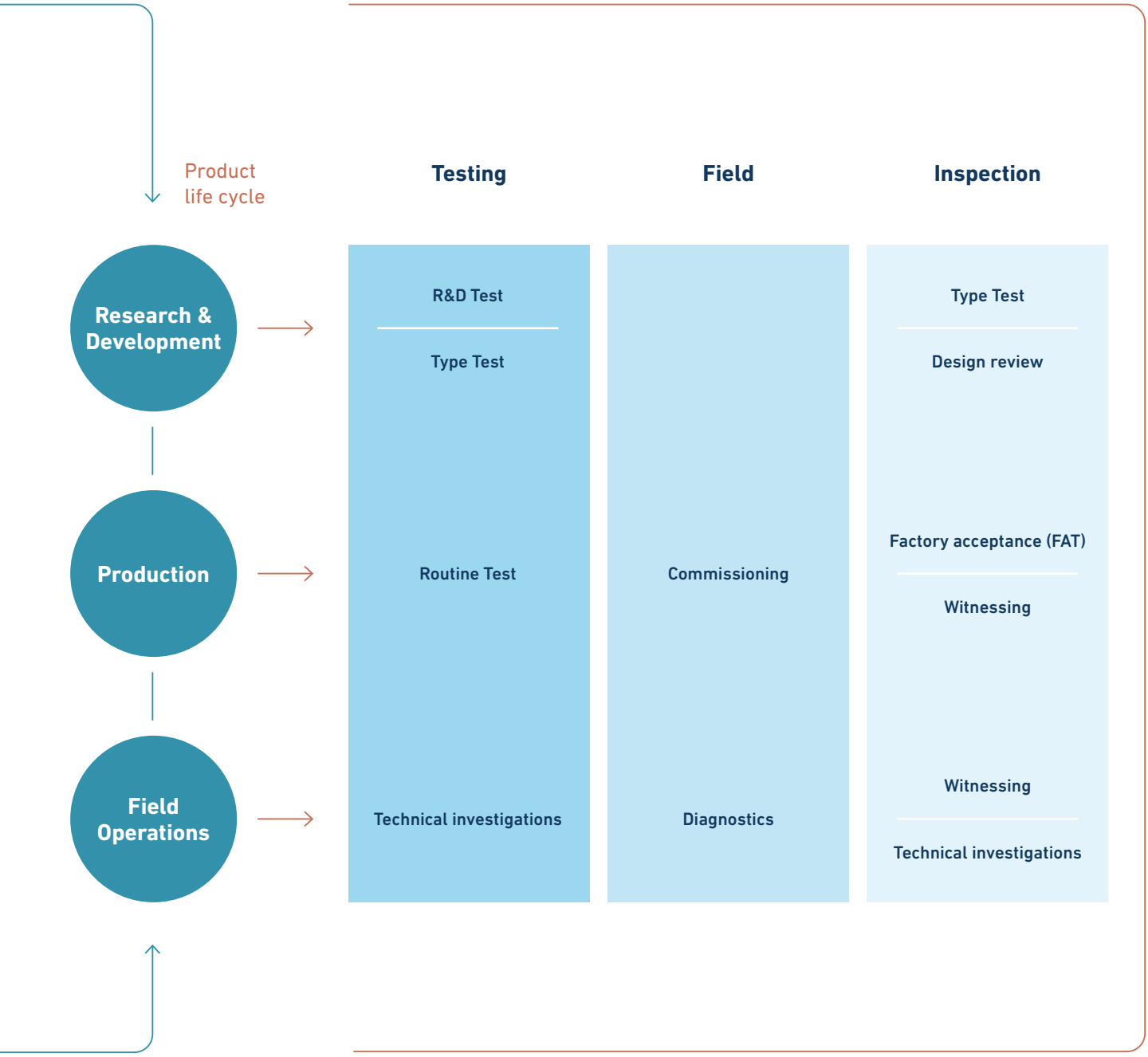


Low Voltage Secondary Distribution

Automotive

Metering & Protections

CESI Services



KEMA Labs

Key services

At KEMA Labs, we ensure the reliability, safety, and performance of power systems worldwide through our state-of-the-art testing services. Our globally recognized laboratories and expert teams support manufacturers, utilities, and grid operators in validating their components and systems under the most demanding conditions.

Our key testing services include

High & Medium Voltage Power Testing

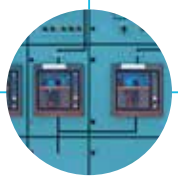
Validating the electrical endurance and performance of components operating at high and medium voltage levels.

Dielectric & Mechanical Testing

Ensuring insulation strength and mechanical integrity for optimal durability and compliance with international standards.

Low Voltage Testing

Evaluating the functionality and safety of low-voltage equipment, from circuit breakers to wiring systems.



EMC (Electromagnetic Compatibility) Testing

Assessing immunity and emissions to verify that devices function reliably in complex electromagnetic environments.

Communication Protocol Testing

Verifying the accuracy and interoperability of communication protocols used in smart grids and automation systems.

With decades of experience and continuous innovation, KEMA Labs is your trusted partner for independent testing and certification, helping build a safer, more resilient energy future.

On-field Testing

Bringing our expertise directly to operational environments to validate system performance and integrity under real-life conditions.

Explosive Atmosphere Testing

Conducting rigorous tests to certify equipment intended for use in hazardous areas where flammable gases or dust may be present.

Inspection Services

Providing independent assessments to verify the compliance, safety, and quality of equipment and installations.

Failure Investigation & Technical Services

Performing root cause analysis of failures to identify issues, prevent recurrence, and improve overall reliability.

Asset Evaluation

Assessing asset condition and estimating residual lifetime to support strategic decision-making and optimizing investments.

KEMA Labs

Case history

Hvdc cable testing

Powering the Future: 525kV HVDC Cable Prequalification

KEMA Labs successfully conducted a comprehensive prequalification test on a 525kV land cable system, a critical component for next-generation high-voltage direct current (HVDC) corridors in Europe. This project marked a major milestone in validating the performance and reliability of advanced extruded cable technology designed for long-distance power transmission. The testing campaign simulated real-world operational stresses to ensure compliance with the most stringent international standards. By qualifying this new HVDC extrusion line, KEMA Labs contributed to the backbone infrastructure of Europe's energy transition, enabling the integration of renewable energy sources across borders with minimal losses and maximum efficiency.

KEMA Labs

Case history

High voltage switchgear testing

Clean Air Innovation: Qualification of SF_6-Free Circuit Breaker

In a forward-looking initiative to support sustainable grid technologies, KEMA Labs carried out R&D testing on a high-voltage circuit breaker using clean-air insulation as an alternative to SF_6 gas. This project focused on validating the performance of this innovative switchgear under demanding conditions, ensuring it meets safety and reliability benchmarks. The successful qualification of this environmentally friendly technology represents a major step toward decarbonizing power systems. It also reinforces KEMA Labs' role as a trusted partner in accelerating the adoption of green technologies that align with global climate goals.

Electrical mobility testing

Accelerating E-Mobility: Charging Energy Hubs

As part of a government-subsidized initiative to electrify the logistics sector, KEMA Labs provided testing services for equipment used in Charging Energy Hubs. These hubs are designed to support the rapid deployment of electric vehicle infrastructure for commercial fleets. The project involved collaborative research to validate the interoperability, safety, and performance of charging systems under real-world conditions. By ensuring the reliability of these critical components, KEMA Labs is helping to remove barriers to large-scale electrification and paving the way for cleaner, more efficient urban logistics.

CESI Consulting

Inspired with innovation

Advisory, Engineering, Infrastructure

Smart solutions for complex energy and infrastructure challenges

CESI delivers practical solutions that help interpret and shape a world that is increasingly interconnected and complex. Our expertise covers almost every aspect of energy and infrastructure:

Power transmission and distribution

HVDC/HVAC infrastructure, distribution infrastructure and smart grids

Renewable energy and storage

Hydropower, solar and wind generation, and storage systems

Conventional power generation

Open and combined cycle gas turbine, coal- and oil-fired thermal power plants, industrial facilities

Infrastructure

Roads, bridges, and cultural heritage

From Feasibility to Operation, Worldwide

With more than 1,000 consultants worldwide, we provide technical assistance to utility, energy & infrastructure investors, governments, regulators, and financial institutions in more than 50 countries throughout Europe, the Middle East, Asia, Africa, the United States, and Latin America. Our services cover the entire life cycle of infrastructure projects, from early stage feasibility studies to the complete support during construction, commissioning, and operation.

Our advisory services include:

- Planning and operational studies
- Environmental and sustainability studies
- Regulatory and market studies
- Civil studies

During the implementation of a project, we offer a full set of owner's engineering services:

- Technical specification & procurement assistance
- Design review
- Construction and commissioning supervision
- Support during environmental permitting

And we can help to optimise the safety and performance of existing infrastructure with flagship services and innovative solutions focused on:

- Monitoring systems for structures and plants
- Environmental monitoring
- Site remediation
- Asset management and maintenance optimisation

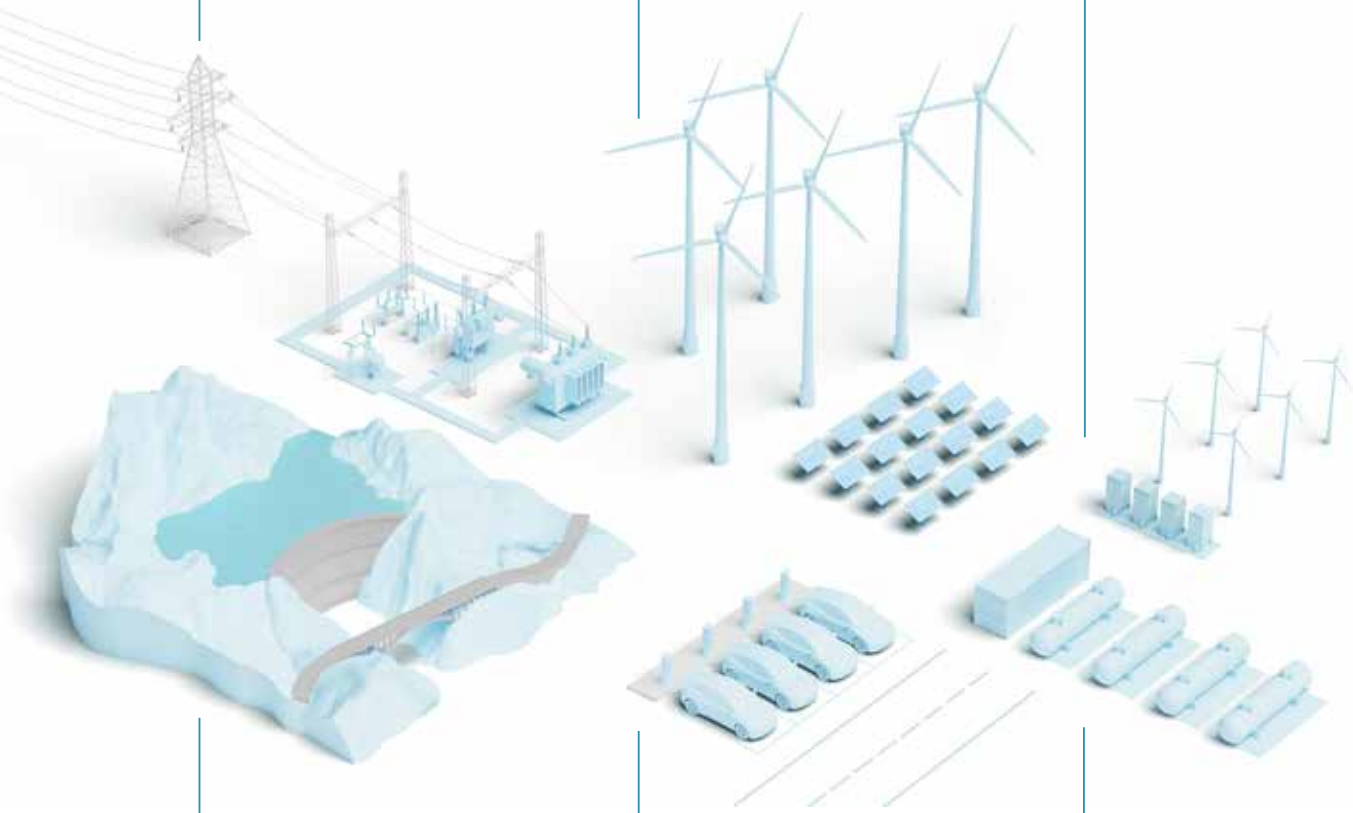
Consulting for the Energy Ecosystem

Multiple industries

Power Transmission & Distribution

Renewables

Storage

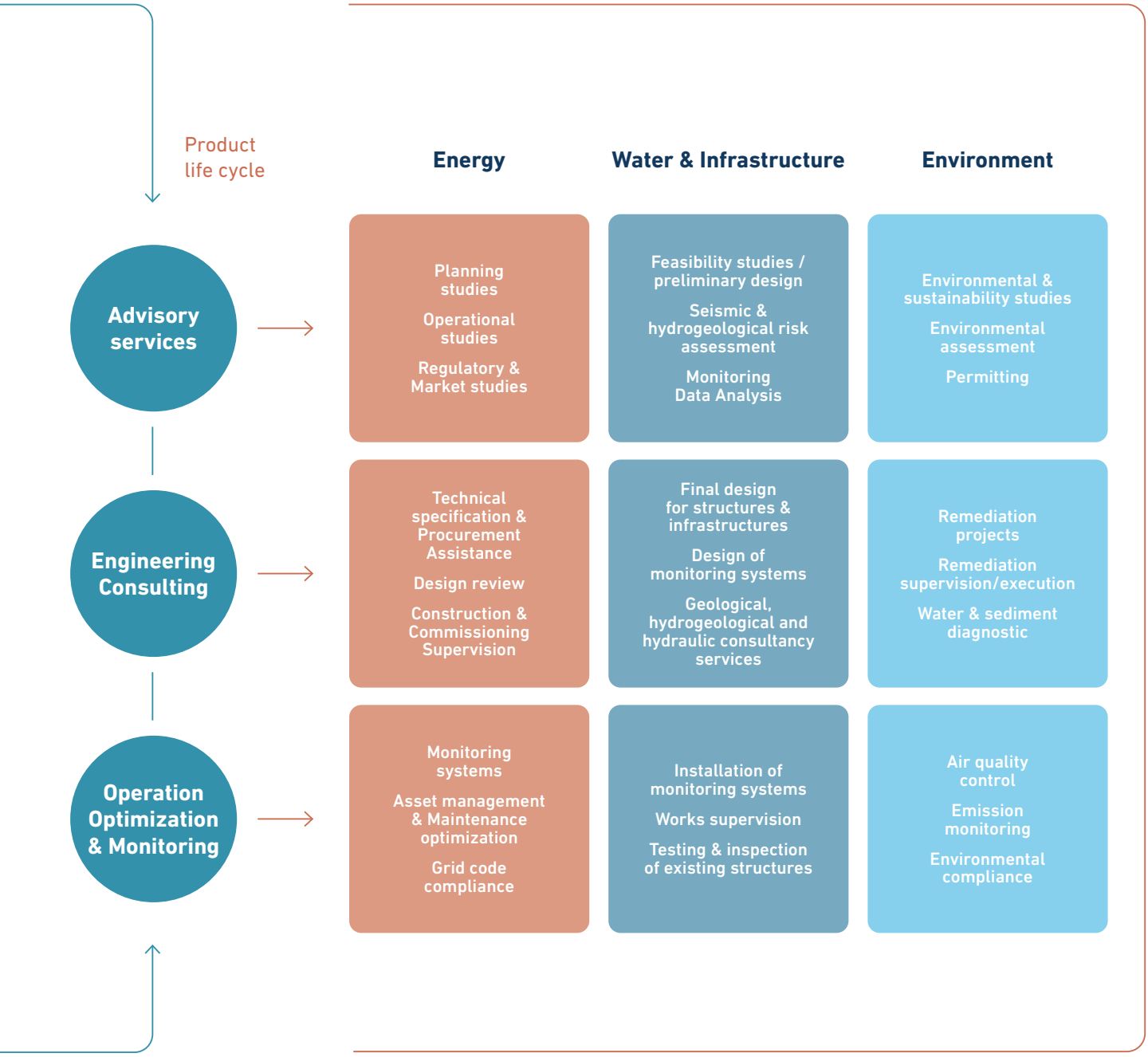


Water & Infrastructures

E-mobility

H_2 and green gases

CESI Services



CESI Consulting

Powering the Future of Energy

For over 60 years, CESI Consulting Services has been at the forefront of the energy sector, delivering unparalleled expertise and innovative solutions. Our core focus lies in the intricate and vital energy infrastructures that are crucial to global decarbonization efforts. We're not just consultants; we're partners in building a sustainable energy future.

Our comprehensive expertise across the Energy Lifecycle

We provide an extensive array of technical consulting services, guiding our clients through every phase of energy infrastructure projects. Our involvement spans from early-stage **feasibility studies** to providing comprehensive support during **construction, commissioning, and operation**, thereby ensuring seamless project delivery and optimal performance. Our proficiency in **Power Transmission & Distribution** encompasses designing and implementing robust, smart grids, as well as expertise in efficient grid management and compliance with grid codes. We specialize in both **HVAC/DC Infrastructures** and the development of advanced **SCADA & Control Centers**.

In the field of **Renewables & Green Hydrogen**, we offer thorough support for solar energy projects, onshore and offshore wind farms, and pioneering solutions for the production and integration of green hydrogen. Furthermore, our capabilities extend to **Storage & E-mobility**, where we design and optimize battery storage and e-mobility infrastructures, alongside integrating distributed energy resources through virtual power plants and aggregators. We also provide end-to-end consulting for **Conventional Power Plants, Industrial Plants, and Oil & Gas infrastructures**, supporting projects throughout their entire lifecycle.

Specialized consulting and optimization services

Our profound industry knowledge enables us to deliver specialized advisory, engineering, and operation optimization services, meticulously tailored to meet our clients' specific needs.

Our **Advisory Services** include strategic planning studies for future energy projects, detailed grid impact studies to assess the effects of new energy sources on existing grids, operational studies to optimize current energy system performance, and regulatory and market studies to navigate complex energy regulations and market dynamics. With **Engineering Consulting Services**, we provide technical specification and procurement assistance to ensure the selection of appropriate technologies and equipment, meticulous design reviews for efficiency and compliance, and rigorous supervision during construction and commissioning to uphold quality and safety standards. Finally, our **Operation Optimization Services** involve implementing advanced monitoring systems for real-time insights, maximizing the lifespan and efficiency of assets through comprehensive asset management and maintenance optimization, while ensuring strict adherence to all relevant grid codes.

Projects

Wind Energy Pozzallo

Study of connection solutions to the National Transmission Grid

For the Pozzallo offshore wind farm, CESI Consulting is supporting Edison in the study of connection solutions to the National Transmission Grid. Comparative analyses between alternating current (AC) and High- Voltage Direct Current (HVDC) links integrate expertise on cables, grids, and electrical substations. A job that combines technical rigor and strategic vision to promote the energy transition and sustainable development.

Client

Edison

Region/Country

Italy

Caucasus - Europe

Green Energy Corridor

Client

GECO Power Company

Region/Country

Caucasus - Europe

Advisory Services

Green Energy Corridor

CESI is engaged in supporting the development of HVDC Power Transmission Infrastructures connecting the Caucasus with the European Union. The role of CESI as a technical Advisor encompasses techno-economic feasibility studies, financial analysis and business model identification, environmental analysis, and infrastructure conceptual design.

AMI 2.0

The next generation of AMI 2.0 use cases

Client

Large West Coast Investor Owned Utility (IOU)

Region/Country

USA

Job Type

Smart Metering

20 years after EnerNex was hired by one of the largest Investor Owned Utility to develop Advanced Metering Infrastructure (AMI) use cases, the US consulting firm of the CESI group has been engaged again to develop the next generation of AMI 2.0 use cases. The mandate included use case workshop facilitation with stakeholders and subject matter experts, requirements identification and distillation, metering technology research, industry standards identification and mapping, proof of concept report and business case development support.

CESI Consulting

Expertise in environmental services for a sustainable future

CESI brings extensive experience to the environmental services sector, adeptly overseeing complex projects from inception to completion. Our approach involves meticulously identifying any site-specific constraints, thoroughly evaluating technology alternatives, and comprehensively analyzing all associated risks. This robust process includes detailed pre-operation evaluations that pinpoint the scale of any potential effects, define necessary mitigation processes, and establish how the structure will be continuously monitored.

Comprehensive environmental coverage across key sectors

Our expertise spans critical environmental domains, ensuring holistic project oversight. In the **Air** sector, we manage continuous emission monitoring, air quality control, and biomonitoring initiatives. For **Water**, our services extend to power generation plants, submarine cables, and effective sediment management. Within **Waste & Wastewater**, we specialize in comprehensive waste management, wastewater management, and the application of geosynthetics. Our capabilities in **Soil & Groundwater** cover power plants, oil & gas facilities, and mining operations. Furthermore, we address **Physical Agents** such as electromagnetic fields, vibration, noise, and radioactivity, ensuring compliance and safety across various industrial settings. Our comprehensive service offerings range from initial **Environmental Impact Assessments** to ongoing **Monitoring, Diagnostic, and Remediation services**, providing end-to-end support for environmental integrity.

Specialized environmental service offerings

To support our clients effectively, we offer specialized services tailored to every stage of environmental project management. Our **Studies & Permitting services** encompass in-depth environmental studies, detailed sustainability studies, and expert guidance through the permitting process. Within our **Monitoring & Diagnostic activities**, we provide continuous monitoring, thorough characterization, compliance assessments, and precise diagnostic evaluations to identify and address environmental challenges. Finally, our **Remediation activities** are designed to restore environmental quality, including initial feasibility studies and environmental site assessments, meticulous remediation project planning, and diligent supervision during execution to ensure effective implementation.

Projects

Removal of sediments accumulated within hydroelectric reservoirs

CESI provides comprehensive support to clients in the planning and execution of activities related to the removal of sediments accumulated within hydroelectric reservoirs. The process begins with the environmental characterization of the intervention site. This is followed by defining the specific typology of the settled material. We identify the appropriate destination sites for the removed material. The service concludes with the detailed executive design for the removal intervention, along with the definition of the correlated environmental monitoring plan for the activity.

Client

Hydroelectric infrastructure operators/Land reclamation consortia/Water purification plants (egp Italy, ACEA)

Region/Country

Italy

Kyrgyz hydropower plant

Full environmental and social impact assessment (ESIA)

Client

Ministry of Energy of the Kyrgyz Republic, funded by the World Bank

Region/Country

Central Asia

Job Type

Kyrgyzstan - ESIA Dam

CESI is conducting a full environmental and social impact assessment (ESIA) for the rehabilitation of an existing hydropower plant and the construction of a green field plant in the Kyrgyz Republic. Its tasks also include the development of the Environmental and Social Management Plans (ESMP) for the future operation of the two HPPs.

Albanian sea waters

Wind RES Assessment

Client

RTI International, funded by USAID

Region/Country

Europe

Job Type

Wind RES Assessment Albania

CESI investigated the offshore wind power potential in Albania to understand the areas of the Albanian sea waters best suited to offshore wind development. The study was executed in the framework of the USAID Connect for Growth (C4G) Project, which aims to strengthen energy security and resilience in USAID's partner countries in the Europe and Eurasia region as part of the U.S.–Europe Energy Bridge project.

CESI Consulting

Engineering excellence for a resilient future

As the infrastructure sector undergoes rapid evolution, CESI has strategically integrated its civil engineering division into a specialized entity operating under the distinguished ISMES brand. For over 70 years, ISMES has been a leader in civil engineering, focusing intently on the water and infrastructure sectors, as well as natural hazards. We are adept at supporting complex projects that demand specialized expertise and in-depth knowledge.

Comprehensive expertise for critical infrastructure and natural hazards

Our proficiency spans crucial areas, ensuring the resilience and efficiency of vital infrastructure. In **water infrastructure**, our capabilities encompass **dams, water distribution networks**, and **irrigation systems**. For civil infrastructure, we specialize in **transport**, the preservation of **cultural heritage**, and robust **building solutions**. Furthermore, ISMES provides critical support in mitigating **natural hazards**, including the assessment and management of **landslides, river flooding, seismic risk**, and broader **climate risk**. Our seasoned team, backed by decades of experience, is equipped to provide integrated services throughout the entire project lifecycle. This ranges from initial **feasibility studies**, comprehensive **safety assessments**, and **hydrological risk analysis** to a full suite of **design and engineering services**, culminating in meticulous **construction management and supervision**.

Specialized services for project lifecycle support

Our commitment to excellence is reflected in our specialized service offerings, designed to meet the diverse needs of complex infrastructure projects. Our **Civil Engineering services** include detailed **feasibility studies**, innovative **engineering design**, thorough analysis of **hydrogeological and seismic risk**, and expert **construction supervision**. Through our **Monitoring services**, we offer comprehensive **monitoring architecture and design**, the precise **installation of monitoring systems**, ongoing **maintenance and remote support**, and advanced **data engineering** to derive actionable insights. Additionally, our **Testing & Inspections** activities, conducted in our cutting-edge **ISTEDIL laboratories**, provide crucial support. These include rigorous **tests on construction materials**, comprehensive **tests on excavated soils and rocks**, detailed **tests on asphalt and bitumen**, and thorough **inspections and investigations on existing buildings and structures**.

Barcis Dam

Hydrogeological safety and territorial protection

The upgrading of the Barcis Dam is a strategic project for hydrogeological safety and territorial protection. ISMES, part of the CESI Group, managed the Works Supervision, integrating expertise in geotechnics, hydraulics, structures, and geology. A complex undertaking that requires, in addition to technical skills, passion, rigor and dedication to guarantee efficiency, sustainability, and infrastructural resilience.

Client

Edison

Region/Country

Italy

Job Type

Construction Management
Barcis Dam

Leaning Tower of Pisa

Safeguarding Cultural Heritage

Client

Opera della Primaziale Pisana

Region/Country

Italy

Structural Monitoring

Structural Monitoring of the Pisa Tower

For years, ISMES has supported Opera della Primaziale Pisana in the continuous monitoring of the Leaning Tower of Pisa. An advanced system collects and analyzes data in real time to protect one of the most famous symbols of world heritage. Innovative technologies, experience and cultural sensitivity merge to safeguard the integrity and beauty of a unique work of art.

Itaipu Dam

Implementation of the Monitoring system for one of the biggest dams worldwide

Client

ITAIPU Binacional

Region/Country

Latin America

Job Type

Monitoring of Itaipu Dam

The project involves implementing a monitoring system designed to collect both automatic and manual data, aimed at studying the behaviour of the two dams' block foundation. As part of the works, 25 four-point extensometers were installed, totaling a 3,900-meter rod length, along with two piezometers. Additionally, an automatic vertical inclinometer system was installed, consisting of 49 IPI sensors. The project also included installing an automatic data-acquisition system to collect data from the IPI sensors.

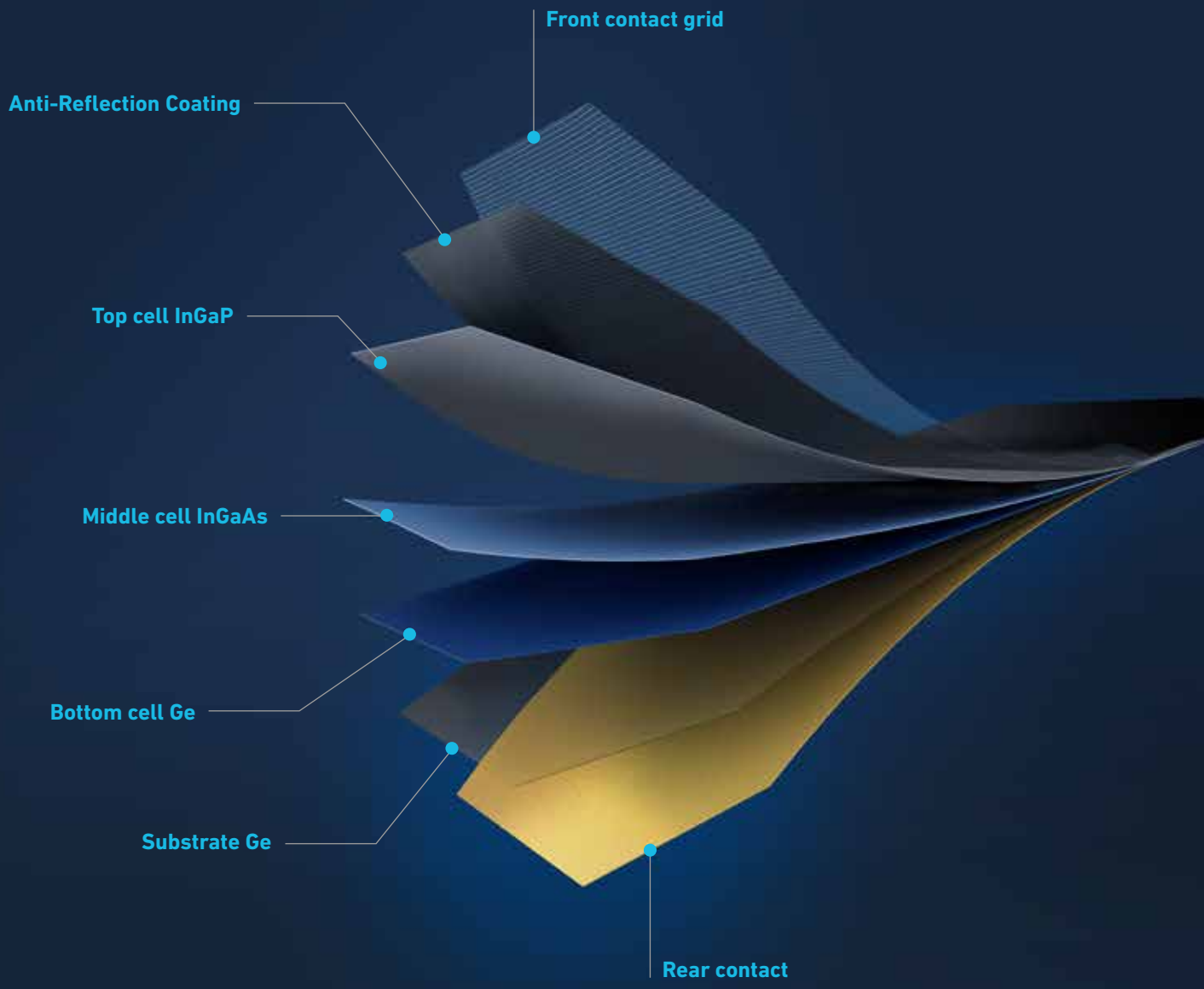
With an installed generation capacity of 14 GW, 20.700 MW generating units and a design head of 118 metres, the Itaipu dam located between Brazil and Paraguay, is one of the biggest hydro-electric dams in the world.

CESI Space

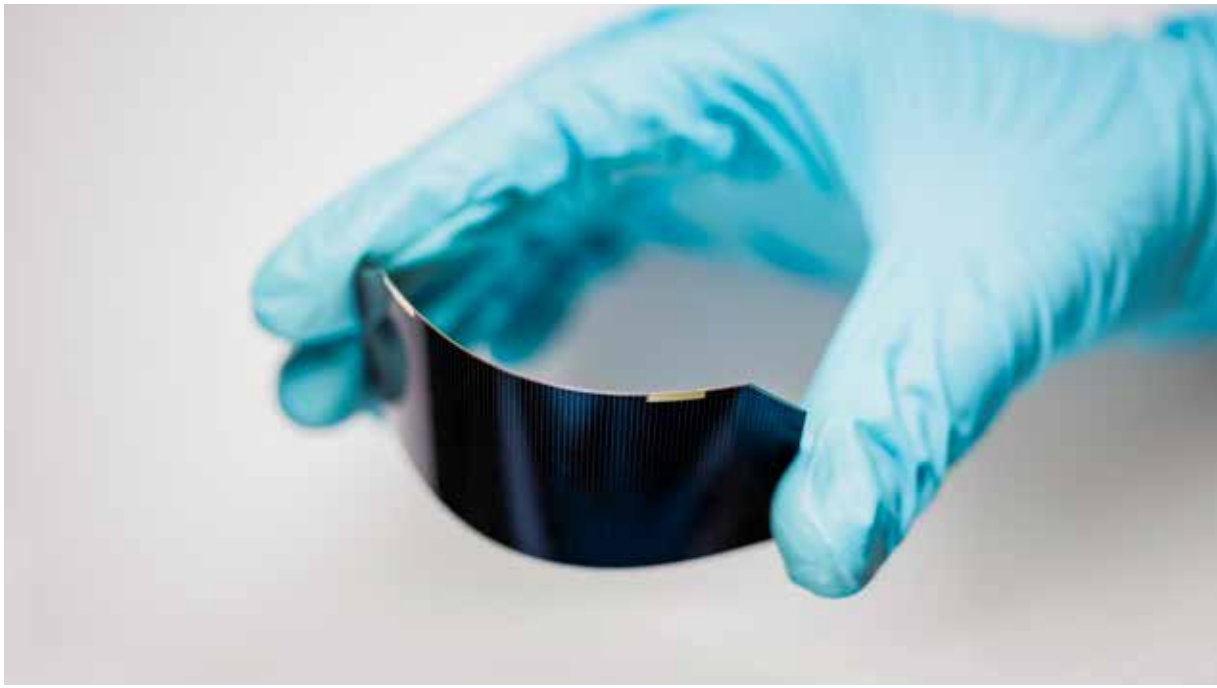
Inspired with innovation

Space Solar Cells

Cutting-Edge Technology for Space



CESI has more than 30 years' experience in the research, development, and production of high-efficiency space solar cells for civil applications and is one of the top global suppliers of multijunction cells based on III-V semiconductors.



CESI has been involved for over 30 years in the research and production of high-efficiency solar cells based on III-V semiconductors for commercial civil space applications, and it is one of the leading global suppliers of space solar cells. For decades, CESI has invested heavily in developing its own proprietary technology, following the roadmap from single-junction to multi-junction, while being involved in the main space research and development programs at the EU and international level.

The research activities of CESI have been carried out over time thanks to relevant internal investments and financial support from the Italian and the European Space Agencies.

CESI has cooperated in many significant projects for interplanetary missions (Mercury, Mars, and Jupiter) and has provided more than 250,000 solar cells for more than 100 civil satellites to commercial and institutional clients from over 25 different countries.

Solar cells are manufactured at the CESI facility in Milan. They can be provided either at bare or SCA (aka CIC) levels to serve the commercial civil application markets, boasting one of the best cost-to-quality ratios. CESI is particularly proud of its distinctive positioning based on its attention and capability to shape and fine-tune solar cells for the specific needs and applications for any of its customers' missions.

The CESI standard triple junction space cells have state-of-the-art 30% typical efficiency, qualified for LEO and GEO missions according to ECSS-E-ST20-08C standard. In its continuous improvement effort, CESI is already investing in four-junction cells, achieving space efficiencies beyond 35%.

One of the top manufacturers of Triple-Junction Solar Cells for Space Application

Our space product commercial portfolio includes

- Our standard triple-junction state-of-the-art space cells with a typical efficiency of 30%. They have an extensive flight heritage in LEO, MEO, and GEO orbits.
- Low-cost triple-junction solar cells, fully qualified for LEO and GEO missions: these cells are suitable for the new mini/micro/cube satellite macro-constellation emerging market, where cost is key. CESI is the only manufacturer selling this class of product.
- Thin triple-junction solar cells fully qualified for LEO missions: these cells are aimed at New Generation Array (NGA) designs that require flexibility and light weight.
- A range of sizes up to Large Area, either as bare cells or Solar Cell Assembly (SCA; also known as Cell-Interconnect-Coverglass-CIC).
- A combination of all the above product features to manufacture and supply space solar cell products fine-tuned to the requirements of any space program.

For more information, please contact us at solar@cesi.it

Our Offices

CESI

Centro Elettrotecnico Sperimentale Italiano Giacinto Motta S.p.A.
Via Rubattino, 54
I-20134 Milan - Italy
T +39 02 21251
Employer/Tax ID: 00793580150

ISMES SpA
Via Lago dei Tartari 3D- 3E
00012 Guidonia
Montecelio (Roma)
Employer/Tax ID: 00422780585

CESI USA, Inc.
The Corporation Trust Center, 1209 North Orange Street, Wilmington, 19801 Delaware,
EIN Letter No. 81-1465653

Enernex
620 Mabry Hood Road, Suite 102, Knoxville, TN 37932, USA
EIN letter No. 27-2301508

CESI Middle East FZE
Building 5WA - Office 326 - Dubai Airport Freezone - Dubai - United Arab Emirates,
DAFZA License: 2176,
VAT no. 100362429100003

IPH Institut
"Prüffeld für elektrische Hochleistungstechnik" GmbH
Landsberger Allee 378A - 12681 Berlin, Germany, registered with the commercial register of the local court of Charlottenburg under registration no. HRB 34753B,
VAT no. DE137211121

FGH Engineering & Test GmbH
Hallenweg 40 - 68219 Mannheim, Germany registered with the commercial register of the local court of Mannheim under registration no. HRB 8138B,
VAT no. DE202994469

KEMA B.V.
Klingelbeekseweg 195 6812DE Arnhem, the Netherlands,
Trade Register number 73117455
VAT code: NL859361809B01

ZKUSEBNICTVI A.S.
Podnikatelská 547, 190 11 Prague 9 - Běchovice,
Identification No.: 452 74 355,
registered in the Commercial Register maintained by the Municipal Court in Prague, File No. B 1563
VAT: CZ45274355

KEMA Powertest, LLC
4379 County Line Road, Chalfont, PA 18914, USA
EIN Letter No.: 32-0225276

KEMA (Shanghai) Technology Consulting Company Limited
凯码（上海）技术咨询有限公司
Room 303-2, 3rd Floor, Building 5 of Vanke Center, 988 Shenchang Road, Minhang District, Shanghai
Unified Social Credit Code: 91310000MA1FPJA120

70 years of expertise power our next chapter.
CESI continues to innovate, connect ideas, and deliver trusted solutions that enable progress and open new possibilities for tomorrow.

cesi.it