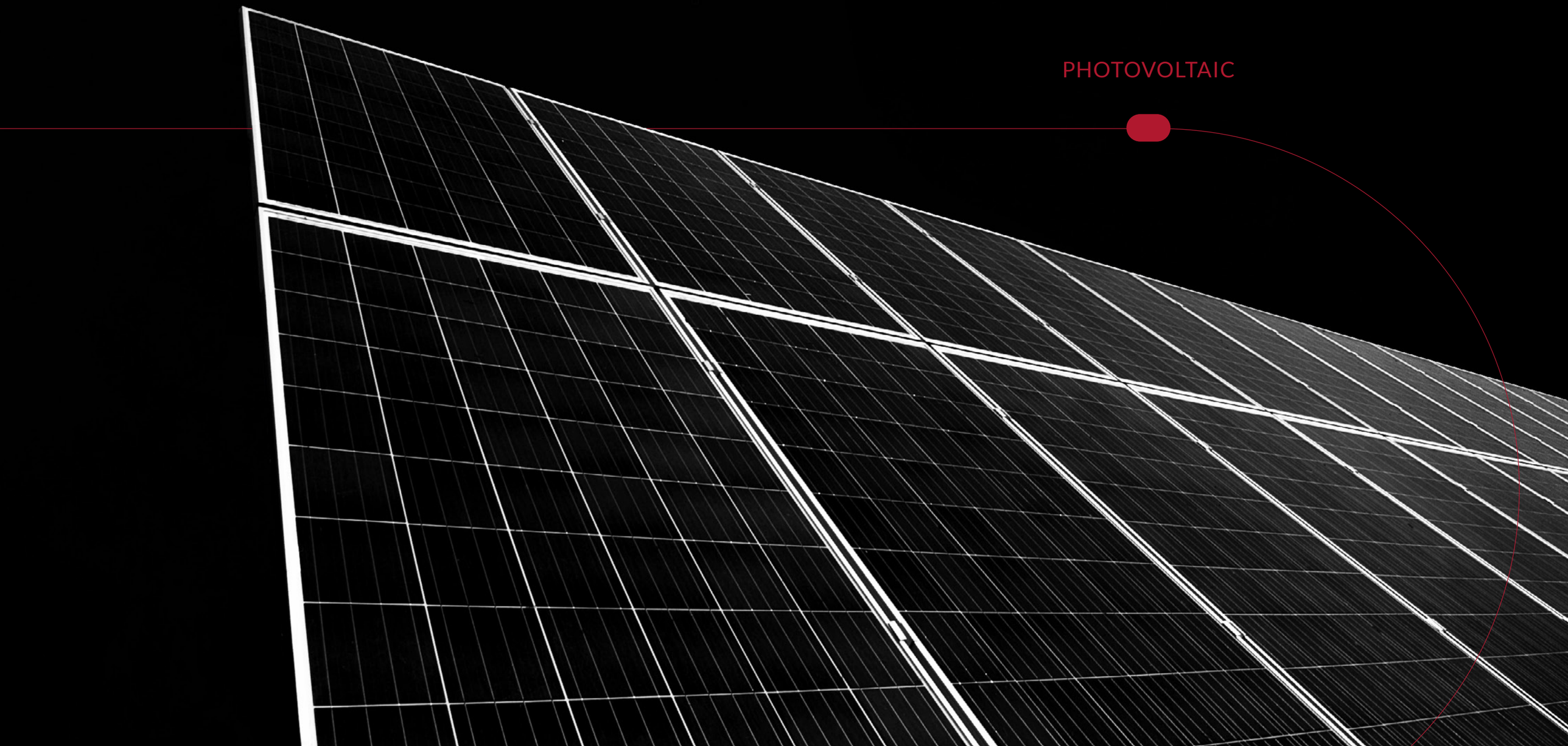
ESPE
Energy Expertise

PHOTOVOLTAIC



THE SUN AS A SOURCE OF DEVELOPMENT

Our expertise in high-power and complex photovoltaic systems reflects the status of an EPC concern specializing in the supply of utility scale industrial and ground-mounted systems. We combine top performance with maximum reliability, so that our technologies can accompany the activities of companies and investors as inexhaustible sources of savings, efficiency and continuous growth.

In addition to large industrial systems, since 2003 we have been installing photovoltaic systems for SMEs, as well as designing and building state-of-the-art off-grid systems. To date, we have completed more than 795 installations, including industrial contracts, large PV parks, and grid parity and storage systems. On each project undertaken, we offer tailor-made solutions that significantly reduce energy procurement costs.

THE SINGLE-SOURCE PARTNER FOR TURNKEY INSTALLATIONS.

TAILOR-MADE DESIGN

The first stage of the development is one of painstaking design, with our team of experts evaluating all the variables so as to offer a custom solution. We examine the site, the energy requirement and the technical constraints, proposing designs that will optimize energy production and ensure maximum efficiency under all conditions.

EFFICIENT INSTALLATION AND TESTING

We take care of every detail during the course of installation, from logistics to commissioning of the various components. Our experts supervise every stage of assembly and testing, ensuring that the system is ready to operate with maximum efficiency. Our aim is to ensure that the system goes into operation on time and on budget.

MAINTENANCE AND CONTINUOUS MONITORING

Our many years of experience with maintenance have led to the creation of Reflow Srl, a company dedicated to scheduled maintenance services, and to advanced monitoring capable of detecting possible abnormalities in real time.
By offering services like these, we can ensure that top levels of performance and durability are maintained over the long term.

Utility scale photo-voltaic systems

With over 20 years of experience in the photovoltaic industry, we are the ideal partner for companies seeking high-performance and durable energy solutions. We offer bespoke systems that are able to meet the power and reliability requirements typical of large-scale projects.

Our engineering team designs and builds top level systems capable of meeting the most complex energy needs, with an expert eye on quality, and on maximum reliability. As a partner organization, we help companies and investors through the transition toward the energy of the future, giving care and expert consideration to each stage of the project.

Big installations, great results.

OPTIMIZED DIMENSIONS

Our utility scale systems are designed to maximize efficiency while occupying the minimum of essential space. An exacting study is made to identify the layout and positioning of the panels that will give the maximum energy yield for the available surface area.

LEADING EDGE TECHNOLOGIES

As we see it, innovation is the key to high and sustainable levels of performance. We use solar panels and inverters of the latest generation, advanced energy storage systems and real-time digital monitoring solutions.

OPERATIONAL FLEXIBILITY

Every utility scale system is designed with the specific needs of the customer in mind. Our flexibility is reflected not only in the design of systems, but also in the possibility of their future expansion.

HIGH ENERGY YIELD

The use of the best technologies is a key factor in ensuring our systems guarantee high energy yields. Every component is selected and configured with optimized energy production in view, reducing losses and improving output under varying light conditions.

DURABILITY AND STRENGTH

Utility scale systems call for materials and components that are capable of standing up to extreme conditions. Consequently, we use only materials of high quality and we test every system to ensure maximum durability.

Ground-mounted and rooftop C&I installations

Photovoltaic systems for the Commercial and Industrial sector offer a range of especially advantageous options for businesses looking to save on energy and make choices in favour of sustainability. By producing their own clean energy, companies can cut their expenditure on external sources of supply and make themselves less vulnerable to increases in market prices.

ESPE can boast decades of experience in industrial systems, and more than 20 years of activity in the solar energy sector, with ground-mounted and rooftop PV systems: a history that makes the company a reliable and competent partner for developing durable, efficient solutions tailored to the specific needs of industrial customers. Together, we can convert unused ground space and rooftops into valuable resources.

Efficiency up, self-consumption up, costs down.

SELF-GENERATION AND SAVINGS

A company that invests in self-generation of energy by installing a photovoltaic system reduces its energy bills, enjoying greater independence from the electricity grid and protection against continual price fluctuations.

PUTTING UNUSED SPACES TO GOOD USE

Industrial ground-mounted or rooftop solar panel arrays can make the most of areas that often remain unused. Without disturbing normal business activity, PV systems offer an infrastructure that can help to maximize energy production, combining efficiency and sustainability.

GIVING A REAL BOOST TO THE TRANSITION PROCESS

Installing an industrial photovoltaic system means taking a concrete step toward securing a sustainable future. With ESPE, you can turn your company into a standard-bearer for clean energy: remember that change is not merely a trend — it is a responsible choice.

INCREASED REAL ESTATE VALUE

A rooftop PV installation is an investment that increases the value of a property. Companies that invest in solar panels improve the energy profile of their facility, increasing its potential to attract buyers at a future time.

COMPLIANCE WITH ENVIRONMENTAL REGULATIONS

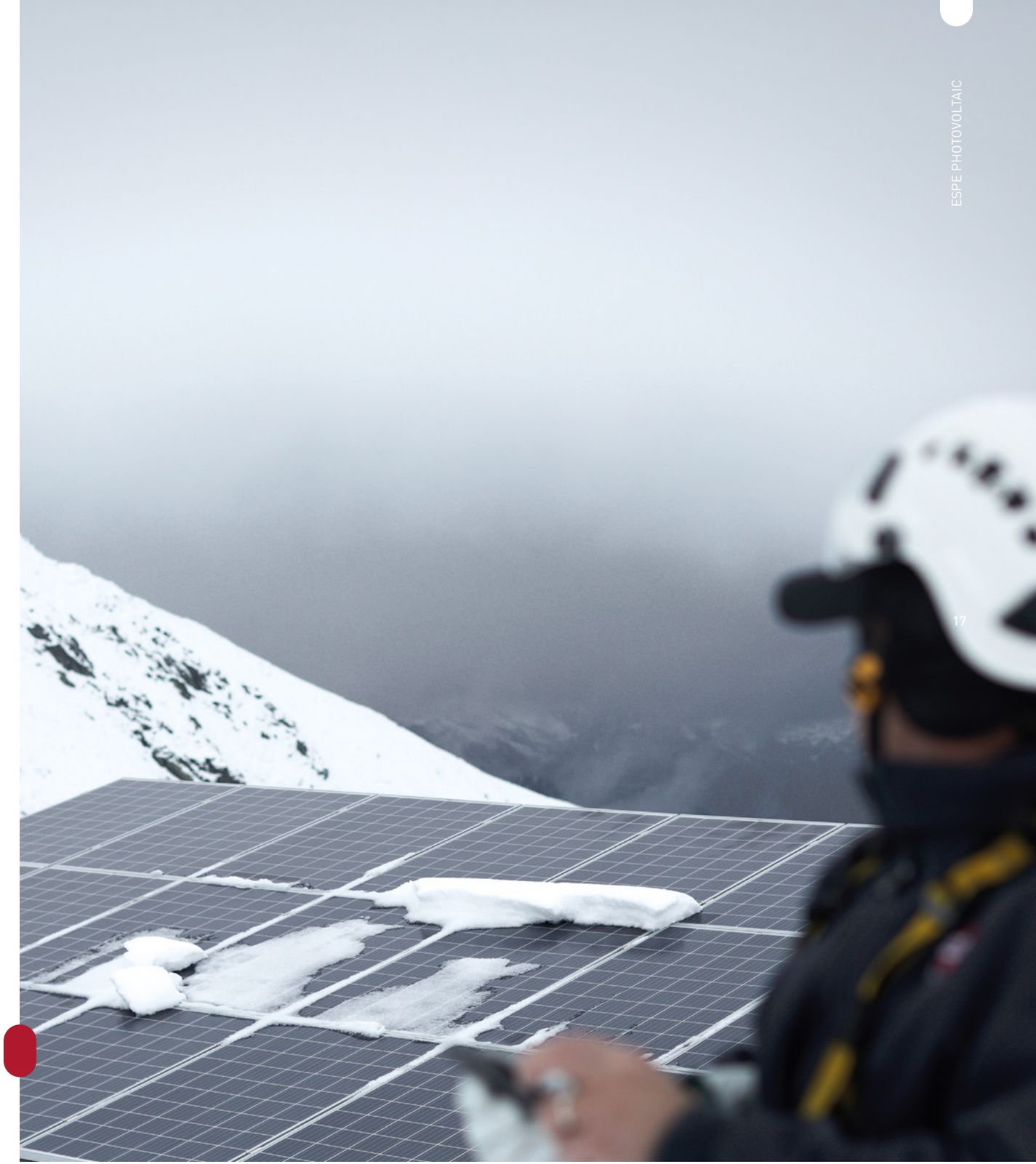
By installing a photovoltaic system, companies ensure they keep pace with continually changing environmental standards and regulations, as well as enhancing their competitiveness and gaining increased access to tax incentives and benefits.

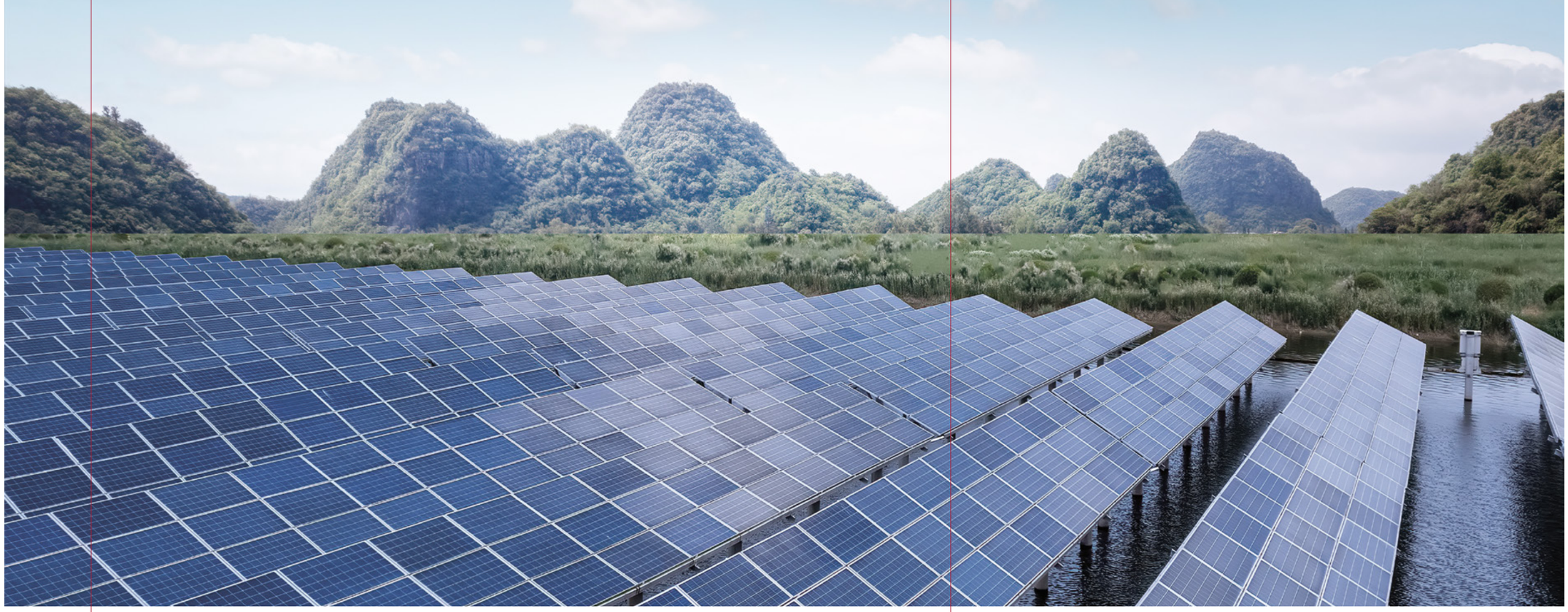
Off-grid systems

As pioneers of off-grid systems in Italy, we have been building electrical systems since 2003 that combine a photovoltaic generator with next-generation storage and backup technologies to ensure freedom from reliance on the grid.

The ideal solution for bringing power even to the most remote and inaccessible of areas, such as highland locations or islands, off-grid systems provide a very effective means of generating electricity in the event of disasters and emergency situations.

What is more, off-grid solutions represent a preferable alternative to traditional fossil-fuel generator sets, providing a cleaner, safer and more cost-effective source of energy.





Clean energy everywhere

HIGHLANDS

Off-grid systems are indispensable in highland areas, where access to the electricity grid is especially problematic. These installations can resolve power supply difficulties in extreme climatic conditions by providing a safe and reliable source of energy, even at high altitudes.

ISLANDS

Connection to the grid can be a problem for islands, being detached from the mainland. Our off-grid systems provide continuous and sustainable energy to these areas, ensuring electrical self-sufficiency and helping to reduce the pollution that accompanies the use of fossil-fuel generators.

REMOTE AREAS

In particularly isolated areas, off-grid systems are the optimum solution for ensuring stable and self-sufficient supplies, making it possible to proceed with projects and activities that require a high availability of electricity.

CRITICAL AREAS

Off-grid systems are invaluable in emergency situations, providing an independent source of electrical power that can be relied on should grid outages occur. In the case of natural disasters and the like, they ensure a reliable supply of energy for timely and continuous rescue and recovery operations.

RURAL AREAS

In many rural areas, connections to the electricity grid can be unstable or insufficient. Off-grid systems provide the ideal solution for the stabilization of energy supplies, providing a readily available source of power for local agricultural or production activities.

Photovoltaic systems for energy communities

We at ESPE are convinced as to the potential of RECs, and ready to guide interested groups through all the steps necessary for their creation and development. From feasibility study to running the system, we offer comprehensive support covering all the technical, regulatory and organizational aspects. We work together with our partners to simplify every step of the process, ensuring that each member of the community has access to a transparent, beneficial and sustainable energy model.

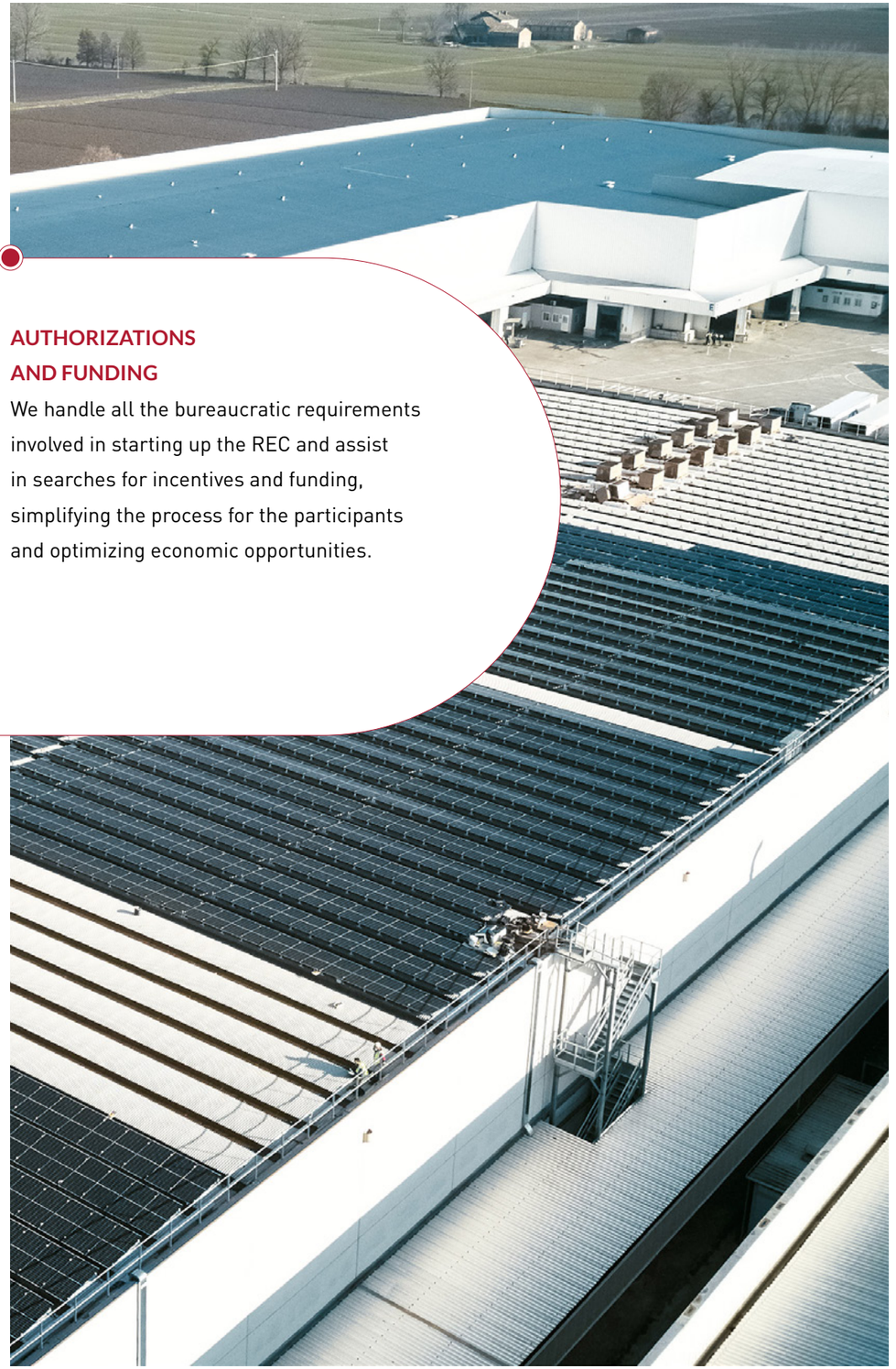
Our energy at the service of RECs

FEASIBILITY STUDY AND DESIGN

Every REC starts from a preliminary analysis that evaluates the energy potential, the number of participants and the energy requirement. We map the resources available, and develop a tailor-made solution that will ensure efficiency and sustainability over time.

AUTHORIZATIONS AND FUNDING

We handle all the bureaucratic requirements involved in starting up the REC and assist in searches for incentives and funding, simplifying the process for the participants and optimizing economic opportunities.



INSTALLATION AND ACTIVATION

Once approval has been given, we install the panels, integrate the system into the grid and test the installation. Quality materials and rigorous testing ensure maximum efficiency from day one.

MANAGEMENT AND SUPPORT

We apply advanced technological methods in monitoring the production and distribution of energy, so as to minimize waste and optimize self-consumption. We offer support and maintenance to ensure operational continuity.

Innovative agrivoltaic systems

Benefiting from past experience gained in the energy sector, ESPE offers innovative agrivoltaic solutions that contribute not only to the preservation of land, but also to the improvement of agricultural productivity. With our support, every agricultural concern can count on a reliable partner that knows the challenges of the sector and how to overcome them, embracing the opportunities offered by the energy transition now taking place.

Together
we cultivate
new growth

SITE ANALYSIS

We start with a thoroughgoing analysis of the site, carefully evaluating the type of crop, the soil characteristics and the levels of solar radiation available. This first step enables our design engineers to adapt the system to the specific needs of the surrounding environment.

CUSTOM DESIGN

We design the installation according to the stated energy requirements and the peculiarities of the available ground space. The systems we create are suited to the characteristics of the soil and neither harm nor hinder crops, favouring agricultural sustainability and productivity still further.

INSTALLATION AND TESTING

With our expertise in technical project management, we are able to install and test every component of the system, while continuous monitoring and preventive maintenance ensure high levels of performance and maximum reliability.

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