



COMPANY PROFILE



 **energia** | save energy
save CO₂

THE COMPANY

*Energia Europa develops and produces **innovative systems for the energy efficiency** of production sites, retail stores and office units. The heart of its production is represented by the **patented E-Power system**, which allows the achievement of real efficiency in an electrical line, and therefore true energy saving with equal output.*

Energia Europa recently incorporated a business unit specialized in the design and development of high quality LED lighting for industrial and urban applications, with the E-Lampsy brand.

E-lampsy | Lighting professionals
Energia LED Division



ENVIRONMENTAL SUSTAINABILITY

Given its capability to produce true energy saving, the E-Power device allows the reduction of CO₂ emissions, so contributing to the environmental sustainability of the sites. Each kWh saved means minor CO₂ emission equal to 0.450 Kg!

R&D

Energia Europa owns a state of the art laboratory, jointly managed with the University of Florence: the “Smart Energy Lab”. The lab is equipped with the most sophisticated equipment available today in terms of the capability to analyze all the parameters that affect the power quality. Thanks to this equipment our engineers, together with the researchers from the department of Information Engineering of the University of Florence, are able to measure and analyze the effects of the E-Power device on the all sorts of loads.



Through this analysis we are able to demonstrate the impact of our devices on the loads and carry on a constant experimental activity on new technological solutions. Our cooperation with universities and research institution does not stop at the Italian borders. **We keep an intense joint R&D activity with prestigious international institutions**, such as the Politechnical University in Madrid, Spain, and two prestigious research institutes in Germany and Poland.

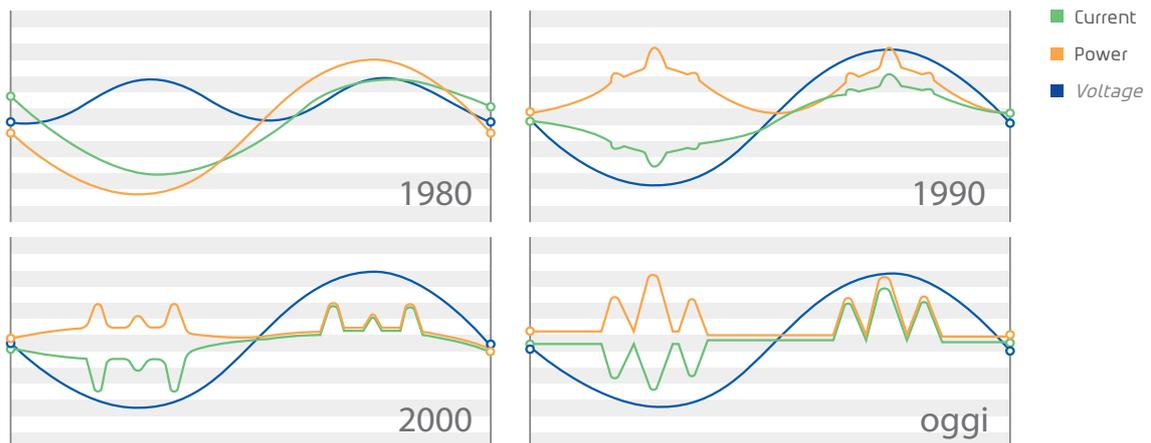
E-POWER SYSTEM

TECHNOLOGY

The patented E-Power system is a passive inductive filter with hybrid functions, given by its capabilities to inject into the power flow some electromagnetic vectors in opposition of phase, utilizing some of the voltage derived from the incoming energy flow. The inductance is not constant, but it changes dynamically its filter impedance value adapting to the power absorption of the electrical network, so maximizing its effectiveness. Since the E-Power only has reactive components and contactors, there are no losses produced by the system and the self-consumption is practically undetectable.



WHY USE IT



Until the 80's, in all industrial and commercial sites the linear loads were largely prevalent; that is, electrical loads not influenced by power electronics. At the end of the 80's the electronic components become smaller and more efficient. New effective technologies linked at the electronic control of power are emerging, which generate a positive impact on energy consumption but a negative one on the power quality. Since the years 2000, the global electrical energy

consumption is constantly increasing at a very fast pace; energy produced by renewable sources is increasing as well, with a negative impact on power quality too. Today in the production sites the non linear loads regulated by power electronics are largely prevalent.

It becomes essential to save energy through the optimization of energy transmission and the improvement of power quality

E-POWER SYSTEM

BENEFITS



ENERGY EFFICIENCY:

reduces the losses and disturbances in the electrical network bringing true energy efficiency on the line; improves power quality and increases the life cycle of the loads.

REDUCTION OF EMISSIONS:

each kWh saved is equal to 0.450 Kg of lower CO₂ emissions in the atmosphere.

ENERGY SAVING:

reduces energy consumption always ensuring the same amount of work, generating a financial saving between 3% to 7%, according to the kinds of loads which are connected to the line. The results are scientifically measurable thanks to the patented Bypass system and the data retrieval and transmission ensured by the E-Controller device.



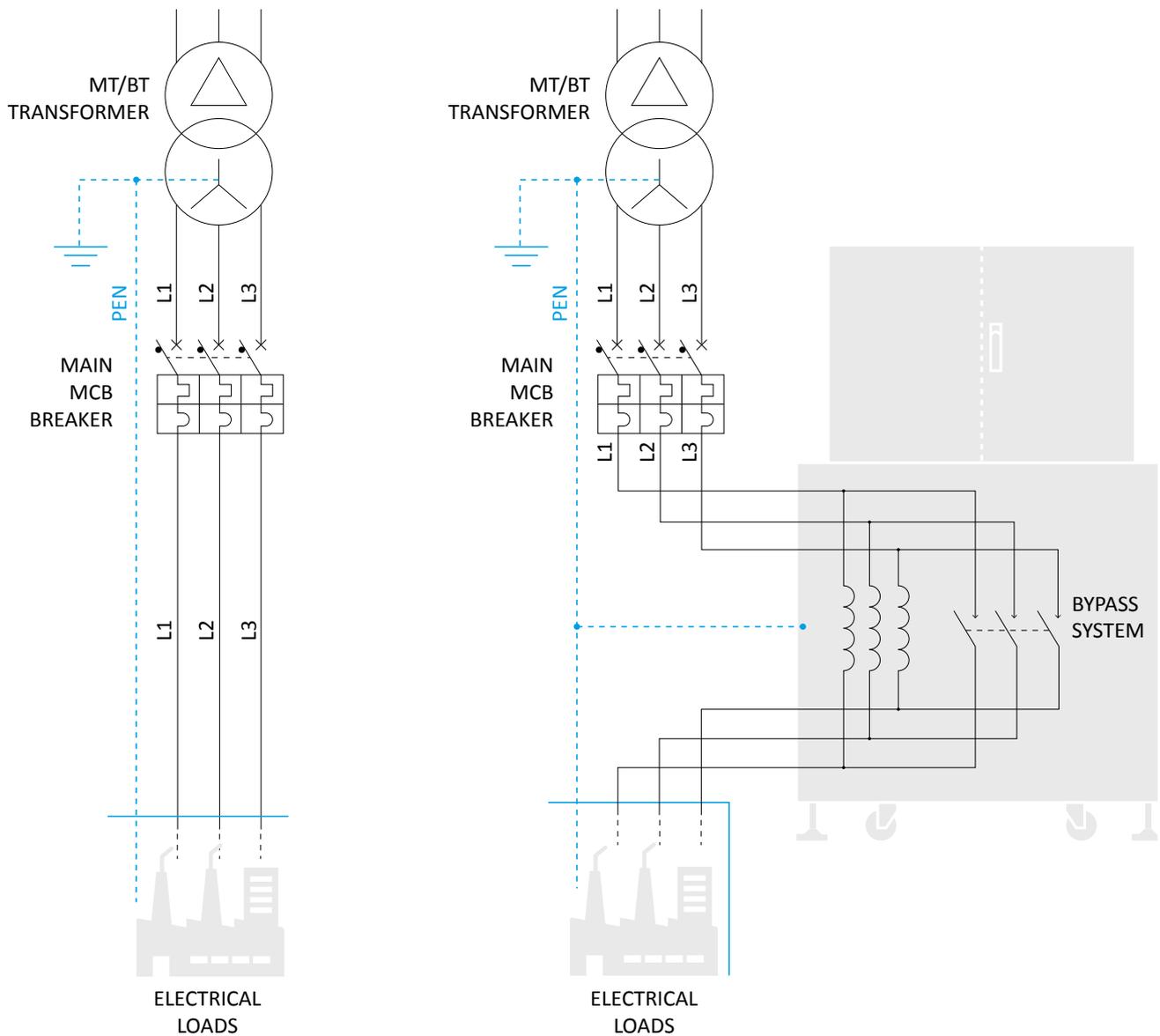
THE PATENTED BYPASS

SAFETY

The E-Power is a 100% secure technology thanks to the 24 hours remote control and its patented Bypass system that automatically excludes the E-Power from the line in case of malfunctions, thus ensuring continuity of power supply to the loads, avoiding any disruption.

MEASURABILITY

The Bypass and the measuring instruments inside the E-Power system, allow to activate and deactivate the technology, objectively highlighting the diversity of power absorption between the two periods.



E-POWER NOW SOFTWARE

The interface software with E-Power: friendly, immediate, efficient and interactive. Through this application the user will be able to verify immediately the performance and the results produced by the E-Power system.

CHECK

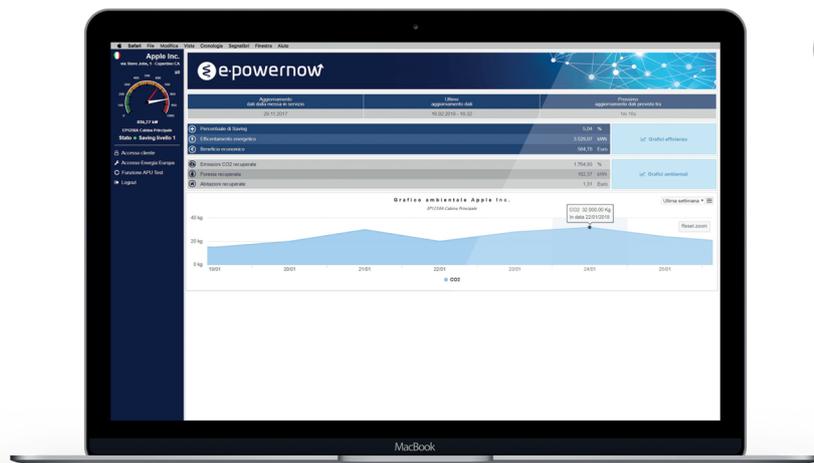
The user is able to check immediately the performance of the E-Power device, in terms of energy efficiency and environmental benefits.

UPDATE

The user is able to receive weekly automatic updates on all requested data and set a fast interactive channel with Energia Europa.

CONTROL

The user is able to perform a complete and autonomous control on E-Power performance through Saving/Bypass commutations that generate an immediate update on the Efficiency results found through the initial measurement campaign. The analysis is performed automatically on the basis of high frequency samplings on the line and through a special algorithm designed to reproduce as close as possible the competence of our Saving Analysis department.



For pc, tablet, and smartphone



CERTIFICATIONS



01.



02.



03.

COMPLIANCE
AND TESTS

04.



05.



06.



07.

EMC

08.

01. ISO 9001:2008, ISO 14001:2004,
UNI CEI 11352:2010, BS OHSAS 18001:2007.

02. Short circuit tests according to the international
standard IEC EN 61439-2.

03. Patent 1: E-Power System protected by international
patent N. PCT/IT2011/000275
Patent 2: Bypass System protected by international
patent N. VI2007A000272.

04. Compliance of IEC EN 50449 regarding the evaluation
of workers exposure to electromagnetic fields
produced by E-Power systems, tests of the Fault Loop
Impedance.

05. CE Mark in accordance with IEC EN 61439-1-2.

06. UL Mark for compliance with US and Canadian
safety requirements.
The UL mark guarantees approval and
recognition worldwide.

07. RCM Mark for compliance with Australia
and New Zealand safety requirements.

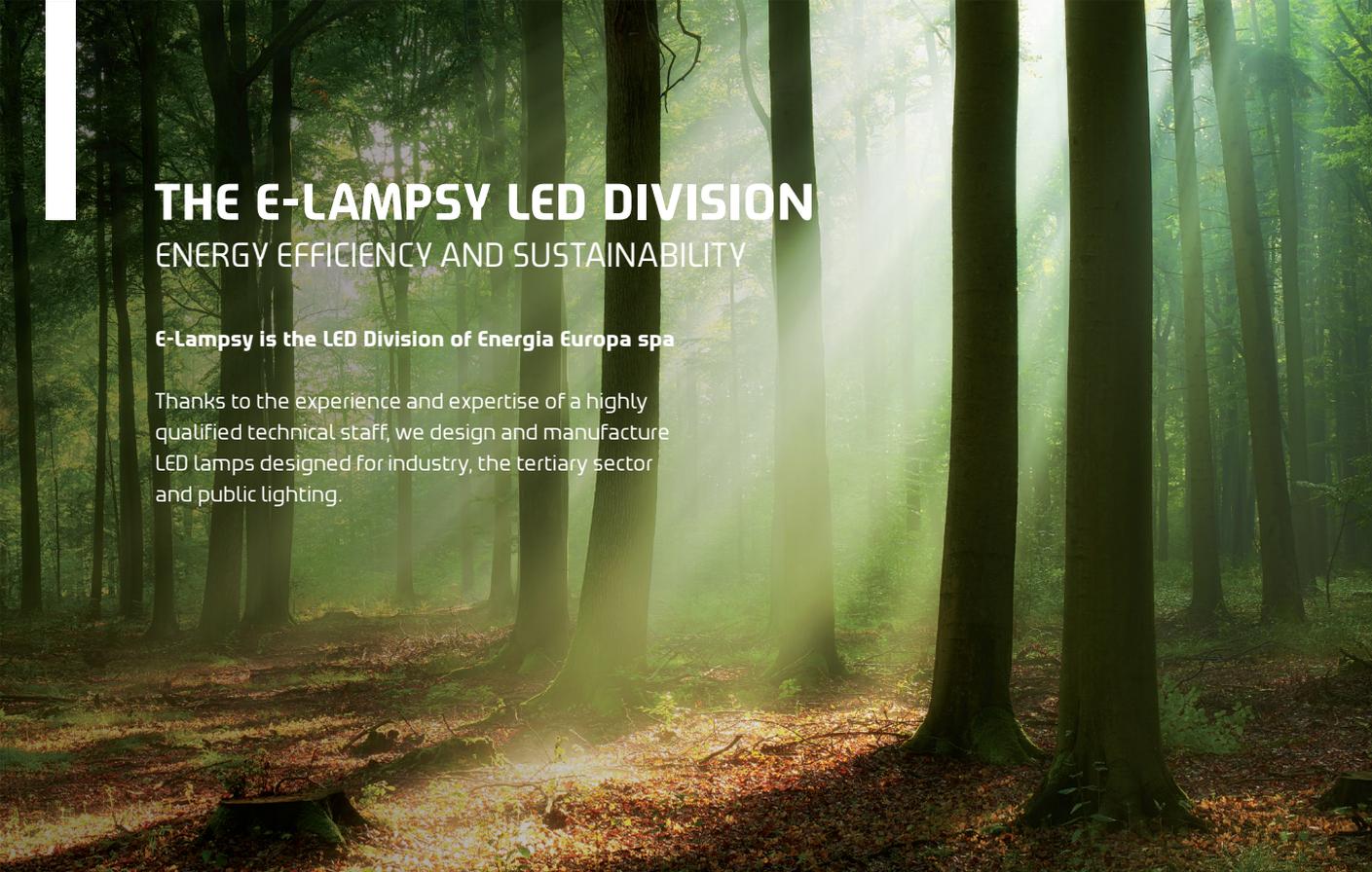
08. Electromagnetic compatibility according
to IEC EN 61000-6-2 and IEC EN 61000-6-4.

ESCo Credited Company

THEY TRUSTED US

In the last years we had the fortune to win the trust in our solutions of many international clients;
some of them are among the best known brands.





THE E-LAMPSY LED DIVISION

ENERGY EFFICIENCY AND SUSTAINABILITY

E-Lampsy is the LED Division of Energia Europa spa

Thanks to the experience and expertise of a highly qualified technical staff, we design and manufacture LED lamps designed for industry, the tertiary sector and public lighting.

E-LAMPSY LIGHTING DESIGN OF EXCELLENCE

Our lighting systems reduce energy consumption and allow to improve the quality of working environments, even with customizable solutions, based on the evaluation of objective savings with the same light efficiency, in full compliance with current regulations.

We carry out lighting projects looking for the best conditions of comfort, efficiency and safety in the spaces where a visual activity takes place that needs an adequate supply of artificial light.

e-Lampsy is able to provide technical support and reports with lighting calculations and photorealistic images of the illuminated environment.

“ We give great importance to **research and experimentation** to create technologically advanced products, with an innovative design and with unique **characteristics, including maximum visual comfort, with solutions for the reduction of UGR (Unified Glare Rating) of luminaires.** ”



OUR STRENGTHS



PUBLIC LIGHTING AND URBAN DESIGN

e-Lampsy solutions contribute to the safety and livability of places at night

(roads, parking lots, parks, avenues, urban areas) with a design always suitable for specific areas.



INDUSTRIAL LIGHTING

Industrial lighting is one of the most energy-intensive areas for lighting: e-Lampsy products for indoor and outdoor lighting are versatile, durable and extremely performing.



LIGHTING SPORTS FACILITIES

Lighting needs of sports facilities aim at reliability, durability, low maintenance and energy saving.

The different LED solutions always provide top performance, offering excellent energy efficiency and high safety.



CUSTOMIZED SOLUTIONS

e-Lampsy offers professional lighting design and helps customers identify needs, solutions and standards to be met.



360° ENVIRONMENTAL BENEFITS OF LED LIGHTING



Environmental sustainability

The environmental benefits of the LED source derive both from the very composition of the lighting fixtures - which avoid the use of toxic substances including lead, mercury, cadmium and hexavalent chromium - and from reducing emissions of CO₂ and other greenhouse gases and pollutants, in full agreement with the Kyoto Protocol.



Waste reduction

Less maintenance and longer life of our lighting fixtures leads to less waste production and greater environmental sustainability.



Reduction of light pollution

E-Lampsy LED products are designed and manufactured in such a way as to significantly reduce light pollution that worsens the quality of life, also affecting the entire ecosystem.



Financial benefits

The environmental benefits of LED technology are largely based on energy saving and emission reduction and lower waste production. A virtuous chain that also touches the company's balance sheet in a positive way, with a drastic increase in energy efficiency and environmental sustainability of the company. LED lighting achieves a concrete saving of at least 40% of electricity, easily convertible into costs savings.

