

CERE, by UL Solutions is a Testing, Simulation and Certification body that was originally set up as a Certification Entity in 2015.

CERE, by UL Solutions was created in its beginnings as a Certification Entity for Renewable Energies, with the purpose of being the access key to the different countries where certification of components, full installations certificates, modeling and software validation of components and facilities was required.

Currently CERE, by UL Solutions has expanded its capabilities and is dedicated not only to Renewable Energies, but also to Electric Vehicle chargers, Industrial Machinery, Medical Devices and Electrical and Electronic Products.



### Accreditations

We have accreditations that verify our technical competences as a Certification Body and Testing Laboratory. This fact ensures a deep knowledge of the international requirements for components and installations.

CERE, by UL Solutions is accredited by ENAC and a2la (IAF/ILAC members) as a Certification Body according to ISO 17065; and as an Accredited Testing Laboratory according to ISO 17025. We also belong to the IEC Scheme being CBTL Testing Laboratory and NCB Certification Entity.

In addition, we can provide solutions to countries such as North America, Israel, Colombia, Korea, Australia, etc.



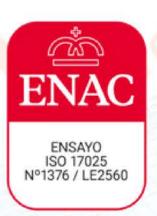
SAFETY



STANDARD

ARD



















NETWORK

#### **TESTING**

We can test grid connection, safety, climate, electromagnetic compatibility and grid quality requirements.

These tests can be done at the client's home, in the field or in our facilities.

#### SIMULATION

The simulation department works at the component level and at the installation level. At the component level, it is dedicated to model validation and simulation of grid code compliance. At the installation level, it is dedicated to plant modeling and verification of grid code requirements and grid quality.

#### CERTIFICATION

Within our scope of accreditation we can offer certificates according to standards of grid connection, safety, climate, electromagnetic compatibility and grid quality, and as in simulation we can work at the component level and at the installation level.

We perform control of the manufacturing process with factory inspections as part of the certification process in accordance with the requirements indicated in ISO/IEC 17065.



# Why do we do it?

Our main objective is to guarantee the quality and reliability of the products we work with.

We provide solutions to achieve the highest quality in your products so you can market them in an integral way and with confidence, controlling risks and meeting the international standards of quality, safety and sustainability.

Thanks to our work we favour global safety by certifying the products you live with.

We promote a safer and cleaner world.



# WE OFFER CONFIDENCE, VALUE AND SAFETY





### How do we do it?

#### QUALITY

We offer the highest quality in all our processes, both human and technical, with cutting-edge technology offering personalized services and backing the client up throughout the process.

#### **PROFESSIONALISM**

We ensure that our testing processes are accordance with procedures to ensure compliance with all regulatory requirements.

#### INDEPENDENCE AND IMPARTIALITY

At CERE, by UL Solutions we do not have our own interests that compromise our impartiality when it comes to carrying out tests and issuing certificates.



## Our team

Our team has a long-accumulated experience in testing, simulation and certification for all its business areas, including an in-depth knowledge of grid integration standards, design, safety, EMC and grid quality.

All this knowledge is applicable in renewable energy generators and controllers, electric vehicle chargers, photovoltaic trackers, household appliances, industry, industrial machinery, electrical and electronic products and medical devices, among others.

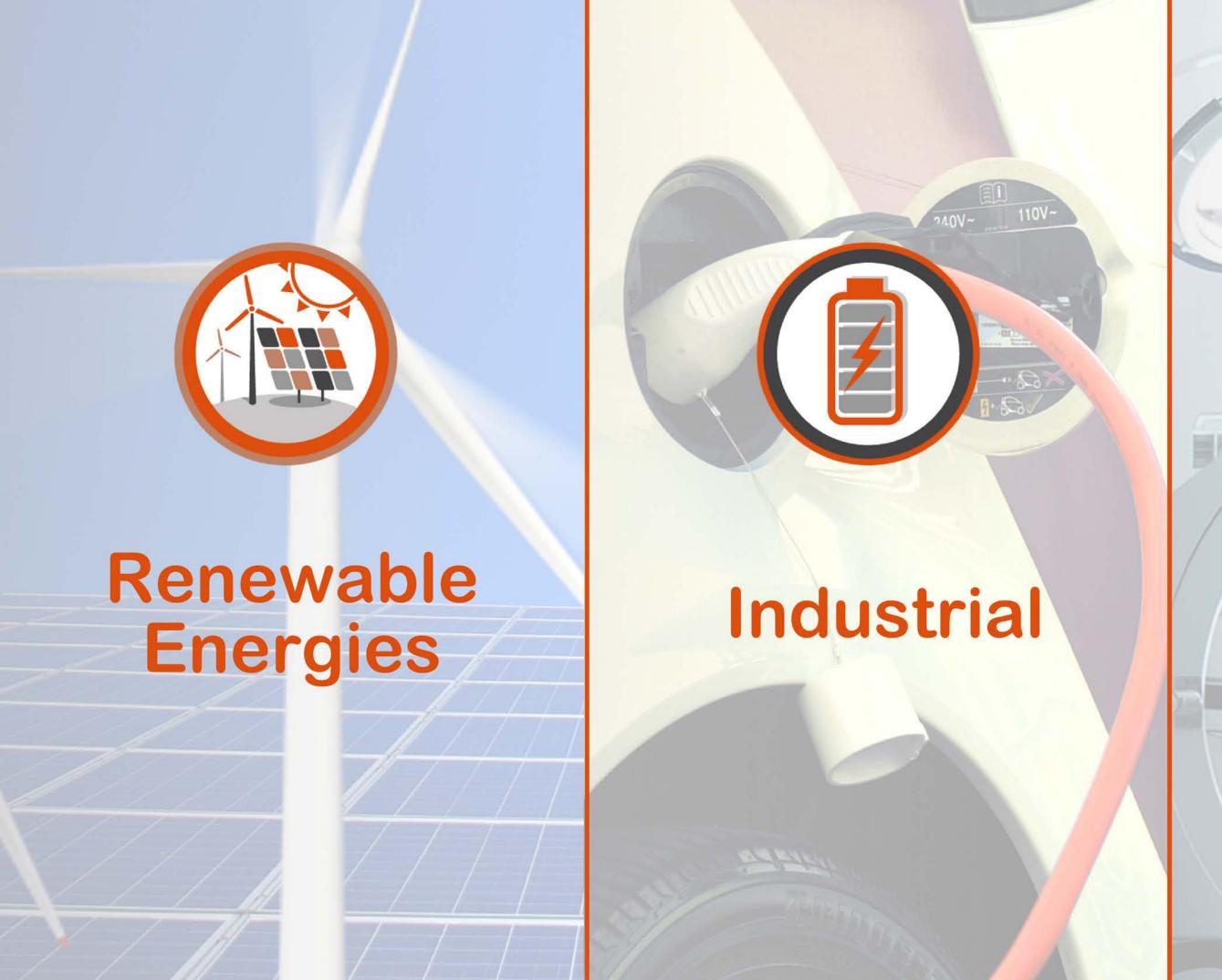


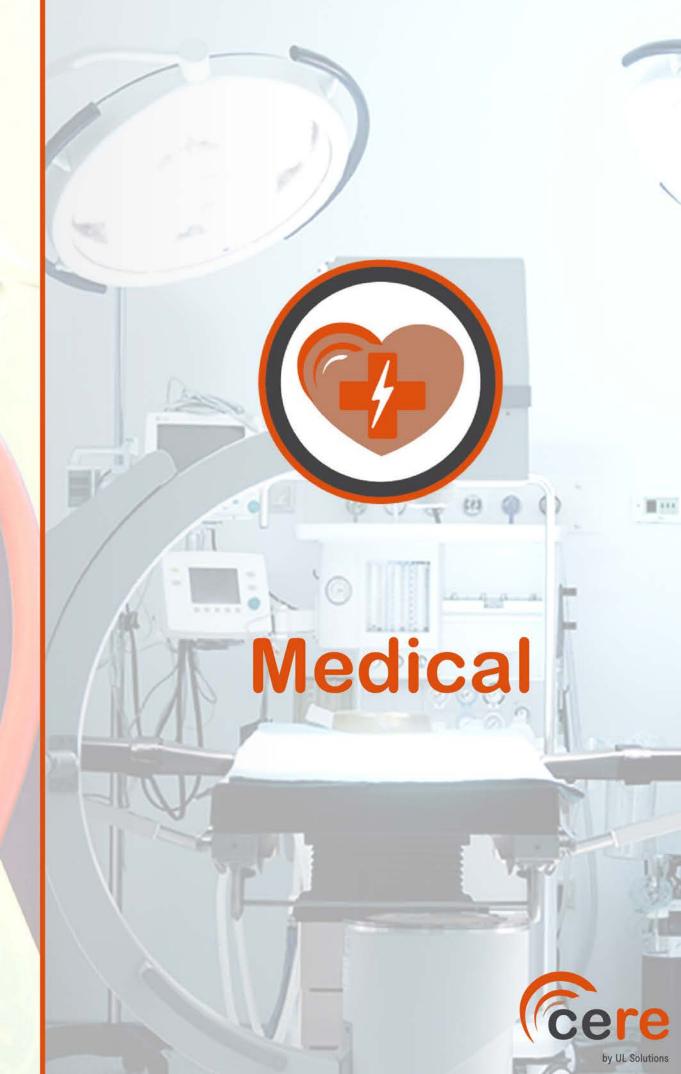


# We work with integrity, professionalism and transparency

Always seeking continuous growth, keeping us at the forefront of the sector and prioritizing adaptability to the client.



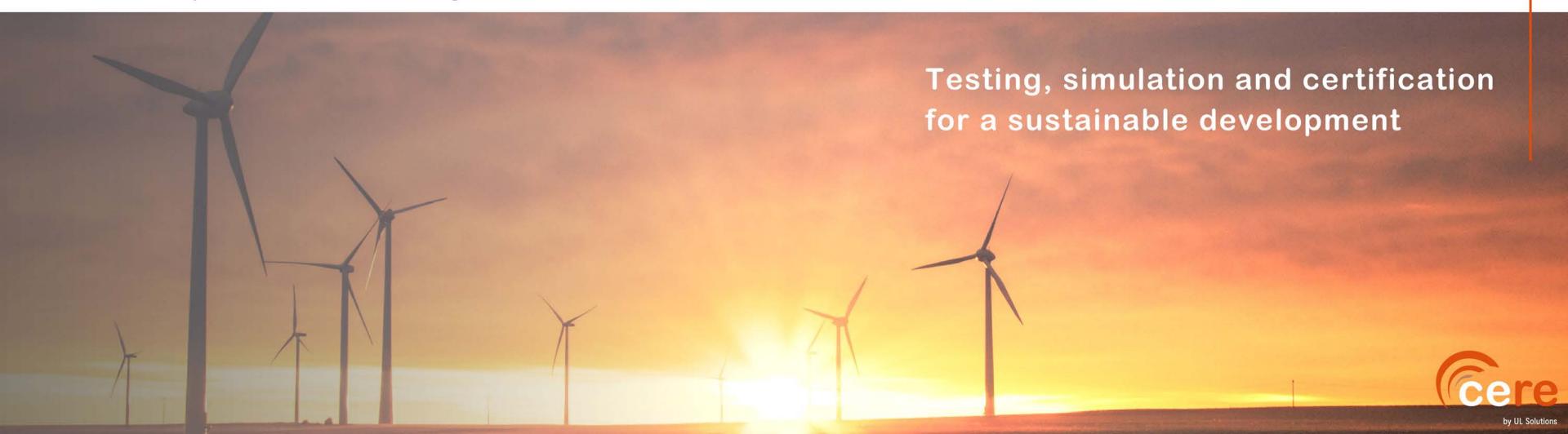




## Renewable Energies

Renewables attempts to be the access key on Client's target countries for Renewable Energies, where testing and certification for components, full installations certificates, modelling and software validation of renewable power plants, generation, and control units of any kind, are being required.

During the lifetime of the company, CERE, by UL Solutions has inspected, evaluated, and certified more than 7GW, distributed in over 200 Renewable Energy installations, with experience in every continent



#### Industrial

Industrial is the Division specialized in the full service of the following equipment: vehicle charger, photovoltaic tracker, aesthetics, software, home, household appliances, information technology, industrial and machinery worldwide.

We provide Electromagnetic Compatibility (EMC) and Electrical Safety testing and verification of standards for CE Marking and requirements of all countries covered by the IECEE Scheme.



#### Medical

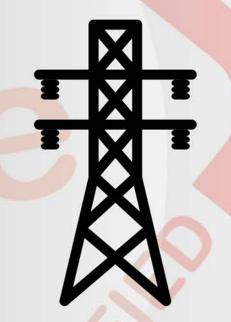
Medical is the Division specialized in the complete service of Testing (Electromagnetic Compatibility (EMC) and Electrical Safety), Certification, Inspection and Verification of standards for CE Marking and requirements of all countries covered by the IECEE Scheme.

CERE, by UL Solutions has the facilities, the accreditation and the huge experience and knowhow of its technical team for testing the next equipment: medical device, diagnostic equipment, and software medical worldwide.



# We certify Grid Code and Quality, Safety and EMC

We actively participate in several International Standardization Committees, which allows us to be at the forefront of the regulations of our sectors.









## Grid Code and Grid Quality

Each country and each grid has its own code that sets out the minimum requirements for connecting to the grid and supplying power.

For example, in Spain, there is a grid code required to connect to the grid (PO 12 2 2020) and another specific for the distribution grid (UNE 217002 2020). There is also a particular requirement for grid-connected zero injection systems (UNE 217001 2020).

Our scope includes more than 60 different grid connection standards and all international grid quality standards.



## Safety

At the product level, each has its own safety regulations that may vary from country to country. Each country has its own safety requirements, although many of them directly require international safety standards.

Our scope includes the specific safety standards of the products we work with, giving manufacturers access to major markets worldwide.



### **EMC**

Electromagnetic Compatibility studies the unwanted effects of the generation, propagation and reception of electromagnetic energy. These tests ensure that there is no interference between different electronic equipment.

A piece of equipment is electromagnetically compatible when it is not affected by the electromagnetic noise surrounding it and does not interfere with other equipment.

Certifying a product is a guarantee to be able to sell it in the market.

To do this, you must comply with the application standard of each device.



# We certify through testing and simulation. For these products:







# Laboratory Capabilities



## **EMC**

- Full Anechoic Chamber of 3 meters and up to 6GHz both in emission and radiated immunity.
- Complete test capacity of IEC 61000 in both radiated and conducted.





## **Test Benches**

- Test bench up to 500kVA for converters
- 3 test benches up to 166kVA with parallel connection capacity.
- DC voltage range up to 1500V and AC voltage range up to 800V and 400Hz
- Passive loads up to 100kVA and electronic load up to 500kVA for island testing.





# **Environmental and Climate Laboratory**

TEMPERATURE RANGE FROM -40°C TO 85°C WITH 85%RH OR 125°C WITHOUT HUMIDITY REFERENCE.

- ✓ Low temperature chamber
- √ High temperature chamber
- √ Temperature chamber
- ✓ Dycometal temperature chamber

- ✓ Binder temperature chamber
- ✓ IP and Nema Camera
- √ Vibration table
- √ Saline atmospheres chamber



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