



DENSIFYING, CAPITALIZING AND DEVELOPING BOTH EXISTING SKILLS AND THE FUTURE TALENTS

As a collaborative R&D tool, PowerGrid Campus Lille brings together companies and laboratories willing to develop projects: designing or innovating solutions, experimentations, validations or prequalification.
The creation of a lab dedicated to the smart transmission power grid will allow development of :



R&D



Entrepreneurship



Education

Project's partners



With the support of



LA NOUVELLE FRANCE
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powergrid

The European Smart
Transmission Powergrid
Campus

powergrid

ABOUT US

Powergrid Campus is a French research, Innovation and training platform dedicated to grow the Smart Transmission Power Grid in Europe. This campus is committed to expanding economic growth in the smart grid sector. Over the last several years, the North of France scientific community has acquired experience with mass integration of renewable energies and power electronics in grids and their simulation tools. Thanks to this experience, people from both industrial and academic worlds created the PowerGrid Campus in order to bring this well-known knowhow to Europe. Thanks to this experience, industrial and academic experts created the Powergrid Campus to transfer this knowledge to Europe.

THE EUROPEAN SMART TRANSMISSION POWERGRID CAMPUS

THE CAMPUS GOALS



Establish an **experimental Smart Transmission Power Grid**



Design through training to **ensure the skills of the future**



Strengthen the public and private sectors **partnerships in Research and Innovation**

THE CAMPUS ROLES



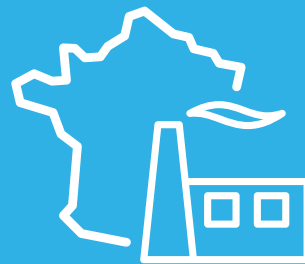
Showcase the **French expertise**



Experiment the most **innovative ideas**



Support **entrepreneurial's initiative**



NEW INDUSTRIAL FRANCE,

PowerGrid Campus is accredited by the French State in the "New Industrial France" program that aims to unite stakeholders towards a common goal, to use State tools and the local ecosystems to design the new French industrial offer.

In addition to Lille, three other campuses (**Saclay, Grenoble and Nice**) make up the Smart Power Grid National Plan, each working on different but complementary issues.

PowerGrid Campus aims to bring the projects developed in the platform to the European Program Horizon2020 (especially in the Secure, clean and efficient energy societal challenge). PowerGrid Campus is **supported by the Cluster MEDEE** representing the North of France scientific community and major industrialists.

THE CAMPUS SCIENTIFIC ROADMAP

The program contributes to the energetic transition implementation and participates in designing the new Transmission Power Grid Architecture. The massive introduction of renewable energies and the DC interconnections have deeply alterate the balance and operating rules of the grid. Hence the Campus Scientific Roadmap focuses on :



Introducing **power electronics** in grids



Taking part in **system services** for power production from intermittent sources



Managing the **interactions between the transmission and the distribution grids needs**



Maintaining **numerical simulation tools expertise**

These issues will question the actual electrical control and supervision systems towards safer and easily and remotely manageable systems.

The L2EP (Laboratory of Electrical Engineering and Power Electronics, Lille) and the UTC (Compiègne Technological University) laboratories make available experimental capabilities. The campus ambition is to create a cluster, associated to the ICT, dedicated to the smart transmission grids thanks to demonstrators and experimental tools facilitating innovation and training.

The expected TRL (Technology Readiness Level) of PowerGrid Campus R&I projects will be 3-5. The campus will contribute to the French smart transmission grid sector international promotion.



PÔLE MEDEE

(Motors and Electrical Devices for Energy Efficiency)

MEDEE is a professional and scientific cluster in electrical engineering. It unites companies (from SMEs to large groups) and laboratories around collaborative R&D projects. Relying on its members, MEDEE bridges **the gap between two worlds : research and industry.**

MEDEE activities range from the design of electrical components to their optimization and smart grid management. Medee has two offices in the heart of Europe (Lille and Brussels). Stay abreast simulation tools expertise (cross-cutting issue).

