

SuperGrid Institute media brief



SuperGrid Institute supports the transition to a more energy efficient, sustainable world. By promoting the emergence and development of new technologies for the integration of renewable energies into the electrical networks of the future, SuperGrid Institute is accelerating this transition in France and in all of Europe.

We work with a wide range of partners in industry and academia who share this vision, helping them to identify and remove technological barriers. Our expertise and innovative inhouse product development enable us to tailor solutions and products to meet each client's needs. They benefit from our high-end research facilities and laboratories as well as expert consulting services.

Who are we?

SuperGrid Institute is an independent private company specialising in High and Medium Voltage Direct Current (HVDC and MVDC) power systems.

We bring together a range of specialists in a collaborative work environment, equipped with state-of-the-art test platforms and resources. Our teams lead and collaborate on major European projects, generating a wide portfolio of innovative technologies that contribute to our recognised excellence.

Established in 2014, today SuperGrid Institute brings together experts from 26 nationalities to develop technologies for the power transmission and distribution grids of the future. With an annual budget of €20M, the company is a key player in the field of direct current in Europe, cooperating with some 17 European countries.



SuperGrid Institute is a member of the French Institutes of Technology, an association encompassing French *'champions of innovation for industrial and economic excellence'*. These interdisciplinary innovation and

research companies are dedicated to exploring new technologies. They pool expertise from public and private companies, academic organisations and laboratories, with the aim of defining and driving applied research for industry, creating value for research results and contributing to life-long and professional training in the field of energy transition.

Key Figures

5 research departments

20 test platforms

140 colleagues

26 nationalities

78M€ investment

90+ patent applications



Why supergrids?

The concept of energy transition focuses on reducing dependence on fossil fuels and limiting carbon footprint. Today, electricity is generally transmitted by grids that function at the national level, linking nuclear, fossil fuel or hydraulic power stations to distribution networks which supply power to the end users. These power stations are generally no more than 50-100 kms away from where the power is consumed.



To achieve the wide-scale integration of renewable energies – of solar origin or from offshore windfarms – the distance between the generation facility and consumers remains a major drawback that needs to be removed. Direct current, at the heart of SuperGrid Institute's research is essential to this challenge. Renewable energy sources are generally very far from the consumption areas and are also

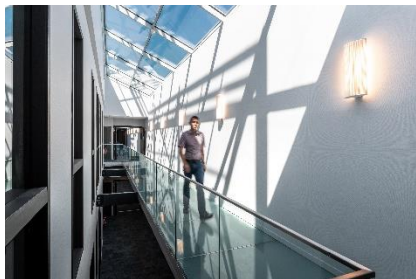
highly dependent on climate (wind, sun, etc.), and therefore are intermittent. Meshed Multi-Terminal High Voltage Direct Current grids (MTDC grids, known as '*supergrids*') can transport massive amounts of energy over long distances reducing significantly losses while balancing out the network, guaranteeing its stability and enabling interconnections.

In Europe, highly efficient energy systems are available within each country. Yet current technologies do not allow for optimal cross-border exchanges and the integration of renewables on a continental, or even a global scale. The European Union requires each European country to be interconnected and able to export up to 15% of its production capacity to its neighbours by 2030. MTDC grids can help them

to achieve this, interconnecting countries and continents and transporting energy from remote geographical locations.

The technologies and services we offer our customers are primarily aimed at power producers, power system operators, engineering companies and consultants, project developers, service and technology providers and manufacturers of high and medium voltage switchgear.

While SuperGrid Institute's approach currently focuses on projects involving European partners, the Institute is committed to achieving worldwide prominence. In the words of Hubert de la Grandière, Managing Director of SuperGrid Institute, "Our mission only makes sense if considered on a European or global scale."



Financing

SuperGrid Institute is owned by public and private minority shareholders, including industrial as well as academic partners, who bring their complementary expertise to the table. Local authorities, in particular the Auvergne-Rhône-Alpes Region and the Greater Lyon, are also committed to this undertaking.

SuperGrid Institute has communicated from the outset its ambition to become the European leader in the field of HVDC & MVDC grid technologies. Increasingly recognised by the industrial and scientific community, the success of its portfolio testifies to the Institute's accomplishments to date.

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Virtual overview of our
platforms



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