

# Smart Grids Institute : a well known expertise for your energy projects

In partnership with :



Are you looking for expertise and innovations in your energy projects ?  
Do you have solutions to provide and do you want to develop them ?  
Join the Smart Grids Institute



Smart Grids Institute boosts local energy projects. Created in the **Auvergne-Rhône-Alpes region**, our vocation is to gather public and private Smart Grids's leaders, and to carry out projects in the following three fields : education and training, innovation and local energy projects, industrial development in France and worldwide.

Become a partner of the Smart Grids Institute



Publication de l'Institut Smart Grids - Décembre 2020. Conception-réalisation : Rouge Badiane



## Smart Grids serving the territories development

Smart Grids, which combine digital technologies and energy systems, are necessary to meet the expectations of energy issues and territories development. **Smart Grids solutions provide new services to citizens and local authorities** : renewable energies, self-consumption, low emission transport, energy management and storage,...

**Created in the Auvergne-Rhône-Alpes region, the Smart Grids Institute works with local authorities and gathers its ecosystem to build local, national and international energy projects.** It contributes to the first French energy region's notoriety : 1st for exporting a mix of energies. Land of innovation and leading R&D region in patents and demonstrators in the energy sector, Auvergne-Rhône-Alpes region combines successful and innovative leaders. **Our region has all the required skills to lead the Smart Grids market, estimated around billions of euros.**

With Smart Grids Institute, a non-profitable association, we offer the possibility to join and boost your collaborative projects. Patrick RAKOTONDRAHAY, Managing Director, gathers partners. Smart Grids Institute already develops several collaborative projects (trainings, seminars, local energy communities,..).

**The established partnerships with academic, private companies, clusters in the fields of energy and digital technology, are a lot of opportunities to succeed in our shared ambition** : boost Smart Grids projects, based on education, innovation, and development.



**Sylvian HERBIN**  
President of Smart Grids Institute



**Patrick RAKOTONDRAHAY**  
Managing Director of l'Institut Smart Grids

## Smart Grids combine innovation, digital and energy technologies

### Digital and technological innovations

- Integration of **renewable energy sources** (photovoltaics, biomass, ...)
- **Internet of Things (IoT), communicating systems and smart solutions** (software and algorithms, energy infrastructures, Artificial Intelligence, ...)
- **Local energy systems** : generation and load balancing
- **Energy management** (generation and load forecasting, flexibility, curtailments,...)
- **Energy storage**
- **Big Data** processing and management

### For new energy uses and services to citizens and local authorities

- **Low emission transport** (low carbon vehicles and charging points, smart charging, ...)
- **Distributed energy generation**
- **Collective and individual self-consumption**
- **Energy master plan** from districts to cities (data platforms, ...)
- **Digital customer services** (energy savings, smart buildings, ...)
- **Citizen engagement** (citizens' energy projects, local community workshops, ...)

## Providing support for your territories energy projects

You are a local authority, a company, a project developer, a training organization, a research and development organization, an international company... In France or abroad, **the Smart Grids Institute takes part in your projects among 3 directions**:

### ACADEMIC education and professional training on Smart Grids

- **Specialized training classes** (on site, Massive Online Open Courses...) from higher education to PhD
- **Thematic and training seminars**
- **A link between academic, industrial and economic worlds**

### INNOVATION and local energy projects

- **Projects leading** (consultancy services, implementation...)
- **Projects advice and expertise** on Smart Grids solutions, adapted to your ambitions
- **Teamwork with experts** (partnerships, consortium, ...)

### INDUSTRIAL DEVELOPMENT in France and Worldwid

- **Studies and evaluations** of your challenges and solutions
- **Consultancy services for the development** of your projects and activities
- **Promotion in France and abroad**

### Smart Grids Institute is :

- **A team of experts** dedicated to your projects
- **A variety of technological platforms**, for training, research, testing and product development
- **A community** of leading companies in the Smart Grids ecosystem
- **A specialised information**, with a Smart Grids Institute advisor