

THE FRENCH SMART GRID SOLUTIONS AND EXPERTISE



FRENCH SOLUTIONS FOR SMARTGRIDS

THINK SMARTGRIDS FEDERATES FRENCH SMART GRIDS STAKEHOLDERS

Think Smartgrids federates and represents the French smart grid ecosystem, with a hundred members from the entire smart grids value chain: electronic engineering, utilities, automation, telecommunication equipment and information systems, business models, training, and regulation.

The association is dedicated to federating the French smart grid sector in France and promoting collaboration with other smart grid ecosystems in Europe and around the world.

Think Smartgrids is chaired by Marianne Laigneau, CEO of Enedis, the main French DSO.

FRANCE IS ONE OF THE LEADING COUNTRIES IN THE DEPLOYMENT OF SMART GRIDS, WITH

- Grid operators and smart grid players among the world leaders;
- 35 million Linky smart meters deployed in 6 years;
- A well-structured ecosystem gathered within the national organisation Think Smartgrids, allying industrial groups, grid operators, Small and medium-sized enterprises and startups with universities, research centers and labs;
- 3 major industrial programmes led by French regions: FLEXGRID (Provence-Alpes-Côte d'Azur), Smile (Brittany and Pays de la Loire) and YOU & GRID (Hauts-de-France);
- More than 150 collaborative projects deployed on all use cases.

FRENCH SMART GRIDS SOLUTIONS



Research and expertise

- Multi-criteria cost-benefit analysis: environmental, societal and economic
- Audit and expertise of the electric system
- Advice on the implementation of new markets and business models
- Training of users and decision-makers



Grid management and operation

- Grid operation: observability, remote operations, dispatching, supervision, flexibility, quality of supply and safety
- Asset management: economic performance, maintenance and modernization of infrastructures
- Comprehensive microgrid solutions
- Reduction of technical losses
- Storage technologies



Integration of renewable resources

- Integration of renewable energies into the grid.
- Implementation of smart connections: grid code, load shedding...
- Contribution to cost-effective energy transition
- Virtual power plants based on DER (Distributed Energy Ressources)



Use of data

- System operation (data and open data)
- Valuation of smart meter data
- Cyber security
- Management and optimization of public policies, predictive and prescriptive analysis...



New uses

- Solutions for Smart Buildings / Smart Factories / Smart Homes
- Electric mobility: charging stations, V2G, smart charging, batteries...
- Design and construction of Smart city networks



Role of the Prosumer

- Role of the prosumer in the flexibility, demand response, self-consumption, storage...
- Deployment of smart metering and multi-metering systems
- Reduction of non-technical losses

3 INDUSTRIAL PROJECTS AT A REGIONAL SCALE

FLEXGRID, SMILE and YOU & GRID are three regional smart grid programs, initiated as part of the French government's smart grid plan in 2014. They have made it possible to demonstrate the technical and economic viability of over a hundred smart grid solutions and brought many of them to the industrial phase.



Flexgrid, a project supported by the South Region (Provence and French Riviera), includes 46 completed or on-going projects, for a budget of € 340 million. The project focuses on the self-consumption of photovoltaic energy, smart territories the synergies between renewable energies, smart mobility, smart industry/ airports/ ports and energy optimization.



Smile, deployed in the west of France, covers two regions (Brittany and Pays-de-la-Loire), several islands, two large cities, a growing EnR production and the highest potential for marine renewable energy in France. The aim is to massively integrate and store renewable energies, to improve flexibility and demand management, to develop electric mobility, and to secure networks and the supply of electricity. SMILE supports more than 90 projects, with over 300 stakeholders and 200 companies involved. The SMILE smart grid showroom opened in 2019, in Rennes and Nantes.



You & Grid aims to develop piloting tools and to experiment with new uses in 15 cities of Lille Metropole. You & Grid is testing models for communities, distributors and end-users from already proven digital solutions. The projects focus on the self-consumption of photovoltaic energy in areas that include businesses, administrations and communities, controlling electricity terminals and optimizing flexibility management by optimizing consumption.

THINK SMARTGRIDS BRINGS TOGETHER A FULL ECOSYSTEM

OBSERVING MEMBERS



DGE



COMMISSION
DE RÉGULATION
DE L'ÉNERGIE

ASSOCIATED MEMBERS



accenture

Atos
Worldgrid

Capgemini

ceatech

edf

enedis
L'ÉLECTRICITÉ EN RESEAU

EY
Building a better
working world



GE GRID SOLUTIONS



GIMELEC

UGA
Université
Grenoble Alpes

MINES
ParisTech

OMEXOM



Sagemcom

Schneider
Electric

sopra steria

PARTNER MEMBERS



Aets
drive

ALTANA
SOLUTIONS & SERVICES

Artelys
OPTIMIZATION SOLUTIONS

Capenergies

Colombus
Consulting

COSMOTEC

EIFFAGE

efficacity

ELUM
energy

energisme

Energy
Pool

ENSTO

Entech
smart energies

EPI

STRASBOURG
ELECTRICITE
RESEAUX

Quantmetry

idex

Institut
smart grids

Itron

Keynergie

KLEE
GROUP

Landis
Gyr
manage energy better

Lite

MEDEE
Mission and Central Services for Energy Efficiency

Mobileese

naelis

Nexans
BRINGS ENERGY TO LIFE

Odit-e

OFATE
DFBEW

Business
Services

PcVue
Solutions

QWANZA

SAFT

senX

setec

siapartners

SICAME

smartside
smart thinking and smart grid solutions

smile
smart grids solutions

socomec
Innovative Power Solutions

stations-e

STREINN

tiko

Dialog

UFE
Union Française de l'Électricité

VOLTALIS

WAVESTONE

Yélé

Schools, research centers and labs

CentraleSupélec

École des Ponts
ParisTech

ifp
SCHOOL

L2EP
Laboratoire d'Énergie et de Processus Industriels

LAAS
CNRS

LNE
Laboratoire National d'Énergie

University
of Corsica
PASQUALE
PAOLI



OVER 100

members from
fundamental research
to industrial applications



5

multilateral or country
partnerships

(African Association of Power Utilities,
India, Singapore, Indonesia, Finland)



35

million smart meters
installed in 2021

MORE THAN

150

collaborative projects
deployed on all use cases

