



Smart grids

If a local authority **wants to effect an energy transition** this requires getting the public actively involved; they then become both power consumers and generators. This is why Metropole Nice Côte d'Azur is focused on **developing smart grids** in order to create independent power networks (loops) at a local level and provide new opportunities for encouraging consumers to reduce their energy consumption.

The Metropole therefore plans to deploy 6 local smartgrids (FlexGrid Plaine du Var project) by taking advantage of the ongoing deployment of Linky and Gazpar smart meters in the NCA region. **The urban area will therefore be home to the biggest Smart Grid in France.**

Two first generation Smart Grid prototypes have already been tested in the urban area:

The REFLEXE project, in Nice, made it possible to determine the demand side management scenarios in the event of surplus generation of solar PV power or a temporary disruption of supply to the national grid,

In partnership with: Veolia, Dalkia, Alstom, Sagemcom, INES CEA and Supélec. This project was supported by NCA, ADEME and the CAPENERGIES competitive cluster and was funded by the State (PIA).

The NICE GRID project, in the Carros mixed residential and industrial joint development zone, has made it possible to examine the characteristics of an energy management solution which manages power generation, storage and consumption in real time: including photovoltaic power generation, testing the capacity of energy storage using urban batteries, and testing peak shaving. This project will be continued within the Nice Mérida industrial zone, supported by a hundred local start-ups

In partnership with: Alstom, Groupe EDF, Armines, Saft and Daikin. This project was supported by ADEME, local authorities and the CAPENERGIES, competitive cluster and was funded by the State (PIA) and the EU (Grid4U).

Objectives:

- ▶ **Change user habits to encourage reduced demand**
- ▶ **80% of building energy demand under control in 2017**
- ▶ **Expected gains: 10 to 20% energy savings**

Key figures

150,000

Linky meters deployed in the urban area

€8.7M

Budget for the REFLEXE project

€30M

Budget for NICE GRID



The Metropole would also like to **ensure that it is exemplary in its management of the power consumption for public monuments**

A new system of smart technical building management - GTB, in French - will be deployed in public buildings. This will make it possible to improve operations, anticipate problems and faults at the same time as reducing costs. The most energy-intensive public buildings in the Metropole, namely: the Promenade des Anglais, the St François swimming pool and the Matisse museum will be the first to have the system installed.

Schedule

2016

NCA was recognised at the **'Euro-China Green and Smart City Awards'** (Schenzen) for its Smart Grid energy policy

2015

Creation of **'Metropolitan Energy Performance Agency'***

2014

***Roles:**
Define the energy strategy,
Develop renewable energy generation
Manage energy distribution
Managing energy consumption

REFLEXE & NICE GRID experiments and prototypes

2011



PROJET LAUNCHED