The 1st Thermal and Electrical Smart Grid in France

Intelligent district of Nanterre Cœur Université
Who is Dalkia Smart Building?

Specialised subsidiary of Dalkia Group

Designs and implements eco-efficiency energy solutions to help customers in both energy and digital transition with the objective to reduce energy costs and curb CO$_2$ emissions.

Turnover = 100 M€

150 employees
The project in the heart of the city
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Housing
Offices
Commercial spaces
ENERGY SOLUTION
LOW CARBON ENERGY SOLUTION

1. Coupled thermal and electrical intelligent grids
2. 5 local renewable source of energy
3. On-site green electricity production
4. Control and management system that monitors the energy production and consumption of the district
THE 5 RENEWABLE ENERGY SOURCES

1. Geothermal energy
2. Grey water energy
3. Solar energy
4. Free Cooling
5. Biomass CHP

District control and management system

1'. Thermal storage
THE DOUBLE SMART GRID CONCEPT

Zero energy waste

- Value unavoidable energy
- Use local renewable energy source

Energy solidarity

- Share the production means
- 100% of on-site production self consumed in the district

Inherent Intelligence

- Thermal and electrical flexibility
- Reduced power consumption during peak-shaving periods
- Control and monitoring system to assure the global efficiency

ENERGY TRANSITION

DIGITAL TRANSITION
INTELLIGENT DISTRICT BENEFITS

1. Guaranteed renewable energy usage in the district
   - Renewable Energy Ratio > 60%
   - Prevent the emission of 510 tons of CO2 per year

2. Guaranteed controlled energy bill in the long term
   - No waste of energy
   - Intelligent and predictive management control system
Thank You