

Renovation + solar power = Habitat 76

The solution steered by two EDF subsidiaries – EDF Optimal Solutions specialising in energy eco-efficiency solutions, and Dalkia for facility operation – is an exemplary energy transition project. It is notable for combining retrofits of energy-inefficient buildings and decentralised generation of renewable solar energy on a large scale (255 buildings managed by the Habitat 76 social landlord and 42 municipalities in the Seine-Maritime administrative department in France's Normandy region).



The solution involves:

- a large-scale photovoltaic programme, the largest so far in the French housing sector. A total of 188 PV installations able to withstand high winds have been installed. They produce 3.5 gigawatt-hours of renewable electricity, enough to power 800 households;
- an extensive energy efficiency retrofit programme based on insulating roof cavities and cellars and reroofing. In all, over 120,000 square metres of roofing have been renovated.

The benefits for the environment are far from neutral as the generation of renewable energy combined with the roof renovations avoids the annual emission of 100 tonnes of CO₂⁽¹⁾.

KEY FIGURES

188 PV plants

42 municipalities in the Seine-Maritime administrative department involved

255 buildings (5,000 housing units) renovated

32,000 m² of PV surface area

Output of **3.5** megawatts

100 tonnes of CO₂ emissions avoided annually⁽¹⁾

(1) Computed by EDF, on the basis of the average greenhouse gas (GHG) content by country, life cycle analysis (LCA) included; generation mix by country provided by the International Energy Agency (IEA) 2012, LCA of power generation by the Intergovernmental Panel on Climate Change (IPCC) 2012.

INTERESTING FACTS



A TURNKEY SOLUTION

- Reduced energy loss and improved thermal comfort by insulating roof cavities (80,000 m²) and cellars (50,000 m²).
- Selecting the size and installing the S-Class integration 195 Wc PV panels.
- The installation of centralised supervision and management tools to track electricity generation in real time.
- Installation operation and maintenance provided by Dalkia.
- 20-year performance guarantee for the amount of electricity generated.

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**50 SOLUTIONS
FOR THE CLIMATE**

