INDUSTRIALISATION OF VILLAGE IN SOUTHERN FRANCE BY SOLAR ENERGY

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**ECONOMIC HISTORY OF CALLIAN**

- Before JC: the Romans built an aqueduct to channel water of Camiole river.
- 12th century: village becomes significant as evidenced by feudal castle.
- 19th century: Callian has a paper plant, 5 ovens, and 6 oil and flour mills powered by Camiole river.
- 1876: new aqueduct built to irrigate the plain.

**AN AMBITIOUS PHOTOVOLTAIC PROJECT**

- 2008: Callian signs a pre-agreement to rent the old landfill with start up company Eneryo for feasibility studies
- 2010: solar farm construction starts with private owned EPC contractors. 40188 solar modules, manufactured by Sharp, are imported from the UK. Installed capacity: 4,7 MWp/17 hectares.
- August 2011: with CAPEX of 24 Millions €, solar plant is finished. O&M for Schneider Electric. Project satisfactory Internal Rate of Return is due to the 20 year Feed In Tariffs.
- During 30 years, Callian will earn old landfill rent and taxes, with no cost for inhabitants.

**FIRST YEAR OPERATION 2012**

- Solar radiation : 1 515 KWh/m²/year.
- Power production : 11,2 GWh.
- Power needs cover : 5000 inhab/3000 inhabitants.
- CO2 emissions : 1 650 tonnes avoided.
- Job creation during construction : 80.
- Job creation during operation : 5.

**PRESENTATION OF CALLIAN**

Callian is a village of 3 000 inhabitants, 320 meters above the sea level. Located in Southern France, 30 km away from Cannes, its solar radiation is one of the best in France, with 1 600 kWh/m²/ year.

The PV solar farm (below) is located 2 km away from centre of Callian (above), uphill in the forest.

Every rectangle of solar farm represents 0.9 hectares.