

ADEME



Agence de l'Environnement
et de la Maîtrise de l'Énergie

Club ADEME
International

newHeat

solar heat generation for industrial applications

NEWHEAT

Solar heat supply to the industrial processes of the pulp and paper mill Condat of the Lecta Group



Intervention time
2018 - 2019



Total cost
2,2M €



Engaged workforce
30 persons

Thematic



Prestations provided

Design - Project development -
Construction
Operation and Maintenance
Investment

The objective of the project was to offset one part of the fossil fuel consumption of the industrial site of Condat (natural gas in this case) with solar thermal energy. The solar heat plant preheats the make-up water of the factory's steam boiler, extracted from the Vézère river nearby and up to 80°C/90°C. This heat supply is competitive with the fossil fuels alternative of the consumer site, in order to keep the factory competitive on its markets. With its third-party finance model or ESCO model (Energy Services Company), NEWHEAT has invested in the thermal energy production unit and operates it in the long term. This enabled the paper mill to get access to stable price over a long period (20 years) while preserving its investment capacity for other strategic projects. The solar thermal plant has been finalized in January 2019.

NEWHEAT has carried out the following services:

- Feasibility study
- Detailed engineering study, design, project development
- Contracting authority for the construction of the solar thermal plant
- Operations, control and maintenance of the solar thermal plant during the term of the Heat Purchase Agreement
- Project investment and financing, subsidy management (in particular from Fond Chaleur of French ADEME)

French partners

Ingénierie - Conseils



Prestataires - Travaux



Foreign partners



Post-project results

Spin-offs for France

Similar projects can be carried outside of France and in all industrial sectors: NEWHEAT currently works with industrials from the food & beverage industry, ceramics, chemistry...NEWHEAT implement these projects for district heating networks as well (2 projects under construction in France). The positive outcomes can be:

- Significant sales of engineering services from French companies, significant sales of equipment produced in France (for instance France is a net exporter of solar thermal collectors)
- Potential of similar projects in Europe, Latin America, Oceania, Asia, Africa
- Promoting French expertise, know-how and good practices in the field of renewable energy, especially in renewable heat, for modelling, engineering, project development and finance.
- Creating partnerships between France and developing countries for the decrease of CO2 emissions in order to have them and France fulfilling their commitment according to the Accord de Paris (COP21).

Spin-offs for International

- Access to a CO2-free, unlimited, local and competitive energy
- Better energy security, less dependency to high-technologies or natural resources
- Create local jobs with a balance between French services and local value added

Environmental impact



Offset the consumption of fossil fuel in the industry and for the district heating (more than 50% of the global energy consumption is heat). For instance, in Condat, 1 000 ton of CO2 will be offset annually (and for a minimum of 20 years).



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With more than 130 members, the Club ADEME International assists the SMEs in its network in the development of innovative projects and international partnerships. The objective is to participate in the dissemination of French knowledge, by supporting the private and public sector in the ecological and energy transition sector in order to meet global environmental and climate challenges.

More information : www.clubinternational.ademe.fr

