

Newheat, in partnership with Lactalis, has opened the largest solar thermal plant in France, to provide heat for the dairy factory at Verdun (département 55) for the next 25 years.

- Various renewable heat production solutions exist, one of which is solar thermal technology, or solar heat, which uses the sun's rays for heating purposes. This system, in common use for domestic applications, has now been redesigned on a massive scale by Newheat
- Thanks to this solar thermal plant, the whey powder manufactured by Lactalis France at Verdun will partly be produced by means of the sun's rays
- Newheat has created here the second largest solar thermal plant in Europe supplying an industrial site

Bordeaux, December 11, 2023 at 7 a.m. - <u>Newheat</u>, a supplier of renewable heat and the leading French supplier of solar heat, last Friday officially inaugurated its fifth solar thermal plant at Verdun (55), which will provide heat for one of the Ingredients division sites of the Lactalis Group. With a surface area of 15 000 m², this massive project will cut the CO² emissions of the site's drying tower by 2 000 tons per year, in other words, 7 % of the site's total emissions. The opening of this facility marks a milestone in the large-scale deployment of solar heat, of renewable heat, of Newheat!



LACTOSOL Solar thermal plant, which supplies the Lactalis Verdun site (Photos HD)

Using solar heat to reduce the Lactalis drying tower CO₂ emissions by 2 000 t / year

The Lactalis site at Verdun converts liquid whey, a by-product of cheese-making, into whey powder to be used by the food industry (with an annual production capacity of 75 000 tons). To achieve this transformation into powder, the liquid whey goes through a drying tower, which needs to be heated.

Officially opened in November 2021, the new drying tower at the Verdun site was initially supplied by a gas boiler. Committed to a program of carbon footprint reduction at its industrial sites and with environmental objectives set out, Lactalis wanted to reduce gas consumption at the Verdun site by opting for one of the most virtuous renewable heat solutions available, solar thermal energy.

Solar thermal technology is particularly simple and reliable. A flat solar thermal collector is a special type of plate: when it heats up in the sun, water circulating behind it also heats up on contact with it.

For the last few months, the drying tower at the Lactalis Verdun site has thus been partially supplied with heat from Newheat's LACTOSOL solar thermal plant, situated right next to the site.

Newheat is a supplier of renewable heat and the French leader in solar thermal. Since 2015, the company has been providing large heat consumers: industrial sites and urban heating networks. LACTOSOL is its fifth solar thermal plant and its third designed to supply an industrial site.

To feed this drying tower, Newheat has designed a plant covering nearly 15 000 m², with a maximal output of approximately 13 MWth. It comes complete with a 3 000 m² storage tank capable of storing several days' worth of heat production to ensure continuity of supply at night and on cloudy days during the summer period.

All year round – now and for the next 25 years – it is the renewable heat produced by the solar plant and stored in a tank that has priority in the drying process at the Verdun site.

Thanks to this solar thermal **plant**, the site will be able to reduce its gas consumption by 6 % (11 % of the total consumption of the drying tower), and thus its CO_2 emissions by 2 000 tons per year. For Lactalis, this project is just part of its continuous improvement program: the Group's endeavors in terms of energy efficiency are ongoing and further progress will be seen at the Verdun site with the installation of a biomass boiler between now and 2026, to replace nearly 50 % of the gas consumption with renewable energy.

LACTOSOL is the largest solar thermal plant in France and the second largest in Europe feeding an industrial site.

Heat production is the primary energy consumer in France, representing 45 % of our final energy needs. 60 % of heat production in this country is currently supplied by fossil fuels; it also accounts for 80 % of our national gas imports. Decarbonizing heat therefore plays a crucial, central role in the decarbonization of our energy mix and, more broadly, achieving energy independence.

A virtuous solution financed by Newheat and its partners and supported by institutional bodies

Newheat finances its renewable heat production projects, while its customers commit to a purchase price for a duration of 20 to 25 years.

In September 2020, to finance the LACTOSOL plant and four other projects, Newheat carried out a financial transaction that included overall bank financing for the sum of €M 13 from banks benchmarked in the energy transition sector. The Regional Energy Transition Fund "Terra Energies", the Occitanie Regional Energy and Climate Agency and OSER ENR are also partners of the scheme as minority shareholders.

This particular project, the total investment for which amounts to $\in M$ 6, furthermore received the financial support of the ADEME (French Ecological Transition Agency), having been selected following a Call for Proposals for "Large solar thermal installations" by the Heat Fund, which offered a grant of up to 55 % of the CAPEX of the project. It also received financial support from the Public Interest Group for the Meuse Département to the tune of $\in K$ 352, as well as aid from the Great East Regional Council to the tune of $\in K$ 170 via the Climaxion program, which is run in partnership with the ADEME.

Renewable heat: strong growth, set to accelerate over the coming years

Following the remarkable inauguration of this fifth site, Newheat, which on November 20 this year had announced fundraising amounting to \in M 30, is now planning a further 15 projects over the next 3 years for a total investment of \in M 150, reflecting the full acceleration of its activity and the growth of the renewable heat sector.

Mostly located in France, these projects represent an annual delivery volume of 200 GWh of renewable heat.

As well as the thermal solar heat and heat storage seen at Verdun, Newheat offers renewable heat solutions able to combine fatal heat recovery, industrial heat pumps and, in addition where necessary, combustion of renewable resources.

For Hugues DEFREVILLE, President and co-founder of Newheat:

"We are very proud to inaugurate today this iconic installation! Back in 2020, the Lactalis site at Verdun was already a frontrunner in choosing solar heat to decarbonize the activity of its future drying tower. Today, the renewable heat sector, and solar thermal energy in particular, is experiencing a significant upsurge. You can bet that the example of Lactalis, which is a global leader in dairy products and recognized for its industrial excellence, will encourage other manufacturers to envisage these virtuous solutions for their own decarbonization projects!"

For Jean-Luc BORDEAU, Managing Director of the Ingredients division at Lactalis:

"After the major renovations of the Verdun site and the inauguration of the new drying tower in 2021, it was vital to continue our transformation by focusing on the reduction of our energy footprint. We are delighted with this joint project with Newheat, which will enable us to cut greenhouse gas emissions at this site by 7 %. This is an important step, one which allows our efforts for sustainable development to take shape, in an endeavor that will continue in the years ahead in response to the challenges of the 21st century.

For Mahmoud KAMAL, Site Director, Verdun – Lactalis France:

"We are delighted with this project, thanks to which our site is fully embarked on a sustainable path while continuing to provide the best to our customers. We thank the Newheat team for their dedication and shall continue our endeavors to reduce our energy footprint."

For Sylvain WASERMAN, President of the ADEME:

"Faced with the climate emergency, increasing the proportion of renewable energy sources in our energy mix is one answer when it comes to cutting CO² emissions, strengthening our resilience capacity to deal with crises and at the same time creating activity in local regions. Priority needs to be given in particular to renewable heat, which is an essential vector for the decarbonization of our economy. I am very happy that the ADEME has been able to contribute to this project, which is a very significant one for the company's energy needs. The widespread deployment of thermal solar solutions, both small scale and large scale like this one, is one of our priorities for the acceleration of the energy transition across a range of geographical locations.

For Franck Leroy, President of the Great East Regional Council:

"The Great East Regional Council opted some time ago for measures to make us a low carbon, positive energy region by 2050. It's when all local entities are involved and working on appropriate solutions that we make a useful contribution to climate change mitigation. Through the commitment of the companies,

with the support of the Regional Council and ADEME via Climaxion, initiatives such as this Newheat project make economic development compatible with energy transition in our region."

For Jérôme DUMONT, President of the GIP (Public Interest Group) for the Meuse département:

"Our region has an industrial infrastructure that is really starting to move on the industrial decarbonization front. We need to promote this type of initiative. Solar thermal technology certainly has its place among the options for the decarbonization of industrial activities.

The Public Interest Group for the Meuse département is proud to support companies that develop innovative solutions that help reduce our local carbon impact. This is the very core of our mission to support energy transition.

The reduction of fossil fuel consumption, the lowering of CO² emissions and the improvement of air quality are the threefold gains of this ambitious project developed in the Meuse département."

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Media kit: Follow this link for the press release, visuals and updates from Newheat

About Newheat: Created in 2015, Newheat is a supplier of renewable heat and the market leader in solar heat in France. The company offers innovative decarbonization solutions for big heat consumers such as large industrial sites and urban heating networks.

Its business is to develop, design, build, finance and operate projects that can combine fatal heat recovery, solar thermal technology, short and long term heat storage systems, industrial heat pumps and, in addition where necessary, combustion of renewable resources. Based in Bordeaux, the company is currently operating 5 sites to a total of 40 MW. Newheat today has 45 employees and a cumulative installation target for 2030 of 1 billion euros of investment amounting to an annual delivery volume of 1.5 TWh of renewable heat, preventing thereby nearly 300 000 tons of CO² emissions per year. <u>www.newheat.com</u>

About LACTALIS: Lactalis, the world's largest dairy group, is a French family business that was formed in 1933 in Laval. Operating in 51 countries with 266 milk and cheese-factories, its 85 000 staff members optimize milk in every form it takes: cheese, drinking milk, yogurt, butter and cream, dairy ingredients and nutrition. The Lactalis Group is an essential part of daily life in millions of homes, offering products under emblematic brands such as Président, Galbani and Parmalat and, as the world leader in AOPs, is highly committed to the continuance of specialist dairy skills and know-how.

The Lactalis site at Verdun makes whey powder, obtained by drying whey (also known as lactoserum). Whey powder is a dairy ingredient with high added value for the food industry, for infant, clinical and sports nutrition, and also in the composition of other dairy products, sweetened condensed milk, chocolate, and bakery, biscuit and ice-cream products.

About the ADEME and Great East Regional Council CLIMAXION program: The Great East Regional Council and the ADEME, a government entity, have been working hand in hand for more than 20 years to accelerate and facilitate ecological transition via the Climaxion program. A genuine one-stop shop, it is a comprehensive toolbox that provides all the information, contacts, partners, financial support and solutions needed, to assist eco-responsible projects through to completion. This program is aimed at anyone in the Greater East region with a project: this includes private individuals and co-owners, businesses, local authorities and associations, housing associations and construction companies. Climaxion is structured around eight complementary priorities: energy efficiency and the environmental quality of buildings, renewable energy sources and recovery (such as, wood energy, biomass, geothermal energy, solar heat, solar photovoltaic , and hydro), circular economy and waste management, sustainable regions, and sustainable mobility (green hydrogen, biogas, electromobility), agriculture, viticulture, and forestry (target: to have 50 % of farmers and wine-growers to commit to the third way (or middle course) in the transformation of agriculture), sustainable tourism, and brownfield redevelopment. Internet site: www.climaxion.fr

About the GIP (Public Interest Group) for the Meuse département: the GIP is an agent for local economic development. It receives an annual budget of €M 28. The GIP finances projects in a variety of strategic fields: industrial and economic infrastructure, innovation and R&D, energy transition, etc. It assists companies investing in the Meuse region by providing specific public funding and long term support. In 2022, more than €M 8 were dedicated to the financing of projects of companies located in the Meuse département.

Internet site: www.objectifmeuse.org

LinkedIn : https://www.linkedin.com/company/gip-objectif-meuse-55/