S L A R U P D A T E

Newsletter of the International Energy Agency Solar Heating and Cooling Programme



#SolarHeat #SolarThermal #SolarProcessHeat #SolarCooling #SolarDistrictHeating

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IEA 2024 SHC Solar Award

Newheat project wins IEA SHC 2024 Solar Award

Newheat's LACTOSOL project in Verdun, France demonstrates how solar heat in an industrial process can competitively reduce gas consumption. François-Xavier Sarda, Industry Key Account Manager, Thomas Colin De Verdière, Control Engineer, and Alexis Gonnelle, Principal Scientist, received the award on behalf of Newheat during EuroSun 2024, the International Conference on Sustainable and Solar Energy for Buildings and Industry, of the IEA SHC and ISES held this year in Limassol, Cyprus.

"The 2024 SHC Solar Award celebrates projects of substantial achievement and measurable impact on an industrial process to reduce costs and emissions by incorporating solar thermal technologies. Newheat's LACTOSOL project is certainly substantial, the largest solar thermal plant in France and second largest in Europe, and is not only reducing production costs but reducing CO₂ emissions by using a combination of new technology and financing mechanism."

LUCIO MESOUITA, IEA SHC Executive Committee Chair

The SHC Solar Award recognizes an individual, company, or private/public institution that has shown outstanding leadership or achievements in solar heating and cooling. The category for this year's award was a project that reduces costs and emissions by incorporating solar thermal technologies in an industrial process.

For Newheat, "We are honored to receive this award, which acknowledges our team's work and the confidence shown by LACTALIS Ingredients, a world leader renowned for its industrial excellence and capacity for innovation. This project demonstrates NEWHEAT's ability to provide its customers with reliable and competitive solutions, even in a sector known for its very high-quality standards."

HUGUES DEFRÉVILLE, CEO Newheat



SHC 2024 Solar Award recipients - Alexis Gonnelle, Francois-**Xavier Sarda and Thomas Colin** De Verdière of Newheat.

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Project Impact

Newheat, a supplier of renewable heat and the leading French supplier of solar heat, commissioned the solar thermal plant at LACTOSOL in Verdun, France, in 2023.

This plant provides heat for one of the Ingredients division sites of the Lactalis Group. This massive solar heat project is **cutting 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.**

LACTOSOL is France's largest solar thermal plant and the second largest in Europe, serving an industrial site. The process-level integration of this project is a unique showcase of the potential to decarbonize heat in industrial processes competitively and effectively. The project was developed under the "Heat as a Service Scheme," with Newheat as a majority shareholder and EPC contractor,

neuheat renewable heat supplier

Newheat, a renewable heat supplier preserves and develops local energy resources, using a tailor-made approach to help towns and industries transition to sustainable and renewable heat. Its unique expertise lies in prioritizing these different available resources with short-term competitiveness and medium- to long-term environmental sustainability in mind. www. newheat.com

thus taking on the technical and financial risk for the project. This model is particularly promising for developing industrial solar heat – it allows the industrial heat consumer to focus on their core business.

The plant delivers approximately **8,000 MWheat annually** using a **15,000 m² solar collector area** and a **3,000 m³ 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.

Lactalis Ingredients chose solar thermal technology for the LACTOSOL plant to meet its carbon footprint reduction commitment. The partnership with Newheat was initially established through a trustbased relationship with Lactalis Ingredients, who believed in solar thermal solutions. This relationship led to direct negotiations, which formed the foundation of the partnership throughout the project development, the new spray dryer tower, and the solar thermal field.

Newheat designed, built, and financed the solar thermal plant. An onsite proprietary hot water loop generates solar heat to convert liquid whey, a by-product of cheesemaking, into whey powder for the food industry. By replacing the gas boiler that powered the drying tower to dry the liquid whey, LACTOSOL has reduced the site's gas consumption by 6% (11% for the drying tower and 30% for preheating needs).

This facility marks a milestone in the large-scale deployment of solar heat, of renewable heat, of Newheat.



Project: NEWHEAT / photo credit: IMAGESinAIR Productions.