

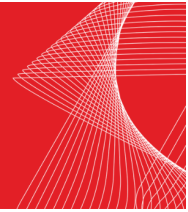
**FOR IMMEDIATE RELEASE:**

[6] September 2023



Performance  
Tapes

Press Release



**Avery Dennison commissions Europe's largest Concentrated Solar Thermal platform  
and Thermal Storage unit in Turnhout, Belgium**

**Turnhout, Belgium, [6] September 2023** – Avery Dennison, a leading global packaging and materials manufacturer, today commissioned Europe's largest Concentrated Solar Thermal (CST) platform and Thermal Storage unit at its production plant in Turnhout, Belgium. The renewable energy project contains a Concentrated Solar Thermal platform with 2,240 surface mirrors, with a solar field peak yield of 2.7 MWh thermal power, and six thermal storage modules with a capacity of 5 MWh thermal power.

The renewable energy platform, consisting of a CST field and Thermal Storage unit, covers roughly 5,540 square meters on site, and will contain the largest installation of parabolic mirrors combined with thermal energy storage in an industrial setting in Europe. In operation, the total installation will provide heat equivalent to 2.3 GWh of gas consumption, reducing the plant's greenhouse gas emissions by an average of 9 percent annually – compared to current rates. During summer months and high-sunshine periods, it will provide up to 100 percent of the factory's heat demand.

The project is a collaboration with Azteq, an organization that builds, develops and maintains CST facilities; ENERGYNEST, a long-duration thermal energy storage (TES) provider; and local community group Campina Energie, which helped secure a portion of the project financing.

The CST platform – built by Azteq – will concentrate energy from direct sunlight into a collector tube filled with absorption liquid, like thermal oil. Additionally, thermal energy from this process will be stored in ENERGYNEST's ThermalBattery™ and dispatched on demand as secure, green heat. When coupled with the six battery modules, the CST platform can produce and dispatch high-temperature thermal energy both day and night on demand. The solar field, thermal storage and heat distribution system of the Avery Dennison production facility is all connected by the Balance of Plant (BoP) by AURA GmbH & Co. KG, and used for heat shifting between the heat sources and heat sinks.

By supplying zero-carbon solar energy, the project will help provide heat to run drying ovens, which are used during the coating process of pressure-sensitive adhesive products manufactured at the site. These products are used in industries such as automotive, building and construction, medical devices and personal care.

Financing was secured through Campina Energie, which is engaged in green energy projects and represents more than 1,000 Turnhout residents. The ENERGYNEST thermal battery installation received funding from the European Union's Horizon 2020 research and innovation program. Azteq's CST platform is partially funded by the Flemish Government via the call Green Heat. The BoP has been developed in the research project #MODULUS which is partly funded by the German Ministry for Economic Affairs and Climate Action.

Tinne Van der Straeten, Belgian Minister of Energy comments on the project: "The greatest potential for energy is in our own hands. Here in Turnhout, Avery Dennison, Azteq, ENERGYNEST and Campina Energie prove exactly that, by commissioning Europe's largest Concentrated Solar Thermal Platform and Thermal Storage Unit. The clean energy transition is the only path to a sustainable future. Investments in innovative renewable energy sources, like this project in Turnhout, will lower our carbon output and have a positive effect on climate change. I am proud to see the active involvement and enthusiastic community support from local Turnhout residents, brought together by Campina Energie. Only by working together will we tackle the climate crisis."

"We have big ambitions to tackle climate change and achieve net zero by 2050. To meet these goals we will look across our industrial processes and identify opportunities to implement new technologies that decarbonize and reduce our reliance on fossil fuels. The successful commissioning of the project in Turnhout is a big step forward in our sustainability plans," says Mariana Rodriguez, general manager, Avery Dennison Performance Tapes Europe.

Christian Thiel, CEO ENERGYNEST, added: "Avery Dennison is paving the way for a more sustainable and modern industrial sector in Europe. Companies across industries are considering how to best reduce their reliance on fossil fuels and decarbonise high-emitting activities, like heat production, while continuing to provide affordable, reliable goods and services to consumers. We will help solve these issues by reducing energy costs, helping the scale-out of reliable renewable energy like CST, and decarbonising heat production."

Koen Vermout, CEO of Azteq, commented on the project's potential for creating a shared future for greener industrial heat. "This project will have tremendous payoffs for the company and the

local community by helping reduce the plant's carbon footprint, lowering energy usage, and ensuring reliable thermal energy supply for manufacturing operations throughout the lifespan.”

Jef Van Eyck, chairman of energy cooperation Campina Energie, reaffirmed the community group's enthusiasm for the renewable energy project. “Since 2017, we have worked with Avery Dennison to produce wind energy. We are proud to cooperate again by supporting this renewable energy project. These kinds of projects, implemented with different partners, help the Kempen region towards its goal to become climate-neutral, reduce reliance on expensive, imported energy, and strengthen our economy. And what's even more important: Campina Energie brings citizens together to be part of these projects and work on the necessary energy transition.”

Together with the local Turnhout community, Avery Dennison also plans to have sheep graze the fields and grass beyond the mirror installation. The sheep replace lawn mowers and support biodiversity on site. So-called “solar grazing” is a common practice as part of “agrivoltaics” and is used for solar and PV installations as a way for both industries to utilize the same ground. The program causes no harm to the animals.

###

### **About Avery Dennison:**

Avery Dennison Corporation (NYSE: AVY) is a global materials science company specializing in the design and manufacture of a wide variety of labeling and functional materials. The company's products, which are used in nearly every major industry, include pressure-sensitive materials for labels and graphic applications; tapes and other bonding solutions for industrial, medical and retail applications; tags, labels and embellishments for apparel; and radio-frequency identification (RFID) solutions serving retail apparel and other markets. Headquartered in Glendale, California, the company employs more than 32,000 employees in over 50 countries. Reported sales in 2020 were \$7 billion. For media inquiries, please contact [ilse.van.der.linden1@eu.averydennison.com](mailto:ilse.van.der.linden1@eu.averydennison.com).

### **About Azteq:**

Azteq is a Belgian company dedicated to the engineering and construction of solar thermal plants producing up to 400 C° for industrial processes (steam, thermal oil, hot water,..). Highly efficient parabolic troughs and vacuum collector tubes are used for an optimal absorption of the concentrated solar radiation. AZTEQ offers EPC contracts (Engineering, Procurement & Contracting) as well as heat as a service by exploitation contracts over a period of 20 to 30 years. For media inquiries, please contact [peter.vandeurzen@azteq.be](mailto:peter.vandeurzen@azteq.be).

### **About ENERGYNEST:**

Founded in 2011, ENERGYNEST is at the forefront of thermal energy storage. The company's ThermalBattery™ provides secure, green energy to reduce reliance on fossil fuel in energy systems and high-carbon industrial processes. The company's thermal batteries enable renewables growth without grid constraints and support industry to recycle heat and steam for later use. Our technology is flexible and can help decarbonize dispersed industrial sites. Available now, the thermal batteries reduce energy costs and carbon emissions. The technology is quick to install, easy to scale and gives customers security on supply and pricing. For media inquiries, please contact [msc@energy-nest.com](mailto:msc@energy-nest.com).

### **About Campina Energie:**

Campina Energie is a Kempen cooperative that was founded in March 2015. The cooperative brings 1800 citizens together to invest in renewable energy and energy saving in the Kempen. Since 2015 we have participated in 9 windmills, installed 45 PV-installations with town governments, hospitals, schools, etc. and advised about 450 people in their personal energy-transition. For media inquiries, please contact [info@campinaenergie.be](mailto:info@campinaenergie.be).

