## Givaudan



### Media Release

Geneva, 27 September 2018

# Givaudan participates in EU-funded HyCool project to promote innovative renewable energy

Givaudan announced today that it has joined the consortium of 16 partners participating in HyCool, an innovative energy technology project funded by the European Union whose aim is to develop cost-effective solutions using solar heat for industrial purposes.

"Givaudan has set the target of 100% renewable electricity for our operations by 2025 and we are well on track with 58% already at the end of 2017. The HyCool project is a unique opportunity to work with leading innovation and technology experts like Ecotherm and Veolia to further advance our ambitious goals," said Willem Mutsaerts, Head of Global Procurement and Sustainability.

HyCool will leverage an innovative combination of Fresnex concentrated solar thermal collectors and Fahrenheit hybrid heat pump technology to provide cooling systems for industrial applications based on solar heat at competitive cost. Givaudan's flagship site in Sant Celoni, Spain, equipped with sophisticated technology for the production of fragrance ingredients with a strong focus on sustainability, has been selected as the HyCool project test site for the chemical industry; a comparable pilot site for the food industry is located at the nearby site of Bo de Debò SA. As multipurpose chemical production is highly variable in terms of heating and cooling needs, the overall efficiency and flexibility of the HyCool system in different configuration and operation modes will be tested at both sites so as to deliver near-to-market solutions. At full scale, it is anticipated that HyCool technology will generate a 25% electricity reduction for refrigeration and a 6% natural gas reduction, driving a total carbon footprint reduction of 7%.

The project partners have begun work on the concept design which is expected to be complete by the end of the year; installation and test campaigns will begin in the first half of 2019. The three-year project is supported by a European Union grant of EUR 5.8 million. HyCool aims to double the use of solar cooling installations worldwide within five years of project completion.

Participating in the HyCool project supports Givaudan's commitment to stringent reduction targets for greenhouse gas (GHG) emissions along with water, waste and energy as part of its framework sustainability approach, A Sense of Tomorrow.



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#### About Givaudan

Givaudan is the global leader in the creation of flavours and fragrances. In close collaboration with food, beverage, consumer product and fragrance partners, Givaudan develops tastes and scents that delight consumers the world over. With a passion to understand consumers' preferences and a relentless drive to innovate, Givaudan is at the forefront of creating flavours and fragrances that 'engage your senses'. The Company achieved sales of CHF 5.1 billion in 2017. Headquartered in Switzerland with local presence in over 100 locations, the Company has more than 11,100 employees worldwide. Givaudan invites you to discover more at www.givaudan.com.

### **About HyCool**

Industrial Cooling through Hybrid system based on solar heat, is a project co-funded by the European Union, whose goal is to obtain near-to-market solutions for the use of solar heat in industrial processes. Following a call for proposals in May 2018, the project has a duration of 36 months and a budget of EUR 7.74 million. HyCool is based on the coupling of an innovative Fresnel based concentrated solar heat (CSH) collector system with specially built Hybrid Heat Pumps (HHP), a 'two-in one' combination of adsorption and compressor based heat pumps, for a wider output temperature range of Solar Heating and Cooling (SHC), and a wide range of design and operational configurations to increase the potential implementation of the proposed solar heat in industrial environments. For more information: http://hycool-project.eu.

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