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PRESS RELEASE

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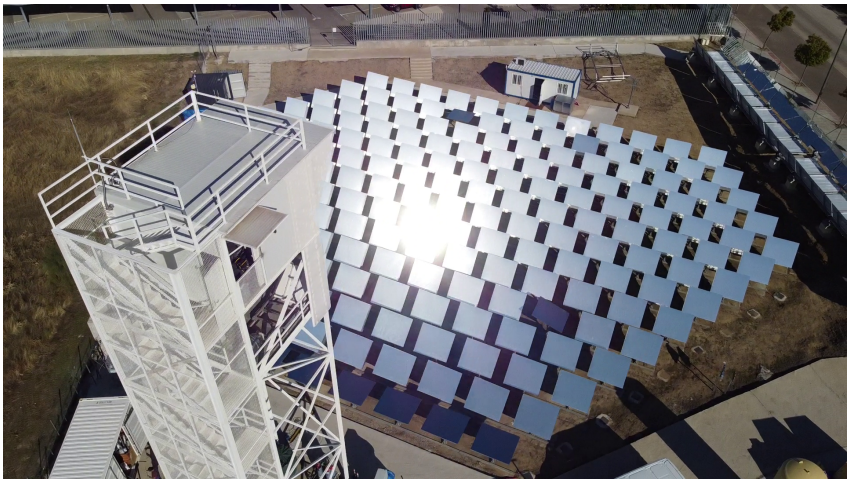
SMS group partners with Synhelion for pioneering industrial plant with state-of-the-art solar technology

From sun to fuel



Synhelion's test facility in Spain, featuring a 1,000 m2 solar field to develop and test its solar fuel technology on medium scale.

- SMS group forms strategic partnership with Synhelion to support its sun-to-liquid process
- nnovative solar technology harnesses the power of concentrated sunlight and enables the production of a climate-friendly alternative to fossil fuels
- Great potential for accelerating the decarbonization of the world of metals

Today, the transportation sector accounts for the major share of global greenhouse emissions, contributing around 25 percent. Along with other energy-intensive

industries, including the metalworking industry, it faces ever-stricter decarbonization targets in order to be more climate-friendly and to reduce the use of non-renewable resources.

As part of its commitment to lower CO_2 emissions with the goal of becoming carbon-neutral, SMS Concast, a company of SMS group located in Zurich, Switzerland, has now formed a strategic partnership with the Swiss company Synhelion and invested an important amount in the funding of their state-of-the-art solar technology. The investments made by SMS group and other partners enables Synhelion to build and operate the world's first industrial production plant for solar fuels. Located in Jülich, Germany, the plant will cover the entire process on an industrial scale, from concentrating sunlight to producing the synthetic liquid fuel. It will empower Synhelion to produce solar fuels at an unprecedented low price that is competitive with fossil fuels, making a significant joint contribution to stopping the climate crisis.

This is especially relevant for sectors, which are notoriously difficult to electrify, such as aviation. Additionally, long-distance transportation such as freight or shipping requires extremely high energy densities that current battery technology cannot reach. Liquid synthetic fuels like the ones to be produced by Synhelion can achieve these densities, making them an ideal energy carrier.

While the focus will be on transportation in the beginning, the process includes solar technologies that can be transferred to other applications. In the metal producing industry, the generated renewable solar process heat, which is able to reach unprecedented temperatures beyond 1,500 degree Celsius can, for example, be used for energy-intensive processes in steel production.

Sun-to-Liquid technology and "solar steel"

Synhelion uses solar heat to convert CO_2 into synthetic fuels, so-called solar fuels. Solar radiation is reflected by the mirror field, concentrated onto the receiver, and converted into high-temperature process heat. The

generated heat is fed to the thermochemical reactor that turns CO_2 and H_2O into syngas, a mixture of H_2 and CO. The syngas is then processed by standard gas-to-liquids technology into fuels such as gasoline, diesel, or jet fuel. Excess heat is saved in the thermal energy storage (TES) to enable continuous 24/7 operation (https://synhelion.com/technology).

“We immediately recognized the potential of this innovative process from the ETH Zürich spin-off Synhelion. Aside from the solar fuel, the technology bears many possible applications in the steel industry, for both SMS group and our customers. It also contributes to driving the green transition of the metal-producing industry forward and to creating a carbon-neutral and sustainable metals industry. The SMS Concast team is looking forward to a fruitful partnership with intense knowledge exchange,” said Dr. Stephan Feldhaus, CEO at SMS Concast.

On the way towards net-zero emissions

Philipp Furler, CEO and Founder of Synhelion, comments: ?SMS group will support us with their extensive expertise in plant design and operations as well as in environmental technology. Together, we will accelerate the commercialization of our unique, proven technology worldwide and integrate our solutions, such as the thermal energy storage, for further applications in the metals industry.”

Tim Ovelgönne, Corporate Development at SMS group and Project Leader of the transaction, states: “We see a very high potential in the ‘sun-to-liquid’ technology as it can be used in various industries. We look forward to a remarkably promising partnership with the team of Synhelion. This investment is an important step for SMS group’s decarbonization strategy.”

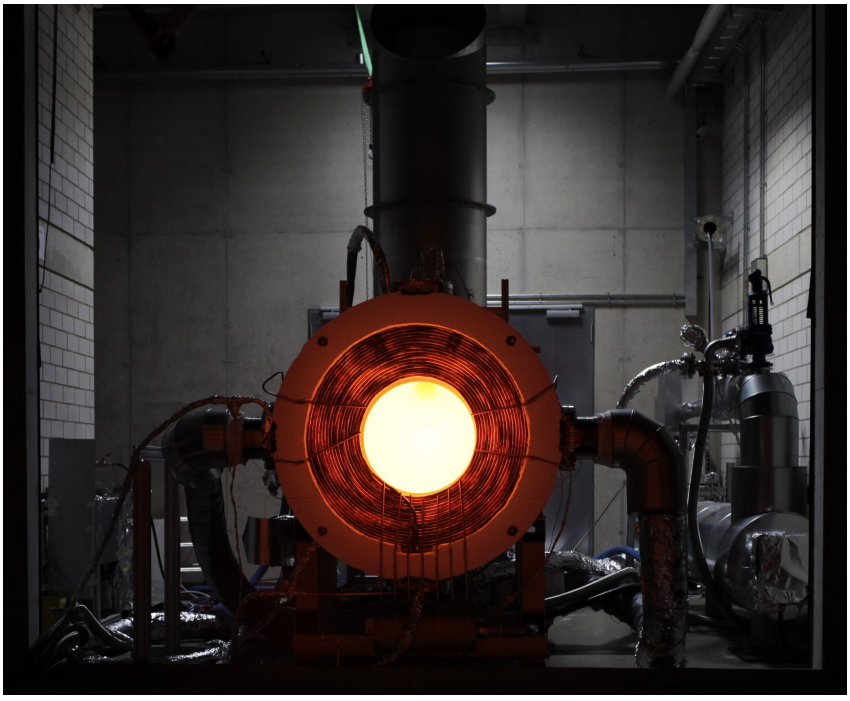
About Synhelion

Synhelion is a global pioneer in the field of sustainable solar fuels. The clean energy company evolved from the Swiss Federal Institute of Technology (ETH Zurich) in

2016 to decarbonize transportation. Solar fuels can replace all types of fossil fuels as they are economically viable and fully compatible with existing global infrastructure. Synhelion's unique technology converts concentrated solar heat into the hottest existing process heat on the market, making it possible to drive an unprecedented number of industrial processes such as fuel production and cement manufacturing with solar heat. The company already works with international partners such as Lufthansa Group, Wood, Eni, CEMEX, and Zurich Airport. For more information, please visit: (www.synhelion.com).

About SMS Concast

SMS Concast, a company of the SMS group, is the leading partner for continuous casting technology for the production of long products in steelmaking. The company was founded in 1954 by Irving Rossi to build continuous casting machines and still headquarters in Switzerland. SMS Concast supports producers from the engineering (design and order handling) through to delivery and commissioning of the plants. Together with the partner companies of the SMS group, SMS Concast builds complete steelworks and rolling mills, looking for ever more sustainable solutions. For more information, please visit: (www.sms-concast.ch).



Solar receiver by SMS group’s new partner Synhelion: delivery of clean solar process heat beyond 1,500 degree Celsius applicable to various industries using high-temperature process heat.

SMS group is renowned worldwide for its future-oriented technologies and outstanding service for the metals industry. The company applies its 150 years of experience and its digital know-how to provide the industry continuously with innovative products and processes – even beyond its core business – and generates worldwide sales of more than 2.7 billion euros. SMS is the right partner for challenging projects, and supports its customers throughout the lifecycle of their plants, enabling profitable and resource-efficient value creation chains. Paving the way for a carbon-neutral and sustainable metals industry is the company’s stated goal. As a global player with German roots, SMS takes responsibility for its about 14,000 employees.