sunfire

RENEWABLES EVERYWHERE CO₂ Free Energy: The Evolution of Green Hydrogen

AIST European Steel Forum 2021, Virtual Conference, 27/10/2021

Hergen Thore Wolf – Head of Product Management

EXECUTIVE SUMMARY

Sunfire is a leading industrial electrolysis company





BUSINESS MODEL

From electrolysis equipment to renewable molecules





STRATEGIC PARTNERSHIP

Sunfire and SMS Group joined forces in 2019 to jointly build green steel plants





GREEN STEEL

Transformation of integrated steelmaking in several stages



GRINHY 2.0 PROJECT

Largest demonstration of SOEC electrolyzer in steelworks worldwide



Showcasing renewable hydrogen production via SOEC's steam electrolysis at megawatt-scale, utilizing waste heat from the iron-and-steel works of Salzgitter Flachstahl GmbH.

Note: This project has received funding from the Fuel Cells and Hydrogen 2 Joint Undertaking (JU) under grant agreement No 826350. The JU receives support from the European Union's Horizon 2020 research and innovation programme and Germany, Luxembourg, Italy, France.



PRODUCT PORTFOLIO

Sunfire's electrolyzer portfolio covers SOEC and Alkaline technology





HYBRID ELECTROLYSIS

Substantial efficiency advantage yields 13% more output with same electricity input





RENEWABLES EVERYWHERE

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In October 2021, Sunfire raised EUR 109 million (USD 125 million)





Management (left to right): Stephan Garabet, Bernhard Zwinz, Nils Aldag & Christian von Olshausen



INDUSTRIALIZATION

We increase manufacturing capacity to 500 MW/year by 2023



Sunfire's industrial production facility for alkaline electrolyzers in Germany

500 MW/year production capacity operational by 2023

Industrial manufacturing

with lean, fully automated processes

Further scaling step to 1 GW/year already in preparation

Made in Germany High-quality manufacturing in Germany

Note: The final investment decision should be made upon completion of site selection and is subject to obtaining the necessary financing, including those requested within the IPCEI framework

