

# 16<sup>th</sup> RDPE Conference – Warsaw, Nov. 28<sup>th</sup>, 2023

## Keynote

**Title:** Innovative Solutions for Defossilization of Industrial Heat Processes

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During more than 26 years of being active in global industrial businesses, I could gain experience with all components of fossil power generation. Not only regarding state-of-art designs, but also from erection and commissioning and even more with focus on the following years of operation, supported by long-term service cooperations, including constant technology upgrade activities.

Since a couple of years, decarbonization of industrial processes became the key topic globally and I decided to get involved in this area. My new focus was on industrial heat processes, their path to zero emissions and all related technologies, independent if available or to be developed.

When Siemens Energy established innovation centers at several location over the globe, I became a part of innovation center Berlin. Here I can drive the development of new defossilization technologies together with partners and push for fast implementation in different industrial verticals, with focus on reliable and sustainable operation of our global industrial assets, today and in the decades to come.

## Abstract:

After introduction of Siemens Energy as a global leader in energy business, with a strong focus on developing new decarbonization technologies together with partners, a deep dive into transformation of the energy sector in Poland is provided. The industrial sector is responsible for a substantial part of global CO<sub>2</sub> emissions and in the area of process heat, the challenges to decarbonize are very high, due to complexity of heat use cases in temperature, media and quantity. An overview on technologies to electrify heat production is given, structured by availability in Siemens Energy portfolio today, or currently under development. Furthermore, some specific technologies around waste heat recovery and also H<sub>2</sub> based heat production are investigated. The overview is expanded into deep dives for each mentioned technology. Intention is to provide the audience with facts regarding capabilities of specific decarbonization technologies, to support a fast selection of best fit solutions for specific use cases, in the wide range of industrial verticals globally.