Enabling the hydrogen economy:Digital design solutions to accelerate hydrogen applications

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Hydrogen is widely expected to play a key role in the decarbonization of advanced economies, and technologies for more sustainable production and utilization of hydrogen are seeing an increased interest. For many of these technologies, challenges remain to scale up, reduce costs, integrate into wider process systems and increase confidence and acceptance.

In this presentation, we present how digital design techniques using digital twins based on high-fidelity, predictive process models can help speed up technology development, map system interactions, determine optimal buffer sizing, especially in highly transient scenarios, optimize equipment and system designs, and ultimately provide reassurance to all stakeholders in the hydrogen economy to confidently navigate the road to decarbonization