

## **Role of Water Electrolysis in the Energy Transition**

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To achieve carbon neutrality by 2050 as a target for limiting global warming, our primary tool is the energy transition, based on the shift from an energy mix based on fossil fuels to one that produces low or zero-carbon emissions from renewable energy sources.

A future with a massive availability of renewable energy sources foresees a lot of potential for electrochemistry. The electrochemical process of water electrolysis is the most established technology option for producing green hydrogen from clean electrical power sources. Green hydrogen is an important ally in decarbonizing sectors that cannot be electrified, for instance, chemical and other hard-to-abate industries such as steel, aviation, and maritime transport. For this reason, green hydrogen can potentially become a central pillar for promoting energy transition to sustainable sources and world economy decarbonization.

The presentation aims to introduce the role of water electrolysis in the energy transition to the audience, showing an overview of the hydrogen market and the impact of a technological leader on electrodes and electrochemical processes as De Nora on the decarbonization while making hydrogen production through water electrolysis increasingly competitive in economic terms.