

Opportunities and challenges of exploiting white and green hydrogen in Africa to decarbonise the global economy

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Hydrogen is the most abundant element in the universe. The molecular form of hydrogen that is of interest as an energy carrier is the diatomic molecule composed of two protons and two electrons, H₂. Hydrogen could be the energy carrier of the future. Captured in its natural form, known as 'white hydrogen', or produced from renewable energy sources, known as 'green hydrogen', it is climate-friendly and can be used to reduce greenhouse gas emissions. Because it can be transported over long distances and stored for long periods, hydrogen has the potential to become the basis for climate-neutral mobility, industry and heat supply. Hydrogen can be produced using a variety of processes and energy sources. Colour codes are used to distinguish between the different processes. This presentation will introduce the different production processes before assessing the challenges and opportunities of harnessing 'white' and 'green' hydrogen in Africa for the decarbonisation of the global economy.

Abstract Category

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