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HYDROGEN DIPLOMACY OFFICE ASTANA
H2-DIPLO: DECARBONIZATION DIPLOMACY
THE ROLE OF GREEN HYDROGEN IN DECARBONIZATION

H2-diplo – Decarbonization Diplomacy



Ongoing energy transition towards renewables



Fossil fuel export and transit countries face future decrease in demand

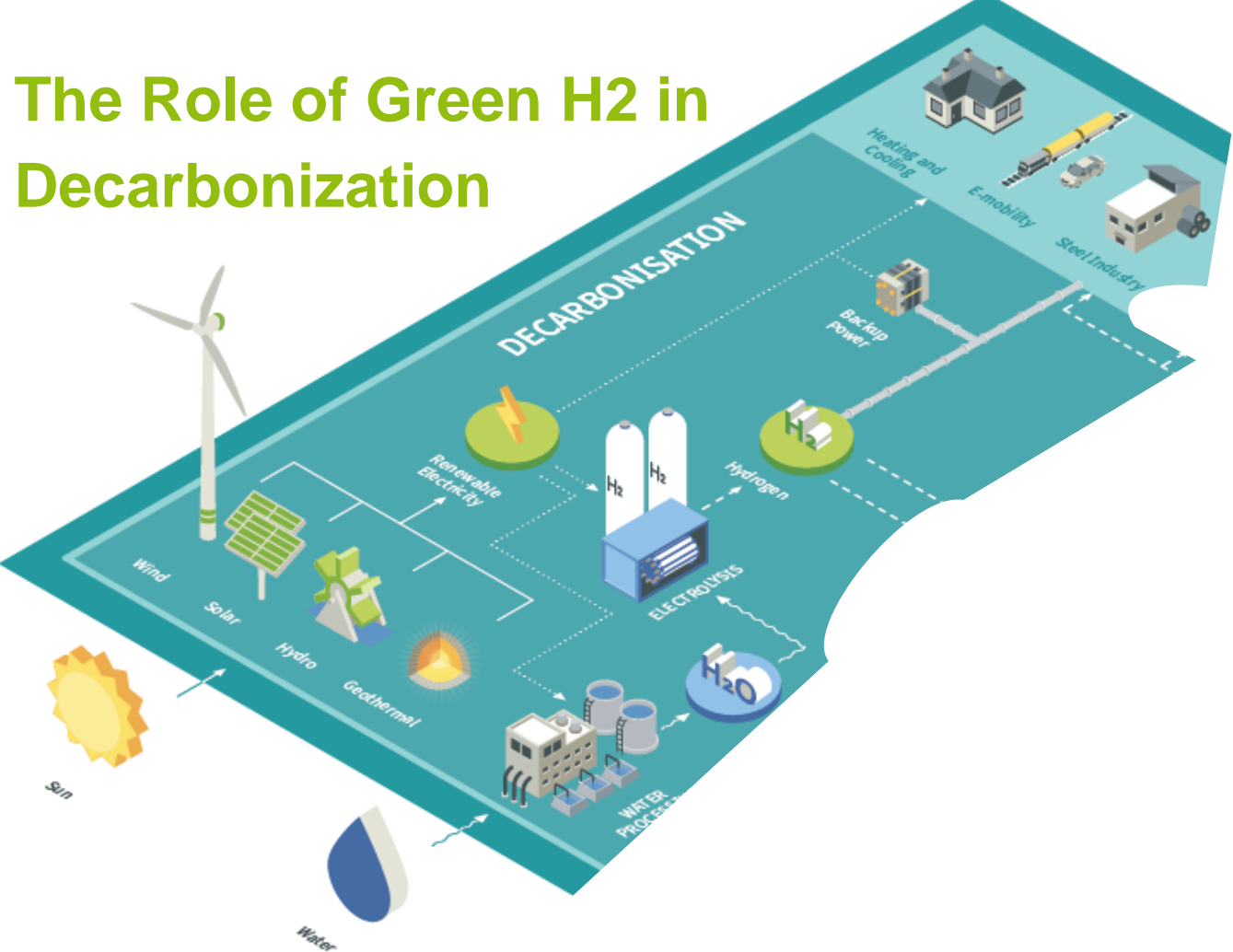


Advancing the global energy transition

Local economy diversification, decarbonization and value chain integration

Advancing global trade of green hydrogen

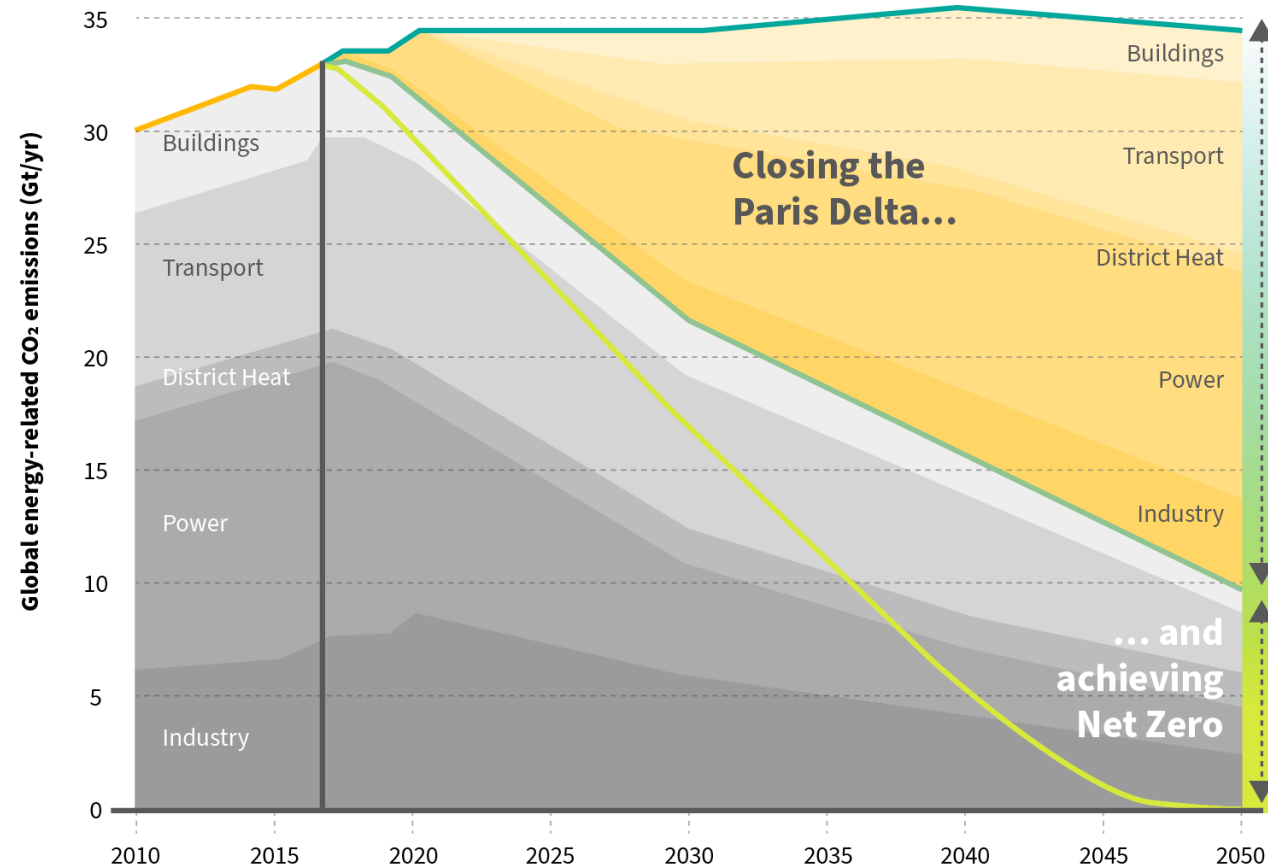
The Role of Green H2 in Decarbonization



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Green H2 as part of the solution

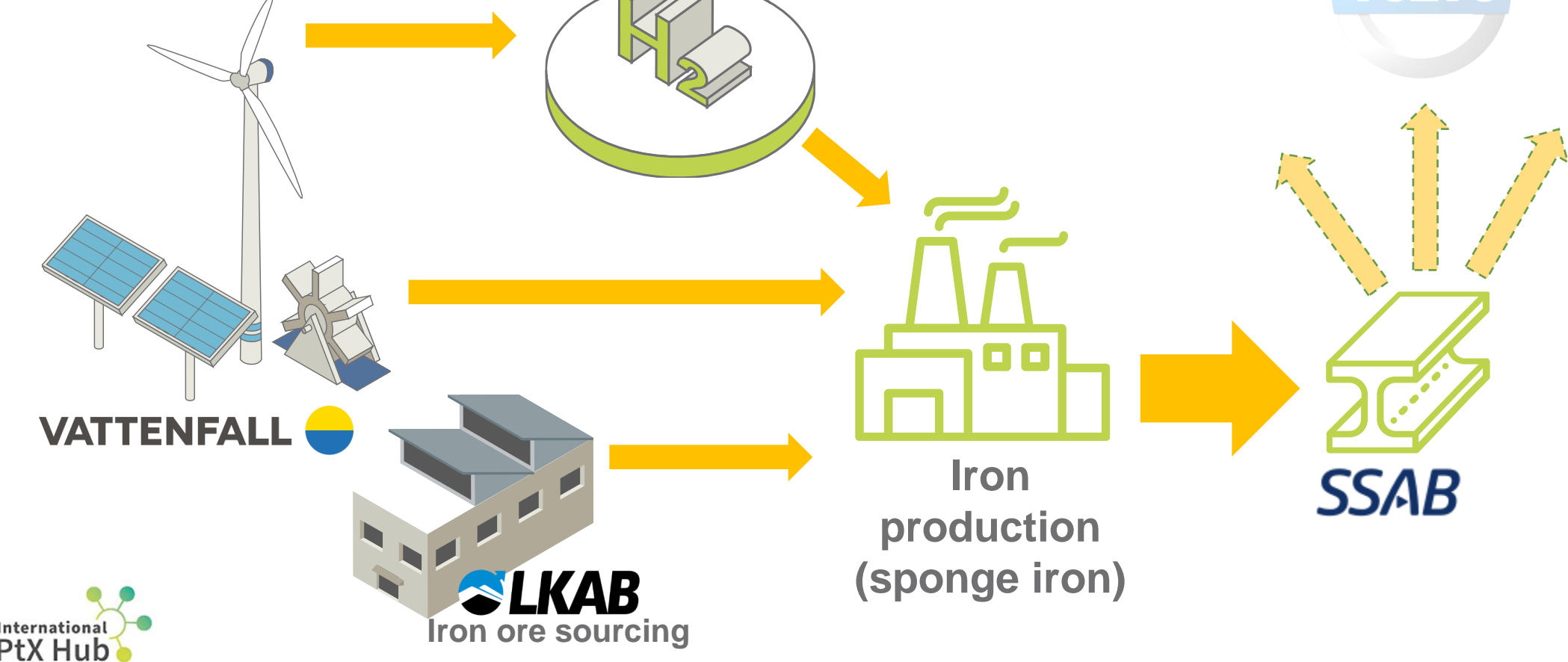


- 1 Improving energy efficiency in all sectors
- 2 Reaching 100 % renewable energy
- 3 Electrifying all sectors such as heating and light-duty transport
- 4 **Power-to-X** for the sectors and industries that cannot directly electrify

The Role of Green H2 in Decarbonization



Green Steel in Sweden



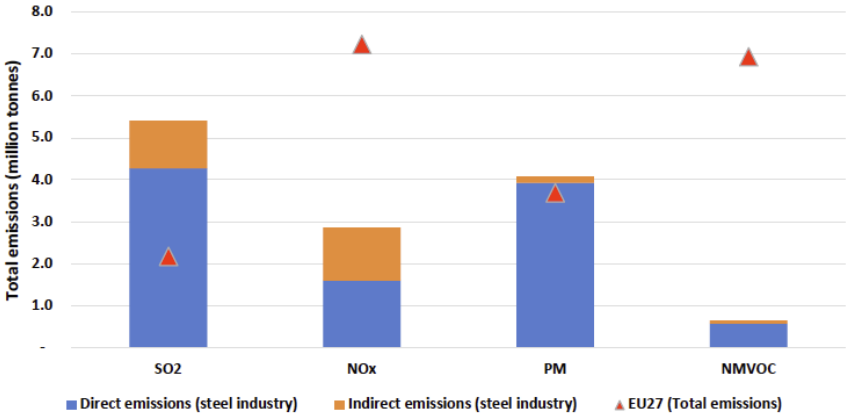
Source: PtX Hub illustration based on: Klimareporter (Wille, J.), Grüner Stahl am Start, 2021.

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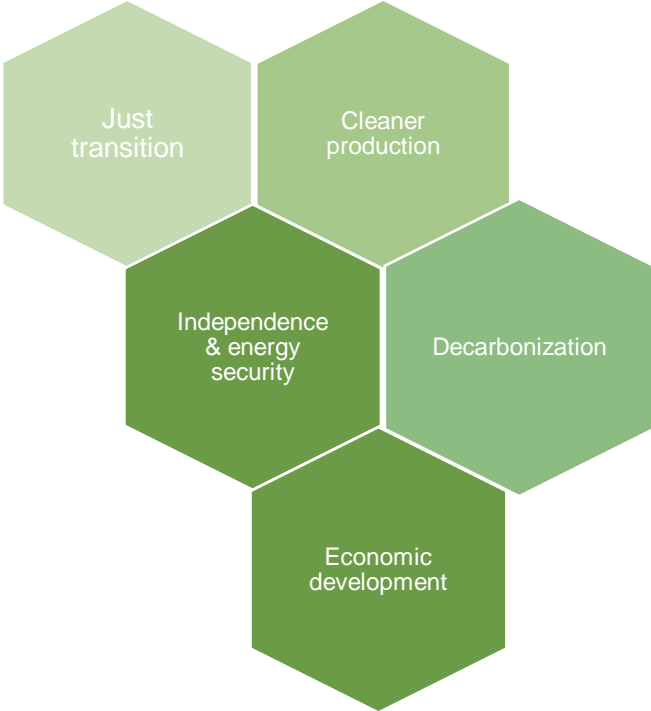
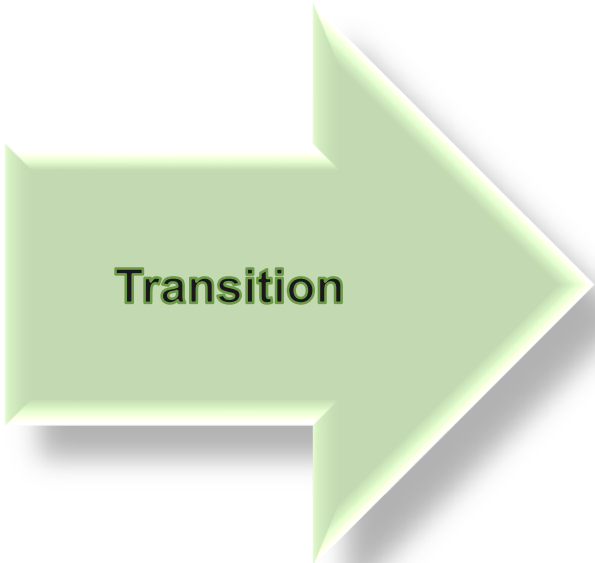


More than CO₂ Mitigation

Example: Other emissions in the steel industry



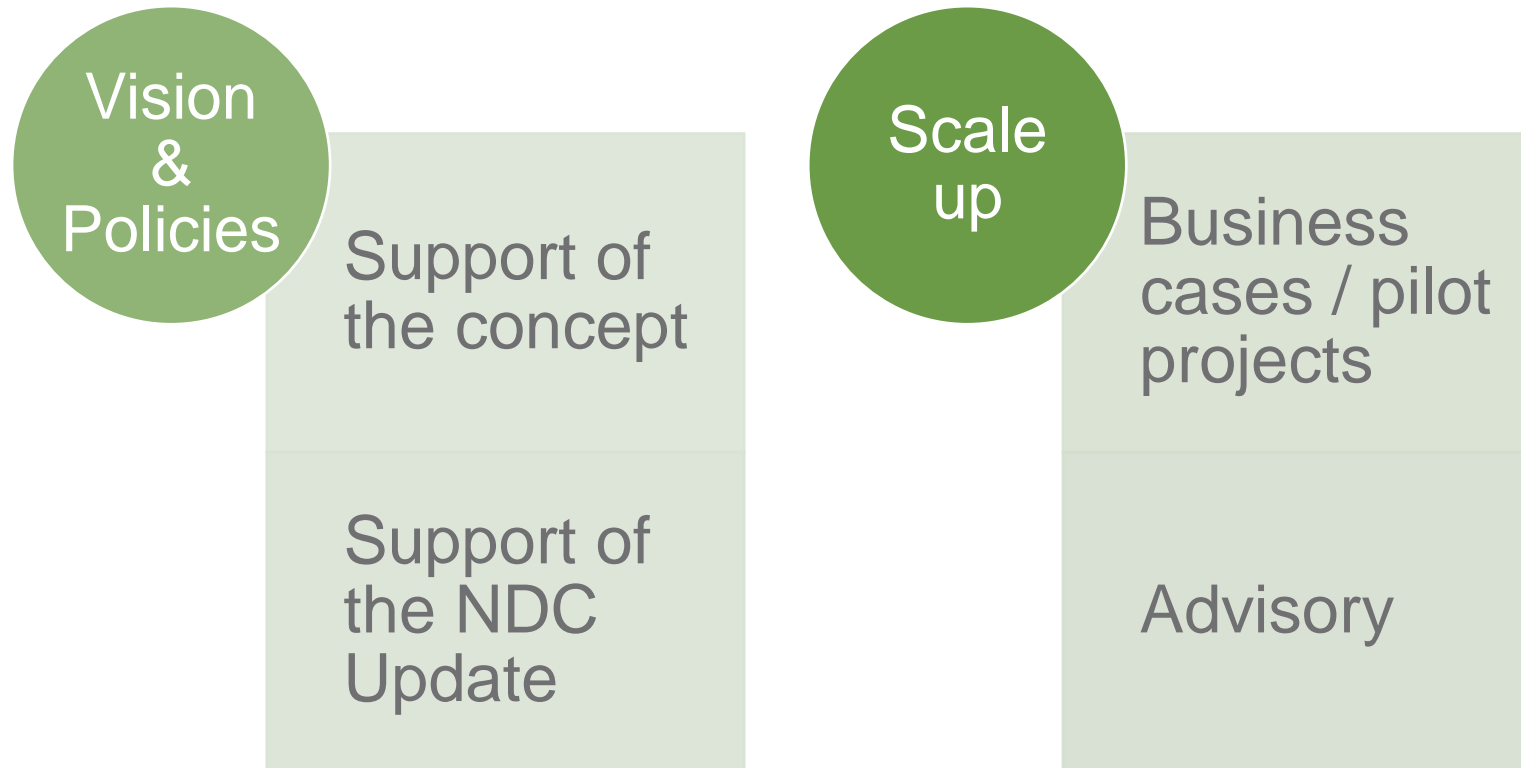
<https://www.globalefficiencyintel.com/air-pollution-from-global-steel-industry>



The Role of Green H2 in Decarbonization



H2-diplo + H2-PEP



Спасибо! Рақмет! Thank you!

**For any questions, please contact the
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