GREEN AMMONIA: KEY FOR THE GERMAN ENERGY TRANSITION

AEA Conference

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ADELPHI IS A THINK TANK AND POLICY CONSULTANCY













GERMANY ACCELERATES THE ENERGY TRANSITION IN RESPONSE TO THE ENERGY CRISIS

Renewable energy*

Electricity generation: + 11%



Expansion of installed capacity PV: + 31%



Expansion of installed capacity wind onshore: + 9%

Buildings & energy efficiency



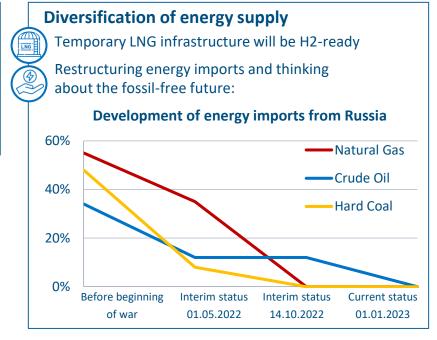
Share of heat pumps in the heating structure: + 7%**



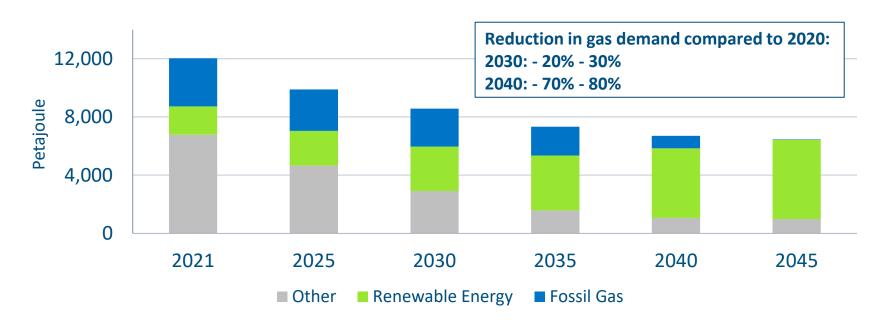
Reduction of gas consumption by households: - 16.7%*



Reduction of gas consumption by industries: - 14.6%*



GERMANY WILL RAPIDLY PHASE OUT GAS AND EXPAND RENEWABLES



THE UPDATED HYDROGEN STRATEGY SETS KEY TARGETS AND DEFINES ACTIONS



Demand:

- 2030: 95-130 TWh (hydrogen and derivates)
- expectations for 2045: Industry sector: 290-440 TWh; Electricity sector: 80-100 TWh

2030 key targets:

- Domestic electrolysis capacity: 10GW
- Establish diversified supply & avoid new dependencies
- Establish sustainability standards
- Become technology partner for exporting countries
- Build hydrogen start network with more than 1.800km by 2027/28
- All major H2 centers to be connected to consumers
- Establish key hydrogen demand in industry, transport and electricity
- Create appropriate regulatory framework
 - CO₂ pricing as guiding instrument & additional funding for green H2

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WHAT'S THE ROLE OF AMMONIA?

- Broad acknowledgement that ammonia is the most practical vector
 - → large volumes of shipped ammonia necessary
- Concrete measures:

Ammonia import terminals



H2 / ammonia sprinter power plants



Funding for supply and demand

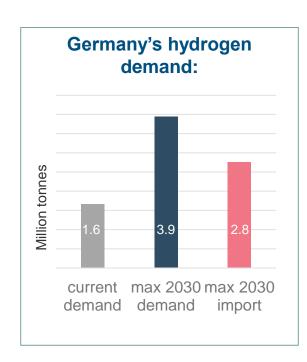


The German Carbon Contracts for Difference (CCfD) scheme

June 6, 2023



WHAT'S THE ROLE OF AMMONIA FROM AUSTRALIA?





Massive demand for imports of H2 and derivatives



Hydrogen import strategy is expected by the end of this year



(Big) part of imports expected via ship



Transport costs negligible is you are looking at shipping (→ HySupply)

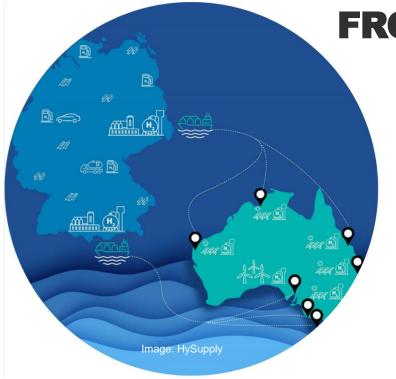


Diversified supplier base important and valued (good quy premium)

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WHAT DO WE NEED FROM AUSTRALIA?



AND WHAT DOES AUSTRALIA NEED FROM GERMANY?

WHAT IS GOING ON TO SUPPORT A BILATERAL HYDROGEN / AMMONIA PARTNERSHIP?

Australia-Germany Hydrogen Accord



Bilateral feasibility study HySupply



Several focal points for the cooperation at adelphi, the German-Australian Chamber (AHK) and Austrade





High-level events, delegation trips and visits

Networking opportunities and match-making to support industry cooperation





TrHyHub Cooperation in Oakajee, WA



Knowledge sharing and build-up through info sessions, briefings and studies

Source: adelphi 2023

CONTACT



Franziska Teichmann

Senior Manager

Head of the German Secretariat for the Energy Cooperation with Australia and New Zealand, Sydney

teichmann@adelphi.de T +61 431 995220



