

Shipping the Sunshine

The Australia-Germany
Hydrogen Partnership



More information:

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Australia and Germany

are natural partners
in green hydrogen



Energy demand ·
Manufacturing capability ·
Technology leader ·

· Land and resources
· Recognised leader in global
export of energy
· Reliable and trusted energy
partner

Australia and Germany both have
expertise in renewable energy generation

1

Australia and Germany are natural partners in green hydrogen.

Using only solar energy from Australia's most promising regions – accounting for just 3% of its surface area - could produce 600 million tons of hydrogen annually. That is ten times Germany's non-electricity energy consumption.

H₂ \approx **10x** Germany's non-electricity energy consumption
600m tonnes

3%

2

Australia has vast solar, wind and hydro resources to produce green hydrogen.

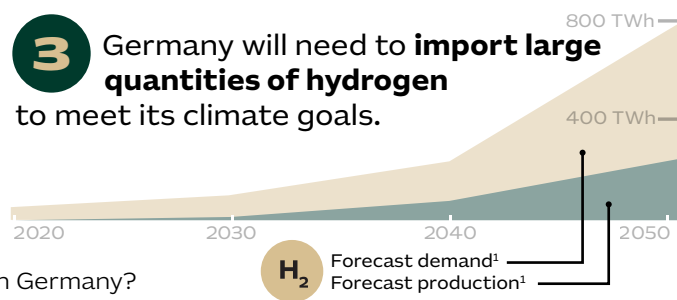
4

While the foundation for a new era in German-Australian cooperation is strong, there are **important questions to resolve:**

- How to bring down costs?
- How should hydrogen be transported?
- What infrastructure will be needed in Australia and in Germany?

3

Germany will need to **import large quantities of hydrogen** to meet its climate goals.



5

Australia and Germany have established a **feasibility study into a renewable hydrogen supply chain.**

We have the sharpest minds on the case

acatech
DEUTSCHE AKADEMIE DER
TECHNIKWISSENSCHAFTEN

BDI
Bundesverband der
Deutschen Industrie eV

UNSW
SYDNEY



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What does success look like?

- ✓ A key foundation for a greener future
- ✓ Achieving Australia's goal of 'H₂ under 2' – hydrogen at or under A\$2 (~€1.70) per kilogram
- ✓ Jobs and exports for German manufacturers
- ✓ A new industry in Australia
- ✓ Investment opportunities for German industry in Australia

Renewable electricity will meet many of the requirements for a carbon neutral future. However, hydrogen molecules will be needed for several specific purposes. For example, hydrogen fuel carries much more energy than the equivalent weight of batteries.

This makes hydrogen the natural solution for steel, chemicals, shipping, heavy transport and eventually aviation.

¹ Source: Fraunhofer Institute, German National Hydrogen Strategy, own calculations