



Knowledge grows

Green H₂ Production from Massive VG Deployment in Western Australia

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Yara key figures 2019

- Around 16,000 employees
- Operations in over 60 countries
- Revenues: USD 12.9 billion
- EBITDA: USD 2.1 billion

- Total Deliveries: 38 million tonnes
- Sales & Marketing deliveries: 30.5 million tonnes
- New Business deliveries: 4.1 million tonnes
- Ammonia trade: 2.5 million tonnes



Yara's ambition is to become climate neutral by 2050



Yara's total greenhouse gas emissions halved by almost eliminating N₂O
- Equal to 15 million tonnes CO₂ every year

Past 15 years



Further improving on world leading performance by CO₂ reduction target:
-10% reduction of CO₂ per tonne of N by 2023

Present



Ambition to become climate neutral by 2050, including:
- Green hydrogen/low carbon fertilizer production
- Reduce in-field emissions

Future

Green Transformation via Hydrogen & Ammonia

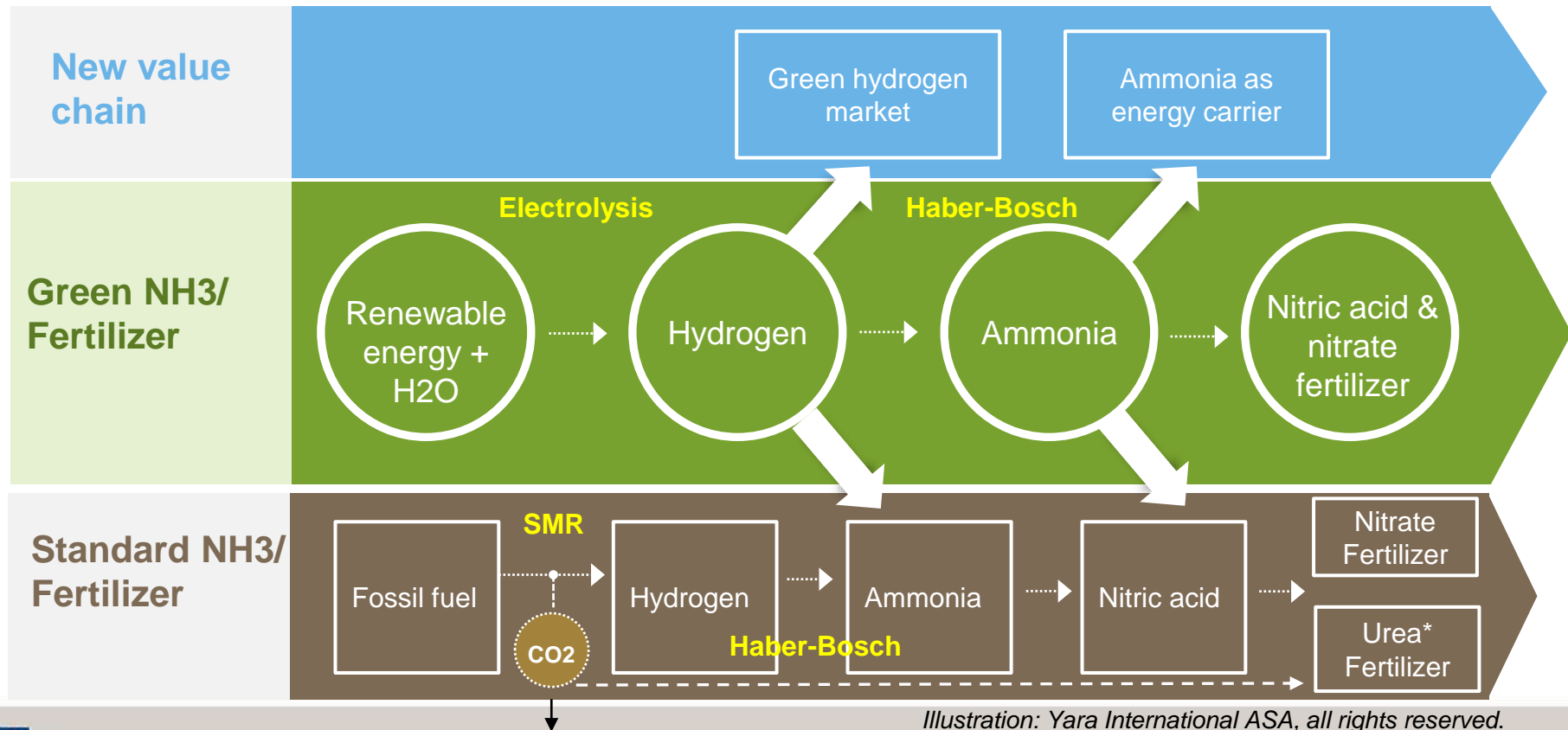


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Clean Energy could triple the global demand for ammonia

- Ammonia Energy is receiving increasing attention and can shift the ammonia market*



- **Power generation**

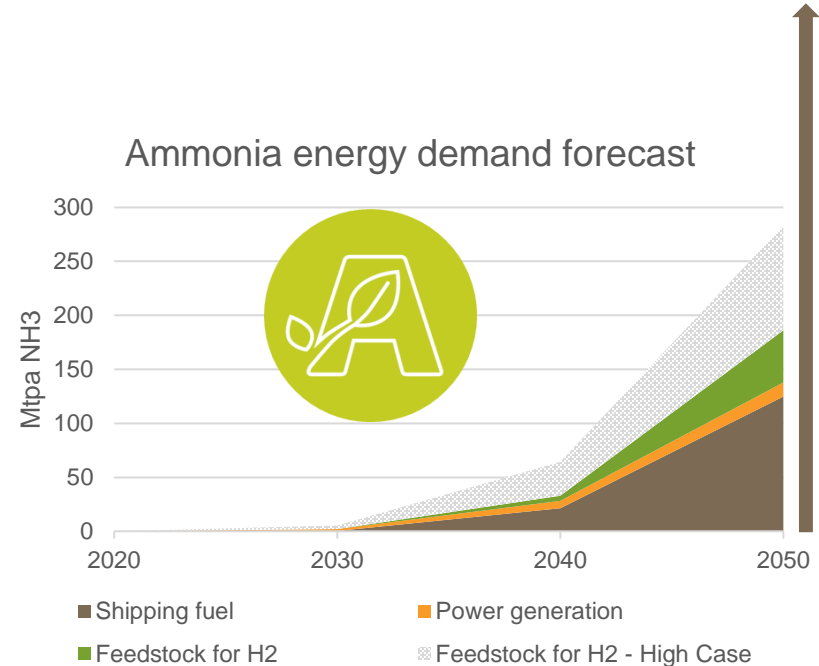
- Ammonia for direct power generation

- **Shipping fuel**

- Ammonia as marine fuel
(DNVGL 25% of 2050 shipping fuel can be ammonia,
Getting to Zero Coalition: 600-900 million ton)

- **H2 carrier**

- Ammonia as energy storage and transport vector (H2 economy) can emerge as deep decarbonization begins

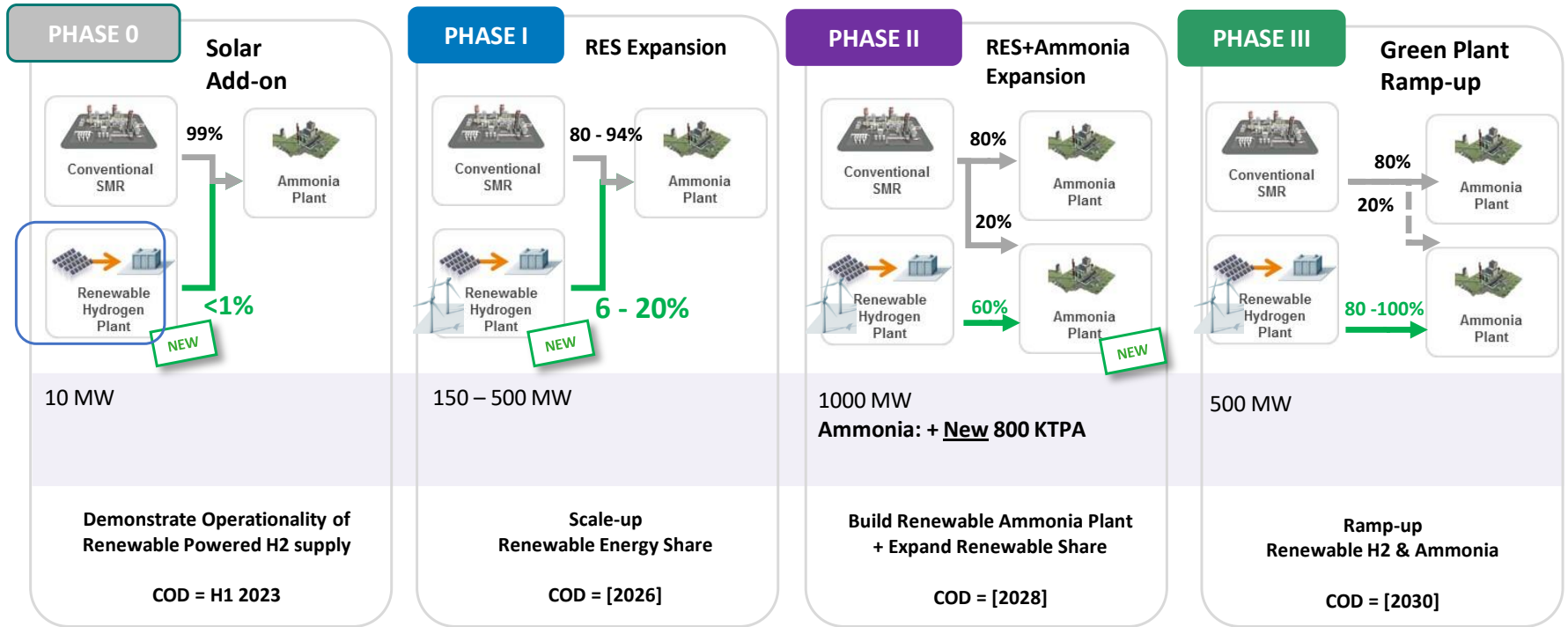




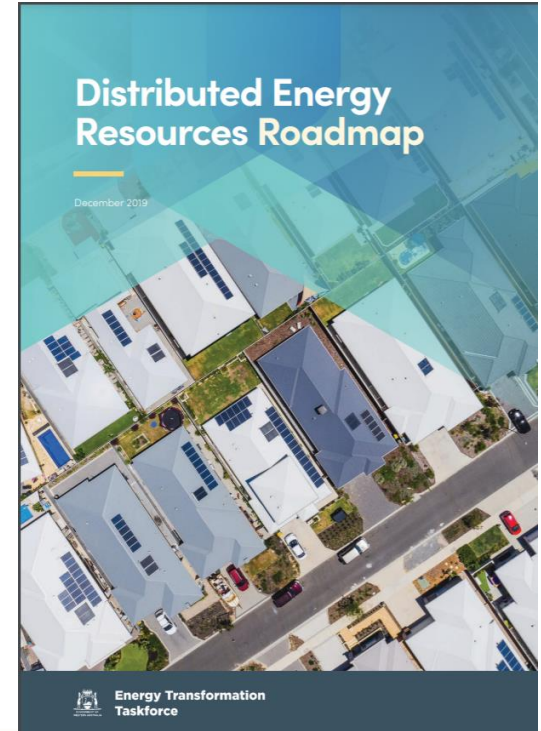
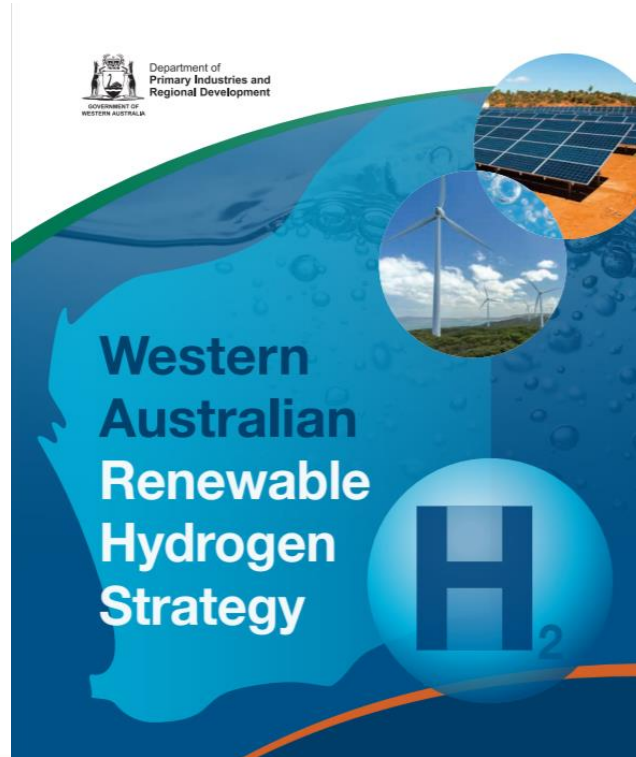
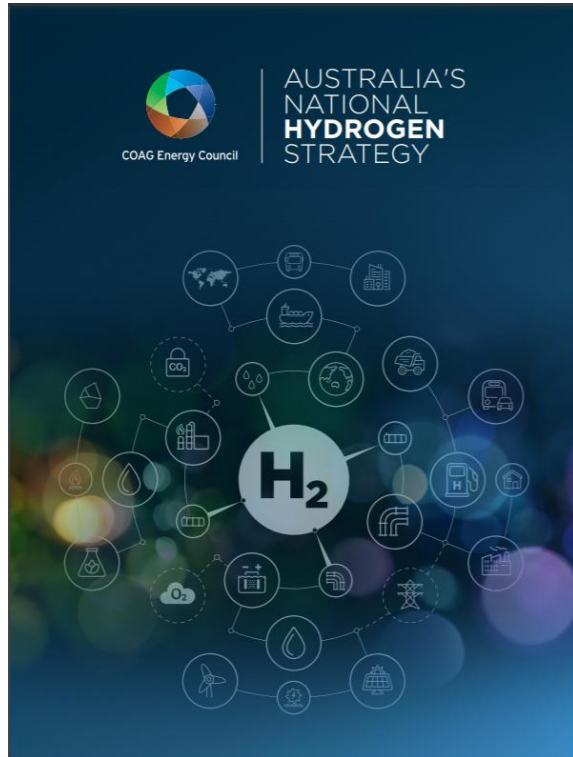




Potential ramp up of green ammonia production in Pilbara

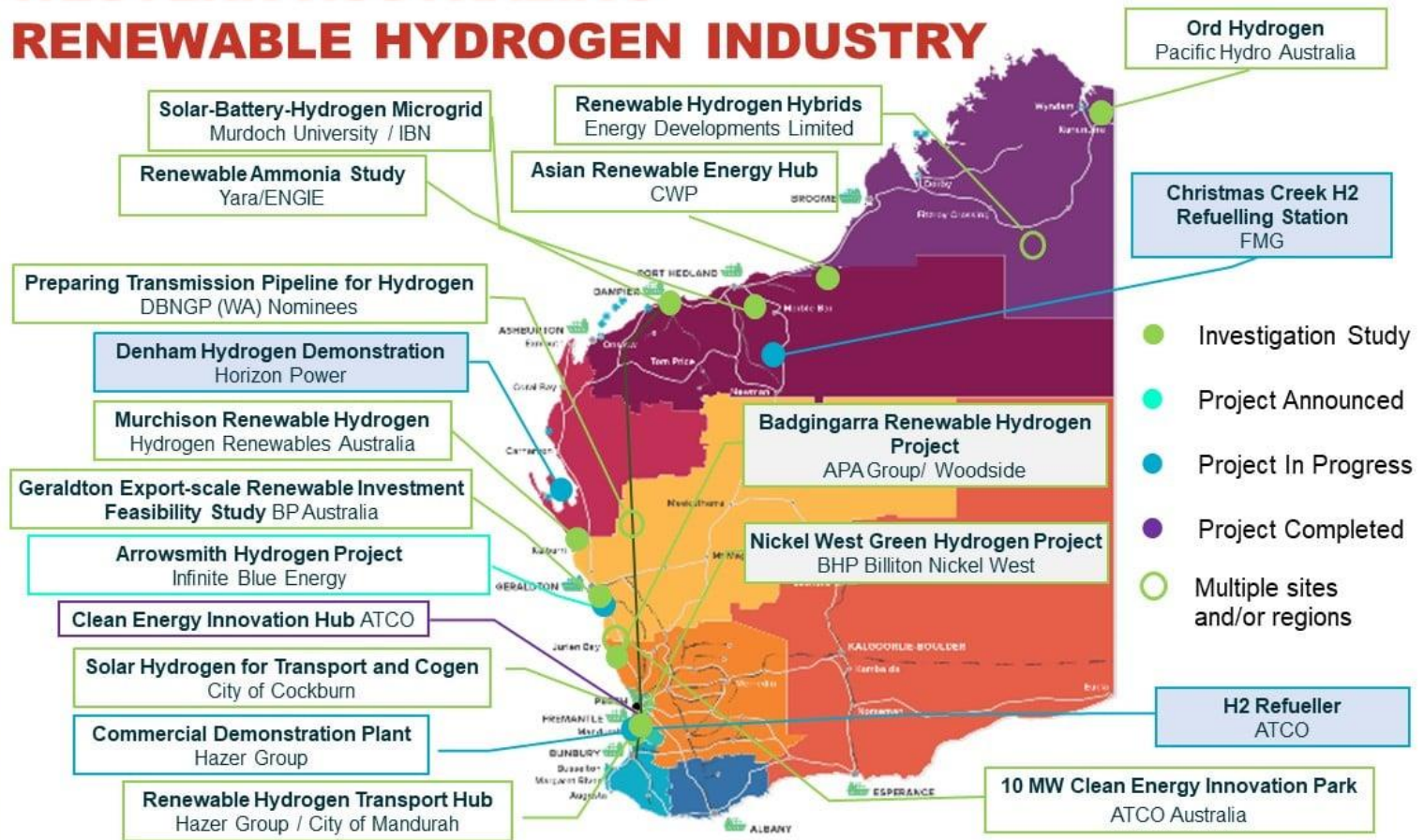


Future directions



WESTERN AUSTRALIA'S RENEWABLE HYDROGEN INDUSTRY

As at August 2020



Source: Minister MacTiernan, DPIRD