



Queensland Update on Hydrogen

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**Queensland
Government**

Image: Artist Impression of Stanwell's Future Energy Innovation Training Hub (FEITH)

Acknowledgement of Country

I would like to respectfully acknowledge the Traditional Owners of the land on which this event is taking place and Elders both past and present.

I also recognise those whose ongoing effort to protect and promote Aboriginal and Torres Strait Islander cultures will leave a lasting legacy for future Elders and leaders.

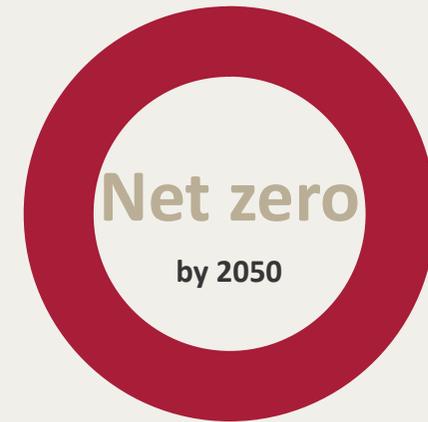
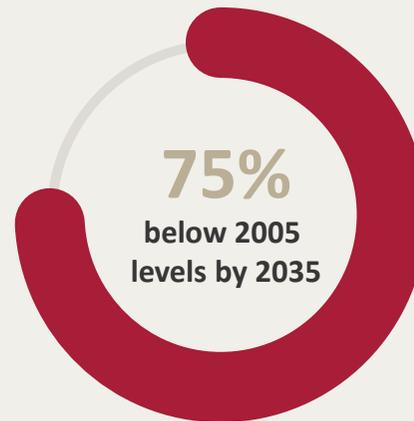
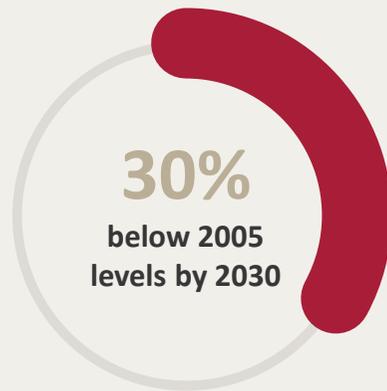
Building Communities
Art by Casey Coolwell-Fisher, Chaboo Designs



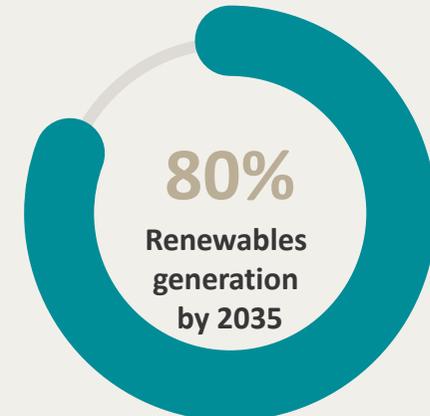
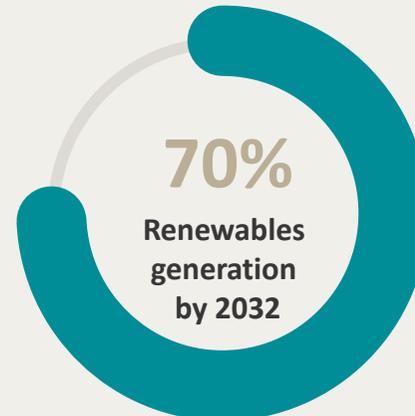
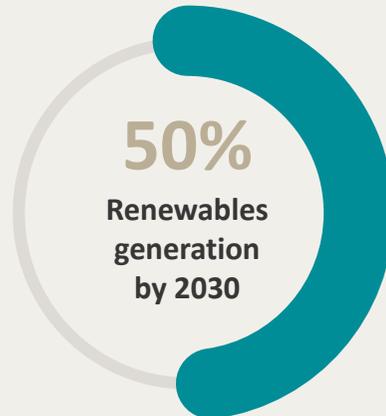
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Queensland's 2035 Clean Economy Pathway

Queensland's emissions reduction targets



Queensland's renewable energy targets



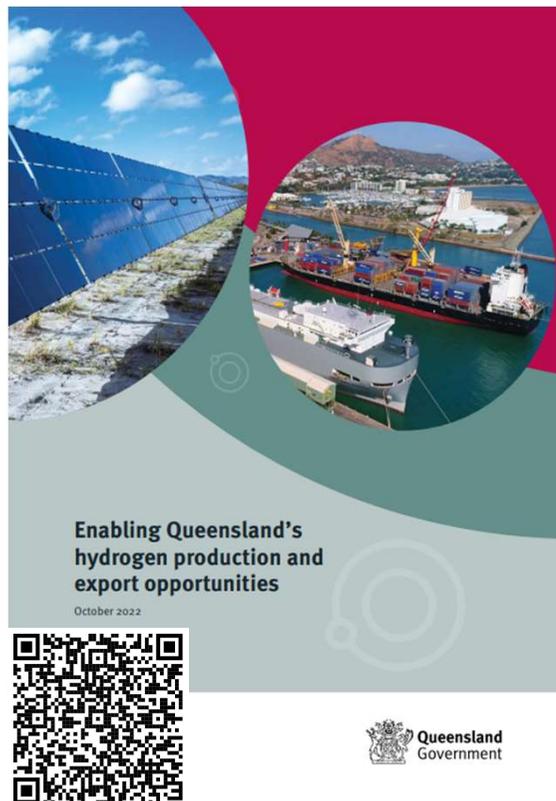
Queensland Energy and Jobs Plan



Will deliver:

- ✓ 50% renewable energy target by 2030
- ✓ 70% renewable energy by 2032
- ✓ 80%+ renewable energy by 2035
- ✓ 95% reduction in electricity emissions by 2035
- ✓ **Zero net emissions by 2050**
- ✓ **Brisbane 2032 Olympics – Climate Positive**

The *Enabling Queensland's hydrogen production and export opportunities* report:



- ✓ **Demonstrates Queensland's unique opportunity** to create an internationally significant renewable hydrogen export industry.
- ✓ **Identifies and evaluates each of Queensland's key export regions** including existing infrastructure and its potential role in local supply chains.
- ✓ **Gives strategic insight for proponents** into Queensland's hydrogen production potential as they plan, develop and secure capital, partners and off-take for their projects.
- ✓ **Provides industry and government partners a platform for future planning** and provides a reference to guide industry to grow sustainably, while balancing economic, social, environmental and cultural values.

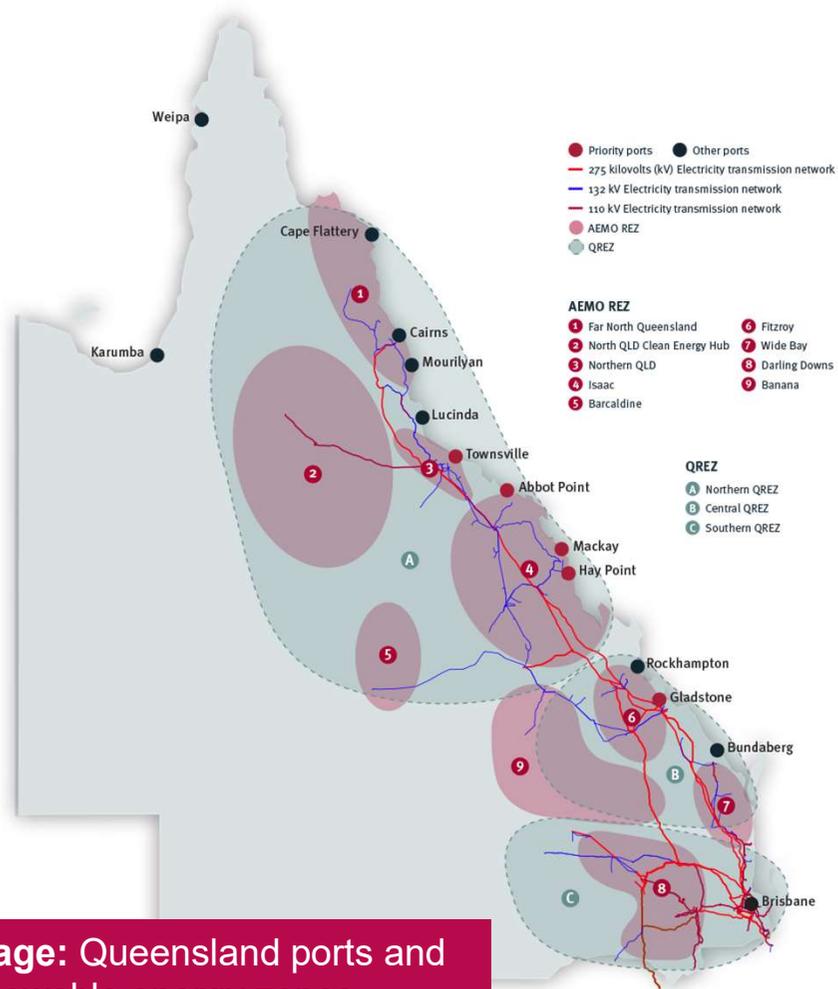


Image: Queensland ports and renewable energy zones

Hydrogen in Queensland regions just makes sense!

- ✓ Significant wind and solar resources.
- ✓ Large transmission network and established industrial hubs in Northern Queensland.
- ✓ 14 ports, 5 priority ports - majority public owned.
- ✓ Experience and an energy exporter and capability in export of bulk commodities out of multiple ports.
- ✓ Publicly owned generators, ports and transmission network.
- ✓ Plenty of land including State Development Areas (SDAs) and Infrastructure Corridors.
- ✓ Large regional population and highly skilled workforce

Queensland is on track to be a Hydrogen powerhouse



Central Queensland Hydrogen Project

- ✓ 3000MW Project at Aldoga
- ✓ Significant Japanese and Singaporean Partners
- ✓ Currently undertaking FEED. \$15m funding - Queensland Renewable Energy and Hydrogen Jobs Fund.



Rio Tinto & Sumitomo Yarwun Hydrogen Calcination Pilot Demonstration Program

- ✓ Construction starting 2024 on a hydrogen plant at Yarwun Alumina Refinery
- ✓ Lower carbon emissions from the alumina refining process
- ✓ 2.5MW on-site electrolyser to supply 6,000 tonnes of hydrogen to the refinery per year

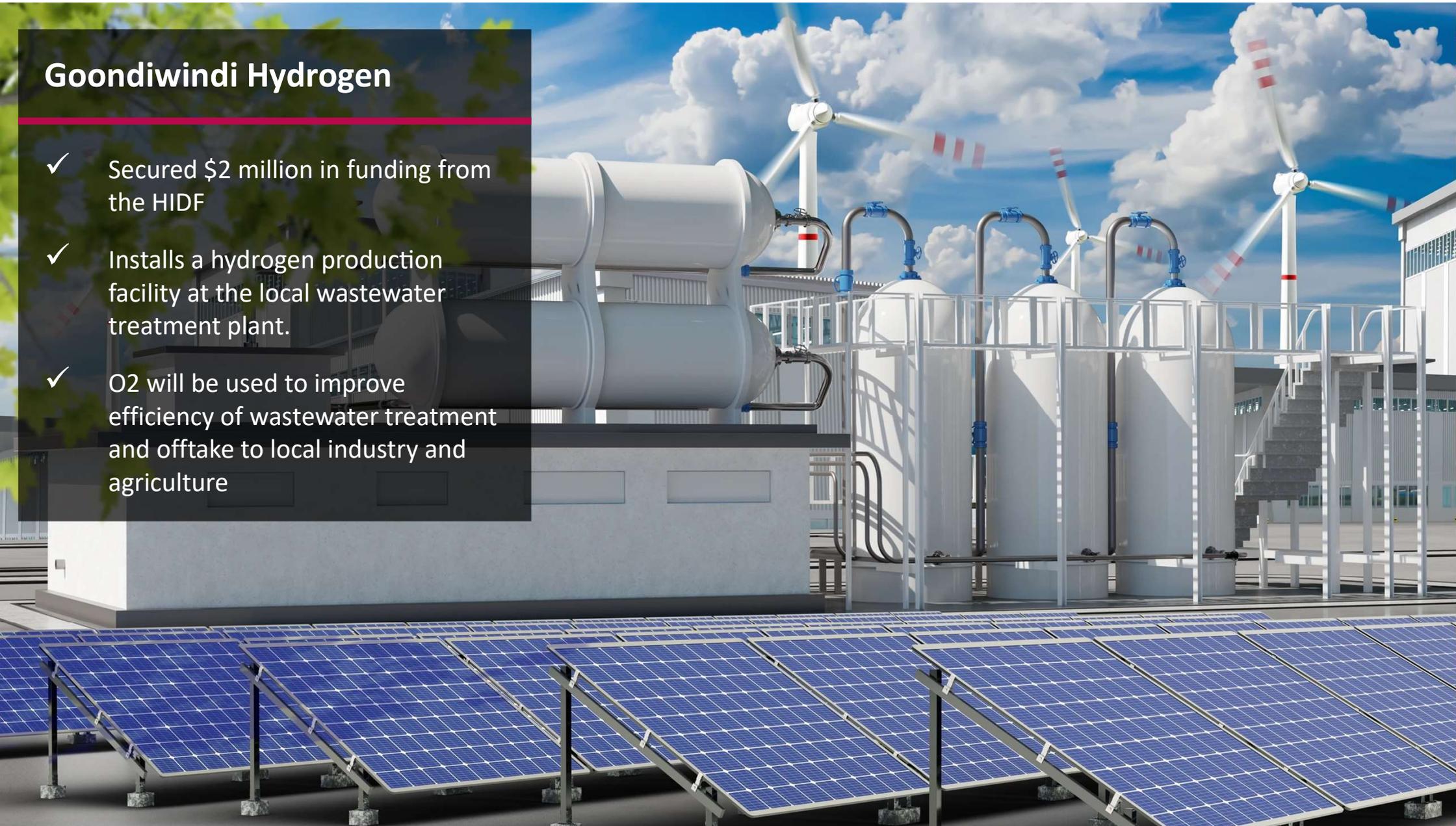


Green Energy Manufacturing Centre

- ✓ Stage 1, \$114m Gladstone Electrolyser Facility (GEF) opened April 2024
- ✓ Stage 2, 50MW green hydrogen production facility PEM50 to begin construction later this year
- ✓ Supported by Queensland Government

Goondiwindi Hydrogen

- ✓ Secured \$2 million in funding from the HIDF
- ✓ Installs a hydrogen production facility at the local wastewater treatment plant.
- ✓ O₂ will be used to improve efficiency of wastewater treatment and offtake to local industry and agriculture





CS Energy Brigalow Peaking Power Plant

- ✓ 400MW hydrogen-ready gas peaker with fast-start capability
- ✓ 35% green hydrogen blend from day one
- ✓ Targeting commercial operations mid-2026
- ✓ Complements Kogan Creek Renewable Hydrogen project

Edify Green Hydrogen Project

- ✓ 17.6MW Electrolyser (Phase 1)
- ✓ To produce 150,000 tonnes per annum (at full scale)
- ✓ Awarded funding under German-Australian HyGATE Initiative



Creating a clear pathway

Community engagement

\$5 Million to expand community awareness on hydrogen and build social licence



Policy and legislation

Initial Bill passed with broader reforms being considered and consulted on



Project planning

\$15 Million in technical studies to support strategic project planning in our hydrogen hubs



Revising the strategy

Refreshing the Queensland Hydrogen Industry Strategy for actions beyond 2024



Industry investment

- Project facilitation
- \$35 Million Hydrogen Industry Development Fund
- \$4.5 Billion Queensland Renewable Energy and Hydrogen Jobs Fund





Let's continue the conversation



**ASIA-PACIFIC
HYDROGEN
2024**

SUMMIT & EXHIBITION

12-13 SEPTEMBER 2024

BRISBANE, AUSTRALIA



In Partnership With:



Supported By:



Host State:



Thank you



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Department of Energy and Climate

www.epw.qld.gov.au/about/initiatives/hydrogen



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