

Zero Carbon Certification Scheme Overview and Progress

3 NOVEMBER
2021

OVERVIEW OF THE SCHEME

- Launched on Thursday 3 December 2020
- Industry-led, Guarantee of Origin style scheme
- Exclusively focussing on renewable hydrogen and derivatives
- Need to support the industry and prompt a faster transition to a zero-emissions economy
- Aiming to certify from point of production – “Well to Gate” methodology



ZERO CARBON CERTIFICATION SCHEME FOUNDING PARTNERS



ACT
Government



Queensland
Government



WESTERN AUSTRALIA



UN COP26 High
Level Champions



AMMONIA ENERGY
ASSOCIATION



evoenergy



energy web



Power Ledger



G A S B O T



Green Hydrogen Catapult



Australian
National
University

AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

Background

- ACT first H2 Refuelling Station (March 2021)
- Electricity provided from ACT grid (100% RE)
- Audit completed by Point Advisory (Oct 2021)



AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

Factors for this facility

- Approval by local authority
- Simple process—produce, compress, store, sell
- Grid electricity, RE100 equivalent
- Grid water supply
- One point of H2 supply, easily tracked



AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

Certification

- The audit is one part of the process
- ISO17029 is standard of choice
- Verification of the truthfulness of the claim about production arrangements
- Validation of the plausibility of the claim about future sale of renewable H2 under agreed conditions
- Agreed procedures, rather than assurance



AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

Claim – what is considered

- Approval of facility at Fyshwick, Canberra
- Arrangements in place for H2 feedstock: water & electricity provided from ACT grid (100% RE)
- Nameplate capacity aligns with claimed production capacity
- Operation arrangements for planned certification period align with manufacture of renewable hydrogen



AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

Conclusion

- Approval: Development Approval granted
- Energy supply: 100% RE from ACT grid (RE100 equiv.)
- Feedstock: 100% consumer potable water
- Production capacity: up to 7,884 kg of H₂ pa



AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

- Report provided to Smart Energy Council as certification authority
- Certification includes Deed and probity checks
- Certification decision imminent



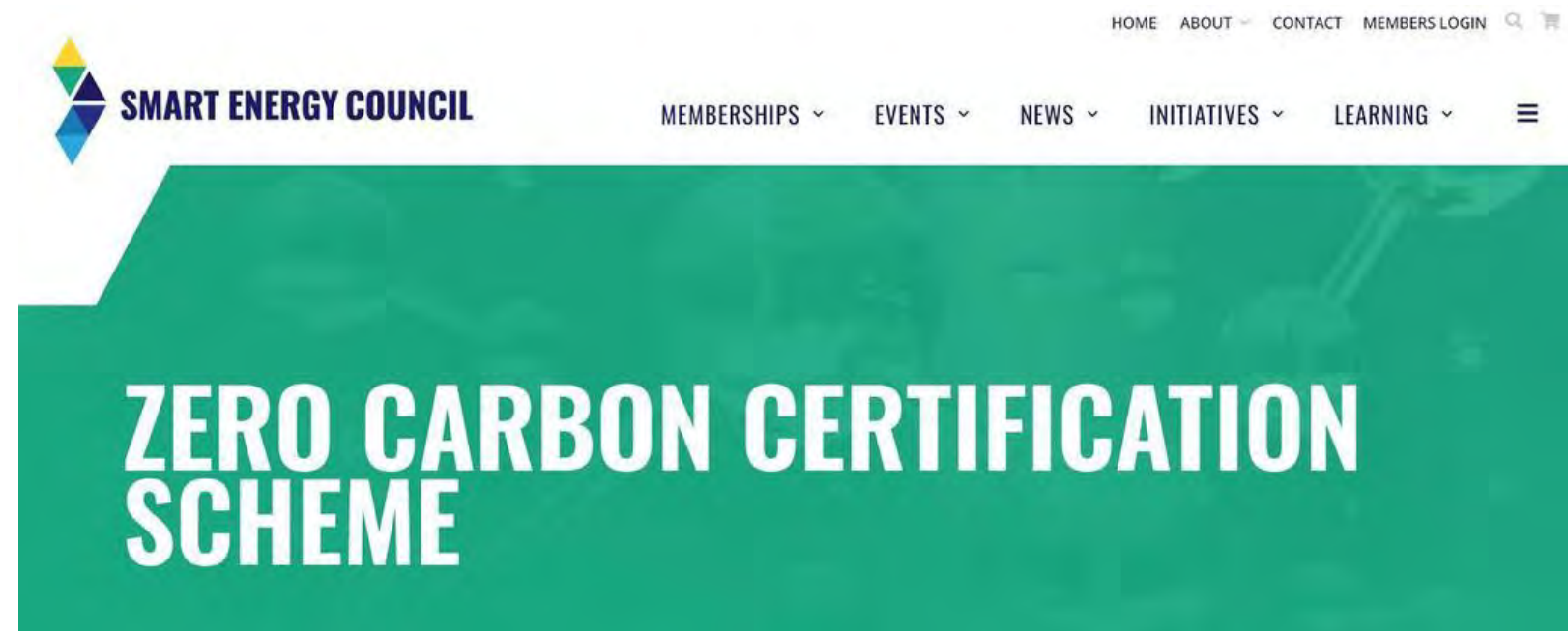
AUSTRALIAN CAPITAL TERRITORY Refuelling Station - Certification

Next Steps

- Monitoring, reporting and audit
- Level of ambition & interaction with other standards & schemes

Next Steps

- Work by other parts of the certification industry
- Other certification activities, methodologies & frameworks (GO certificates; EU RE Directives)



Yara Green Ammonia plant Pilbara, Western Australia

- Pre-certification
- ARENA Grant January 2020 + WA Gov Funding
- 10MW Electrolyser with on-site solar to produce
- ~30K tpa renewable H2 (Stage I)

“The initiative will provide guarantees to our customers in Asia, Australia or Europe that the quantities supplied have been produced according to set standards and will inform the customers about key attributes such as renewable origin and greenhouse gas footprint.”

– Yara International

