

# THE IMPORTANCE OF CERTIFICATION FOR INTERNATIONAL TRADE

ANU Energy Update

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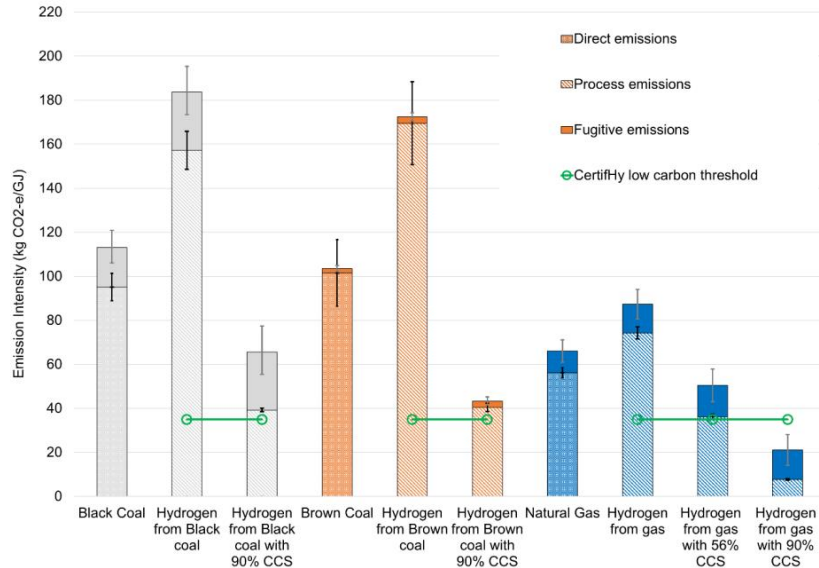
# Markets want clean H<sub>2</sub>, NH<sub>3</sub>, iron, aluminium...

- Governments and companies have made ambitious decarbonisation commitments
- European producers will have to be clean, so demand imports are too.
- Many companies' commitments include Scope 3 "supply chain" emissions
- Flow-on effects in other markets including Asia.



# Hydrogen can be dirtier than coal or gas

Source: Longden et al 2021



Source: Stocks & White, forthcoming

Region	Average intensity t <sub>CO2</sub> /MWh	Average intensity t <sub>CO2</sub> /MWh	Average H <sub>2</sub> kg <sub>CO2</sub> /kg	Marginal H <sub>2</sub> kg <sub>CO2</sub> /kg
NSW	0.81	0.66	44.6	36.3
VIC	1.02	0.55	56.1	30.3
QLD	0.81	0.66	44.6	36.3
SA	0.44	0.53	24.2	29.2
TAS	0.15	0.31	<u>8.3</u>	17.1

Certification is the only way buyers can be confident they are buying truly clean commodities





## Certification schemes are proliferating and may not be interoperable

### Green Certification

- 100% renewable energy
- Should be net zero emission
- Challenges for grid-connected even with RE certificates (Stocks & White, forthcoming)
- EU may require geographic and temporal alignment of RE production and electricity consumption

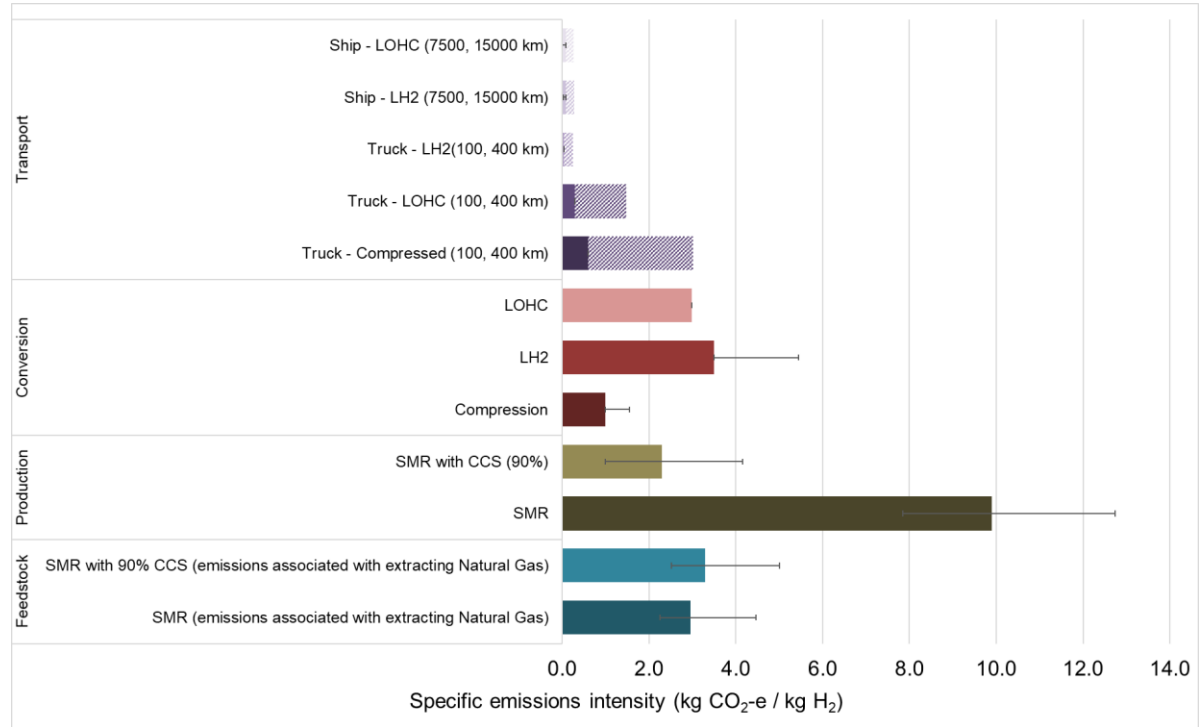
### Clean Certification

- Flexible and technology neutral
- Gas, coal, grid-connected electrolysis
- Certify how much embedded emissions – not necessarily zero
- National Greenhouse Accounting methodologies could be a starting point ([Reeve & Aisbett, 2021](#))



# Emissions accounting boundaries matter

- Emissions occur all along value chains
- Comprehensive boundaries guide better decisions
- Single, comprehensive boundaries may disadvantage exporters like Australia
- A modular approach to boundaries can ensure environmental and trade distortions are minimised ([White et al, 2021, Energy](#))



Source: White et al, *Energy*



# CONCLUSION

- Certification for truly clean and green is not easy.
- There are many competing approaches emerging, both private (voluntary) and public (mandatory).
- Governments can help avoid excess regulatory burden and non-tariff barriers to trade



# THANK YOU

## Contact Us

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