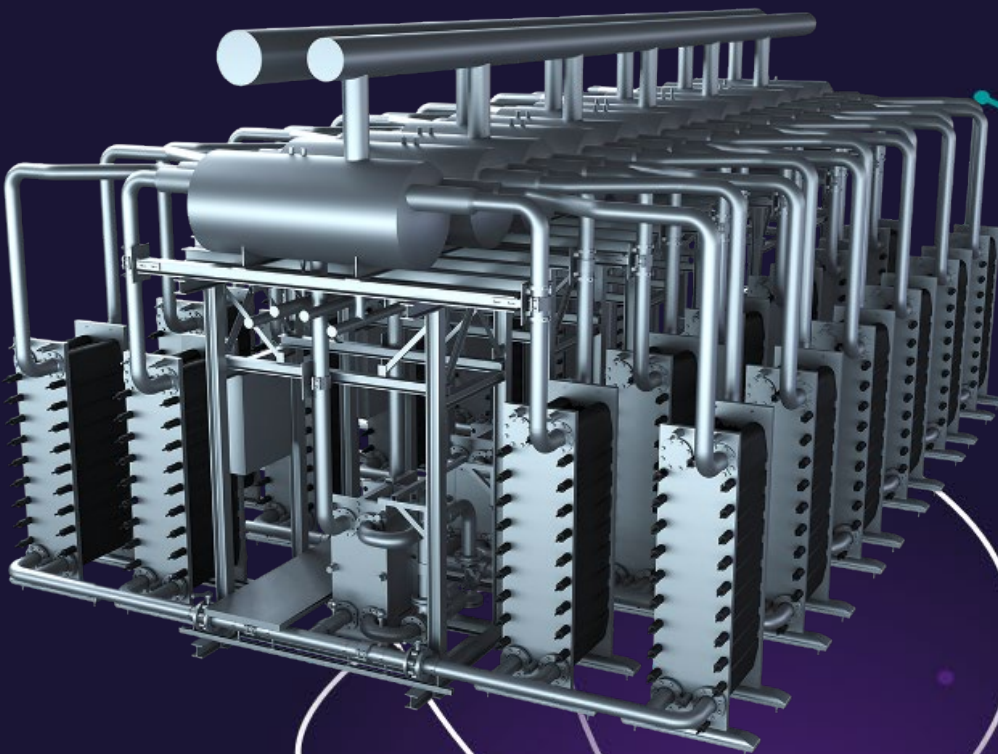


Hydrogen Production Tax Incentive

Siemens Energy Response to Australian Government
Treasury Consultation Paper

[siemens-energy.com](https://www.siemens-energy.com)



Executive Summary

Siemens Energy welcomes the opportunity to submit this response to Australian Government Treasury Hydrogen Production Tax Incentive (HPTI) consultation paper. Hydrogen Production Tax Incentive Scheme builds on the success and learnings of the first hydrogen round and Hydrogen Headstart currently in progress which establishes the credibility necessary for the success of this and subsequent hydrogen funding rounds.

Siemens Energy sees that the purpose of Hydrogen Production Tax Incentive is to; 'support investment of renewable hydrogen for Australian Industry'. This will address the current problem in the hydrogen industry; being that a large number of prospective projects exist but with insufficient progress towards commencement. Project commencement is critically important if Australia is to maintain its position within the leading 'hydrogen pack' of global countries and draw maximum economic and societal benefits from this emerging industry.

Siemens Energy is a global energy powerhouse, supplying enabling technologies for decarbonisation and the energy transition. The company is one of the world's largest providers of energy and resource efficient technologies. Siemens Energy has more than 92,000 employees in over 90 countries. In Australia, Siemens Energy has over 300 employees based in all the major capitals and a rotating machinery workshop in Tonsley, South Australia. We have a significant installed base of generation equipment both fossil and renewable including via our wholly-owned group company Siemens Gamesa Renewable Energy. We are also a critical supplier of grid transmission technologies and industrial plant equipment and solutions across the country.

Siemens Energy has extensive experience with hydrogen production using electrolyzers, hydrogen compression and hydrogen consumption in gas turbines. We are one of the world leaders in delivering MW scale electrolyzers with committed development of multi-GW scale manufacturing capabilities. Our experience with hydrogen combustion in gas turbines is well established and we are a market leader in this field, with the commitment to offer 100% H₂ capabilities by 2030. We are also a provider of hydrogen compression technology in leading global projects through our compression portfolio.

Siemens Energy look forward to supporting project proponents with high quality support leading to successful projects eligible for the Hydrogen Production Tax Incentive.

Murray Kohn

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2. Questions Raised in Consultation Paper

- Q1. The proposed funding mechanism recognises the challenge for hydrogen projects being that at this stage of the industry the operational expenditure prevents many project from competing with its more carbon intensive equivalent incumbent.
- Q2. Due to varying ways of rating electrolyzers from different manufacturers suggestion is using kg/hr of Hydrogen production maximum capacity of the production facility rather than MW rating.
- Q3. Source of renewable energy and carbon intensity of produced hydrogen should be key criteria for eligible facility.
- Q4. Certainty the project is eligible for HPTI would be key for any FID decision which requires clear, concise definition of eligibility criteria for a project, possibly confirmation from Treasury during final project development project is eligible based on project design criteria to provide certainty to developers.
- Q5. Hydrogen production facilities of 10-50MW would have construction time of approximately 2 years. Larger facilities (100MW +) would be longer construction time (2-3 years) however for very large projects (500MW +) the facility could be staged to allow initial production to occur earlier depending on offtake and downstream requirements.
- Q6. Projects should still be eligible if the project is developed with foreign investment, this should not impede any projects with foreign investment provided project entity fulfils all foreign investment requirements that currently exist for Australian production facilities with foreign investment.
- Q7. 0.6kg of carbon dioxide per kg Hydrogen produced is similar to standard set by other global countries for green/low carbon hydrogen that are provided government funding incentives/tax credits.
- Q9/10. Due to varying ways of rating electrolyzers from different manufacturers suggestion is using kg/hr of Hydrogen production maximum capacity of the production facility rather than MW rating.
- Q11. Grid connected projects should be included provided matched at least yearly to the same operating grid.
- Q12. Allowing yearly matching as opposed to hourly time-matching would allow better flexibility for operations to ensure most cost effective production of Hydrogen from grid connected facilities.
- Q14. GO Scheme should be mandatory on the assumption that a robust scheme will be established by the time HPTI becomes available. A credible Guarantee of Origin scheme is an essential enabler for international trade where carbon emissions must be accounted for.
- Q16. Same obligations should be imposed that exist currently for any government Hydrogen project funding for community engagement where applicable
- Q17. Same obligations should be imposed that exist currently for any government Hydrogen project funding for Australian Industry Participation where applicable
- Q19. Appropriate requirements may include detailed information of Hydrogen production facility regarding carbon intensity of the facility, community engagement and Australian Industry participation requirements being met and should not be additional to other government funding programs.

Q21. Amount of production (credit) could be sensitive information for Hydrogen Production facility owners and specific capacity details should not be made public. More general overview on HPTI overall amounts paid should be publicly announced for taxpayers to understand distribution of tax credits however should be released in a way not to disclose detailed information on production capacity for each individual facility.

Q22. Minimal reporting requirements should be imposed on recipient entity to ensure added complexity is not created for developers increasing the cost of hydrogen produced un-necessarily.

Q23 Any CAPEX funding (i.e Hydrogen Hubs Funding) should not disqualify projects for HPTI due to this funding is required for first-mover developers to build Hydrogen industry in Australia and is for construction of facility and HPTI would assist these project proceeding to FID.

Export projects able to attract multiple subsidies or incentives should be allowed. The benefits for such projects flow beyond Australia and it is therefore reasonable to expect that they be supported by other governments on the offtake side.

Q25. Successful projects for Headstart the payments should be reduced proportionately for projects that are also eligible for HPTI as suggested.