

Director  
Production Tax Incentives Unit  
Corporate and International Tax Division  
Treasury  
Langton Crescent  
Parkes ACT 2600  
Via email: [HydrogenProductionTaxIncentive@treasury.gov.au](mailto:HydrogenProductionTaxIncentive@treasury.gov.au)

12 July 2024

Dear Treasury,

**Submission regarding the Hydrogen Production Tax Incentive (HPTI) Consultation Paper dated June 2024**

EM Energy welcomes the opportunity to provide feedback on the HPTI Consultation paper dated June 2024. EM Energy is a hydrogen production technology company based in Newcastle, New South Wales, and we are working with the University of Newcastle to develop and commercialise our technology.

EM Energy patent pending technology is an alternative production method to water electrolysis and uses organic chemistry to create green hydrogen from biomass waste without needing heat, electricity or bacteria. Our technology converts diverse waste streams, including agricultural and coal waste, into 100% renewable, carbon-negative hydrogen on-site, minimising the need for transporting or storing hydrogen. This provides new revenue streams to agricultural and coal waste providers that would otherwise bury or burn their waste contributing to greenhouse gas emissions.

Under the Commonwealth-backed Trailblazer for Recycling & Clean Energy (TRaCE) program, we are working with the University of Newcastle to develop and commercialise our technology. We have been successful in receiving support from the following institutions:

- TRaCE R&D Voucher program (<https://trace.org.au/trace-rd-vouchers-applications-open/>)
- Investment NSW MVP Ventures program (<https://www.investment.nsw.gov.au/news-and-events/media-releases/nsw-government-supporting-game-changing-technology-as-applications-open-for-startup-grants/>)
- NSW Decarb Hub Powerfuels including Hydrogen Network ([https://www.decarbhub.au/pfihn\\_projects/em-energy-organic-hydrogen-electrolyser-cell-ohc-critical-element-testing-and-characterisation/](https://www.decarbhub.au/pfihn_projects/em-energy-organic-hydrogen-electrolyser-cell-ohc-critical-element-testing-and-characterisation/))

Regarding the HPTI Consultation paper, we are highly supportive of the initiative being undertaken by the Australian Government to support the hydrogen sector by providing a tax incentive.

However, we wish to provide feedback specifically on Question #10 in the consultation paper, namely,

*10. For renewable production processes other than electrolysis, is using the minimum capacity requirement of “equivalent to a 10MW electrolyser” appropriate? Is another definition of capacity required to deal with other production pathways?*

As previously mentioned, EM Energy’s patent pending technology allows the production of green hydrogen without needing heat, electricity or bacteria. This has the potential to significantly reduce the cost of producing green hydrogen through water electrolysis which requires substantive amounts of electricity.

The HPTI Consultation Paper proposes to include a minimum capacity metric (10-megawatts) that specifically assumes hydrogen is produced via water electrolysis and therefore requires electricity to produce green hydrogen.

We believe a fairer way to define a minimum capacity requirement is to define it around a minimum volume of hydrogen production per year e.g. minimum number of kilograms of eligible hydrogen produced annually. We believe this would achieve the same outcome of supporting projects that meet a certain size and scale under the scheme without potentially unfairly prejudicing alternative methods of producing green hydrogen.

Should you have any questions regarding our submission, please don’t hesitate to contact us.

Yours sincerely



Chris Wilson

EM Energy Co-founder and Managing Director