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Member

9 January 2025
Committee Secretary
Senate Standing Committees on Economics
PO Box 6100
Parliament House
Canberra ACT 2600
*By email: economics.sen@aph.gov.au*

**Inquiry into the Future Made in Australia (Production Tax Credits and Other Measures) Bill 2024 [Provisions] – submission to the Senate Economics Legislation Committee on behalf of Ark Energy.**

Dear Committee Secretary

Ark Energy Corporation Pty Ltd **(Ark Energy)** is an Australian renewable energy company specialising in the development and operation of utility-scale wind and solar energy generation, battery energy storage systems and renewable hydrogen production. Ark Energy is a member of the Australian Hydrogen Council **(AHC)**, the Clean Energy Council **(CEC)** and the Queensland Renewable Energy Council **(QREC)**. Ark Energy is a subsidiary of Korea Zinc, a leading non-ferrous metal company and green energy and materials provider. Ark Energy is at the forefront of developing Australia's renewable hydrogen industry and is currently responsible for two flagship projects; the SunHQ Hydrogen Hub, a production and refuelling station in Townsville - designed to decarbonise road haulage, and the Han-Ho $H_2$ Hub, a major green hydrogen and ammonia production facility currently in early development - designed for domestic supply and export from North Queensland. Ark Energy welcomes and is grateful for the opportunity to provide a submission to the Senate Economics Legislation Committee for the Future Made in Australia Bill.

Ark Energy is supportive of the Hydrogen Production Tax Incentive (**HPTI**) and the critical role it will play in stimulating financial investment in hydrogen production. Australia, with its strong renewable energy resources, has the opportunity to become a world-leader in the development and export of green hydrogen. A mature hydrogen export industry could increase Australia's gross domestic product by tens of billions per year. The industry requires significant support to establish itself and the introduction of the HPTI marks a material step in Australia's journey to becoming a competitive global renewable hydrogen user and exporter. The HPTI will support these

goals through its broad eligibility criteria, uncapped nature and simple structure as a refundable, production-based tax credit.

Ark Energy supports the submissions on this inquiry made to the Committee by the CEC and AHC, however Ark Energy also submits the following two recommendations which are consistent with Ark Energy's earlier submission during the consultation period in July 2024:

1. Removal of Sunset Date
2. Indexation of Incentive Payments

## Recommendation 1: Removal of Sunset Date

Ark Energy recommends that projects that achieve a Final Investment Decision **(FID)** by 2030 be eligible for the full 10 years of the HPTI, as this would deliver superior outcomes for Australia's nascent hydrogen industry.

Our experience in the industry, along with our technical partners (ThyssenKrupp and Aurecon), indicate that construction timelines for ambitious and complex integrated renewable energy/hydrogen projects are expected to take five years at a minimum, providing that local labour is available. This is consistent with our experience constructing and commissioning SunHQ – our 1MW hydrogen refuelling station in Townsville which took ~18 months to bring online due to various technical challenges (safety and procurement) associated with being a first mover in a nascent industry.

We also believe the labour supply market will be exceptionally tight over the coming decade. The extensive build out of hydrogen production infrastructure, coupled with renewable energy generation, transmission network upgrades and other significant construction projects like the 2032 Olympics, will contribute to a significant labour supply shortfall.

For these reasons, Ark Energy considers the risk of schedule delay during construction to be material for large scale projects and mitigating that risk will be key to reducing the cost of hydrogen available for domestic consumers. This risk will also be closely assessed by associated financial institutions and negatively impact financing ability, and therefore the likelihood projects proceed to a positive FID.

Demand wise – we observe that a major challenge for projects aiming to maximise current HPTI eligibility is securing long-term offtake agreements, especially given the anticipated slowdown in hydrogen demand. Forecasts from the International Energy Agency **(IEA)** and Det Norske Veritas **(DNV)** indicate hydrogen demand is not expected to grow sufficiently to support export projects until the early 2030s. Maintaining a 2040 HPTI end date will significantly impact the financial viability of these export-scale projects, reducing their financial attractiveness and ability to take a successful FID. If a sunset date is necessary for the HPTI, Ark Energy suggests extending it to at least FY45, considering the projected five-year construction period.

## Recommendation 2: Indexation of Incentive Payments

Ark Energy recommends indexation of the HPTI to provide consistency with input operating costs (e.g. energy, labour and raw materials), which will be unavoidably impacted by cost inflation over time. Indexation limits the downside risk and ensures the HPTI will provide a realisable commercial benefit given the long-term timeframes considered. Based on the Federal Budget 2024-25 CPI inflation forecasts, a lack of inflation adjustment for the HPTI means the real value of the tax offset will decline more than 10 per cent by the time the HPTI comes into effect (i.e., ~A$1.80/kg in 2027), and by around a third by the time it expires (i.e., ~A$1.34/kg in 2040).

## Conclusion

Ark Energy commends the Federal Government for the proposed support model however submits that its structure would benefit from these changes to achieve its goals of stimulating financial investment and growing Australia's hydrogen economy. Removal of the sunset date and indexation will significantly increase the ability for large scale hydrogen projects to take a successful FID without materially altering the structure of the HPTI.

Should you require any further information [redacted] Tim Davies, Senior Project Manager Han-Ho $H_2$ Hub at [redacted]

Yours sincerely

[redacted]

Michael Choi

**Chief Executive Officer**

**Ark Energy**