Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600

Offshore Electricity Infrastructure (Regulatory Levies) Bill 2021 and Offshore Electricity Infrastructure Bill 2021

To Whom It May Concern,

Thank you for the invitation to make a submission on the Offshore Electricity Infrastructure Bill 2021.

The Institute for Sustainable Futures, University of Technology has completed a report on the potential for offshore wind energy in partnership with CSIRO which was funded by the Blue Economy CRC and a group of trade unions (Maritime Union of Australia, Electrical Trades Union, Australian Council of Trade Unions, Australian Manufacturing Workers Union).

We welcome the introduction of legislation to establish a regulatory framework for the development of offshore renewable energy in Commonwealth waters (which was the recommendation 1 of the report). We also note that subsequent to the report the Australian Energy Market Operator has also released the Inputs, Assumptions and Scenarios report for the 2022 Integrated Systems Plan which incorporates offshore wind renewable energy zones for the first time (recommendation 3).

We have attached the report to inform the committee's deliberations. Some of the other key findings and recommendations of relevance to the Committee include:

- **Marine allocation of space for offshore renewable energy projects should be considered**

With many offshore wind projects already in the development pipeline, Australia would benefit from proactive consideration, via Marine Spatial planning, to resolve potential conflicts in uses of the marine domain and ensuring it remains sustainably managed. This can help Australia meet its international commitments, such as Australia's pledge through the High Level Panel for a Sustainable Ocean Economy to sustainably manage 100% of the ocean area under national jurisdiction by 2025. Additional work is occurring through the Blue Economy CRC to consider the issues relating to marine allocation of space.

- **The permitting process should support the development of local supply chain capacity to maximise investment and jobs and community benefit**

  Offshore wind can develop into a significant source of employment in the maritime 'blue economy'. Our study found employment potential ranging between 3,000 – 4,000 jobs (lower scenarios) to 5,000 – 8,000 jobs each year (high scenario) annually from 2030. Australia's share of manufacturing and supply chain activity in most renewable energy sectors is low and the range depends significantly on the local share of supply chain employment.

  The permitting process for offshore wind should include economic development and local supply chain involvement criteria to create requirements and incentives for industry development. Community benefit including benefits to Traditional Owners should also be incorporated. The use of local content criteria has been successfully used in on-shore renewable energy auctions in the ACT and Victoria and in offshore wind auctions and programs internationally.

- **Baseline data needs to be collected on environmental and social dimensions of offshore wind energy**

  The social acceptability of offshore renewable energy in Australia is largely untested, and indeed, environmental effects are largely unknown in the southern hemisphere. More research and collection of baseline data is required to understand the effects of offshore renewable energy on ocean and local communities, and on economies and local environments. Global knowledge gained in reducing the potential environmental effects of offshore wind turbines must be transferred to an Australian context. This work should not be left to individual companies, and the value of shared data agreements should be recognised.

- **Offshore wind energy should be incorporated into planning for the National Hydrogen Strategy and other renewable energy assessments**

  The opportunity for offshore wind to play an integral role under 'energy superpower' demand scenarios should be recognised. With the scale of electricity requirements required to realise the objectives of the National Hydrogen Strategy, offshore wind could be an important source of power located adjacent to many ports and industrial facilities to meet increased demand associated with large industrial loads, electrification of other energy sectors, or for the production of hydrogen to meet the needs of industrial applications such as steel and aluminium production, or for export. Further research is required to understand the potential of offshore wind energy for hydrogen,

and offshore wind should be incorporated into planning for the National Hydrogen Strategy.

- **The Australian Renewable Energy Agency (ARENA) and Clean Energy Finance Corporation (CEFC) should be allocated funding to develop a program to accelerate the commercialisation of offshore wind energy in Australia**. In particular, there should be a focus on the demonstration and deployment of floating offshore wind technologies which will be essential to access the best Australian resources in deeper waters.

We would be happy to provide further information, answer any questions or give further evidence in any public hearings if required.

Regards

Dr Chris Briggs
Research Director, Institute for Sustainable Futures, University of Technology
[redacted]

Dr Sven Teske
Associate Professor, Institute for Sustainable Futures, University of Technology Sydney
[redacted]