

## Energy (Renewable Transformation and Jobs) Bill 2023

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Committee Secretary  
Transport and Resources Committee  
Parliament House  
George Street  
Brisbane Qld 4000

Dear Committee members,

**Subject: *Energy (Renewable Transformation and Jobs) Bill 2023* Public Inquiry**

Port of Brisbane Pty Ltd (PBPL) is the manager of the Port of Brisbane (the Port), Queensland's premier port and logistics hub. The Port is the third largest container port and one of the most diverse multi-cargo ports in Australia; an economic powerhouse driving Queensland and Australia's trade growth. The Port provides critical export and import links to world markets. On average, approximately \$55 billion in international trade is handled annually through the Port, which includes around 50% of Queensland's agricultural exports and 95% of its motor vehicles and containers.

As a major coastal asset at the mouth of a major river system, the Port is incredibly conscious of the impacts of climate change, such as rising sea levels and increases in the intensity and severity of major weather events.

PBPL has taken a proactive approach to managing our emissions profile and subsequently set ambitious targets to reduce emissions in the short term. We have invested heavily in ensuring a timely net zero transition across our own Scope 1 and 2 emissions sources and are now investing in Scope 3 emissions reductions strategies. We have also invested in infrastructure to place ourselves as a critical import hub for renewable energy infrastructure componentry, something that continues to be a challenge given the size and scale of the components involved and the increasing volume of components being imported.

As a national ports industry leader in sustainability and energy transition, PBPL has been extremely encouraged by the foresight of the Queensland Government in setting an ambitious energy transition pathway. We acknowledge the release of the Queensland Energy and Jobs Plan (QEJP) and the SuperGrid Infrastructure Blueprint in 2023 which is now being supported by the *Energy (Renewable Transformation and Jobs) Bill 2023*.

**Queensland Energy and Jobs Plan/*Energy (Renewables Transformation and Jobs) Bill 2023***

PBPL commends the Queensland Government on its initiative to set and legislate its renewable energy targets for Queensland of 50% renewable energy by 2030, 70% by 2032 and 80% by 2035.

PBPL understands the Government will set targets for public ownership of energy assets - 100% ownership of transmission and distribution assets, 100% ownership of deep storage assets (defined as pumped hydro storage with a generation capacity of at least 1500MW), and a target equal to or more than 54% ownership of generation assets. The Minister must have a public ownership strategy prepared by the end of 2025 and will set out how these targets will be achieved and maintained by 2035.

Significantly, the Bill also requires the Minister to develop the "Queensland SuperGrid Infrastructure Blueprint" to identify and plan significant electricity and infrastructure projects, including priority transmission investments, REZ transmission networks and large-scale energy storage.

The first Blueprint was released with the QEJP in September 2022 and is required to be reviewed under the Bill by 31 May 2025 and be subject to a biennial review.

Section 15 of the Bill also provides for:

*(3) The infrastructure blueprint may also include any other matter the Minister considers relevant to achieving—(a) the optimal infrastructure pathway objectives*

PBPL acknowledges the importance of the Act and the Minister's proposed objectives. The Port's track record in emissions reduction, renewable power generation and the facilitation of critical renewable energy componentry aligns with the Act and the Blueprint it aims to create.

### ***Port of Brisbane Pty Ltd – net zero on Scope 1 and 2 emissions in FY24***

PBPL has been recording and reporting our Scope 1 and 2 emissions for 20 years, and more recently our Scope 3 emissions. Of our own Scope 1 and 2 emissions, 82% are Scope 1 emissions and 18% are Scope 2 emissions.

Our Scope 1 emissions are made up of direct emissions from the combustion of fuel with the majority of that coming from our dredge vessel, the *TSHD Brisbane*, which not only maintains the shipping channel in Moreton Bay, but does likewise across a vast network of state-owned ports along the Queensland coast. We have implemented fuel efficiency upgrades across all our vessel and vehicle fleet however, due to age of equipment and the lack of availability of alternate fuels, future emissions reductions are challenging. Our business made the decision to offset our Scope 1 emissions in 2022.

Our Scope 2 emissions are made up of indirect emissions from the purchase of electricity. We have been installing local renewable energy across our facilities for several years and in late 2021 implemented a Virtual Energy Network (VEN).

We now have installed over 1MW of rooftop solar and generate around 25% of our electricity from these systems, which is most of our daytime demand. We are currently installing a battery energy storage system (BESS) with our goal to install more solar and storage over time and become as self-sufficient as possible in renewable energy generation. We entered into a renewable energy power purchase agreement (PPA) with our energy retailer in January this year which means all our electricity is sourced from renewables and subsequently zero emissions.

Under our current strategy, including offsets, we will achieve net zero for our business this financial year. Our goal however is to shift to absolute zero through technology upgrades and efficiencies, particularly across our Scope 1 emission sources. This will require significant industry and government support which we are hoping the Queensland Government approach will facilitate. There is an immediate requirement for continued support of alternative fuels such as biodiesel fuels and hydrogen, and the implementation of updated standards to facilitate and encourage zero emissions transportation. For example, current steer axle weight restrictions preclude the use of battery powered trucks on Queensland roads, resulting in a significant barrier to their introduction into Queensland.

### ***Recording, reporting and working to reduce Port of Brisbane's Scope 3 emissions***

In 2022, we calculated and reported our Scope 3 emissions for the first time. There were significant challenges in both setting our Scope 3 emissions boundaries and then collecting data and calculating these emissions. Our Scope 3 emissions shadow our Scope 1 and 2 emissions and, although we do not have direct control over Scope 3 emissions, we are starting to take actions to influence reductions in these emissions where practicable.

The Port is working on a number of initiatives that will assist us in tackling Scope 3 emissions, including but not limited to:

## **Shore Power**

Shore Power provides large, high emitting oceangoing vessels to 'switch off' their main engines when at berth within a port. At the Port of Brisbane, approximately 40% of our Scope 3 emissions occur from ships alongside, so tackling this issue is of critical importance.

The Port has commissioned an investigative study into installing shore power – including the provision of renewable power – at the Brisbane International Cruise Terminal as a first step.

In NSW, these activities are being funded by the State Government. Indeed, most projects of this nature around the world benefit from public funding. The Port of Brisbane would welcome an opportunity to partner with the Queensland Government on this initiative.

## **'Green Button' shipping routes**

The Port is working with its technology provider and the Regional Harbour Master on an initiative that would model a ship's most efficient route and timeslot through our 70+ kilometre shipping channel. A ship's Master would then have the option of 'pressing the green button', utilising wind and tides, as well as slowing down or speeding up depending on conditions, to reduce its emissions profile on its way to and from the Port.

The development of this software and subsequent scenario testing is now complete and we have commenced discussions with the Regional Harbour Master to begin a trial. If the trial is successful, we hope to have the software fully operational by mid-2024.

## **Port West Stage 2 Embedded Network**

The Port is currently leasing land to industrial property customers in its Port West Stage 2 development on Lytton Road in the suburb of Lytton.

As a greenfield development, PBPL has taken the decision to invest in its own 'embedded energy network', building, owning and operating the energy infrastructure within the development. This will be accompanied by (at least) 1MW of solar panels and 1MW battery storage, to ensure all power provided to our customers there is fully renewable.

We not only expect this to provide great outcomes in the provision of renewable energy to our customers, but we will also be able to generate a return on our investment while providing customers with a discount on their power bills.

## ***Port of Brisbane – Queensland's renewable energy import hub***

The Port of Brisbane plays a critical role in facilitating an increase in the amount of electricity generated in Queensland from renewable energy sources by becoming an integral cog in the importation of renewable energy infrastructure into Queensland. We are currently supporting the importation of significant renewable energy equipment for the \$2B Macintyre Wind Farm, having previously supported both the \$850M Coopers Gap and \$500M Dulacca projects.

In FY23 alone, 86,169 tonnes of wind farm cargo was handled through the Port of Brisbane.

Not only are these projects driving Queensland's renewable energy transition, but they are helping create and support hundreds of jobs in the renewables and logistics sectors. Supporting these wind farm projects is no small undertaking, requiring significant logistical planning and significant space for the storage of componentry at the Port of Brisbane.

The Port has also been integral in the support of the solar and battery industries with the majority of solar componentry imported via containers, with 4,650 containers of solar related equipment handled through the Port in FY23.

The Port of Brisbane handles 95% of all containers entering Queensland and therefore is responsible for facilitating the import of the majority of all solar componentry into Queensland. Again, there is significant logistical planning and management to facilitate the movement of this cargo.

***‘Off-Port’ supply chain challenges – Queensland’s roads and bridges must keep up***

Whilst the Port is investing heavily to ensure our infrastructure is fit for purpose for the import and storage of various renewable energy equipment, it is important that external supply chain infrastructure is developed and maintained to allow for the transport of the equipment from the Port to its ultimate destination.

The Warrego and Cunningham Highways are critical freight routes for heavy vehicles carrying wind farm and associated electrical components. We are currently seeing disruptions to these critical routes with significant restrictions placed on the Bremer River Bridge on the Warrego Highway and future delays on the Cunningham Highway due to the Cunninghams Gap reconstruction project. This will place significant restrictions and cost implications on the transport of renewables from the Port.

While all stakeholders, including DTMR representatives, are working towards short-term mitigation measures, direct investment in the upgrade of the Bremer River Bridge by the State Government must be of the highest priority. Without this investment, the logistics of moving these components to site becomes more costly and therefore puts long-term energy transition projects at risk.

A DTMR audit of all relevant supply chain infrastructure, particularly high-risk roads and bridges, would enable better planning to mitigate against potential disruption.

***Port of Brisbane – investing in Queensland’s energy transition***

PBPL welcomes the Bill, as the underpinning legislation for the State Government’s comprehensive clean energy transition – the AUD\$62B Queensland Energy and Jobs Plan, which was released in September last year.

To further the discussion, PBPL has offered to host a visit by the Committee as part of their Inquiry into the Bill.

We look forward to working with the Government to achieve the afore-mentioned objectives and play a significant role in facilitating Queensland’s energy transition.

Yours sincerely



Neil Stephens  
**Chief Executive Officer**