Impact Analysis Statement

Summary IAS

Details

Lead department	Department of Energy and Climate
Name of the proposal	Regulations to support commencement of the <i>Energy (Renewable Transformation and Jobs) Act 2024</i>
Submission type	Summary IAS
Title of related legislative or regulatory instrument	Energy (Renewable Transformation and Jobs) Amendment Regulation 2024
Date of issue	May 2024

For proposals noted in table below

Proposal type	Details
	Public Ownership of Energy Assets
Regulatory proposals	This regulatory proposal excludes a distribution asset that is the subject of a special approval operating near the Queensland-New South Wales (NSW) border from the definition of transmission and distribution assets under the <i>Energy (Renewable Transformation and Jobs) Act 2024</i> (Act).
where no RIA is required As a result of the scope of the outlined in the the community determining the assets, this as	As a result of this regulatory proposal, this distribution asset will be outside the scope of the public ownership of energy assets for the purposes outlined in the Act. This exclusion will have no regulatory or cost impact on the community or business, as it simply outlines that for the purpose of determining the levels of public ownership of transmission and distribution assets, this asset will not be included.

For all other proposals

What is the nature, size and scope of the problem? What are the objectives of government action?

Queensland's energy system is undergoing a rapid shift towards renewable energy, and existing regulatory and infrastructure frameworks are not designed to facilitate the scale and pace of the State's energy transformation, as signalled in the Queensland Energy and Jobs Plan (the Plan) and Queensland SuperGrid Infrastructure Blueprint (Blueprint).

This is because the existing national framework was designed to enable incremental augmentation of the network, rather than 'step change' change necessary to transition to renewable generation according to the ambition of the QEJP. Further, the national framework, in maximising NEM system benefits, is not able to favour one jurisdiction over another nor target non-system benefits, such as strategic economic and social goals. Without suitable alternatives to the national framework, Queensland's energy



transformation risks being under-delivered and uncoordinated. This presents several challenges and risks to the community and the Queensland Government, resulting in:

- **Higher system costs, leading to increased electricity costs for consumers**: Inefficient spend on new or upgraded network due to uncoordinated development is expected to lead to higher electricity costs. This can also be exacerbated if adequate investment does not occur in storage or system security technologies.
- Increased network constraints: Inadequate coordination of network investment risks Queensland's electricity supply, through congestion and constraint of renewable generation. These constraints not only have an impact on Queensland businesses and households, through potential disruptions in supply, but also risk revenue loss for generators, creating investment risks in Queensland.
- **Social licence issues**: The large-scale, uncoordinated expansion of greenfield renewable, storage and transmission infrastructure in local communities risks the long-term social licence for the future clean energy system.

The Plan and the Blueprint outline the Queensland Government's coordinated approach to transforming and decarbonising its energy system to achieve the renewable energy targets of 50% by 2030, 70% by 2032, and 80% by 2035.

The Plan sets a vision to transform Queensland's energy system to achieve clean, reliable, and affordable power for generations. This approach includes leveraging Queensland's natural advantages to:

- build a clean and competitive energy system for the economy and industries as a platform for accelerating growth;
- deliver affordable energy for households and business and support more rooftop solar and batteries; and
- drive better outcomes for workers and communities as partners in the energy transformation.

The Blueprint outlines the optimal infrastructure pathway to deliver the energy infrastructure required to transform and decarbonise Queensland's energy system. This infrastructure includes high-voltage backbone transmission and large-scale storage e.g., pumped hydro energy storage. This is the state-based infrastructure pathway that will achieve the renewable energy targets, while maintaining electricity system security and reliability and minimising costs to Queensland consumers.

The Plan and Blueprint aim to ensure Queenslanders can take advantage of the opportunities and benefits of a coordinated transformation and to prevent them from facing the risks of an uncoordinated transition. In relation to this, independent modelling conducted by Ernst & Young (EY) in 2022 highlighted that a coordinated transformation supported by the Plan would (compared to without a Plan):

- deliver higher economic growth by 2040;
- lower electricity emissions by 2035-36;
- lower retail bills in 2032 for households and small business; and
- deliver more jobs in the energy sector and across the Queensland economy.

The Queensland Government committed to legislating key measures in the Plan, recognising the need to enact suitable regulatory and infrastructure frameworks in new legislation to support a coordinated energy transformation. This included a commitment to legislate the Job Security Guarantee (JSG) and to investigate appropriate legislative models to support backbone transmission needed to build the Queensland SuperGrid. The JSG is a Queensland Government commitment that ensures workers in Queensland's publicly owned coal-fired power stations have a secure future, choices, and clear employment pathways and opportunities. In part, it does this by supporting affected energy workers to



undertake additional training or skills development to secure opportunities in the future energy sector. This is an important aspect of a coordinated energy transformation, ensuring Queensland has the necessary skills for the future energy sector and affected energy workers are supported throughout the transformation.

The priority transmission investments (PTI) framework has been developed to prioritise and build highvoltage backbone transmission at the pace and scale outlined in the Blueprint. This is an important aspect of a coordinated energy transformation, ensuring Queensland can build necessary transmission infrastructure in accordance with the scale and pace outlined in the Blueprint.

Consistent with the commitments in the Plan, the *Energy (Renewable Transformation and Jobs) Bill 2023* passed the Legislative Assembly on 18 April 2024 and received asset on 26 April 2024, legislating both the JSG and PTI frameworks. The *Energy (Renewable Transformation and Jobs) Act 2024* (Act) was a key step in supporting a smooth, coordinated energy transformation for Queensland.

During the drafting of the Act, it was recognised that certain aspects of the JSG and PTI frameworks could appropriately be delegated to Regulation. This is because both of these frameworks operate within dynamic environments, necessitating the flexibility that Regulations provide to review and update the frameworks to respond to future demands and needs.

With the Act now in place, the Energy (Renewable Transformation and Jobs) Amendment Regulation 2024 (Regulations) is the next step in supporting a smooth, coordinated energy transformation for Queensland. The Regulations do this by supporting the Act's commencement and operationalising the JSG and PTI frameworks. Without these Regulations to support commencement of the Act and to operationalise both the JSG and PTI framework, Queensland is at risk of an uncoordinated transformation.

What options were considered?

Overview

During the development of the Plan and Blueprint, the Queensland Government considered how best to deliver Queensland's energy transformation. The Plan outlines the actions the Queensland Government considers are needed for a smooth, coordinated energy transformation that delivers real, lasting benefits for Queensland industry, households, workers, and communities. The Blueprint details the timing and sequencing for the delivery of significant energy infrastructure, including high-voltage backbone transmission. The Plan and Blueprint were both developed based on robust analysis, expert advice, and detailed policy analysis¹.

The analysis below considers two options:

- Option 1: Do nothing and rely on the Plan, Blueprint, and existing frameworks; and
- Option 2: Develop Regulations to support commencement of the Act.

Option 1: Do nothing and rely on the Plan, Blueprint, and existing frameworks

Under this option, the Queensland Government would seek to deliver on the commitments, pathway, and ambition of the Plan and Blueprint without the necessary legislative and regulatory frameworks to deliver the transformation at the scale and pace called for by the Plan and Blueprint. This would mean that the Act, including its JSG and PTI frameworks, would not be available during the energy transformation since there would be no Regulations to support commencement and to operationalise these frameworks. Accordingly, the Queensland Government would be reliant on the Plan and Blueprint to provide sufficient



¹ See for example the modelling to support the development of the Plan, available at https://www.epw.qld.gov.au/ data/assets/pdf file/0010/33130/queensland-energy-planelectricity-market-and-economic-modelling.pdf; https://www.epw.qld.gov.au/___data/assets/pdf_file/0012/33132/qld-energy-plan-for-greener-growth.pdf

certainty of its trajectory, as well as existing infrastructure and governance frameworks to deliver the Plan and Blueprint.

<u>JSG</u>

Under this option, Queensland would continue to rely on the Plan and the Charter to provide support to affected energy workers, including the provision of training, access to job opportunities, and other benefits. The JSG, as it is contained in the Act, would not be functional since there are no supporting Regulations under this option to operationalise this framework.

Further, without the Regulations, there would be a lack of clarity concerning how the \$150 million JSG Fund, as stated in the Charter and Plan, will be utilised to support workers affected by the energy transformation (i.e., the eligibility criteria and types of supports available would be unknown). By enshrining the JSG in legislation and operationalising it with Regulations, affected energy workers will have increased certainty and confidence regarding the choices, opportunities, and pathways available during the energy transformation.

<u>PTI</u>

Under this option, Queensland would continue to rely on the existing national regulatory framework, which includes national electricity laws and the National Electricity Rules (NER), to build new high-voltage backbone transmission to deliver the Plan and Blueprint. The PTI framework in the Act would not be available, given the primary legislation (once passed) requires fundamental elements of the framework to be prescribed by Regulation to be fully operational. This includes prescribing the projects that can be 'eligible PTIs' and therefore eligible to go through the PTI assessment framework, as well as the process for Powerlink to recover costs associated with PTIs. Further, there would be no legislative cost-recovery option available for Powerlink in respect of these transmission lines.

The existing national frameworks are not designed to support the scale and pace required to deliver the transmission infrastructure identified in the Blueprint. As noted above, this is partly because existing frameworks are designed to consider defined national electricity objectives, rather than meeting Queensland specific objectives, which may be more ambitious. This will limit the scale and pace of the State's energy transformation.

Applying existing national frameworks to the needs of Queensland's optimal infrastructure pathway would result in either smaller transmission infrastructure (not capable of supporting the Plan's objectives) and/or transmission infrastructure being delivered out of sequence or time with Queensland's optimal infrastructure pathway (leading to an uncoordinated transition).

Option 2: Develop Regulations to support commencement of the Act

Under this option, Regulations would be developed to support commencement of the Act and to operationalise both the JSG and PTI frameworks. Unlike the 'no action' option, this option allows the Queensland Government to fully utilise the frameworks in the Act, including the JSG and PTI frameworks, to deliver a coordinated energy transformation that delivers on the commitments and trajectory outlined in the Plan and Blueprint.

<u>JSG</u>

Under this option, Regulations would be developed to operationalise the JSG framework. This framework enables the State to provide appropriate and timely support to affected energy workers during the energy transformation.

The JSG elements of the Regulations support commencement of the Act and operationalise the overarching framework. The Regulations provide for further details as to the eligibility and nature of supports available under the framework, consistent with the commitments made in the Charter and advice from the interim Energy Industry Council (EIC). Advice from the interim EIC has informed the identification



of an appropriate threshold of employment for eligibility to be a relevant prescribed energy worker and affected energy contractor, and eligibility and types of support outlined under the Regulation. By doing so, it provides greater clarity as to how the \$150 million JSG Fund will support affected energy workers.

The Regulation does this by:

- Designating Kogan Creek Mine and Meandu Mine as prescribed facilities, enabling workers at these sites to have access to the JSG Fund, consistent with commitments in the Charter;
- Establishing eligibility requirements for non- (GOC) workers at publicly owned coal-fired power stations and prescribed facilities to ensure support is available;
- Prescribing the categories of costs and support that will be payable from the Fund;
- Determining the eligibility of affected energy workers or other entities to receive support; and
- Establishing reporting requirements for entities or individuals that receive money from the JSG Fund, requiring recipients to summarise how payments have been used during a financial year.

Prescribed facilities

Kogan Creek Mine and Meandu Mine have been included in the Regulations as prescribed facilities, giving effect to the commitment in the Charter that those workers would be supported through the JSG Fund. Once these sites are prescribed, the workers at the site are then eligible to receive support from the JSG Fund.

Tenure requirements for non-GOC workers

Informed by the advice of the tripartite interim EIC, long-term contractors at publicly owned coal-fired power stations are eligible to receive support from the JSG Fund as 'affected energy contractors'. This recognises that these individuals work alongside GOC workers and may also have significant connections to the local communities that host these facilities.

In consultation with the interim EIC, the Department of Energy and Climate (DEC) has determined all non-GOC workers at in-scope facilities should be treated equally by being subject to the same eligibility requirements and receive the same level of support. As such, the Regulations also impose a tenure requirement on prescribed energy workers, in addition to affected energy contractors.

The tests prescribed by Regulations require an individual to have spent either 80 per cent of their working time on site in the 36 months prior to the application to the JSG Fund, or 100 per cent of time on site for 24 months prior to the application date. These thresholds have been developed in consultation with the interim EIC.

The intention is to only calculate eligibility once to reduce the administrative burden and need for individuals and organisations to repeatedly demonstrate their employment history, which could delay access to the JSG Fund and supports.

Categories of support

DEC and the interim EIC have worked to define the types of supports that should be available to affected energy workers. This was supported by an analysis of best practice transitions commissioned by the department that identified the types of supports provided in other jurisdictions to support workforces during transition.

The Regulations contain a list of support that will be available to affected energy workers through the JSG Fund. Broadly, it will make available the following support for affected energy workers:

• Personal support services, including mental health, career or financial planning and job seeking services;



- Reimbursement to undertake training or upskilling and/or financial assistance to undertake short term employment opportunities to upskill;
- Financial assistance to voluntarily relocate;
- Other financial support or incentives to individuals to transition to employment in another sector;
- Financial incentives such as retention payments, to ensure sufficient workers with the necessary skills are retained at publicly owned coal-fired power stations to ensure safe and reliable operation.

The Queensland Energy and Jobs Plan committed \$150M for the JSG Fund. Supports from the JSG Fund will also sit alongside, rather than replace, existing employee entitlements through Enterprise Agreements.

Eligibility to receive support

The Regulations also articulate the supports that will be available for each type of affected energy worker.

Affected energy GOC workers will receive access to the following categories of support from the JSG Fund:

- Personalised support service costs;
- Skills support costs;
- Relocation support costs;
- Worker mobility support; and
- Sector transition support costs.
- Relevant prescribed energy workers and affected energy contractors will be eligible to access funding for personalised support service costs, as well as a capped amount of \$8,000 for relocation and capped amounts of \$15,000 for skilling or training.

The Regulations also include the term 'co-funded' for prescribed energy workers and affected energy contractors. This highlights the expectation for the employers of these individuals to also provide support to their workers.

<u>PTI</u>

This framework enables Queensland to build the new high-voltage backbone transmission at the pace and scale outlined in the Blueprint. This high-voltage backbone transmission is critical to Queensland's transformation, connecting the 22GW of new large-scale wind and solar and the two pumped hydro energy storage assets identified in the Blueprint to move power to where and when it is needed.

The PTI elements of the Regulations support commencement of the Act and operationalise the overarching framework by performing the following four primary functions:

- Prescribing transmission projects that may progress under the PTI framework;
- Declaring PTI assessment documents;
- Enabling Powerlink to recover the costs of PTI in the manner determined by the responsible Ministers - the Queensland Energy Minister and the Treasurer; and
- Making other derogations from national laws necessary to enable the PTI framework to leverage the existing national framework, where appropriate.



Prescribing eligible PTI

The Regulations prescribe five significant transmission projects as 'eligible PTI'. These projects include:

- Gladstone project to reinforce the Gladstone system to support decarbonisation of the region;
- Stage 1 Borumba Connections which is required to connect the Borumba pumped hydro energy storage to the National Electricity Market (NEM);
- Stage 2 Central Queensland Connection to enable renewable generation to supply one of Queensland's largest industrial load centres;
- Stage 3 Pioneer-Burdekin PHES and NQ Connection to connect the Pioneer-Burdekin pumped hydro energy storage to the NEM; and
- Stage 4 Townsville to Hughenden Connection which is expected to unlock significant amounts of renewable resources around the Hughenden area.

These projects have been identified in the Blueprint as being part of Queensland's optimal infrastructure pathway, and by prescribing these projects as 'eligible PTI', the projects may advance to the assessment stage in the PTI framework, where they will be assessed using a rigorous cost benefit analysis.

The Act provides that if a transmission project has been identified as being on Queensland's optimal infrastructure pathway, the Minister may recommend to the Governor in Council the making of a regulation prescribing it as an 'eligible priority transmission investment'.

For a transmission project to be on Queensland's optimal infrastructure pathway, the Minister must be satisfied, having consulted with/ received advice from, the independent Energy System Advisory Board, that the project helps to meet the optimal infrastructure pathway objectives. These objectives are: a) the achievement of the renewable energy targets, b) the provision of a safe, secure and reliable supply of electricity to Queensland consumers, c) the long-term minimisation of the cost of electricity for Queensland consumers.

Declaring PTI assessment documents

Projects progressing under the PTI framework must undergo an assessment based on prescribed 'assessment documents'. The Regulations will prescribe three documents developed by the Australian Energy Regulator's (AER) that together represent the national Regulatory Investment Test for Transmission (RIT-T). The RIT-T is a prescriptive cost-benefit analysis that transmission network service providers must apply under the national framework. Prescribing these documents as 'assessment documents' allows the PTI framework to borrow the established national framework's cost benefit analysis and tailor it to Queensland's purposes, provided any modifications are appropriate and as minimal as practical. This requirement is established under the Act.

Cost recovery directions

The Regulations enable Powerlink to recover the costs of PTI projects in the manner directed by the responsible Ministers. This is achieved through the establishment of three types of financial directions that allow the responsible Ministers to include cost allowances associated with the construction and maintenance of PTI projects within Powerlink's revenue determination and associated regulatory asset base (RAB). The Regulations also confer functions on the AER, enabling it to take actions in accordance with these directions.

The three financial directions include the primary PTI allowance direction, the RAB allocation direction, and the material change direction.

<u>The primary PTI allowance direction</u>: This direction, when used, includes forecast incremental operating expenditure in Powerlink's revenue allowance, fixes capital and operating expenditure forecasts for the



purposes of expenditure incentive schemes, and contributes to identifying where actual capital expenditure exceeds forecast capital expenditure.

<u>The RAB allocation direction</u>: This direction, when used, allows the responsible Ministers to specify the extent to which and timing of when a PTI's capital expenditure is included in Powerlink's regulatory asset base. This type of direction allows the responsible Ministers to determine when and how much of the PTI costs will be recovered from Queensland electricity customers. All directions will be subject to government approvals and must be made in accordance with the PTI Guidelines, which will be published on the Department's website.

<u>The material change direction</u>: This direction, if used, allows the responsible Ministers to make further adjustments to the value of Powerlink's RAB, where there has been a material change in circumstances since the RAB allocation direction was made. This type of direction may only be made within 18 months after Powerlink has advised the Minister of the day the PTI was completed.

Other derogations from national laws

The Regulations also include other derogations from national laws, including:

- Removing obligations on Powerlink to undertake a RIT-T under the national framework in respect of PTIs. This is to avoid Powerlink being required to undertake, effectively, two RIT-Ts (i.e., one under the national framework, and a second under the PTI framework); and
- Implementing other minor derogations to ensure that the PTI framework is recognised in the NER as a legitimate state-directed pathway to deliver transmission investments in Queensland. These derogations include ensuring Powerlink's RAB does not include PTI capital costs unless directed by the responsible Ministers to do so; requiring PTI cost allowances to be included in revenue proposals; and recognising Powerlink's Maximum Allowable Revenue (MAR) may be adjusted in accordance with PTI financial directions.

What are the impacts?

Overview

Both options will have various economic, social, and environmental impacts. However, Option 2 is preferred because it enables the State to fully utilise the frameworks in the Act, including the JSG and PTI frameworks, to deliver a coordinated energy transformation in line with the Plan and Blueprint. This option enables Queensland to identify the most efficient investment pathway to address state objectives (rather than NEM objectives, which are broader and not as tailored to Queensland's energy goals). Below are the differences in impacts for each option.

Option 1: Do nothing and rely on the Plan, Blueprint, and existing frameworks

Independent modelling was conducted to support development of the Plan. It examined the impacts of Queensland's energy transformation with and without a coordinated Plan.

For the analysis below, the modelling results for the scenario 'without coordination' have been used. This is because the Plan includes actions to prepare legislation to support delivery. Without the Act, the coordinated approach outlined in the Plan and Blueprint may not be fully achieved. The following outlines the impacts of an uncoordinated energy transformation, as indicated in the EY modelling.

Economic

• The modelling indicates that an uncoordinated energy transformation would lead to a failure in meeting the renewable energy targets. In turn, this would result in lower economic growth and higher wholesale energy prices due to delayed and inadequate investment in storage and transmission infrastructure to unlock investment in new renewable energy generation.



- Delayed investment in energy infrastructure could harm investor confidence and delay realising the
 economic benefits linked to decarbonising the energy system via green growth opportunities.
 Queensland may lose out on these opportunities, as new investment may flow to other States. A
 recent report by Climate Energy Finance highlighted that the Plan has created a strong market signal
 and foundation for future investment, expected to result in significantly more projects entering the
 development pipeline and bring in further private capital for large-scale generation projects, as well as
 associated investments. An uncoordinated energy transformation could undermine investor
 confidence.
- Since Option 1 relies on the national framework, the transmission backbone is unlikely to be constructed to the State-specified size or timeframes. Delayed delivery of Queensland's transmission backbone would likely increase costs to Queensland electricity customers (due to higher construction costs because of piecemeal augmentation of the existing transmission network, and constrained planning and delivery times).
- If the transmission backbone is not built in accordance with the Blueprint, it could lead to line losses and incremental augmentation of the existing transmission network. This is likely to lead to less efficient and more expensive outcomes for Queensland electricity customers over the longer term.
- Cumulative electricity emissions are expected to be higher under Option 1 because of delayed investment in renewable energy generation. This will place further economic costs on other sectors of the Queensland economy to achieve the Government's broader emissions reductions policy objectives.

Social

- If the State fails to meet the commitments in the Plan, there are a range of social impacts to communities and reputational impacts to the Queensland Government. This could result in, for instance, a loss of trust and public confidence in the energy transformation and of Government's capacity to manage the impacts on the social fabric of regional communities.
- Option 1 does not provide the existing energy workforce in publicly owned coal fired power stations the certainty of support through the energy transformation.
- An uncoordinated approach is likely to lead to a more incremental build out of the transmission network, which could impact more landowners' properties than would be required under a coordinated energy transformation. This would have a social impact on communities where there are significant changes in land use to accommodate incremental transmission build out. It may also create angst, mistrust, and a lack of support for the energy transformation.

Environmental

• In an uncoordinated energy transformation, EY modelling forecast a limited reduction in the annual emissions until mid-2030s. This would delay action on addressing climate change and have an adverse impact on the environment.

Option 2: Develop Regulations to support commencement of the Act

For the analysis below, the modelling results for the scenario 'with coordination' have been used. This is because the State can fully utilise the frameworks in the Act, including the JSG and PTI framework, as committed to under the Plan. These frameworks enable the State to coordinate the energy transformation in line with the Plan and Blueprint. The following outlines the impacts of a coordinated energy transformation, as indicated in the EY modelling.





Economic

- The EY modelling indicated a coordinated approach is expected to result in \$76 billion of investment by 2040. According to EY modelling, this could support 64,000 jobs, including 28,500 direct jobs across construction, manufacturing, and operations, with almost 20,000 of these jobs located in regional Queensland. This significant investment is also expected to support more than 35,000 indirect jobs.
- The modelling also indicated a coordinated approach would deliver an additional \$25.7 billion in Gross State Product to the Queensland economy. The modelling indicates that approximately 51% of increased economic output will occur in regional Queensland, with significant gains for Central Queensland, Mackay and Whitsundays, Darling Downs, and Townsville.
- Under Option 2, the PTI framework implements a key element of the Plan, enabling the responsible Ministers to assess and direct the construction of PTIs according to State based needs. Without this, the Plan could not be implemented as, as noted above, the national framework for the construction of transmission infrastructure cannot move at the scale and pace required, as its focus is on NEM objectives, and not State-based objectives. Further, the candidate PTIs are identified through the Infrastructure Blueprint. The Infrastructure Blueprint will be reviewed and updated biennially based on extensive modelling, ensuring projects are only eligible to be built under the PTI framework where a genuine Queensland need has been identified.
- The PTI framework (noting the Regulations establish three specific financial directions) allows
 Powerlink to recover costs in respect of PTI projects through its revenue determination and RAB
 under the NER. Indicative, but high-level costs will continue to be identified through the Infrastructure
 Blueprint, with detailed costs identified through the Bill's RIT-T assessment process. Under the
 Regulations, the Minister may include less than the full cost of the PTI project into Powerlink's RAB,
 and therefore the full cost may not be passed through to electricity customers.
- Under Option 2, the Regulation costs for the Queensland Government in relation to the PTI framework would be higher than Option 1. Costs would include engaging a 'suitably qualified person' to provide expert advice, Queensland-specific AER functions, and the State's administration of the framework, as well as Powerlink administration costs to respond to directions by the responsible Ministers. However, the Blueprint's optimal infrastructure pathway cannot be achieved without legislating this framework.
- The exact costs for the Queensland Government for the PTI framework have cannot be calculated at this stage, as the framework builds in the process for identifying exact costs and provides for how they may be recovered through Powerlink's regulatory asset base. However, overall the costs are expected to be less than the overall contribution to the economy brought about by the frameworks' facilitation of investment in renewable energy generation. Further, investing in expert advisory functions and leveraging the expertise of the suitably qualified person will ensure the robustness of regulatory processes and decision-making, including a focus on the prudency and efficiency of network expenditure so that Queenslanders will pay no more than necessary for these services.

Social

- Under Option 2, more coordinated infrastructure investment can be delivered. This is anticipated to lead to an overall smaller infrastructure 'footprint' than Option 1, which is expected to result in positive social impact.
- The PTI framework under Option 2 allows Queensland to build the transmission backbone identified in the optimal infrastructure pathway. Under Option 1 and Option 2, communities will be impacted by the construction of transmission infrastructure. Under Option 1, delivery of transmission infrastructure is anticipated to be incremental in nature, and likely in a less coordinated and less optimal manner.



This is anticipated to have a greater impact on communities and landholders, than a coordinated, transmission build facilitated through the PTI framework.

• Enacting the JSG into law is expected to have a beneficial social impact on affected workers. It will do this by providing certainty and confidence that there will be support, as well as secure choices, opportunities, and pathways. It will also ensure that critical skills can be retained in key roles throughout the energy transformation and provide an avenue for existing workers to upskill or reskill into new clean energy roles.

Environmental

- The EY modelling indicates a coordinated energy transformation would result in lower emissions in comparison to an uncoordinated energy transformation. Option 2 is expected to have a positive impact on the environment given the lower emissions under this approach. Emissions benefits are primarily due to the coordinated withdrawal and repurposing of publicly owned coal fired power stations. Emissions are anticipated to fall by 56% on 2005 levels from 49Mt in 2005, to 22 Mt in 2030-31 and by 96% on 2005 levels by 2039-40, down to 2 Mt.
- Under Option 2, the PTI framework will enable the construction of necessary transmission to support Queensland's energy transformation and progress towards 80% renewable energy by 2035.

Who was consulted?

Overview

Significant consultation was undertaken during the development of the Bill and the Regulations, including:

- Four-week public consultation on an exposure draft of the Bill and an extract of the PTI Regulations. During this consultation, 91 respondents provided submissions, including regional interest groups, local governments, professionals, individuals, and workers' groups. Of these respondents, 28 provided feedback on the PTI framework and 27 provided feedback on the JSG framework.
 - Respondents considered the proposed PTI framework would assist Queensland in building the transmission infrastructure needed to transition to renewable energy. Some respondents noted that although it aligned to the national framework for transmission investments it was still a departure and sought assurances that the PTI framework would not result in underutilised or inefficient transmission infrastructure. The PTI framework has checks and balances throughout its 4 stages. This includes: that only projects which help to meet the optimal infrastructure pathway objectives have access to the framework; that projects are assessed, using the AER's RIT-Tas a basis, only modified as appropriate and in a way that is as minimal as practical; and the responsible Ministers must seek advice from a suitably qualified person on the modifications to the RIT-T, the assessment report and whether the expenditure proposed is that of an efficient and prudent operator.
 - Most respondents who responded to the JSG were supportive of it.. The definition of "affected energy worker" was expanded to include long-term contractors at publicly owned coal-fired power stations as a result of this feedback.
- A consultation summary report² was published on the outcomes of consultation on the exposure draft.
- Subsequently to this, targeted consultation continued with on the Regulations, including Powerlink, the AER, the Australian Energy Market Operator, and the Australian Energy Market Commission. The Regulations were refined as appropriate in response to this feedback.



² Consultation Summary Report is available at https://www.epw.qld.gov.au/__data/assets/pdf_file/0021/39432/energy-bill-consultation-report-2023.pdf.

- The Bill underwent public consultation as part of the Parliamentary Committee process. The Committee held five public hearings in Brisbane, Rockhampton, Mackay, Townsville, and Cairns during January and February 2024. Additionally, the Committee received 48 public submissions.
- Targeted consultation was undertaken for the JSG element of the Regulations. The interim EIC was consulted through the development of the Regulations.

What is the recommended option and why?

Recommended option

The recommended option is Option 2 – Develop Regulations to support commencement of the Act and operationalise both the JSG and PTI frameworks. This will enable Queensland to fully utilise the frameworks in the Act to coordinate the energy transformation in line with the Plan and Blueprint. It is the only option that allows for the vision and actions in the Plan to be fully implemented and to achieve the Queensland Government's objectives. Option 1 relies purely on the Plan, Blueprint, and existing frameworks, which risks an uncoordinated energy transformation.

Option 2 provides greater economic, social, and environmental benefits by operationalising the frameworks needed for a coordinated Queensland energy transformation. This includes overcoming the emerging challenges and identified regulatory barriers to drive investment, minimise long term costs on Queensland consumers, and provide the public with confidence in the energy transformation. The economic costs associated with Option 2, primarily in implementing a new PTI framework, will be offset by the added benefits to the Queensland economy.

Implementation, compliance support and evaluation strategy

Option 2 will be implemented in concert with accompanying guidance materials. This includes the development of a JSG Guideline and a PTI Guideline.

There are also applicable review processes under the Act, including:

- A review of the JSG Fund 5 years from commencement and every 5 years thereafter;
- Biennial review of the Blueprint, which identifies the optimal infrastructure pathway, which includes PTI projects this review will be founded on expert advice provided by the Queensland Energy System Advisory Board; and
- Time-limiting the PTI framework, with a sunsetting period after 2035.



Impact assessment

The costs and benefits associated with delivering the Plan (Option 2), and an uncoordinated approach (Option 1) were undertaken as part of developing the Plan and Blueprint (modelling completed by EY).

As noted above, implementation of both the PTI and JSG frameworks are intended to deliver different aspects of the coordinated approach as outlined under the Plan. The PTI framework will enable the delivery of the transmission backbone necessary to meet the Plan objectives. Further, the support provided through the JSG will be essential to ensuring community support, retaining critical skills in key roles throughout the energy transformation and provide an avenue for existing workers to upskill or reskill into new clean energy roles.

The modelling indicated a coordinated approach is expected to result in \$76 billion of investment by 2040. This could support up to 64,000 jobs, including 28,500 direct jobs across construction, manufacturing, and operations, with almost 20,000 of these jobs located in regional Queensland. This significant investment is also expected to support more than 35,000 indirect jobs.

The modelling also indicated a coordinated approach could deliver an additional \$25.7 billion in Gross State Product to the Queensland economy. The modelling indicates that approximately 51% of increased economic output will occur in regional Queensland.

Signed

Paul Martyn Director-General Department of Energy and Climate

Date: 12/06/2024

Mick de Brenni MP Minister for Energy and Clean Economy Jobs

Date: 14/06/2024

