Queensland Government response to the Renewable Energy Expert Panel inquiry into credible pathways to a 50 per cent renewable energy target in Queensland by 2030

June 2017



This publication has been compiled by Consumer and Pricing division, Department of Energy and Water Supply.

© State of Queensland, 2017

The Queensland Government supports and encourages the dissemination and exchange of its information. The copyright in this publication is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

Under this licence you are free, without having to seek our permission, to use this publication in accordance with the licence terms.



You must keep intact the copyright notice and attribute the State of Queensland as the source of the publication.

Note: Some content in this publication may have different licence terms as indicated.

For more information on this licence, visit https://creativecommons.org/licenses/by/4.0/.

The information contained herein is subject to change without notice. The Queensland Government shall not be liable for technical or other errors or omissions contained herein. The reader/user accepts all risks and responsibility for losses, damages, costs and other consequences resulting directly or indirectly from using this information.

The following table provides the Queensland Government's detailed response to the Renewable Energy Expert Panel's final report recommendations.

RECOMMENDATION

GOVERNMENT RESPONSE

Defining Queensland's renewable energy target

- The Panel recommends that a Queensland renewable energy target:
 - Is based on Queensland's electricity generation sector only
 - Applies the same renewable energy sources as defined under the Large-scale Renewable Energy Target
 - Includes contributions made from smallscale solar PV, wind and hydro systems
 - Follows the principle of technology neutrality, but allows for the development of programs that target specific technologies and/or applications of renewable energy
 - Is expressed in percentage terms in the long term, but allows for the establishment of short and medium term fixed targets based on predetermined levels of renewable energy generation
 - Is based on renewable energy output (e.g., GWh), not renewable energy capacity (e.g., MW)
 - Is not legislated as a broad target, noting that legislation may be required to support specific policy initiatives (for example, legislation may be required where the costs of the scheme are to be recovered from parties outside of the government)
 - Includes Queensland's pro-rata share of renewable energy generation under the LRET.

Accepted in-principle

The Queensland Government accepts the Panel's general approach for defining a 50 per cent renewable energy target.

The Queensland Government accepts the Panel's rationale for including Queensland's pro-rata share of the LRET in the target. The relative importance of the pro-rata share to the target will be clearer in 2019 closer to the subscription of the LRET.

Some elements of the target will need to confirmed in 2019, following confirmation of national policy settings.

Leveraging existing Federal support schemes to 2020

In order to leverage the opportunities for renewable energy investment under the LRET, the Panel recommends the Queensland Government should undertake a reverse auction process for Contracts for Difference (CFDs) in 2017-18 for the delivery of further

Accepted

In the period up to 2020 a significant opportunity exists for additional renewable energy projects to be developed in

1

renewable energy capacity prior to 2020. The Panel recommends an indicative capacity target of up to 400 MW, with the target to be reviewed based on the level of renewables developed by the market, and the competitiveness of projects in the market. Preparatory work should commence as soon as possible on auction design and sourcing the necessary capabilities and advisors to undertake the auction.

Queensland under the LRET, with over 5,000 MW of projects currently in the pipeline.

In addition to creating an attractive environment for these projects, there is also a role for the Queensland Government in supporting technologies that are currently not being deployed on a fully commercial basis.

The Government accepts the Panel's recommendation and will undertake a reverse auction for up to 400 MW of renewable capacity, to commence in the second half of 2017.

This process will include a focus on bringing forward renewable technology solutions that can support long-term system security (e.g. storage and dispatchable generation), and will include a 100 MW energy storage component.

In order to enhance the potential benefits from investment in renewable energy, the Queensland Government could consider incentivising some R&D in renewable energy as part of the policy, with a specific focus on regional Queensland.

Accepted

The Queensland Government strongly supports R&D and currently administers programs which facilitate R&D and the development of new technologies, such as the Advance Queensland Ignite Ideas, Research Fellowships, Platform Technology Program, Innovation Partnerships, and the Business Development Fund. These programs have facilitated a number of renewable energy projects in Queensland to date.

Following the success of the Solar 150 program, which saw Queensland leverage over \$20 million of ARENA funding, the Government will continue to seek opportunities to partner with ARENA in the development of renewable energy projects in Queensland.

National energy and climate change policy post 2020

As part of implementing its renewable energy policy, the Panel recommends the Queensland Government should proactively support the development of integrated climate and energy policies at the national level, as

Accepted

The Queensland Government will continue to work proactively through the COAG Energy Council to advocate for national policy actions

the most efficient way of achieving carbon emission reductions and uptake of renewable energy. aimed at reducing greenhouse gas emissions in the NEM. This includes ongoing strong support for the Finkel Review process.

In the absence of national action however, the Queensland Government will continue to pursue policies to meet its objective for a clean energy future for Queensland, and to deliver the economic and employment benefits that will result from a strong renewable energy sector.

The Panel recommends the Queensland
Government should consider the principles of
complementarity, flexibility and adaptability
when designing its renewable energy target, to
provide greater credibility and durability to its
policy.

Accepted

The Queensland Government accepts these design principles.

Alongside actions to maximise new renewable energy projects in Queensland, the Government will further consider its renewable energy policy in 2019, following the completion of the Finkel Review and the national review of climate change.

Queensland renewable energy policy options post 2020

The Panel recommends the Queensland Government should not introduce any additional policy mechanisms beyond the Small-scale Renewable Energy Scheme (SRES) that provide financial support for small-scale renewable energy.

Accepted

The Queensland Government acknowledges the maturing of renewable energy technologies and has previously ruled out reintroducing a premium feed-in tariff for residential solar PV systems.

The Government will continue to monitor progress towards its solar PV target including increased uptake in new market segments.

In December 2016, the Queensland
Government released its response to the
Queensland Productivity Commission Solar
Feed-in Pricing in Queensland Inquiry. As part
of its response, the Government announced a
number of initiatives to help open new market
opportunities for the Queensland solar
industry, including expanding the eligibility
criteria for the regional feed-in tariffs so that
more small customers are paid for their
excess solar power, and introducing a

voluntary time-of-use feed-in tariff in regional Queensland.

7 The Panel recommends that the primary mechanism for delivering new large-scale renewable energy capacity post 2020 should be through reverse auctions for CFDs.

Accepted in-principle

To the extent that additional incentives are required post-2020 to deliver renewable energy projects to achieve the 50 per cent target, the Queensland Government accepts the Panel's finding that reverse auctions are likely to be an effective policy mechanism to incentivise the development of renewable energy in Queensland post 2020.

The Government also notes feedback from stakeholders highlighting the importance of exposing project proponents to an appropriate level of market and commercial risk through the policy mechanism.

The Government will apply the learnings from the initial reverse process (of up to 400 MW) to further refine the post-2020 policy mechanism.

8 While the overall approach to running reverse auctions should be technology neutral, the Panel recommends the Government investigate opportunities for running specific reverse auctions for dispatchable renewable energy and isolated and/or fringe-of-grid solutions.

Accepted

The Queensland Government recognises the importance of renewable energy technologies that can provide dispatchable generation, grid support and the opportunity to develop these technologies in fringe-of-grid or isolated regions.

On this basis, the Queensland Government's initial reverse auction (of up to 400 MW) will include a focus on bringing forward renewable technology solutions that can support long-term system security (e.g. storage and dispatchable generation). As part of this process, the Government will include a 100 MW energy storage component.

9 Given that consumers are the ultimate beneficiaries of electricity that is generated in the market, the Panel recommends that the costs of the CFDs are recovered through electricity market mechanisms. Under the modelling the net effects of the policy on

For further consideration

The Queensland Government is committed to delivering stable electricity prices.

The Government notes the Panel's advice that there is no expected price impact on

consumers are expected to be broadly cost neutral (including the estimated subsidy and modelled effect on wholesale prices). consumers prior to 2020 due to leveraging the revenue support available under the LRET. In line with this, the Queensland Government will ensure that no costs associated with the target are passed through to consumers pre-2020.

The Government also notes the Panel's advice that beyond 2020 the effect of achieving the target is also projected to be broadly cost neutral. This is consistent with other modelling of renewable energy targets including analysis undertaken for the Federal RET Review and the Australian Energy Market Commission.

Prior to establishing the policy mechanism to achieve the target post-2020, the Queensland Government will undertake further analysis on cost recovery mechanisms.

The Panel recommends the Queensland
Government should not pursue the
implementation of broader state-based
economic policy mechanisms, such as carbon
pricing, for the purpose of meeting the 50%
renewable energy target. However, these
policies could be considered by the
Queensland Government in the context of
coordinated policy action with other
jurisdictions in the NEM or nationally, aimed at
facilitating emission reductions.

Accepted

As noted earlier, the Queensland Government has ruled out a state-based carbon price and acknowledges that economic policy mechanisms such as carbon pricing are most efficiently implemented at the national level. The Queensland Government will continue to work proactively through the COAG Energy Council to advocate for national policy actions aimed at reducing greenhouse gas emissions in the NEM.

Facilitating large-scale renewable energy projects

The Panel recommends the Queensland
Government assess options to provide
focused and centralised information about
project planning and approvals processes to
assist both project developers and those
entities assessing proposals. These options
could include the development of dedicated
web-based resources and the creation of
centralised facilitation roles, similar to the
NSW Renewable Energy advocate.

Accepted

The Queensland Government recognises that providing centralised information services to project proponents and entities assessing project proposals is critical to facilitating the expansion of a renewable energy industry in Queensland.

The role of local governments and the state government in assessing and approving renewable energy projects can vary depending on the type of project and its sitespecific characteristics and constraints.

Assessment is against the applicable planning instrument/s, including local government planning schemes (which are guided by the Queensland Government's State Planning Policy (SPP)), and the State Development Assessment Provisions. The Queensland Government is currently updating the SPP to include a policy to support and enable the development and supply of renewable energy at the regional, local and individual scale in appropriate locations. This will be supported by updated guidance material, which will provide greater clarity to local governments on how to implement the policy through their planning schemes.

The Department of State Development currently provides a range of facilitation services to renewable energy projects including streamlining approvals, access to Queensland Government contacts and facilitating introductions with local companies and service providers.

To ensure project proponents are able to readily access the information and services that are available, the Government will establish a centralised web portal in the second half of 2017 to provide an integrated information service for project proponents.

The Panel recommends that the Queensland Government work with the network businesses to ensure that the business have adequate internal resourcing and implement appropriate workflow planning measures to be able to manage the expected increase in connections for renewable generators under the 50% renewable energy target.

Accepted

The Queensland Government accepts this recommendation and will consult with the network distribution businesses to ensure adequate resourcing is in place to manage higher levels of network connection requests.

13 The Panel recommends the Queensland network businesses consider options to improve the process for network connection.

This should be considered in the context of a likely increase in the volume of renewable related network connection inquiries. It should

Accepted

The Queensland Government acknowledges the network businesses' critical role in facilitating projects connecting to the network under a 50 per cent renewable energy target. The Government notes the network

to assist early stage assessment and the coordination of network connections.

also consider the open provision of information businesses' actions in recent years to improve connection processes, and notes the expectation of increasing workload to ensure effective connection processes for emerging renewable generation projects. On this basis, the Government will work with the network businesses to identify opportunities to improve connection processes and ensure the efficient connection of projects to the network.

14 The Panel recommends the Queensland Government and the Queensland network businesses continue to consult with ARENA in the development of its Australian Renewable Energy Mapping Infrastructure (AREMI) mapping tool, to ensure accurate and up to date information is included in the map.

Accepted

Consistent with its response to Recommendation 11, the Queensland Government supports open access to data and information to facilitate project development.

15 The Panel recommends that the concept of developing renewable energy hubs or zones should be investigated further in Queensland, with the potential for this to form part of a future reverse auction process.

Accepted

The development of renewable energy projects in hubs or zones has the potential to improve the efficiency of the network connection process and reduce the overall cost of the project development. To support the development of a renewable energy hub, the Government has committed \$150 million to develop strategic transmission in north and north-west Queensland, subject to the completion of a feasibility study. This transmission infrastructure will unlock around 2,000 megawatts of solar, wind and hydroelectric projects in the northern hinterland.

The Queensland Government is currently investigating the use of surplus or underperforming government-owned land in regional Queensland that has the potential to become large-scale renewable energy developments. In consultation with Powerlink and Ergon Energy, the Government is identifying potential sites close to existing network infrastructure that could be suitable for renewable energy developments. The first site identified at Aldoga, approximately 1200 hectare, within the Gladstone State

Development Area was released to market in April 2017 (closed 2 June 2017). The site is adjacent to a Powerlink substation with a substantial amount of available capacity (up to 450MW). If developed the site will help contribute towards the State's renewable energy aspirations.

Integration of renewables into the National Electricity Market

- The Panel recommends that the Queensland Government works proactively with AEMO to assist with efficient policy development, particularly in regard to system security and the development of ancillary services markets. Elements of this co-operation could include:
 - Joint analytical activities monitoring the effect of renewable energy uptake in Queensland, incorporating state and national data to identify potential challenges early on
 - Leveraging AEMO studies such as the National Transmission Network
 Development Plan to inform the technical requirements of delivering the target, and stress testing potential policy options as state and federal policies evolve
 - Exchanges of AEMO and Queensland Government staff to maximise information transfer between the two agencies.

Accepted

Maintaining system security and reliability across the NEM is critical to implementing a 50 per cent target. The Government notes the modelling undertaken for the Panel which projects that 50 per cent of Queensland's energy can be supplied by renewable energy technologies by 2030, while meeting or exceeding today's reliability standard.

Hydro-electric generation will play an important role in Queensland's future energy mix, as it provides key security services to the grid. To support additional hydro development in Queensland, the Government has committed \$100 million to help fund a 50 megawatt hydro-electric power station at the Burdekin Falls Dam, subject to completion of a business case.

As part of the Queensland Government's response to the Finkel Review, in order to enhance system security, the Government called for improvements of a technical nature to be implemented as a priority - for example ensuring wind farms have a fault ride-through capability enabling them to continue to operate for short periods at times of lower electric network voltage.

The Queensland Government will continue to work proactively with AEMO on efficient policy development giving particular consideration to the development of ancillary services markets.

To support this work, the Queensland Government is establishing the Queensland Energy Security Taskforce which will provide advice to Government on short and long-term plans for maintaining system security and reliability in the state. The Taskforce will be responsible for:

- Developing a Summer Preparedness Plan for 2017-18 and 2018-19, which will map out actions to ensure Queensland's system is secure in the short-term
- Developing a Demand Management and Energy Efficiency strategy to better manage peak demand and improve the resilience of the grid
- Undertaking a study to assess to options for the deployment of new hydro-electric and pumped storage generation capacity
- Undertaking a feasibility study of strategic transmission infrastructure in the northwest Queensland that will identify options to unlock wind resources in the northern hinterland region
- Undertaking a review of the feasibility of expanding interconnection between Queensland and New South Wales to further enhance the stability of Queensland's system and the NEM.
- 17 The Panel recommends the Queensland Government facilitate the collection and disclosure of relevant data on embedded systems to assist AEMO in managing power system security and reliability, to the extent this data is not collected by other organisations such as the Clean Energy Regulator.

Accepted

See response to Recommendation 16.

The Panel recommends that the Queensland
Government continue to explore ways to work
co-operatively with other State and Federal
Governments on measures to enhance
customer uptake of renewable energy

Accepted

The Queensland Government recognises the importance of inter-jurisdictional cooperation and will continue to work with other State and Federal governments to support uptake of

systems, so as to avoid duplication of effort and inconsistent approaches across jurisdictions. renewable energy and emerging technologies by residential consumers and businesses.

19 The Panel recommends that the Queensland Government investigate the use of solar PV on state-owned buildings, where it is cost effective to do so.

Accepted

The Queensland Government acknowledges the important role it can play in expanding the use of solar PV across the state. The Government is delivering a range of initiatives to increase the use of solar PV in line with meeting its target of 3,000 MW by 2020, including:

- A trial of solar PV on public housing this initiative will deliver three to six megawatts of solar on 2,000 to 4,000 governmentowned, detached houses.
- The installation of solar PV on government buildings in the Lockhart River Aboriginal Shire Council – this initiative will reduce the amount of high-cost diesel fuel required to power the township, with savings to be shared with public housing tenants.
- Trialling new solar business models for tenants located in the Woodridge, Cairns and Rockhampton Housing Service Centre areas – these initiatives will provide opportunities for tenants to reduce their electricity bills by receiving both grid and solar power from their electricity retailer.
- Advancing Clean Energy Schools program

 this initiative will investigate innovative
 ways to use solar and energy efficiency to
 reduce energy costs across Queensland
 state schools.

Supporting economic development

20 The Panel recommends Queensland
Government engage with Queensland
secondary and tertiary education institutions to
identify opportunities for research in relevant
renewable energy supply chain industries.

Accepted

The Queensland Government accepts the recommendation and will work with secondary and tertiary education institutions to identify

opportunities to provide training in renewable energy supply chain industries. 21 The Panel recommends the Government Accepted includes consideration of local content as part The Queensland Government will encourage of any reverse auction process to ensure that projects developers to use local content as local businesses are provided the opportunity part of the reverse auction process. to compete for the development of renewable energy projects in Queensland. 22 The Panel recommends the Queensland Accepted Government seek to promote investment The Queensland Government through Trade opportunities in the Queensland renewable and Investment Queensland, the Department industry through its international partnerships of State Development and other relevant and agreements, including developing agencies will continue to ensure interstate and incentives for attracting international firms to international firms are able to access the state. investment opportunities in Queensland under a 50 per cent renewable energy target.