



# Our renewable future will be powered by us.

## Burnie Q&A Responses

### Why do we need to help the mainland?

Tasmania has an opportunity to build on our long history of investing in renewable energy like hydropower. When the mainland imports clean, renewable energy from Tasmania, they have to purchase it through the National Electricity Market (NEM).

This means the more energy Tasmania can produce and export, the greater the return to our state.

Tasmanian renewable energy generation and storage can also play a role in ensuring that the electricity supply on the mainland is reliable and consistent as the mainland shifts away from coal and gas.

### How many wind turbines would there be in the REZ?

There are only 2 proposed wind farms at the moment, and the transmission infrastructure will only be able support 1 or 2 more wind farms. Both projects are in their early planning stages, so we do not know the exact number of turbines.

However, based on the capacity of the proposed transmission infrastructure, we would expect to have between 100 and 150 turbines if the REZ were to progress.

### Why haven't we heard about the REZ before?

We have been engaging with the community and other stakeholders since the Government announced it would focus on a North West REZ back in 2022. Throughout 2023, prior to the release of the proposed REZ boundary, we carried out engagement activities that consisted of 8 Stakeholder Reference Group (SRG) workshops, 6 community information sessions, 22 industry meetings, 42 representative body meetings, 22 council meetings, 3 newsletters, 4,478 website visits, 30 completed online surveys and 693 submissions on the first Mapping Important Places initiative. To read more about our engagement to date please see our North West Community Consultation Summary, which explains our key findings from our 2023 engagement.

### **Is wind actually the cheapest form of energy?**

The [GenCost](#) report by CSIRO demonstrates that wind is the cheapest form of energy.

### **How will infrasound be mitigated?**

Scientific research around the impacts of infrasound is relatively new, however, the research that exists suggests infrasound does not cause any psychological or physiological impacts.

### **How large will the wind turbines be? Will the guidelines still work for larger turbines?**

Guildford Wind Farm turbines, for example, are planned to have 247m tip height, 166m hub height and 162m rotor diameter.

### **What will the buffer be from residences?**

There will be a buffer from residences. This is generally referred to as the 'set-back distance' and varies from state to state. The Australian Energy Infrastructure Commissioner recommends a distance of 1.5km between a wind turbine and neighbouring buildings. This is the current default for QLD and WA. For more information, please see the AEIC's [Governance and Compliance of Standards](#). The exact set back distance, which may be greater than 1.5km, would be set out as part of the planning and environmental approval for any project locating in the REZ.

### **Why don't we build roof top and battery that will lower power costs instead of raising them?**

The Tasmanian Government has its [Energy Saver Loan Scheme](#) to help households access solar power and similar technologies. However, it is not cost effective for many Tasmanian households to go off-grid, and there is still a demand for more grid-scale electricity to support growing businesses and industry. If every household went off grid, there would still be a network to maintain for the remaining commercial and industrial customers. This would make electricity costs for those businesses prohibitive. Providing funding to households to transfer to rooftop solar and batteries could have unintended consequences and should be balanced against the benefit of having more customers connected to the electricity network.

### **How much is this costing TasNetworks?**

The REZ infrastructure is currently estimated at \$174 million, with the intent that this would be met through annual payments from REZ participants (new generators, storage or large-scale industrial users of energy).

### **How will the power get from generation to Marinus Link? What about easements?**

A 220kV transmission line from Hampshire Hills to Burnie will carry power to Marinus Link. The transmission line will be built as part of the REZ and the [North West Transmission Developments](#), mostly utilising existing easements that follow the route of the existing 100kV line. Renewable energy projects will be required to connect to the Burnie to Hampshire Hills transmission line to be part of the REZ, reducing the need for project-by-project transmission lines connecting back to Burnie.

### **What about decommissioning?**

A wind farm is expected to have an operational life of approximately 20 to 30 years. After this time, the project owner will either decommission the site and, as part of its environmental approval, be required to restore the area to its previous land use, or negotiate with the landowners to repower or upgrade the equipment and extend the wind farm's operational lifespan.

Decommissioning means that the wind turbines, site office and any other necessary infrastructure is removed from the site. The roads and foundation pads are also covered and revegetated, allowing land to be returned to its former use.

Sometimes parts of the wind farm that continue to serve a functional purpose may be left in place, such as the substation or access tracks. Outside of required environmental rehabilitation, the wind farm's remains will be negotiated and agreed with the host landowners. In many cases, access tracks become a desirable part of the landowner's property and the landowner wishes to keep them.

### **Why do we need REZ if the total number of turbines would be the same as Robbins? Why can't we just do that instead?**

Robbin's Island alone would not meet Tasmania's future energy needs and the Government's aspirations to attract new industry to the state, like

hydrogen production. It is also important to pursue multiple options, because not all projects end up getting built.

### **How will construction workers be housed?**

While a REZ promotes economic growth and attracts workers and families to the host region, this can potentially impact the availability of accommodation and local services. Government agencies, local councils and other representative bodies will assess and address housing and healthcare concerns to ensure balanced and sustainable development that aligns with community needs. Community Benefit Sharing could be targeted at priority areas such as housing and healthcare if that's what the North West community decides.

### **If there's about 1000 MW of power generation possible to be located in the REZ, how does that compare to one coal plant?**

The output of coal plants in Australia range from around 100 MW to 2,900 MW, with the average coal plant producing around 1,200 MW.

### **Many Mapping Important Places submissions were a "no we don't want this", are you going to respect this?**

We appreciate this feedback received. However, we have also received constructive feedback regarding potential amendments to the zone boundary and submissions from some landholders wishing to host renewables within the zone. We will be passing all this information onto the Minister for consideration.

### **Can the councils do a letter drop to everyone in the state?**

REZ is being delivered by the Tasmanian Government, not the councils. We are considering the best ways to get information out to the community within and close to the REZ and have heard from the community a preference for utilising mail for communication.

### **What are the population numbers in the zone?**

It is difficult to find the exact population within the zone, but there are around 2000 properties within the REZ.

### **Will the land be rezoned?**

REZ will not rezone any land.

### **Have you considered how this will affect tourism?**

Yes, our first Mapping Important Places initiative sought views on this, and we have put buffers around known tourist areas.

### **What about sediment contamination into river systems?**

Water impacts are a normal risk that is taken into account and mitigated for when considering any construction project. The risks are no higher for wind farms and are usually not difficult to mitigate.

### **Proponents can't force us to comply, can the government?**

The Compulsory Acquisition Act gives the government powers for compulsory acquisition for essential infrastructure like transmission and generation. Private sector proponents would need to apply to the Minister to utilise these powers, and providing these powers can only come after extensive negotiation with impacted landowners.

### **We have a lot of land that isn't being used for much, why aren't we doing it there?**

The north west of Tasmania is an ideal location for new renewables due to its abundant wind resources, developer interest, existing projects, and proximity to the proposed North West Transmission Line upgrades which provide capacity in the network to host new generation. We also completed engagement activities in 2023 that suggested there were less community and environmental impacts in this region.

### **What are the effects of noise from wind farms?**

With setbacks from residences, wind turbines should not cause any noise pollution. The [EPAs conditions](#) for St Patricks Plains Wind Farm sets out further details on this, and more information can be found in the AEIC's [Governance and Compliance of Standards](#).

### **How much of our renewable energy future will be foreign owned?**

Most of the wind farm proponents active in Tasmania are foreign owned or the majority are foreign owned. However, they produce local jobs and provide much needed energy for Tasmania.

### **How much does Tasmania pay Victoria for Basslink?**

Tasmania does not pay Victoria for Basslink. The Basslink interconnector is a privately owned, unregulated asset, currently held by APA group. There is currently a contract in place between Hydro Tasmania and APA for Basslink. Through this, Hydro Tasmania obtains the ability to sell electricity when it is of high value in Victoria and import electricity from Victoria when it is of relatively low value. The trading profits earned by Hydro Tasmania are returned to the community through its dividends paid to the Government.

### **Who owns the Australian Energy Market Operator (AEMO)?**

Ownership of the Australian Energy Market Operator (AEMO) is shared between government and industry, with members representing federal and state governments, as well as generation, distribution, retail and resources businesses across Australia. Please see, [AEMOs website](#) for more information.

### **How will we be compensated for decreased property value?**

There have been many studies relating to the impact of wind farms on house prices. Some have been commissioned by pro and anti wind farm lobby groups and as such should be regarded with caution. ReCFIT has reviewed many of these papers and the largest it could find (a US study) was published by the well regarded Proceedings of the

National Academy of Sciences. The [study](#) reviewed over 300 million home purchases, included 60,000 turbines and covered a 23 year period. While ReCFIT is not suggesting the findings will be representative of any potential Tasmanian REZ impacts we believe it is worth reading.

Community Benefit Sharing (CBS) involves sharing the rewards of renewable energy development earned by renewable energy proponents with local communities to recognise that host communities should see positive impacts from having renewables in their area, it is based on a desire to establish and maintain positive long-term connections to the area.

We understand that there are many things that CBS could include, and we do not know what it will help fund. Compensation to impacted property owners is one option. If you would like to have your say, you can fill out the [Community Benefit Sharing Survey](#) on our website.

### **Insurance companies will raise premiums to an unaffordable level due to this REZ. Banks check annually to see that properties are insured, if they find non-compliance it will leave people bankrupt. What are we putting in place to mitigate and compensate?**

There has been no evidence that insurance companies will raise premiums due to a REZ. The Insurance Council of Australia (which is the peak body for insurers in the country) has provided [advice specific to the hosting of energy infrastructure](#).

### **What is going to happen to land tenures?**

REZ will not rezone any land. If a property owner wishes to host a wind farm and the current zoning does not allow for it, they would have to seek to have the property rezoned.

### **Will the legislation include anything that seeks to automatically change zoning?**

No, the draft legislation does not include anything about rezoning land.

**Why would a proponent come in to risk doing a Developmental Application? [if land is not industrial zoned]**

Land does not have to be industrial for proponents to apply for a Developmental Application, but they will need to have an accompanying rezoning application. This is the normal process and will be no different within a REZ.

**These projects are always taken on because someone is going to make a massive profit. Who is making this profit? How much are they making?**

Proponents will seek to make profits for their owners/shareholders from wind farms developments, which require multimillion dollar investments and in most cases significant borrowings. Each proponent will have its own rate of return to get a project committed. However, it should be noted these projects will also produce local jobs and provide much needed energy for Tasmania.

**In Vic and NSW the CFA is refusing to come to fires on wind turbines because they are too hard to fight. They can't water bomb them, and can't go in there because it's life threatening. This means we can't get insurance on our properties. If we can't get the firefighters out there, how do we protect our lives?**

The CFA in Victoria has a [guideline](#) for its fire preparedness expectations regarding wind farms. The guideline outlines requirements to assist in the fighting of fires on wind farm properties. It is inaccurate to state that these organisations will not fight fires on wind farm properties.

**What help is going to be given to people who are forced to leave their home? What is happening to make sure people can sleep?**

No one will be forced to leave their home. The planning and environmental approvals system will ensure wind turbines are placed far enough away from residences that there will be minimal impacts. They should not affect anyone's sleep.

**What is the extra land required for the transmission line?**

There is currently a 110kV transmission line from Burnie to Hampshire Hills. This line would need to be upgraded to 220kV line to facilitate the connection of new generation in the REZ. This upgrade would mostly utilise existing easements, but the corridor will have to be widened in places for the larger line. TasNetworks has discussed these upgrades with impacted landowners and will re-engage in the future should the REZ be declared and go ahead.

**Why not nuclear?**

The CSIRO GenCost report suggests that nuclear is the most expensive way to meet demand for new energy needs.

**Why can't we just reduce energy usage?**

Tasmania will need more electricity to supply population growth, support electrification of transport and industry, and attract new industries. It is not possible to maintain, let alone reduce energy usage whilst still supporting industry and population growth in Tasmania. For more information, please see our [fact sheet](#) on why Tasmania needs more energy.

**Why not Whaleback ridge?**

Whaleback Ridge is a proposed 3000MW wind farm. Its scale is very large and is in the early stages of its life cycle. While it is in a remote part of the state, its scale will require significant new transmission that will run through to the North West of Tasmania. It is one of many projects around the state all seeking to be built, but none have yet committed to construction.

**Why no offshore?**

There are offshore wind projects currently being considered in Bass Strait. These projects are generally in very early stages of development. When they are finally built, the offshore wind projects would likely play a role in large scale industrial development, like hydrogen, or the expansion of existing major industrial customers.

## Is this a done deal?

No, this is not a done deal. The North West REZ is open for consultation until Wednesday 11 September 2024. We will use all the feedback from this consultation to help shape what the final REZ will look like. Community needs are important, and we want to shape the REZ in a way that works for everyone. Furthermore, we are consulting on the Community Benefit Sharing Framework which will determine how funds are redistributed back into the community.

## What is the benefit of REZ to Tasmania?

REZ will benefit Tasmania by coordinating new wind and transmission projects in areas of abundant renewable resources, while protecting environmental, cultural and social values. Without a REZ, these projects are likely to still go ahead using the usual approval processes. This would be a less coordinated approach and would likely see more transmission lines running across the state as they would be developed on a project by project basis.

## Does a coal plant produce less carbon dioxide than the life cycle of equivalent solar panels?

No. Even when the emissions from sourcing the materials for solar panels are considered, they still produce far less CO<sub>2</sub> than a coal plant. See the table below from the Intergovernmental Panel on Climate Change.

## What will the concentration of wind turbines be?

There are only 2 proposed wind farms at the moment for the North West REZ, and the transmission infrastructure will only be able support 1 or 2 more wind farms. Both projects are in their early planning stages, so we do not know the exact number of turbines. However, based on the capacity of the proposed transmission infrastructure we would expect to have between 100 and 200 turbines in the REZ depending upon the size of the individual turbines.

## What happens if I need to move house?

No one will be forced to leave their home.

## How does the Electricity Wayleaves and Easements Act apply to REZ?

The Electricity Wayleaves and Easements Act 2000 is a means for registering wayleaves (temporary permissions) or easements (permanent rights) where there is infrastructure already in place but with no corresponding access right for the infrastructure owner. The Act grants electricity entities the right to access land to maintain, repair, or upgrade pre-existing electricity infrastructure. Since this Act specifically applies to existing infrastructure, it is not relevant for REZ, which aims to build new infrastructure.

**Table A.II.4** | Aggregated results of literature review of LCAs of GHG emissions from electricity generation technologies as displayed in Figure 9.8 (g CO<sub>2</sub>eq/kWh).

| Values          | Bio-power | Solar |     | Geothermal Energy | Hydropower | Ocean Energy | Wind Energy | Nuclear Energy | Natural Gas | Oil  | Coal |
|-----------------|-----------|-------|-----|-------------------|------------|--------------|-------------|----------------|-------------|------|------|
|                 |           | PV    | CSP |                   |            |              |             |                |             |      |      |
| Minimum         | -633      | 5     | 7   | 6                 | 0          | 2            | 2           | 1              | 290         | 510  | 675  |
| 25th percentile | 360       | 29    | 14  | 20                | 3          | 6            | 8           | 8              | 422         | 722  | 877  |
| 50th percentile | 18        | 46    | 22  | 45                | 4          | 8            | 12          | 16             | 469         | 840  | 1001 |
| 75th percentile | 37        | 80    | 32  | 57                | 7          | 9            | 20          | 45             | 548         | 907  | 1130 |
| Maximum         | 75        | 217   | 89  | 79                | 43         | 23           | 81          | 220            | 930         | 1170 | 1689 |
| CCS min         | -1368     |       |     |                   |            |              |             |                | 65          |      | 98   |
| CCS max         | -594      |       |     |                   |            |              |             |                | 245         |      | 396  |

Note: CCS = Carbon capture and storage, PV = Photovoltaic, CSP = Concentrating solar power.

'Figure 9.8' that is referred to in the above table can be found on p.732 of the ['IPCC Special Report on Renewable Energy Sources and Climate Change Mitigation'](#).