



INQUIRY: IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND
REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

Portfolio Committee No. 4 – Regional NSW

Answers to Questions on Notice

Hearing: 13 March 2025

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1. Hunter offshore wind zone – Transcript page 4

Ms ABIGAIL BOYD: Good morning to all of you. I will start with you, Mr Albury. Living on the Central Coast, I get a lot of questions about the Hunter offshore wind zone and how it will be connected into the Hunter-Central Coast REZ. Are you able to give us an update on where the planning is with that and particularly where the best place would be to connect between an eventual offshore wind project and the rest of the energy infrastructure?

ASH ALBURY: Ms Boyd, I'd have to take that question on notice because that particular offshore wind project is something that's being run through the Federal Government and I'm not a technical expert in that area. I'd be happy to take that on notice and come back to you with the answer.

Ms ABIGAIL BOYD: That would be very useful. I guess the impact for us in the State, though, is where exactly those transmission lines would go.

ASH ALBURY: Ah, yes.

Ms ABIGAIL BOYD: When you look at the geography of the Central Coast and the Hunter, it does get a little tricky. Has thought been given to some planning ahead of time?

ASH ALBURY: Yes. What I will say is that the Hunter-Central Coast Renewable Energy Zone is more of a brownfield renewable energy zone. Rather than creating massive transmission lines and upgrading the transmission lines, we're trying to upgrade the network in certain locations. The benefit of that is that we're really piggybacking off that existing infrastructure and moving forward. As I said, in terms of the Hunter-Central Coast offshore wind farm process, I'll have to get back to you with an answer for that. But I'm sure our technical experts have been looking at that process.

Ms ABIGAIL BOYD: You may need to take this on notice. When you look at the likely plan for where that transmission line would go from the offshore wind project into the REZ, it does seem to cut across the Hunter Gas Pipeline project. Has it been considered from that perspective within your remit?

ASH ALBURY: Once again, I'll take that on notice. But I do recognise what you're saying.

Answer:

The Hunter offshore wind zone is located in Commonwealth waters and its licencing regime is being managed by the Australian Government. Further information can be found at <https://www.dcceew.gov.au/about/news/hunter-offshore-wind-zone-final-decision-feasibility-licences> and <https://minister.dcceew.gov.au/bowen/media-releases/joint-media-release-next-steps-securing-western-australias-offshore-wind-future>.

If awarded by the Australian Government, feasibility licence holders are required to conduct detailed studies to determine the impacts of the connecting infrastructure and propose appropriate mitigation measures for consideration under the NSW and Commonwealth regulatory regimes.

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The Energy Corporation of NSW (EnergyCo) has undertaken some preliminary high-level analysis on potential connection points to the onshore electricity network in the Hunter-Central Coast region.

In general, offshore wind projects would likely connect to onshore electricity network infrastructure near to the coast via subsea cables that cross state waters and underground cables on land.

2. Prospect of a Central-West Orana REZ capacity increase – Transcript page 8

The Hon. STEPHEN LAWRENCE: Would you be able to take on notice to provide to the Committee the information from EnergyCo or from government more broadly that was available at the time that the REZs were legislated for, and before December 2023, what was in the public domain about the prospect of the capacity being increased for the Central-West REZ?

LIAM RYAN: I'm happy to take that on notice. I'm also happy to give a brief outline of some of the background of what was in the public domain. Just for the Committee to understand, the concept of renewable energy zones came from the Finkel review, which was an independent review of the National Electricity Market settings in the wake of the system black event in South Australia in 2016. That review found that the lowest cost mix for meeting consumer demand in the future would be a mixture of wind, solar, gas and batteries. It recommended that the market operator produce an integrated grid plan, which has since become the Integrated System Plan that you may have heard of, to identify renewable energy zones across the NEM. That process started in 2018. The New South Wales Government at the time put in a submission to that process, calling out the potential priority energy zones in the Central West, the South West and New England. Later that year it released a Transmission Infrastructure Strategy, that identified those zones in a geographic boundary, which aren't the exact same as what's been declared but are very similar.

I've got some notes in front of me: They had contemplated up to 4.9 gigawatts in South West; 7.3 gigawatts in Central-West; and New England, 5.5 gigawatts. That's generation, not network capacity. I guess that first public statement about the renewable energy zones of 7.3 gigawatts is similar to what has actually happened with the access rights in that first round, but obviously didn't contemplate that future expansion. Then in 2019 the Government released an Electricity Strategy that called for a three gigawatt pilot renewable energy zone in the Central-West Orana, so that's where that three gigawatt figure has come from and that's what then informed the Act in the Electricity Infrastructure Investment Act. I'll need to go back and do what you asked about taking on notice what was available at the actual time in 2023, but I wanted to give you that background. I guess the numbers have shifted a number of times since the concept was first raised in 2018.

Answer:

The Central-West Orana (CWO) Renewable Energy Zone (REZ) was formally declared in November 2021 with an initial intended network capacity of 3 gigawatts (GW). Network capacity is the maximum amount of power that can be transferred from

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renewable energy generated and stored within the REZ to the NSW transmission system.

The scoping report for the transmission infrastructure, which was lodged in the planning system in September 2022, described the REZ as consisting of 'at least 3 GW of network capacity'.

In December 2023, the Minister for Energy increased the intended network capacity of the CWO REZ from 3 GW to 6 GW, noting it will initially operate at 4.5 GW. This followed a period of public consultation, in line with requirements under the *Electricity Infrastructure Investment Act 2020* (EI Act).

This increase was recommended following rigorous analysis demonstrating the need for the increased capacity including increased consumer benefits. Only minimal changes were made to the physical footprint of the planned transmission infrastructure as a result.

To reflect the network commencing operations at 4.5 GW and following consultation, EnergyCo decided on a commensurate increase in the generation connection or 'hosting' capacity from 5.84 GW to 7.7 GW. Generation capacity is the total maximum output that all connected generators, such as wind turbines and solar panels, can produce under specific conditions.

Some of this increased capacity allowed projects, that were recently awarded access rights to add battery storage technology, to deliver energy even when the wind is not blowing or the sun is not shining, with minimal changes to the footprint of the REZ.

Attachment 1 provides a timeline of public information on the network and generation capacity of the CWO REZ.

3. Biodiversity Conservation Act – Transcript page 9

The Hon. EMMA HURST: Thank you. I will have a question for Mr Riley about the Biodiversity Conservation Act as well. Before I move on to that, I wanted to ask about some of the submissions that we received that also suggested that the developers of renewable energy zones should be required to follow the regenerative techniques outlined in the Building Better Biodiversity on Solar Farms guide, which highlights those four design tools. It talks about wildlife corridors, connectivity, native grasses, ground cover, protection of creeks and habitat clusters. Is that something that the department is also addressing within the department of planning, or is that just relying again on the Biodiversity Conservation Act in regard to all of those areas?

CLAY PRESCHAW: I'd have to take on notice that specific policy reference. But again, in general, the way that we assess biodiversity impacts is under the Biodiversity Conservation Act, with the expert advice of the relevant part of government. Unfortunately, looking at the people in the room, there's no-one from that part of government here today. But if we needed to provide details on how a specific biodiversity impact was to be assessed, we could certainly do that. Perhaps just to explain the process of how a project is assessed at the State significant level, it is an integrated development assessment process. When we receive the first part of a project, being the SEARs, and every stage of the project at the department of planning,

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we then refer it to all of the expert agencies across government for which there might be a relevant area of expertise.

When it comes to wind and solar farms, particularly where there's vegetation clearing, and for any wind farm in relation to bird and bat strike, we rely quite heavily on the advice of the biodiversity arm of DCCEEW. But we also refer the projects to a number of other agencies — we're talking 10 or 15 different agencies for each project — and we need to take into account their advice in determining the merits of a project, but also in drafting up the recommended conditions. Even before we make a final decision, or before we refer to the Independent Planning Commission for a decision, we often will refer the draft conditions to the agency to ensure that those conditions are appropriately addressing the legislative requirements under that agency's expertise and all the relevant policies. In relation to the better building guideline you referred to, I'd probably have to take that on notice and seek some advice from DCCEEW as to how that's applied at the State significant level or whether there's some other guideline that's more relevant to the assessment of State significant wind and solar projects.

Answer:

The *Biodiversity Conservation Act 2016* incorporates the key elements of the Building Better Biodiversity on Solar Farms guide as they relate to biodiversity offsetting. This includes requirements for proponents to assess direct impacts on biodiversity (such as impacts to native grasses, ground cover, creeks and habitat) and indirect impacts (such as to wildlife corridors and connectivity) and take reasonable measures to avoid, minimise and then offset these impacts. These requirements are operationalised in the Biodiversity Assessment Method.

4. Biodiversity Conservation Act review – Transcript pages 9-10

The Hon. EMMA HURST: Thank you. We also received a significant number of submissions that did raise the Biodiversity Conservation Act, and I'm hoping that Mr Liam Ryan might be able to answer a couple of questions in regard to that Act. We know that the 2023 review of the Act by Ken Henry identified some quite major shortcomings and recommended a suite of reforms to ensure that we have nature positive development in New South Wales that does actually protect animals and the environment. Do you have any information you can provide the Committee as an update on where we're up to in reforming the Biodiversity Conservation Act? Obviously we have many developments in the pipeline, and there's a lot of public concern in regards to the issues with that Act not actually going far enough to be able to protect wildlife. Do we have any updates on the next tranches of the review of that Act?

LIAM RYAN: Ms Hurst, sorry, I'm not able to give you that update. I'm from a different area of the department and unfortunately I didn't prepare for that question. What I would say is that we are working closely with the conservation side of our department on renewable energy zones. They are developing conservation investment strategies for each of the renewable energy zones to guide investments in conservation in each of those five REZs. In addition to that, they are planning to enter into strategic offset delivery agreements with each of the proponents in those zones, to make the offset process more efficient and lead to better biodiversity outcomes at lower cost. I apologise that I can't answer your question, though. I'll take that on notice.

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The Hon. EMMA HURST: Thank you. I did wonder if you'd be able to, but I thought I'd put it out there anyway, so I appreciate that. I have a couple of last questions in regard to housing and some of the concerns that have come forward. We have some concerns from Local Government NSW about the impact of fly-in fly-out and drive-in drive-out workers on local communities and infrastructure. They'd like to see a focus on hiring local employees to work on the construction operations of these projects wherever possible. Is this something where work is being done to prioritise local employment in renewable energy zones?

Answer:

In mid-2024, the NSW Government released the NSW Plan for Nature, which is the government's response to the statutory reviews of the *Biodiversity Conservation Act 2016* (BC Act) and the native vegetation provisions of the *Local Land Services Act 2013*.

The NSW Plan for Nature commits to amending and strengthening the BC Act to support the Government's ambition to set nature in NSW on a path to recovery. In late 2024, amendments were made to the Act to substantially improve the operation of the Biodiversity Offsets Scheme. This included introducing a requirement for the scheme to transition to net positive biodiversity outcomes over time and strengthening application of the 'avoid, minimise, offset' hierarchy.

Targeted consultation is underway to identify options to revise the objects and operative provisions of the BC Act. Proposed amendments will seek to address the findings of the statutory review and support delivery of the NSW Plan for Nature, including to strengthen protections for native wildlife and its habitat.

5. Complaints from landholders – Transcript page 13

The CHAIR: I might take over here. We've only got 10 minutes left. Mr Albury, in your opening statement, you talked about the number of complaints that EWON has received since it has been established. I want to go back in time. Can you tell me, perhaps on notice, the number of complaints EnergyCo has received regarding its engagement with landholders over projects? Whether you do it via a REZ basis or a project basis, I'll leave that up to you in terms of what data you have available.

ASH ALBURY: I'll have to take that on notice, but I am happy to do that.

Answer:

EnergyCo has received 72 landowner-related complaints from 29 November 2022 through to 2 June 2025. The table below provides data the complaints including those received via the Energy and Water Ombudsman NSW (EWON).

| Year | Central-West Orana REZ | New England REZ | Hunter Transmission Project | South West REZ | Total |
|------|------------------------|-----------------|-----------------------------|----------------|-------|
| 2022 | 2 | 0 | 0 | 0 | 2 |
| 2023 | 14 | 18 | 1 | 0 | 33 |
| 2024 | 15 | 8 | 8 | 1 | 32 |
| 2025 | 4 (2 via EWON) | 1 (via EWON) | 0 | 0 | 5 |

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| | | | | | |
|-------|----|----|---|---|----|
| Total | 35 | 27 | 9 | 1 | 72 |
|-------|----|----|---|---|----|

6. Socio-economic impact assessment for REZs – Transcript page 14

The CHAIR: What assessments have been done on the long-term socio-economic impacts of the REZs and their associated projects on local communities, particularly in terms of job displacement versus job creation? Do we have an assessment on that? Can you table it for the Committee?

LIAM RYAN: In terms of each renewable energy zone, when the Electricity Infrastructure Roadmap was first released, we had estimates of the jobs that would be required in the construction and then operation and maintenance of the transmission and wind and solar projects. Since then, a couple of times University of Technology Sydney has released its forecasts of those employment figures, although they're not broken down by each renewable energy zone. The department and EnergyCo are completing an update, because we haven't done that analysis and now we have more information about the number of projects in each renewable energy zone. We're in the process of updating our estimates from the year 2020.

The CHAIR: Does that study include things like cultural impacts in terms of changes of land use, job dispersal versus job replacement and the impact on farming communities?

LIAM RYAN: No. The figures I just referred to are about the jobs involved in the construction. I think they include some induced employment as well, but it's not a broader socio-economic impact assessment. It doesn't contemplate cultural impacts.

The CHAIR: Is the Government planning on doing a broader socio-economic impact assessment or are we not going to worry about that? What's the policy of the Government?

LIAM RYAN: I might need to take that question on notice.

The CHAIR: Sure.

LIAM RYAN: I'm not aware of a study being commissioned like what you've described, but I'll have to get back to you on that.

Answer:

Socio-economic impacts are currently evaluated under the *Environmental Planning and Assessment Act 1979* for each energy infrastructure project.

Social and economic impact, land use and agricultural assessments are undertaken as part of the Environmental Impact Statement (EIS) for state significant infrastructure projects for renewable energy zone network infrastructure (the transmission lines) and state significant development applications for solar and wind project. The EIS is made publicly available for consultation and assessed by the NSW Department of Planning, Housing and Infrastructure which makes a recommendation to the consent authority to approve or refuse consent and whether any approval is subject to conditions.

In response to feedback from local communities and councils in some renewable energy zones, EnergyCo has also investigated cumulative impacts across transmission and generation projects, or has these studies underway. These studies will inform the

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NSW Government’s responses to address cumulative issues from development in renewable energy zones.

EnergyCo continues to receive feedback from local communities and councils on the progress and outcomes from this work. EnergyCo will continue to review and refine its approach to address issues that are common across projects in a renewable energy zone.

Attachment 1 – response to Question on Notice No. 2

| | 2018 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
|--|---|---|---|---|--|--|---|
| Contemplated Transfer capacity (network capacity) | Not noted | 3 GW | 3 GW | Options including 3 GW, 4.5 GW and 6GW | 6 GW (with initial intending network capacity of 4.5 GW) | 6 GW (with initial intending network capacity of 4.5 GW) | 6 GW (with initial intending network capacity of 4.5 GW) |
| Hosting/ connecting capacity (how much generation can be hosted by the transfer capacity) | 7.3 GW | Not noted | Not noted | 5.84 GW | 5.84 GW | 5.84 GW | 7.7 GW |
| Source | NSW Transmission Infrastructure Strategy https://www.energy.nsw.gov.au/sites/default/files/2022-08/2018_11_NSW_TransmissionInfrastructureStrategy.pdf | NSW Electricity Infrastructure Roadmap (Overview) www.energy.nsw.gov.au/sites/default/files/2022-08/NSW%20Electricity%20Infrastructure%20Roadmap%20-%20Overview_1.pdf And in the EII Act 2020 s23(3) | CWO REZ Declaration www.energy.nsw.gov.au/sites/default/files/2022-08/central-west-orana-rez-declaration-draft.pdf | CWO REZ Draft Access Scheme Declaration www.energy.nsw.gov.au/sites/default/files/2022-08/draft-cwo-rez-access-scheme-declaration.pdf And in the final scheme declaration https://gazette.nsw.gov.au/gazette/2024/4/2024-116.pdf Internal: Network options provided to AEMO Services for economic modelling to support the 2023 Network Infrastructure Strategy. | Renewable Energy Zone (CWO) Order 2023 www.energyco.nsw.gov.au/sites/default/files/2023-08/cwo-rez-proposed-declaration-amendment-consultation.pdf | Hosting capacity was not changed to match the increase in transfer capacity in amended Access scheme declaration. https://gazette.nsw.gov.au/gazette/2024/4/2024-116.pdf | CWO REZ Headroom assessment - final decision www.energyco.nsw.gov.au/sites/default/files/2025-01/20251601_Central-West%20Orana%20Renewable%20Energy%20Zone%20Final%20Headroom%20Decision.pdf Was used to increase the hosting capacity to match the new transfer capacity. |