

# Response to questions on notice & supplementary questions from parliamentary inquiry into the impacts of REZs

---

### Question on Notice Page 26, 27

- **WILL RAYWARD-SMITH:** I suppose the nine gigawatts that I mentioned—quite often a project may be of the scale of 500 megawatts, even though projects in the State are 100 megawatts. In terms of the land area associated with those projects, there are some statistics that the Net Zero Commission, together with the agriculture commission, has on hand. We can provide those following today. I'm happy take that on notice. With regards to the nine gigawatts, we know nine gigawatts is still required. Only four gigawatts are currently committed, according to the latest update that we have, which is from the energy data and analytics team within the Department of Climate Change, Energy, Environment and Water, who is tracking the status of those different projects.

There's also the storage capacity target of 16 gigawatt hours by 2030 and an additional 12 gigawatt hours by 2034. We know that outcomes from the three long-duration storage LTESAs, the long-term energy service agreements, under the road map are expected to contribute roughly 40 per cent of the 2030 minimum objective, and more than 65 per cent towards the 2034 minimum objective. We have the 850-megawatt Waratah Super Battery, expected to be operating this year, which will be a real milestone in storage capacity. And then, very recently—just within the last few days—AEMO Services have released their latest competitive tender for long-duration storage, which is under the road map. That's aimed to contribute roughly eight gigawatt hours of storage capacity.

- **The CHAIR:** How much of that is actually guaranteed or locked in? Do you look at AEMO's fuel-mix dashboard when you're doing your calculations? I looked at it yesterday afternoon and 0 per cent was generated from solar and 5 per cent wind. If we're talking about locked-in reliability, reliable energy, are you looking at that dashboard and running the calculations? Those figures don't really paint a good picture in terms of energy reliability across the State, if that's what we're pulling out.

Response:

### Land requirements

The NSW Agricultural Commissioner's 2022 report *Renewable energy generation and agriculture in NSW's rural landscape and economy – growth sectors on a complementary path*<sup>1</sup> estimates that

---

<sup>1</sup> [https://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0005/1449860/210395fd12ea058abf3b424f4370204d64e105bb.pdf](https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0005/1449860/210395fd12ea058abf3b424f4370204d64e105bb.pdf)

approximately 54,500 hectares of land area is needed to support the solar and wind energy projects required to achieve AEMO's electricity generation targets by 2051. This is equivalent to 0.07% of the total area of land in NSW or 0.09% of land classified as rural land use. If a hydrogen production scenario is included in the consideration, the required land increases to 80,700 hectares.

#### Data sources

The Commission utilises a range of data sources to understand the generation mix in the grid. These include data provided by AEMO on their NEM dashboard, as well as OpenNEM and data from the Australian PV Institute.