

Select Committee on Energy Planning and Regulation in Australia
Answers to questions on notice
Climate Change, Energy, the Environment and Water Portfolio

Inquiry: Select Committee on Energy Planning and Regulation in Australia
Question No: IQ24-000177
Hearing Date: 29 October 2024
Division/Agency: Electricity Division
Topic: Installation of solar panels and wind turbines
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Senator Canavan asked:

Senator CANAVAN: ... The minister, a couple of years ago, said we need to build and install 22,000 solar panels every day and 40 new turbines a month. Over the last 12 months, how many solar panels have we installed a day and how many wind turbines on average each month have we installed?

Mr Duggan: I don't know if we've got that information at our fingertips. We might have to take that one on notice.

Senator CANAVAN: Why aren't we tracking that? The minister gave that speech. We're not tracking that at all?

Mr Duggan: No.

Ms Gowans: We are tracking that. We will have that information ready for estimates because we would be expecting that we might be asked that. Sorry, we are just a little bit behind schedule in the market body inquiry.

Senator CANAVAN: Alright. We'll do that next week. But maybe someone could ask while we're here.

Answer:

The Minister for Climate Change and Energy said in a speech on 24 September 2022 that Australia needed to install 22,000 new solar panels a day and 40 wind turbines a month to reach the target of 82% renewable electricity.

The minister used this metric to describe the scope of the energy transition rather than the optimal pathway towards the 82% target. That pathway — as outlined, for example, in the Australian Energy Market Operator's (AEMO's) Integrated System Plan (ISP) — is non-linear. AEMO also changes its ISP projections as it receives new information, meaning metrics calculated in 2022 are less relevant today.

Utility-scale solar and wind

Between 1 May 2022 and 10 December 2024

- 74 solar projects started generating nationally, hosting 10,226,900 solar panels with an average panel capacity of 304 watts and total capacity of 3,113 megawatts.
- 16 wind projects started generating nationally, hosting 599 wind turbines with an average turbine capacity of 4.6 megawatts and total capacity of 2,736 megawatts.
- These estimates are sourced from Rystad Energy. Its project start dates are estimates.

Small scale solar

Between 1 May 2022 and 31 October 2024

- At least 801,239 small-scale solar systems have been installed, with an average size of 9.3 kilowatts and total capacity of 7,482 megawatts. Assuming rooftop solar panels are 400 watts in size, this is equivalent to 18,705,908 solar panels being installed.
- These estimates are sourced from the Clean Energy Regulator's small-scale installation data. These data lag actual installation counts.