

## E11 - 2024-04-05 WPQs - Response to 4318 4320 4324

In January 2024, the Electricity Authority released its '*Generation Investment Survey*' which provides a comprehensive analysis of investment in new renewable generation projects. This survey does not identify projects by consent status. Rather, projects are categorised into three stage groups

categorises projects into three groups:

**Committed** – projects on which an unconditional final investment decision have been made.

**Actively pursued** – projects which have a realistic probability of proceeding as a site has been identified by a developer and there has been active consideration of other requirements such as consent, financing, connection to the grid, etc.

**Other** – projects which are unlikely to be built in the next few years.

The following projects have been identified in each of these categories:

### Committed

1.5GW of committed generation has been identified by the survey and is publicly available information. Projects with a total capacity of 0.85GW are listed below.

In addition to these projects there is a further 0.6GW of capacity which is committed. This data aggregated because the stage of the developments had not been publicly announced at the time of the survey.

| Name                             | Location     | Type         | Capacity (MW) |
|----------------------------------|--------------|--------------|---------------|
| Harapaki                         | North Island | Onshore wind | 176           |
| Tauhara                          | North Island | Geothermal   | 174           |
| Turitea South                    | South Island | Onshore wind | 103           |
| Ruakaka battery                  | South Island | Storage      | 100           |
| Te Huka 3                        | South Island | Geothermal   | 51.4          |
| Nga Tamariki OEC5                | North Island | Geothermal   | 47            |
| Kaiwera Downs (Stage 1)          | North Island | Onshore wind | 43            |
| Kaitaia                          | North Island | Solar        | 39            |
| Edgecumbe                        | North Island | Solar        | 35            |
| Huntly battery                   | Uncertain    | Storage      | 35            |
| Karapiro rehabilitation          | Uncertain    | Hydro        | 17            |
| Maungaturoto                     | Uncertain    | Solar        | 17            |
| Gisborne Airport                 | North Island | Solar        | 5             |
| Hydro efficiency upgrades (2023) | South Island | Hydro        | 3             |
| Hydro efficiency upgrades (2025) | North Island | Hydro        | 3             |
| Hydro efficiency upgrades (2026) | North Island | Hydro        | 3             |
| Waiuku (Auckland)                | North Island | Solar        | 2             |

## Actively pursued

18.6GW of actively pursued generation has been identified by the survey and is publicly available information. Projects with a total capacity of 14.8GW are listed below.

In addition to these projects there is a further 3.8GW of capacity which is actively pursued. This data aggregated because the stage of the developments had not been publicly announced at the time of the survey.

| Name                            | Location     | Type          | Capacity (MW) |
|---------------------------------|--------------|---------------|---------------|
| Taranaki (stage 1)              | North Island | Offshore wind | 1000          |
| Port Waikato offshore wind      | North Island | Offshore wind | 1000          |
| New Plymouth offshore wind      | North Island | Offshore wind | 1000          |
| South Taranaki offshore wind    | North Island | Offshore wind | 900           |
| Waikato offshore wind (stage 1) | North Island | Offshore wind | 810           |
| South Taranaki offshore wind    | North Island | Offshore wind | 810           |
| North Island offshore wind      | North Island | Offshore wind | 750           |
| Guys Road Solar and BESS        | South Island | Solar         | 600           |
| 150 MW Solar Farm North Rakaia  | South Island | Solar         | 450           |
| Auckland solar                  | North Island | Solar         | 350           |
| Southland wind farm             | South Island | Onshore wind  | 300           |
| Taranaki wind                   | North Island | Onshore wind  | 300           |
| Kaihiku/Lochindorb              | South Island | Onshore wind  | 240           |
| Huriwaka wind                   | North Island | Onshore wind  | 230           |
| Puketoi                         | North Island | Onshore wind  | 228           |
| Manawatu wind                   | North Island | Onshore wind  | 200           |
| Manawatu solar                  | North Island | Solar         | 200           |
| Waerenga                        | North Island | Solar         | 190           |
| Kaiwera Downs (Stage 2)         | South Island | Onshore wind  | 185           |
| GeoFuture                       | North Island | Geothermal    | 170           |
| Kaimai wind farm                | North Island | Onshore wind  | 168           |
| Kowhai Park                     | South Island | Solar         | 150           |
| Glorit                          | North Island | Solar         | 150           |
| Taranaki solar                  | North Island | Solar         | 150           |
| Rangitāiki (stage 1)            | North Island | Solar         | 150           |
| Rangitāiki (stage 2)            | North Island | Solar         | 150           |
| Tauhei                          | North Island | Solar         | 147           |
| Rangiriri                       | North Island | Solar         | 146           |
| Greytown                        | North Island | Solar         | 146           |
| Waiterimu                       | North Island | Solar         | 140           |
| Carterton                       | North Island | Solar         | 133           |
| Marton                          | North Island | Solar         | 130           |
| Swannoa solar                   | South Island | Solar         | 130           |
| Ruakaka solar                   | North Island | Solar         | 120           |
| Edgecumbe                       | North Island | Solar         | 115           |
| Waipara                         | South Island | Solar         | 113           |
| Battery 1                       | North Island | Storage       | 100           |
| Greytown                        | North Island | Solar         | 100           |
| Karioi (Ruapehu)                | North Island | Solar         | 100           |
| Manawatu battery                | North Island | Storage       | 100           |

|                                 |              |              |      |
|---------------------------------|--------------|--------------|------|
| Rangitāiki (stage 3)            | North Island | Solar        | 100  |
| Waikato solar                   | North Island | Solar        | 100  |
| Hawkes Bay solar                | North Island | Solar        | 100  |
| Solar plus BESS at Masterton    | North Island | Solar        | 100  |
| Solar + BESS Kimberly           | South Island | Solar        | 100  |
| Mt Cass                         | South Island | Onshore wind | 95   |
| Opunake                         | North Island | Solar        | 94   |
| Mt Munro wind                   | North Island | Onshore wind | 90   |
| Opunake                         | North Island | Solar        | 86   |
| Kikiwa                          | South Island | Solar        | 83   |
| Te Rere Hau Repower             | North Island | Onshore wind | 80   |
| Waiuku                          | North Island | Onshore wind | 80   |
| Pahiatua wind farm              | North Island | Onshore wind | 77   |
| Kaiwaikawe                      | North Island | Onshore wind | 74   |
| Marton                          | North Island | Solar        | 65   |
| Dannevirke solar & BESS         | North Island | Solar        | 65   |
| Dargaville                      | North Island | Solar        | 60   |
| Tararua repowering              | North Island | Onshore wind | 60   |
| Taumatotara wind farm (stage 2) | North Island | Onshore wind | 60   |
| Waitara                         | North Island | Solar        | 59   |
| Waiotape                        | North Island | Solar        | 52   |
| Lauriston                       | South Island | Solar        | 47   |
| Tikokino (Hawkes Bay)           | North Island | Solar        | 43   |
| Te Rere Hau Extension           | North Island | Onshore wind | 37.8 |
| Taheke/Rotoiti                  | North Island | Geothermal   | 35   |
| Jericho                         | South Island | Onshore wind | 35   |
| Marton                          | North Island | Solar        | 33   |
| Whitianga                       | North Island | Solar        | 33   |
| Maraetai I rehabilitation       | North Island | Hydro        | 32.5 |
| Three Streams (Kaponga)         | North Island | Solar        | 32   |
| Skinner Road (Stratford)        | North Island | Solar        | 32   |
| Taumatotara wind farm (stage 1) | North Island | Onshore wind | 32   |
| Ngawha stage 3                  | North Island | Geothermal   | 32   |
| Argyle solar                    | South Island | Solar        | 28   |
| Solar at Dannevirke             | North Island | Solar        | 25   |
| Kapuni                          | North Island | Onshore wind | 24   |
| Twin Rivers (Kaitiaia)          | North Island | Solar        | 24   |
| Tolaga Bay                      | North Island | Solar        | 20   |
| Ngawha solar                    | North Island | Solar        | 9    |
| Atiamuri rehabilitation         | North Island | Hydro        | 7.5  |

## Other

17.5GW of committed generation has been identified by the survey and is publicly available information. Projects with a total capacity of 8.7GW are listed below.

In addition to these projects there is a further 8.8GW of capacity in an early planning. This data aggregated because the stage of the developments had not been publicly announced at the time of the survey.

| Name                            | Location     | Type          | Capacity (MW) |
|---------------------------------|--------------|---------------|---------------|
| Waikato offshore wind (stage 2) | North Island | Offshore wind | 1125          |
| Tauhara (stage 2)               | North Island | Geothermal    | 85            |
| Taranaki (stage 2)              | North Island | Offshore wind | 1000          |
| McKenzie Country (x2)           | South Island | Solar         | 350           |
| Mahinerangi (Stage 2)           | South Island | Onshore wind  | 138           |
| Advanced solar options          | Uncertain    | Solar         | 1650          |
| Secured wind options            | Uncertain    | Onshore wind  | 140           |
| Advanced wind options           | Uncertain    | Onshore wind  | 1400          |
| Otorohanga peaker               | North Island | Gas           | 350           |
| Balmoral station (stage 1)      | South Island | Solar         | 12            |
| Balmoral station (stage 2)      | South Island | Solar         | 76            |
| South Taranaki onshore wind     | North Island | Onshore wind  | 216           |
| Maranga Ra                      | North Island | Solar         | 27            |
| Selwyn/Brookside                | South Island | Solar         | 160           |
| Wellington offshore wind        | North Island | Offshore wind | 1000          |
| Kinleith bioenergy              | North Island | Biofuel       | 70            |
| Project M                       | North Island | Onshore wind  | 176           |
| Waitaha                         | South Island | Hydro         | 20            |
| Solar land opportunities        | Uncertain    | Solar         | 200           |
| Huntly battery                  | North Island | Storage       | 100           |
| Castle Hill                     | North Island | Onshore wind  | 300           |
| Solar at Waipawa                | North Island | Solar         | 100           |