

2024-2025 NEM Connection Scorecard - Dec 2024

Financial year to date (FYTD) summary of connections to the National Electricity Market (NEM).

Notes:

(1) Application stage: assess the performance of the plant "as designed".

(2) "Approved Applications" have achieved NSP and AEMO approval of Generator Performance Standards (5.3.4A letter).

(3) Proponent Implementation stage: AEMO has no involvement. Proponent and NSP execute connection agreement. NSP constructs network interface. Proponent constructs plant and prepares registration application. Completion milestone is when registration package (R1) is submitted to AEMO.

(4) Registration stage: assess registration application, demonstrating performance of "as built" plant.

(5) "Approved Registrations" have received NEM registration approval from AEMO.

(6) Commissioning to Full Output stage: assess physical interaction of the plant at successive hold points to confirm alignment between modelled and tested performance.

(7) "Full Output Achieved" means plant has commenced operating at maximum rated capacity in the NEM.

(8) Alterations increasing/decreasing capacity, required to notify AEMO Registrations team.

(9) Technology type groups are as stated. Solar+(B) are projects with solar generation and battery. Other Hybrid includes projects combining multiple variable renewable generation types (e.g. Wind & Solar). Pumped hydro is included in Hydro. Other includes all other synchronous technologies beyond hydro.

(10) Typical average duration shows complete project stages within the past 12 months, and excludes projects which experienced atypical delays (e.g. construction issues or funding uncertainty), in order to provide an indicative stage duration.

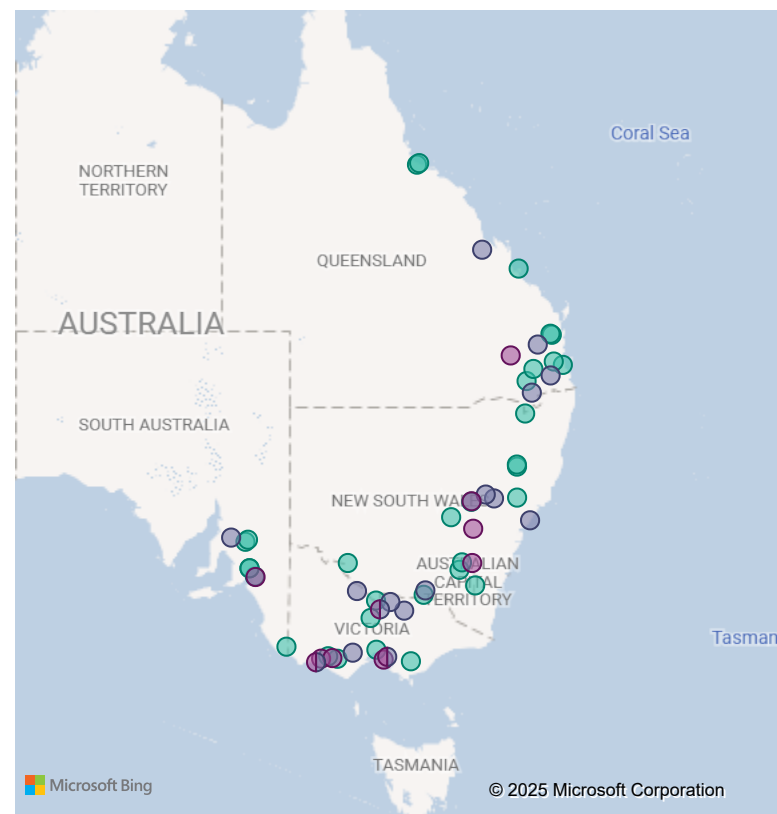
Key This value is:

- ▼ Lower than at the same time last year.
- ▲ Higher than at the same time last year.

Oct - Dec 2024 Summary [View Chart Data \(Excel\)](#)

Sixteen new connection applications were received during Oct-Dec, adding 3.6 gigawatts (GW) to the pipeline of projects. More than 50% of this capacity are batteries in Queensland. Twenty projects (4.9 GW) received application approval during Oct-Dec, bringing the FYTD total to 35 projects (7.5 GW). Eleven projects (1.7 GW) were registered during Oct-Dec, bringing the FYTD total to 21 projects (5.2 GW). Four projects (0.6 GW) commenced operating at full output during Oct-Dec, bringing the FYTD total to 11 projects (2.0 GW).

Approved ● Application ● Registration ● Full Output



Approved Applications⁽²⁾

Twenty projects completed application stage this quarter: Batteries (3,575 MW), Solar (687 MW), Solar + battery (200 MW) and Wind (478 MW)

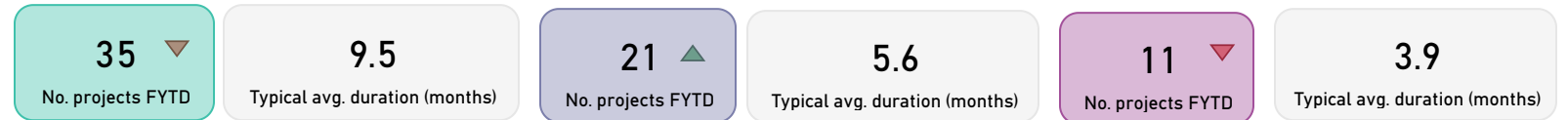
Approved Registrations⁽⁵⁾

Eleven projects were registered this quarter: Solar (831 MW), Wind (440 MW) and Batteries (350 MW). 52% of the capacity registered was in NSW.

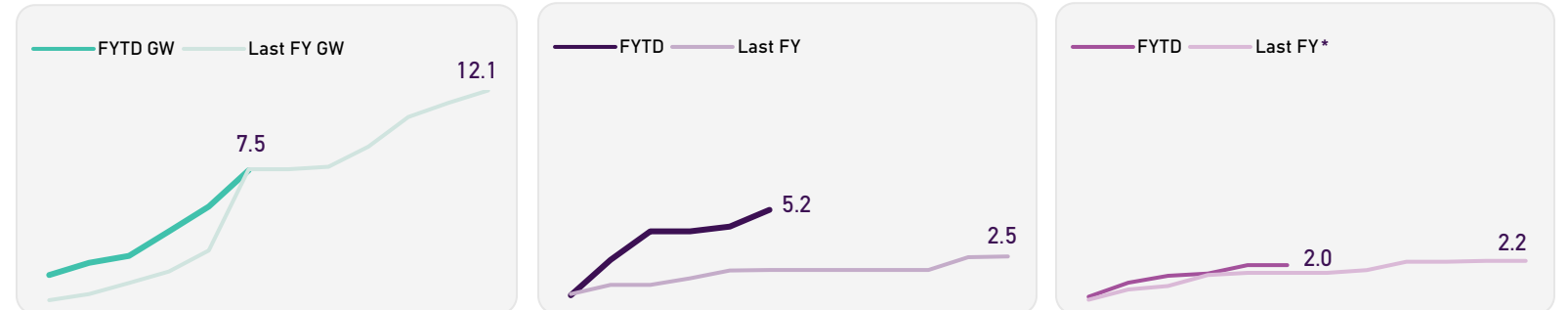
Full Output Achieved⁽⁷⁾

Four projects reached full output this quarter: Ryan Corner Wind Farm (205 MW), Rangebank BESS (200 MW), Girgarre Solar Farm (76 MW) and Tailem Bend 2 Hybrid Renewable Plant (129 MW)

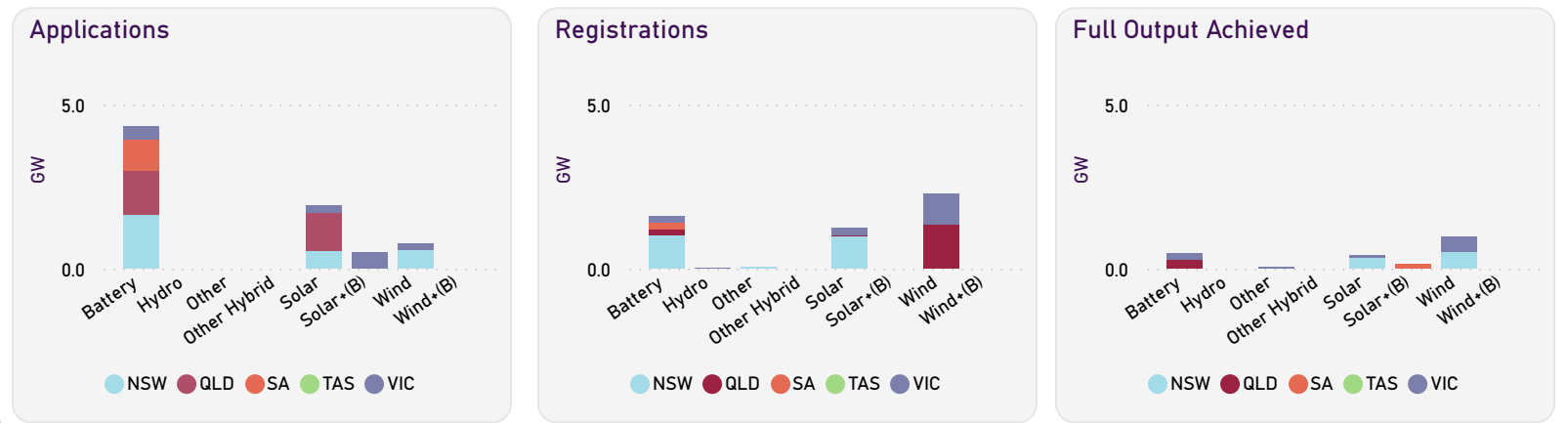
Total Projects (FYTD) and Project Duration (Typical average duration)



Approved FYTD GW by Stage in relation to last FY

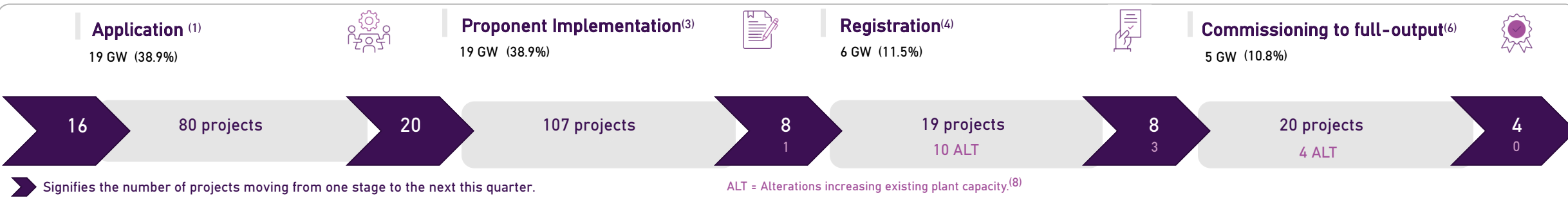


Approved FYTD GW by Technology Type⁽⁹⁾ and Stage



Connection projects underway

Learn more: [Connection Scorecard](#)



Snapshot of current projects (in-progress) in each stage as of Dec 2024

Notes:

(1) Enquiries are potential applications for connection to the NEM. Project options and feasibility are assessed.

(2) Application stage: assess the performance of the plant "as designed".

(3) Proponent Implementation stage: AEMO has no involvement. Proponent and NSP execute connection agreement. NSP constructs network interface. Proponent constructs plant and prepares registration application. Completion milestone is when registration package (R1) is submitted to AEMO.

(4) Registration stage: assess registration application, demonstrating performance of "as built" plant.

(5) Commissioning to Full Output stage: assess physical interaction of the plant at successive hold points to confirm alignment between modelled and tested performance.

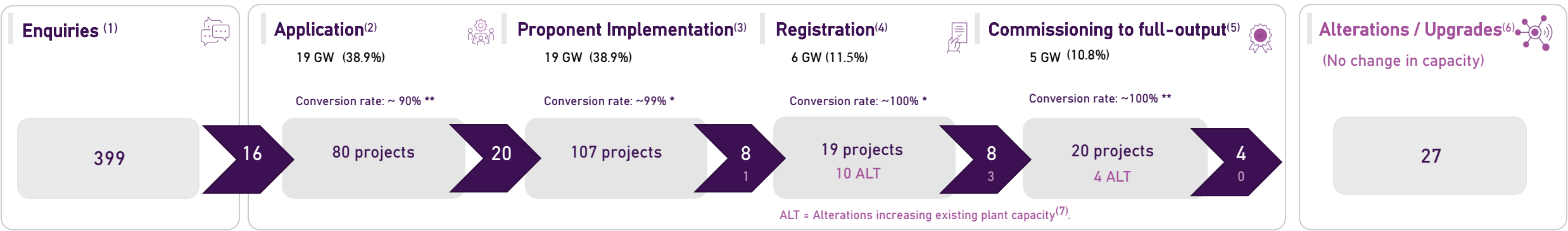
(6) Alterations /Upgrades for plant already connected to the NEM e.g. setting changes or new plant components.

(7) Alterations increasing/decreasing capacity, required to notify AEMO Registrations team.

(8) Staged commissioning approach - Proponent has planned commissioning in stages due to staged construction or to manage their resources.

▲ Higher than at the same time last year.
▼ Lower than at the same time last year.

Fig. 1 Connection projects underway - quarterly changes



➔ Signifies the number of projects moving from one stage to the next this quarter. * The conversion rate is an indicative MW % that will proceed through this stage based on historical data.

Fig. 2 - Connection Volume (GW) Trend Analysis by Stage

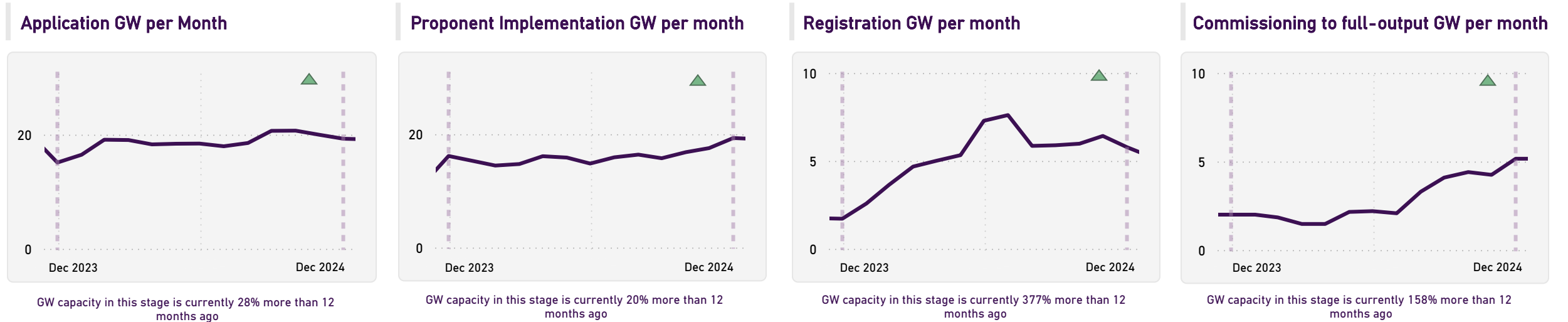
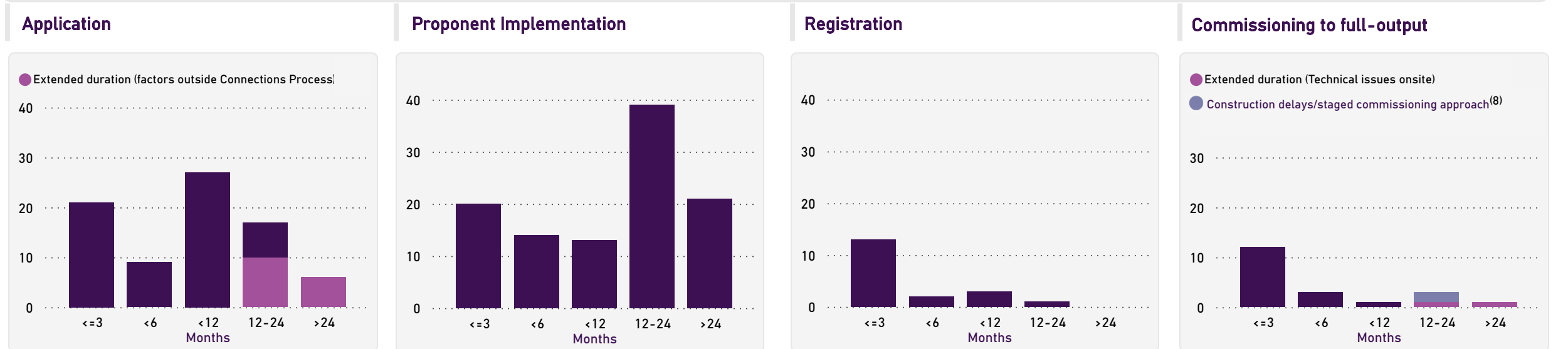


Fig. 3 - Current number of projects in each Stage by Duration



20% of projects have extended duration due to factors outside the connections process, with the remaining projects in this stage for >12 months experiencing complex design, design changes and higher need for resubmissions.

57% of projects have been in this stage for more than 12 months.

5% of projects have been in this stage for more than 12 months.

10% of projects have extended duration due to technical issues onsite. 10% of projects are undergoing construction delays/staged commissioning approach.

Snapshot of current projects (in-progress) in each stage as of Dec 2024

Notes:

(1) Technology type groups are as stated. Solar+(B) are projects with solar generation and battery. Other Hybrid includes projects combining multiple variable renewable generation types (e.g. Wind & Solar). Pumped hydro is included in Hydro. Other includes all other synchronous technologies beyond hydro.

(2) Application stage: assess the performance of the plant "as designed".

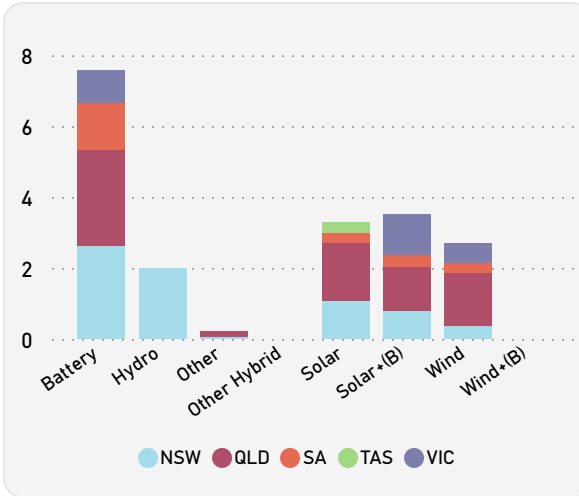
(3) Proponent Implementation stage: AEMO has no involvement. Proponent and NSP execute connection agreement. NSP constructs network interface. Proponent constructs plant and prepares registration application. Completion milestone is when registration package (R1) is submitted to AEMO.

(4) Registration stage: assess registration application, demonstrating performance of "as built" plant.

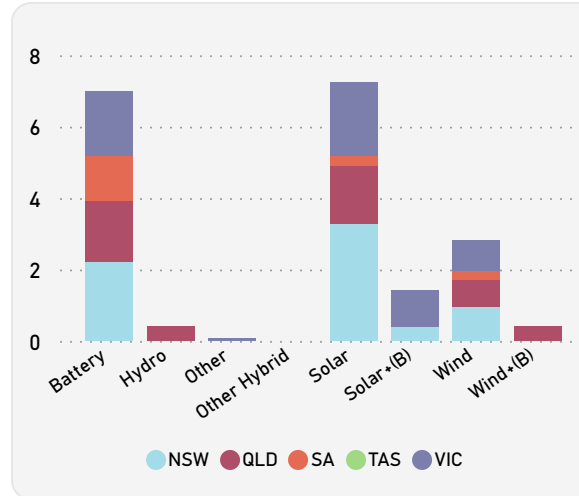
(5) Commissioning to Full Output stage: assess physical interaction of the plant at successive hold points to confirm alignment between modelled and tested performance.

Fig. 4 GW Volume in each Stage by Technology Type⁽¹⁾ and State

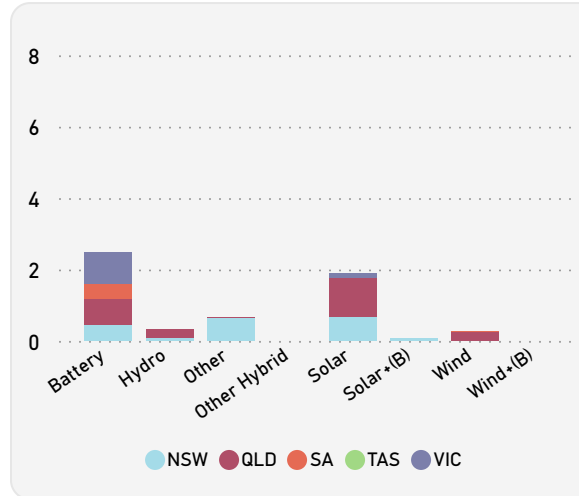
Application GW⁽²⁾



Proponent Implementation GW⁽³⁾



Registration GW⁽⁴⁾



Commissioning to full-output GW⁽⁵⁾

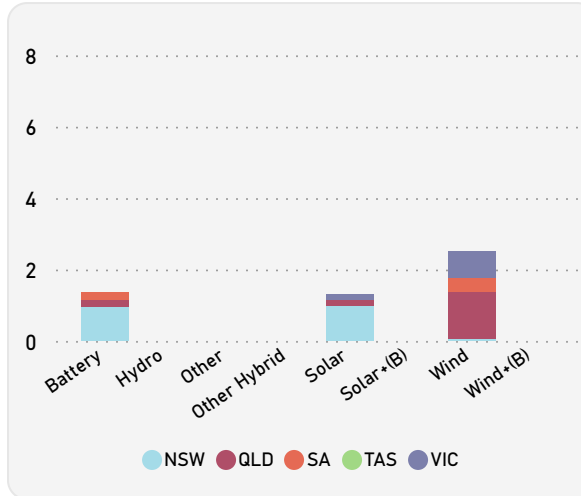
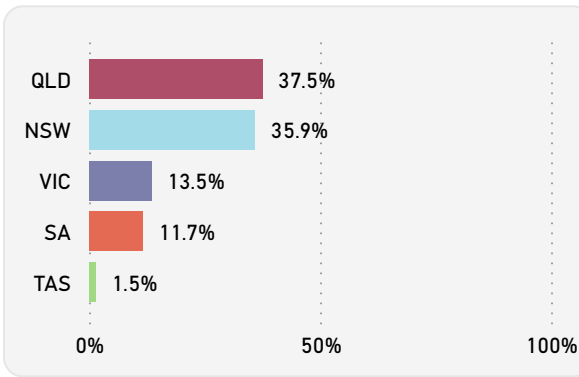
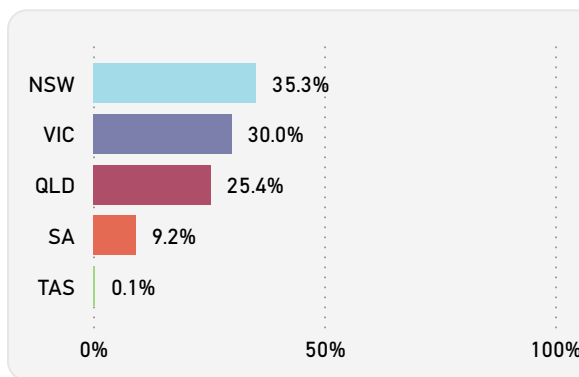


Fig. 5 GW Volume percentage by State

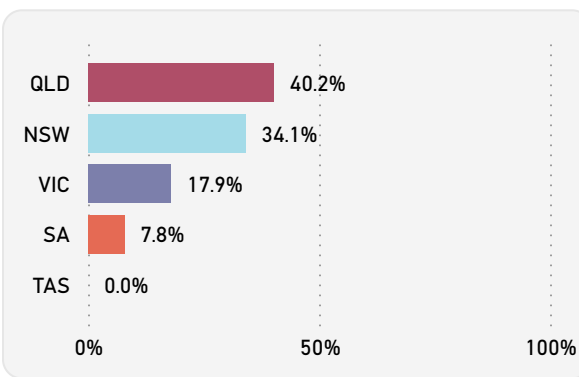
Application % of GW



Proponent Implementation % of GW



Registration % of GW



Commissioning to full-output % of GW

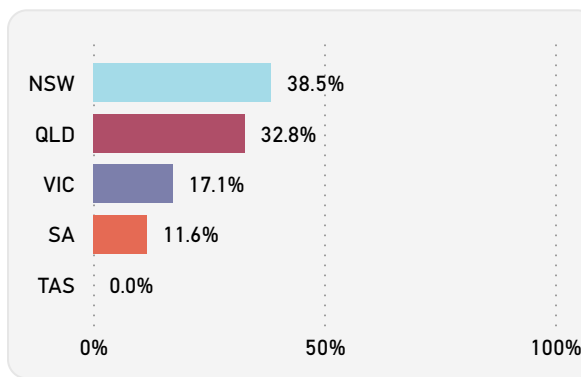
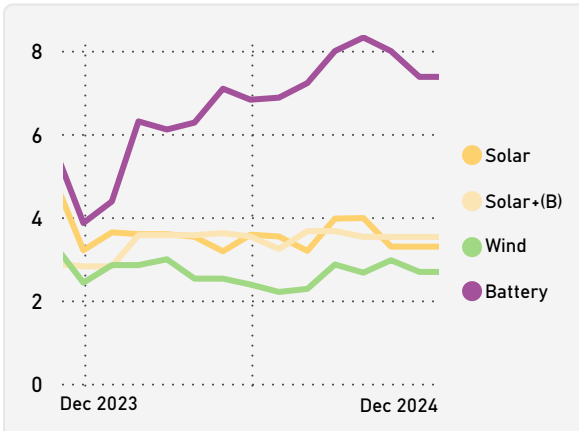
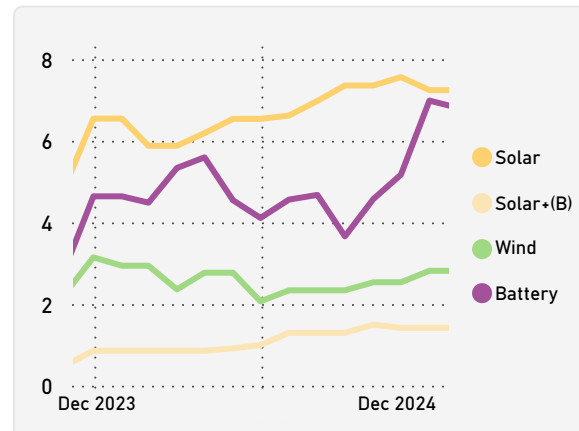


Fig. 6 GW Volume Trend Analysis by Renewable Technology

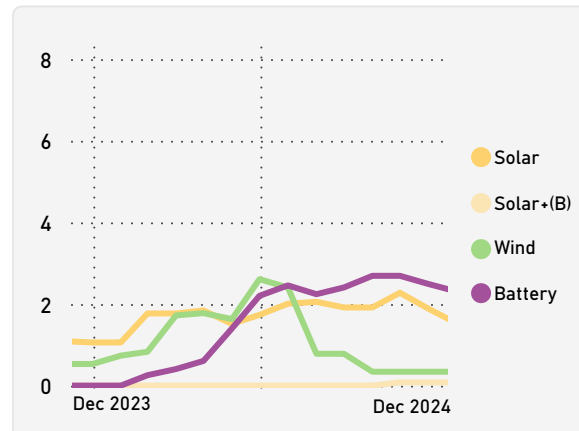
Application GW



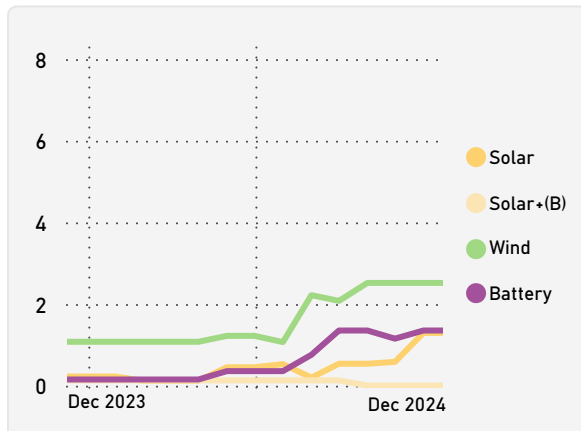
Proponent Implementation GW



Registration GW



Commissioning to full-output GW



NEM Connection Scorecard Performance

Completed milestones in AEMO Connections process, by Stage.

Notes:
 (1) Application stage assesses the performance of the plant as designed. Applications are approved when the 5.3.4A letter is issued.

(2) Registration stage: assess registration application, demonstrating performance of "as built" plant. Approved Registrations have received NEM registration approval from AEMO.

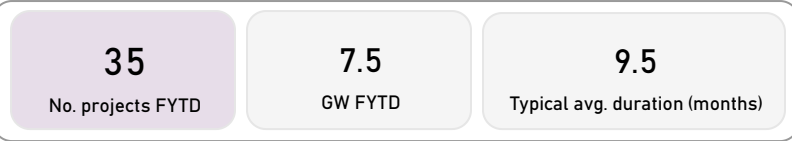
(3) Proponent Implementation stage: AEMO has no involvement. Proponent and NSP execute connection agreement. NSP constructs network interface. Proponent constructs plant and prepares registration application. Completion milestone is when registration package (R1) is submitted to AEMO.

(4) 'Full Output Achieved' means plant has commenced operating at maximum rated capacity in the NEM.

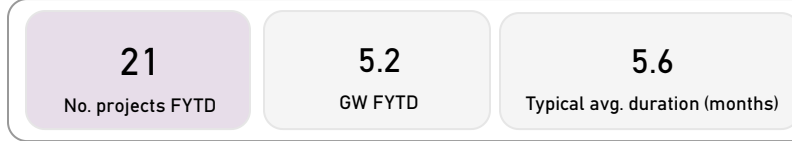
(5) Typical average duration shows complete project stages within the past 12 months, and excludes projects which experienced atypical delays (e.g. construction issues or funding uncertainty), in order to provide an indicative stage duration.

(6) For staged commissioning (typically for wind farms) construction delays due to staged delivery has been removed to more accurately reflect the duration.

Approved Applications⁽¹⁾



Approved Registrations⁽²⁾



Full MW Output Achieved⁽⁴⁾

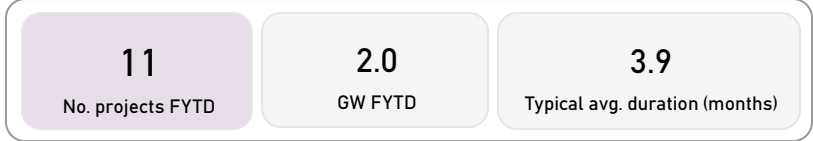
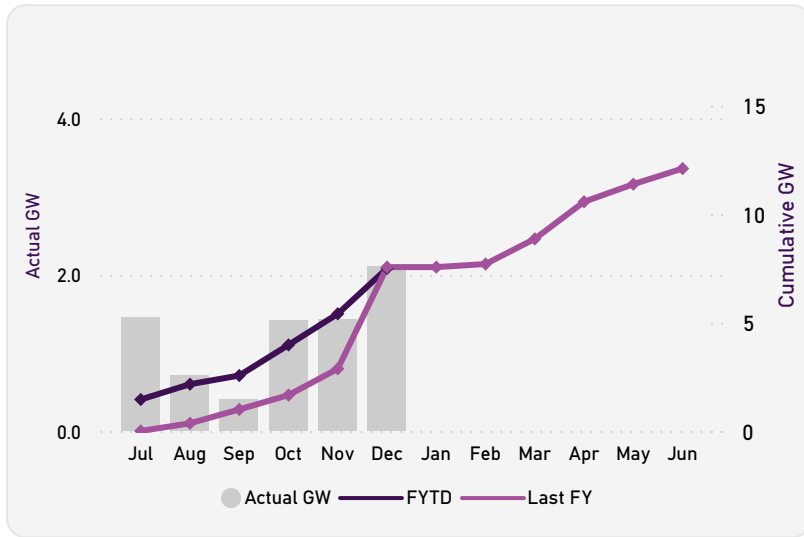


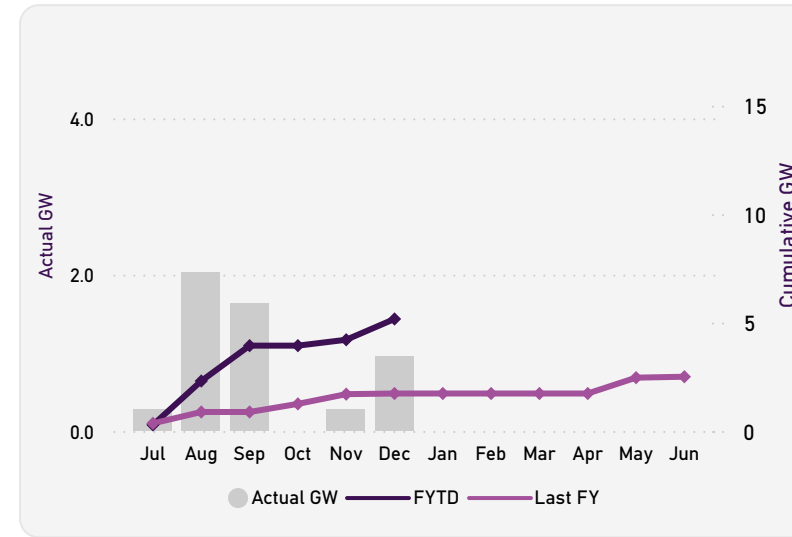
Fig. 7 Approved GW by Stage

Approved Application



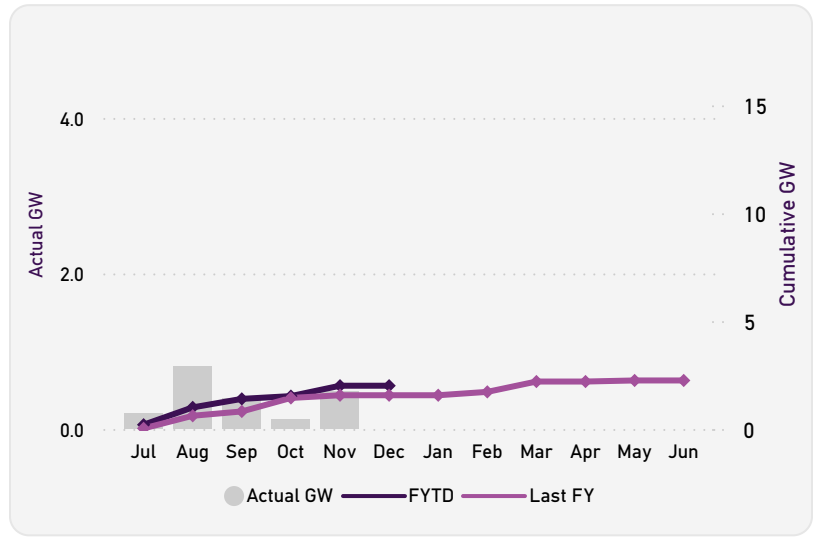
The latest cumulative GW capacity for Dec 2024 is 1% less than the same time last year

Approved Registration



The latest cumulative GW capacity for Dec 2024 is 199% more than the same time last year

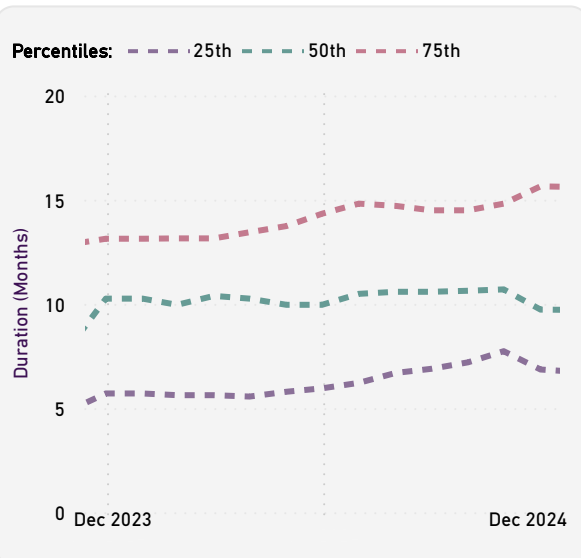
Full Output Achieved



The latest cumulative GW capacity for Dec 2024 is 28% more than the same time last year

Fig. 8 Project Stage Duration (Months) Trend Analysis

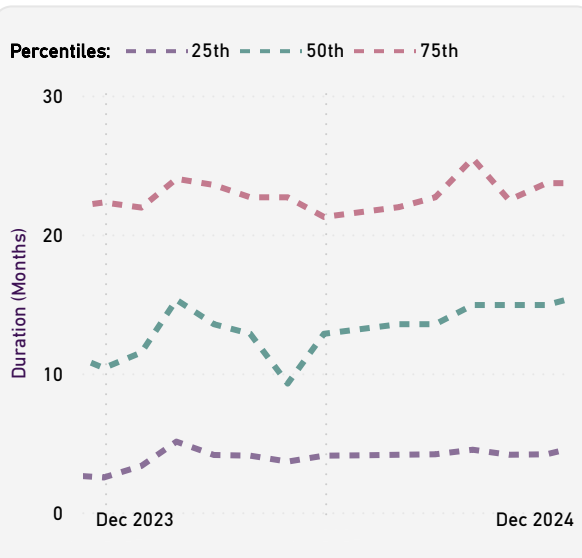
Approved Application



75% of the projects took 15.6 months or less to complete this stage.
 25% of projects took 6.9 months or less to complete this stage.

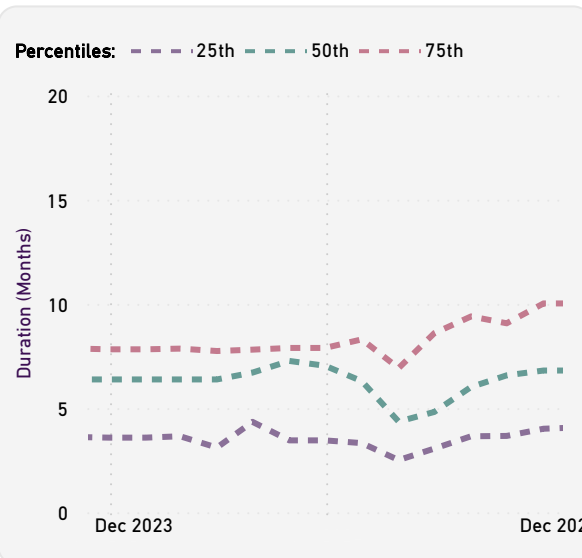
Proponent Implementation⁽³⁾

AEMO has no involvement in this stage



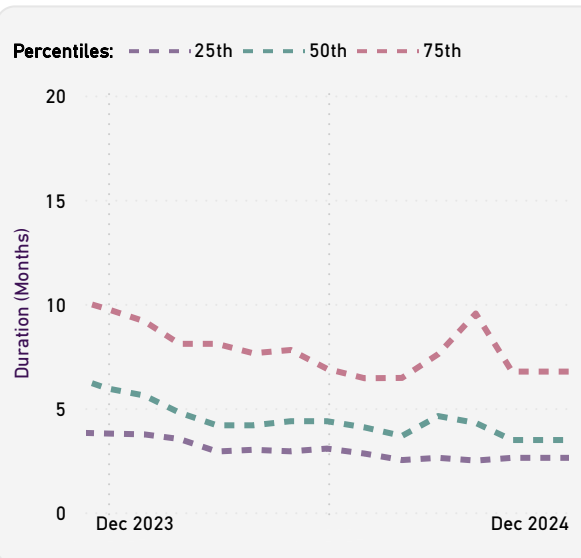
75% of the projects took 23.7 months or less to complete this stage.
 25% of projects took 4.2 months or less to complete this stage.

Approved Registration



75% of the projects took 10 months or less to complete this stage.
 25% of projects took 4 months or less to complete this stage.

Full Output Achieved⁽⁶⁾



75% of the projects took 6.8 months or less to complete this stage.
 25% of projects took 2.6 months or less to complete this stage.