

2023-2024 NEM Connection Scorecard - Apr 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) Pre-Registration stage: execute connection agreement, construct plant, network interface and prepare registration application. Completion milestone is when registration application is submitted.
- (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.

Apr 2024 Summary

During April, 6 projects totalling 1.71 gigawatts (GW) received application approval and moved into the pre-registration stage, bringing the FYTD total to 49 projects (10.5 GW). No projects completed registration, so the FYTD total remained at 12 projects (1.7 GW). No projects commenced operating at full output in April, so the FYTD total remained at 17 projects (2.2 GW).

Approved ● Application ● Registration ● Full Output



Approved Applications⁽²⁾

Six projects: 3 wind farms (865 MW), 2 solar farms (385 MW) and 1 BESS (460 MW)

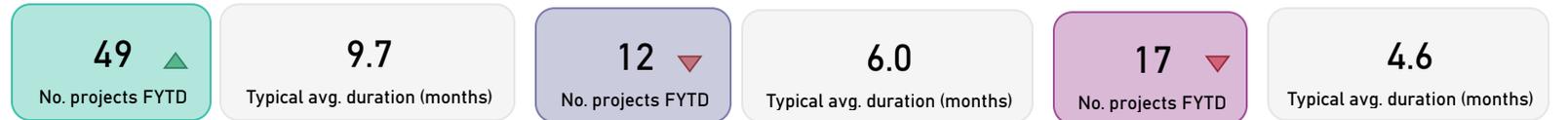
Approved Registrations⁽⁵⁾

No registrations in April

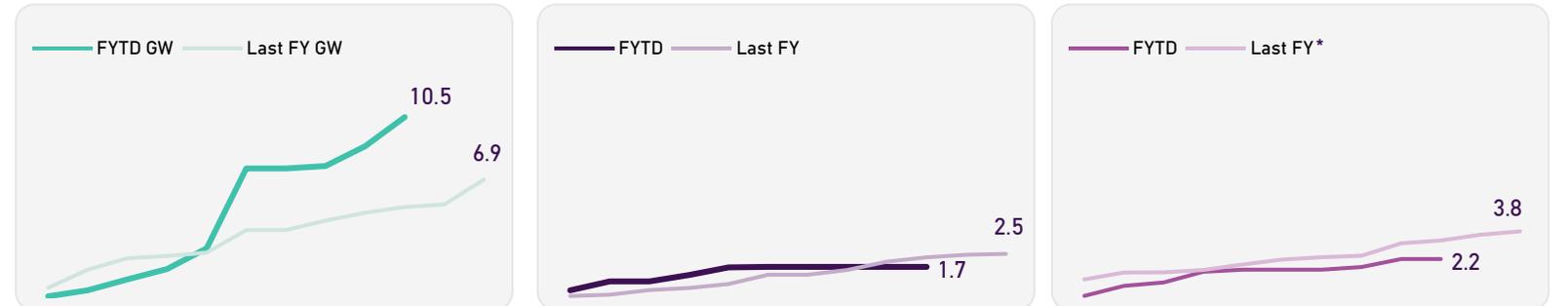
Full Output Achieved⁽⁷⁾

No projects reached full output in April

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

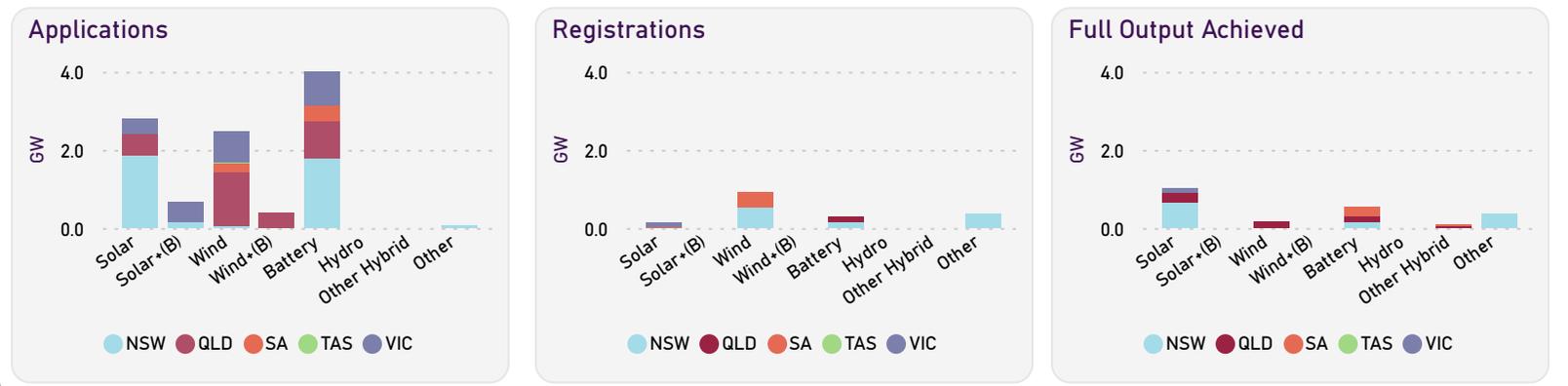


Approved FYTD GW by Stage in relation to last FY



* FY23 Full Output GW was updated in April, correcting a duplication issue affecting the GW reported. New controls have been introduced, including automated data validation and data entry constraints to ensure the data reported is accurate each month

Approved FYTD GW by Technology Type⁽⁹⁾ and Stage



Connection projects underway - monthly changes

Learn more: [Connection Scorecard](#)



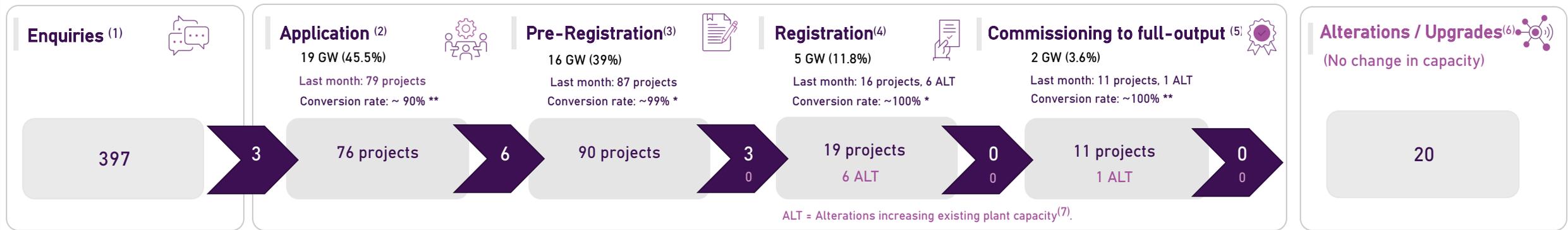
Snapshot of current projects (in-progress) in each stage as of Apr 2024

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) Pre-Registration stage: execute connection agreement, construct plant, network interface and prepare registration application. Completion milestone is when registration application is submitted.
- (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 - monthly changes



➤ Signifies the number of projects moving from one stage to the next this month. * 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

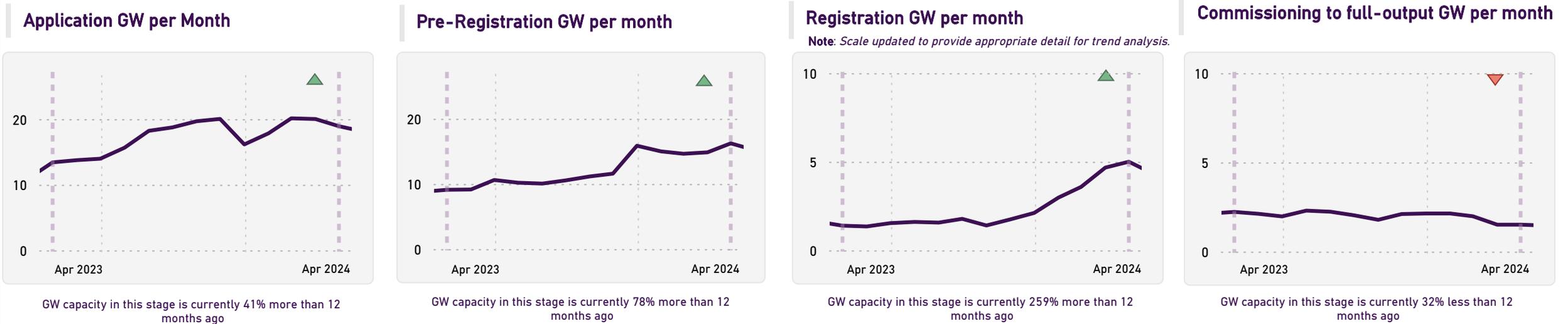
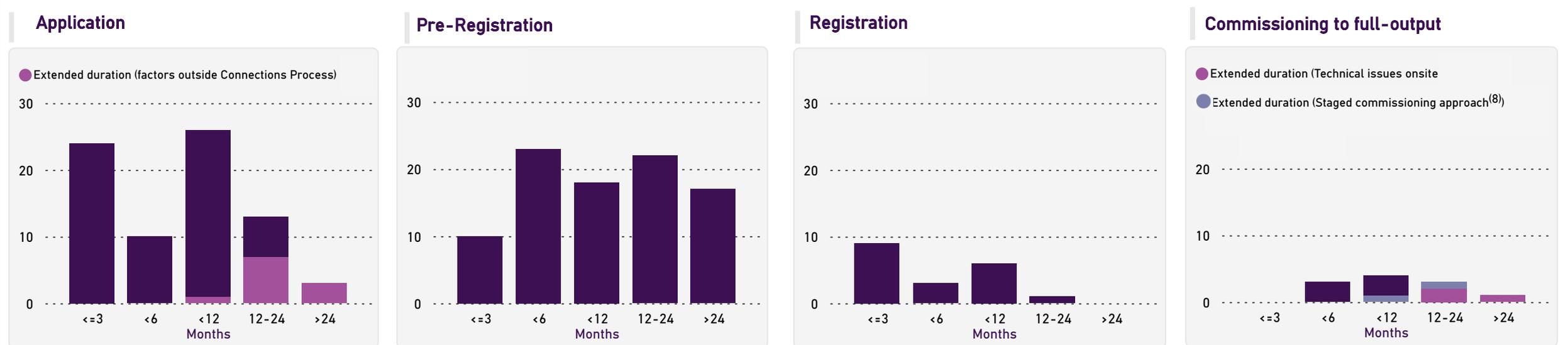


Fig. 3 - Current number of projects in each Stage by Duration



14% 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.

43% 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.

27% of projects have extended duration due to technical issues onsite. 18% of projects are undergoing a staged commissioning approach.

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) Pre-Registration stage: execute connection agreement, construct plant, network interface and prepare registration application. Completion milestone is when registration application is submitted.

(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

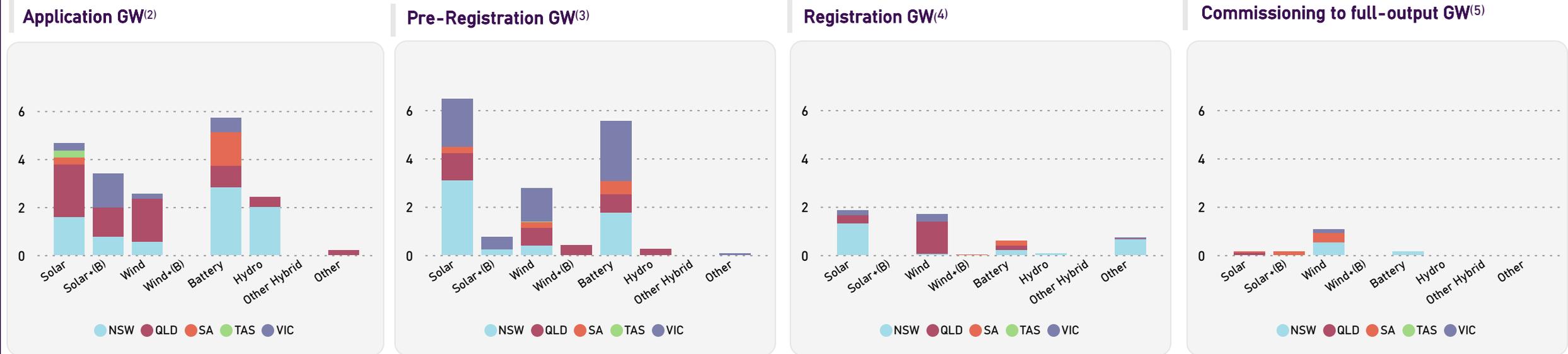


Fig. 5 GW Volume percentage by State

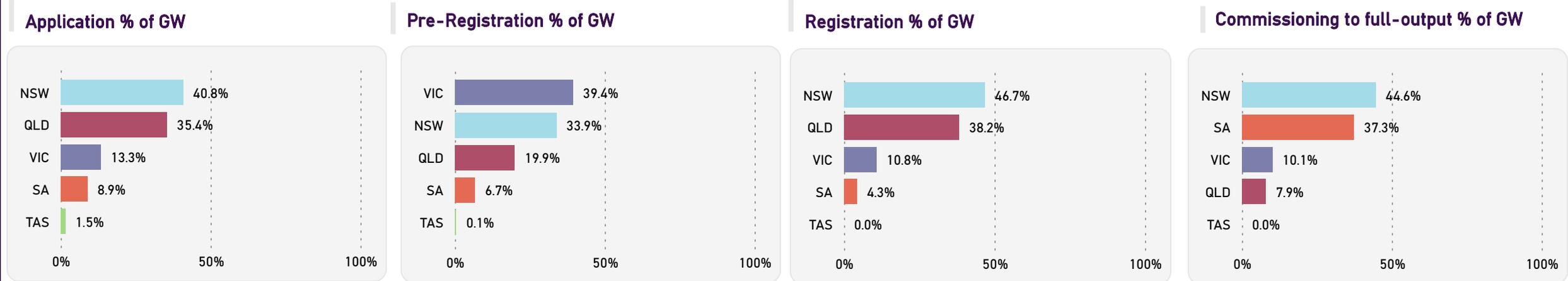
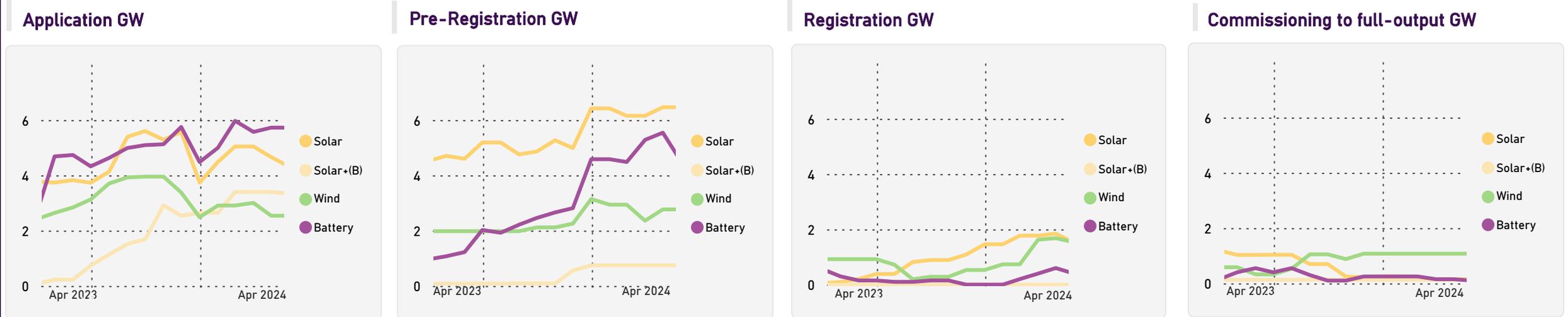


Fig. 6 GW Volume Trend Analysis by Renewable Technology



NEM Connection Scorecard Performance

Completed milestones in AEMO Connections process, by Stage.

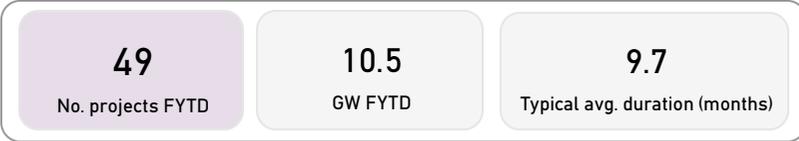
Notes:
 (1) Application stage assesses the performance of the plant as designed. Applications are approved when the 5.3.4A letter is issued.

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

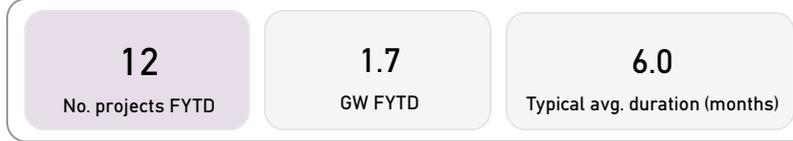
(3) 'Full Output Achieved' means plant has commenced operating at maximum rated capacity in the NEM.

(4) 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.

Approved Applications⁽¹⁾



Approved Registrations⁽²⁾



Full Output Achieved⁽³⁾

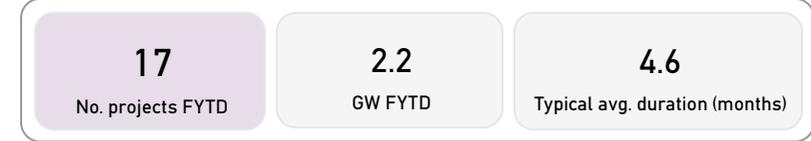
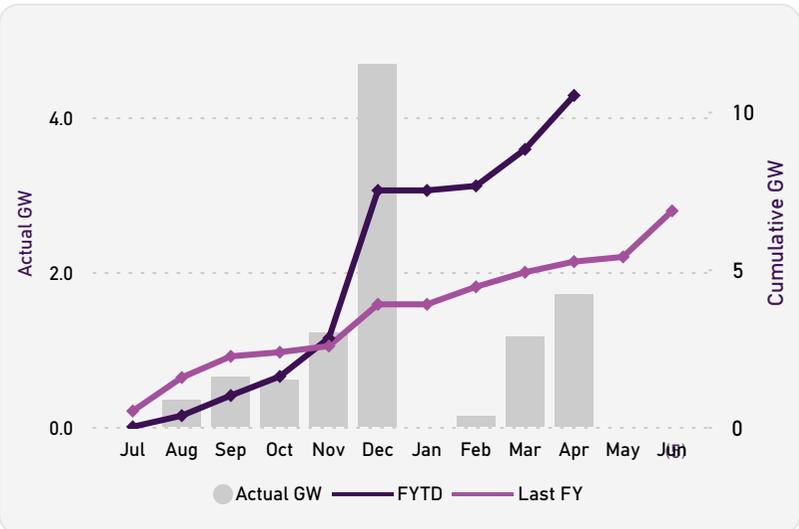


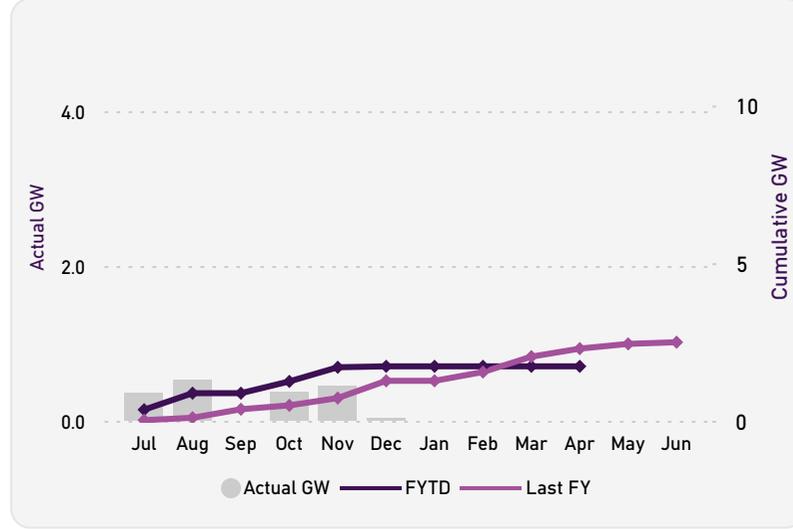
Fig. 7 Approved GW by Stage

Approved Application



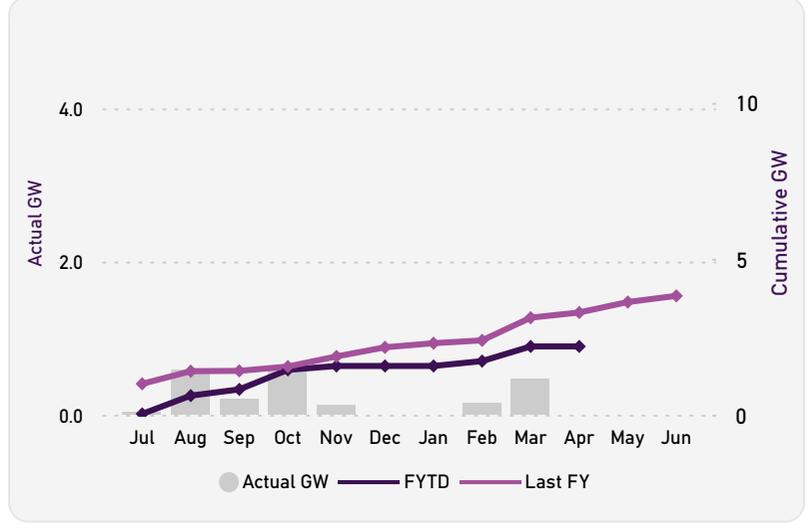
The latest cumulative GW capacity for Apr 2024 is 101% more than the same time last year

Approved Registration



The latest cumulative GW capacity for Apr 2024 is 25% less than the same time last year

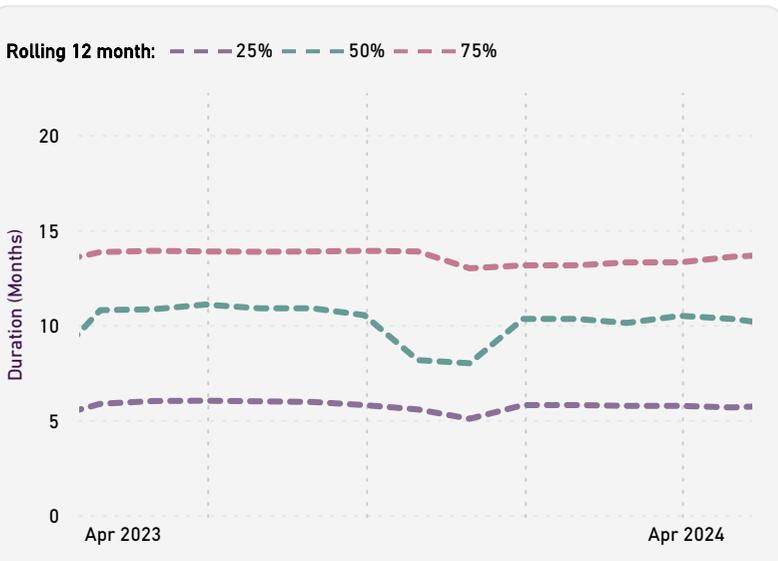
Full Output Achieved



The latest cumulative GW capacity for Apr 2024 is 33% less than the same time last year

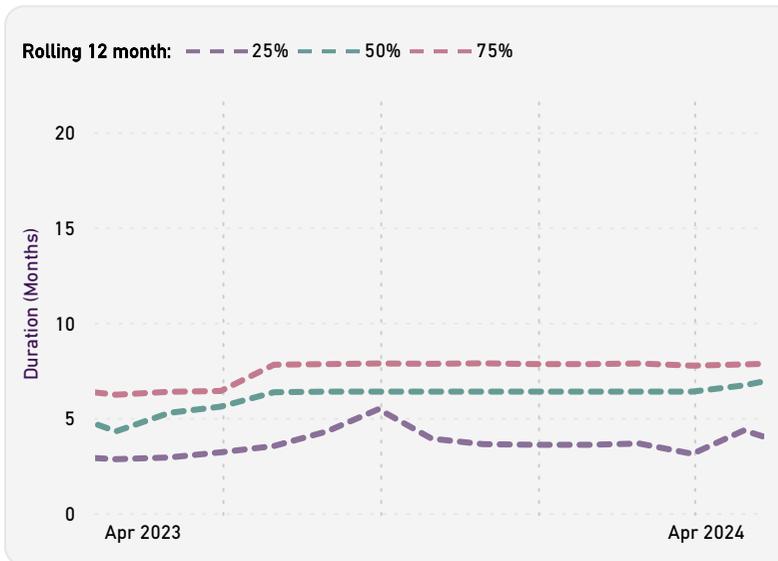
Fig. 8 Project Stage Duration (Months) Trend Analysis

Approved Application



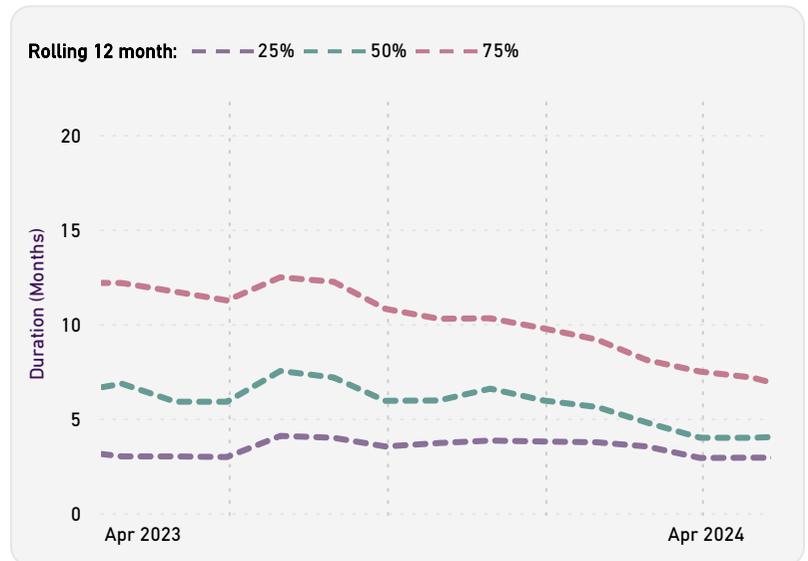
75% of the projects took 13.6 months or less to complete this stage.
 25% of projects took 5.7 months or less to complete this stage.

Approved Registration



75% of the projects took 7.8 months or less to complete this stage.
 25% of projects took 4.3 months or less to complete this stage.

Full Output Achieved



75% of the projects took 7.2 months or less to complete this stage.
 25% of projects took 2.9 months or less to complete this stage.