

2023-2024

NEM Connection Scorecard - Jan 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.

Jan 2024 Summary Approved Applications⁽²⁾

Coral Sea

Tasman

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Seven applications (1.2 GW) were received in January.

Two projects (0.9 GW) entered the registration stage, bringing the volume of in-progress registrations to 11 (3.0 GW), a 40%

increase compared to the same time last year.

Approved ● Application ● Registration ● Full Output

QUEENSLAND

NORTHERN TERRITORY

SOUTH AUSTRALIA

Microsoft Bing

No application approvals in January, similar to last year in January. FYTD total remained at 38 projects (7.5 GW), which exceeds the total application approvals for FY23.

No registrations in January, similar to last year in January. The FYTD total is 12 projects (1.7 GW), ahead of the same time last year.

Approved Registrations(5)

No projects reached full output in January, compared to 1 project commencing at full output last January. The FYTD total remained at 12 projects (1.6 GW).

Full Output Achieved(7)

Total Projects (FYTD) and Project Duration (Typical average duration) (10)



Y.Y
Typical avg. duration (months)



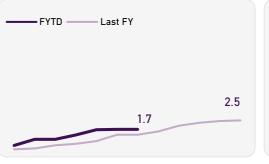
5.6
Typical avg. duration (months)

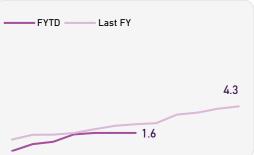


5.4
Typical avg. duration (months)

Approved FYTD GW by Stage in relation to last FY

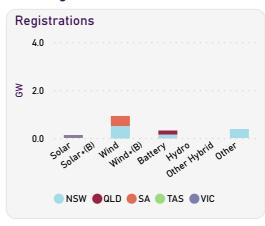






Approved FYTD GW by Technology Type(9) and Stage







Connection projects underway - monthly changes

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TASMANIA

Learn more: Connection Scorecard







FY 2023-2024

Month ending

Jan 2024

NEM Connection Scorecard In-progress

Snapshot of current projects (in-progress) in each stage as of Jan 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.

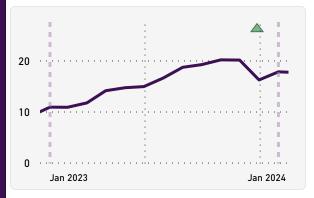
Fig. 1 Connection projects underway - monthly changes



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.

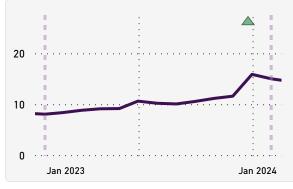
Fig. 2 - Connection Volume (GW) Trend Analysis by Stage

Application GW per Month



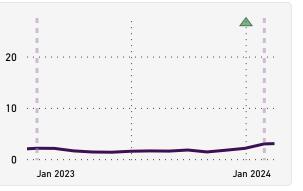
GW capacity in this stage is currently 64% more than 12 months ago

Pre-Registration GW per month



GW capacity in this stage is currently 86% more than 12 months ago

Registration GW per month



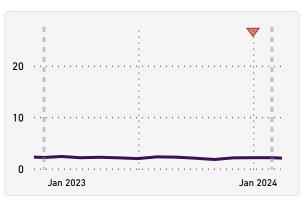
GW capacity in this stage is currently 40% more than 12 months ago

Commissioning to full-output GW per month

Alterations / Upgrades(6)

18

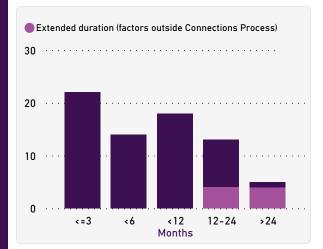
(No change in capacity)



GW capacity in this stage is currently 2% less than 12 months ago

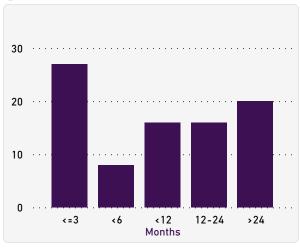
Fig. 3 - Current number of projects in each Stage by Duration

Application



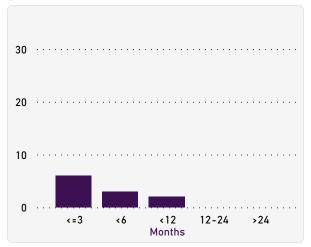
11% of projects have extended duration due to factors outside the connections process, with the remaining 13% of projects in this stage for >12 months experiencing complex design, design changes and higher need for resubmissions.

Pre-Registration



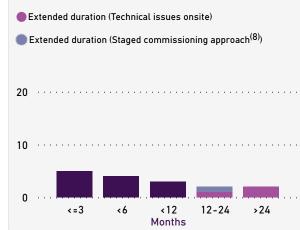
41% of projects have been in this stage for more than 12 months.

Registration



0% of projects have been in this stage for more than 12 months.

Commissioning to full-output



19% of projects have extended duration due to technical issues onsite 6% are due to staged commissioning approach.



FY 2023-2024

Month ending

Jan 2024

NEM Connection Scorecard

In-progress

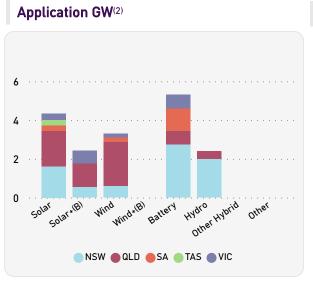
Snapshot of current projects (in-progress) in each stage as of Jan 2024

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) 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.

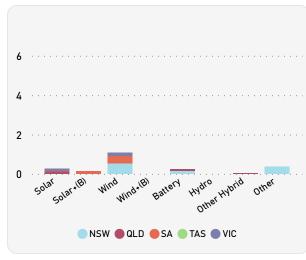
Fig. 4 GW Volume in each Stage by Technology Type(1) and State





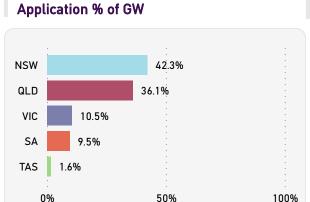
Pre-Registration GW(3)

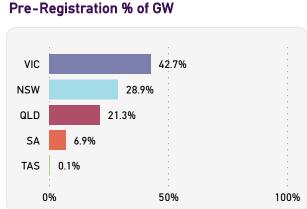




Commissioning to full-output GW(5)

Fig. 5 GW Volume percentage by State







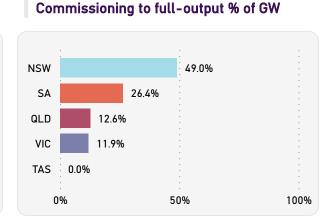
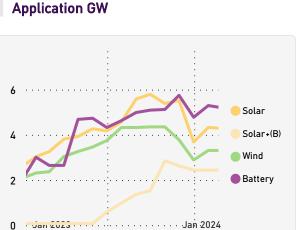
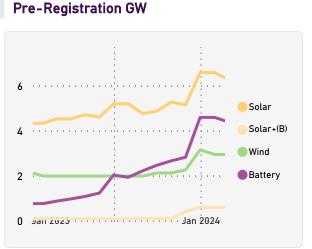
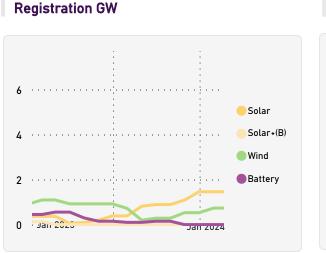
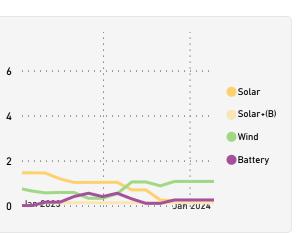


Fig. 6 GW Volume Trend Analysis by Renewable Technology









Commissioning to full-output GW



FY 2023-2024

Month ending

Jan 2024

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)



38 No. projects FYTD

7.5 GW FYTD

9.9
Typical avg. duration (months)

12 No. projects FYTD

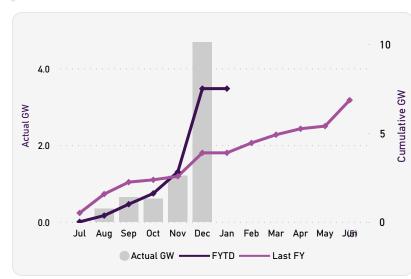
1.7 GW FYTD

5.6
Typical avg. duration (months)

12 No. projects FYTD 1.6 GW FYTD 5.4
Typical avg. duration (months)

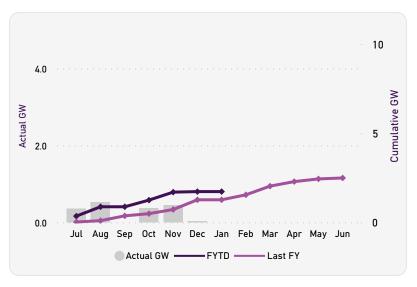
Fig. 7 Approved GW by Stage

Approved Application



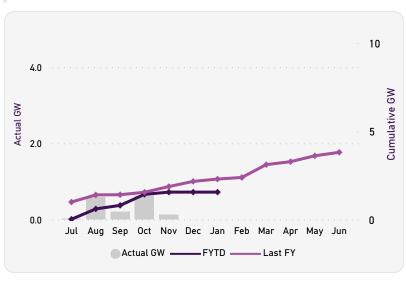
The latest cumulative GW capacity for Jan 2024 is 93% more than the same time last year

Approved Registration



The latest cumulative GW capacity for Jan 2024 is 36% more than the same time last year

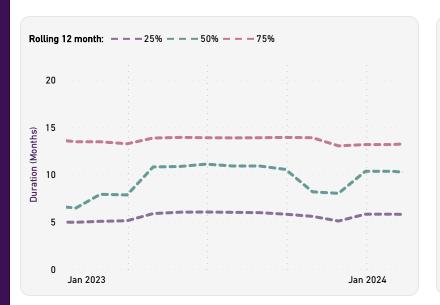
Full Output Achieved



The latest cumulative GW capacity for Jan 2024 is 32% less than the same time last year

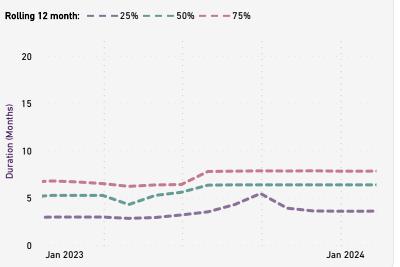
Fig. 8 Project Stage Duration (Months) Trend Analysis

Approved Application



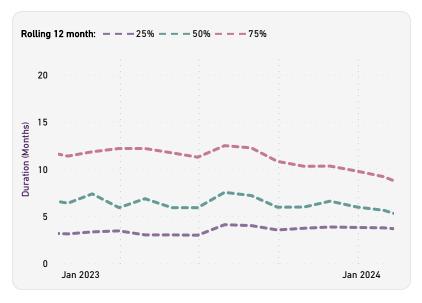
75% of the projects took 13.1 months or less to complete this stage. 25% of projects took 5.8 months or less to complete this stage.

Approved Registration



75% of the projects took 7.8 months or less to complete this stage. 25% of projects took 3.6 months or less to complete this stage.

Full Output Achieved



75% of the projects took 9.2 months or less to complete this stage. 25% of projects took 3.7 months or less to complete this stage.