

WEM Reform Market Readiness Report No.2

11 March 2022



About this report



• The Market Readiness Report is intended to monitor WEM participant preparedness for the start of new market arrangements in the WEM, in accordance with the Market Readiness Engagement and Reporting Strategy

Prior to July 2022

Readiness reporting focuses on:

- Measuring the extent to which respondents have established and commenced internal readiness work programs
- Identifying the areas where respondents anticipate the most significant effort and challenges.

From July 2022 onward

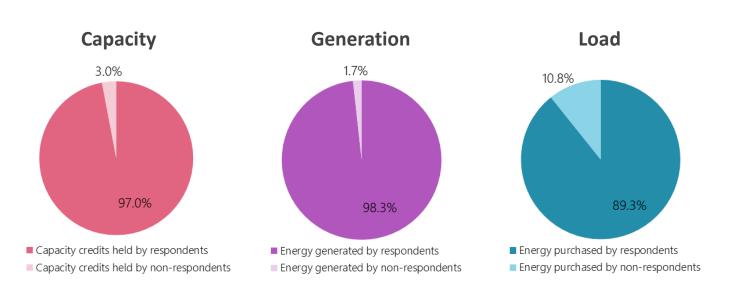
Readiness reporting will measure each respondent's progress against Specific Readiness Criteria

- The Specific Readiness Criteria will inform more granular and more targeted questions, to gauge each respondent's progress in delivering outcomes of relevance to their particular business and facilities
- Different sets of criteria will be specified for different types of entity; market participant, network operator, system operator and regulatory authority.
- The first Market Readiness Survey was released in June 2021 and the first Market Readiness Report was published in July 2021
- The second Market Readiness Survey was released on 31 January 2022 and supported by <u>Additional Guidance for Respondents</u>.
- Survey invitees were identified as follows.
 - All registered market participants, noting AEMO excluded market participants known to no longer be active.
 - Where a common organisation is affiliated with multiple market participants, a single invitation in respect of that organisation was issued.
- Participation in the survey is voluntary and the results reported here have been aggregated and anonymised.
- This Market Readiness Report will be published on AEMO's website.
- If you wish to make any comment or suggestion regarding the survey or this report, or wish to raise a concern, please contact wa.ets@aemo.com.au.

Participation

AEMO

- 60% of survey invitees responded (c.f. 45% from Survey 1)
- Five new respondents, one Survey 1 respondent didn't respond to Survey 2
- Removal of some invitees from the invitation list accounts for the rest of the improvement in response rate
- Responses covered most of the energy generated and capacity credits held in the market
- A small drop in the generator coverage by capacity (97.0% down from 97.5%) due to non-participation by one small to medium market participant.
- The share of energy consumption covered by responses is 89%. The remaining 11% is largely attributed to smaller retailers and several large users that procure energy to supply their own facilities.



| Statistic | Value | Comment |
|---------------------------------|----------|---|
| Survey invitations issued | 45 | Note multiple participantIDs aggregated in one invitation where appropriate (62 participantIDs covered by an invitation) |
| Completed responses | 27 (60%) | Response rate based on completion of unique invitations. Response rate 66% if calculated as: participantIDs covered by a response / participantIDs covered by an invitation |
| Generation coverage | +97% | Share of 2021 portfolio measured either by energy or capacity |
| Retail coverage | 89% | Aggregated consumption metered across all NMIs assigned to Survey respondents as share of total energy supplied (2021). |
| | | |

Respondent types



Market Generators

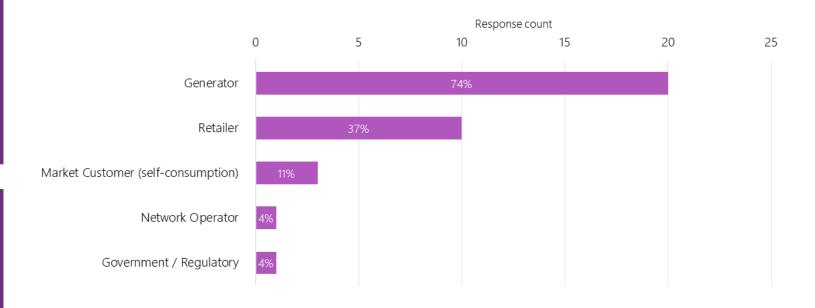
- 19 of 27 respondents were generators
- 9 facilities that dispatched in 2021 were not covered by a response, of which
 - 1 facility accounts for almost all of the uncovered capacity
 - 1 other facility accounts for almost all of the uncovered energy

Market Customers

- Around a third of respondents
- 6 non-responses, including one previous respondent

Three large industrial users responded, self identifying as market customers

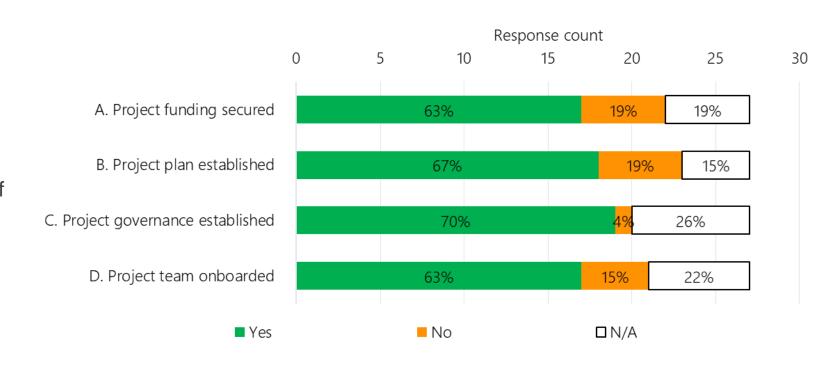
ERA and Western Power both responded



Program Setup - Setup Completion



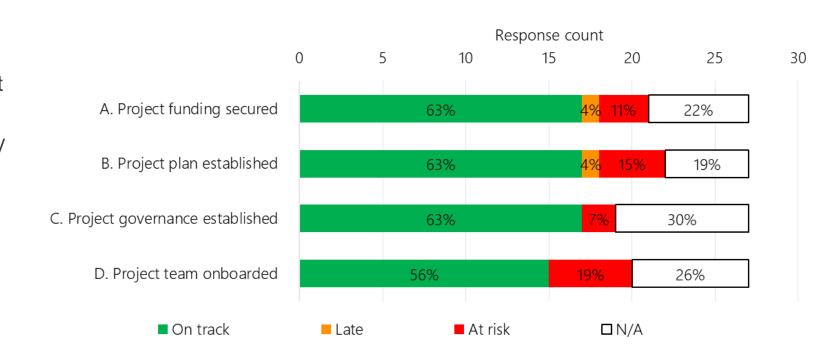
- Two thirds of respondents report key program establishment tasks complete
- Since Survey 1, largest improvements in funding (+13% complete) and planning (+29% complete)^(a)
- 15 to 20% of respondents have not completed planning, funding and/or resourcing a program of work – most of these are smaller participants.
- 15 to 25% of respondents don't regard these tasks as relevant to their preparations (exclusively smaller entities or those with a limited involvement in the WEM)
- Project governance (where relevant) is now established for all but one respondent.



Program Setup - Setup Elements



- Funding, planning and governance setup reported "on track" by just under two thirds of respondents
- Onboarding reported as "on track" by just over half of respondents
- Setup elements were reported "at risk" by some respondents, primarily for Onboarding (19% of respondents) and Planning (15% of respondents)
- Since Survey 1, significant reduction in reports of setup elements being at risk:^(a)
 - Funding (-14% point fall),
 - Planning (-10% point fall) and
 - Onboarding (-6% point fall)
- Large increases in "Not Applicable" suggesting execution approach requires limited internal change



(a) Reporting simple percentage point changes

Program Setup - Comments



"Although funding is secured for WEM Reform activities, the extent of changes resulting from WEM Reform and the associated cost is still unknown."

"[Respondent's] project plan is still in progress due to the limited tangible information that is available. [Respondent] will be unable to monitor progress against proposed changes that are yet to be revealed"

"Some budget has been granted towards the project, however certain aspects remain uncertain or changing as time progresses such as consultant requirements for GPS and GMP."

Program Setup

"[Respondent] plans to present options to the executive in March and contract a developer in April"

"Project management and resources in place. Funding to be included in budget once scope defined."

"Business case for IT changes prepared.
Funding secured. Expect to use off the shelf products so not much in house development required."

"[Respondent] is unable to determine if additional resources will be required given the limited information that has been provided"

Early Execution

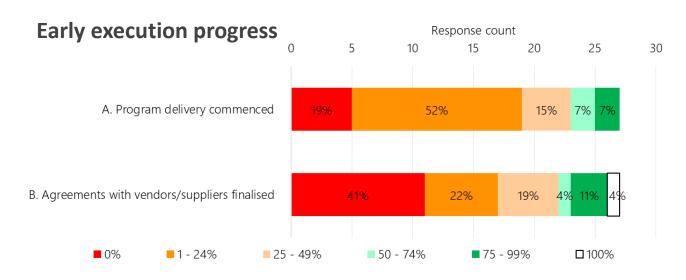
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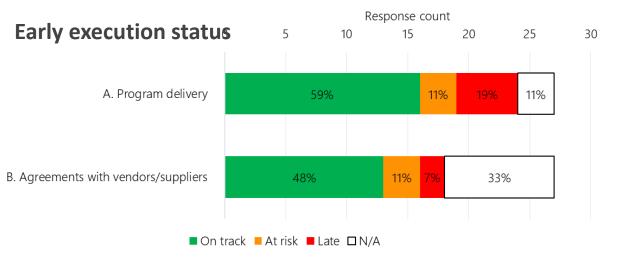
Commencement of delivery

- 80% of respondents have commenced execution (compared to 66% for Survey 1)
- 60% of respondents report their early program execution is "on track" (up 14% points since Survey 1)
- 20% of respondents have not commenced execution and 30% report this is "at risk" or "late" (down 25% points since Survey 1)

Vendor / Supplier agreements

- Few respondents (4 to 15%) have completed or are well progressed with vendor/supplier agreements
- 33% of respondents indicated "N/A". Of the remaining 66%, most reported as "on-track" (up since Survey 1)
- 41% of respondents have yet to commence vendor/supplier agreements, yet only 18% report this work as "at risk" or "late". Suggests some may be making an informed deferral.





Early Execution – Comments



"Whilst [Respondent] has progressed in this area, there has not been additional information to work with since the last questionnaire."

"Awaiting final specification."

"[IT system changes] have been scoped and tested in the market via procurement process.

Preferred vendor identified.

Contract yet to be executed."

"We are still at the planning stage and are awaiting information. There are still project risks that are yet to be discovered."

Early Execution

"[Respondent] plans to present options to the executive in March and contract a developer in April"

"While interface specs are available, our own system development is a work in progress"

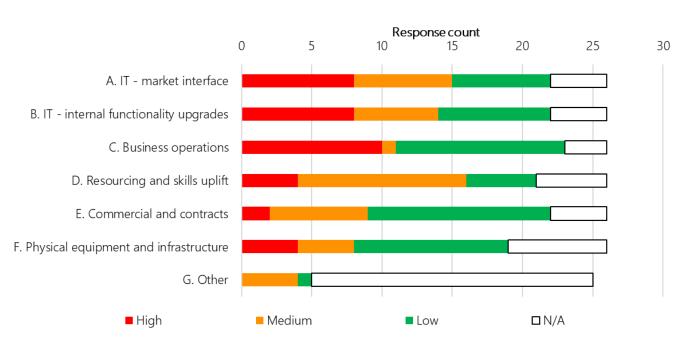
"[Respondent] is unable to determine if additional resources will be required given the limited information that has been provided"

Risk Areas - Impact



- There continues to be widely varying feedback on the magnitude of impacts of work in different areas is not completed. Compared to Survey 1:
 - Overall, the frequency of "low" impact ratings increased, while "medium" and "high" impact ratings reduced.
 - IT changes (A and B) and Business operations (C) remain the areas most likely to be rated "high" impact
 - Fewer respondents rate impact of non-completion in IT changes "high" (6% point improvement)
 - Business Operations (C) maintained the same number of "high" impact ratings, but almost all "medium" impact ratings were replaced with "low" impact ratings (23% point improvement)
 - Physical equipment and infrastructure (F) is now rated "low" impact or not relevant by 69% of respondents (9% point improvement)
- The changes in ratings may reflect improved understanding of the changes required.

Magnitude of impact if not completed (counts of L,M,H)

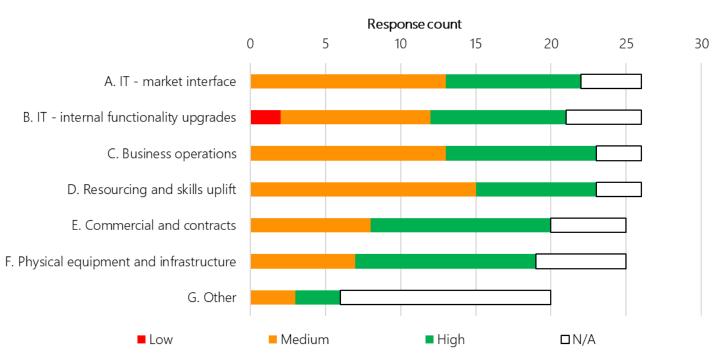


Risk Areas - Confidence



- The vast majority of respondents expressed High to Medium confidence in successful completion across all areas.
 - Only 2 responses indicated "low" confidence in successful completion for any area (Survey 1 recorded "low" ratings for between 10 and 20% of responses for most areas)
 - Internal IT (B) was the only area to record any "low" confidence ratings with comments relating to the availability of technical information from AEMO.
 - Increases in "high" ratings (areas A,B,E,F&G) and "medium" ratings (areas C&D) were observed compared to Survey 1.
- The changes in ratings appear to reflect a combination of better understanding of the work required and the increased time to deliver it.

Confidence in successful completion (counts of L,M,H)



Risk Areas - Overall Scores



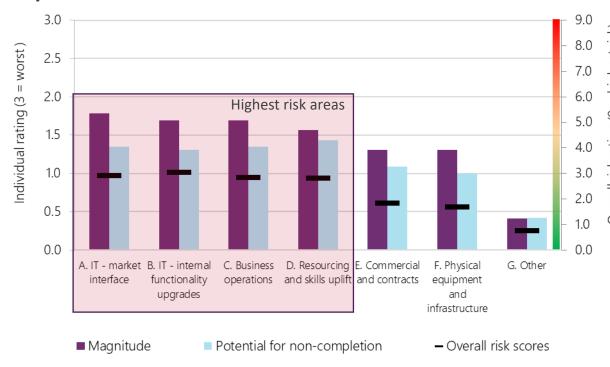
Overall risk scores

 Calculated for each impact area (see inset "How we calculate implicit risk scores") and plotted (see chart to right)

Compared to Survey 1:

- There has been a reduction in the risk scores reflecting an improved market readiness position:
 - Reduced in all areas (-13% for G. to -40% for F.)
 - On average, overall risk scores reduced by around 25%
- Finding consistent with respondents gaining a better grasp on their work programs
- Some respondents identified a smaller scope of work because they intend to have minimal direct involvement in the market

Implicit risk scores



How we calculate implicit risk scores

- Respondent's magnitude and confidence ratings in each impact area combined to produce implied risk scores.
- Confidence ratings inverted to represent potential for non-completion
- Overall risk score (Right Hand Axis) is the multiple of magnitude and potential for non-completion scores.

Risk Areas – Key Themes



| Impact area | Themes identified | |
|--|---|--|
| A. IT - market interface | Large scale and scope of change is challenging; reliant on AEMO for specifications; unknown unknowns. | |
| B. IT - internal functionality upgrades | Large scale and scope, external dependencies on AEMO, Western Power, EPWA; insufficient time to build and test; skills/resourcing challenges | |
| C. Business operations | Similar to A and B | |
| D. Resourcing and skills uplift | Significant training required, large scale and scope, unknown unknowns, small teams are under pressure, recruitment and retention challenging | |
| E. Commercial and contracts | Common response: no significant/difficult changes; one response indicated negotiations were challenging. Other responses – external dependencies and unknown unknowns. | |
| F. Physical equipment and infrastructure | Risk depends on difficulty in meeting GMP or GPS requirements, large scale and scope, external dependencies, risk of failure subject to outcome of GMP/GPS negotiations | |
| G. Other | Difficult to stay informed (lots of detail), treatment of intermittent loads still a concern. | |

Key Insights





WEM Reform Engagement is Improving

- The majority of the larger market participants continue to be strongly engaged with the WEM Reform process
- Several of the smaller market participants are also starting to engage



More Work Programs are Established

- For two thirds of respondents, the key program establishment tasks are complete.
- Areas most likely to be at risk concern onboarding staff and planning.
- These results are a significant improvement compared to Survey 1



Vendor Agreements a Critical Focus

- Two thirds of respondents recognise the relevance of vendor/supply however most have not completed agreements
- Some respondents may be deferring agreements which increases chance of issues being exposed late in participant work programs



Readiness Confidence is Increasing

- Overall, respondents appear more confident that they understand their tasks and can achieve it.
- Several respondents express continuing concerns regarding the available time for development and testing



Some Challenges Identified

- Gaps in some understanding of the changes
- Internal dependencies (e.g. system design, approvals, small teams) and external dependencies (e.g. availability of AEMO's specifications) complicate and delay decisions



Improved Market Readiness Position

- Implied risk scores have reduced considerably
- Many of the changes were consistent with respondents acquiring a more nuanced understanding of the relative importance and difficulty of different activities

Key Activities Looking Forward



- Key program delivery roadmap activities for the next 3 months include:
 - Publish the draft technical specification of the WEMDE Dispatch Outcomes File, allowing participants to consume and analyse market results; Plan an external WEMDE showcase.
 - Deliver remaining features of the Outage submission system and plan showcase
 - Publish draft Settlements formulation documentation and Capacity Credit Allocation APIs
 - Complete final release of RCM changes for Phase 1 (Year 1 of 2021 RC Cycle) and provide Market Participants with detailed plan for Phase 2 (implementing NAQ for the 2022 RC Cycle).
 - Progress assessment and approval of Generator Performance Monitoring Plans
- AEMO is continuing to work closely with EPWA on the exposure draft WEM Rules for Tranche 6 which will include refinements the existing RCM rules, Non Co-optimised ESS, Supplementary ESS, and the STEM.
- AEMO will draft and consult on multiple WEM Procedures
- AEMO will pursue enhance market readiness engagement and support, including proactively engaging those market participants that have not responded to the Survey and progressing the establishment of specific readiness criteria to enhance depth and insights from industry reporting.

Next steps



- Next Market Readiness Survey and Report (General Readiness Criteria)
 - Market Readiness Survey No.3 is due to be released April 2022, and the next iteration of this report in May 2022
 - Survey 3 will focus on the general readiness of WEM participants and seek their views on key readiness risks.
- Following Market Readiness Surveys and Reports (Specific Readiness Criteria)
 - As detailed in the <u>Market Readiness Engagement and Reporting Strategy</u>, AEMO plans to base Market Readiness Survey 4 on Specific Readiness Criteria (due for release July 2022)
 - The Specific Readiness Criteria will inform more granular and more targeted questions, to gauge each respondent's progress in delivering outcomes of relevance to their particular business and facilities
 - AEMO plans to consult on the specific readiness criteria before proceeding with Survey 4

