

# Finance Consultation Committee FY24 Meeting #1

8 December 2023



We acknowledge the Traditional Owners of country throughout Australia and recognise their continuing connection to land, waters and culture.

**We pay respect to Elders, past and present.**

# Agenda



1. Introduction
2. FY23 results recap
3. FY24 budget recap & Q1 forecast update
4. NEM Reform Program Update
5. Discussion and questions

# Minutes

Minutes from the April 2023 meeting are on the AEMO website.



- Recap on the FY24 budget and fees consultation process and feedback. General agreement it was an improvement.
- It was reiterated that AEMO is continuing to uplift transparency and opportunities by members and stakeholders to provide feedback.
- This is supported by stakeholder feedback generally which seeks greater transparency, accountability and deeper discussions.
- We are actively working on a forward plan for 2024 to achieve this and will share more information soon.

# Welcome to our members



Name	Title	Organisation	Nominee from Association Members
Rachel Richardson	Chief Financial Officer	ENGIE Australia & New Zealand	AEC
Jonathan Cowper*	Chief Financial Officer	Synergy WA	AEC
Grant Appleton	GM Commercial	Pacific Hydro	CEC
Tim Peters	Chief Financial Officer	Hydro Tasmania	CEC
Katrina Porteus	Director, Strategy and Corporate	Energy Consumers Australia	ECA
Nadine Lennie	Chief Financial Officer	TransGrid	ENA
Peter Price	Executive General Manager, Engineering	Energy Queensland	ENA
Mark Grenning	Director Policy & Regulation	Energy Users Association of Australia	Consumer Representative
William Durant-Whyte	Manager, National Coordination	NSW Department of Planning, Industry and Environment	NSW – Government
Jess K Young	Director Energy Markets and Networks	Victorian Department of Environment, Land, Water and Planning	VIC – Government

# And the AEMO team ...



Vanessa Hannan  
EGM Finance & Governance



Matthew Myers  
GM, Stakeholder Engagement

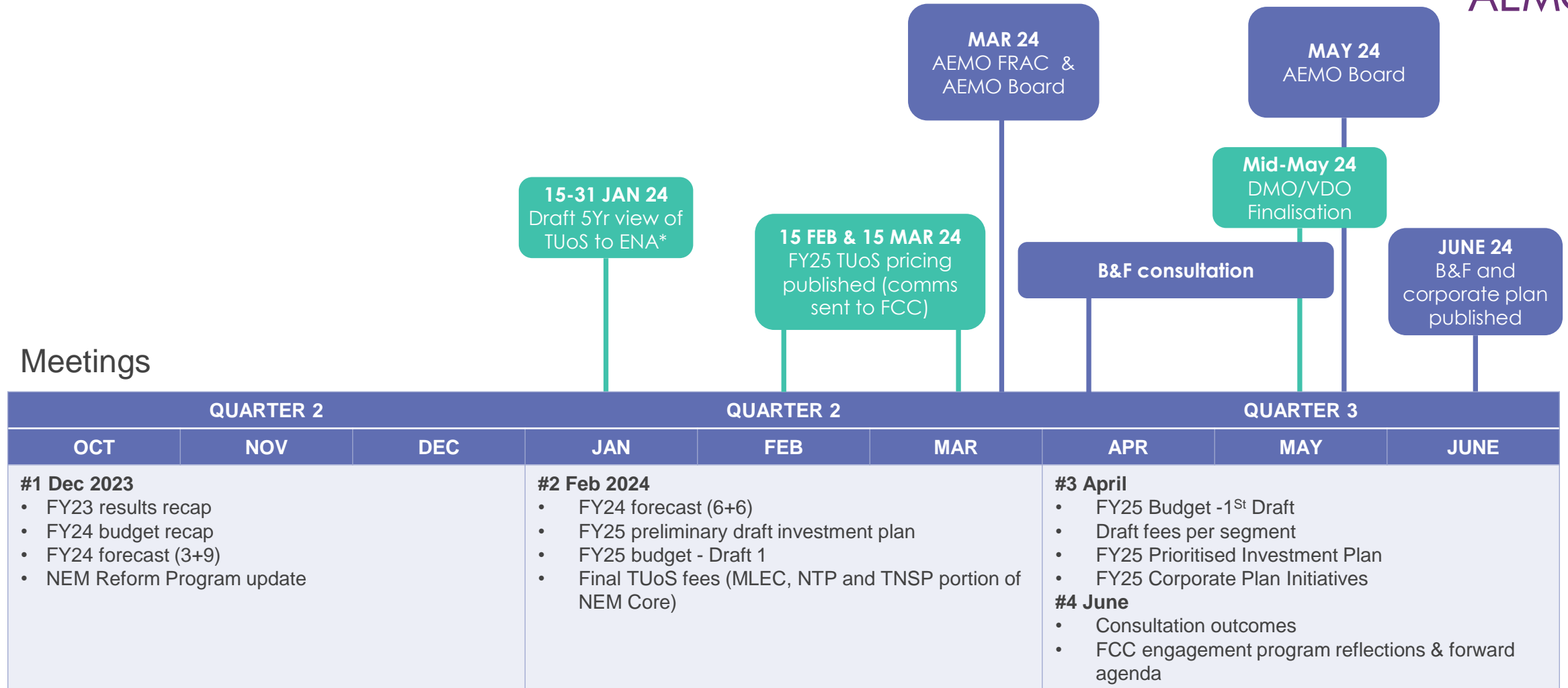


Yogesh Nagarajan  
Manager – Strategic Finance



Margaret Lynch  
Stakeholder Engagement Lead,  
Corporate

# FY24 FCC timeline



\* A forward outlook of the NTP and TNSP portion of NEM Core will be provided to ENA in Jan-24.

# FY23 in review

FY23 Corporate Plan Delivery





# Scale of FY23 operations

## Electricity



**National Electricity Market (NEM):**  
• NEM Core  
• NEM Functions



**Western Australia electricity and gas (WA)**

## East Coast Gas (ECG)



**Declared Wholesale Gas Market**



**Short-term Trading Market**



**Gas Supply Hub**

**175,577 GWh**  
energy purchased

**\$25.46b**  
purchase value

**17,303 GWh**  
total energy traded

**\$2.18b**  
total value

**199 PJ**  
wholesale gas withdrawal

**\$4.77b**  
wholesale gas purchased

**149.5 PJ**  
wholesale gas withdrawal

**\$2.76b**  
wholesale gas purchased

**50.9 PJ**  
wholesale gas withdrawal

**\$0.88b**  
wholesale gas purchased

GWh = gigawatt per hour

PJ = petajoule

# AEMO's FY23 strategic priority activities



1

## Operating today's systems and markets

- Undertake seasonal analysis and preparation
  - Prepare and share critical risk analysis
  - Monitor energy system and market performance
  - Commence implementation of the Operational Technology Roadmap
  - Evolve operational communications, network and infrastructure
  - Strengthen AEMO's resilience to security threats
  - Strengthen cyber-resilience and cyber preparedness of Australia's energy grids and markets and in line with AEMO's expanded industry role and responsibilities.
- and more for a total of 11 initiatives.



2

## Navigating the energy future

- Deliver engineering roadmap to 100% renewables
  - Deliver network planning advice
  - Deliver AEMO input and support for implementation of actionable ISP projects
  - Develop and update a reform roadmap
  - Implement market reforms
  - Design and implement a capacity mechanism and congestion management mechanism
  - NSW Infrastructure Roadmap
  - Enhance and streamline connections process
- and more for a total of 15 initiatives.



3

## Engaging our stakeholders

- Clearly and consistently consider stakeholder feedback
  - Co-design the ISP Engagement Strategy
  - Embed a stakeholder management system
  - Simplify communication
  - Ensure our operating model and cost recovery mechanisms are appropriate.
  - Provide tailored advice and insights to Governments
  - Embed a consumer focus
- And more for a total of 11 initiatives.



4

## Evolving the way we work

- Implement and track fee outcomes that
  - Implement the fee pathway consulted on with participants to recover NEM Core accumulated deficit.
  - Update funding models to reflect ESB principles around the structure of and accountability for cost-recovery payments, including NEM 2025.
  - Refine AEMO's financing strategy to optimise the level and cost of funds to support capital investments not funded via specific grant or contribution funding.
- And more for a total of 18 initiatives.

# FY23 delivered activities



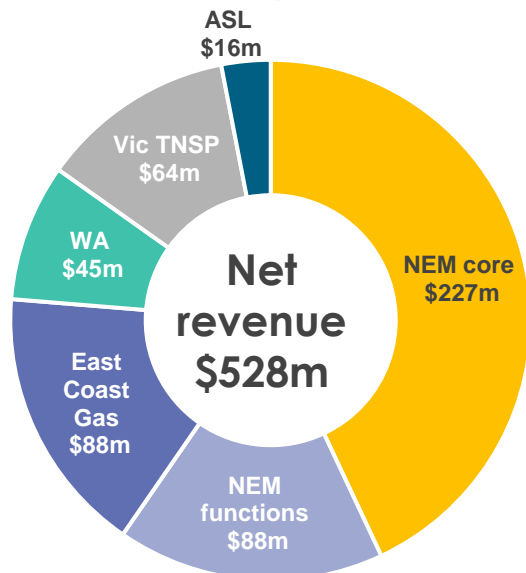
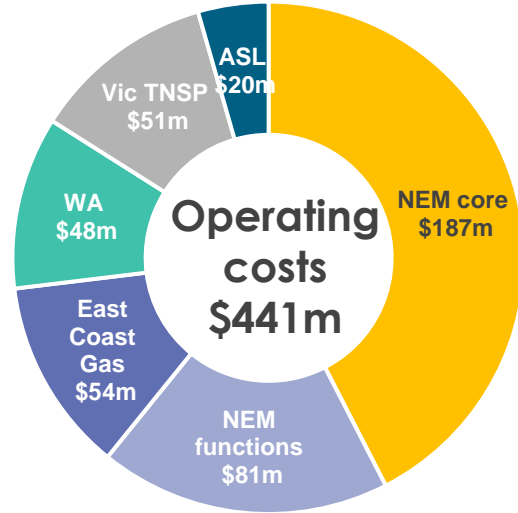
	Fully delivered	Partially delivered	Deprioritised
Operating today's systems and markets	9	2	0
Navigating the energy future	13	2	0
Engaging our stakeholders	9	2	0
Evolving the way we work	14	2	2
<b>Total</b>	<b>45</b>	<b>8</b>	<b>2</b>

## *plus ...*

- rapidly delivered Tranche 1 of the Commonwealth's **East Coast Gas Reforms** for winter 2023
- supported the design of the Commonwealth's **Capacity Investment Scheme**
- and more ...

# Initiatives delivered within budget for each segment

## Segment FY23 financial overview



**NEM Core:** includes operating the NEM energy system and market and providing near-term energy forecasting and planning services for the NEM.

- Operating costs were \$187m and revenue was \$227m.
- In-year surplus of \$40m, noting NEM Core has an accumulated deficit position which is being recovered through fees.
- Costs in FY23 were fully recovered through a combination of fees based on \$/MWh and \$/day. The NEM benchmark fee for FY23 is \$1.11220/MWh.

**NEM Functions:** includes national transmission planning, operation and management of five-minute settlements, facilitation of retail market competition, administration of Settlement Residue Auctions and the integration of Distributed Energy Resources into the NEM.

- Operating costs were \$81m and revenue was \$88m.
- In-year surplus of \$7m.
- Costs were recovered through a combination of fees which were charged on \$/MWh, \$ per connection point or \$/day.

**East Coast Gas:** includes operating the Declared Wholesale Gas Market, facilitating Short-Term Trading Market, monitoring and managing supply adequacy in the East Coast gas system, developing the Gas Statement of Opportunities, operating the Gas Supply Hub, maintaining and operating the Capacity Trading Platform, facilitating day ahead auctions, operating the Gas Bulletin Board and administration of retail gas markets.

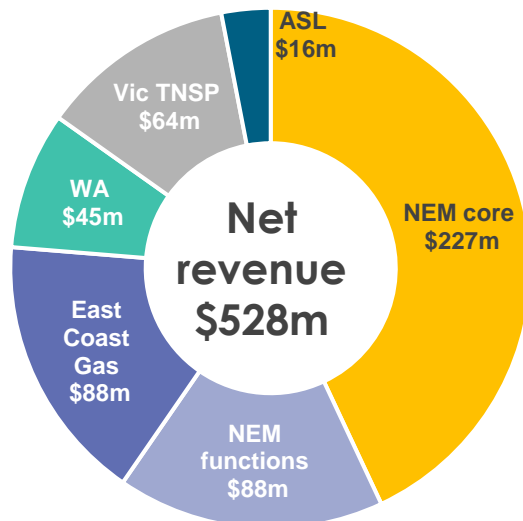
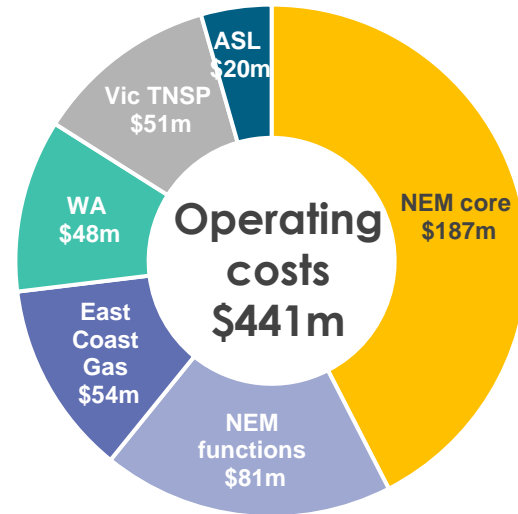
- Operating costs were \$54m and revenue was \$88m.
- In-year surplus of \$33m.
- Costs were fully recovered primarily through a fee based on \$/GJ withdrawn.

**WA Electricity and Gas:** includes operating the energy system and market and providing near-term energy forecasting and planning services for the WEM, operating the WA Gas Bulletin Board, developing the WA Gas Statement of Opportunities and administering the gas retail market.

- Operating costs were \$48m and revenue was \$45m.
- In-year deficit of \$3m.
- Costs were recovered primarily through a \$/MWh fee. Any deficits will be recovered in next financial year.

Note: Figures are based on segment management reporting and do not reflect certain account classifications and descriptions that apply to the Consolidated Financial Statements.

# Segment FY23 financial overview (continued)



**Victorian Transmission Network Service Provider (Vic TNSP):** plans future requirements of the declared shared network, procures augmentations and non-network services, plays a role in connecting new generators and loads to the system, and procures system strength transmission services in Victoria. In FY23:

- Operating costs were \$51m and net revenue after network charges was \$64m.
- In-year surplus of \$13m.
- Any deficits are recovered in the following year.



AEMO Services Ltd (ASL) is a subsidiary of AEMO with an independent board and produces its own corporate plan and annual report.

In 2021, ASL was appointed by the NSW Government as the independent NSW Consumer Trustee. ASL is a key partner in the implementation of the NSW Electricity Infrastructure Roadmap, carrying out coordinated planning of long-term investment, managing competitive tenders to facilitate this investment, authorising Renewable Energy Zone transmission infrastructure, and provides financial risk management and advice.

ASL operates on a not-for-profit, full-cost recovery basis. Ongoing funding requirements are informed by an annual contributions determination process regulated by the AER.

In FY23:

- Total operating costs were \$20m and revenue was \$16m, noting, AEMO has a 70% interest in ASL.
- In-year deficit of \$4m.

# FY23 P&L – performance and accumulated surplus/deficit position by segment

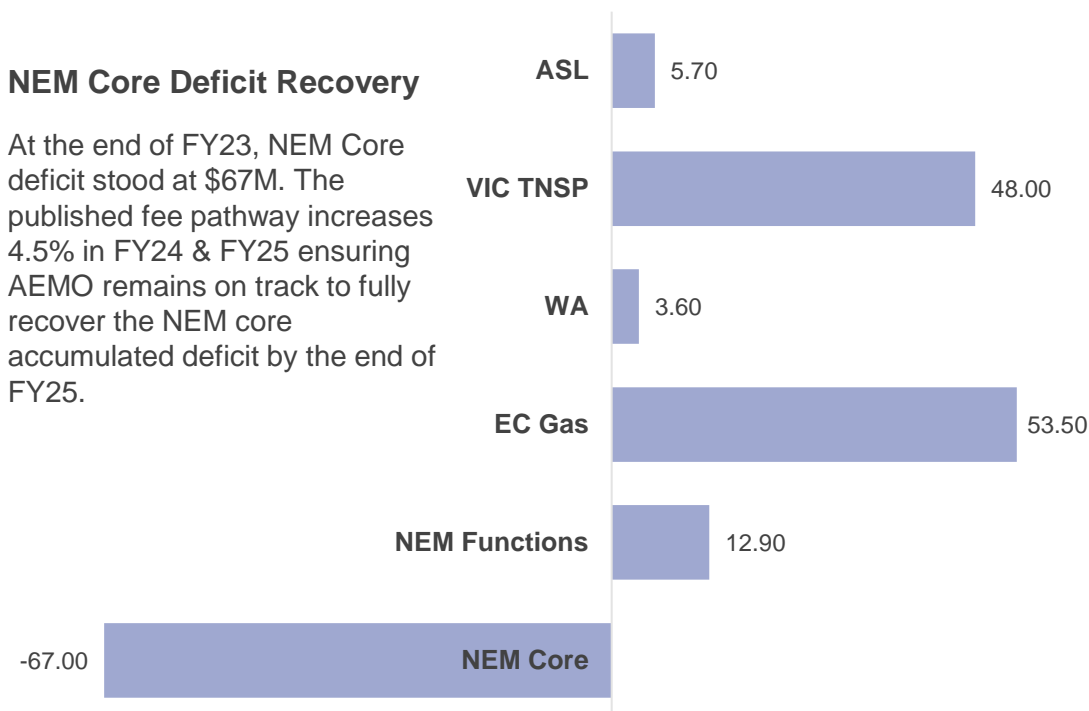


	FY23	FY23	FY22	FY23	FY23
	Actual	Budget	Actual	var to bud	var to FY22
	\$m	\$m	\$m	\$m	%
Fees and tariffs	378.7	378.5	258.5	0.2	46%
TUoS income	677.4	675.9	653.2	1.5	4%
Settlement residue revenue	59.1	20.0	45.9	39.1	29%
Capacity certificate auctions	29.2	-	-	29.2	Nm
Connections revenue	36.4	34.6	31.1	1.8	17%
Other revenue	15.0	4.0	17.9	11.0	(16%)
Other income	23.8	36.0	20.0	(12.2)	19%
<b>Total revenue</b>	<b>1,219.6</b>	<b>1,149.0</b>	<b>1,026.6</b>	<b>70.6</b>	<b>19%</b>
Network charges	(691.8)	(663.3)	(672.8)	(28.5)	3%
<b>Net revenue</b>	<b>527.8</b>	<b>485.7</b>	<b>353.8</b>	<b>42.1</b>	<b>49%</b>
Labour	231.4	237.2	176.7	5.8	31%
Consulting	37.7	42.6	16.7	4.9	126%
Digital	65.4	66.0	53.4	0.6	22%
Occupancy	6.0	13.0	3.5	7.0	72%
Other expenses	35.4	38.6	31.8	3.2	11%
Depreciation and amortisation	60.7	61.9	53.8	1.2	13%
Financing costs	4.5	4.4	1.4	(0.1)	221%
<b>Total operating expenditure</b>	<b>441.1</b>	<b>463.7</b>	<b>337.3</b>	<b>22.6</b>	<b>31%</b>
Annual surplus / (deficit)	86.7	22.0	16.4	64.7	425%
<b>Accumulated surplus / (deficit)</b>	<b>55.0</b>	<b>(42.4)</b>	<b>(31.7)</b>	<b>97.5</b>	<b>274%</b>

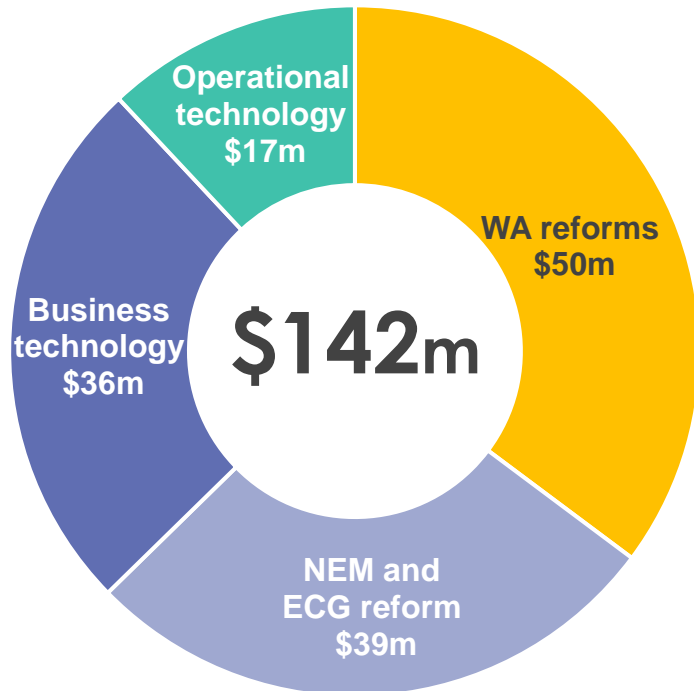
## Accumulated surplus/deficit position FY23

### NEM Core Deficit Recovery

At the end of FY23, NEM Core deficit stood at \$67M. The published fee pathway increases 4.5% in FY24 & FY25 ensuring AEMO remains on track to fully recover the NEM core accumulated deficit by the end of FY25.



# FY23 Capital expenditure



AEMO has a range of reform programs underway, in FY23 the activities under these programs were segmented into the following four areas of investment focus:

## WA Reforms

- **WEM reform program** –delivered a new wholesale electricity market which addresses today’s security and market effectiveness challenges, including the introduction of security constrained economic dispatch and extensive changes to the reserve capacity mechanism.
- **Project Symphony** – a trial to integrate consumer distributed energy resources (e.g. rooftop solar, batteries and other major appliances) into the WA energy markets and systems unlocking greater economic and environmental benefits for customers and the wider community.

## NEM and East Coast Gas (ECG) Reform

- **NEM Reform Program** - a large-scale, industry-wide program to support the transition of the NEM and bring Australia closer to a net-zero future. In FY23, activities included projects to provide consumers greater control over data protection, changes to dispatch and settlement to better recognise storage in the market, enhancements to provide greater visibility over generator availability and preparations for the opening of a new fast frequency market.
- **Gas reforms** - Delivered system and procedure changes to operationalise East Coast Gas reforms.

## Operational technology

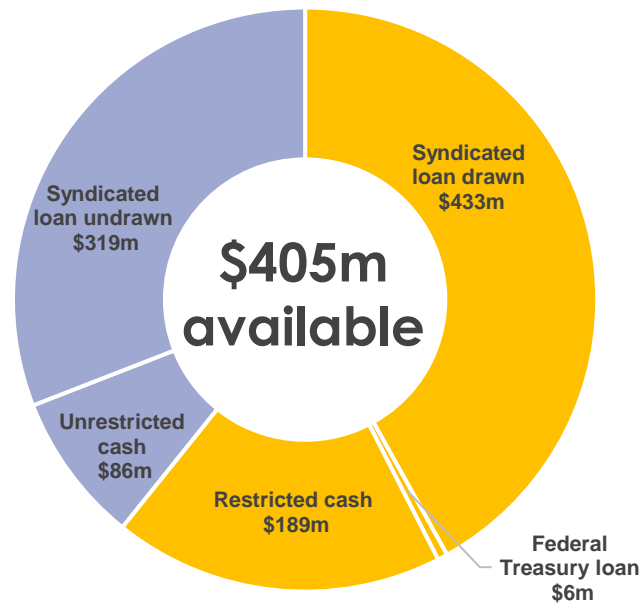
- **Operational technology roadmap** - uplifting operational and control room capabilities and technologies to ensure they are fit for purpose in a distributed and high variable renewable energy environment. In FY23 this included, replacing systems for market notices and constraint management, progressing IT system development for forecasting platforms and progressing Short Term Projected Assessment of System Adequacy replacement.

## Business technology

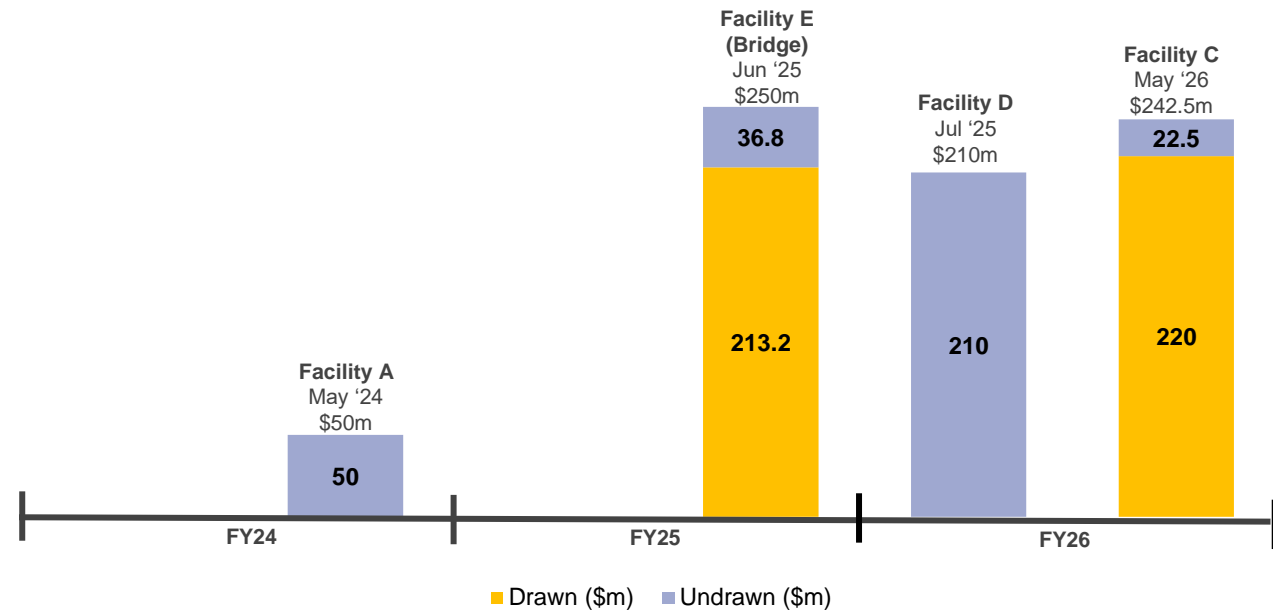
- Maintaining and modernising core business systems, particularly cyber defences, and uplifting and modernising corporate systems. In FY23 this included delivering lifecycle upgrades and changes to digital assets, cyber uplift including development of energy sector cyber incident response arrangements and industry cyber exercise planning, and design for uplift to finance and HR systems.

# Capital structure

**Financing and liquidity  
as at 30 June 2023**



**Bank debt maturities  
as at 30 June 2023**



- AEMO's debt has staggered maturities supported by a Syndicated Facility Agreement.
- \$405m available liquidity as at 30 June 2023, comprising unrestricted cash and undrawn bank debt.
- Facility A is a short-term facility, which is renewed annually.
- Facility B was refinanced in June 2023 via a bridge facility, Facility E.



# Balance sheet

BALANCE SHEET (AUD\$M)	FY24B <sup>1</sup>	FY23A	FY22A
<b>Assets</b>			
Cash	137.1	275.1	1,296.7
<i>Cash at bank</i>	29.8	86.1	27.5
<i>Other restricted cash<sup>2</sup></i>	107.3	189.0	1,269.2
Receivables (current)	130.3	141.7	128.4
Intangible assets & PPE	622.3	472.0	383.8
Other assets	54.5	29.1	22.0
<b>TOTAL ASSETS</b>	<b>944.3</b>	<b>918.0</b>	<b>1,830.8</b>
<b>Liabilities</b>			
Payables	218.8	228.4	1,145.4
Debt	562.0	459.2	454.5
Other liabilities	91.5	143.2	229.5
<b>TOTAL LIABILITIES</b>	<b>872.3</b>	<b>830.7</b>	<b>1,829.4</b>
<b>TOTAL EQUITY</b>	<b>72.0</b>	<b>87.2</b>	<b>1.4</b>

Cash represents both balances held for AEMO operational needs and restricted cash balance provided by participants to AEMO for credit/prudential purposes. Restricted cash balances are not available for AEMO operational use.

The largest element of receivables is the transmission revenue receivable for the month followed by the participant fee receivable.

Majority of the PPE & Intangible balance relates to intangible assets associated with major reform projects principally in the NEM and WEM including 5MS and NEM2025.

Debt balance is used to fund both capital expenditure and any operating deficits or working capital needs. The large accumulated deficit in the NEM segment has been debt funded as has the CAPEX investment in reform activities.

- Notes:
1. FY24B closing balances based on FY23 8+4 forecast closing balances.
  2. Includes grants in trust, security deposits and early settlement proceeds, participant compensation fund

# Cashflow statement



CASH FLOW (AUD\$M)	FY24B	FY23A	FY22A
<b>Cash flows from operating activities</b>			
Receipts from customers	498.8	455.1	494.2
Payments to suppliers and employees	(427.2)	(395.0)	(327.9)
Net interest and other finance costs paid	(6.8)	(9.9)	(3.1)
Net (payments)/receipts - prepaid settlements	(5.3)	(942.1)	923.9
<b>NET CASHFLOW FROM OPERATING ACTIVITIES</b>	<b>59.5</b>	<b>(891.9)</b>	<b>1,087.1</b>
<b>Cash flows from investing activities</b>			
Payments for plant, equipment and intangible assets	(200.4)	(129.6)	(97.5)
<b>NET CASHFLOW FROM INVESTING ACTIVITIES</b>	<b>(200.4)</b>	<b>(129.6)</b>	<b>(97.5)</b>
<b>Cash flows from financing activities</b>			
Net proceeds from borrowings	65.1	5.7	75.0
Repayment of lease liabilities	(5.4)	(5.8)	(7.3)
<b>NET CASHFLOW FROM FINANCING ACTIVITIES</b>	<b>59.8</b>	<b>(0.1)</b>	<b>67.7</b>
<b>Change in cash position</b>	<b>(81.1)</b>	<b>(1,021.6)</b>	<b>1,057.4</b>
Cash at the beginning of the FY <sup>1</sup>	218.2	1,296.7	239.3
Cash at the end of FY <sup>1</sup>	<b>137.1</b>	<b>275.1</b>	<b>1,296.7</b>

AEMO's fees and tariffs are broadly set to recover forecast operating cost (including D&A) each year, with adjustments to reflect brought forward surpluses or deficits

Cash from operating activities was highly elevated in FY22 reflecting significant prepaid settlements received during the financial year as a result of a spike in wholesale electricity prices associated with ageing thermal plants and fuel supply issues. These balances are not available for AEMO operational use and were returned in FY23. Refer to Balance Sheet for breakdown of cash and restricted cash balances.

Investment spend consists of regulatory reform projects, corporate enablement & modernisation and the initial works for VNI West

# FY24 budget recap & Q1 forecast



# FY24 - AEMO's strategic priorities



1

## Operating today's systems and markets

### A secure and reliable energy system, every day

AEMO has prepared for and managed operational changes for the next 12 months, including embedding market and system changes, managing increased renewable penetration and scheduled generation retirements, and strengthening its core systems to be more resilient, including to cyber threats.



2

## Navigating the energy future

### AEMO has planned and enabled critical infrastructure delivery and market reforms

AEMO has enhanced integration of gas and electricity in the 2024 Integrated System Plan, sought to enhance the regulatory frameworks for transmission investment, and progressed infrastructure delivery in its jurisdictional roles. AEMO has helped deliver business and digital solutions for in-progress reforms and worked with stakeholders to develop the design of critical reforms.



3

## Engaging our stakeholders

### AEMO has enhanced trust and delivered value to stakeholders

AEMO has enhanced trust by clearly delivering value to consumers, members and stakeholders; partnered with jurisdictions to achieve positive energy transition outcomes; and helped to build social licence for the energy transition.



4

## Evolving the way we work

### AEMO has modernised its systems, evolved its culture, and improved financial health

AEMO has modernised its systems and evolved its culture to make AEMO an even better place to work.  
AEMO has managed costs and reduced its accumulated deficit in NEM Core in line with the agreed fee pathway and budget.

# FY24 key initiatives and estimated incremental costs/investment expenditure



## 1 Operating today's systems and markets

- Operational capability uplift across people and processes.
- Modernise technology systems and tools.
- Strengthen cyber resilience and recovery capabilities.
- Operationalise new roles and responsibilities under the *Security of Critical Infrastructure Act 2018*.

and more for a total of 14 Initiatives in Priority 1

**Opex ~\$22m**  
**Capex ~\$43m**



## 2 Navigating the energy future

- Deliver and embed WEM reform on 1 October.
- Deliver high quality and timely network planning advice including the 2024 *Integrated System Plan*.
- Deliver and embed NEM reform as per roadmap.
- Progress the Engineering Roadmap to 100% renewables.
- Progress Victorian Transmission projects.
- Deliver improvements to the connection process.

and more for a total of 22 Initiatives in Priority 2

**Opex ~\$20m**  
**Capex ~\$106m**

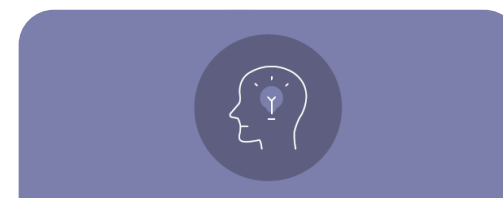


## 3 Engaging our stakeholders

- Enhance trust with stakeholders through openness and transparency.
- Improve accessibility of AEMO information and publications.
- Improve stakeholder engagement approach and capability.
- Embed consumer and community focus.

and more for a total of 10 initiatives in Priority 3

**Opex ~\$2m**



## 4 Evolving the way we work

- Deliver outcomes within agreed budget.
- Continue to provide greater financial transparency and demonstrate value for money.
- Continue to attract, empower, develop and retain talent for AEMO's current and future requirements.
- Embed our values and culture.
- Modernise our systems and processes to reduce effort and cost.

And more for a total of 16 initiatives in Priority 4

**Opex ~\$8m**  
**Capex ~\$14m**

A total of 62 Initiatives in FY24. Refer to [FY24 Strategic Corporate Plan](#) for more details

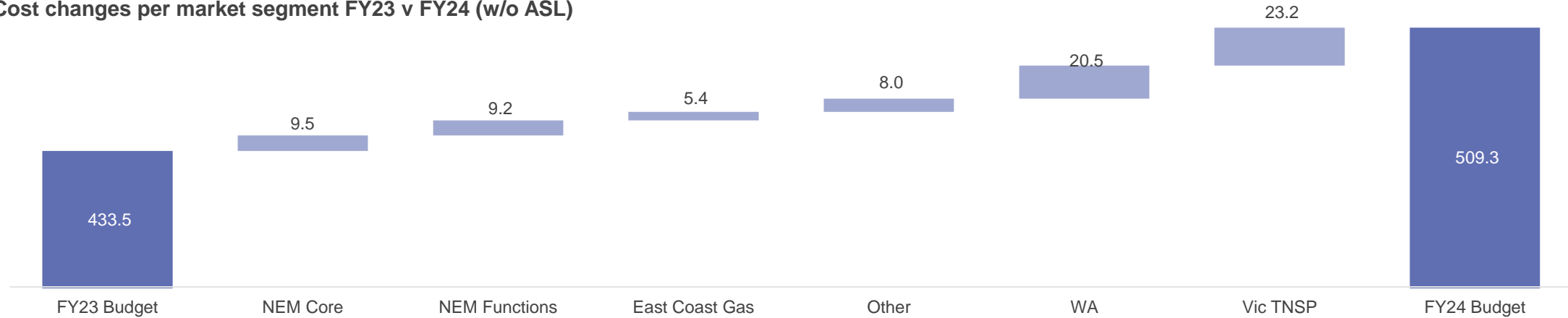
The investment spend above accounts for \$163m of the \$180m spend (~90%), the remainder is stay in business investment. The operating spend above accounts for ~\$52m (excluding D&A and borrowing costs) of the incremental \$76m spend (~70%).

# FY24 budget recap - Opex



Costs are carefully managed and in line with planned programs of work. Most operating cost increases are in VIC TNSP and in the regulated WA market, driven by mandated initiatives. Cost increases in NEM and East Coast Gas are driven by wage inflation, investment in central functions and mandated tasks (e.g. Dandenong LNG).

Cost changes per market segment FY23 v FY24 (w/o ASL)

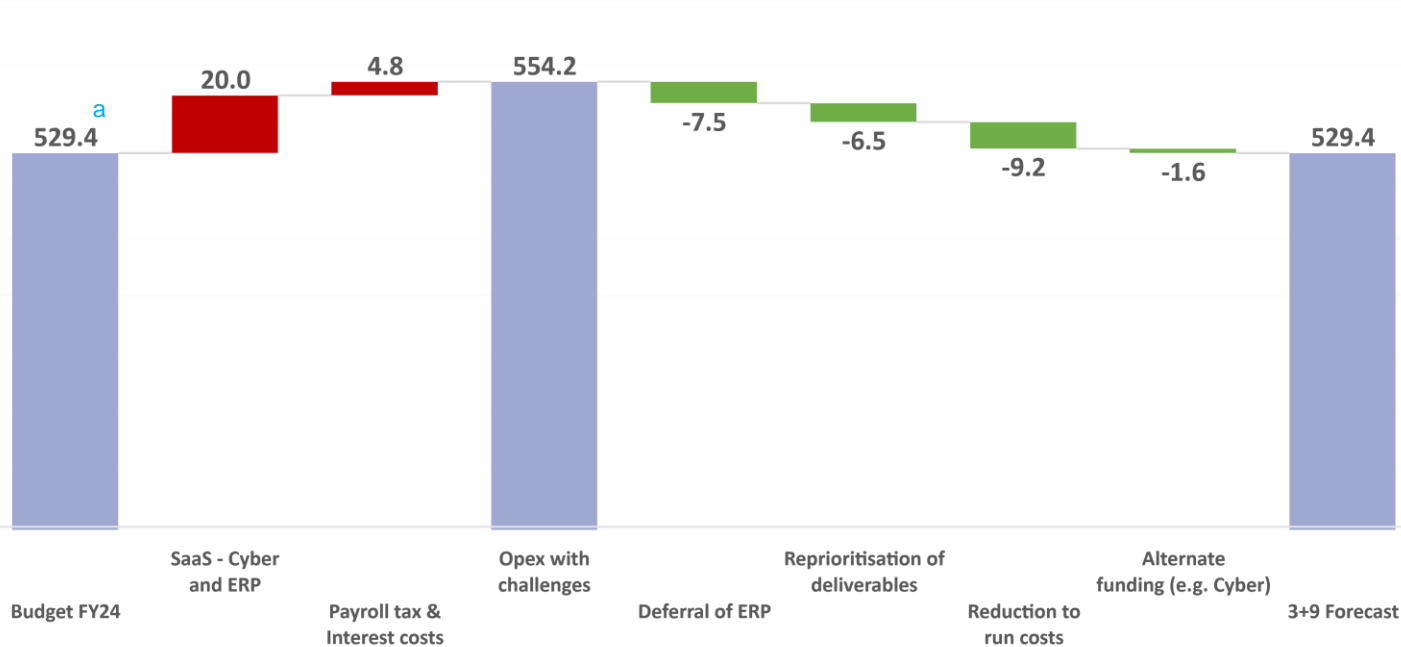


NEM Core (5% increase)	NEM Functions (10% increase)	East Coast Gas (10% increase)	Other	WA (25% increase)	VIC TNSP (46% increase)
<p>Increase in NEM Core of 5% is primarily due to:</p> <ul style="list-style-type: none"> <li>Labour increases across the Operations and System Design teams to meet increasing complexity in managing the energy transition and to support connection activities</li> <li>planned capability uplift in Finance, legal and other corporate functions and investment into Cyber resilience and recovery.</li> <li>increased financing cost as a result of interest rate environment</li> <li>Partially offset by lower D&amp;A costs and underlying IT savings.</li> </ul>	<p>Increase in NEM Functions opex reflects:</p> <ul style="list-style-type: none"> <li>Increased Financing cost as a result of interest rate environment, specifically within 5MS.</li> <li>Additional consulting &amp; FTE to support the Supercharged ISP within National Transmission Planner role</li> <li>Increased operating cost to support mandated NEM Reform activities ~\$5m</li> </ul>	<p>Increase in East Coast Gas is largely driven from:</p> <ul style="list-style-type: none"> <li>Storage costs ~\$7.8m associated with gas rule change that requires AEMO to hold additional gas capacity (140TJ to 420 TJ).</li> <li>Finance costs are ~\$2.6m lower as a result of higher cash holding.</li> </ul>	<p>AEMO provides services under an SLA to ASL. These services relate to system design, digital, legal, HR, transactional support.</p> <p>Year on year difference relates to a change from net to gross cost presentation.</p>	<p>WA reform program drives majority of the changes with:</p> <ul style="list-style-type: none"> <li>Increased labour ~\$4.5m &amp; consulting ~\$2.4m required to manage the transition to new market design</li> <li>Increased depreciation and amortisation and finance costs associated with WEM reform ~\$11.1m</li> <li>Development, and deployment of IT systems and interfaces required to implement the WEM Reform Program ~\$1.9m</li> </ul>	<p>Key increases across labour and consulting to support:</p> <ul style="list-style-type: none"> <li>VNI West ~\$10m</li> <li>WRL and Renewable Energy Zone Development Plan ~\$7m</li> <li>Other increases to support Vic connection related activities ~\$2m.</li> </ul>

# FY24 Budget Opex challenges – Solutioning enacted to stay within the FY24 budget envelope and prioritise delivering accumulated NEM core deficit recovery.



## FY24 Budget Challenge & solutioning



### FY24 budget challenge

Since the FY24 Budget was set, three key financial challenges emerged resulting in a \$24.8m FY24 headwind that has required management by AEMO.

- Cyber and Corporate systems modernisation (ERP) related expenditure identified as Opex (SaaS); and
- Victorian Government introduced a 2% surcharge on payroll tax (Covid Debt repayment plan) and higher finance costs resulting from tightening cash rate cycle.

### Solution

AEMO has proactively managed the challenge by identifying and assessing opportunities and risks, agreeing actions and tracking implementation. Actions include:

- Defer corporate system implementation
- Reductions through deferred or reduced expenditure primarily by reducing scope of initiatives,
- Reduction to run costs - savings realised by delaying or cancelling recruitment, reviewing capitalisation assumptions and reducing recruitment costs by using internal resources

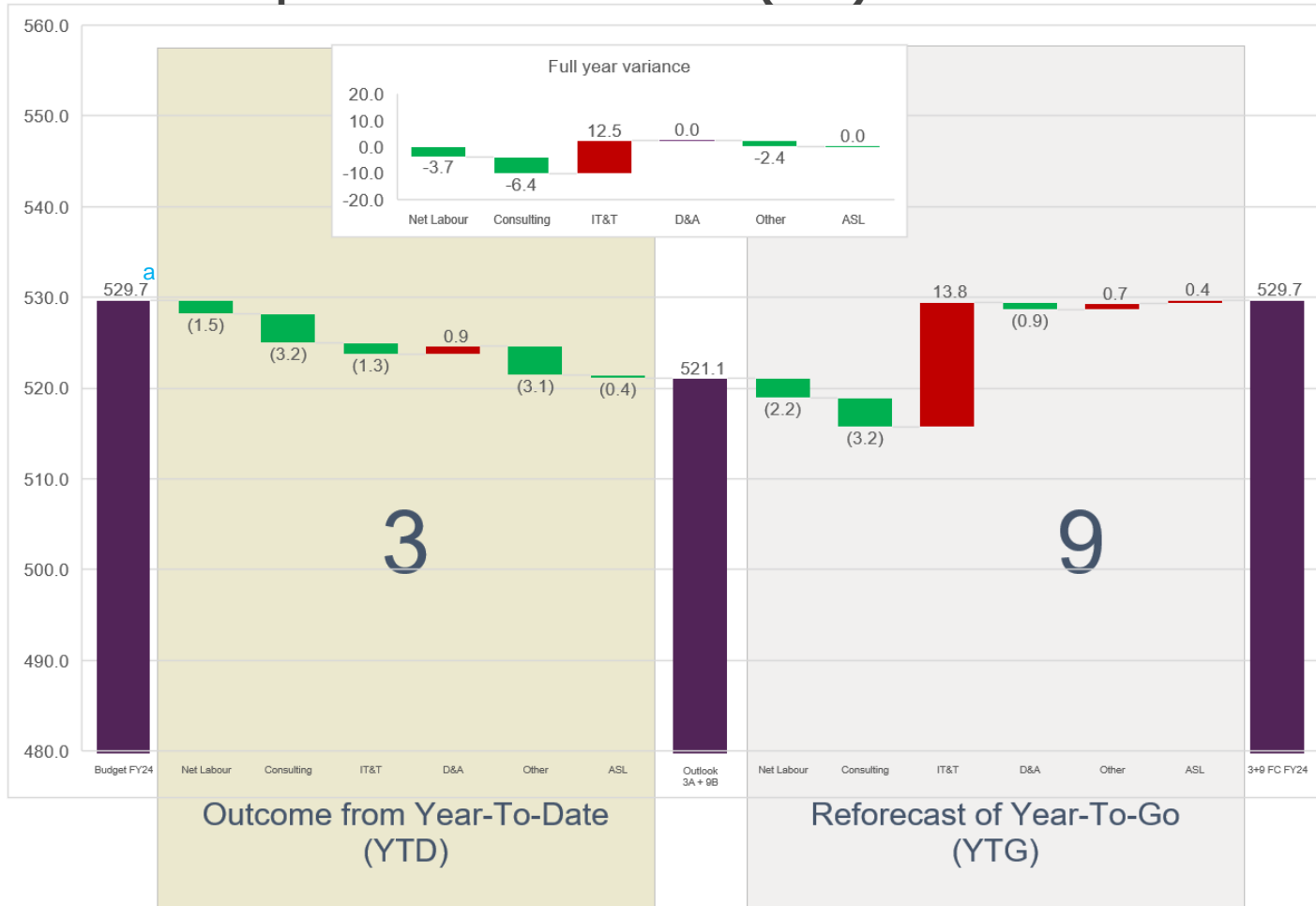
Given the impact to the NEM Core segment and risk to the deficit recovery pathway, NEM core opportunities were the major focus.

a. Budget & F'cast includes \$32.2m of ASL operating expenditure.

# FY24 Q1 F'cast (Opex) - all segments are favourable to budget at end Q1, through careful cost management to accommodate investment in cyber secure systems



## AEMO Group FY24 OPEX Forecast (3+9) net of recoveries



### Full Year Forecast

YTD Sep 23 result was \$8.6m favourable to budget, mostly in labour, consulting, digital and borrowing costs. This favourability will be fully offset by investments within cyber and ERP in H2 of FY24.:

- Labour underspend is expected to continue through the rest of FY24 with prioritisation of roles to meet corporate plan objectives;
- Consulting expenditure favourability through YTD Sep 23 is part timing and from specific actions identified as part of solutioning the FY24 Budget challenge. Some of this favourability in consulting services relate to directly recoverable projects being undertaken within Vic TNSP segment;
- Digital costs are purely timing with several cost pressures as illustrated within the risks and opportunities;
- Other expenditure related primarily to timing of costs such as Gas storage expenditure (full cost passthrough).
- Borrowing costs are marginally favourable in YTD Sep 23Q1 but with a tightening circle of RBA cash rate increases, it is expected to be marginally unfavourable to budget by the end of the year.

a. Budget & F'cast includes \$32.2m of ASL operating expenditure.

# FY24 Budget - Key Opex risks actively being managed



Risk Description	Risk rating	Approx. Range \$m	Actions
Programs require additional "Project Opex"	High	0 – 5	Actively manage within FY24 Budget envelope through ePO forums.
Lower capitalisation of labour	High	0 – 5	Timesheet review by Project Delivery teams to ensure capitalisation is aligned with actual time spent and budget assumptions.
Higher interest rate	High	0 – 2	AEMO has lower drawn debt than budget. The recent decision by RBA to increase cash rate crystallises part of the risk. However, a further increase in the RBA cash rate would put additional upward pressure on borrowing costs.
Cyber related additional expenditure requirements	High	0 - 5	Cyber related costs are expected to be higher than budget for market related roles and internal cyber related investment. Alternate funding/cost recovery mechanisms are being discussed.
Higher Labour costs	Med	0 – 5	Budget assumes a 7.5% vacancy factor. Management have been working within their envelopes for FY24 with initiatives agreed and targeted monitoring of recruitment is underway to manage to labour budgets.
Risk that digital efficiency initiatives are not delivered	Med	0 – 5	Digital efficiency initiatives are actively being progressed by Digital team supported by Finance to manage the risks identified.

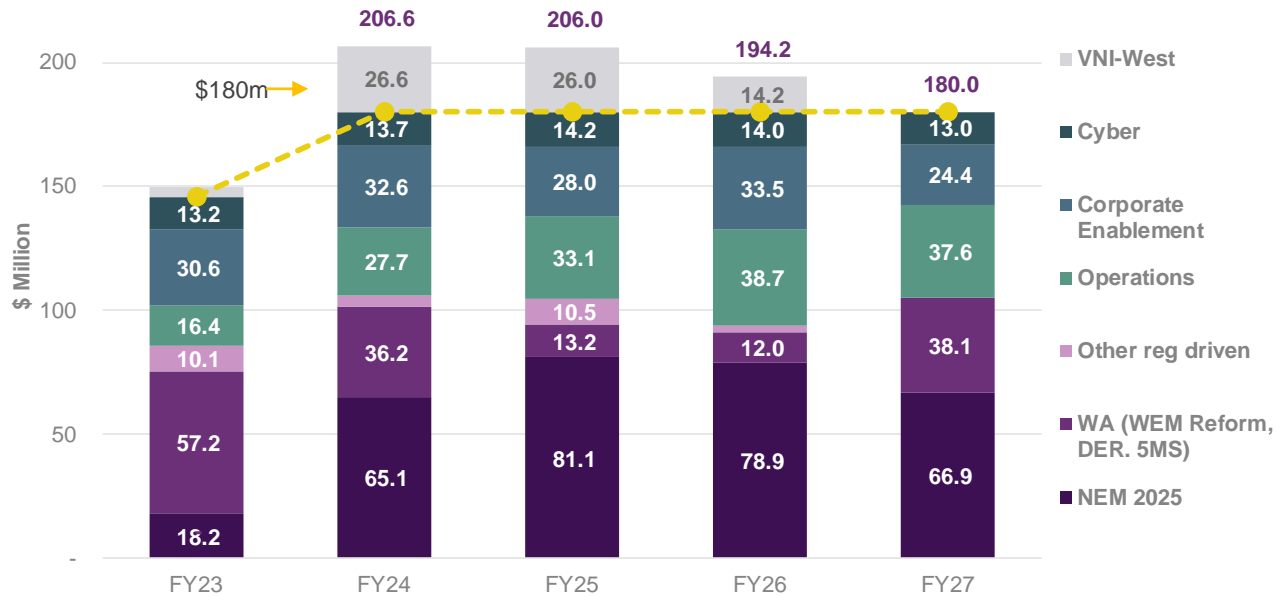
- Risks and opportunities are monitored, and actions managed as part of day-to-day financial management.



# FY24 Investment program is aligned to corporate plan priorities. Consistent with FY23, the majority of the future year spend is on regulatory reform programs



Investment spend capped to \$180m p.a. to FY27



The investment profile has an expenditure constraint of \$180m (excluding VNI West) reflecting the business' delivery capacity, with reform implementation requirements.

- From FY24-FY27 ~\$100m p.a. of programs are regulatory driven (purple segment)
- Remaining~ \$80m p.a. consists of Cyber related spend, Operations Tools uplift and Corporate Enablement spend including digital projects and lifecycle maintenance.

## Regulatory

Largest element of spend is on the multi-year programs like NEM Reform and the WEM reform program (go live of October 2023). These are key reforms driven by regulation.

## Operations

Largest element of investment includes the Operational Technology Roadmap program of work to uplift controls room tools and systems, including replacement of the Short Term Projected Assessment of System Adequacy (ST PASA).

## Corporate Enablement

Includes data centre consolidation, investment in operational data storage capability, lifecycle digital spend and web portal refresh for members, employees and consumers.

## Cyber

Develop and implement AEMO compliance with Protective Security requirements of the Security of Critical Infrastructure (SOCl) Act. Develop and implement AEMO's new Cyber security roles in the Energy Sector as per the Commonwealth government. Cyber assurance, testing and exercises.

**Note:** Allocations of investment for FY24 and beyond are regularly prioritised through AEMO's governance forums, including through submissions to relevant State regulators. As a result, the numbers are subject to change and will align with final regulatory determinations where relevant.

# FY24 Capital Management activities are aligned with AEMO's investment program



## Bond Issuance

AEMO successfully issued its inaugural Australian Medium-Term Note (A\$MTN/Bond) on 30 Nov 23 (financial close on 6 Dec 23) for AUD \$300m, tenor of 5 years, all-in fixed rate of 5.35%.

The Bond is an important milestone for AEMO, which provides diversity to the capital structure and flexibility for ongoing funding requirements. Investors welcomed the opportunity to support AEMO's inaugural issuance, which was reflected in a high-quality investor base and an order book in excess of \$715 million.

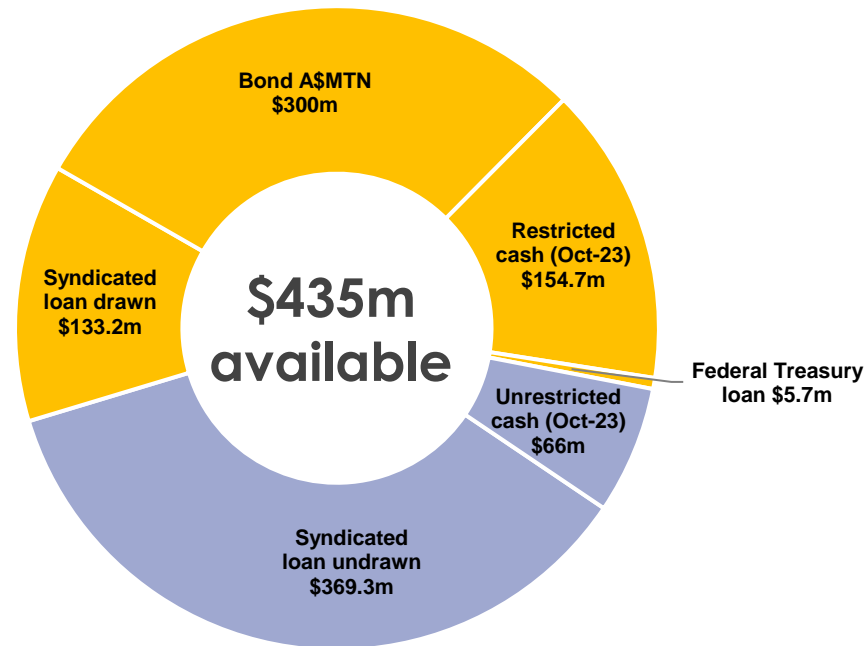
Benefits of AEMO's inaugural bond include:

- Reinforcing the capital structure with cost competitive long dated debt;
- Enhancing the tenor and maturity profile to be more aligned to the capital investment strategy and cashflow recovery profile of AEMO;
- Improving the debt mix from 100% floating to approximately 70%/30% fixed/floating consistent with AEMO's treasury strategy; and
- Increasing bank market capacity allowing the lenders to provide strategic financing solutions and additional capital support as required. This will provide flexibility to the extent that more roles and responsibilities are mandated for AEMO which require capital investment.

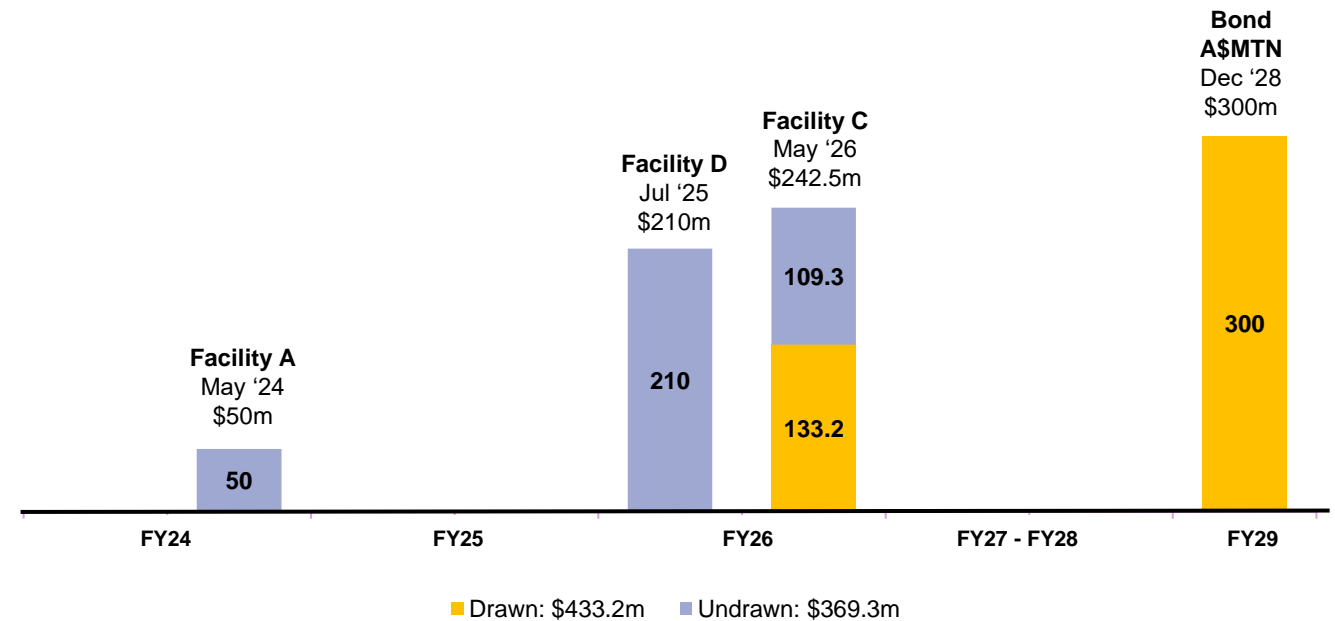
# FY24 Capital structure – Post Bond Issuance



**Financing and liquidity  
as at 6 December 2023**



**Bank debt maturities  
as at 6 December 2023**



- AEMO’s debt has staggered maturities supported by a Syndicated Facility Agreement.
- \$435m available liquidity as at 6 December 2023, comprising unrestricted cash and undrawn bank debt.
- Facility A is a short-term facility, which is renewed annually.
- Facility E (Bridge) was refinanced with the A\$MTN Bond.

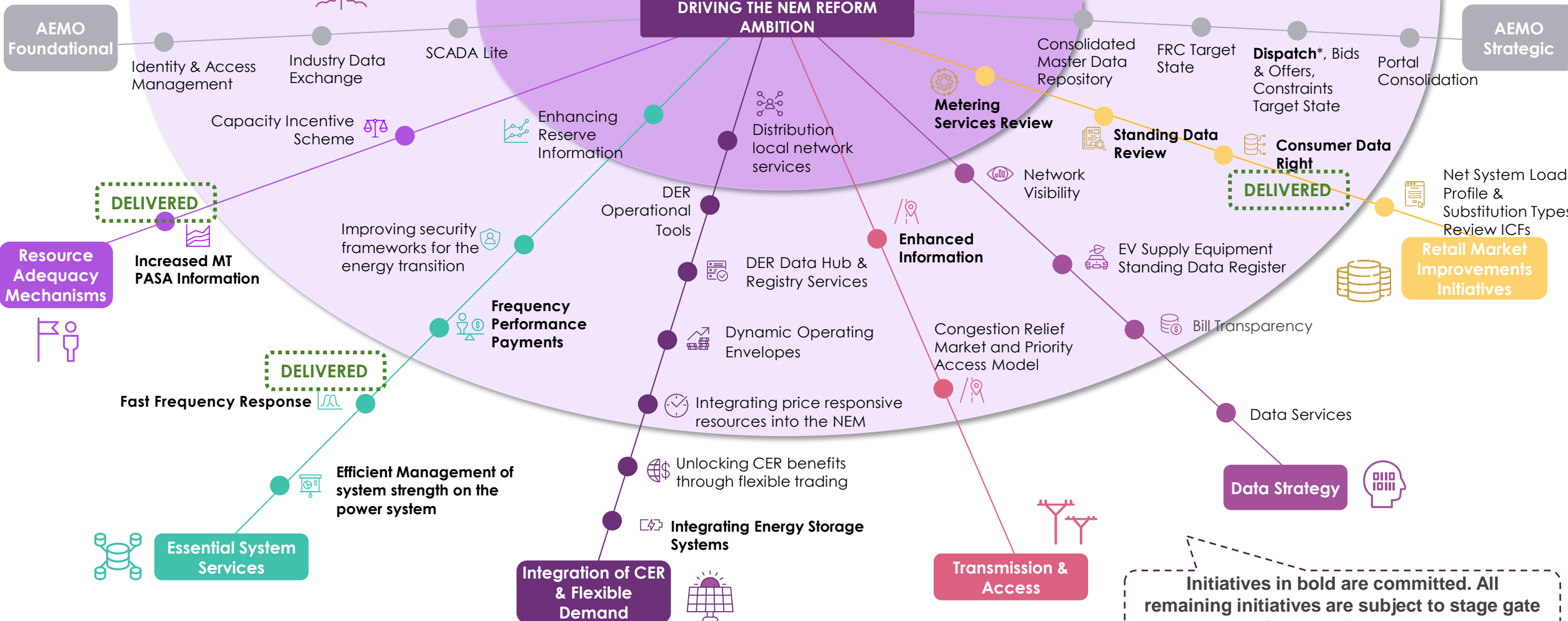
# NEM Reform Program - Update



# Program Overview



Successfully enabling the energy transition and net-zero emissions economy for Australians



Initiatives in bold are committed. All remaining initiatives are subject to stage gate and approval processes

\* Tactical uplift only.

# Context and background



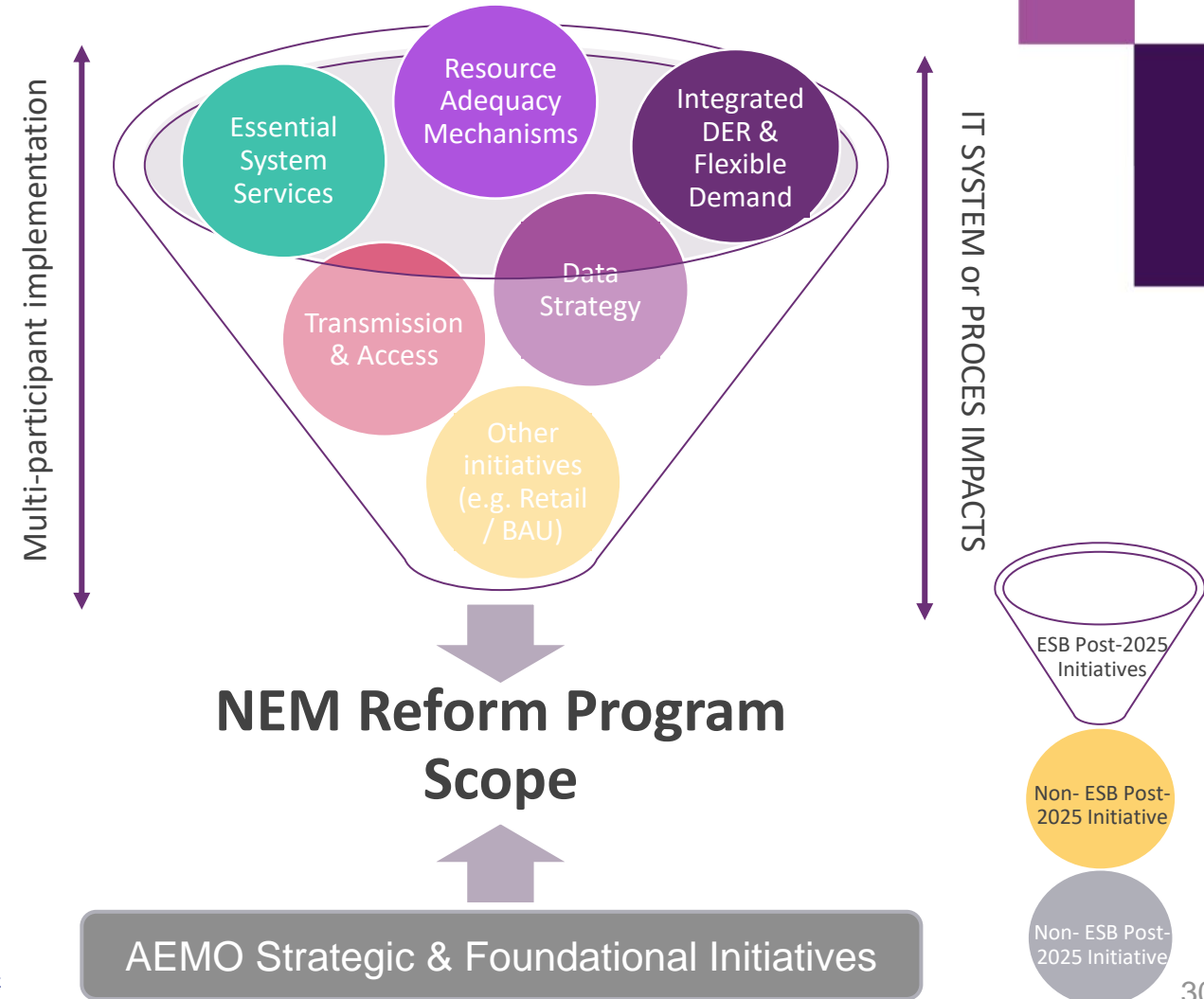
## NEM Reform Program

- AEMO, together with industry, is delivering a comprehensive package of reforms, covering the Energy Security Board's (ESB) Post 2025 reforms<sup>1</sup>, AEMO Strategic and Foundational initiatives and other NEM market reforms.
- AEMO has formed the NEM Reform Program to manage the implementation of this reform package.

## Objectives of the program

- To work **collaboratively with industry** in setting a forward view aligned with reform timelines to support individual planning and delivery activities.
- To **deliver effective solutions** that meet the reform objectives.
- To **deliver as efficiently** as possible leveraging opportunities to **bundle, sequence and prioritise** projects within the Program, and where possible identify and drive out costs through solution design and implementation.


<sup>1</sup> <https://esb-post2025-market-design.aemc.gov.au/32572/1629945809-post-2025-market-design-final-advice-to-energy-ministers-part-b.pdf>



# Industry engagement



# NEM Reform Program Engagement

Forums	Forum focus 	Cadence	Approach
Executive Forum	Program overview and status update	3 per Year	Nomination
Reform Delivery Committee (RDC)	Long term strategic perspective	Quarterly	Nomination
Program Consultative Forum (PCF)	Inflight initiatives status & co-ordination	Monthly	Open
Implementation Forum	Implementation of reforms	Monthly	Open
Electricity Wholesale (EWCF) & Electricity Retail (ERCF) Consultative Forums	Procedures working groups	Monthly	Open
Industry Testing Working Group	Testing	Monthly	Open
Working Groups	Inflight	As appropriate	As appropriate



To learn more about these forums, please visit

- [AEMO | NEM Reform Program Forums](#)
- [AEMO | NEM Reform Program Initiatives](#)
- [AEMO | Industry Meetings Calendar](#)
- or contact the program at [NEMReform@aemo.com.au](mailto:NEMReform@aemo.com.au).

Focus/working Groups for inflight initiatives include:

- Initiative working groups
- Strategic and foundational focus groups (IDX/IDAM/PC)
- Industry Testing Working Group (ITWG) – IT technical implementations

Subscribe to the NEM Reform Newsletter [here](#)



# Going beyond engagement



## Establishing engagement

### Establish information channels

Media Releases, Newsroom articles, Newsletters, Website, Mailbox, infographics, Fact sheets & Tailored materials.

### Establish consultation channels

Industry briefing & information sessions, Consultative forums, One 2 One meetings, Surveys

### Stakeholder involvement

Establishing working groups and focus groups, to ensure stakeholder perspectives are understood and provide feedback on the outcome of stakeholder contributions.

### Establish collaborative channels

(via EWCF, ERCF, PCF and Implementation Forum to facilitate and support industry readiness)



## Planning uplift

### NEM Reform Implementation Roadmap

(Visibility of implementation roadmap, long-term planning, bundling, sequencing and prioritizing of initiatives)

### Reform Delivery Committee (RDC)

(Leveraging industry insight to maintain the Implementation Roadmap)

### NEM Reform Program Governance

(manage implementation impacts of policy/rules changes, stage gate, investment commitment)

### Informed Go-Live Date Process

(High-level implementation design and participant impacts to assist in setting an informed go-live date for the Rule)



## Participant delivery facilitation

### Participant Impact Assessments & Development Timelines / Requirements

(identify impacts to participants and the timeline needed for their development)

### Participant technical information

(Provide participants with tech spec and interface information, testing support and environments, etc)

### Participant self service

(Self-serve videos outlining implementation design, timing and participant impact assessment)



## Industry readiness

### Industry readiness requirements

(Establish L1/L2 milestones, Readiness criteria, Readiness monitoring and reporting, Contingency Plans)

### Industry Test, Transition & Go-Live

(Plan and facilitate industry testing and market trial, define industry transition plans, define/manage industry-wide go-live)

# Governance

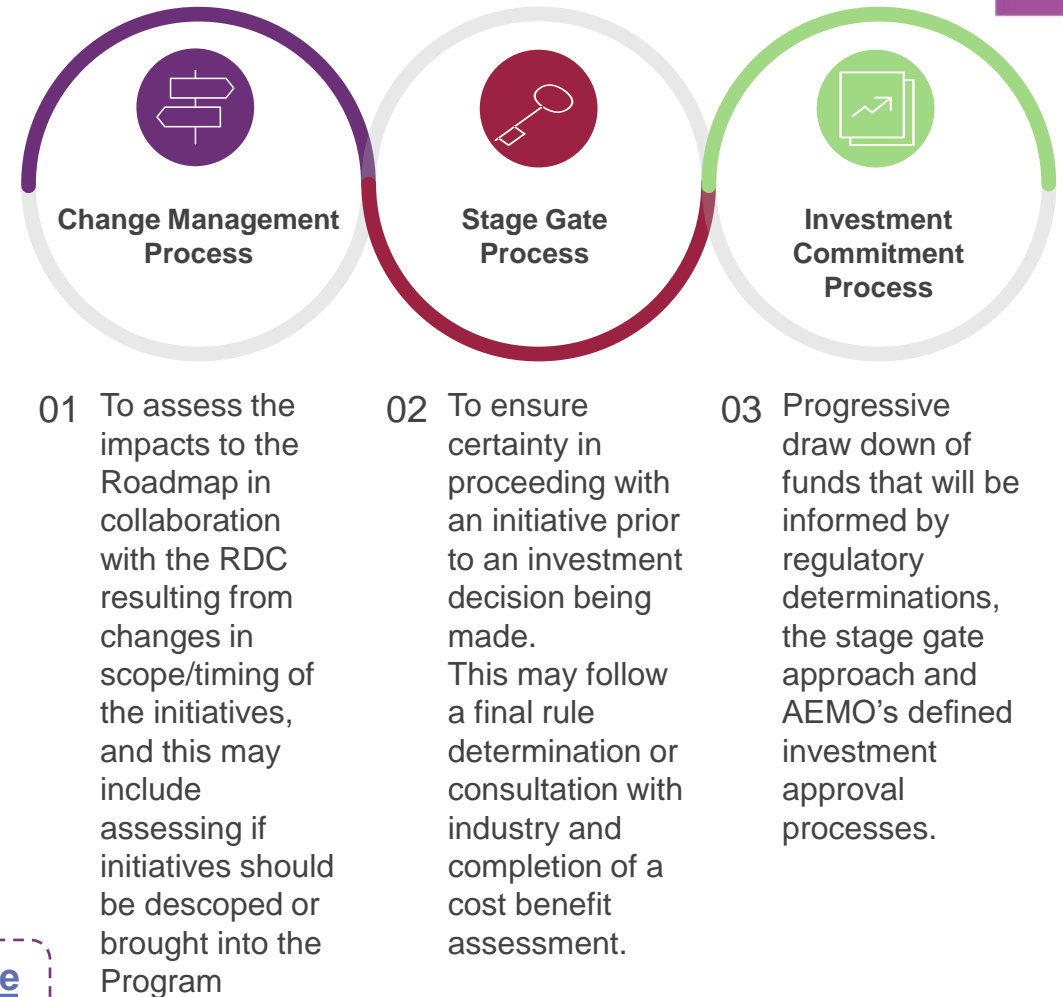


# Program and Roadmap Governance

The [NEM Reform Implementation Roadmap](#) commits to delivery of mandatory and no regrets initiatives in a timely way. It also sets a pathway and progressive commitment process for delivery of those initiatives with greater uncertainty in policy, design, scope or timing

- In developing the Roadmap, AEMO and the Reform Delivery Committee noted the significant challenges and risks associated with delivery of the NEM Reform Program and the importance of an appropriate management and governance framework.
- Challenges include but are not limited to:
  - Managing uncertainty in scope, timing and cost of initiatives
  - Establishing the basis for, and timing of AEMO strategic and foundation enabling initiatives
  - Setting funding commitments over a multi-year Program given the uncertainty surrounding policy and regulatory outcomes and scope of certain initiatives

Refer to published [“NEM Reform Implementation Roadmap Governance – Statement of Approach”](#) for further information on each process.



# Delivered and coming up



# 2023 has been an intensive, but successful year

- Collectively, we have successfully deployed a large volume of reforms with the November 2023 release marking our final release for this calendar year
- While we as an industry should be proud of the successful deployment of those initiatives they have not been without their challenges
- Building on established engagement structures, **the program has evolved to deliver integrated planning for participants and prioritise participant facilitation** to support participants with the necessary information and artefacts that underpin their own readiness preparations
- For example:
  - AEMO to provide early, whenever possible High-Level Implementation Design for participant consideration
  - A better understanding and factoring in of participant development timelines and support requirements can enable AEMO to better mitigate delivery risks and reduce overall implementation stress (Informed by participant impact assessments)

Release	Initiatives	Status
Mar-23	Integrating Energy Storage Systems (Initial release)	Delivered
	Stand Alone Power Systems (SAPS) Market Stand-Alone Power System Resource Provider (MSRP) Registration	Delivered
MAY-23	CDR (excluding LCCD)	Delivered
	B2B v3.8 and other ICFs	Delivered
JUN-23	SAPS	Delivered
AUG-23	Integrating Energy Storage Systems (ADC)	Delivered
	Fast Frequency Response - Dispatch & Reg	Delivered
OCT-23	Fast Frequency Response	Delivered
	5 Minute load profile	Delivered
	Increased MT PASA Information	Delivered
NOV-23	CDR (LCCD), CDR Ph3, MS DR compliance Holiday	Delivered

2023 wrap up

# NEM Reform Our projects



All 2023 projects successfully delivered

13

Projects delivered

8

Rule changes implemented

4

Procedure changes implemented



2023 wrap up

# NEM Reform Stakeholder Engagement



180

industry engagements delivered

2,700+

opens of external newsletter

2,500+

Attendance at industry engagement sessions

1,000+

Mailbox enquiries responded to

# 2024 is shaping up as another busy year for all

## ONGOING / COMMITTED IN 2024

Release	Initiatives	Impacted Stakeholders
MAR-24	Metering Exemptions (MSDR)	Retailers MC MP/MDP
JUN-24	<a href="#">Integrating Energy Storage Systems [Final]</a>	IRPs NSPs FRMP MC/MP/MDP MSRPs ENMs Vendors
SEP-24	Retail Market Improvements	FRMP MDP LNSP
DEC- 24	<a href="#">Frequency Performance Payments</a> (Non-Financial)	Generators Scheduled Loads
JUN-25	<a href="#">Frequency Performance Payments</a> (Financial Commencement)	Generators Market Customers

- In addition to those committed reforms, several initiatives are likely to reach a draft or final determination in 2024 including:
  - Improving security frameworks for the energy transition** (FD – Mar 24)
  - Enhancing Reserve Information** (DD – Dec 23, FD – Apr 24)
  - Unlocking consumer energy resource benefits through flexible trading** (DD – Feb 24)
  - Integrating price responsive resources into the NEM** (DD – Feb 24)
- This may require us to start work on these initiatives depending on the final scope and if a rule change is made by the AEMC
- In a similar manner and subject to ongoing industry consultation and business case development implementation of AEMO’s foundational / strategic initiatives (IDAM, IDX, PC, SCADA Lite) may commence throughout the year
- Finally, various reforms will continue to progress through a policy development phase including for example CER initiatives

# Continuous improvement





# How did we go and where can we improve ?

## Stand Alone Power Systems

- Policy objectives delivered through process and system enablement. AEMO able to centrally deliver NSP responsibilities reducing overall industry costs.
- Limited industry use so far, but progress made on establishment. Certain aspects of commencement delayed.

## IESS: Contingency FCAS for SGA (Mar 2023)

- Policy objectives met. Optional for participants, all set-up costs were for AEMO. Detailed materials available for participants wishing to register. Thorough industry engagement.
- No uptake to date by participants, limited benefit delivered thus far.

## IESS: Aggregated Dispatch Conformance (Aug 2023)

- Policy objectives met. Optional for participants, all set-up costs were for AEMO, and solution delivered preferable outcome following stakeholder feedback. Thorough industry engagement
- Low uptake at present, however the reform is valuable in incentivising the important firming resources going forward.

## Fast Frequency Response

- Policy objectives met. A good example of delivering reforms at the right time and is expected to deliver significant benefits in terms of efficiently delivering system security as inertia levels decrease. Thorough industry engagement.

## Enhanced MT PASA Information

- Policy objectives met. Provides a good opportunity to uplift participant interfaces. Development of API will reduce industry costs going forward. Thorough industry engagement.

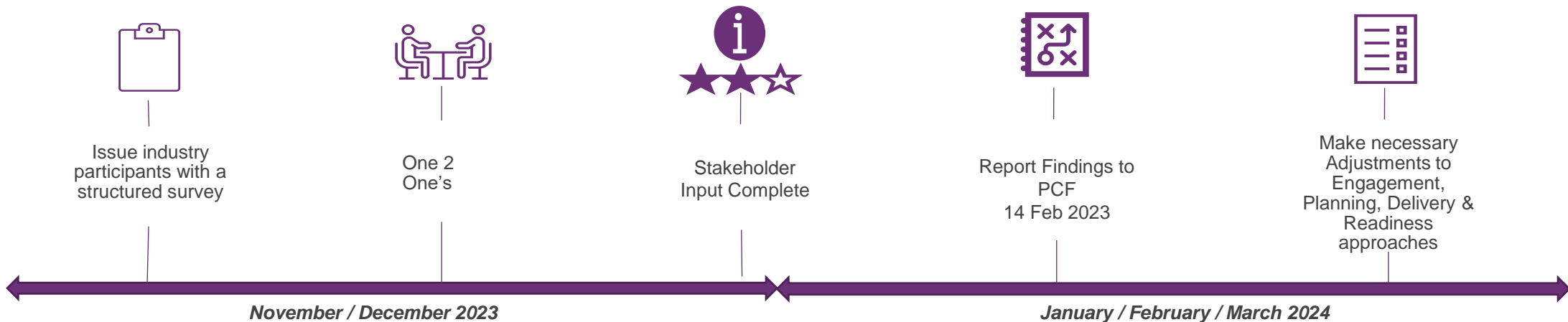
# Upcoming: NEM Reform Program Review

- With 2023 wrapping up, this presents us with an opportunity to reflect on our delivery process and look for opportunities to improve the process for our 2024 delivery schedule
- AEMO intend to undertake a review of our 2023 program processes to help inform 2024 delivery processes
- The review will leverage industry insights, and include, but not be limited to, a review of our engagement, planning, delivery and readiness process

## KEY CONSIDERATIONS

- Is the current program engagement meeting its objectives?
- Is this engagement framework supporting the implementation needs of market participants?
- What else can AEMO do to support *participant delivery facilitation* objective?

## INDICATIVE PROCESS



# Discussion and questions



**Thank you**

