



Australian Government

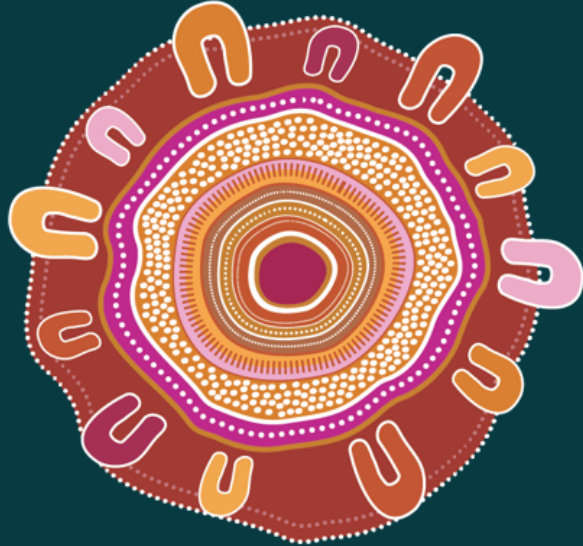
Department of Climate Change, Energy,  
the Environment and Water

# Storage and flexibility in Australia's grid

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26 February 2025





We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present.

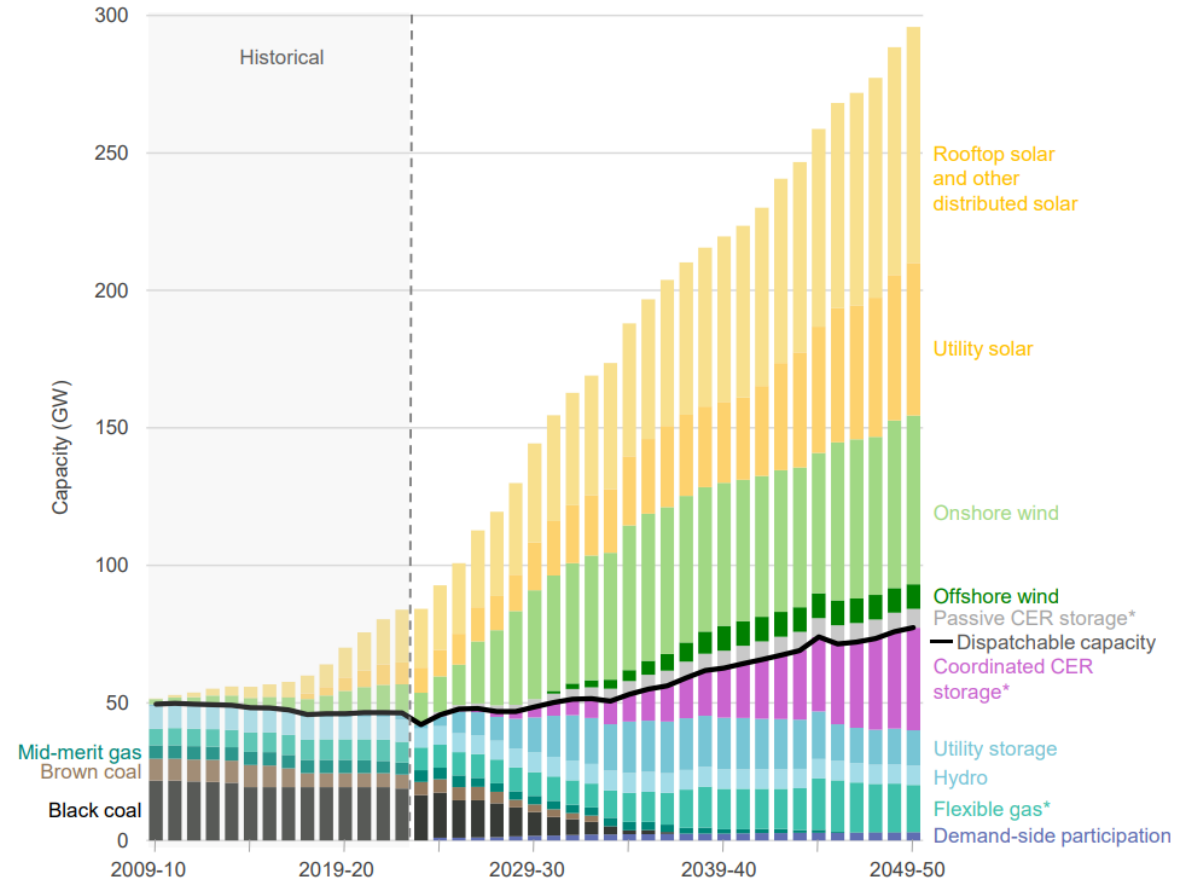
# CER uptake to reach 82%

CER in 2022-23:

- 3.5m rooftop solar installations (21 GW)
- 230,000 distributed batteries (1.8 GW)
- 180,000 EVs

CER in 2030-31:

- 75% more rooftop solar (to reach 37 GW)
- 5 times more distributed storage (to reach 11.1 GW)
- Est. 1.4 million EVs

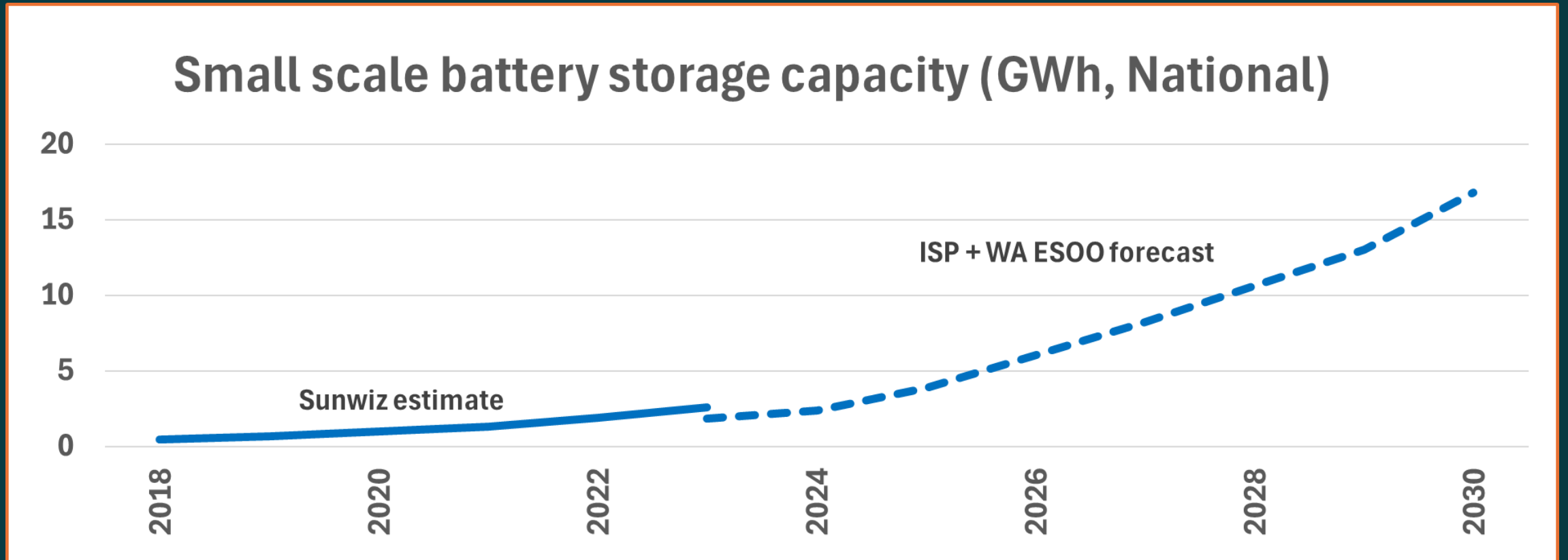


Notes: Flexible gas includes gas-powered generation, and potential hydrogen and biomass capacity.  
"CER storage" are consumer energy resources such as batteries and electric vehicles.

Capacity, NEM (GW, 2009-10 to 2049-50, Step Change)



# A lot more storage is needed



# National CER Roadmap

## National Consumer Energy Resources Roadmap

Powering Decarbonised Homes and Communities

energy and  
climate change  
ministerial council



## 3 Roadmap vision, outcomes & principles

### National Consumer Energy Resources Roadmap

#### Vision

Consumer Energy Resources are an integral part of Australia's secure, affordable and sustainable future electricity systems, delivering benefits and equitable outcomes to all consumers through efficient use which smooths the transition, rewards participation and lower emissions.

#### Outcomes

Benefits for all consumers



Maximise economic opportunities



Reliable and secure systems



Sustainable, future-ready and world-leading



#### Principles

Ensure equitable access to new technology

Fair system that prioritises consumer protection, including emerging energy products and services

Reduce household and business bills and emissions, support power system security and reliability

Integration with sectoral action plans

Consistent and contemporary compliance, technical standards and enforcement

Orchestrated management and implementation of CER and enabling infrastructure

#### Workstreams



##### 1 Consumers

- C.1 Extending consumer protections for CER
- C.2 More equitable access to benefits of CER
- C.3 CER information to empower consumers



##### 2 Technology

- T.1 Nationally consistent standards, including electric vehicle to grid
- T.2 National regulatory framework for CER to enforce standards
- T.3 Establish secure communication systems for CER devices



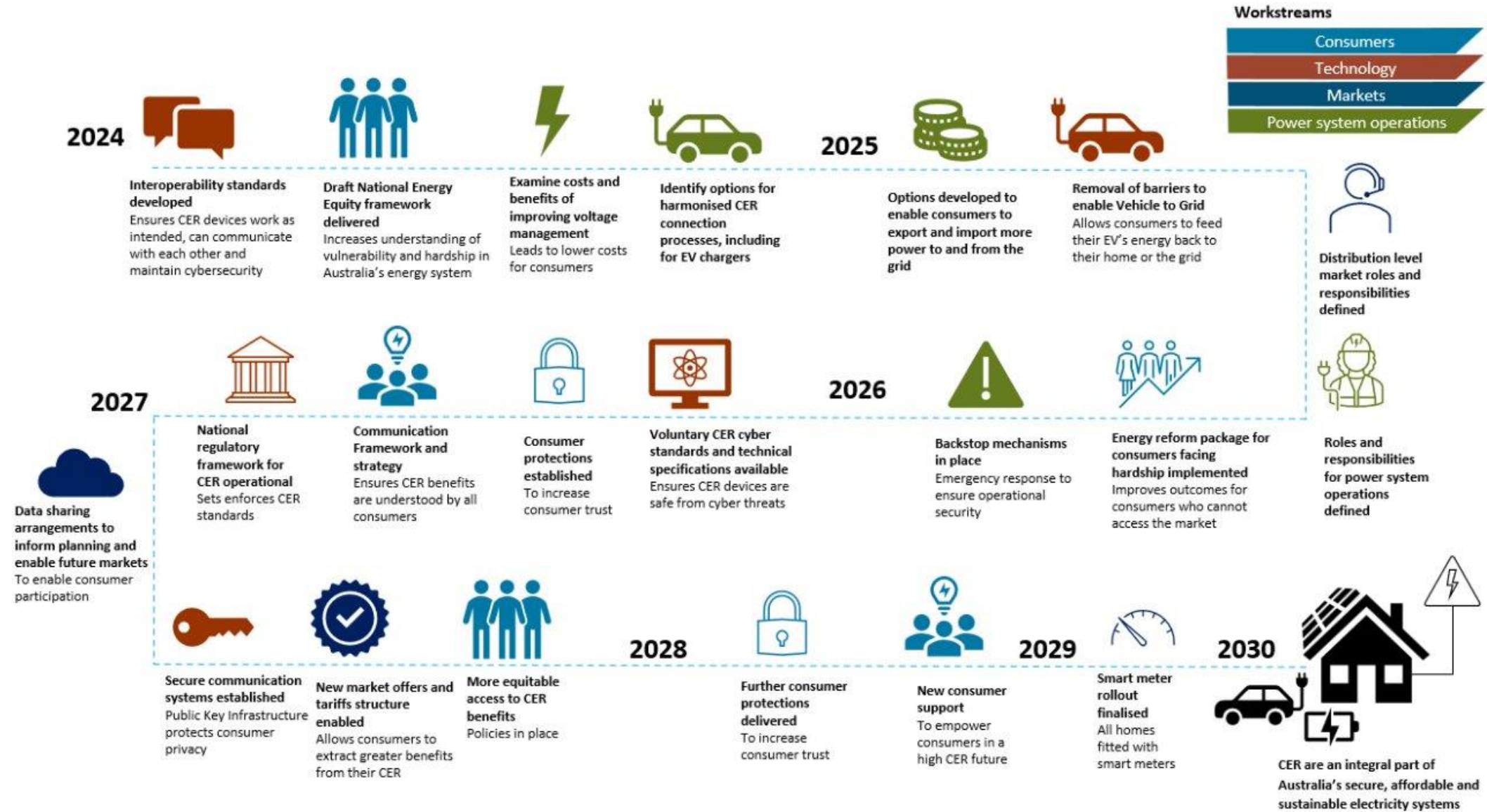
##### 3 Markets

- M.1 Enable new market offers and tariff structures to support CER uptake
- M.2 Data sharing arrangements to inform planning and enable future markets
- M.3 Redefine roles for market operations



##### 4 Power system operations

- P.1 Enable consumers to export and import more power to and from the grid
- P.2 Faster, harmonised CER connection processes, including EV chargers
- P.3 Improve voltage management across distribution networks
- P.4 Incentivising distribution network investment in CER
- P.5 Redefine roles for power system operations





# How the CER Roadmap supports storage

## Initial CER interoperability standards

- Ecosystem of standards being prepared for public consultation in Q2 this year
- Includes standards for vehicle-to-grid.

## CER Regulatory Framework

- Public consultation planned for Q2 this year.

## Streamlining network connections

- Governments and ENA have identified areas of focus for faster connection of CER and EVSE

## Flexible export limits (“FELs”)

- Actions to extend the benefits of FELs to more consumers, sooner.

# Other actions to support storage uptake

Other Australian Government programs to support batteries:

- Solar Banks and community batteries
- Solar Consumer Guide
- National EV Strategy





# Questions?



