ESB Data Strategy

Initial reforms

Public Consultation

JULY 2022



- ESB Data Strategy implementation underway
 - agreed by officials (Dec 2021), focused on access to data needed to support the market transition

Today's focus - Workstream 1 released

- Initial Reforms consultation paper
 - Proposes reforms to enable access to data held by market bodies for policy, planning and research
 - Released Thu 14th Jul, submissions due 19 Aug
 - Aim to agree reforms by end 2022, to be implemented early 2023

Next steps

- Data Services Governance Considers governance and resources needed to facilitate proposed reforms and great benefits for consumers. Consultation paper released August
- Priority data projects for DER kicking off soon EV data, Network visibility for market planning, Bill transparency

- . DATA STRATEGY overview
- . INITIAL REFORMS detailed discussion
- . NEXT STEPS
- . QUESTIONS/DISCUSSION

ESB DATA STRATEGY – WHY IT IS NEEDED



The ESB is implementing the Data Strategy to unlock data as an enabler in the energy transition

The Strategy plays a critical role integrated with the broader energy reform program. It provides overarching consideration of the energy sector's existing and future data needs, supporting the needs of consumers, industry and policy makers in the energy transition

Energy-sector data reform is urgently needed to enable benefits for consumers as the sector transitions

- Data and digitalisation provide unprecedented opportunities to transform the sector into a smarter, more flexible and affordable system which is responsive to consumer needs.
- But existing regulation and capabilities have not kept pace with the digital transition. Decision makers across the sector need better access to data to improve outcomes for consumers – through reduced costs and fit for purpose customer protections.
- Emerging technologies and services depend on better use of data and digitalisation to be affordable, reliable and sustainable.
 Unlocking access to data is critical for efficient planning, lower costs, reduced consumer risks and innovation.

Coordinated sector-wide reforms are needed: data and technology are key enablers for Post 2025 reforms

- Economy-wide digitalisation and national data reforms create significant opportunities for energy - and energy data capabilities are growing rapidly across the sector.
- But existing markets and governance are not delivering these needs – due to a range of regulatory barriers, market failures and coordination challenges.
- Data needs and market systems will keep evolving. Need a
 proactive, adaptable approach to identify and address where
 emerging gaps, risks and opportunities.

DATA STRATEGY OVERVIEW



ESB DATA STRATEGY

Managing changing data needs in the <u>energy transition</u> and optimising the <u>long-term interests of consumers</u> in a digitalised future

Data Access and Sharing

Unlock barriers to benefits from data.

Effective sharing of data for decision makers policy, planning and the market

Capability

- Governance to coordinate reforms
- Facilitation of data access and analytics to drive benefits

Frameworks

- Regulatory reforms to remove barriers, risks and uncertainty
- New clear principle-based flexible arrangements



Regularly review priorities



Coordination to address emerging needs

Priority data gaps - DER

Design solutions to critical gaps
Addressing market failures, regulatory barriers
and coordination problems

1. Data to **optimise DER** in the network and market

2. Data to **optimise new services** for consumers

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Unlock barriers to benefits from data

Effective sharing of data for decision makers - policy,
planning and the market

Capability

- Governance to lead reforms and address coordination barriers
- Facilitation of access and analytics to drive benefits

New leadership/ coordination

New Data Services

Frameworks

- Regulatory reforms to remove barriers, risks and uncertainty
- New clear principle-based flexible arrangements

Initial reforms

Common guidelines

New Data Framework



Regularly review priorities



Coordination to address emerging needs

Priority data gaps - DER

Design solutions to critical gaps
Addressing market failures, regulatory barriers and
coordination problems

1. Data to optimise DER in the network/market

Network visibility for market planning

EV charger visibility

Over voltage impacts

2. Data to **optimise new services** for consumers

Bill transparency for consumer protections

Consumer metrics

FRAMEWORK: REFORMS TAKE A STAGED APPROACH



Review of energy data frameworks and international data reforms with King & Wood Malleson and Galexia. Identified barriers to greater benefits from data and proposed a staged approach to reforms.

INITIAL REFORMS

COMMON GUIDELINES

NEW FRAMEWORK

- Aims to provide immediate benefits to policy and planning in the energy transition
- Targets key barriers and uncertainty in existing framework
- Allows AEMO to share data with trusted government bodies and public universities, where protections are maintained
- Does not resolve wider future needs or adaptability.
- Depends on Data Services workstream to facilitate benefits

- Template data sharing agreements and consent arrangements
- Reduce risks of uncertainty and inconsistent approaches
- · Reduce delays in negotiations

- "Fit-for-purpose" in the digital transformation
- Flexible, principles-based arrangements, adaptable to changing needs over time
- Energy Laws aligned with national reforms (including DAT Act)
 - Defined purposes for which data can (and can't) be shared
 - Frameworks for managing secure access based on 5 Data Sharing Principles

Consultation paper: early July

Reforms agreed: end 2022

Progress late 2022/early 2023

Begin design 2023



OVERVIEW OF PROPOSED REFORMS

KING & WOOD MALLESONS

Vishal Ahuja Cheng Lim Lauren Bourke



CURRENT FRAMEWORK

Status quo

Core Bodies (the AEMC, AER, AEMO and ESB) already have some limited rights to share data with each other and other bodies (described in the Legal Report).

AEMO and AEMC also have the right to share protected information with (among others):

- each other;
- ACCC;
- AER;
- ESB; and
- any other person prescribed in the relevant regulations.

AEMO and AEMC may impose conditions on the above bodies in relation to the information shared under these rights.

The issue

Legal Review findings:

- AEMO faces difficulties sharing data, such that valuable energy sector data is not used as effectively as it could be.
- AEMO's current rights to share data are limited and have at their foundation the presumption that information is protected and should not be shared.
- Identified various specific prohibitions on AEMO sharing data



PRESCRIBE TRUSTED BODIES TO DISCLOSE TO

Overview of Proposal

We propose to amend section 54C of the National Electricity Law (**NEL**) to permit AEMO to disclose protected information to:

<u>"Class A Bodies"</u> - who have prescribed statutory functions either specific to the energy industry or where energy information would enhance the carrying out of its functions and where there is a high level of confidence in the recipient as to the security and protection of the data; and

"Class B Bodies" - including universities and researchers, where additional security may be warranted, particularly when considering appropriate data projects and outputs of the data seeker (ie secondary disclosure).

Note that all disclosures by AEMO that we are proposing are <u>voluntary</u> in nature. AEMO has no obligation to disclose.



PRESCRIBE TRUSTED BODIES TO DISCLOSE TO

Proposed Regime for Class A Bodies

Proposed list of Class A bodies

- (a) a Department of State of a participating jurisdiction responsible for the administration of the application Act of the jurisdiction;
- (b) Australian Bureau of Statistics;
- (c) Clean Energy Regulator;
- (d) Australian Renewable Energy Australia;
- (e) Energy Consumers Australia;
- (f) Clean Energy Finance Corporation;
- (g) CSIRO; and
- (h) the entities already listed in s 54C(2) of the NEL.

The intent is for AEMO to be able to disclose to Class A bodies where confidentiality of the information is otherwise preserved. Other principles relating to data transfers and data security (e.g. appropriate data format, environment, intended use or outputs) should not be required.

An authorised Class A recipient (and not AEMO) would be responsible for their own and any further use or disclosure of protected information.

These bodies have been selected because they have prescribed statutory functions that are similar to AEMO's and there is a high level of confidence in the recipient as to the security and protection of the data being disclosed.



PRESCRIBE TRUSTED BODIES TO DISCLOSE TO

Proposed Regime for Class B Bodies

Proposed list of Class B bodies

- (a) Australian public universities and other higher education institutions, including research schools and researchers that are part of an Australian public university or other higher education institution; and
- (b) prescribed bodies,

that conduct (or proposes to conduct) research related to energy.

The intent behind Class B bodies is to have a list of data recipients where additional security may be warranted.

The Class B bodies may be subject to certain restrictions on disclosure and use of the data. For example, the recipient may be subject to a condition that it:

- is only permitted to use the protected information for a prescribed purpose;
- is not authorised to make further use or further disclosure of that protected information;
- must take all reasonable measures to protect the protected information from unauthorised use or disclosure; and
- may, for some services, be required to pay AEMO's direct and reasonable costs incurred in providing the protected information.

These conditions might be imposed by AEMO. Alternatively, there could be standard data transfer conditions, a breach of which would attract a civil penalty.



OTHER KEY AMENDMENTS*

	Summary	Proposal
1	Future-proof the Class A and Class B list of bodies	Add a new paragraph 54C(2)(i) of the NEL to authorise disclosure of protected information to include any other body specified in an order made by the South Australian Minister (with the unanimous approval of Ministers of participating jurisdictions) and published in the South Australian Gazette
2	Transfer liability from AEMO to the Class A or B body	Add a new subsection to section 54C of the NEL to clarify that any authorised Class A (and Class B?) recipient (and not AEMO) is responsible for their own and any further use or disclosure of protected information
3	Expand AEMO's functions in section 49 of the NEL to include "to disclose information accordance with this Law or the Rules". This will allow AEMO to recover its confirmment for disclosure	
4	Clarify AEMO's right to use information	Amend section 53D of the NEL to clarify that AEMO's right to use information is not subject to the NEL, the Rules or the Regulations

^{*}See further the consultation paper.



CONSULTATION PROCESS



• Initial Reforms consultation paper, the legal review and Data Strategy background are available at:

esb-post2025-market-design.aemc.gov.au/data-strategy

- Submissions are due by 19 August 2022
- Further enquires on the consultation paper can be sent to the project team at info@esb.org.au



Implementing Initial Reforms

- Aim to finalise and agree proposed reforms by end 2022, after consideration of consultation input
- Reforms passed in in early 2023.

Data Services Governance

- Considers governance and resources needed to facilitate proposed reforms and greater benefits for consumers.
- Consultation paper expected to be released August

Priority data projects for DER to be progressed within 2022

- EV data scope agreed and project kicking off.
- Network visibility for market planning scope being agreed
- Bill transparency scope being agreed



ATTACHMENT

- SUMMARY OF CONSULTATION QUESTIONS

SUMMARY OF CONSULTATION QUESTIONS



The ESB welcomes any comments on this consultation paper.

In particular, the EBS is seeking feedback on the following questions:

#	Question
1.	What is the appropriate scope for Class A Bodies?
2.	Should Class A Bodies include entities that already have their own data collection powers?
3.	Should Class A Bodies have a right to make subsequent disclosure?
4.	Do you have any concerns with disclosure to Class A Bodies that have not been considered above?
5.	What is the appropriate scope for Class B Bodies?
6.	Is it appropriate to require that Class B Bodies conduct (or propose to conduct) research related to "energy"?
7.	When is it appropriate for AEMO to disclose data to Class B Bodies?
8.	Should the regulations making power to prescribe additional bodies as Class A Bodies and Class B Bodies be replaced with a Ministerial Order process?

SUMMARY OF CONSULTATION QUESTIONS CONT...



#	Question	
9.	Which disclosure option, if any, has the most merit? In particular:	
	a)	Who should be responsible for setting the conditions on disclosure?
	b)	What should those conditions be?
	c)	Who should be responsible for enforcement of those conditions?
	d)	If a regulator is required for monitoring data sharing agreements, what existing body could or should play this role?
	e)	What are the appropriate consequences for non-compliance with those conditions? In particular, what amount is appropriate for a civil penalty?
	f)	Should Option 2 or Option 3 also apply to Class A Bodies?
	g)	Are there any related considerations in resourcing these activities, where the development and enforcement of data transfer conditions would require an expansion
		of a nominated regulators' and/or AEMO's functions?
10.	Is it necessary and appropriate to clarify that authorised Class A and Class B recipients are responsible for their own and any further use or disclosure of protected information?	
11.	Is it necessary and appropriate to expand AEMO's statutory functions to include disclosure of information in accordance with the law and rules and/or enforcement of conditions imposed in accordance with section 54C(4) of the NEL and section 91GC(4) of the NGL?	
12.	Are there any other improvements on the status quo that we should be considering? (Noting that wider concerns could also be considers as part of more in depth design of the new fit-for-purpose regime)	
13.	The current intention is to only amend AEMO's data provisions. We are not amending AEMC's or AER's data related provisions, as they involve legislation outside the national energy regime. Is this narrow approach appropriate?	
14.	Should Class B bodies be permitted to disclose protected information to specified industry research partners? If not, will this limit the value of AEMO sharing data with Class B bodies? Will research projects conducted in collaboration with industry still be able to achieve their aims?	

ATTACHMENT

- DATA STRATEGY BACKGROUND

ESB DATA STRATEGY IMPLEMENTATION – WHAT WE WILL DO



The ESB is implementing the Data Strategy to unlock data as an enabler in the energy transition

The Strategy plays a critical role integrated with the broader energy reform program. It provides overarching consideration of the energy sector's existing and future data needs, supporting the needs of consumers, industry and policy makers in the energy transition

In 2022 – 2023, the ESB is focusing on two workstreams to address critical issues

Initial Activities (2022)

Future Activities (2023)

Outcomes



Energy data access & sharing

- Energy Data principles and initial reforms
 - New leadership and coordination
- New data services

- New data framework
- Common guidelines

Barriers to data access to inform policy decision making are reduced



Data priorities: DER

- Assess options to address data gaps for:
 - o EV visibility
 - Network visibility
 - Bill transparency
- Data issues across DER integration program

- Assess options to address data gaps for:
 - Over voltage impacts
 - Updated consumer research
- Data issues across DER integration program

 Market bodies and policy makers understand the data required to achieve DER integration outcomes

2022-2023 activities will put in place reforms and governance to proactively identify and address emerging data needs and grow future data capabilities.

DATA IMPLEMENTATION – WHAT WILL OUTCOMES LOOK LIKE FOR 2022-23





Initial reforms and data services are designed to work together to support data access for more effective planning and policy in the market.

These workstreams are already underway and should begin having impact during 2023.

Priority data projects are feasibility studies targeted at addressing emerging data needs. The three priority projects currently in development are focussed on data needs to support effective DER planning.



Initial reforms

Outcome 1

New high-level principles guide a paradigm shift in data management.

Outcome 2

Regulatory barriers reduced to allow safe sharing of existing data with trusted parties.



New Data Services

Outcome 3

Supporting safe data access and analytical services for a wide range of stakeholders.



Priority data projects – year one

EVSE

Ensuring agencies and industry have sufficient visibility of EVSE for effective planning and system management.



Networks

Enable definition of and access to datasets required to inform stakeholders making DER planning decisions and managing network capacity risks.



Billing

Designing efficient arrangements to provide ongoing transparency of consumer bills to better protect consumers in the market.

Outcome 4

Development of more effective planning and policy in the market transition.

WHAT WE DID - REVIEW FINDINGS



Extensive review found that energy data challenges face coordination problems, market failures and regulatory barriers - intervention is required

Review of Energy Data Gaps

Reviewed direct cases studies across agencies and issues raised in reviews, such as the ACCC REPI and Finkle.

Findings: Decision makers do not have the data they need

- 30+ data challenges identified which already contribute to major costs and risks – including through infrastructure planning challenges and limited consumer protections.
- Progress is being made in many areas especially reforms for new technologies
- Many needs are not being resolved or resolved too slowly

 due to clear market failures, regulatory barriers or coordination problems
- Post 2025 market reforms are highly exposed to the most extensive gaps
 - Lack of visibility/control over the low voltage network and DER technologies
 - 2. Lack of visibility of consumer bills, impacts and behaviours critically limit consumer protections, service innovation, forecasting and planning.

Review of Energy-data regulation

King-Wood Mallesons and Galexia led a review and public consultation across current regulatory frameworks and international case studies.

Findings: Three broad challenges make the framework unworkable

- 1. Complexity of legislative regime
 - starts by prohibiting all data sharing, followed by layers of inconsistent exceptions.
 - written for past needs
 - unclear to interpret leaving data holders with too many risks
- 2. Unworkable public interest test
- Privacy and commercial sensitivities driving current regime to exclusion of wider concerns

Impacts include: duplication of collection, use of undesirable workarounds, lengthy and costly bilateral sharing arrangements, stalled or abandoned sharing negotiations, data gaps



Energy data policy - paradigm shift

From...

PROTECT by default RELEASE with explicit rights

Legal review found current arrangements require explicit rights for any data release, hardwired into complex regulation. This struggles to adapt to changing data and consumer needs. In complex arrangements inconsistencies have emerged and create uncertainty.

To.

OPTIMISE Long-term interests of consumers in a digitalised future

PROTECT where necessary
OPEN where possible
ENABLE transparent markets
ENABLE access rights
ENABLE safe research for public good

A new principles-driven approach would be more flexible, evaluating the case for data release based on clear criteria and consumer benefits. This is consistent with national reforms on open data, data rights and data sharing and would adapt to ongoing changing needs.

NEW POLICY PRINCIPLES AGREED



Data Strategy agreed new high level energy data policy principles to drive a paradigm shift and align reforms. These will be reflected in the New Data Framework.

Energy Data Policy Principles

Data reforms and management should:

- Drive outcomes consistent with the energy market objectives and the long term interest of consumers
- 2. Ensure appropriate privacy and security safeguards are maintained
- Capture benefits of a transparent, innovative and informed digitalised energy market
- 4. Be fit-for-purpose, flexible and cost effective for a digitalised market
- 5. Be coherent with wider national reforms on data