

# 2025 Inputs Assumptions and Scenarios Report, Scenarios Consultation

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# **About the Justice and Equity Centre**

The Justice and Equity Centre is a leading, independent law and policy centre. Established in 1982 as the Public Interest Advocacy Centre (PIAC), we work with people and communities who are marginalised and facing disadvantage.

The Centre tackles injustice and inequality through:

- legal advice and representation, specialising in test cases and strategic casework;
- research, analysis and policy development; and
- advocacy for systems change to deliver social justice.

# **Energy and Water Justice**

Our Energy and Water Justice work improves regulation and policy so all people can access the sustainable, dependable and affordable energy and water they need. We ensure consumer protections improve equity and limit disadvantage and support communities to play a meaningful role in decision-making. We help to accelerate a transition away from fossil fuels that also improves outcomes for people. We work collaboratively with community and consumer groups across the country, and our work receives input from a community-based reference group whose members include:

- Affiliated Residential Park Residents Association NSW;
- Anglicare;
- Combined Pensioners and Superannuants Association of NSW;
- Energy and Water Ombudsman NSW;
- Ethnic Communities Council NSW;
- Financial Counsellors Association of NSW;
- NSW Council of Social Service;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW;
- Salvation Army;
- Tenants Union NSW; and
- The Sydney Alliance.

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## 1. Introduction

The JEC (formerly PIAC) welcomes the opportunity to respond to the consultation paper on the proposed 2025 Inputs Assumptions and Scenarios Report Scenarios, (Consultation Paper).

Significant changes have occurred since the 2023 IASR, and the 2025 IASR scenarios must be substantially amended accordingly. We highlight the submission of the Institute for Energy Economics and Financial Analysis (IEEFA) to this process and support their key issues and recommendations.

The progressive Scenario should be removed as it is fundamentally inconsistent with emissions targets and Australia's Paris Agreement commitments.

A plausible 1.5 C aligned scenario should be added, potentially by revising the previous Green Energy Exports scenario to focus it on more predictable and plausible domestic considerations. We highlight IEEFA's detailed responses and recommendations in relation to the most appropriate amendments required to create an additional, plausible 1.5 C aligned scenario.

Since the 2023 IASR the national energy objectives have been amended to add the 'achievement of emissions targets' as an additional criteria determining the efficient investment, use and operation of energy services in the long term interest of consumers.

The Ministers objective and intent in amending the energy objectives was to enable a decarbonised, efficient and reliable energy system, as a driver for efforts to achieve net zero by 2050. Market bodies were given direction that the operation and regulation of energy investment and markets should actively contribute to achieving net zero. The AEMC and AER have signaled this means that emissions reduction will be internalized in their decision making, and not seen as an externality.

Consideration of achievement of the emission targets at all levels is relevant to the AEMOs planning processes, particularly the development of the IASR. AEMOs consideration of emissions targets must be aligned with the Ministerial intent.

# 2. Energy System planning and the emissions imperative

Since the 2023 IASR publication, what changes (such as environment, social, policy) do you consider most impact scenario development for the 2025 IASR scenarios?

The most significant change since the 2023 IASR has been the addition of the requirement to consider the achievement of emissions targets to the National Energy Objectives (NEO), and the resultant rule changes, including the changes to Rule 5.22.3 of the National Electricity Rules (NER) concerning the development of the Integrated System Plan (ISP).

As outlined by IEEFA and others in their submission to this process, a number of other relevant changes have occurred since the 2023 IASR, including:

- An increased focus on distributed energy resources, with a range of policy and industry developments, including the release of a National Consumer Energy Resource (CER) roadmap,
- Rapid changes in the understanding of the likely medium-term role of hydrogen exports and a narrowed focus of likely hydrogen export and domestic gas replacement applications,
- Consistent rapid reductions in the costs of battery storage and solar PV, particularly relative gas and gas-peaking as firming, and
- A range of Government and regulatory measures to speed up transmission and renewables build out in order to address project delays and potential financing risks.

These changes should have a material impact in the development of scenarios and sensitivities for the 2025 IASR.

#### 2.1 The intent of the NEO amendments

The Ministers' intention in amending the national energy objectives were made clear in the 2<sup>nd</sup> Reading Speeches of the Bill amending the National Electricity Law, National Gas Law, and the National Electricity Retail Law.<sup>12</sup> These intentions should guide the actions of AEMO (and other market bodies) in interpreting and implementing the objectives. These intentions:

- Reflect the commitment of all governments in Australia to achieve net zero by 2050 or earlier.
- Are to support achievement of a decarbonised energy system and contribute to government emission reduction targets.
- Underline the role of market bodies in **enabling** this transition.
- Require decision makers to continue to promote efficient investment in, operation of and use of services in the long term interests of consumers.
- Add achievement of emissions reduction targets to the dimensions of consumer interest, to be considered alongside the interests of price, safety, reliability and security.
- Require as a minimum the consideration of achievement of targets set out in the AEMC target statement.
- Include emissions reduction as a new form of market benefit.<sup>3</sup>

We do not consider continuation of the Scenarios developed in 2023 as reflecting this intent, and substantial changes are required for AEMO to meet its obligations as implied by this intent.

National Electricity Law - schedule to the *National Electricity (South Australia) Act 1996* (NEL);
National Gas Law – schedule to the *National Gas (South Australia) Act 2008* (NGL); National Energy Retail Law – schedule to the *National Energy Retail Law (South Australia) Act 2011* (NERL).

<sup>&</sup>lt;sup>2</sup> Relevant portions of the 2<sup>nd</sup> Reading Speech in the House of Assembly are extracted in Annex A.

<sup>&</sup>lt;sup>3</sup> See 2nd Reading SA House of Assembly 14 June 2023, Hansard pp.4378-4380.

## 2.2 Implication of NEO amendments for AEMO

As outlined in the previous section, changes to the NEO have material implications for AEMO in the fulfilment of its functions, particularly in the development of Scenarios for the ISP, specifically:

 The NEL and NGL require AEMO to have regard to the NEO and NGO respectively when carrying out its functions.<sup>4</sup>

The NEO and NGO were amended to add to the list of consumer's long term interests, the achievement of targets set by a participating jurisdiction-

- (i) for reducing Australia's greenhouse gas emissions; or
- (ii) that are likely to contribute to reducing Australia's greenhouse gas emissions. 5
- The NEL and NGO explicitly require that when having regard to the NEO and NGO objective, 'a person or body must consider, **as a minimum**, the targets stated in the targets statement.' The term 'as a minimum' indicates scope to consider other relevant targets of a jurisdiction.
- AEMO must now consider the achievement of emission reduction targets in the AEMC targets statement, when undertaking its functions including determining the 2025 IASR Scenarios.
- The requirement to consider the "achievement of" targets set by a participating jurisdiction means AEMO must consider the targets intention to bring about a specific end point.
   Specifically the level of emissions reduction required by the targets, and the timeline for achieving this reduction.

When considering the achievement of this end point, AEMO must consider the emissions impact (crucially this includes reducing, perpetuating or increasing emissions) of any planning decision it makes, as well as the resultant expenditure and timeframe of this emissions impact.

In guidance issued by the AER and AEMC following the amendment to the national energy objectives, both have noted the significance of the change and that emissions now become a central consideration, with a shift to internalising emissions impacts in decision making.<sup>7</sup>

s. 49(3) NEL; s. 91A(2) NGL.

<sup>5</sup> s. 7, NEL; s. 23, NGL.

<sup>&</sup>lt;sup>6</sup> s. 32A(5) NEL; s. 72A(5), NGL.

AEMC, How the national energy objectives shape our decision, 1 August 2024, p.8, and Appendix A, <a href="https://www.aemc.gov.au/sites/default/files/2024-07/Final\_AEMC%20guide%20on%20energy%20objectives%20markup%20for%20new%20MCE%20statement%20%28effective%201%20Aug%202024%29\_0.pdf; AER Guidance on amended National Energy Objectives, September 2024, p. 5, <a href="https://www.aer.gov.au/documents/aer-guidance-amended-national-energy-objectives-final-quidance-note-september-2023">https://www.aer.gov.au/documents/aer-guidance-amended-national-energy-objectives-final-quidance-note-september-2023</a>

# 3. The impact and significance of scenarios

#### 3.1 Selection and use of scenarios is normative

The ISP, ESOO and GSOO are central references for Governments and investors. They must be consistent with achieving Australia's Paris commitment to ensure resulting investment contributes to Australia's commitments and targets.

The JEC does not accept AEMO's assertion that the selection of scenarios is non-normative. While it may not be the goal to select normative scenarios, the prominence of scenarios, their centrality as a reference and the way they are used means the selection of scenarios becomes normative in nature.<sup>8</sup>

Planning and investing for a specific scenario locks in infrastructure spending to meet that scenario and drives assumptions about the investment that is required. It does not allow for, or provide sufficient incentive and direction for spending required to achieve a faster transition. In this way, regardless of intent, scenarios become normative in nature, and self-fulfilling in output making their nature and scope critical.

## 3.2 Impact of NEO amendment on the purpose of the ISP

Amendment of the energy objectives has implications for the overall purpose of the ISP as well as how its processes (such as the IASR) must be undertaken.

As we have noted the Ministers objective and intent in amending the energy objectives was to enable a decarbonised, efficient and reliable energy system, as a driver for efforts to achieve net zero by 2050. Market bodies were given direction that the operation and regulation of energy investment and markets should actively contribute to achieving net zero. <sup>9</sup>

The rules specific to ISP planning have also been amended so that AEMO now, 'must consider the emissions reductions targets' in the AEMC target statement<sup>10</sup>. The prior public policy provision empowering AEMO to more widely consider climate change commitments including those made in international agreements, also remains in place.<sup>11</sup>

In recognising the significance of the changes brought about by the amendment of the energy objectives, and rules on ISP planning, AEMO states,

For the ISP, AEMO's scenarios consider qualifying public policies that meet the public policy criteria (NER 5.22.3(b)), or are included in the Australian Energy Market Commission (AEMC) Emissions Targets Statement. These policy considerations may narrow the breadth of futures available to the scenario collection for some scenario

<sup>8</sup> See Consultation Paper, p.6.

See 2nd Reading SA House of Assembly 14 June 2023, Hansard pp.4378-4380.

see clause 5.22.3(b)(1), NER

see clause 5.22.3(b)(2).

parameters (for example, the pace of the transition may be influenced by meeting renewable energy targets and emissions reduction commitments in all scenarios). <sup>12</sup>

[...]

AEMO is bound by the NER to consider policies that meet the relevant public policy criteria, and considers that identifying the necessary investments to achieve these policies is an appropriate and important insight from the scenario planning process. <sup>13</sup>

Until the 2024 ISP, the intent of the ISP has been to describe the optimal (least-cost) paths for energy infrastructure (specifically transmission) development under a range of scenarios and sensitivities, chief among them the speed at which the wider Australian economy is decarbonised. The implication was that if the wider decarbonisation occurred more slowly than anticipated, the consumer benefit from investments in new infrastructure in the National Energy Market (NEM) would be optimised by taking a slower path, and vice versa.

The demand to make the NEM the driver decarbonisation of the wider Australian economy (as implied by the Ministers intent in introducing changes to the NEO) reverses this implication. If the wider economy decarbonises at a slower rate than is anticipated within a given central scenario, the value of the more rapid investment in and transformation of the NEM goes up, as it makes wider decarbonisation more rapid and more attractive.

The emissions targets that AEMO must enable through the ISP are given, and the speed of wider economic decarbonisation is dependent on choices made within the ISP. This carries a significant implication for the development of scenarios.

In the 2024 ISP process following the Delphi Panel insights AEMO assigned the Step Change Scenario a likelihood narrowly ahead of that for the Progressive Scenario. Scenario of the Progressive Scenario could have had material impact on the achievement of Australia's emissions targets not only within the NEM, but also the wider economy. This demonstrates that the risks from including a scenario inconsistent with Australia's emission targets, and Paris Agreement commitments are real, due to the potential for that Scenario to be used to determine planning and investment decisions which lock in certain energy system emissions.

The Progressive Scenario is not consistent with Paris commitments and emissions targets and the following statement in the consultation paper is erroneous:

As required under the National Electricity Rules (NER), for the ISP's purposes, all scenarios in the scenario collection apply relevant policies that meet public policy criteria, including international commitments (such as to the Paris Agreement) and legislated policies that are quantifiable within AEMO's modelling scopes. <sup>15</sup>

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<sup>&</sup>lt;sup>12</sup> Consultation paper, p.9.

Consultation paper, p.13.

<sup>&</sup>lt;sup>14</sup> ISP 2024, pp.43-44.

<sup>&</sup>lt;sup>15</sup> Consultation paper, p.4.

As we have outlined, the current use of scenarios is normative in nature and all selected scenarios must meet emissions targets and Australia's Paris Agreements commitments in order for AEMO to appropriately meet its obligations.

#### 3.3 The role of the ISP must evolve

The ISP is (or should be) a coordinating mechanism and a central reference and guide to optimise the transition from a systemic perspective. We have supported rule changes, and argued for changes to AER guidelines, to contribute to this evolution. <sup>16</sup> We also note the recommendations of IEEFA and others to this submission, particularly those relating to the incorporation of demand side considerations and improved consideration of distributed energy resources.

While transmission infrastructure build out is a necessary component of the energy system's transition to a renewable energy base, it is not the only investment needed (or informed or influenced by the ISP). The set of actors making investment decisions in the NEM (in some part informed by the ISP) is expanding due to,

- The rise of renewable utility scale generation, with the average generation unit being markedly smaller than the dominant generators in the traditional system (ie. coal generators),
- The rise of consumer energy resources as a structurally significant component of the grid, adding millions of households and businesses as producing and investing actors, where previously they were merely energy users,
- The rise of batteries and other storage providers to meet the firming (and ancillary service) needs of the new system,
- The rise of new retail service providers, such as virtual power plant providers,
- The new network service needs of the grid no longer automatically provided by the large fossil fuel generators (ie. various system security needs), and the rise of providers that offer these services.

We have observed in prior submissions, that the ISP should be normative process modelling the Optimal Development Path (including recommendations on distribution assets, generation, storage projects or demand side developments). This will among other things mean removing, or heavily modifying the Delphi Panel process so that the ISP is not designed to meet an external scenario deemed the 'most likely' (and so subject to significant potential status quo bias), but rather intended to produce recommendations on planned investment to drive change to a desired

See for example, JEC submissions to the AEMC on Enhancing the ISP, <a href="https://jec.org.au/resources/submission-to-aemc-rule-change-on-enhancing-the-integrated-system-plan-to-support-the-energy-transition/">https://jec.org.au/resources/submission-to-aemc-rule-change-on-enhancing-the-integrated-system-plan-to-support-the-energy-transition/</a>, and to the AER, submissions on AER CBA guidelines, <a href="https://jec.org.au/resources/submission-to-aer-review-of-the-cost-benefit-analysis-guidelines-and-rit-application-guidelines/">https://jec.org.au/resources/submission-to-aer-review-of-the-cost-benefit-analysis-guidelines-and-rit-application-guidelines/</a>. We have also argued that existing rules allow for full consideration of not only the planning needs of transmission assets, but also distribution assets, generation, storage projects and demand side developments, see AEMC submission.

scenario. Specifically this desired scenario should be one in which temperature rise is maintained below 2C, best efforts are made not to exceed 1.5C temperature rise.

# 4. The 2.6C Progressive Scenario must be removed

Is AEMO's proposal as described above a suitable evolution of each scenario's parameters that will effectively support AEMO's functions in planning the transition?

The 2.6 Progressive Scenario is fundamentally inconsistent with our Paris commitments and Government emissions targets and must be removed.

Australia has committed in the Paris Agreement to cutting emissions so that global temperatures remain below no more than 2°C more that pre-industrial levels, and to aim to maintain a 1.5C maximum temperature rise.<sup>17</sup>

The AEMC Target Statement references the Commonwealth's commitments to 43% emissions reduction by 2030 and net zero emissions by 2050.<sup>18</sup> The Commonwealth has legislated this commitment in section 10 of the *Climate Change Act 2022* (Cth).<sup>19</sup>

The Progressive Scenario is neither consistent with -

- The commitment to net-zero by 2050 or before, nor
- The commitment to ensure global temperatures remain below no more than 2C more that pre-industrial levels, and to aim to maintain a 1.5C maximum temperature rise.

In the consultation paper AEMO states -

Progressive Change – meets Australia's current Paris Agreement commitment of 43% emissions reduction by 2030 and net zero emissions by 2050. This scenario has more challenging economic conditions, higher relative technology costs and more supply chain challenges relative to other scenarios. <sup>20</sup>

Table 3 of the consultation paper states that the Progressive Scenario is aligned to the IEA 2021 World Energy Outlook scenario 'Stated Policy Scenario (STEPS)', and applies the Representative Concentration Pathway (RCP) 4.5 where relevant. <sup>21</sup> A pathway aligned with those scenarios is not consistent with Australia's emissions targets and Paris commitments in

See Article 2 of the Paris Agreement. Australia has committed to emissions are cut so that average global temperatures remain well below 2C above pre-industrial levels, and to pursuing efforts to limit the increase to

AEMC Target Statement, 6 June 2024, <a href="https://www.aemc.gov.au/regulation/targets-statement-emissions">https://www.aemc.gov.au/regulation/targets-statement-emissions</a> (AEMC Target Statement), p.1.

Section 10(2) states that the section 10(1) commitment to achieving 43% reductions by 2030, and zero emissions by 2050, are to be interpreted in a way consistent with both the Paris Agreements and Australia's NDCs. It should be recalled that section 10(1)(a) for the period to 2030, references not only point in time emissions reduction for 2030, but also an emissions budget from 2021-2030.

Consultation paper, p.6. See also Table 3, first row, 'National decarbonisation targets'.

Consultation paper, pp.11-12.

circumstances where both the STEPS scenario and RCP 4.5 envisage emissions rising to 2050, and only falling after 2050, and temperature rises of above 2°C.<sup>22 23 24</sup>

The Progressive Scenario also appears inconsistent with 82% renewable generation in the NEM by 2030. We understand from the Consultation Paper that the Progressive Scenario remains widely unchanged from that used in the 2023 IASR.<sup>25</sup> The CISRO/CWA modelling which was relied upon in developing the Draft IASR 2023, the graph for the Progressive Change scenario in Figure 4-4 appears to indicate that less than 82% of electricity in the NEM will come from renewable energy in 2030. <sup>26</sup>

Government policy has targeted an intended increase in the level of renewables in the NEM by 2030 to at least 82 %.<sup>27</sup> This policy of achieving 82% renewables underpins achieving the 2030 climate target of 43% reductions.<sup>28</sup> A scenario which does not provide for the NEM to reach 82% should not be included in the 2025 IASR.

Further, the IEA WEO asserts the need for advanced economies to achieve net-zero in the electricity sector by 2035.<sup>29</sup> As indicated in Draft 2023 IASR Figure 4, the 2.6°C scenario is the only one of the four scenarios that does not achieve a net-zero emissions NEM by 2035.<sup>30</sup>

As the 2.6°C scenario fails to deliver Australia's climate commitments and fails to deliver government policy of 82 % renewables, this scenario should be removed from the 2023 IASR.

## 5. A Plausible 1.5C Scenario should be added.

#### What additional changes should be considered?

A plausible 1.5C aligned Scenario should be added. We strongly support the recommendations of IEEFA and other stakeholders in their response to this process, detailing the appropriate considerations for a 1.5 C aligned Scenario. We particularly note their recommendation for a 1.5

See IEA 2021 report – Scenario trajectories and temperature outcomes, <a href="https://www.iea.org/reports/world-energy-outlook-2021/scenario-trajectories-and-temperature-outcomes#abstract">https://www.iea.org/reports/world-energy-outlook-2021/scenario-trajectories-and-temperature-outcomes#abstract</a>. see also IEA 2024 report.

The IPCC Assessment Report 5, at multiple points references a range of possible temperatures rises under RCP4.5. See IPCC, Assessment Report 5 WGIII Report, p.13. Table SPM.1 details that RCP4.5, leads emissions equivalent to temperature ranges of 2.3-2.6C, and 2.6-2.9C. See also IPCC, Assessment Report 5, Synthesis Report, Summary for Policymakers, <a href="https://www.ipcc.ch/site/assets/uploads/2018/02/AR5\_SYR\_FINAL\_SPM.pdf">https://www.ipcc.ch/site/assets/uploads/2018/02/AR5\_SYR\_FINAL\_SPM.pdf</a>; p.10 (under RCP 4.5 the likely temperature rise is 1.4C to 3.1C, <a href="https://www.ipcc.ch/site/assets/uploads/2018/02/AR5\_SYR\_FINAL\_SPM.pdf">https://www.ipcc.ch/site/assets/uploads/2018/02/AR5\_SYR\_FINAL\_SPM.pdf</a>; See also the IPCC Assessment Report 6, Summary for Policymakers, Table SPM.1, p.14 <a href="https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\_AR6\_WGI\_SPM.pdf">https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\_AR6\_WGI\_SPM.pdf</a> - updated scenario SSP2-4.5 has estimated warming of around 2.7C. The IPCC Assessment Synthesis Report 5, Summary for Policymakers, details that RCP 4.5 is more likely than not to exceed 2C. See IPCC Assessment Report 5, Summary for Policymakers, p.10.

<sup>&</sup>lt;sup>25</sup> Consultation paper, p.10.

https://aemo.com.au/-/media/files/stakeholder\_consultation/consultations/nem-consultations/2022/2023-inputs-assumptions-and-scenarios-consultation/supporting-materials-for-2023/csiro-climateworks-centre-2022-multisector-modelling-report.pdf?la=en , pp.54-55.

<sup>&</sup>lt;sup>27</sup> AEMC Target Statement, p.2.

<sup>&</sup>lt;sup>28</sup> Draft IASR 2023, p.27.

International Energy Agency, World Energy Outlook 2022, <a href="https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf">https://iea.blob.core.windows.net/assets/830fe099-5530-48f2-a7c1-11f35d510983/WorldEnergyOutlook2022.pdf</a>, p 123.

Draft IASR 2023, pp.46-47.

C aligned scenario which is more focussed on the domestic aspects of a least-cost pathway for Australia's energy system to contribute to a 1.5 C aligned path.

In response to the Draft IASR 2023, the JEC (formerly PIAC) made extensive submissions on the implausibility and inconsistent nature of AEMOs assumptions on the development and role of hydrogen and 'green energy exports'. These observations covered the following issues:

- The lack of a short term realistic short term role for hydrogen;
- That there should be no role for hydrogen that was not 'green' and
- The implausibility and inefficiency of hydrogen as a replacement gas (in whole or part) in domestic networks.

These points remain valid critiques of the possible future role of hydrogen and are also relevant in the consideration of a 'Green Energy Export' scenario.

While changes to the way hydrogen futures are referenced in the scenarios since the Draft IASR 2023 are welcome, there is still significant scope for implausible or unreasonable projections on the possible development and deployment of hydrogen and other green energy exports.

We continue to have concerns that the role of biomethane, hydrogen and 'renewable gases' will be implausibly referenced in the final IASR 2025, and that assumptions about the development of green energy exports and the deployment of 'renewable blends' are both implausible and contrary to the consumer interest in an efficient energy system.

The JEC observes the cost of replacing infrastructure, the inefficiency of hydrogen as a fuel in gas networks and the significant increased renewable energy generation required to support hydrogen, means that it cannot be considered a plausible option. We further observe that no level of hydrogen blending in domestic gas networks (whether recognised by volume or energy) is a material or efficient contributor to energy system decarbonisation, or in the interest of consumers.

Any plausible 1.5 aligned C scenario should be without reference to either:

- 'High production [of hydrogen] for domestic industries and moderate hydrogen exports in the short term, and high exports in the long run.'
- 'Up to 10% (hydrogen) [in gas distribution networks], with unlimited blending opportunities for biomethane and other renewable gases.'31

As noted by IEEFA and other stakeholders, a plausible 1.5 C aligned scenario should assume higher energy efficiency measures, rapid electrification, higher demand side uptake, higher CER investments, coupled with accelerated decommissioning of the gas network and no deployment of hydrogen gas networks.

Consultation Paper, Table 3.

# **Continued engagement**

We welcome the opportunity to meet with AEMO and other stakeholders to discuss these issues in more depth. Please contact Michael Lynch at <a href="mlynch@piac.asn.au">mlynch@piac.asn.au</a> regarding any further follow up.

## Annex A

Relevant portions of the 2<sup>nd</sup> Reading Speech in the House of Assembly are extracted below:

The government is delivering an important national reform to incorporate an emissions reduction component into the national energy objectives—long overdue reforms. The Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Bill 2023 reflects the commitment by all Australian governments to net zero greenhouse gas emissions by 2050 or earlier.

[...]

[...] As currently framed, the energy objectives do not refer to emissions reductions, either directly or indirectly.

Changing this will send a clear signal to wider industry, market participants, investors and the public of all Australian governments' commitments to achieve a decarbonised, modern and reliable energy system that contributes to the achievement of Australia's emissions targets. These reforms are long overdue.

This bill will integrate greenhouse gas emission reduction and energy policy into the national energy laws. [...] The bill's amendments will clarify that the Australian Energy Market Commission, the Australian Energy Market Operator, the Australian Energy Regulator and other decision-makers under the laws should explicitly consider the achievement of emissions reduction targets alongside the existing components when they use their respective powers and functions.

[...]

As we transition towards a low emissions energy system, these changes are intended to ensure the transition is managed in the long-term interests of consumers—in respect of not just emissions reduction but also price, quality, safety, reliability and security. [...]

The bill frames the emissions reduction objective by reference to the achievement of targets set by a participating jurisdiction, be it the commonwealth, a state or a territory, for reducing or that are likely to reduce Australia's greenhouse gas emissions. These targets could include those with an explicit objective of emissions reductions or those that are likely to contribute to emissions reductions, such as a renewable energy target or an electric vehicles target. The intent of this wording is to

allow energy market bodies the discretion to consider appropriate targets relevant to a matter under consideration. [...]

The bill requires the Australian Energy Market Commission to prepare, maintain and publish a targets statement that lists the targets that must, at a minimum, be considered by decision-makers, comprising government or regulatory entities such as market bodies, in applying the emissions component of the national energy objectives. [...]

[...]

Introducing an emissions reduction component implies that the reduction of greenhouse gas emissions is a new category of market benefit to be assessed in market body decisions and processes where appropriate. To operationalise the emissions reduction component under an economic efficiency framework, a methodology for valuing emissions reduction for the purposes of regulatory decision-making is required.<sup>32</sup>

<sup>&</sup>lt;sup>32</sup> 2nd Reading SA House of Assembly 14 June 2023, Hansard pp.4378-4380.