

Incorporating an emissions reduction objective into the national energy objectives

Proposed legislative package to give effect to an emissions reduction objective in the National Electricity Law, the National Gas Law and the National Energy Retail Law

Consultation Paper

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Abbreviations

Name in full	Abbreviation
Australian Energy Market Commission	AEMC
Australian Energy Market Operator	AEMO
Australian Energy Regulator	AER
Electricity Statement of Opportunities	ESOO
Energy Security Board	ESB
Gas Statement of Opportunities	GSOO
Integrated System Plan	ISP
Ministerial Council on Energy	MCE
National Electricity Objective	NEO
National Electricity Law	NEL
<i>National Energy Laws Amendment (Emissions Reduction Objectives) Bill 2022</i>	Draft Bill
National Electricity Market	NEM
National Electricity Rules	NER
National Energy Retail Law	NERL
National Energy Retail Objective	NERO
Collective term for the National Electricity Law, the National Energy Retail Law and the National Gas Law	National energy laws
National Energy Retail Rules	NERR
National Gas Objective	NGO
National Gas Law	NGL
National Gas Rules	NGR
Regulatory Investment Test for Distribution	RIT-D
Regulatory Investment Test for Transmission	RIT-T
Collective term for the National Electricity Rules, the National Energy Retail Rules and the National Gas Rules	Rules
Strategic Energy Plan	SEP

1. Overview

On 12 August 2022, Energy Ministers (Ministers) agreed to fast track the introduction of an emissions reduction objective into the national energy objectives (energy objectives) and tasked Energy Senior Officials (Officials) to progress the necessary legislative amendments for Ministers' agreement.

The three energy objectives – the National Electricity Objective (NEO), the National Gas Objective (NGO) and the National Energy Retail Objective (NERO) are set out in the national energy laws – the National Electricity Law (NEL), the National Gas Law (NGL) and the National Energy Retail Law (NERL) respectively (collectively the national energy laws). As currently framed, the energy objectives do not refer to emissions reduction either directly or indirectly.

Ministers' decision to introduce an emissions reduction objective will integrate emissions reduction and energy policy in the national energy laws. The focus of the amendments is to provide greater clarity to Australia's three energy market bodies – the Australian Energy Market Commission (AEMC), the Australian Energy Market Operator (AEMO) and the Australian Energy Regulator (AER) (and a small number of other decision makers under the laws) to explicitly consider emissions reduction in how each market body undertakes its respective powers and functions. The amendment will also send a clear signal to wider industry, market participants, investors and the public, of governments' commitment to work together to manage the transformation of the energy sector to achieve a decarbonised, modern and reliable grid.

The electricity system accounts for about 33 per cent of national emissions, due to the significant share of coal and gas in electricity generation. As such, the sector has a substantial role to play in achieving net zero and interim emissions reduction targets. Reducing emissions from the energy sector is also expected to support the decarbonisation of other high-emitting sectors, including transportation and industrial processes.

The proposed reform reflects the commitment by all Australian governments to net zero emissions by 2050 or earlier. Introducing an emissions reduction objective was a first action agreed by governments under the new National Energy Transformation Partnership – representing a fundamental reset of relations across governments and the first fully integrated national energy and emissions agreement. It is also consistent with a desired outcome of the Ministers' Strategic Energy Plan (SEP) to deliver 'reliable and low emissions electricity and gas supply,' and the corresponding objective that 'electricity and gas sectors efficiently deliver at least their share of emissions target/s while ensuring reliable supply.'¹

The proposed reform is intended to support a managed transition to an energy system with a higher proportion of firmed renewables, which will serve the long-term interests of consumers with regard to price, quality, safety reliability and security.

Ministers are progressing these amendments with a focus on emissions reduction. Proposals from stakeholder groups for broader changes to consider social equity, cost and affordability in the objectives have been identified by Ministers as important matters for future consideration, however they are outside the scope of this process.

¹ [Strategic Energy Plan, November 2019](#) (published in January 2020), COAG Energy Council.

To implement the agreed reform, changes will be needed to the NEL, the NGL and the NERL which are contained in schedules to the relevant parent Acts of South Australia, as lead legislature for the national co-operative scheme legislation for the energy markets.²

Officials from across relevant Commonwealth, state and territory governments have prepared the draft amendments to these instruments, set out in the *National Energy Laws Amendment (Emissions Reduction Objectives) Bill 2022* (Draft Bill) (refer to **Appendix A**), informed by close consultation with the energy market bodies.

Consistent with the current approach to applying the objectives, the emissions reduction component will be one of a number of components or 'outcomes' (alongside price, quality, safety, reliability and security of supply) that decision makers under the national energy laws will be obliged to consider and have discretion to balance in making their decisions. In this way, the emissions reduction objective is not intended to sit above, or be prioritised over, the existing components within the objectives, but rather will be considered and balanced alongside the other existing components, in a way that maximises the overall objectives, in the long-term interests of consumers.

The amendment will require that market bodies, when making decisions in line with the new emissions reduction objective, consider relevant Commonwealth, state and territory emissions reduction and/or other targets such as renewable energy targets, whilst still being afforded the flexibility to, after considering targets, decide which targets are relevant to that decision. The new set of energy objectives will be taken into account by market bodies in their interpretation and application of laws and rules.

References to 'decisions' above encompasses the full range of functions, powers and obligations assigned to the market bodies where they are already required to be undertaken with reference to the energy objectives, for example in system planning, rule change determinations, self-initiated and statutory reviews and reports. This is explored more fully in Section 4 – Application by market bodies of the proposed changes.

1.1. Consultation process and next steps

This consultation paper seeks feedback on the Draft Bill. The consultation process will inform the development of a final Bill, to be presented to Ministers for agreement in early 2023, before introduction into the South Australian Parliament (subject to South Australian Government scheduling).

In making submissions, stakeholders are strongly encouraged to use the response template available on the consultation webpage. Stakeholders should not feel obliged to answer each question or comment on each provision, but rather address those issues of particular interest or concern. Responses to each question in this paper will, however, be greatly appreciated.

It is expected that submissions will be published on the Ministers' website, as will the names of stakeholders who made submissions. While it is preferable that submissions are made publicly available, if you would prefer your submission (in part or full) to remain confidential, please advise in a covering email or letter. The default is that confidential submissions will still be shared with market bodies – please advise in a covering email or letter if you would prefer this not to be the case.

² *National Electricity (South Australia) Act 1996, National Gas (South Australia) Act 2008, National Energy Retail Law (South Australia) Act 2011.*

Submissions should be sent via email to netp@industry.gov.au by **COB Tuesday 7 February 2023**.

A summary of the key next steps is in the table below.

Key Steps	Dates
Consultation on Draft Bill	20 December 2022 – 7 February 2023
Refine Bill following consultation	February 2023
Final Bill provided to Ministers for approval	First Quarter 2023
South Australian Cabinet and Parliament processes for Bill introduction	As soon as possible following approval; first half of 2023
Act Commencement	On a day to be fixed by proclamation, suggested six months after Assent

2. The current national energy objectives

The three energy objectives are part of the legislative frameworks that govern the national electricity, gas and related retail markets. The energy objectives are expressed in the national energy laws – the NEL, the NGL and the NERL. The NEL and NGL were introduced in response to the introduction of national competition policy reforms and are concerned with the establishment of wholesale markets for the trading of electricity and gas, and the regulation of interconnecting monopoly networks and pipelines where market power issues arise. The NERL is a set of broadly uniform energy-specific consumer protections which became possible on the establishment of national electricity and gas markets.

The energy objectives govern and guide market bodies in their activities under the relevant energy law. The AEMC in exercising its rule-making power can only make and amend the electricity, gas and energy retail rules, or recommend changes to the national energy framework in reviews, if doing so will, or is likely to, contribute to the relevant energy objective.³ The same is true for the AER's performance or exercise of its economic regulatory functions or power. AEMO must have regard to the objectives in its market operations functions and planning processes (e.g. the Electricity Statement of Opportunities (ESOO), Gas Statement of Opportunities (GSOO) and Integrated System Plan (ISP)).

In addition, when making a decision on a Ministerial Council on Energy (MCE)⁴ Statement of Policy Principles and an 'ESB Recommended' Rule⁵, the MCE and the ESB respectively must be satisfied of consistency with the relevant energy objective.

Each of the energy objectives are framed in broadly similar terms, with the most complex being the national electricity objective in the NEL (excerpt of the objectives from the NEL, NGL and NERL below). All three objectives focus on promoting the long-term interest of consumers through efficient investment, operation and use of energy services.⁶

³ [Australian Energy Market Commission \(AEMC\), *How the national energy objectives shape our decisions*, October 2022.](#)

⁴ The term used in the national energy laws to refer to the collective of Energy Ministers in their statutory role.

⁵ Section 90F of the NEL and equivalent sections of the NERL and NGL

⁶ [AEMC, *How the national energy objectives shape our decisions*.](#)

The NEO as stated in s 7 of NEL is:

... to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to:

1. price, quality, safety and reliability and security of supply of electricity; and
2. the reliability, safety and security of the national electricity system.

The NGO as stated in s 23 of the NGL is:

... to promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.⁷

The NERO as stated in s 13 of the NERL is:

... to promote efficient investment in, and efficient operation and use of, energy services for the long-term interests of consumers of energy with respect to price, quality, safety, reliability and security of supply of energy.

Under the NERL, the application of the NERO by the AER (s 205) and the AEMC (s 236) is subject to consideration of compatibility with the development and application of consumer protections for small customers, including (but not limited to) protections relating to hardship customers.

Self-contained interpretation legislation is also set out in Schedules to the NEL, NERL and NGL. By way of example, NEL Sch 2 cl 7(1) states that the 'interpretation that will best achieve the purpose or object of this Law is to be preferred to any other interpretation'. In this way, the objectives not only inform the decision-making processes of the AER, AEMC and AEMO under the Rules, but the interpretation of the law as a whole.

To assist stakeholders in considering the potential implications of the proposed changes to the energy objectives in the Draft Bill, **Appendix B** lists provisions in the laws, regulations and rules that specifically reference the energy objectives.

3. Approach to incorporating an emissions reduction objective

3.1. Utilising the existing 'economic-efficiency' framework

All three existing energy objectives are framed in terms of 'efficiency'. The word 'efficient' is not defined in the energy laws but is generally understood to be an economic term, with this interpretation supported by the Second Reading speeches of the NEL and NGL Bills.⁸ What is 'efficient' is defined by reference to price, quality, safety, reliability and security of supply

⁷ On 28 October 2022, Ministers agreed to legislative amendments which include changing references from 'natural gas' to 'covered gas' in the NGO as part of the reforms to extend the regulatory framework to hydrogen and other renewable gases. This new term will include natural gas, hydrogen, biomethane, synthetic methane, and blends of these gases. For details, see consultation webpage on [Extending the national gas regulatory framework to hydrogen blends and renewable gases](#). Energy Ministers announced this change in their communique of 28 October 2022 – refer to [communiques](#) webpage.

⁸ *National Electricity (South Australia) (New National Electricity Law) Amendment Bill* and the *National Gas (South Australia) Bill*.

as determined by state and territory laws, or in some cases by the national energy laws, and their subordinate rules.

The legislative premise of 'efficient' assumes that the long-term interest of consumers of the relevant form of energy (electricity or gas) will be maximised through efficient investment and efficient use and delivery of either electricity/gas services. For example, the Second Reading speech of the NEL (and of the NGL similarly) states:

The market objective is an economic concept and should be interpreted as such. For example, investment in and use of electricity services will be efficient when services are supplied in the long run at least cost, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.

The long-term interests of consumers of electricity requires the economic welfare of consumers, over the long-term, to be maximised. If the National Electricity Market is efficient in an economic sense the long-term economic interests of consumers in respect of price, quality, reliability, safety and security of electricity services will be maximised.⁹

The proposed approach in the Draft Bill to adding an emissions reduction component to the energy objectives is to insert this new component within the same 'economic-efficiency' framework with the above legislative premise applying to both the existing components of the objectives and this new component.

The provision of various relevant criteria for the objectives recognises that there are trade-offs to be made. In practice, market bodies routinely have to balance and make trade-offs between them. This is currently achieved in a balancing act that considers each of the components in the objectives together, rather than consideration of each in isolation. Including an emissions reduction component under the energy objectives as proposed would compel decision makers to consider it as one of a number of components or 'outcomes' (alongside price, quality, safety, reliability and security of supply) but allow market bodies the discretion to balance the various components when making decisions, as they currently do.

For example, the AEMC when considering making a rule or a recommendation in a review would focus on whether the proposed change would promote more efficient decisions towards achievement of the relevant components of the energy objectives (currently price, quality, safety, reliability and security of supply), and assess which outcome or option would deliver the greatest efficiency benefit.

The focus of the energy objectives on the long-term interests of consumers provides a temporal aspect to these considerations. For example, investment in transmission may increase the costs paid by consumers in the short-to-medium term but has the long-term impact of improving reliability and security, and reducing the emissions intensity of the National Electricity Market (NEM). So, while there may be a range of 'economically efficient' decisions that can be made, some may not be in the long-term interests of consumers and therefore are unlikely to advance the NEO. The AEMC uses the concept of 'dynamic efficiency' in assessing these temporal trade-offs¹⁰ – a concept well understood within the framework of 'economic efficiency'.

⁹ Second reading speech on the introduction of the *National Electricity (South Australia) (New National Electricity Law) Amendment Bill*.

¹⁰ [AEMC, How the national energy objectives shape our decisions, October 2022.](#)

The amendments presented in the Draft Bill at **Appendix A** (amending s 7 of the NEL, s 23 of the NGL and s 13 of the NERL) propose consistent amendments be made across all three energy laws. As stated in the Second Reading speeches for the NGL and NERL, alignment between the objectives of the national energy laws is considered an important foundation, and this has been a factor in developing the proposed amendments to the objectives. Consistent objectives across the gas, electricity and retail frameworks will help ensure the regimes remain closely aligned over the long term, even in light of the capacity in each of the regimes for interested parties to make applications to change rules through the AEMC.

3.2. Consideration of alternative approaches

Officials considered alternative options as part of the development of the Draft Bill that could offer a similar or greater level of flexibility where appropriate, including the consideration of using a new ‘cost-effectiveness’ framework to apply the emissions reduction objective.

In this context, ‘cost-effective’ is described variously as ‘the degree to which something is effective or productive in relation to its cost’ (Oxford Online Dictionary), ‘good value for the amount of money paid’ (Cambridge Online Dictionary) or ‘offering profits deemed to be satisfactory in view of the costs involved; cost-efficient.’ However, the concept is not as well understood nor well applied in energy decision making, and is highly dependent on the context in which it is interpreted. In the absence of a clear definition and existing understanding of how it may be applied in this context, it could therefore result in a range of interpretations. For example, it could afford a higher degree of flexibility,¹¹ but could also afford less discretion, where using an interpretation in a strict financial sense.

There is also uncertainty that the two frameworks (albeit having some similarities) could be successfully applied and weighed up in a single decision-making process, and uncertainty around the associated defensibility of the resulting decision. The lack of a clear definition and understanding of the application of a ‘cost-effectiveness’ framework has the potential to result in broader discretion than may be intended, and the risk of market bodies being required to make policy decisions that better sit with governments.

In general, the current level of discretion afforded through the ‘economic-efficiency’ framework of the current energy objectives is considered by market bodies to be sufficient, including adequate discretion to determine the components of the objectives most relevant to the decision at hand. ‘Economic efficiency’ is also well understood and has a body of literature and precedents to support robust application. There is also no legal impediment to including an emissions reduction objective within an ‘economic-efficiency’ framework, and including the additional objective within the existing framework would enable a level playing field for considering all components of the objectives.

Questions:

1. Do you consider incorporating the emissions reduction objective into the existing ‘economic-efficiency’ framework is an effective way of integrating the concept into the decision making of energy market bodies?

¹¹ The Productivity Commission highlights a range of interpretations, pointing to the previous COAG’s Principles and Guidelines for National Standard Setting and Regulatory Action (2004) that refers to measures of comparative cost-effectiveness such as ‘cost per unit of effectiveness’ or ‘units of effectiveness per dollar’, or maximising the level of output for a stated level of inputs or cost (Productivity Commission, *On efficiency and effectiveness: some definitions*, Productivity Commission Staff Research Note, May 2013, p. 8).

2. Is the current level of discretion afforded through an 'economic-efficiency' framework appropriate for balancing an emissions reduction component against existing components of the energy objectives?
3. Do you consider that, for certain instances/processes, market bodies should develop/update guidance material to assist market participants in understanding how market bodies will interpret the proposed revised national energy objectives?
 - a) What are these instances/processes and what sort of content would you want to be included in this guidance?

3.3. Reference to Australia's greenhouse gas emissions reduction targets

The proposed amendments frame the emissions reduction objective by reference to 'achieving targets for reducing Australia's greenhouse gas emissions' where the Commonwealth, or a state or territory, has made a public commitment including under a law or an international agreement or as a matter of policy.

It also covers other government targets that are 'likely to contribute to' reducing Australia's greenhouse gas emissions, even if they are not purposely called out as an emissions reduction target (e.g. a renewable energy target). This could include emissions reduction or renewable energy targets of participating jurisdictions that are not legislated. The intent here is that market bodies will have discretion, when making decisions in line with the new emissions reduction objective, to consider the targets relevant to that decision, whilst still being afforded the flexibility to, after considering a range of factors (and targets), decide which targets are relevant to that particular decision.

Officials also considered including the emissions reduction component of the objectives in the list of components already considered under the economic efficiency framework (i.e. not as a separate limb and simply alongside price, quality, safety, reliability and security of supply) under the current s 7(a) under the NEL and equivalent sections under NERL and NGL.

However, Officials consider the approach reflected in the Draft Bill provides greater clarity to market bodies and participants as to the policy intent of the new emissions reduction component – that is, to deliver on targets that the Commonwealth, state and territory governments have committed to, either in legislation or unlegislated.

Questions:

4. Does this approach gives an appropriate level of clarity as well as discretion to market bodies to consider relevant targets in their decision making? If not, detail your reasons and suggested solutions.
5. Does the inclusion of 'public commitments' including 'publicly as a matter of policy,' as well as legislated targets, provide sufficient certainty for effective consideration of an emissions objective by market bodies?

3.4. Amendments to acknowledge interactions between electricity and gas markets and enable management of transition impacts

Gas is likely to play an important role in the energy transition, with increasing interactions between gas and electricity markets.

In its 2022 Integrated System Plan (ISP), AEMO notes that:

Gas-fired generation will play a crucial role as coal-fired generation retires. It will complement battery and pumped hydro generation in periods of peak demand, particularly during long 'dark and still' weather periods. It will help cover for planned maintenance of existing generation and transmission. And it will provide essential power system services to maintain grid security and stability, particularly following unexpected outages or earlier than expected generation withdrawal.' (p 11)

Increasing electrification of gas demand will require increased investment in electricity infrastructure and generation to meet that demand. AEMO's 2022 GSOO also notes that while electrification will decrease gas demand overall, it will increase the need for and peakiness of gas generation in winter (p 18). The current gas network stores significant quantities of energy in its pipelines and storage facilities. Some industrial applications will also need to continue to rely on gas for the foreseeable future due to its heating and feedstock properties. The continuing use or re-purposing of gas infrastructure could therefore be important for both gas and electricity users. This will require planning and regulatory reforms to consider these interactions.

The NEL and NGL were drafted to manage the two energy markets and systems separately, however, the gas and electricity markets are increasingly intertwined and interdependent. This was evident over recent months with the international impacts on our export-linked gas market flowing through to prices in the electricity market. The laws do not currently acknowledge gas as a transition fuel. To ensure the peaking and firming capacity role of gas-powered generation is taken into account in the regulatory approaches, particularly in the context of the decarbonisation of the NEM, it will likely be necessary for market bodies to consider how decisions in one market (gas) affect outcomes in another (electricity), and vice versa.

Allowing consideration of these trade-offs and interdependencies between the two markets and their consumers is arguably increasingly important in the context of achieving decarbonisation of the energy sector as a whole. While market bodies consider the implications of their decisions for both markets at present to the extent they can, the Draft Bill reflects a view that this would be better facilitated through legislation that allows market bodies to consider and manage the two systems in a more integrated way, where relevant. Moreover, holistic consideration of the interrelated impacts of market bodies' decisions on the electricity and gas markets may facilitate outcomes which are in the long-term interests of all energy consumers.

To address these issues, Officials therefore propose replacing current references to 'consumers of electricity' in the NEO and 'consumers of natural gas' in the NGO, with 'consumers of energy'. The term 'energy' for the purpose of this change to the NEO and NGO will be defined through standalone provisions in the NEL and NGL and be consistent with the existing approach in the NERL where 'energy' means 'electricity or gas or both'.

The intent is to enable market bodies to continue their function of ensuring the efficient operation of the relevant energy markets with regard to the existing components of the objectives – price, quality, safety, reliability and security of supply of electricity (in the case of

decisions under the NEL) and gas (in the case of decisions under the NGL), within the separate energy laws. That is, the NEL and NGL would still be focused on the relevant energy market, and the market bodies would still have the function of ensuring each of these energy markets operate optimally with regards to the relevant energy objective for that law. With the change to 'consumers of energy', the intent is that market bodies will be required to consider the impacts of decisions in one energy market on the other market where relevant, having regard to the energy objectives and the impact on energy consumers as a whole.

Officials consider this amendment, for example, will assist:

- the AEMC to consider the impacts of a proposed measure on all energy consumers when considering a rule change;
- AEMO to perform its planning functions with regard to the energy system as a whole, including identifying the investments that are required across the electricity and gas sectors (as an integrated whole) to achieve the emissions reduction component of the energy objectives (and other components of the energy objectives); and
- the AER to consider the impact of its economic regulatory decisions on all energy consumers.

While not included in the Draft Bill, a second similar change to the wording of the energy objectives was contemplated that would see 'supply of electricity' in the NEO and 'supply of natural gas' in the NGO also replaced with 'supply of energy'. Again, 'energy' would be defined as 'electricity or gas or both'.

This additional change to the NEO and NGO was considered on the basis that when the AEMC considers a rule change it will consider price, reliability etc. (e.g. through existing s 7(a) which refers to supply of electricity) as well as emissions reduction (new s 7(c)), balancing the costs and benefits; but may be confined to considering price and reliability impacts only in relation to one energy source (because of s 7(a)). Officials considered whether changing 'supply of electricity/natural gas' to 'supply of energy' in the NEO and NGO would address this issue, noting for instance it would allow for the making of rules amending the National Electricity Rules (NER) that are intended to improve gas prices or reliability (or limit impacts) for example.

Overall, this possible additional change would therefore recognise that in changing the objective to promote a broader outcome i.e. the 'long-term interests of consumers of energy', it would be inappropriate for decisions makers under the laws to then be limited to considering only particular variables that may be relevant to achieving that broader outcome.

However, after consideration, this additional change was not included in the Draft Bill because it would seem to move the NEL and NGL further away from their core purposes of being focussed on promoting efficient investment in, and efficient operation and use of, electricity and natural services respectively. Officials were also concerned that this addition could heighten the possibility of unintended consequences from amending the energy objectives.

Questions:

'Consumers of energy'

6. Do you agree that the proposed change to 'consumers of energy' is necessary and appropriate to recognise the interconnections between the two energy markets and to enable future decisions to consider the implications for the energy system as a whole?

7. What impacts (positive and/or negative) would the proposed change have on your organisation or your stakeholders/customers?
 - a) Do you foresee any unintended adverse consequences coming from such a change, especially for market participants or consumers?

'Supply of energy'

8. Do you consider the additional change to 'supply of energy' is necessary given the reasons above?
9. Do you agree that the market bodies, when making a decision under the NEL/NER should be empowered to consider the implications for price, reliability, security etc. in the gas market and vice versa? If not, what are other ways of managing the potential implications of the transition on all energy consumers?
10. Do you foresee any unintended adverse consequences coming from such a change, especially for market participants or consumers?

3.5. Consequential changes

The Draft Bill includes the following consequential amendments to the national energy laws:

- Replacing references to consumers of electricity or natural gas in the energy objectives of the NEL and NGL respectively with 'consumers of energy' – as discussed above.
- Consequent on the above change, the inclusion in the NEL of a new definition for the term 'gas' as used in defining the term 'Energy'.

Consequential changes to national rules

As part of the development of the Draft Bill and with the support of the AEMC, consideration has been given to whether any consequential changes are required to the National Electricity Rules (NER), National Gas Rules (NGR) and the National Energy Retail Rules (NERR).

The outcome of this initial review is that no rule changes are being proposed as part of the package of legislative amendments for Ministers' initial agreement. Further, no consequential rule changes have been identified as being essential to support operationalisation of the emissions reduction objective on commencement of the legislation.

This view was informed by an initial, high-level review conducted by the AEMC, which identified:

- A. instances where it is considered that the changes to the energy objectives would be automatically incorporated into processes undertaken under the rules; and
- B. provisions of the rules that could be considered for amendment at a future time to harmonise with the revised energy objectives.

With respect to A, the AEMC's initial high-level review confirmed there are a number of instances where processes under the energy rules refer to the energy objectives specifically; and where the AEMC's initial view is that consequential changes are not necessary because the requirement to consider the new emissions component of the objective will automatically apply (where it is relevant). For example, cl 5.2.6A of the NER requires AEMO to conduct a periodic review, having regard to the NEO, of the technical requirements for network connections that are set out in the NER. Clause 6.6.4 allows for the AER to provide

Distribution Network Service Providers with small-scale incentives to provide standard control services in a manner that contributes to the achievement of the NEO.

Similarly, Rule 18(i) of the NGR requires that an applicant for a coverage revocation determination (under s 102 of the NGL) must provide information to the AER that is relevant to the application of the NGO in the circumstances of the case. Rule 22 of the NGR says the AER must approve a proposed tender process as a competitive tender process if the AER is satisfied that the tender process is an appropriate mechanism for determining terms and conditions of access, having regard to the NGO. Rule 100 under Part 10 requires that the provisions of a (pipeline) access arrangement be consistent with the NGO.

With respect to B above, the AEMC's high-level review of the energy rules also identified a number of areas of the NER where the AEMC's initial thinking is that changes could be considered in the future to harmonise with the revised energy objectives, for example by including a reference to the emissions reduction objective. Unlike the processes referenced above, these provisions do not currently refer to the energy objectives using the defined term, so changes to the objectives would not automatically flow through to these processes. To include explicit emissions reduction considerations in these processes/provisions, a rule change would be needed.

Any amendments to the rules can be made by either a Minister-made rule (which would require an appropriate rule-making power to be included in the final Bill – not included currently), or by the AEMC (which would require a rule change request to be submitted to the AEMC as per the existing rule change process – this is Officials' current preference).

While no rule changes are being proposed at this time, in order to support any subsequent rule change process, Officials are interested in stakeholder views on any rule changes they anticipate as necessary or desirable to more effectively give effect to the emissions reduction objective.

Questions:

11. Do you have views on other consequential changes that might be required for the national energy laws as part of implementing the emissions reduction component?
12. Are there existing rules or regulations under the national energy laws that may require consideration of consequential changes? If so, please provide details including why consequential changes are envisaged as necessary or appropriate.
13. Do you have views on any rules that would benefit from a concurrent change within the current Bill process? If so, please provide details of the changes and the reasons why they would benefit from a concurrent change.
14. Do you have views on/are you aware of any rules that might benefit from more explicit reference to the objectives as a whole, or specifically the emissions reduction component?

3.6. Commencement and transitional arrangements

The Draft Bill provides for commencement of the amendments on a date to be proclaimed. It is proposed the amendments would take effect six months after passage through the South Australian Parliament.

On transitional arrangements, the Draft Bill currently reflects Officials' initial position that:

- the amended objectives will only apply to new processes commenced after the commencement of the amendments
- decision processes under the law and rules that are underway at the time the amendments commence will be continued and finalised as if the changes to the objectives were not in place when the decision was finalised
- however, energy market bodies could be given a broad discretion to apply the amended objective where they consider it is appropriate/feasible.

Officials recognise there is value in providing some level of discretion for market bodies to apply the changed objectives to processes that are underway, and is seeking views on whether the broad discretion in the Draft Bill is appropriate or requires refinement. Processes that span multiple years or which are multi-staged processes would potentially benefit from the market body having discretion to apply the amended objective. There may also be instances where market participants may see benefit in being able to agree to the amended objectives being applied, despite a process/project already being underway.

At a minimum, Officials consider it would be appropriate to retain a broad discretion for the AEMC to choose to apply the amended objectives to reviews¹² underway at the time the amendments commenced.

Officials are seeking views on how to ensure the transitional arrangements provide a balance between the need to provide market participants with a level of certainty on the potential application of the amended objective, and how to facilitate the application of sensible discretion where relevant. Further, Officials seek views on specific processes, particularly multi-staged processes, where application of the amended objective may require some flexibility or more care/certainty. Officials are also open to views on alternative approaches to the transitional arrangements, such as the laws containing standard, default arrangements, but providing a head of power for a subordinate instrument to be made detailing alternative arrangements for particular processes.

Questions:

15. Do you agree with the proposed commencement date being six months after passage through the South Australian Parliament?
16. What are your views on the proposed transitional arrangements in the Draft Bill?
 - a) Are there particular processes that should be subject to different transitional arrangements?
 - b) How or where should arrangements for these specific processes be prescribed – in the primary legislation or through a subordinate instrument?
17. What already-commenced regulatory processes under the energy laws or rules might benefit from transitional arrangements that provide for the emissions reduction component to apply (i.e. automatically and not be subject to market body discretion)?
 - a) Should business-initiated processes such as RIT-Ts and RIT-Ds¹³ be captured, rather than just market body processes?

¹² Reviews under s41 and s45 of the NEL and equivalent sections under the NGL and the NERL.

¹³ The purpose of a RIT-T and a RIT-D is to identify the credible transmission investment option (for a RIT-T), or the credible distribution investment option (for RIT-D), which maximises the present value of net economic benefits to all those who produce, consume and transport electricity in the NEM, and

18. Should market bodies be afforded a broad discretion to decide when to apply the amended objective to a process that is 'underway'?
19. Are there logical points in multi-stage and/or multi-year processes (e.g. RIT-T and RIT-D assessment processes and revenue determination processes/resets) after which the emissions reduction objective should or should not be able to be applied?
- a) Should a RIT-T process be considered 'underway' when a project specification consultation report has been made available (clause 5.16.4(c)), or at a different stage?
 - b) Should a RIT-D process be considered 'underway' when an options screening report or determination has been published (clause 5.17.4(b) and (c)), or at a different stage?
 - c) Electricity – should a revenue determination/reset be considered 'underway' when the network service provider has submitted its initial revenue proposal (clause 6A.10.1 for transmission and clause 6.8.2 for distribution), or at a different stage?
 - d) Gas – should a gas access arrangement process be considered 'underway' when an access arrangement proposal is lodged with the AER under rule 46(1A) in the NGR, or at a different stage?

4. Application by market bodies of the proposed changes

Where relevant, the market bodies already indirectly consider 'big picture' issues that have the potential to influence the outcomes of their decisions, including decarbonisation. For instance, scenarios underpinning AEMO's 2022 Integrated System Plan include varying assumptions about the pace of decarbonisation and the influence this would have on future system needs.

However, as outlined in this paper, the intent of including an emissions reduction component that is additional to the existing components of the energy objectives is that emissions reduction would become a relevant factor that market bodies must consider and balance against the other components of the energy objectives, such that at an overall level, the energy objectives are achieved to the greatest degree.

Interpretation and application of the laws and rules by energy market bodies will be informed by the new set of energy objectives, especially where the relevant provision or rule directly references the energy objective. At **Appendix B**, Officials have identified provisions in the laws and rules that reference the energy objectives and would therefore require market bodies to consider in their processes/decision making, including the additional emissions reduction objective.

The following sections illustrate how it is envisaged some of the more common and relevant market body decision-making processes would be impacted or change following the addition of an emissions reduction objective.

where applicable, meets the relevant jurisdictional or Electricity Rule based reliability standards (see [AER Regulatory investment test for transmission \(RIT-T\) and application guidelines 2010](#)), National Electricity Rules clauses 5.15A.1(c) and 5.17.1(b)).

4.1 AEMC's application of the emissions reduction objective

The AEMC's statutory functions include its rule-making and market-development functions (such as conducting reviews into matters relating to the energy markets and operation and effectiveness of the various rules). The AEMC must have regard to the relevant national energy objective when performing these functions.

Consistent with the current rule-making process, the AEMC will have the power to make and amend electricity, gas, and energy retail rules, or recommend changes, if doing so will contribute to the objective of the relevant law, including considering (where relevant) how the rule or recommendation would contribute to achieving targets for reducing Australia's greenhouse gas emissions.

In applying the new objective in its rule-change decision-making process, the AEMC considers a rule change may fall into one of the following categories:

- being able to consider the benefits of emission reductions could result in changes to the preferred option, either as a whole or in relation to a specific design question or the timing of implementation, because those benefits are material in light of all the other costs and benefits of the proposed rule or recommendation;
- being able to consider the benefits of emission reductions does not change the preferred option, because, while a particular option may reduce emissions more than another option, the emissions reduction benefits are outweighed by the impacts on other components of the objective, such as price or reliability; or
- being able to consider the benefits of emission reductions does not change the preferred option, because all options under consideration would reduce emissions equally, or the rule change does not relate to emissions.

The AEMC is not able to give examples of rule changes that may fall into each category, as making this decision would require a full analysis of the benefits, which can only be done with public consultation during a formal rule change process.

After Ministers approve the amendments to the national energy laws to give effect to the emissions reduction objective, the AEMC will start a process of amending its processes and documents, including:

- revising the AEMC guide for stakeholders on how the energy objectives shape their decisions¹⁴ and publishing the revised version;
- including the revised objective in all their consultation papers, determinations and review reports, where the new objective applies to the rule change process or review;
- revisiting their set of standard assessment criteria (used to assess the contribution of a rule change or review recommendation to the energy objectives) to determine whether changes are required – e.g. the existing criterion on emissions reduction may need to be re-worded for consistency with the emissions reduction objective; and
- revisiting internal documents relating to their decision-making framework¹⁵ to determine what changes will be required to apply the revised objectives to AEMC decisions.

¹⁴ AEMC, *How the national energy objectives shape our decisions*.

¹⁵ See AEMC's website on [Priority initiatives](#).

The AEMC will also consider consequential and harmonising changes to the rules, including the kind considered in section 3.5.

4.2 AER's application of the emissions reduction objective

As the national energy regulator, the AER undertakes a number of functions under the NEL, NGL and NERL. The AER's functions, powers and discretions under the energy laws are broad, and are subject to:

- relevant constraints of particular provisions; and
- any duties imposed by the energy laws to exercise its functions or powers in a manner that will, or is likely to, contribute to the achievement of the relevant objective.

The AER's functions include the regulation of electricity networks and gas pipelines, enforcing compliance with national energy legislation and rules, reporting on electricity and gas market activity, authorising retailers, approving retailer hardship policies and administering a retailer of last resort scheme.

In undertaking its functions, the relevance of the energy objectives will vary depending on the function or power, and on the particular decision-making criteria applicable to that function or power.

At this stage, it is considered that the AER functions that will most likely be impacted by an emissions reduction objective would be the economic regulatory functions under the NEL and NGL.

Similarly, the AER's economic regulatory decision-making functions and powers as outlined in the Rules will need to be performed and exercised in a way that will, or is likely to, contribute to the achievement of the NEO or NGO.

In the case of a RIT-T or RIT-D assessment, the addition of an emissions reduction objective may allow treatment of emissions reduction as a new category of market benefit.¹⁶ This allows consideration of the benefits of emissions reduction against the other components of the energy objectives in the decision-making process.

Case study: how the AER would apply the emissions reduction objective to electricity distribution and transmission, and gas pipeline expenditure proposals

The AER's functions, powers and discretions under the energy laws are relatively broad. They are subject to relevant constraints of particular provisions; and any duties imposed by the energy laws to exercise its functions or powers in a manner that will or is likely to contribute to the achievement of the relevant objective. This case study provides an example of an approach the AER would use to apply the emissions reduction objective in carrying out its network expenditure functions.

The AER's assessment approach to electricity distribution and transmission expenditure proposals are set out in several documents, with the AER's overarching guideline being the Expenditure Forecast Assessment Guidelines.¹⁷ When assessing gas expenditure proposals, the AER applies the same assessment approach.

¹⁶ As long as those benefits are (a) measurable and (b) attributable to relevant categories of market participants.

¹⁷ See AER's website for the [Expenditure Forecast Assessment Guideline 2013](#).

As noted in the AER's guidelines, there are several assessment techniques the AER has regard to when assessing the prudence and efficiency of capital and operating expenditure proposals. A key assessment technique is a cost benefit analysis of the proposed expenditure and the AER expects Network Service Providers to submit this analysis in support of expenditure forecasts.

A cost benefit analysis can be used to demonstrate the proposed expenditure has the highest net economic benefit compared to other feasible options and best satisfies the national energy objectives. Maximising net benefit ensures the promotion of efficient investment in, and efficient operation and use of, electricity services in the long-term interests of consumers with respect to price, quality, safety, reliability and security of supply.

With the inclusion of the emissions reduction component into the energy objectives, an approach would be to include a monetarised value of emissions in the calculation of the net benefits within the cost benefit analysis framework. This would allow the comparison of the overall estimated costs and benefits including those related to the emissions reduction objective. Having the emissions reduction objective as an input into a cost benefit analysis framework allows for the weighing up of the costs and benefits to ensure the most efficient way of meeting the national energy objectives, including the new emissions reduction objective.

The AER would consider the current international standards on carbon pricing and other industry standards when assessing the monetarised value of the emissions. The calculation of emissions reduction from a proposed project or program would take account of the total net emissions from an investment. It would therefore incorporate emissions from inputs (e.g. materials used in the investment), as well as outputs (e.g. emissions reductions from coal or gas).

4.3 AEMO's application of the emissions reduction objective

AEMO has a range of statutory functions under the NEL and NGL, including various planning functions, such as the ISP. The ISP is published every two years in accordance with r 5.22 of the National Electricity Rules. Its purpose, generally speaking, is to establish a whole of system plan for the efficient development of the power system that achieves power system needs for a planning horizon of at least 20 years for the long-term interests of the consumers of electricity. If an emissions reduction objective is inserted into the NEO, this would be expected to allow treatment of emissions reduction as a new category of market benefit that AEMO can acknowledge and apply in its development of the ISP.

It is not intended that the insertion of an emissions reduction objective will materially impact AEMO's statutory function of the administration and operation of the wholesale exchange, including their functions with regards to real-time dispatch.

Questions:

20. Do you agree with the characterisation of how it is envisaged market bodies' decision processes might be impacted or changed as a result of inclusion of an emissions reduction component in the energy objectives?
21. Do you have any concerns with regards to the impact an emissions reduction component in the energy objectives may have in broadening the scope of the AEMC's rule making power or the decision-making powers of the other market bodies under the laws and rules?

Appendix A: Draft Bill

Appendix B: Provisions in the national energy laws, regulations and Rules that reference the energy objectives