

MEDIA RELEASE

Call for public submissions on National Energy Guarantee

The first public consultation paper for the National Energy Guarantee (Guarantee) has today been released by the independent Energy Security Board (ESB).

The guarantee's intention is to deliver more reliable, affordable and cleaner energy to Australian consumers.

The ESB is chaired by Dr Kerry Schott, and includes Deputy Chair Clare Savage, Australian Energy Market Commission Chair John Pierce, Australian Energy Market Operator Chief Executive Officer Audrey Zibelman, and Australian Energy Regulator Chair Paula Conboy.

The Board is implementing the COAG Energy Council's mandate to deliver a lower emissions, reliable power system with enough electricity available when needed, at the lowest possible price.

"The National Energy Guarantee is focussed on the key issues raised by the Finkel review; the need to improve system reliability, cut power prices; and reduce emissions," Dr Schott said.

"It's an obligation on retailers to do two things – to make sure the energy they are purchasing meets emissions reduction targets for the electricity sector and to meet dispatchability requirements in each region.

"The National Energy Guarantee would integrate energy and climate change policy for the first time. This will give investors the much needed certainty they have been lacking over the last decade.

"Under the proposed mechanism, energy sector development could continue confidently with emissions and reliability objectives implemented in lockstep under the rules," she said.

The guarantee produces a clear investment signal so the cleanest, cheapest and most reliable generation gets built in the right place at the right time," Dr Schott said. "It can also signal opportunities for demand response which may help reduce the need for costly new generation infrastructure."

The Guarantee was considered by the COAG Energy Council at its last meeting in November 2017 which agreed that further development work and public consultation should be conducted.

"We are seeking feedback from stakeholders on the high level design of the mechanism's reliability and emissions component," Dr Schott said.

"While the Federal Government will set the emission target itself we need stakeholder inputs on how contracting and compliance associated with meeting annual electricity emissions targets will work in practice.

"Reliability requirements will be set for each region across the whole power system, and we welcome contributions exploring the effectiveness of proposed incentives for investment in dispatchable energy and compliance arrangements."

The release of this paper is the first step in a consultation process that will occur over coming months.

The ESB will provide a draft high level design to the COAG Energy Council in early April, ahead of the COAG meeting later that month where ministers will consider the report.

A stakeholder forum and webinar will be held on 26 February 2018.

Submissions on the consultation paper are due on 8 March 2018.

To arrange an interview with Dr Schott, please contact 0409 382 121, or email media@aemo.com.au

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AT A GLANCE

Consultation process

- The National Energy Guarantee (Guarantee) consultation paper was released today by the Energy Security Board (ESB).
- Today we take the first step in a consultation process that will occur over coming months to establish the final design of the Guarantee.
- The ESB is fully committed to an open and transparent approach to development of the Guarantee model.
- A stakeholder forum and webinar will be held on 26 February.
- Submissions on this consultation paper are due on March 8.
- The ESB will provide a draft, high level design paper to all energy ministers in mid April for consideration at the COAG Energy Council meeting later that month.
- The COAG Energy Council will consider the policy approach and the draft design paper.
- The ESB will then, in consultation with industry, develop the detailed design of the Guarantee to be able to provide a final design to the COAG Energy Council for decision.
- Once the final design is approved by the COAG Energy Council in mid 2018, the instruments implementing the final designs will be open for consultation in the second half of the year.

The consultation paper

- The Guarantee is designed to integrate energy and climate change policy into a clear investment signal to make sure the cleanest, cheapest and most reliable generation gets built in the right place at the right time.
- It will help achieve lower prices for consumers
- It can also signal the need for cheaper alternative options like demand response to replace the need for generation.
- The Guarantee requires retailers to contract with generators or demand response providers for a minimum level of dispatchable 'on demand' electricity that meets both reliability and emission targets that will be set.
- The consultation paper seeks public input into the high-level design for the emission and reliability requirements.
- The emissions target will be set by the Federal Government.
- The Guarantee has been designed to adjust to whatever emissions target is set by government.
- The paper also outlines the ESB's preferred governance for the Guarantee.
- Guarantee design options need to be considered alongside key Finkel blueprint recommendations including:

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- The need for a strategic reserve
- The suitability of a 'day-ahead' market
- The development of a mechanism that facilitates demand response to the wholesale energy market

Complementary mechanisms to the Guarantee will be required to support system security to ensure a sufficiently flexible operating system and support system security.

Key issues under consideration

- We want stakeholder feedback on the best way for retailers to contract with, or directly invest in, generation, storage or demand response so:
 - There is a minimum amount of dispatchable energy available to meet consumers' needs and keep the system reliable
 - The average emission levels of electricity they sell to consumers actually helps to meet emission reduction commitments set by the Australian Government
- The Guarantee is designed to encourage new investment in clean and low emission technologies while allowing the system to continue to operate reliably.
- Integrating energy and climate change policy through the establishment of clear reliability and emission targets will give investors the certainty they are looking for.
- The Guarantee means energy sector development would continue confidently with emissions and reliability objectives implemented in lockstep under the rules
- The Guarantee is expected to increase contracting. A more liquid contract market is expected to reduce wholesale electricity prices that should result in lower retail prices to consumers.
- The consultation paper has taken into account a range of factors including changing consumer choices, rapidly evolving technology and environmental policies that are transforming Australia's energy market including:
 - The growing potential of demand side responses, particularly as consumers have more technology in their hands than ever before to manage and control their energy use
 - The challenges arising from the changing generation mix, with increased intermittent technologies and the exit of coal-fired generation.
 - Continuing uncertainty over key energy policy, including emission reduction policies
- The design of the Guarantee should make sure that it does not unintentionally further entrench existing market power and create barriers to entry for smaller players. These issues will be further considered when the design of the Guarantee is further advanced.



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Reliability requirement

The paper outlines issues for stakeholder consultation on design of the reliability requirement that will be important to create the right incentives to invest in dispatchable energy.

Key issues include:

- Forecasting any reliability gaps, triggering investment to meet any identified reliability gaps if it looks like the market is not responding.
- Allocation to each retailer of reliability gaps and what contracts or arrangements will qualify for meeting any such reliability gaps. What stakeholders think are the possible impacts of different design options on the contract market will be important to inform the next stage of the design.
- AEMO's ability to step into the market as a procurer of last resort if the reliability gap is not met.
- Retailers' compliance with meeting their reliability requirement.
- Penalties for retailers who fall short of their reliability requirements.

Emissions requirements

The consultation paper raises issues for the Guarantee's emission requirements including:

- How each retailer's emissions should be calculated.
- Possible impacts of different design options on the contract market.
- The most efficient ways for retailers to comply with their emissions requirement.
- Development of a potential compliance registry.
- Interaction between emission requirements of the Guarantee and voluntary programs such as GreenPower.
- Enforcement tools for emission requirements, including the use of civil proceedings.

Emission requirements: Commonwealth Government responsibilities.

The Guarantee will require the Federal Government to determine:

- Emission reduction targets for the NEM
- Treatment of emissions-intensive trade-exposed (EITE) activities
- Eligibility of offsets and any limits on the use of eligible offsets

The ESB is not seeking feedback on those three issues.

As part of this consultation process, the Commonwealth Government is seeking feedback on issues relevant to these three issues including

- Setting the emission targets under the Guarantee and its form



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- Whether, and in what circumstances, electricity emission targets should be adjusted and the process for doing so
- Proposed timing for updating the electricity emission targets, including a 5 year notice period
- Proposed approach to setting the electricity emission targets under the Guarantee and interaction with state renewable energy schemes
- Exemption of any EITE activities
- Use of external offsets



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QUESTIONS AND ANSWERS

1. What is the reliability and emissions guarantee?

The National Energy Guarantee (Guarantee) requires retailers to contract with generators for a minimum level of dispatchable, on demand, electricity where there is an identified gap. But that's not all. The emissions produced by that electricity must not exceed an agreed level. These contracts provide generators with a steady stream of income to support their future operations and investments, putting downward pressure on prices.

This truly integrates energy and emissions policy - both energy and emissions targets are reflected in a single energy price. That energy price will signal how much electricity the market needs and when it is needed, while also reflecting the cost of meeting Australia's emissions targets.

2. How do the two parts of the Guarantee work together?

Reliability guarantee

AEMO will forecast whether the reliability standard is likely to be met in any NEM region over a forecast period.

If there is a shortfall the market will be expected to react and start to invest in new capacity or offer existing additional capacity. If the gap doesn't look like it will be met there will be a trigger for retailers and some large energy users to contract for capacity depending on the size of their peak load requirements. This capacity could include fast response resources, such as batteries and demand response, or slow starting but longer running resources such as coal and gas.

Emissions guarantee

The Commonwealth Government will set the emissions guarantee at a level to meet Australia's international emissions reduction commitments. There will be a target for the electricity sector, translated into an average level to be met by each retailer for the national electricity market (NEM).

3. How is it different to what happens now?

The Guarantee brings together climate and energy policy for the first time – so we can meet Australia's obligation to reduce emissions while supporting power system reliability. Providing long-term policy confidence is critical to bringing down electricity prices and delivering a deeper, more liquid contract market.

4. Why should the National Energy Guarantee be built in the national electricity rules?

The rules are already changing to support the redesign of the energy market.

Building the Guarantee into the rules should give market participants more certainty that the mechanism will endure and evolve as needs change.

The Guarantee can be fully integrated with the broader energy rules. This reduces complexity and compliance costs for retailers and generators. These cost savings can ultimately be passed on to consumers.



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5. When would the National Energy Guarantee start?

The framework for the reliability requirement in the guarantee is proposed to start in 2019.

The emissions requirement would start in 2020 to replace the renewable energy target (RET).

6. How is it different to a clean energy target / or generator reliability obligation / or emissions trading scheme / or carbon tax?

The Guarantee is a better way of meeting clean energy objectives, which are to support a reliable energy supply and drive clean energy investments. It would achieve these outcomes while lowering costs for consumers.

The Guarantee has a clear focus on reducing emissions by any means possible, as long as they are reliable, secure and at the lowest possible cost. This will be done by combinations of demand response and cleaner technologies of today as well as new solutions we can't even imagine which will be possible in the future. The Guarantee embraces all solutions without certificates and taxpayer subsidies.

The Guarantee would meet the objective of the generator reliability obligation proposed in the Finkel review by requiring enough dispatchable capacity to be available in all regions.

It is not an emissions trading scheme as there are no permits or certificates. It is not a carbon tax as no revenue is collected.

7. Is the National Energy Guarantee a subsidy?

The Guarantee encourages investment in a generation portfolio that is both dispatchable ('on demand') and low-emission. It allows the market to pick the most appropriate mix of technologies to meet the reliability and emissions outcomes. It is technology-neutral and neither favours nor discourages renewables.

It is designed to achieve the outcome for consumers of a reliable, least cost energy supply that supports Australia's emissions targets. It is about providing a fair value for all technologies based on their characteristics and the outcomes they deliver in terms of emissions and reliability.

8. What about the other Finkel recommendations?

The Energy Security Board will continue to oversee implementation of the other recommendations. See the ESB's Health of the NEM Annual Report

9. Can states still set their own emissions reduction or renewables targets?

Yes.

For any state targets, the Commonwealth is proposing that electricity emission targets will remain unchanged and retailers contracting with generators receiving subsidies through state schemes would be able to count towards meeting the emission requirement under the Guarantee.

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10. Will electricity bills go up or down, and by how much?

The Guarantee will reduce wholesale energy prices by providing investment certainty, and by allowing the market to pick the lowest cost, most efficient mix of technologies.

As a result the wholesale price would likely be lower relative to today.

The wholesale price would also be lower compared to a certificate-based scheme like the renewable energy target. This is because the renewable energy target is not technologically-neutral. The RET encourages wind and solar and excludes other potentially lower-cost means of reducing emissions such as demand response; gas; investment in existing generators to improve their emissions performance; or new technologies still to come.

The Guarantee is designed to adapt to changes in the market including technological advances.

For example, if advances in technology make renewables cheaper, then retailers won't need to pay as much to meet their emissions guarantee and can pass on these savings to consumers.

It's a way of helping Australia to meet its international commitments while keeping the lights on, but at the lowest cost.

Currently, wholesale and retail costs make up around 40-50% of electricity bills; poles and wires around 40-55% and environmental policy costs around 5-15%.

11. Will this meet the National Electricity Market's share of Australia's emissions reduction commitments?

Yes. The National Energy Guarantee can be set by the Commonwealth to meet any level of emissions reduction.

12. What percentage of renewables will there be in the system under the National Energy Guarantee?

To meet the Paris commitments, the electricity system needs to transition to include more low emissions generation and other technologies while keeping the lights on. This is why the Guarantee is designed to encourage investment in both dispatchable and low emissions generation and other technologies.

The ultimate mix of variable and dispatchable generation will be determined by the market, which will be incentivised to find the lowest cost way of meeting the reliability and emissions guarantee. This could include variable generators investing in storage to back-up their supply, or coal generators investing in carbon capture and storage.

Modelling undertaken at the request of the Government suggests the Guarantee will deliver around 27-36% renewables (mainly hydro, wind and solar) by 2030, but with only 18-24% of that mix coming from variable generation that can cause reliability concerns. But ultimately it will be for the market to determine the mix. This modelling was completed in November 2017. The COAG Energy Council will decide if any additional modelling is required going forward.

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13. What will happen to the renewable energy target?

The renewable energy target will continue until 2030 as set out in legislation. Once new investment under the renewable energy target finishes in 2020, the emissions requirement within the Guarantee will start.

14. Will the Guarantee stop coal plants from exiting?

The reliability guarantee provides an incentive for more dispatchable energy, in the right place at the right time, when it is needed to meet consumers' needs. This means generators will be paid for the value they deliver to the market in terms of both dispatchability and lower emissions. We expect the largest increase in the generation mix will be in energy that is dispatchable and low emissions, such as hydro and batteries charged by renewables

15. Is this mechanism being used anywhere else in the world?

The Guarantee has been designed to work in Australia's national electricity market, which like all other energy markets has its own unique features. However, it reflects elements of schemes in other markets which put obligations on market participants to meet reliability and/or emissions objectives.

It is also consistent with the principles of good design for any mechanism needed to effectively integrate energy and emissions policy, such as letting the market find the lowest cost, technology-neutral solution.

16. Are claims that the Guarantee favours centralised generation over decentralised generation and local energy trading correct?

No. The Guarantee is technology-neutral and designed to make opportunities for lower cost, lower emission, dispatchable solutions. Decentralised energy resources such as solar PV/battery storage and demand response services will all be part of the mix of solutions to help meet reliability and emissions guarantee in the future, particularly as the costs of advanced technology come down.

17. Would generators still be required to provide three years' notice of closure?

Yes. This is a separate Finkel recommendation which is being overseen by the Energy Security Board.

18. Will the Guarantee make our system 100% reliable?

It is important to note that reliability is made up of a number of elements including:

- enough generation capacity when it is needed, and
- a network of poles and wires that can deliver energy to where it's needed and when it's needed

A reliable supply of electricity is important to everyone: electricity interruptions can be costly, but it can also be disproportionately expensive to try to avoid them completely and no system can ever be 100% reliable. The key is to strike a balance between delivering secure and reliable electricity supplies, and maintaining reasonable costs for electricity customers.

Currently the standard we have requires there be sufficient generation and transmission interconnection so that 99.998% of annual demand for electricity is expected to be supplied.

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This translates to around 11 minutes when electricity demand is not met for their regions over a 12 month period. This standard is reviewed every four years by the Reliability Panel in accordance with a detailed public process set out in the national electricity rules.

State and territory governments also set the level of reliability that must be provided by transmission and distribution networks (the 'poles and wires'). Again, the level of reliability for this part of the supply chain is not 100%, since the benefits of such a high level of reliability would be outweighed by the costs of providing and maintaining this level.

19. What would the Guarantee mean for renewable energy zones?

The proposal for renewable energy zones is another separate Finkel recommendation which is currently being progressed by the AEMC and AEMO work programs. Although the details of the renewable energy zone proposal are still being worked out, the zones would be compatible with the Guarantee in that they would support investment in low emissions generation.

20. Will the Guarantee enable or provide an incentive for demand response?

Demand response involves customers - industrial, commercial and/or residential - changing their electricity usage in response to signals such as the spot price or the price of ancillary services.

Under the guarantee, demand response services can be purchased by retailers to meet their reliability and / or emissions requirements. For example, retailers will be incentivised to buy demand response if it is cheaper than buying extra generation.

21. Will the Guarantee affect competition?

Issues of market power and competition are currently being considered more broadly, including through the ACCC's Electricity Supply and Price Inquiry. The ESB considers that the design of the Guarantee should make sure that it does not unintentionally further entrench market power and create barriers to entry for smaller players.

Further consideration will be given to issues of market concentration in the next stage of design work.

22. Will this mean more gas will be used for electricity generation, as it is reliable and produces lower emissions? What does this mean for gas supplies and gas prices?

Gas-fired generation is a source of dispatchable generation with lower emissions than coal. Retailers will contract for gas-fired generation under the Guarantee if it is the lowest cost way of meeting the guarantee. Electricity and gas markets are interlinked, which is why ongoing reforms to gas markets are so important, along with initiatives to address gas prices.

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23. Can emissions-intensive trade-exposed industries such as iron and steel be excluded?

Yes. However, the extent to which these industries are exempt from the emissions requirement is a matter for the Commonwealth Government. If the Commonwealth decided to exempt them from the emissions requirement, the rest of the sector would need to meet the emissions shortfall so the electricity sector can meet the emissions target.

However in relation to reliability, it is necessary for the Guarantee to cover all market customers, to encourage generators to make their capacity available to the market and that all appropriate action has been taken to secure the needed electricity supply.

24. Would Western Australia and the Northern Territory have to implement the guarantee?

No. The Guarantee is being designed as a mechanism for the national electricity market which doesn't include WA and NT.

25. Must the reliability guarantee be implemented together with the emissions guarantee?

Yes To achieve reliability outcomes and emissions targets at the lowest cost possible, both elements need to be implemented together. By combining the two elements of the Guarantee, the reliability and emissions targets are reflected in a single energy price that can guide investment in the lowest cost mix of generation resources.

The integrated policy mechanism allows both policy objectives to be achieved at the lowest possible cost to consumers.

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