

## **EXPLANATORY STATEMENT**

Issued by the authority of the Minister for Climate Change and Energy

*Australian Renewable Energy Agency Act 2011*

*Australian Renewable Energy Agency Amendment (Powering Australia) Regulations 2022*

### **Purpose**

The *Australian Renewable Energy Agency Amendment (Powering Australia) Regulations 2022* (the Regulations) limit the additional prescribed financial assistance functions of the Australian Renewable Energy Agency (ARENA) to only include energy efficiency and electrification. The Regulations will permit ARENA to invest in these additional technologies, which will be critical to the transformation of the energy sector and help facilitate the uptake of renewable energy technologies at scale, thereby supporting Australia to meet its Nationally Determined Contribution (NDC) under the Paris Agreement and contribute to the *Powering Australia* agenda. Electrification and energy efficiency are both essential to delivering Australia's new targets of a 43 per cent reduction on 2005 levels by 2030 and achieving net zero by 2050, and support renewable energy's role in those commitments.

ARENA, as established by the *Australian Renewable Energy Agency Act 2011* (the Act), has the dual objectives of improving the competitiveness of renewable energy technologies and increasing the supply of renewable energy in Australia. Its legislated functions, as outlined in section 8 of the Act, are primarily to provide financial assistance (in the form of grants<sup>1</sup>) for research into, development, demonstration, commercialisation or deployment of renewable energy technologies, and to engage in knowledge sharing in relation to the same. Paragraph 8(f) further provides that additional functions may be prescribed through regulations made under section 74 of the Act.

The Australian Government recognises that an amendment to the Act will be the best way to provide certainty to these functions and allow ARENA to undertake additional programs for which it has been funded. The Regulations are an interim measure, until the Act can be amended, to allow ARENA to undertake activities that further support their objective of increasing the supply of renewable energy. The regulation making power allows for *new* functions. The new functions conferred by the Regulations do not constrain the existing functions of ARENA set out in the Act, which include electrification that uses renewable energy. The need to continue to progress energy efficiency and electrification through funding provided to ARENA means the Regulations are necessary in advance of any Act amendments.

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<sup>1</sup> See the definition of "financial assistance" in section 4 of the Act.

The *Australian Renewable Energy Agency Regulation 2016* (the 2016 Regulation) conferred on ARENA the additional function of working with the Clean Energy Finance Corporation to administer the Clean Energy Innovation Fund in reliance upon paragraph 8(f) of the Act. In April 2022, the previous government amended the 2016 Regulation to expand ARENA's functions to cover a broader suite of clean energy technologies, including carbon capture and storage. This was done through the *Australian Renewable Energy Agency Amendment (Clean Energy Technology) Regulations 2022* following disallowance of two earlier regulations.

The Regulations are responding to concerns raised regarding attempts by the previous government to unreasonably extend ARENA's mandate. The Regulations repeal the broad conferral of functions on ARENA attempted by the previous government and amend the 2016 Regulation to only allowing financial assistance for the additional functions of energy efficiency and electrification. The purpose of the Regulations is consistent with the objectives of the Act, as these additional technologies are expected to support the transition to greater shares of renewable energy generation and/or reduce the cost of transitioning to a greater share of renewable energy generation and use, resulting in an overall increase in the competitiveness and supply of renewable energy technologies. It is consistent with the Act to prescribe additional functions of energy efficiency, which includes demand management and energy conservation, and the transition to electrification of other sectors of the economy. This will provide market pull for greater investments in renewable energy generation and progressive fuel switch in the generation mix. The benefits of demand management are particularly important for energy reliability as Australia moves to transform its economy consistent with the new 2030 and 2050 emissions reduction targets whilst utilising greater amounts of variable renewable energy sources.

The electrification of the transport and industry sectors alone will create many challenges, particularly in the timely provision of the necessary infrastructure and efficient management of grids, to ensure the reliability of supply, the addition of sufficient generation capacity and the limitation of price volatility. The use of energy conservation and demand management technologies, at both grid and consumer levels, will be critical in supporting an effective transition.

While it is recognised that the electricity supplied to consumers at the initial time of electrification may not be solely from renewable energy generation, the significant increases in demand for electricity will create the conditions for the addition of renewable energy generation at scale over the coming decades. The Australian Energy Market Operator predicts the share of renewable energy generation will rise from the current 30 per cent to 83 per cent by 2030, which aligns with the *Powering Australia* target of 82 per cent by 2030.

For example, the transition to electric vehicles (EVs) is expected to add an additional 7Twh of additional residential consumption in the National Electricity Market by 2030-31<sup>2</sup> alone,

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<sup>2</sup> [https://aemo.com.au/-/media/files/electricity/nem/planning\\_and\\_forecasting/nem\\_esoo/2021/2021-nem-esoo.pdf?la=en&hash=D53ED10E2E0D452C79F97812BDD926ED](https://aemo.com.au/-/media/files/electricity/nem/planning_and_forecasting/nem_esoo/2021/2021-nem-esoo.pdf?la=en&hash=D53ED10E2E0D452C79F97812BDD926ED)

much of which will come from renewable energy. In order to establish a market for EVs, however, sufficient charging infrastructure must first be in place to enable the roll-out and provide potential EV customers assurance. EVs bought now will continue to reduce emissions over their lifetime.

The additional functions have close synergies with ARENA's current market analysis and funding considerations and will enable the best use of the agency's skills and expertise in the support of the transformation of the energy sector. Any decision by ARENA to provide funding to the additional functions will need to be in accordance with their General Funding Strategy.

## **Background**

The Government's *Powering Australia* plan aims to create jobs, cut power bills and reduce emissions by boosting the supply of renewable energy. It includes a commitment to update Australia's NDC under the Paris Agreement (which was achieved on 16 June 2022), to reduce emissions by 43 per cent by 2030, which represents a significant step towards the Net Zero by 2050 target. This will require a significant switch from fossil fuels to renewable energy to deliver meaningful reductions in emissions.

Commitments under *Powering Australia* relevant to ARENA include:

- undertaking upgrades to the electricity grid to facilitate increases in renewable energy generation and use
- co-investing in solar banks to help reduce the power bills of renters and low-income households
- installation of community batteries to maximise the supply of renewable energy from rooftop solar, support the grid and provide shared energy storage for up to 100,000 households
- development of a National Electric Vehicle (EV) Strategy, including boosting charging infrastructure, and incentivise the uptake of EVs
- addressing energy affordability and reliability
- developing new clean energy industries, such as green hydrogen production and export and bioenergy
- supporting innovation and local manufacture of wind turbine components, battery and solar supply chain parts, hydrogen electrolyzers, bioenergy and biomass.

The decarbonisation of the economy through the transition to renewable energy generation will require the electrification of many sectors of the economy. In order to allow a smooth switching of energy sources, while retaining grid stability, security of supply and minimising system costs, it will be necessary to maximise use of energy efficiency measures, such as demand management and energy conservation.

Demand management through micro-grids and virtual power plants, which seek to maximise energy usage across a number of consumers through load shifting, supply sharing or

curtailment, is already being funded by ARENA. The addition of energy efficiency to ARENA's functions enables greater opportunities for integration of renewable energy and energy efficiency technologies or measures for optimal energy system management, thereby increasing the viability, cost effectiveness and uptake of renewable energy technologies.

Electrification projects are already funded by ARENA where they are seen as an enabling technology for the transition to greater renewable energy demand, such as charging infrastructure for EVs that use renewable energy for charging. The Regulations will enable ARENA to support electrification projects that do not have a direct, immediate link to renewable energy. Other examples of electrification projects that could support a significant increase in the supply of renewable energy in Australia include:

- heating and cooling of buildings
- water heating for residential and commercial use
- industrial process heat, e.g. for food processing
- calcination and metals refinery
- driving machinery.

### **Authority and Operation**

The Regulations are made under the regulation-making power in section 74 of the Act, enlivened by the power in paragraph 8(f) of the Act to prescribe additional legislated functions through regulation.

The Regulations are different in substance from the previous Regulations. In particular, the Regulations do not include the funding of technologies like carbon capture and storage, nuclear energy and soil carbon and only expand ARENA's funding to include energy efficiency and electrification technologies, which are likely to support an overall increase in the supply of renewable energy in Australia.

The power to prescribe additional functions for ARENA by regulation is not narrowly limited to the subject matter of renewable energy. There is nothing in the wording of paragraph 8(f) of the Act or in the Explanatory Memorandum to the Bill that became the Act which would indicate an intention to limit the regulation-making power to renewable energy alone. While the "main object" of the Act in section 3 relates to renewable energy, there is nothing that expressly excludes ARENA from pursuing other objects, including those conferred through additional functions such as those prescribed by the Regulations. It is also relevant that the new functions prescribed by the Regulations are funded by separate appropriations, and do not impact on the delivery of the statutory appropriation set out in section 64 of the Act.

There is nothing in the explanatory material or debates associated with the passage of the *Australian Renewable Energy Agency Bill 2011* to indicate that the power in subsection 8(f) to prescribe additional functions should be read with additional words or limitations. The Minister introducing the Bill on 12 October 2011 made clear the context of the Commonwealth's actions to support 'clean energy' generally, of which ARENA was

intended to be an important part. This second reading speech provides an important policy link between ARENA's support for 'financial assistance for the research, development, demonstration and commercialisation of renewable energy and related technologies' and broader emissions reduction policies of the Commonwealth for 'promoting innovation and investment in renewable and low emissions energy'. The Explanatory Memorandum for the bill does not set out any intended limitations on the power conferred by paragraph 8(f).

The new function prescribed by the Regulations remains subject to ARENA's ongoing governance and accountability framework. Accordingly, when administering the new function outlined above, ARENA must continue to act in a proper, efficient and effective manner and make all investment decisions on merit.<sup>3</sup> ARENA must also exercise its new function within the legislative powers of the Commonwealth.<sup>4</sup>

As is the case for its existing functions under the Act, the Regulations do not provide standing for external merits review of the funding decisions made by ARENA under its new function. Since ARENA's funding decisions relate to the allocation of finite resources, they are not amenable to merits review and it would not be appropriate to provide this here.

Noting that the following is not a comprehensive statement of relevant constitutional considerations, the new function outlined above relates to the external affairs power in paragraph 51(xxix) of the Constitution, thereby grounding the exercise by ARENA of its new function within its constitutional basis under paragraph 14(b) of the Act.

The external affairs power supports legislation implementing Australia's obligations under international treaties to which it is a party. The United Nations Framework Convention on Climate Change (the UNFCCC)<sup>5</sup> includes a range of obligations on Australia to take domestic actions that reduce its emissions of greenhouse gases. Relevantly, it provides that parties shall:

- formulate, implement, publish and regularly update national and, where appropriate, regional programs containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change<sup>6</sup>
- promote and cooperate in the development, application and diffusion of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases in all relevant sectors including energy, transport, industry, agriculture, forestry and waste management sectors<sup>7</sup>

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<sup>3</sup> See paragraphs 9(a) and (b) of the Act.

<sup>4</sup> See section 14 of the Act.

<sup>5</sup> [1994] ATS 2. Available at <http://www.austlii.edu.au/au/other/dfat/treaties/1994/2.html>.

<sup>6</sup> See article 4.1(b).

<sup>7</sup> See article 4.1(c).

- adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs.<sup>8</sup>

The Paris Agreement<sup>9</sup> was entered into by the parties to the UNFCCC to enhance its implementation. Under the Paris Agreement, Australia has a “Nationally Determined Contribution” comprising a 2030 emissions reduction target of 43 per cent below 2005 levels and a target to reach net zero emissions by 2050. Relevantly, article 4.2 of the Paris Agreement provides that “[e]ach Party shall prepare, communicate and maintain successive NDCs that it intends to achieve” and that “[p]arties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions”.

The energy efficiency and electrification technologies ARENA will support under the Regulations will reduce Australia’s greenhouse gas emissions, thereby contributing to Australia’s international emissions reduction obligations as outlined above. Projects will include activities that reduce emissions intensity and energy and fuel use, allow load shifting and efficient grid or minigrid management, switch business operations from non-renewable to renewable energy sources or adopt electrification technologies that will create demand for an increasing amount of renewable energy in the generation mix. ARENA can also fund studies and analysis that will support further emissions reduction activities in the future. The function will allow ARENA to play a significant role in delivering the *Powering Australia* plan, in support of reaching Australia’s NDC.

The Regulations are also different to the previous *Australian Renewable Energy Agency (Implementing the Technology Investment Roadmap) Regulations 2021* which also conferred additional functions on ARENA. In particular, the Regulations do not include specific functions relating to the use of carbon capture and storage technologies and soil carbon measurement, nor do they constrain ARENA’s decision making. The Regulations maintain the limitation provision in section 7, to confirm the new functions are consistent with the statutory framework, which was not part of the earlier regulations.

Further details of the Regulations are set out at **Attachment A**.

### **Consultation**

ARENA was consulted on a draft of the Regulations in June 2022 and will undertake appropriate consultation on the implementation of the relevant initiatives consistent with its statutory framework and responsibilities.

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<sup>8</sup> See article 4.2(a).

<sup>9</sup> [2016] ATS 24. Available at <http://www.austlii.edu.au/au/other/dfat/treaties/ATS/2016/24.html>.

### **Regulatory Impact**

A short-form Regulation Impact Statement agreed with the Office of Best Practice Regulation for this measure found there would likely be no regulatory impact (reference number ID 43576 refers).

### **Statement of Compatibility with Human Rights**

A Statement of Compatibility with Human Rights for the purposes of Part 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011* is set out at **Attachment B**.

**Details of the Australian Renewable Energy Agency Amendment (Powering Australia) Regulations 2022**

**Section 1 – Name**

Section 1 provides that the title of the Regulations is the *Australian Renewable Energy Agency Amendment (Powering Australia) Regulations 2022*.

**Section 2 – Commencement**

Section 2 provides that the Regulations commence the day after registration on the Federal Register of Legislation.

**Section 3 – Authority**

Section 3 provides that the Regulations are made under the *Australian Renewable Energy Agency Act 2011* (the Act). For the avoidance of doubt, the power to make regulations under section 74 of the Act also includes the power to amend or revoke any such regulations once they have been made, as per subsection 33(3) of the *Acts Interpretation Act 1901*.

**Section 4 – Schedules**

Section 4 is a formal enabling provision specifying that each instrument specified in a Schedule to the Regulations is amended as indicated by the Schedule. Schedule 1 contains the amendments the Regulations make to the 2016 Regulation.

**SCHEDULE 1 – AMENDMENTS**

**Item 1 – Section 4**

This item adds definitions of ‘electrification technologies’ and ‘energy efficiency technologies’ to section 4 of the 2016 Regulation to define the areas of ARENA’s expanded operational remit to include electrification and energy efficiency technologies.

‘Electrification technologies’ is defined as technologies that use electricity and replace technologies that use fossil fuels; or technologies that facilitate the replacement of technologies that use fossil fuels with technologies that use electricity. This includes both EVs, which replace vehicles powered by fossil fuels, and charging infrastructure which facilitates the uptake of those vehicles. Industrial and manufacturing process can also be electrified, replacing technologies that generally used natural gas or diesel. For the reasons outlined earlier, electrified technologies do not need to use renewable energy, such as through GreenPower or directly connected solar, but will generally support and use renewables as the grid adapts to achieve Australia’s new NDC under the Paris Agreement.



‘Energy efficiency technologies’ includes energy conservation technologies, demand management technologies and technologies (including enabling technologies) that are related to energy efficiency technologies. That is, the term would include technologies that enable, or are otherwise related to, energy conservation technologies or demand management technologies. Beyond this, it is intended for the term to carry its ordinary meaning of a technology that facilitates reductions in energy consumption or increases in productivity relative to energy consumption. ‘Technology’ here is intended to carry its widest possible meaning in the sense of extending to ideas, practices and processes as well as the more conventional software, machinery and equipment. Examples of energy efficiency technologies might include plant and machinery upgrades, technologies that increase the efficiency of agricultural production and demand response techniques such as load shifting, energy storage, and electrification.

### **Item 2 – Section 6 (heading)**

Item 2 substitutes “energy efficiency technologies and electrification technologies” for “clean energy technologies” into the heading to section 6 of the 2016 Regulation. This reflects ARENA’s expanded operational remit to only include electrification and energy efficiency technologies.

### **Item 3 – Subparagraphs 6(a)(i), (ii), (iii) and (iv)**

Item 3 substitutes “energy efficiency technologies and electrification technologies” for “clean energy technologies” in subparagraphs 6(a)(i), (ii), (iii) and (iv) of the 2016 Regulation to reflect ARENA’s expanded operational remit to only include electrification and energy efficiency technologies.

### **Item 4 – Paragraph 6(d)**

Item 4 substitutes “energy efficiency projects and electrification projects” for “clean energy projects” in paragraph 6(d) of the 2016 Regulation to reflect ARENA’s expanded operational remit to only include electrification and energy efficiency technologies.

### **Item 5 – Section 7 (heading)**

Item 5 substitutes “energy efficiency technologies and electrification technologies” for “clean energy technologies” in paragraph 6(d) of the 2016 Regulation to reflect ARENA’s expanded operational remit to only include electrification and energy efficiency technologies.

**Statement of Compatibility with Human Rights**

*Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011*

*Australian Renewable Energy Agency Amendment (Powering Australia) Regulations 2022*

These regulations are compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

**Overview of the Legislative Instrument**

The *Australian Renewable Energy Agency Amendment (Powering Australia) Regulations 2022* (the Regulations) limit the additional prescribed financial assistance functions of the Australian Renewable Energy Agency (ARENA) to only include energy efficiency and electrification. They amend the *Australian Renewable Energy Regulation 2016* to include a new function of supporting various activities relating to energy efficiency and electrification technologies, narrowing the conferral previously included in that Regulation.

**Human rights implications**

The Regulations do not engage any of the applicable rights or freedoms.

**Conclusion**

The Regulations are compatible with human rights as it does not raise any human rights issues.

**The Hon Chris Bowen MP**  
**Minister for Climate Change and Energy**