**EXPLANATORY STATEMENT**

Issued by the authority of the Minister for Industry, Energy and Emissions Reduction

*Australian Renewable Energy Agency Act 2011*

*Australian Renewable Energy Agency Amendment (Clean Energy Technologies) Regulations 2022*

**Purpose**

The *Australian Renewable Energy Agency Amendment (Clean Energy Technologies) Regulations 2022* (the Regulations) expand the operating remit of the Australian Renewable Energy Agency (ARENA). The Regulations will permit ARENA to invest in a wider range of clean energy technologies which are essential to Australia meeting its Nationally Determined Contribution under the Paris Agreement, including low emissions technologies set out in the technology stretch goals in that contribution.

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[[1]](#footnote-2)) 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.

ARENA’s functions have been expanded before under paragraph 8(f) and section 74 of the Act. The *Australian Renewable Energy Agency Regulation 2016* (the 2016 Regulation) conferred on ARENA the new function of working with the Clean Energy Finance Corporation (the CEFC) to administer the Clean Energy Innovation Fund (the CEIF). In 2021 two regulations were made which expanded ARENA’s functions and both were disallowed by the Senate, but were not subject to any legal challenges.

The Regulations add to ARENA’s functions under paragraph 8(f) and section 74 of the Act. Specifically, it amends the 2016 Regulation to prescribe an additional function of providing financial assistance in relation to clean energy technologies within the meaning of the *Clean Energy Finance Corporation Act 2012* (CEFC Act). This definition was already applied by the 2016 Regulation. The purpose of the Regulations is consistent with the objectives of ARENA, as both renewable energy and clean energy technologies are geared towards emissions reduction. Paragraph 8(f) specifically provides for regulations to prescribe functions for ARENA in addition to those set out in the Act with respect to renewable energy technologies and it is consistent with the Act to provide functions such as those relating to clean energy technologies to complement ARENA’s renewable energy functions..

**Background**

The Government’s Technology Investment Roadmap[[2]](#footnote-3) (the Roadmap) aims to mobilise and coordinate public and private investment in the next generation of new and emerging low‑emission technologies with the potential for transformational economic and emissions reduction outcomes.[[3]](#footnote-4) The Roadmap envisages ARENA, together with the Clean Energy Finance Corporation and the Clean Energy Regulator, playing a key role in driving down the cost of deploying priority low-emission technologies identified in the Annual Low Emissions Technology Statements (LETS) and Australia’s Nationally Determined Contribution under the Paris Agreement. This will make them competitive with existing alternatives, positioning Australia as a global leader and delivering meaningful reductions in emissions. The annual LETS will communicate progress towards the technology priorities and identify opportunities to invest in new and emerging technologies.

The technology stretch goals, currently set out in Australia’s Nationally Determined Contribution, are:

* Clean hydrogen—production under $2 per kg.
* Energy storage—electricity from storage for firming under $100 per MWh.
* Low emissions materials—low emissions steel production under $700 per tonne and low emissions aluminium production under $2,200 per tonne.
* Carbon capture and storage (CCS)—carbon dioxide (CO₂) compression, hub transport, and storage under $20 per tonne of CO₂.
* Soil carbon—soil carbon measurement under $3 per hectare per year.
* Ultra-low cost solar—solar electricity generation at $15 per MWh

In the 2020-21 Budget[[4]](#footnote-5) ARENA was allocated new baseline funding of $1.4 billion with which to progress the commercialisation of a range of new and emerging priority low emissions technologies under the Roadmap and the first (and subsequent) LETS. In the 2020‑21 Budget the Department of Industry, Science, Energy and Resources (the Department) was also allocated an additional $192.5 million to be transferred to ARENA to deliver the following targeted programs:[[5]](#footnote-6)

* A Freight Efficiency Assistance Grants initiative, to encourage activities that improve energy productivity or fuel efficiency or increase the proportion of renewable energy used in the road transport sector.
* A Freight Energy Productivity Trial Program, to test the effects of specific new renewable truck technologies on energy productivity or fuel efficiency.
* A Future Fuels Fund, to support the implementation of batteries, hydrogen and biofuels in the road transport sector.
* An Industrial Energy Transformation Studies Program, to fund studies that will inform business investment decisions in energy efficiency technologies.
* A Regional Australia Microgrid Pilots Program, to fund pilot projects testing the use of renewable energy microgrids in regional and remote areas.

In the 2021-22 MYEFO ARENA was allocated $33.5 million for the Backing the Bioenergy Roadmap Package and an additional $178 million to expand the Future Fuels Fund.[[6]](#footnote-7) An additional $50 million has also been invested in the HyGATE initiative.[[7]](#footnote-8) This is a total of $1.88 billion since the 2020-21 Budget and is additional to the statutory appropriation in Part 5 of the Act.

The Regulations empower ARENA to play a full role in the delivery of the outlined Budget initiatives and to contribute to the delivery of the Government’s technology-driven approach to the reduction of greenhouse gas emissions.

As outlined above, ARENA’s legislated functions are currently limited to supporting renewable energy technologies. This restricts ARENA’s ability to support important low emissions technology innovation in Australia and delivery of the 2020-21 Budget programs, which each drive emissions reductions but may contain elements that are not within the subject matter of renewable energy. The Regulations provides ARENA with the necessary authority to deliver any non-renewable elements of the programs, supporting emissions reductions through broader clean energy technologies such as energy efficiency and non‑renewable low-emission technologies.

**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 power to prescribe additional functions for ARENA by regulation is not 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 new 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 the Australian Renewable Energy Agency (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 act in a proper, efficient and effective manner and make all investment decisions on merit.[[8]](#footnote-9) ARENA must also exercise its new function within the legislative powers of the Commonwealth.[[9]](#footnote-10)

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)[[10]](#footnote-11) 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;[[11]](#footnote-12)
* 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;[[12]](#footnote-13) and
* 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.[[13]](#footnote-14)

The Paris Agreement[[14]](#footnote-15) 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 26 to 28 per cent below 2005 levels and a target to reach net zero emissions by 2050. Australia’s Nationally Determined Contribution also includes technology stretch goals relating to priority low emissions technologies. Relevantly, article 4.2 of the Paris Agreement provides that “[e]ach Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve” and that “[p]arties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions”.

Each of the clean energy 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. The projects will include activities that reduce emissions intensity and energy and fuel use, switch business operations from non-renewable to renewable energy sources or develop or implement low-emission technologies. 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 technology stretch goals in Australia’s Nationally Determined Contribution.

The Regulations, in part, replace the *Australian Renewable Energy Agency (Implementing the Technology Investment Roadmap) Regulations 2021* (the previous Regulations) which also conferred functions on ARENA. The Regulations are different in substance from those previous regulations. In particular, these Regulations cover the full range of clean energy technologies, whereas the previous Regulations only covered a limited set of targeted programs for particular technologies. For example, funding of priority technologies was limited to 5 particular technologies and the economic stretch goals associated with them. The previous Regulations also focused on research and development, whereas these Regulations include commercialisation and deployment activities. The Regulations also does not impose reporting, financial or timing constraints that were imposed by the previous instrument. The Regulation includes a new limitation provision in section 7 to confirm the new functions are consistent with the statutory framework.

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

**Consultation**

The initiatives authorised by the Regulations were developed over a policy process dating back to 2019, and encompassing the independent King Review into low cost carbon abatement opportunities, which in February 2020 recommended the Government provide ARENA and the CEFC with an expanded technology-neutral remit. This informed aspects of the Roadmap Discussion Paper and first LETS, and subsequently the release of the low emissions elements of the 2020‑21 Budget. There was considerable public consultation at each stage of this policy development process. In particular, the Roadmap Discussion Paper received around 500 written submissions and over 400 people participated in a public webinar. This process was central to the development of the priority low emissions technologies and cost reduction goals set out in Australia’s Nationally Determined Contribution under the Paris Agreement. Comments and advice received in public consultation and consultation with Government stakeholders, including the Department of the Prime Minister and Cabinet in relation to the previous Regulations has also been considered in the development of these Regulations.

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

**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.**

**Attachment A**

**Details of the *Australian Renewable Energy Agency Amendment (Clean Energy Technologies) Regulations 2022***

**Section 1 – Name**

Section 1 provides that the title of the Regulations is the *Australian Renewable Energy Agency Amendment (Clean Energy Technology) 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 (after the heading)**

This item adds an introductory note to refer readers to the fact that a number of terms are defined in the Act. The introductory note clarifies that the terms ‘ARENA’, ‘financial assistance’ and ‘Climate Change Convention’ are to be understood as defined in the Act.

**Item 2 – Section 4 (definition of *Clean Energy Innovation Fund*)**

This item repeals and replaces the definition of ‘Clean Energy Innovation Fund’. The definition of ‘Clean Energy Innovation Fund’ has been moved from section 5(2) to section 4 to assist the readability of the 2016 Regulation. It remains as previously drafted. At the time that the Regulation is made, the relevant investment mandate direction for the fund under subsection 64(1) of the CEFC Actis the *Clean Energy Finance Corporation Investment Mandate Direction 2020*.

**Item 3 – Section 4**

This item adds definitions of ‘clean energy technologies’ and the ‘Paris Agreement’ to section 4 of the 2016 Regulation.

The definition of clean energy technologies was already referenced in section 5 of the 2016 Regulations and is now also being used in section 6.

The definition of ‘clean energy technologies’ is taken from subsection 60(1) of the CEFC Act: that is, for the purposes of the Regulations, clean energy technologies are technologies that are made up from one or more of renewable energy technologies, energy efficiency technologies and low-emission technologies. This definition recognises that many technologies that reduce emissions often combine a number of elements, such as energy efficiency and renewable energy.

* ‘Renewable energy technologies’ are defined in in subsection 60(3) of the CEFC Act in almost identical terms to the corresponding definition found in the Act.
* ‘Energy efficiency technologies’ are defined below in subsection 60(2) of the CEFC Act. 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.
* ‘Low-emission technologies’ are defined in subsection 60(4) of the CEFC Act and that definition references guidelines published by the CEFC and freely available from: <https://www.cefc.com.au/media/402277/cefc-complying-investments-guidelines.pdf>. They cover low-, zero- and negative-emissions technologies that substantially reduce the emission of greenhouse gases relative to a baseline of the average emissions produced by the relevant activity or sector. Again, ‘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.

“Paris Agreement” means the agreement made within the UNFCCC that was concluded in Paris on 12 December 2015,[[15]](#footnote-16) including any amendments to that agreement which become binding on Australia in the future. It is referenced to draw appropriate links to the external affairs power in the Constitution.

**Item 4 – Section 5 (heading)**

Item 4 adds ‘Clean Energy Innovation Fund’ at the end of the heading to section 5 of the 2016 Regulation. This reflects the need to distinguish section 5 (which deals with the CEIF) from the new section 6 inserted by item 8 below (which deals with the clean energy technologies).

**Item 5 – Subsection 5(1)**

Item 5 replaces ‘For paragraph 8(f)’ at the start of subsection 5(1) of the 2016 Regulation with ‘For the purposes of paragraph 8(f)’. This minor stylistic change updates the text to reflect current drafting practices.

**Item 6 – Paragraph 5(1)(a)**

Item 6 removes ‘within the meaning of the *Clean Energy Finance Corporation Act 2012*’ from paragraph 5(1)(a) of the 2016 Regulation. It has now been superseded, since the new definition of ‘clean energy technologies’ inserted into section 4 by item 2 above inserts the same meaning of the term.

**Item 7 – Subsection 5(1) (note)**

Item 7 removes the note at the end of subsection 5(1) of the 2016 Regulation. This note was previously required to make it clear that the ‘ARENA’ referred to in subsection 5(1) meant the Australian Renewable Energy Agency. It has now been superseded, since the new note inserted into section 4 by item 1 above clarifies the meaning of the term.

**Item 8 – Subsection 5(2)**

Item 8 repeals subsection (2) as the definition is now included in section 4.

**Item 9 – At the end of Part 2**

Item 9 prescribes a new legislated function for ARENA under paragraph 8(f) of the Act, to provide financial assistance to clean energy technologies.

Specifically, new section 6 empowers ARENA to:

* provide financial assistance (in the form of grants) for research into clean energy technologies; the development, demonstration, commercialisation or deployment of clean energy technologies; and the storage and sharing of information and knowledge about clean energy technologies;
* enter into and administer agreements for the purpose of providing such financial assistance;
* collect and share information and knowledge as to the outcomes of the activities so funded; and
* liaise with State and Territory governments and other authorities to facilitate all of the above.

This function is modelled on paragraphs 8(a), (b), (c) and (e) of the Act and is intended to have an equivalent scope and meaning for the relevant terms, such as ‘development’, ‘demonstration’, ‘commercialisation’ and ‘deployment’.

The term financial assistance has the meaning given by the Act, so that it includes grants and can include other forms of financial assistance if prescribed by legislative instrument.

New section 7 confirms that the function conferred by section 6 is consistent with the Act and the external affairs power.

Paragraph (a) ensures that the function must not be exercised inconsistent with the Act. Accordingly, when administering the new initiatives outlined above, ARENA must act in a proper, efficient and effective manner and make all investment decisions on merit.[[16]](#footnote-17)

Paragraph (b) ensures that the function cannot extend beyond that authorised by paragraph 8(f) and section 74 of the Act. As set out in the Purpose and Background sections of this Explanatory Statement, it was always intended that ARENA could be conferred these kinds of functions to complement the renewable energy function in paragraph 8(a) of the Act.

Paragraph (c) ensures that the financial assistance must be in accordance with the general funding strategy that is in force under Subdivision A of Division 2 of Part 3 of the Act at the time when the agreement to provide the financial assistance is entered into. This is required by section 10 of the Act, but the paragraph ensures that this discipline applies to the new function in the same way as existing financial assistance. The general funding strategy[[17]](#footnote-18) allows ARENA to prioritise its activities consistent with its statutory framework and where it is able to deliver the greatest benefits by providing financial assistance.

Paragraph (d) ensures that the financial assistance is for the purpose of providing financial assistance for projects and other activities that could reasonably be expected to contribute to Australia meeting its obligations under the Climate Change Convention; or the Paris Agreement. This ensures the projects and activities are genuinely contributing to emissions reductions, including through contribution to the technology stretch goals set out in Australia’s Nationally Determined Contribution.

**Attachment B**

**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 (Clean Energy Technologies) Regulations 2022*

This regulation is 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 (Clean Energy Technologies) Regulations 2022* (the Regulations) expand the operating remit of the Australian Renewable Energy Agency to permit it to invest in a wider range of clean energy technologies. They amend the *Australian Renewable Energy Regulation 2016* to include a new function of supporting various activities relating to clean energy technologies. .

**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 Angus Taylor MP**

**Minister for Industry, Energy and Emissions Reduction**

1. See the definition of “financial assistance” in section 4 of the Act. [↑](#footnote-ref-2)
2. The Technology Investment Roadmap refers to the Government policy of the same name, under which five priority low-emission technologies were identified in the first Annual Low Emissions Technology Statement, with further new and emerging technologies to be identified for future investment. See further <https://www.industry.gov.au/data-and-publications/technology-investment-roadmap-first-low-emissions-technology-statement-2020>. The second Low Emissions Technology Statement is available at: <https://www.industry.gov.au/data-and-publications/technology-investment-roadmap-low-emissions-technology-statement-2021> [↑](#footnote-ref-3)
3. For the avoidance of doubt, the range of technologies in play would include renewable, low-, zero- and negative-emissions technologies, as well as technologies that enable each of these. [↑](#footnote-ref-4)
4. See Budget 2020-21, *Budget Paper No. 2: Budget Measures*, pp.118-119. [↑](#footnote-ref-5)
5. Note that, while the general funding for these programs was announced in the 2020-21 Budget, the final names for some of the programs were only settled subsequent to the release of the Budget papers. [↑](#footnote-ref-6)
6. See https://budget.gov.au/2021-22/content/myefo/index.htm [↑](#footnote-ref-7)
7. See https://arena.gov.au/news/arena-to-lead-australia-germanys-hygate-initiative/. [↑](#footnote-ref-8)
8. See paragraphs 9(a) and (b) of the Act. [↑](#footnote-ref-9)
9. See section 14 of the Act. [↑](#footnote-ref-10)
10. [1994] ATS 2. Available at <http://www.austlii.edu.au/au/other/dfat/treaties/1994/2.html>. [↑](#footnote-ref-11)
11. See article 4.1(b). [↑](#footnote-ref-12)
12. See article 4.1(c). [↑](#footnote-ref-13)
13. See article 4.2(a). [↑](#footnote-ref-14)
14. [2016] ATS 24. Available at <http://www.austlii.edu.au/au/other/dfat/treaties/ATS/2016/24.html>. [↑](#footnote-ref-15)
15. Freely available at <http://www.austlii.edu.au/au/other/dfat/treaties/ATS/2016/24.html>. [↑](#footnote-ref-16)
16. See paragraphs 9(a) and (b) of the Act. [↑](#footnote-ref-17)
17. See the [*Australian Renewable Energy Agency (General Funding Strategy) Determination 2021 (legislation.gov.au)*](https://www.legislation.gov.au/Details/F2021L01191) [↑](#footnote-ref-18)