**EXPLANATORY STATEMENT**

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

*Australian Renewable Energy Agency Act 2011*

*Australian Renewable Energy Agency Amendment (2020-21 Budget Programs) Regulations 2021*

**Purpose**

This instrument expands the operating remit of the Australian Renewable Energy Agency (‘ARENA’). The Instrument will permit ARENA to invest in a wider range of clean energy technologies to deliver programs announced in the 2020-21 Budget.

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 and 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 once 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’).

This instrument, the *Australian Renewable Energy Agency Amendment (2020-21 Budget Programs) Regulations 2021* (the ‘Regulation’), further expands 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 the five programs announced in the 2020-21 Budget: the Freight Energy Productivity Program, the Future Fuels Fund, the Industrial Energy Transformation Studies Program, the Regional Australia Microgrid Pilots Program and the Technology Investment Roadmap priorities.

**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). 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.

In the 2020-21 Budget ARENA was allocated additional funding[[4]](#footnote-5) for a program to increase the commercial readiness of new and emerging priority low-emission technologies under the *Technology Investment Roadmap* and the first *Low Emissions Technology Statement* (2020), and to and deliver the following targeted programs:[[5]](#footnote-6)

* An Industrial Energy Transformation Studies Program, to fund studies that will inform business investment decisions in energy efficiency technologies.
* A Freight Energy Productivity Program, to encourage activities that improve energy productivity or fuel efficiency and reduce greenhouse gas emissions in the road transport sector.
* A Future Fuels Fund, to support the integration of new clean energy vehicle technologies such as battery electric vehicles, hydrogen and biofuels, including support for public charging infrastructure and commercial fleet trials.
* A Regional Australia Microgrid Pilots Program, to fund pilot projects testing the use of clean energy microgrids in regional and remote areas.

As outlined above, ARENA’s legislated functions are currently limited to supporting renewable energy technologies. This restricts ARENA’s 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 Regulation 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 Regulation is 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 new function prescribed by the Regulation remains subject to ARENA’s ongoing governance and accountability framework. Accordingly, when administering the new programs outlined above, ARENA must act in a proper, efficient and effective manner and make all investment decisions on merit.[[6]](#footnote-7) ARENA must also exercise its new function within the legislative powers of the Commonwealth.[[7]](#footnote-8)

As is the case for its existing functions under the Act, the Regulation does 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 2020-21 Budget programs outlined above relate 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)[[8]](#footnote-9) 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;[[9]](#footnote-10)
* 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;[[10]](#footnote-11) 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.[[11]](#footnote-12)

The Paris Agreement[[12]](#footnote-13) 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. 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 programs ARENA will either administer or support under the Regulation will reduce Australia’s greenhouse gas emissions, thereby contributing to Australia’s international emissions reduction obligations as outlined above. The programs will fund 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. The targeted programs will also fund studies and analysis that will support further emissions reduction activities in the future.

**Consultation**

Exposure drafts of the Regulations were circulated to Government stakeholders, including the Department of Finance, the Department of the Prime Minister and Cabinet and ARENA, for consultation in March and April 2021. Comments and advice received were taken into account in finalising the Regulations.

Further public consultation was not necessary, as the Regulations only addresses machinery issues relating to the administration of announced Government programs. ARENA will undertake appropriate consultation on the implementation of the programs 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).

**Details of the *Australian Renewable Energy Agency Amendment (2020-21 Budget Programs) Regulations 2021***

**Section 1 – Name**

Section 1 provides that the title of the Regulation is the *Australian Renewable Energy Agency Amendment (2020-21 Budget Programs) Regulations 2021*.

**Section 2 – Commencement**

Section 2 provides that the Regulation commences the day after it is registered on the Federal Register of Legislation.

**Section 3 – Authority**

Section 3 provides that the Regulation is made under the *Australian Renewable Energy Agency Act 2011*. 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 Regulation is amended as indicated by the Schedule. Schedule 1 contains the amendments the Regulation makes to the 2016 Regulation.

**SCHEDULE 1 – AMENDMENTS**

**Item 1 – Section 4**

Item 1 replaces the definition clause at section 4 of the 2016 Regulation with a new definition clause.

An introductory note clarifies that the terms ‘ARENA’, ‘financial assistance’ and ‘renewable energy technologies’ are to be understood as defined in the Act. Item 1 then goes on to provide definitions for a number of terms.

The terms ‘Act’ and ‘Clean Energy Innovation Fund’ were previously defined in the 2016 Regulation. “Act” still carries the same meaning as it did in the 2016 Regulation, while ‘Clean Energy Innovation Fund’ has been lightly updated for stylistic reasons, with ‘section 5’ becoming ‘subsection 5(2)’.

The remainder of the terms in item 1 are newly-introduced for the purposes of the Regulation.

The definition of ‘carbon capture and storage’ shares the same meaning as the definition of the same term in section 7 of the *National Greenhouse and Energy Reporting Act 2007*. The definition relates to the capture and permanent storage of greenhouse gas that would otherwise be emitted into the atmosphere using geological formation and related processes.

The definition of ‘carbon capture and utilisation’ means either the utilisation of greenhouse gas to produce other substances (such as using carbon dioxide to produce products such as methanol and concrete) or the capture, compression, processing, offloading, transportation or piped conveyance of the greenhouse gas, where it is for the purposes of utilising greenhouse gas to produce other substances, where the greenhouse gas would otherwise be emitted into the atmosphere (i.e. it was captured from an emissions source such as an industrial facility). The captured greenhouse gas could be incorporated in the substance or product or could be used in the production process for the substance or product.

The definition of ‘clean energy technologies’ is modelled off the definition of the same term in subsection 60(1) of the *Clean Energy Finance Corporation Act 2012* (the CEFC Act): that is, for the purposes of the Regulation, clean energy technologies comprise renewable energy technologies, energy efficiency technologies and low-emission technologies.

* ‘Renewable energy technologies’, as noted above, are further defined in the Act, in almost identical terms to the corresponding definition found in subsection 60(3) of the CEFC Act.
* ‘Energy efficiency technologies’ are defined below in item 1 in identical terms to the corresponding definition found 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 not further defined, but are intended to 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.

‘Freight Energy Productivity Program financial assistance’ means financial assistance provided under the Freight Energy Productivity Program for (a) anything that is intended to both increase energy productivity or fuel efficiency and reduce greenhouse gas emissions in the road transport sector; or (b) test projects relating to the effects of road transport technologies on energy productivity, fuel efficiency or greenhouse gas emissions. The subject noun for limb (a) of the definition (‘anything’) is intentionally broad, and might encompass activities across the research, trial, demonstration or deployment phases of technological development. Energy productivity and fuel efficiency are types of energy efficiency, with the former referring to achieving higher output using the same or less energy and the latter referring to achieving higher output using the same or less fuel. Note that the term ‘test projects’ is further defined below in item 1. The term ‘road transport’ is not defined in the Regulation, but it is intended for it to carry its ordinary meaning of any type of transport by light or heavy vehicles, including by car, bus, truck or delivery van.

‘Future Fuels Fund financial assistance’ means financial assistance provided under the Future Fuels Fund for anything that is intended to make it easier for businesses in the road transport sector to adopt new clean energy technologies for vehicles. Again, the subject noun for the definition (‘anything’) is intentionally broad, and might encompass activities across the research, trial, demonstration or deployment phases of technological development. The definition provides non-exhaustive examples of a number of eligible development areas, including battery electric vehicles, hydrogen fuel-cell electric vehicles and biofuels, as well as charging or refuelling infrastructure and associated electrical upgrades for these technologies. The example in paragraph (c) would extend to “hybrid” hydrogen refuelling infrastructure that utilised hydrogen produced on-site or a short distance away, but would not encompass hydrogen production activities alone. The example in paragraph (e) would not cover the simple purchasing of battery or hydrogen fuel-cell electric vehicles, in the absence of anything further that might make it easier for future businesses to adopt such technologies (for example, a project that involved the direct purchase of battery or hydrogen fuel-cell electric vehicles might also include a component covering the associated infrastructure or electrical upgrades required to charge or refuel these vehicles). Note that the terms “clean energy technologies” and “road transport” are further defined above and below in item 1.

‘Industrial Energy Transformation Studies Program financial assistance’ means financial assistance provided under the Industrial Energy Transformation Studies Program for studies conducted to improve business investment decision-making in relation to clean energy technologies. Examples of eligible studies might include engineering studies, blueprints, commercial surveys or analyses undertaken by businesses or their contractors to inform specific investment cases in relation to clean energy technologies, as well as sectoral studies undertaken by researchers for the purpose of supporting business investments in clean energy technologies in general. Note that the term ‘clean energy technologies’ is further defined above in item 1.

‘Regional Australia Microgrid Pilots Program financial assistance’ means financial assistance provided under the Regional Australia Microgrid Pilots Program for pilot projects relating to the use of microgrids in regional and remote areas that employ renewable energy or low-emission technologies. The definition is limited to pilot projects because the Regional Australia Microgrid Pilots Program will only fund a small number of projects which, under a previous program, were funded to undertake feasibility studies and are now ready to move to the demonstration phase. A microgrid is a group of interconnected loads and distributed energy resources that functions as a single controllable entity, and can be operated in connection with an energy grid or in isolation as a stand-alone power system. Note that ‘renewable energy technologies’ are further defined in the Act; ‘low-emission technologies’ are not further defined, but the meaning of the term is generally equivalent to that explained under the definition of “clean energy technologies” above.

‘Technology Investment Roadmap financial assistance’ means financial assistance provided for research and development activities that are intended to progress priority clean energy technologies identified in the Technology Investment Roadmap’s annual Low Emission Technology Statements and similar technology opportunities. The research and development activities in question are intentionally broad, and might encompass activities across the research, trial, demonstration or deployment phases of technological development, including test projects as defined below in item 1. To be eligible under the program, a technology must be a clean energy technology and must also:

* involve or relate to any of the following:
  + clean hydrogen (that is, hydrogen produced using renewable energy or fossil fuels wholly or substantially offset by carbon capture and storage);
  + energy storage (such as those using a chemical process or pumped hydro systems);
  + the manufacturing of materials including steel, aluminium and other low-carbon materials with fewer emissions compared to an alternative product;
  + carbon capture and storage, or carbon capture and utilisation (as defined above in item 1);
  + soil carbon (including carbon sequestration and other land management activities that encourage increases in soil carbon); or
* comprise any other technologies that make, or have the potential to make, a material contribution to the reduction of greenhouse gas emissions in Australia, thereby contributing to Australia’s international emissions reduction obligations as outlined above.

Note that the second of these sub-definitions (that is, the ‘other technologies’ in paragraph (b)) is intentionally broad to enable ARENA to provide financial assistance to new and emerging technologies under future Low Emission Technology Statements. These other technologies are not limited by paragraph (a) of the definition and the existence of technical or regulatory barriers to the deployment of a technology should not exclude the technology for consideration. Note also that the term ‘clean energy technologies’ is further defined above in item 1 and all technologies under paragraph (b) must be clean energy technologies.

‘Test project’ is defined as including demonstration projects, pilot projects, feasibility studies and pilot studies. Again, it is not intended for this definition to exclude any other types of test project not explicitly specified here.

**Item 2 – Section 5 (heading)**

Item 2 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 7 below (which deals with the deployment of programs agreed in the 2020-21 Budget).

**Item 3 – Subsection 5(1)**

Item 3 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 4 – Paragraph 5(1)(a)**

Item 4 removes ‘within the meaning of the *Clean Energy Finance Corporation Act 2012*’ from paragraph 5(1)(a) of the 2016 Regulation. This text was previously required to make it clear that the “clean energy technologies” referred to in paragraph 5(1)(a) were to be understood as defined in the CEFC Act. It has now been superseded, since the new definition of ‘clean energy technologies’ inserted into section 4 by item 1 above clarifies the meaning of the term.

**Item 5 – Subsection 5(1) (note)**

Item 5 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 6 – Subsection 5(2)**

Item 6 replaces ‘regulation’ at the start of subsection 5(2) of the 2016 Regulation with ‘instrument’. This minor stylistic change updates the text to reflect current drafting practices and to make the reference consistent with the way the 2016 Regulation is described in section 4 of the 2016 Regulation.

**Item 7 – At the end of Part 2**

Item 7 prescribes a new legislated function for ARENA under paragraph 8(f) of the Act, to grant it all aspects of power necessary to finance priority low-emission technologies under the Technology Investment Roadmap and to deploy the Freight Energy Productivity Program, the Future Fuels Fund, the Industrial Energy Transformation Studies Program and the Regional Australia Microgrid Pilots Program as announced in the 2020-21 Budget.

Specifically, item 7 empowers ARENA to:

* provide financial assistance (in the form of grants) for each of the programs mentioned above, on the terms set out under the definition for each program above in item 1;
* 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.

Item 7 is intended to provide a broad basis for ARENA’s deployment and administration of the four nominated programs and financing of priority low-emission technologies under the Technology Investment Roadmap. It is expected that item 7, in conjunction with the rest of the Regulation, will supply any legislative power necessary to implement the programs that might otherwise be lacking in the Act. Item 7 would also extend, in conjunction with paragraph 8(h) of the Act, to authorising anything incidental or conducive to its performance (for example, liaising with the Minister as to the design, implementation or performance of the nominated programs). Note however that the power conferred through item 7 must still be exercised within the terms established in the Regulation and, where relevant, the Act (for example, any financial assistance must still be provided in the form of a grant[[13]](#footnote-14) and in accordance with the general funding strategy and any relevant grant guidelines in place at the time[[14]](#footnote-15)). It is also expected that a memorandum of understanding will be developed between ARENA and the Department in relation to the delivery of the Freight Energy Productivity Program, the Future Fuels Fund, the Industrial Energy Transformation Studies Program and the Regional Australia Microgrid Pilots Program.

Item 7 is necessary to clearly provide ARENA with the legislated function identified above, which empowers it to deploy and administer the listed 2020-21 Budget programs. It is appropriately made within the scope of the power provided in paragraph 8(f) of the Act, the wording of which is not in any way limited to renewable energy. The broader concept of supporting clean energy technologies is also an important policy measure that is appropriate and adapted to implement Australia’s international greenhouse gas emission reduction obligations under the UNFCCC and the related Paris Agreement, as explained above.

**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 (2020-21 Budget Programs) Regulations 2021*

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**

This regulation expands the operating remit of the Australian Renewable Energy Agency to permit it to invest in a wider range of clean energy technologies for the deployment of programs announced in the 2020-21 Budget.

**Human rights implications**

This regulation does not engage any of the applicable rights or freedoms.

**Conclusion**

This regulation is compatible with human rights as it does not raise any human rights issues.

**The Hon Angus Taylor MP**

**Minister for 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>. [↑](#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. Refer Budget Paper No. 2, Budget Measures 2020-21, Part 2: Payment Measures, p. 118-119. Note that the measure funding allocations provided in the Budget may differ from the actual funding allocations provided to ARENA under the relevant appropriation legislation. [↑](#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 paragraphs 9(a) and (b) of the Act. [↑](#footnote-ref-7)
7. See section 14 of the Act. [↑](#footnote-ref-8)
8. [1994] ATS 2. Available at <http://www.austlii.edu.au/au/other/dfat/treaties/1994/2.html>. [↑](#footnote-ref-9)
9. See article 4.1(b). [↑](#footnote-ref-10)
10. See article 4.1(c). [↑](#footnote-ref-11)
11. See article 4.2(a). [↑](#footnote-ref-12)
12. [2016] ATS 24. Available at <http://www.austlii.edu.au/au/other/dfat/treaties/ATS/2016/24.html>. [↑](#footnote-ref-13)
13. See the definition of “financial assistance” in section 4 of the Act. [↑](#footnote-ref-14)
14. See sections 10 (general funding strategy) and 24 (guidelines) of the Act. [↑](#footnote-ref-15)