



# **Australian Renewable Energy Agency (Implementing the Technology Investment Roadmap) Regulations 2021**

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I, General the Honourable David Hurley AC DSC (Retd), Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following regulations.

Dated 23 July 2021

David Hurley  
Governor-General

By His Excellency's Command

Angus Taylor  
Minister for Energy and Emissions Reduction

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## 1 Name

This instrument is the *Australian Renewable Energy Agency (Implementing the Technology Investment Roadmap) Regulations 2021*.

## 2 Commencement

- (1) Each provision of this instrument specified in column 1 of the table commences, or is taken to have commenced, in accordance with column 2 of the table. Any other statement in column 2 has effect according to its terms.

Commencement information		
Column 1	Column 2	Column 3
Provisions	Commencement	Date/Details
1. The whole of this instrument	The day after this instrument is registered.	30 July 2021

Note: This table relates only to the provisions of this instrument as originally made. It will not be amended to deal with any later amendments of this instrument.

- (2) Any information in column 3 of the table is not part of this instrument. Information may be inserted in this column, or information in it may be edited, in any published version of this instrument.

## 3 Authority

This instrument is made under the *Australian Renewable Energy Agency Act 2011*.

## 4 Purpose of this instrument

The purpose of this instrument is to enable ARENA to provide financial assistance for projects and other activities that could reasonably be expected to contribute to Australia meeting its obligations under:

- (a) the Climate Change Convention; or
- (b) the Paris Agreement.

## 5 Definitions

Note: A number of expressions used in this instrument are defined in the Act, including the following:

- (a) ARENA (short for Australian Renewable Energy Agency);
- (b) Climate Change Convention;
- (c) financial assistance;
- (d) renewable energy technologies.

In this instrument:

*Act* means the *Australian Renewable Energy Agency Act 2011*.

**carbon capture and storage** has the same meaning as in the *National Greenhouse and Energy Reporting Act 2007*.

**enabling technologies** includes measurement technologies.

**energy efficiency technologies** includes technologies (including enabling technologies) that are related to energy conservation technologies or demand management technologies.

**Freight Efficiency Assistance Grants** has the meaning given by subsection 6(7).

**Freight Energy Productivity Trial Program financial assistance** has the meaning given by subsection 6(7).

**Future Fuels Fund financial assistance** has the meaning given by subsection 6(7).

**Industrial Energy Transformation Studies Program financial assistance** has the meaning given by subsection 6(7).

**Paris Agreement** means the Paris Agreement, done at Paris on 12 December 2015, as in force for Australia from time to time.

Note: The Agreement is in Australian Treaty Series 2016 No. 24 ([2016] ATS 24) and could in 2021 be viewed in the Australian Treaties Library on the AustLII website (<http://www.austlii.edu.au>).

**priority aluminium and steel technologies financial assistance** has the meaning given by subsection 7(6).

**priority carbon capture and storage technologies financial assistance** has the meaning given by subsection 7(6).

**priority clean hydrogen technologies financial assistance** has the meaning given by subsection 7(6).

**priority energy storage technologies financial assistance** has the meaning given by subsection 7(6).

**priority low emissions technologies** has the meaning given by subsection 7(6).

**priority low emissions technologies financial assistance** has the meaning given by subsection 7(5).

**priority soil carbon technologies financial assistance** has the meaning given by subsection 7(6).

**Regional Australia Microgrid Pilots Program financial assistance** has the meaning given by subsection 6(7).

**research and development project** includes a test project.

**test project** includes:

- (a) a demonstration project; and
- (b) a feasibility study; and
- (c) a pilot project; and

(d) a pilot study.

*type* of priority low emissions technologies financial assistance has the meaning given by subsection 7(5).

## 6 2020-21 Budget programs

- (1) For the purposes of paragraph 8(f) of the Act, ARENA has the following functions:
  - (a) subject to subsection (2) of this section, to provide the following financial assistance:
    - (i) Freight Efficiency Assistance Grants;
    - (ii) Freight Energy Productivity Trial Program financial assistance;
    - (iii) Future Fuels Fund financial assistance;
    - (iv) Industrial Energy Transformation Studies Program financial assistance;
    - (v) Regional Australia Microgrid Pilots Program financial assistance;
  - (b) subject to subsection (4), to enter into agreements for the purpose of providing financial assistance as mentioned in paragraph (a) of this subsection and to administer such agreements;
  - (c) to collect, analyse, interpret and disseminate information and knowledge relating to the outcomes of the projects, studies and other things for which financial assistance was provided as mentioned in paragraph (a);
  - (d) to liaise with State and Territory governments and other authorities for the purpose of facilitating projects for which financial assistance is, or is proposed to be, provided as mentioned in paragraph (a);
  - (e) to provide information to the Minister about the total amount of financial assistance provided by ARENA under paragraph (a), including information about how much of that financial assistance relates to renewable energy technologies.

### *Cap*

- (2) The function prescribed by paragraph (1)(a) does not include providing:
  - (a) a particular grant; or
  - (b) particular assistance of another kind;if, were ARENA to provide the grant etc., the total amount of financial assistance provided by ARENA under that paragraph would exceed \$192.5 million.
- (3) For the purposes of subsection (2), disregard financial assistance that ARENA could provide under both:
  - (a) paragraph (1)(a); and
  - (b) another Commonwealth law (including another section of this instrument).

### *Time limit*

- (4) The function prescribed by paragraph (1)(b) does not include entering into an agreement on or after 1 January 2026.
- (5) Subsection (4) does not affect the ability of ARENA:

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- (a) to vary or terminate an agreement entered into before 1 January 2026; or
- (b) to enter into an agreement on or after 1 January 2026 under another Commonwealth law (including another section of this instrument).

### *Information about total amount of financial assistance*

- (6) The Minister must cause a copy of information ARENA provides to the Minister under paragraph (1)(e) to be tabled in each House of the Parliament within 15 sitting days of that House after ARENA provides the information to the Minister.

### *Definitions*

- (7) In this instrument:

***Freight Efficiency Assistance Grants*** means financial assistance (other than Freight Energy Productivity Trial Program financial assistance) for:

- (a) anything that is intended to increase:
  - (i) energy productivity or fuel efficiency in the road transport sector; or
  - (ii) the proportion of energy used in the road transport sector that is renewable energy; or
- (b) without limiting paragraph (a)—projects relating to energy efficiency rating or certification in the road transport sector; or
- (c) without limiting paragraph (a)—providing information to the road transport sector about:
  - (i) increasing energy productivity or fuel efficiency; or
  - (ii) using renewable energy in heavy freight vehicle fleets.

***Freight Energy Productivity Trial Program financial assistance*** means financial assistance for test projects that:

- (a) relate to the effects on energy productivity or fuel efficiency of new truck:
  - (i) drivetrain technologies; or
  - (ii) component technologies; or
  - (iii) logistic technologies; and
- (b) involve the use of renewable energy.

***Future Fuels Fund financial assistance*** means financial assistance for anything that is intended to reduce barriers to the on-road use of:

- (a) electric vehicles; or
- (b) vehicles powered by biofuels; or
- (c) vehicles powered by clean hydrogen.

Example: Funding for research and development projects relating to, or deployment of, any of the following:

- (a) charging infrastructure, including public electric vehicle chargers;
- (b) biofuel refuelling infrastructure;
- (c) clean hydrogen refuelling infrastructure, including infrastructure that integrates hydrogen refuelling with clean hydrogen production;
- (d) electrical upgrades relating to charging electric vehicles;
- (e) batteries or fuel cells, or related technologies, for electric vehicles.



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***Industrial Energy Transformation Studies Program financial assistance*** means financial assistance for studies conducted for the purpose of improving business decisions relating to investing in energy efficiency technologies (whether or not the decisions also involve investing in other low emissions technologies).

***Regional Australia Microgrid Pilots Program financial assistance*** means financial assistance for pilot projects relating to the use of renewable energy microgrids in regional and remote areas.

## 7 Priority low emissions technologies

- (1) For the purposes of paragraph 8(f) of the Act, ARENA has the following functions:
  - (a) to provide priority low emissions technologies financial assistance in accordance with subsection (2) of this section;
  - (b) to enter into agreements for the purpose of providing financial assistance as mentioned in paragraph (a) of this subsection and to administer such agreements;
  - (c) to collect, analyse, interpret and disseminate information and knowledge relating to the outcomes of the research and development projects for which financial assistance was provided as mentioned in paragraph (a);
  - (d) to liaise with State and Territory governments and other authorities for the purpose of facilitating research and development projects for which financial assistance is, or is proposed to be, provided as mentioned in paragraph (a);
  - (e) to provide advice to the Minister relating to priority low emissions technologies, including advice about the following:
    - (i) improving the competitiveness of priority low emissions technologies;
    - (ii) increasing the supply of priority low emissions technologies in Australia;
    - (iii) improving the development of skills in the priority low emissions technologies sectors;
    - (iv) increasing the use of priority low emissions technologies;
    - (v) Commonwealth programs relating to priority low emissions technologies;
  - (f) to provide the following information to the Minister in relation to priority low emissions technologies financial assistance provided by ARENA during a 12-month period:
    - (i) the total amount of priority low emissions technologies financial assistance provided by ARENA under paragraph (a) during the period;
    - (ii) the total amount of each type of priority low emissions technologies financial assistance provided by ARENA under paragraph (a) during the period;
    - (iii) the total amount of priority low emissions technologies financial assistance provided by ARENA (whether under paragraph (a) or another Commonwealth law) during the period;

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- (iv) the total amount of each type of priority low emissions technologies financial assistance provided by ARENA (whether under paragraph (a) or another Commonwealth law) during the period.

### *Annual funding average*

- (2) For the purposes of paragraph (1)(a), ARENA must make reasonable efforts to ensure that the mean of the annual total amounts of priority low emissions technologies financial assistance provided by ARENA (whether under paragraph (1)(a) or another Commonwealth law) during the 2022-23 to 2029-30 financial years will be \$60 million or more.

### *Information about annual total amounts of priority low emissions technologies financial assistance*

- (3) For the purposes of subparagraph (1)(f)(i) or (ii), disregard priority low emissions technologies financial assistance that ARENA could provide under both:
  - (a) paragraph (1)(a); and
  - (b) another Commonwealth law (including another section of this instrument).
- (4) The Minister must cause a copy of information ARENA provides to the Minister under paragraph (1)(f) to be tabled in each House of the Parliament within 15 sitting days of that House after ARENA provides the information to the Minister.

### *Definitions*

- (5) Each of the following is a ***type of priority low emissions technologies financial assistance***:
  - (a) priority aluminium and steel technologies financial assistance;
  - (b) priority carbon capture and storage technologies financial assistance;
  - (c) priority clean hydrogen technologies financial assistance;
  - (d) priority energy storage technologies financial assistance;
  - (e) priority soil carbon technologies financial assistance.
- (6) Financial assistance is of the type of priority low emissions technologies financial assistance mentioned in column 1 of an item of the following table if:
  - (a) the financial assistance is for research and development projects relating to the technologies (***priority low emissions technologies***) mentioned in column 2 of the item; and
  - (b) before the financial assistance is provided, it is reasonable to believe that it is likely that the research and development projects (including their outcomes) will be of use in achieving the goal mentioned in column 3 of the item.

<b>Types of priority low emissions technologies financial assistance</b>			
<b>Item</b>	<b>Column 1</b> <b>Type of priority low emissions technologies financial assistance</b>	<b>Column 2</b> <b>Priority low emissions technologies</b>	<b>Column 3</b> <b>Goal</b>
1	<i>priority aluminium and steel technologies financial assistance</i>	technologies relating to manufacturing low emissions aluminium or steel	reducing the mean cost of manufacturing low emissions aluminium or steel in Australia to below: (a) in the case of aluminium—\$2,700 per tonne; or (b) in the case of steel—\$900 per tonne
2	<i>priority carbon capture and storage technologies financial assistance</i>	technologies relating to carbon capture and storage	reducing the mean cost of carbon dioxide compression, hub transport and storage in Australia to below \$20 per CO <sub>2</sub> e tonne
3	<i>priority clean hydrogen technologies financial assistance</i>	technologies relating to clean hydrogen	reducing the mean cost of clean hydrogen in Australia to below \$2 per kg
4	<i>priority energy storage technologies financial assistance</i>	technologies relating to energy storage	reducing the mean cost of stored electricity used for the purposes of firming in Australia to below \$100 per MWh
5	<i>priority soil carbon technologies financial assistance</i>	technologies relating to soil carbon	reducing the mean cost of measuring soil carbon in Australia to below \$3 per hectare per year