



ACT
Government

2021–22 Annual Feed-in Tariff Report



Disclaimer

As established in Section 11B of the Electricity Feed-in (Renewable Energy Premium) Act 2008, Evoenergy and National Energy Retail Law (NERL) retailers are obligated to provide information required to prepare this report. Much of the data in this report is from these sources. The ACT Government relies on Evoenergy and NERL retailers providing accurate data, as it has no means to obtain this data directly.

Acknowledgment to Country

Yuma

Dhawura nguna ngurumbangu gunanggu Ngunnawal.Nginggada dindi dhawura Ngunnawalbun yindjumaralidjinyin.

Mura bidji mulanggaridjindjula.

Naraganawaliyiri yarabindjula.

Hello

This country is Ngunnawal (ancestral/spiritual) homeland.

We all always respect elders, male and female, as well as Ngunnawal country itself.

They always keep the pathways of their ancestors alive.

They walk together as one.

EPSDD acknowledge the Ngunnawal people as Canberra's first inhabitants and Traditional Custodians of Ngunnawal Country. We recognise the special relationship and connection that Ngunnawal people have with this Country. Ngunnawal people are a thriving people whose life and culture is connected unequivocally to this land in a way that only they understand and know, and is core to their physical and spiritual wellbeing.

The past disconnection of the Ngunnawal people from Culture and Country has had long-lasting, profound and ongoing health and wellbeing effects on their life, cultural practices, families and continuation of their law/lore.

We acknowledge the historic dispossession of the Ngunnawal people of Canberra and their surrounding regions. We recognise the significant contribution the Ngunnawal people make in caring for Country as for time immemorial they have maintained and will continue to maintain a tangible and intangible cultural, social, environmental, spiritual and economic connection to these lands and waters.

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Produced by the

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Contents

Executive Summary	1
Introduction	4
ACT Government Small and Medium Scale Fit Scheme Performance	5
Number of Generators	6
Installed Capacity	6
Generation	6
Impact on Electricity Bills.....	7
Retailer Market Offers (Non-Premium FIT)	8
Appendix A—Additional Data on the Small and Medium FIT Scheme	9





Executive Summary

Under section 11A of the [Electricity Feed-in \(Renewable Energy Premium\) Act 2008](#) (the Act), the Minister must publish an annual report that provides the following information on the ACT's Small and Medium Feed-in Tariff Scheme (the FiT scheme):

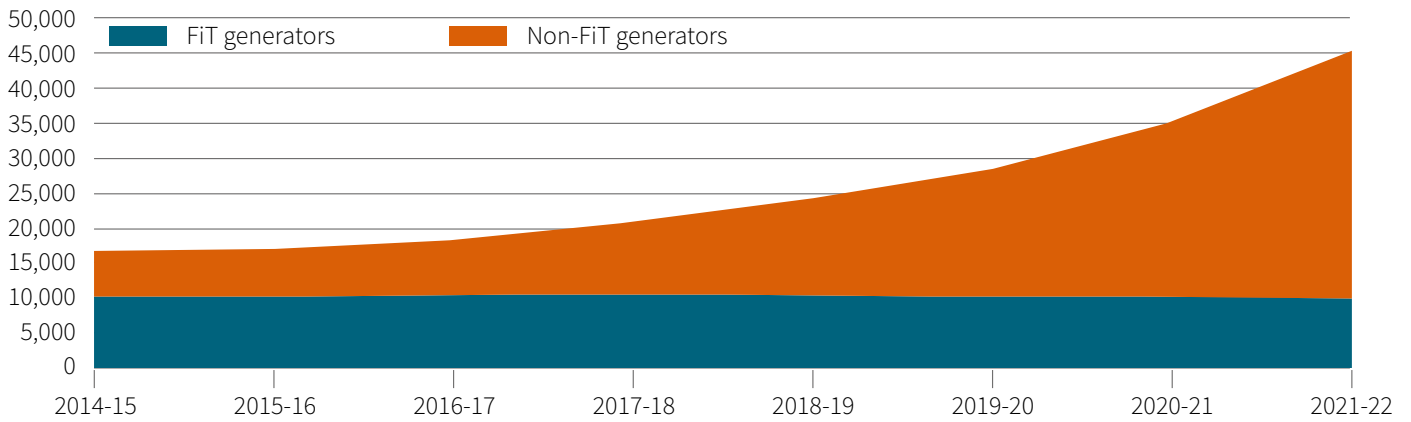
- The number of compliant renewable energy generators installed on premises in the ACT;
- The total capacity of compliant renewable energy generators installed on premises in the ACT; and
- The costs under this Act on electricity users.

Renewable generators supported by the FiT scheme generated 38,370 megawatt hours (MWh) of electricity in 2021–22, from a total installed capacity of around 34.39 megawatts (MW), consisting of 9,876 solar photovoltaic systems.

2021–22 solar generation totalled 178,370MWh. This is a noteworthy annual increase of 26%. This result was achieved through the 38,370MWh of FiT scheme-supported generation combined with non-FiT (retailer supported) scheme solar generation which produced 140,000MWh.

Figure 1 shows the ACT's recent trend of an increasing number of generators.

Figure 1: Total small and medium generators



The estimated cost of the FiT scheme to consumers is \$5.78/MWh, or around 71c per week for a two-person house consuming 6.371MWh annually. This represents an 9.2% increase of FiT scheme costs compared with 2020–21.

These figures do not represent the ACT's total solar capacity or generation and there are likely to be a small number of rooftop installations that are not part of either this FiT scheme or those offered by electricity retailers. However, these figures likely represent the majority. Additional 'behind the meter' generation that is not exported to the grid is not measured by electricity distributors or reported here.

These results are summarised in Figures 1–4, and in tables throughout this report.

Figure 2: Total small and medium generation capacity (MW)

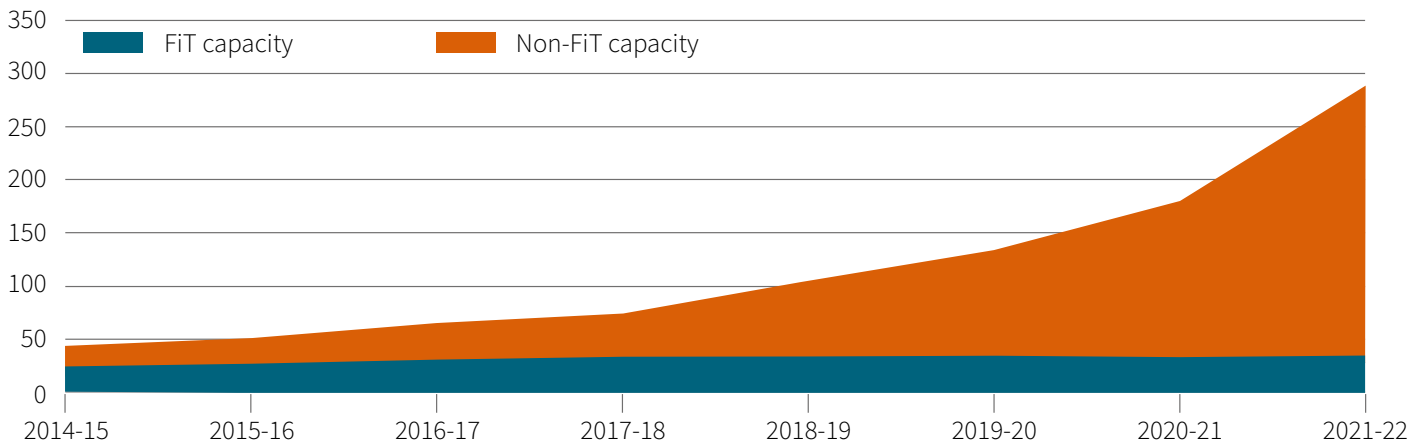


Figure 3: Total small and medium generation (MWh)

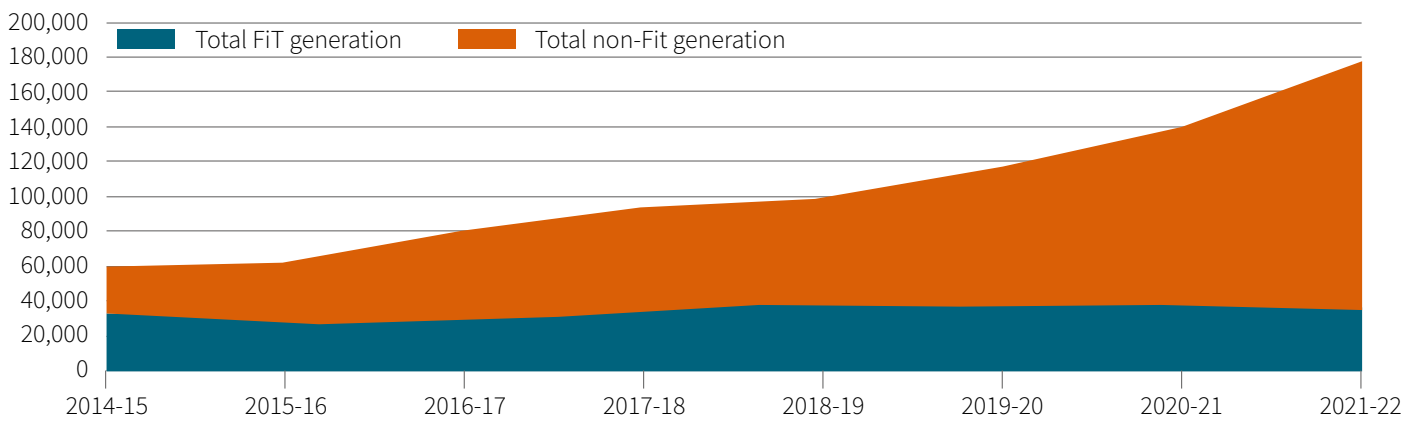
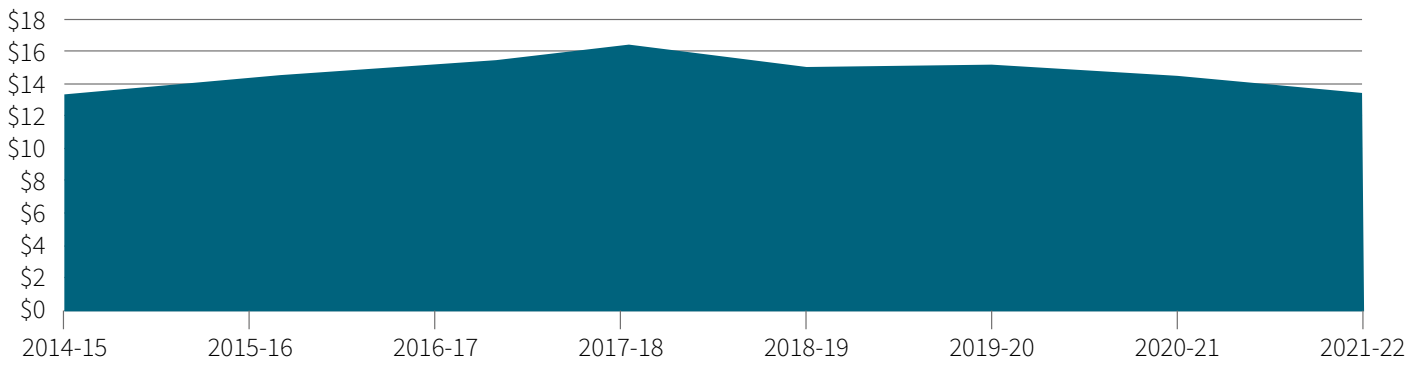


Figure 4: Total small and medium premium FiT paid (\$million)





Introduction

In March 2009, the ACT Government established a scheme for payments to ACT households and businesses generating renewable electricity under the [Electricity Feed-in \(Renewable Energy Premium\) Act 2008](#) (the Act), referred to as the Small and Medium Feed-in Tariff Scheme. While this scheme was open to any form of small (under 30kW) and medium (30–200kW) sized renewable electricity generator, initially only rooftop solar photovoltaic system applications were successful, so the scheme also became known as ‘the rooftop solar scheme’. The scheme was closed to new entrants on 13 July 2011. The cut-off date for generator installation under the scheme was 31 December 2016. A summary of the application dates and rates offered is included in Table 7.

This report is the eighth annual report on the ACT’s Small and Medium Feed-in Tariff (FiT) Scheme (the FiT scheme). Section 11A of the Act requires an annual report containing the number of compliant renewable energy generators installed under the scheme, the total capacity of the generators installed under the scheme, and the costs passed on to electricity users.

A premium FiT is a premium payment (higher than the market value) for electricity generated by a renewable electricity generation system. The purpose of these payments is to encourage the uptake and development of renewable electricity. The ACT’s FiT scheme is a premium FiT scheme.

Successful applicants receive premium FiT payments for 20 years from the date their system was connected to the electricity network. This payment is made by their electricity retailer for the total kilowatt hours (kWh) their system generates, including any generation used at the same premises where it was generated. The FiT rate depends on the system’s capacity and date of application to the scheme. Electricity retailers pass on the cost of premium FiT payments to the ACT electricity distributor, which incorporates this cost into network charges.

While the ACT Government’s Small and Medium FiT scheme is now closed, households can still access solar support schemes offered voluntarily by electricity retailers that extend payments for excess generation from their rooftop solar photovoltaic systems. Unlike the ACT Government Premium FiT scheme, which offers a FiT for all generation (‘gross’), market offers by retailers only make payments for generation exported to the grid for the energy left after any consumption at the premises (‘net’). These market offers are referred to in this report as non-FiT schemes.

ACT Government Small and Medium Scale FiT Scheme Performance

The FiT scheme's performance is measured by four factors. These factors include the number of generators, the scheme's installed capacity, the amount of electricity produced and the scheme's impact on electricity bills. Table 1 summarises the performance of the FiT scheme in 2021–22, together with comparative data from previous years.

Change in figures from year-to-year is predominantly driven by insolation and the degradation of solar panels. There is also some variation year-to-year in the installed capacity and number of systems participating in the FiT scheme. This is due to homes and businesses disconnecting and/or reconnecting during renovations and re-builds. For the past two financial years, improvements to FiT scheme administration resulting from the audit and review of the scheme may also have led to some adjustments.

The estimated per household cost of the FiT scheme has increased in 2021–22 compared with the previous year.

For the purpose of this report a representative household is taken to be a two-person household consuming 6.371MWh of electricity annually, as per the Australian Energy Regulator's Jurisdictional Snapshot 2020–21.¹

Table 1: Small and medium scale FiT scheme performance

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change
Number of FiT scheme generators	10,270	10,304	10,394	10,428	10,170	10,153	9,979	9,876	-1.0%
Installed capacity (MW)	26.2	26.35	32.53	32.94	35.00	34.96	34.99	34.39	-1.7%
Electricity production (MWh)	33,373	34,910	40,355	47,560	46,550	47,296	44,480	38,370	-13.7%
Total FiT paid (\$M)	\$ 13.70	\$ 14.56	\$ 15.50	\$ 16.72	\$ 15.16	\$ 15.41	\$ 14.78	\$ 13.70	-7.3%
Cost (\$/MWh) ²	\$ 5.52	\$ 6.21	\$ 6.30	\$ 7.01	\$ 6.16	\$ 6.07	\$ 5.34	\$ 5.78	8.2%
Average annual cost to a representative ACT household (\$/year) ³	\$40.36	\$45.41	\$45.05	\$50.13	\$44.05	\$43.41	\$34.03	\$36.82	8.2%
Average weekly cost to a representative ACT household (c/week)	\$0.78	\$0.87	\$0.87	\$0.96	\$0.85	\$0.83	\$0.65	\$0.71	9.2%

1 See <https://www.aer.gov.au/system/files/AER%20Jurisdictional%20Snapshots%202019-20.pdf>

2 Independent Competition and Regulatory Commission *Retail electricity price recalibration 2022-23* at www.icrc.act.gov.au/__data/assets/pdf_file/0004/2013781/Report-retail-electricity-price-recalibration-2022-23.pdf.

3 Calculated based on average household electricity usage published by Australian Energy Market Commission Residential Price Trends Reports 2015, 2016, 2017, 2018, 2019 and the Australian Energy Regulator Jurisdictional Snapshot Report 2020-21.

Number of Generators

Since the scheme cut-off date in 2016–17, there should be no more growth in capacity or number of systems. However, minor adjustments may continue to be made due to improvements in data completeness and the retiring of systems. There is also some variation year-to-year due to homes and businesses disconnecting and/or reconnecting during renovations and re-builds. In 2021–22, there were 9,876 generators under the scheme. This is 103 (1.0%) generators fewer than 2020–21. These results are shown in Table 2.

Table 2: Number of small and medium solar generators under the FiT scheme, plus non-FiT generators

Generators (number)	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change
FiT generators	10,270	10,304	10,394	10,428	10,170	10,153	9,979	9,876	-1.0%
Non-FiT generators	6,614	6,636	7,774	10,050	13,736	17,985	23,870	35,249	47.7%
Total generators	16,884	16,940	18,168	20,478	23,906	28,138	33,849	45,125	33.3%

Installed Capacity

Evoenergy has reported a total installed capacity of 34,393MW in the FiT scheme during 2021–22, which is a 1.7% reduction compared with 2020–21. The variation year-to-year in the installed capacity is due to homes and businesses disconnecting and/or reconnecting during renovations and re-builds.

The final scheme capacity is less than the maximum of 35MW set by the Minister by way of the [Electricity Feed-in \(Renewable Energy Premium\) Total Capacity Determination 2012 \(No. 1\)](#).

Table 3: Installed solar generation capacity, FiT scheme plus non-FiT generators

Capacity (MW)	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change
FiT capacity	26.2	26.35	32.53	32.94	35.00	34.96	34.99	34.39	-1.7%
Non-FiT capacity	19.30	26.95	34.12	42.08	72.05	100.59	146.46	256.16	74.9%
Total reported capacity	45.50	53.30	66.65	75.02	107.05	135.54	181.45	290.55	60.1%

Generation

Total solar generation from FiT scheme generators was 38,370MWh in 2021–22. This was 13.7% lower than in 2020–21, as shown in Table 4. Solar generation has been affected by increased cloudy weather and rain experienced over 2021–22. This was also evident in the 2020–21 reporting period.

Table 4: Total FiT and non-FiT electricity generation

Generation—FiT and non-FiT (MWh)	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change
Evoenergy—Total FiT generation	33,373	34,910	40,355	47,560	46,550	47,296	44,480	38,370	-13.7%
Evoenergy—Total non-FiT generation	27,488	28,815	42,298	48,574	53,746	71,895	96,931	140,000	44.4%
Total generation	60,861	63,725	82,653	96,134	100,295	119,191	141,411	178,370	26.1%

Impact on Electricity Bills

The impact on electricity bills is calculated based on the Independent Competition and Regulatory Commission (ICRC) annual publication of detailed FiT cost data.

The average small-scale FiT scheme pass-through costs for a typical two-person household in 2021–22 was \$36.82 compared to \$34.03 in 2020–21. This represents an 8.2% increase in the average cost of the FiT scheme across all Canberra households.

The cost to households of the scheme is calculated by the Independent Competition and Regulatory Commission (ICRC) and included in its annual standing offer price determination. It is calculated with the best available data at the time of publishing and includes estimated scheme costs provided by the Australian Energy Regulator (AER). The ICRC's methodology for calculating the scheme's cost also takes into consideration total network costs, therefore changes in total network costs can also effect changes to the scheme's costs to households.

Costs to households are expected to reduce over time as the population grows and solar photovoltaic systems age or are removed.

Table 5: Impact of the FiT scheme on ACT residential electricity bills

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change
Cost (\$/MWh)	\$5.52	\$6.21	\$6.30	\$7.01	\$6.16	\$6.07	\$5.34	\$5.78	8.2%
Calculated costs (\$/year)	\$40.36	\$45.41	\$45.05	\$50.13	\$44.05	\$43.41	\$34.03	\$36.82	8.2%
Cents per week	\$0.78	\$0.87	\$0.87	\$0.96	\$0.85	\$0.83	\$0.65	\$0.71	9.2%

Retailer Market Offers (Non-Premium FiT)

While the ACT Government is only required to report on the Small and Medium FiT scheme, this report also includes information on solar support schemes offered by retailers. This is intended to provide a more complete picture of rooftop solar generation in the ACT to examine how successful the FiT scheme has been in its policy objectives to encourage a greater uptake of solar by households and business across the Territory. Comparisons with the FiT scheme results have been included in Tables 2–5 above. This section brings the non-FiT data together in the one place. Trends over time and current totals are shown in Table 6.

As retailers' market offers for solar are not regulated, there is no mandatory reporting of installation and generation rates. This creates problems for data completeness and accuracy as data must be derived from a range of sources; data reported here should be regarded as best estimates only.

As at 30 June 2022, Evoenergy reported a total of 35,249 generators installed under retailer supported schemes with a combined capacity of 256,164MW, and an output of 140,000MWh during 2021–22 financial year.

Table 6 shows a 47.6% increase in the number of non-FiT generators compared with the 2020–21 result and an increase of 75% in the total reported capacity over the same period, which indicates a growth in the system size of new installs. Technological improvements in solar panels enabling greater output and increased installations on sub-optimal roofs that require additional panels are potential reasons for the increased capacity of new systems.

Table 6: Summary of Non-FiT results

Non-FiT Supported	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	% Change
Installed capacity (MW)	19.30	26.95	34.12	42.08	72.05	100.59	146.46	256.16	74.9%
Electricity production (MWh)	27,488	28,815	35,791	48,574	53,746	71,875	96,931	140,000	44.4%
Number of generators	6,614	6,636	7,774	10,050	13,736	17,985	23,870	35,249	47.6%

Appendix A—Additional Data on the Small and Medium FiT Scheme

The following FiTs were available to eligible renewable energy generators from the date of scheme opening on 1 March 2009 to its close on 13 July 2011.

Table 7: Small and medium FiT scheme rates

Gross FiT Rate	Eligible generation capacity and date of application
50.05c/kWh	Generator capacity up to 10kW for applications approved 1 March 2009 to 30 June 2010
45.7c/kWh	Generator capacity up to 30kW for applications approved 1 July 2010 to 31 May 2011
40.04c/kWh	Generator capacity between 10–30kW for applications approved 1 March 2009 to 30 June 2010
34.27c/kWh	Generator capacity between 30–200kW for applications approved 7 March 2011 to 11 July 2011
30.16c/kWh	Generator capacity up to 200kW for applications approved 12 July to 13 July 2011

Source – Review of the Electricity Feed-in (Renewable Energy Premium) Act 2008 (August 2015)

The ACT Government small and medium FiT scheme was a ‘gross’ scheme. This means that the FiT was paid for all the electricity generated by a renewable energy generator, rather than only the net generation left after consumption, as is the case for retailer solar support schemes.

Table 8: Capacity and number of generators by tariff in 2021–22

Gross FiT Rate	No of generators	Installed Capacity (kW)
50.05c/kWh	2,317	5,585
45.7c/kWh	7,508	22,318
40.04c/kWh	2	60
34.27c/kWh	10	980
30.16c/kWh	39	5,450
Total	9,876	34,393

