

Solar feed-in tariff for regional Queensland 2024-25

Final determination

June 2024

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1 About our review

Each year, we set a flat rate solar feed-in tariff (FiT) to apply in regional Queensland. The FiT reflects our estimate of the costs retailers avoid by sourcing electricity from solar photovoltaic (PV) customers rather than purchasing it from the National Electricity Market (NEM).

In December 2023, the Minister for Energy and Clean Economy Jobs (the Minister) directed us to set a flat-rate FiT for regional Queensland in 2024–25.¹ At that time, the Minister also delegated us the task of setting regulated retail electricity prices (notified prices).²

We use a well-established approach based on factors in the Electricity Act and matters in the direction (Box 1). We are required to publish the solar FiT by 7 June 2024.

Box 1: Overarching framework

When setting the solar FiT the Electricity Act requires us to consider:

- the effect of the solar FiT on competition in the Queensland retail electricity market
- any other matter in the Minister’s direction.

The Minister’s direction (and terms of reference) details matters we must consider this year, such as:

- the pricing methodology – we must use the general ‘avoided cost’ methodology applied for previous tariff years from 2014–15 onwards
- the arrangements in place for Origin Energy to provide retail services to Queensland customers connected to the Essential Energy supply network in southern Queensland
- any other matter the QCA considers relevant.

This year no public consultation was required given we are applying the same methodology used in previous years.

1.1 Our approach

We have set the solar FiT using the avoided cost methodology. This is consistent with Minister’s direction and the method applied in previous determinations.

¹ The direction was issued in accordance with s 93 of the *Electricity Act 1994* (Qld). The direction, including the terms of reference, is provided in Appendix A.

² Further information on this review is available on our [website](#).

This approach estimates the direct financial costs a retailer avoids when it sources exported electricity from its solar PV customers (rather than the NEM). Our estimates are based on:

- the wholesale energy costs (WEC) a retailer avoids – these are the costs incurred when purchasing electricity from the NEM (see section 2.1)
- other energy costs a retailer avoids – these include NEM management fees and ancillary services fees, irregular cost pass-through items (if any) and the value of avoided energy losses (see section 2.2).

The direction also requires us to consider:

- **the effect of the solar FiT on competition in the Queensland retail electricity market** – to the extent a mandatory solar FiT set above Ergon Retail’s avoidable costs would further discourage other retailers (not subsidised by the government) to compete
- **arrangements for customers on the Essential Energy network in southern Queensland** – who are supplied by Origin Energy at notified prices, in much the same way as Ergon Retail supplies customers throughout the rest of regional Queensland.³

Table 1 describes how we have regard to these matters when setting the solar FiT.

Table 1: Additional matters

Matter	Outcome
Competition considerations	This means basing the solar FiT on the Ergon Distribution east zone, transmission region one. This is the region: <ul style="list-style-type: none"> • with the lowest cost of supply that is connected to the NEM • where competition is most likely to develop, given the concentration of customers.
Arrangements for Queensland customers on the Essential Energy network	This means ensuring the solar FiT we set is available to customers in the Essential Energy area in southern Queensland. This is consistent with the intent of the terms of reference, which requires a single FiT to be applied across regional Queensland. ^a

^a Section 92 of the Electricity Act defines the solar FiT as an amount that must be credited by a prescribed retailer – that is, Ergon Retail and Origin Energy (only for Queensland customers on the Essential Energy network) – to a qualifying customer for each unit of electricity that is produced by a small PV generator and supplied to the network.

Consistent with previous years, we estimated avoided costs for this year’s solar FiT based on the ACIL Allen (ACIL) energy cost estimates developed for the purposes of setting notified prices.⁴ As these are the estimated costs a retailer incurs to purchase electricity from the NEM, they also represent a reasonable estimate of costs a retailer avoids when sourcing electricity from a solar PV customer.

However, changes occurring in the electricity market could have implications for how we set the solar FiT in the future. In particular, there may be opportunities to further consider and refine our estimates, including as more information and data related to electricity demand and solar PV

³ Like Ergon Retail, Origin Energy incurs a financial loss to supply these customers at notified prices (which are lower than the actual cost of supply) and is therefore subsidised by the Queensland Government to compensate for this loss.

⁴ ACIL’s reports (prepared for the 2024-25 notified price review) are available on our [website](#).

exports continues to become available.⁵ Given the potential complexities, we consider broader changes to our approach and methods would benefit from further consideration, including stakeholder consultation, which would need to form part of a Ministerial direction in future.

1.2 Supporting information

A range of supporting information is available on our website. This includes:

- a fact sheet, which provides an overview of the key issues for setting the solar FiT this year
- appendices to this report
 - Appendix A: Minister’s direction
 - Appendix B: Gazette notice
- information provided as part of our review of notified prices, including ACIL Allen’s report on energy costs.

Important note to customers



Customers should not base decisions to install or upgrade solar PV systems on the expectation the solar FiT will remain at its current level in future years.

The solar FiT is largely influenced by annually updated forecasts of wholesale energy costs, which are driven by a variety of domestic and international factors.

In addition, any refinements to our approach that occur in future reviews may impact the solar FiT.

⁵ For example, we are now able to identify the demand satisfied by solar PV exports in advanced digital meter profile data (which was not possible previously). We have used this data to estimate the WEC for this year’s notified price review, as it better reflects the actual demand satisfied by a retailer. However, using this data for the solar FiT may have further implications, which therefore may be appropriate to explore in future reviews (in consultation with stakeholders).

2 Estimated solar FiT

Our estimated solar FiT reflects the direct financial costs a retailer avoids when sourcing electricity from solar PV customers (rather than the NEM).

We have estimated the solar FiT to apply in regional Queensland for 2024-25 at 12.377c/kWh. This is 7.9% lower than the 2023-24 FiT, driven largely by the decrease in the avoided WEC in 2024-25 (Table 2 and Figure 1).

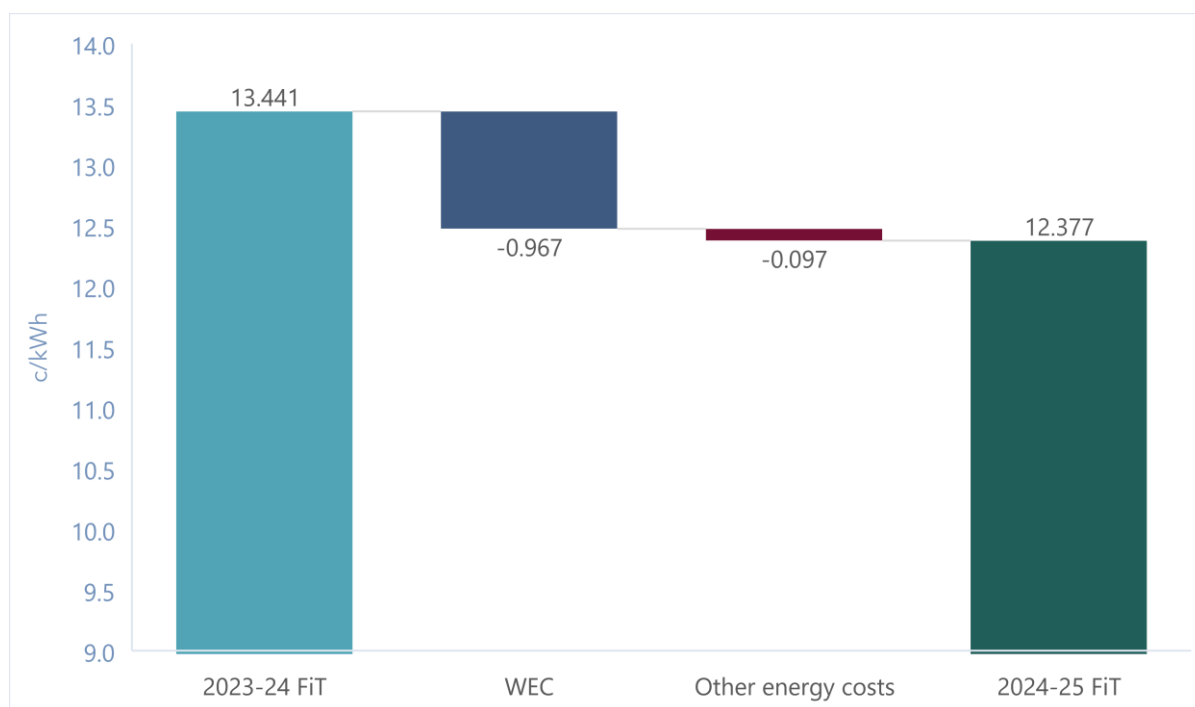
Table 2: FiT for regional Queensland, 2023-24 and 2024-25

Avoided costs	Feed-in tariff (c/kWh)		Change (c/kWh)
	2023-24	2024-25	
Wholesale energy costs	12.420	11.453	-0.967
Other energy costs	1.021	0.924	-0.097
Feed-in tariff	13.441	12.377	-1.064

Note: Estimates exclude GST. Totals may not add up due to rounding.

Source: ACIL, *Estimated energy costs*, final report prepared for the QCA, May 2024; QCA calculations.

Figure 1: Changes in solar FiT, 2023-24 to 2024-25



Note: Estimates exclude GST. Totals may not add up due to rounding.

Source: ACIL, *Estimated energy costs*, final report prepared for the QCA, May 2024; QCA calculations.

2.1 Avoided wholesale energy costs

Retailers incur costs when purchasing electricity from the NEM to meet the electricity demand of their customers. Retailers typically adopt a range of strategies to reduce their exposure to rapidly changing wholesale electricity prices (spot prices) when purchasing from the NEM, including pursuing hedging (financial), contractual and operational strategies.⁶

When a retailer sources electricity exported from its solar PV customers (rather than the NEM) it avoids these costs. Our estimate of the value of the avoided WEC is based on ACIL's WEC estimate for our final determination of notified prices for 2024-25 that uses:

- **a market hedging approach** – that estimates the WEC for a retailer that hedges spot price risk (through ASX Energy contract data)
- **the latest available information** – to take into account the current environment (this includes ASX Energy contract data up until 3 May 2024).⁷

Our approach to estimating the WEC is consistent with previous years, is transparent and is likely to produce WEC estimates that reasonably reflect market conditions for a given determination year.⁸

We have also had regard to competition considerations (as discussed in Chapter 1) and have therefore set the FiT based on the WEC estimate for Ergon Distribution's east zone, transmission region one.

Avoided wholesale energy cost estimate

We have estimated the avoided WEC to be 11.453 c/kWh, which is a 7.8% decrease from the WEC in last year's FiT determination.

This primarily reflects a slight decrease in the trade-weighted price of base contracts relative to last year – as well as the demand profile that underpins the estimates becoming flatter.⁹

2.2 Other avoided energy costs

While avoided WEC are the primary driver of the FiT rate, there are other energy costs that a retailer may avoid when sourcing electricity from solar PV customers rather than the NEM. For example, retailers:

- can avoid paying charges that are based on the amount of energy that they purchase from the NEM (like NEM management fees and ancillary services charges)
- largely avoid the costs associated with transmission and distribution losses when they source energy from PV customers¹⁰ and have less need to transport energy across long distances.

Our estimates of the value of the other avoided energy cost components are based on the cost inputs (estimated by ACIL) for our final determination of notified prices for 2024-25.¹¹ Table 2

⁶ ACIL, *Estimated energy costs*, final report prepared for the QCA, May 2024, pp 7-8.

⁷ See QCA, *Regulated retail electricity prices in regional Queensland for 2024-25*, final determination, June 2024, section 4.2.1 for further detail on how we estimate the WEC.

⁸ ACIL has compared WEC estimates in previous reviews against actual movements in the trade-weighted contract prices to demonstrate that the approach produces estimates that align with what is observed in the market. See ACIL, *Estimated energy costs*, final report prepared for the QCA, May 2024, pp 24-26, 51.

⁹ A 'flatter' demand profile results in lower hedging costs (all other things equal). See QCA, *Regulated retail electricity prices in regional Queensland for 2024-25*, final determination, June 2024, p 19.

¹⁰ As solar PV systems tend to be in residential areas, and electricity (when exported to the distribution grid) typically travels to the closest household/small business where electricity is demanded, energy losses are avoided.

¹¹ While retailers incur a range of other energy costs (which we include when we set notified prices), these costs are not avoided when retailers source energy from PV customers and so are not included in our solar FiT estimate.

describes how we have regard to these matters when setting the FiT, consistent with the requirements of the direction and our approach to previous decisions.

Table 2 Other avoided energy cost components

Avoided costs	Description	Approach
NEM fees	The costs to the Australian Energy Market Operator (AEMO) of operating the NEM	Estimated using the latest data from AEMO, including historical costs and projected changes in costs. Only variable charges are included as an avoided energy cost. ^a
Ancillary services	The costs of services used by AEMO to manage power system safety, security and reliability	Estimated using the average historical costs observed over the preceding 52 weeks, published by AEMO.
Value of avoided energy losses	The costs incurred during the transmission and distribution of electricity to customers	Estimated by multiplying the avoided WEC, NEM management fees, ancillary services fees, and irregular cost pass-through items with the percentage energy loss.

^a Fixed charges are not considered an avoided cost as they do not vary with consumption. Our final determination on notified prices this year includes both fixed and variable charges for NEM fees (See QCA, *Regulated retail electricity prices in regional Queensland for 2024-25*, final determination, June 2024, pp 21-22).

Other avoided energy costs estimate

We have estimated the other energy costs to be 0.924c/kWh, which is 9.5% lower than last year. This reflects decreases in most of the individual components.¹²

¹² In 2023-24, the other avoided energy costs included the avoided cost pass through of fees levied by AEMO in response to the market intervention triggered in June 2022 – there were no such costs included this year. See QCA, *Solar feed-in tariff for regional Queensland for 2023-24*, final determination, June 2023, pp 13-14 for more information on irregular avoided cost pass-through items relevant to the previous determination.

Glossary

ACIL	ACIL Allen
AEMO	Australian Energy Market Operator
ASX	Australian Securities Exchange
FiT	Feed-in tariff
kWh	Kilowatt-hour
NEM	National Electricity Market
PV	Photovoltaic
QCA	Queensland Competition Authority
WEC	Wholesale energy costs

Appendix A: Minister's direction

ELECTRICITY ACT 1994 Section 93

As the Minister for Energy, Renewables and Hydrogen, pursuant to section 93 of the *Electricity Act 1994* (the Act), I hereby direct the Queensland Competition Authority (QCA) to decide a flat rate feed-in tariff for the 2024-25 tariff year.

The following are the Terms of Reference pertaining to this direction.

Terms of Reference

Matters to consider

In accordance with section 93(2) and 93(3) of the Act, in deciding the feed-in tariff the QCA must consider the following:

1. The flat rate feed-in tariff should be decided using the general 'avoided cost' methodology applied for previous tariff years from 2014-15 onwards.
2. The effect of the feed-in tariff on competition in the Queensland retail electricity market.
3. The matters described below:
 - the arrangements in place for Origin Energy to provide retailer services to Queensland customers connected to the Essential Energy supply network in southern Queensland; and
 - any other matter the QCA considers relevant.

Application of the feed-in tariff

4. The flat rate feed-in tariff is to apply for the period 1 July 2024 to 30 June 2025.

Consultation

5. No public consultation is required to decide the 2024-25 flat rate feed-in tariff given that the QCA must apply the same methodology as was applied in previous Tariff Years.

Timing

The QCA must decide the flat rate feed-in tariff and, in accordance with section 94 of the Act, announce the flat rate feed-in tariff on the QCA's website and publish the feed-in tariff via Gazette Notice no later than 7 June 2024.

This direction is made by **The Honourable Mick de Brenni MP**, Minister for Energy, Renewables and Hydrogen and Minister for Public Works and Procurement:

Signed:



The Honourable Mick de Brenni MP
**Minister for Energy, Renewables and Hydrogen and
Minister for Public Works and Procurement**

Dated: 14/12/2023

Appendix B: Gazette notice

Queensland Government Gazette

FEED-IN TARIFF FOR EXPORTED SOLAR PHOTOVOLTAIC (PV) ELECTRICITY IN REGIONAL QUEENSLAND

Electricity Act 1994

Pursuant to section 94 of the *Electricity Act 1994* (the Electricity Act) and the Direction Notice from the Minister for Energy, Renewables and Hydrogen (dated 14 December 2023) issued under section 93 of the Electricity Act, I hereby state that the Queensland Competition Authority decided that on and from 1 July 2024 to 30 June 2025, the feed-in tariff, as defined in section 92 of the Electricity Act, is 12.377 cents per kilowatt hour.

Dated this DD day of MM 2024

Professor Flavio Menezes
Queensland Competition Authority