SUBMISSION:	**To the Essential Services Commission**
RE:	***Draft Decision Minimum Electricity Feed-in Tariffs from 1 July 2025: 10 January***
FROM:	**Phillip Anstis** [redacted]
AS:	**A residential owner of a 5kW roof-top solar PV system**
DATED:	**27 January 2025**
DATE DUE:	**31 January 2025**

1.0 Summary: a flawed process and a Feed-in Tariff that is demonstrably wrong

The ESC's Draft Decision is so deficient in logic, basic arithmetic, basic economic endeavour (but with an excess of faulty assumptions) that it really is quite difficult to know where to begin. That's because it basically presents as a low-quality copy 'n' paste version from previous years – but with new and significant errors embedded in it throughout.

The ESC's Draft Decision reveals several key areas where their analysis is incomplete or has not been updated. In some sections, out-of-date assumptions are simply repeated, rather than being retested and re-examined, as one would expect of a strong and active economic regulator. Yet the ESC present as strangely passive in areas of key interest to Victorian residents with rooftop solar – who are considered more as commercial small-scale generators by the ESC rather than Victorian citizens.

The Draft Decision is also misleading in several areas by omission of vital information which would enable respondents to make a more fully informed assessment of the pricing proposal and their subsequent submission.

Once these omissions, errors of logic, faulty assumptions and relevant information are updated, the overzealous nature of the ESC's attitude to reach Feed-in Tariff (FiT) net zero can be recalibrated and the correct flat FiT becomes 9.22 cents per kWh. This will be clearly demonstrated in this submission to be supported by fact and relevant legislation.

The ESC's insistence to treat Victorian residents with rooftop solar as small-scale generators of electricity for grid consumption rather than hardworking and socially-minded Victorian citizens who have invested their own private capital (that the State also benefits from) comes with risks to the ESC. One of the biggest risks is that of unconscious bias, and in the quest to drive the FiT to zero over many years to benefit electricity retailers, that bias has been revealed in all its misery in this Draft Decision. The ESC appears to take great joy in decreasing any FiT component by 0.01 c/kWhr,[1] yet steadfastly refuse to examine any FiT component that would actually increase under the proper application of their obligations under legislation and benefit small-scale generators.

[1] The *Avoided social cost of carbon* component is reduced from 2.5 c/kWh last year to 2.49 c/kWh in this Draft Decision without comment by the ESC

In addition to this obvious bias, the ESC's own engagement and feedback process also prevents Victorian small-scale generators from engaging meaningfully, denying their right to negotiate a fair and reasonable price for their solar inputs. This is due to the power imbalance in negotiating strength between the generator/supplier (being the dispersed and decentralised Victorian resident) and the purchaser (the electricity retailer as represented by the ESC). And given that the feedback period is just three weeks, and in the middle of the traditional holiday period in January, it is open to conclude that the ESC fulfils many of the definitions of unconscionable conduct according to the ACCC's definition. The Victorian government specifies standards for engagement by all public sector entities (including the ESC) but the ESC have apparently totally ignored these basic requirements and even failed to follow its own *Stakeholder Engagement Framework*. Yet another unfortunate example of unconscious bias.

If that wasn't enough already, the proposed 96% reduction in the flat FiT rate from 3.3 c/kWh to just 0.04 c/kWh provides electricity retailers with an instantaneous profit of some 75,000 % when they sell that same unit of electricity under the default offer in Victoria for about 30 c/kWh. How is that fair reward for effort for the small-scale solar generator?

Many things are very wrong with this Draft Decision, as will be clearly demonstrated by this paper. Most serious is the intransigence of the ESC to update the *Avoided social cost of carbon* component, despite publicly recognising this need two years ago. It has remained unchanged since its introduction, some eight years ago and is woefully out of date, denying small-scale generators their rightful and lawful financial returns.

The following table summarises the ESC's position in the Draft Decision (which does not even add up correctly) and the revised values as recommended by this paper once some fairly basic analysis has been undertaken.

Table 1 Flat Feed-in Tariff component summary from 1 July 2025

Feed-in tariff component	ESC Draft Decision	Recommended by this paper
Forecast solar-weighted average wholesale electricity price	-2.4	-2.37
Avoided market fees and ancillary service charges	-0.08	-0.08[2]
Value of avoided distribution and transmission losses		
Value of avoided social cost of carbon	2.49	11.66[3]
Avoided human health costs	0.00	0.01
Total Feed-in Tariff	**0.04[4]**	**9.22**

[2] Only if this figure can actually shown to be true

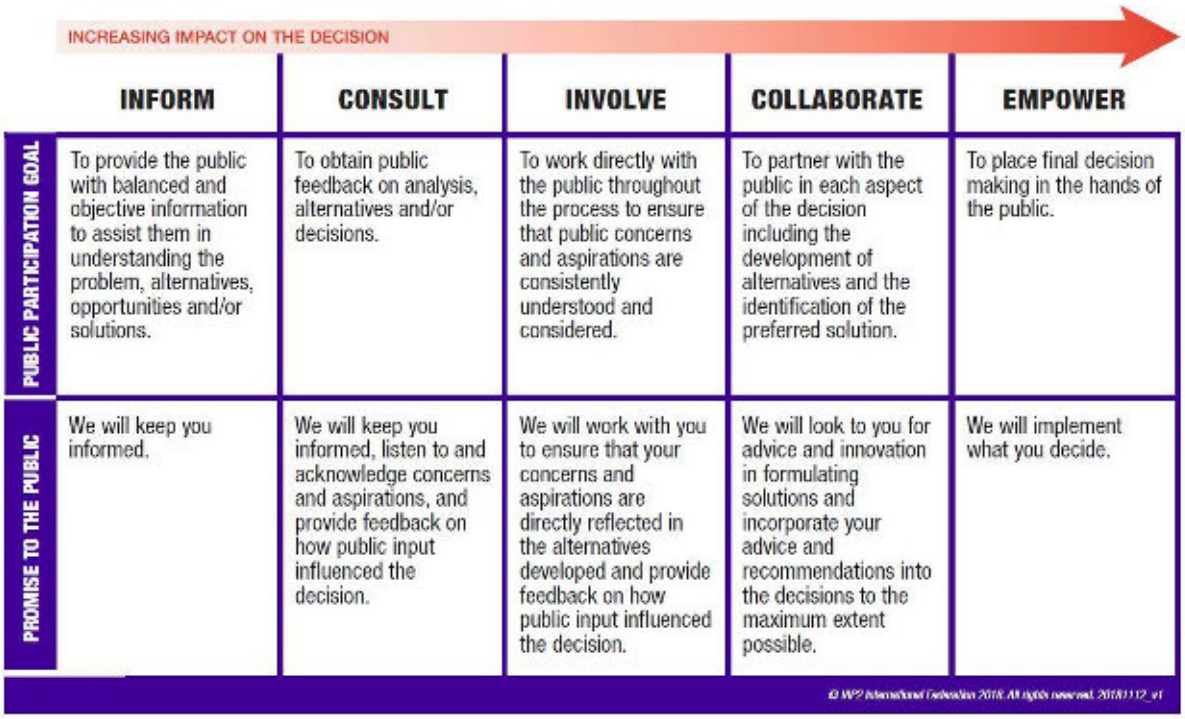
[3] A full explanation for this value is provided in section 6.0 *Value of avoided social cost of carbon* - still not updated after eight years – and here's why

[4] Note the columns of data as provided by the ESC in the Draft Decision do not add up correctly. The numbers as presented add up to 0.01, yet the ESC quote 0.04 in the Draft Decision. The reason for this basic error is explained in this paper.

2.0 Who regulates the regulator?

The Victorian Government requires all public sector agencies to adopt their Public Engagement Framework 2021-25.[5] This involves the suggested adoption and application of the IAP2 Spectrum of Public Participation model as best practice (refer Figure 1 Below).[6] [7] There is no evidence provided in this Draft Decision engagement process that the ESC have considered either resource, let alone applied them. As a matter of interest, the ESC itself demanded that Victorian water corporations adopt the IAP2 model in their pricing engagement with consumers and they did so in excruciating detail during the recent 2023 Price Review process.[8] However, the ESC appears to believe that this basic standard does not apply to itself in its engagement with the community.

Figure 1 The IAP2 Spectrum of Public Participation



Announcing this Draft Decision on 10 January 2025, the ESC has also considered that 21 days in the middle of the traditional holiday period is appropriate for consumers to read complex information, comprehend, research and respond associated with the Draft Decision.[9] If an agency reporting to the ESC considered this an acceptable time frame for consumer engagement, the ESC would be outraged. Yet somehow, this inadequate timeframe is considered appropriate for Victorians in the middle of the traditional holiday season. The ESC's own *Stakeholder Engagement Framework Document* states that up to four weeks can be made for feedback to annual updates. So why has the

[5] https://www.vic.gov.au/public-engagement-framework-2021-2025
[6] https://www.vic.gov.au/public-engagement-framework-2021-2025/legislation-policy-and-best-practice
[7] IAP2 stands for International Association of Public Participation
[8] https://www.esc.vic.gov.au/water/water-prices-tariffs-and-special-drainage/water-price-reviews Accessed 27 January 2025
[9] Refer Appendix A1

ESC disregarded their own standards, and not allowed the full 28 days for evaluation of this complex Draft Decision? [10]

Due to the lack of the explicit application of the IAP2 model the public have no idea what the intent of this engagement with the Draft Decision actually is.[11]

Is it to 'Collaborate' with the public to develop a final FiT price or is it to simply 'Inform' them of the decision made by the ESC? Given the historical record of the Final Decisions over several years, the answer is immediately obvious, it is for the ESC to continue the charade of accepting feedback but having no intention whatsoever of altering any aspect of the Final Decision.[12] The ESC should adopt the IAP2 model and explicitly state the purpose of the consultation according to this internationally accepted model, and that would be to 'Inform' only. This way the expectations can be made clear, and consumers providing submissions would be under no illusion as to the futility of providing feedback in the expectation that their views may actually influence the final decision. If the ESC wishes to counter this proposition, then they should move significantly up the IAP2 spectrum in a transparent way, and adopt an engagement method that then enables this to occur, which, as a starting point, is not 21 days in January.

The Draft Decision pushes Victorian consumers' rights into a corner where as small suppliers to a wholesale market wholly regulated by the ESC they have no bargaining power due to the absence of key information and the over-zealous attitude of the ESC who clearly do not want to alter their Draft Decision. This unfair business practice in the supplier/purchaser relationship is described as 'unconscionable behaviour' as clearly defined by the Australian Competition and Consumer Commission through the provisions of the *Australian Competition and Consumer Act 2010*. [13]

The following factors, as stated by the ACCC are relevant with regards to the pricing demands of the ESC placed on owners of roof-top solar in the Draft Decision:[14]

When deciding whether behaviour is unconscionable, the law says that the courts may also consider a range of other factors, including:

Factor	Evaluation of the ESC Draft Decision process
• the bargaining strength of the parties compared against each other	Individual residents have no bargaining strength against the ESC
• whether the weaker party could understand any documents used	The majority of individual residents would be unable to access let alone comprehend the supporting technical documentation
• the use of undue influence, pressure or unfair tactics by the stronger party	The ESC provides very little time to consider detailed technical information in the traditional holiday period of the year
• the willingness of the stronger party to negotiate	The ESC is silent on its willingness to negotiate but its past behaviour of not changing Draft Decisions in response to feedback clearly shows they have no intention of altering this Draft Decision either

[10] Refer Appendix A2 for the relevant framework.
[11] While the ESC does have a document titled *Stakeholder Engagement Framework (undated)* it is not evident that this was used to guide this consultation process.
https://www.esc.vic.gov.au/sites/default/files/documents/ESC02%20Stakeholder%20Engagement%20-Final.pdf
[12] Refer Appendix A3 for a comparison of Final Decisions and Draft Decisions
[13] https://www.accc.gov.au/
[14] https://www.accc.gov.au/business/selling-products-and-services/unfair-business-practices

So, the key question quickly becomes, who regulates the regulator?

Could we expect the ACCC to bring the ESC to heel? The answer is that Australia is beset with very weak corporate regulators and regulator on regulator action is the last thing any government would want, so the most likely answer is no.

The ESC is a public sector agency administered under Victoria's Department of Treasury and Finance (DTF). The DTF are so hopelessly politically captured that there would be no prospect of them raising any concerns with the relevant Minister, especially with the sensitives of the impending federal election and then the Victorian state election to follow.

It would appear that Victorian consumers and generators of roof-top solar energy are just going to have to live with an overzealous economic regulator who engages in unconscionable behaviour and has exhibited no desire to change, or indeed accept the need to change.

Stakeholder satisfaction with the ESC in 2023-24 was reported to be just 59%, some 6% below what is considered by the ESC to be 'acceptable' at just 65%.[15] I wonder why that could be…?

[15] Essential Services Commission 2025, *Annual Report 2023–24* p.36

3.0 Evaluation of ESC's methodology and arithmetic reveals serious defects

The following table details the progression of the FiT components from 2016 to the 2025-26 Draft Decision. Each component will be evaluated in detail in the following sections of this report.

Table 2 Minimum flat Feed-in Tariff from 2016 to 2025-26 (c/kWh)

FiT component	2016	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26 Draft[16]
Forecast solar-weighted average wholesale electricity price	4.6	8.1	6.8	8.9	7.3	3.9	2.5	2.1	0.64	-2.4
Avoided market fees and ancillary service charges	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.08	-0.08
Value of avoided distribution and transmission losses	0.3	0.6	0.5	0.5	0.3	0.2	0.2	0.1	0.05	
Value of avoided social cost of carbon	n/a	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.49
Value of avoided human health costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Feed-in tariff rate	**5.0**	**11.3**	**9.9**	**12.0**	**10.2**	**6.7**	**5.2**	**4.8**	**3.3**	**0.04[17]**

There are two key areas that are immediately apparent and require comment and explanation from the ESC:

1. There is inconsistent use of significant decimal places in the figures. It appears that the ESC decided to reporting to two significant decimal places in 2024-25 to avoid the need to round up to one significant place and deprive consumers of even the tiniest benefit. However, they appear to have forgotten about the *'Value of avoided social cost of carbon'* component until this year when it has promptly been downgraded to 2.49 c/kWh, without comment or explanation.

If the ESC is going to change the calculations to two decimal places (i.e. to the nearest 0.01 c/kWh), then they need to be consistent and transparent about this change and the reasons for doing so.

[16] As published in the 2025-26 Draft Decision

[17] Note that these figures do not add up to 0.04, they add up to 0.01. (!)

2. But the inconsistent application of how many significant decimal places to report has resulted in an even bigger blunder – the proposed FiT rate as published in the Draft Decision doesn't even add up!

As per the Draft Decision and transcribing the FiT components in order from Table 2, the arithmetic is as follows (from top to bottom):

2025-26 proposed FiT = - 2.4 - 0.08 + 2.49
= 0.01 c/kWh

However, the ESC states the FIT rate is 0.04 c/kWh in the Draft Decision, so it begs the question, what is going on here, is the rate 0.01 or 0.04?

Sure, mathematically it's a minor difference but it is mathematically incorrect, and a difference of 0.03.

Fortunately, the answer is kind of simple so therefore kind of embarrassing for the ESC as well. The Frontier Economics technical report accompanying the Final Decision calculates the *Forecast solar-weighted average wholesale electricity price* to be negative 2.37 c/kWh.[18]

When substituted back into the overall FiT calculation, we now have:

2025-26 proposed FiT = - 2.37 - 0.08 + 2.49
= 0.04 c/kWh

This is the rate quoted in the Draft Decision. However, this rate cannot be determined by reference to the Draft Decision document alone, because the -2.37 from the Frontier Economics Report was rounded down to -2.4 by someone in relation to the preparation of the Draft Decision document.

And here is the key point: the calculation for the Draft Decision was done on the basis of each FiT component being a two decimal place figure and the result of 0.04 c/kWhr was attained. Whoops.

While not a major error in the overall scheme of things, (as the FiT is still essentially zero) it does point however to a lack of transparency and consistency regarding the apparent the use of one or two decimal places in quoted figures. Most importantly though, it demonstrates a lack of vigour, attention to detail and of most concern, a lack of fundamental QA/QC processes. There is no doubt both documents would have (or should have) been read by multiple parties and at the most basic level checked that the key numbers were represented faithfully and consistently and that the numbers actually added up correctly. The fact that this did not apparently happen does not provide confidence for expert scrutiny of other FiT components. This is in fact has been found to be true and shall be demonstrated by similar simple analysis in this submission. This is doubly disappointing for the ESC because as the economic regulator, their key speciality and skill should fundamentally be… numbers.

No doubt the ESC will be embarrassed by such a silly error but now they have to decide which is the rate for the *Forecast solar-weighted average wholesale electricity price* they are going to adopt in

[18] Frontier Economics 2025. *Wholesale Price Forecasts for Calculating Minimum Feed-In Tariff 2025-26 Draft Report for the Essential Services Commission*, 9 January 2025 p.8

the Final Decision calculation: will it be the -2.37 or the -2.4? I can almost hear the electricity retailers tapping away at their keyboards demanding the use of the stated -2.4 c/kWh figure so that they can avoid paying that additional 0.03 c/kWh for the flat FiT. Surely the ESC will be true to their published -2.4 and adopt the overall 0.04 c/kWh rather than the apparently mathematically correct 0.01c/kWh, but I have grave concerns that the ESC has essentially been 'captured' (in a regulatory sense) by the large retailers and will listen to their demands over the small voices of the small-scale Victorian rooftop generators who have essentially no power in these lopsided 'negotiations'. (See section 2.0)

Surely the ESC couldn't be that heartless?

It's apparent the ESC intended to adopt figures to two decimal places throughout this sorry process, so that the FiT rate wouldn't be quoted as 0.0 if the figures were retained at one decimal place. The intent is so obvious, but again, the silence in explaining the approach from the ESC is deafening. It's obvious they didn't want to say the FiT was zero, so two decimal places fixed that little problem. What's coming next year? Three decimal places and a rate of 0.002? Still not zero the ESC would say. It would be refreshing (and transparent) if the ESC could actually discuss this in their Final Decision.

This paper will now examine and discuss the shortcomings in each FiT component of which there are plenty.

4.0 *Forecast solar-weighted average wholesale electricity price* – results in unfair outcome for consumers/small scale generators

As demonstrated in the previous section, a discrepancy exists between the calculated value of this FiT component by Frontier Economics of -2.37 c/kWh and the published value of -2.4 c/kWh in the ESC's Draft Decision Document. This appears to have brought about by confusion about whether to report and calculate figures to one or two decimal places.

But digging deeper behind the simple mathematical blunder, other assumptions, omissions of information and data sources need to be challenged in order to ensure a robust and transparent decision is ultimately made in regards to the *Forecast solar-weighted average wholesale electricity price* FiT component.

Several deficiencies have been noted, as follows:

1. The assumption that wholesale electricity prices will fall in 2025-26 is not uniformly held across the economic forecasting industry. Frontier Economics hold one view of falling wholesale prices and that is fine, but other views consider that wholesale electricity prices will in fact rise.

As recently as 18 January 2025, *The Australian* newspaper reported that based on comments from RBA Capital Markets, wholesale electricity prices have jumped in recent weeks, threatening to elevate the next default pricing benchmark for electricity bills. The article states that since

November, base contracts in Victoria have risen by 5.6% in Victoria. Year-on-year contract prices have risen by 17% in Victoria.[19] [20]

Supporting this upward pressure on future wholesale prices is further current commentary from independent firm *Electricity Brokers*. They state on their website that:

> *Rising Energy Costs and the Search for Cheap Electricity in Melbourne:*
>
> *According to the Australian Energy Regulator (AER), electricity prices in Melbourne are projected to rise by as much as 25% in 2025, primarily due to higher wholesale costs and network charges.*[21] [22]

So here are two views that directly counter the drop in wholesale electrical price as forecast by Frontier Economics.

I think the underlying issue here is one of 'unconscious bias', that is, the ESC favours information, consulting firms and unstated assumptions that support the lowering of all FiT components, while actively ignoring or arguing against those assumptions or factors that may in fact increase individual FiT components. One wonders why or how this is happening?

2. The argument around the number of solar installations is misleading.

The ESC states in the Draft Decision that:

> *The number of solar installations has increased significantly from around 446,000 in 2019 to around 787,000 by 30 November 2024. This has been part of the Victorian community's effort to reduce its carbon emissions and increase renewable energy generation. This has increased supply while demand is lower, resulting in the decreasing value of solar exports during the day since the introduction of feed-in tariffs.*[23]

Why is this seemingly simple 'statement of fact' misleading?

Simply because it does not include all the relevant information to help consumers understand the full context and therefore be able provide appropriate feedback to this process. It attempts to argue that due to the diligence and social conscience of Victorians who installed rooftop solar at their own expense, they, and they alone are to blame for the collapse in the FiT rate due to excess solar energy produced during certain times of the day making it essentially worthless. But this is not necessarily the case.

The number of solar installations actually refers to 'small-scale solar photovoltaic installations' (as identified in the Draft Decision's footnotes) which are installations of less than 100 kW in capacity as defined by the Clean Energy Regulator.[24] The average residential solar installation would be in the order of 5 kW or thereabouts. So, there is no way of knowing how many residential systems compared to larger systems that have been installed by businesses (with less than 100 kW capacity).

---

[19] The Australian. *Heat on wholesale electricity prices amid coal outages*. 18 January 2025 p.25.
[20] Refer Appendix A4 for a copy of the article.
[21] https://electricitybrokers.com.au/latest-energy-market-trends-melbourne-vic/ accessed 20 January 2025.
[22] Refer Appendix A5 for a copy of the article.
[23] Essential Services Commission 2025, *Minimum Electricity Feed-in Tariffs from 1 July 2025: Draft Decision,* 10 January p.3
[24] https://cer.gov.au/schemes/renewable-energy-target/small-scale-renewable-energy-scheme/small-scale-renewable-energy-systems

Knowing this data would help both residential and non-residential solar PV customers frame their response as these are totally different consumer groups.

But probably the most significant omission from the statement is the fact that large scale solar PV systems (above 100 kW capacity) are generating huge volumes of electricity and feeding them into the grid as well. In fact, the following table from the Victorian Government shows the current capacity of large solar plants to be 1,178 MW. [25]

Solar energy projects

A summary of solar energy facilities in Victoria that are operational, approved, in process and under construction.

STATUS	CAPACITY (MW)
Operating	1178
Approved (not operational)	6346
Planning permit application lodged and process underway	1014
Under construction	190
Total	8728

More importantly, this capacity is going to substantially increase over the coming years to a planned 8,728 MW of capacity. This will almost double the capacity from small-scale roof top solar installations (estimated to be 4,847 MW as at July 2024) and continue to place downward pressure on this FiT component.[26] However, large scale generators have strategies and capabilities to avoid exposure to wholesale negative spot prices as they can sell their solar power through Power Purchase Agreements to large customers or even have their solar panel arrays engineered so that they can tilt and track the sun during the day to maximise their solar energy and financial return.

Small Victorian consumers with a small roof top installation have none of these options available to them to mitigate the essentially zero FiT and are increasingly at the mercy of these large industrial scale installations putting downward pressure on wholesale prices. This is fundamentally unfair to this group of consumers who through no fault of their own (but it does read that way) are exposed to negative price pressures.

To omit all this information from the Draft Decision and to simply place the blame for 'excess' solar production on householders alone (which is directly inferred on p.15 of the Draft Decision) is very disingenuous from the ESC, and another telling example of how unconscious bias has inserted itself throughout this Draft Decision.[27] It appears the intention is to deter any counter-argument from consumers regarding the near zero FiT – we should be grateful it's not zero!

Consumers deserve the full facts without bias so that they can make a full and proper assessment of the ESC's Draft Decision.

3. The reduction to near zero for the flat minimum feed-in tariff will be welcomed by the large electricity retailers and will boost their retail profit margin.

The ESC has estimated the solar-weighted average wholesale electricity price to be negative 2.4 c/kWh (–2.4), which is 3.0 c/kWh lower than last year when the forecast was 0.64 c/kWh.

---

[25] https://mapshare.vic.gov.au/planningwebmaps/RenewablesSummary.html Accessed 20 January 2025

[26] https://www.pv-magazine.com/2024/08/22/australian-state-launches-plan-to-install-7-6-gw-of-solar-by-2035/#:~:text=As%20of%20July%202024%2C%204%2C847,@pv%2Dmagazine.com. Accessed 20 January 2025

[27] As stated on p.15 of the Draft Decision: *There were approximately 446,000 household solar systems installed in Victoria in 2019. This has increased substantially to 787,000 systems installed in November 2024*.

This will be music to electricity retailers' ears and tills as this FiT component has a huge bearing on the final FiT rate.

But from a Victorian residential customer's point of view, they are now being asked (told) to sell their generated electricity at a flat rate of 0.04 c/kWh to a retailer, who will instantaneously sell it on their customers for approximately 30 c/kWh (being the current Victorian default offer).[28]

Simple mathematics shows this to be a profit of approximately 75,000 %.

Hang on a minute, wasn't there a big fuss about price gouging recently?

So, at what point does an economist consider that the wholesaler provider (being the small-scale generator) is simply being 'ripped off' by the retailer by these excessive profits? I think at 1,000% profit some alarm bells perhaps might be ringing … but at 75,000 % ?? Wouldn't these be classified as windfall profits? Where's the regulator when you need them…?

Despite the big profit margin, this shows that the price of the flat FiT in no way matches the value ascribed to it by the retailer. But with the ESC the only agency in town protecting small-scale generators against this blatant rip-off, things are not looking good. Residential small-scale generators are simply being taking advantage of due to their inability to negotiate a reasonable FiT rate and the unconscionable behaviour of the ESC in this one-sided negotiation process, as described in detail in section 2.0.

But unfortunately, this is only half the story, as recent data from the ACCC reveals that average retail margin across the National Energy Market increased materially in the past year, from $34 to $110 for residential customers.[29] In Victoria, a slight decrease was recorded. The report also highlighted rising costs for electricity retailers to serve, attract and retain customers.

So, the question remains, why should residential small-scale solar generators in Victoria effectively have to forgo a fair and reasonable rate of return on their solar feed-in tariff in order to provide further profit margin to the electricity retailers? Their increasing costs are under their direct control – they can choose to operate more efficiently or they can merge operations with other companies under a number of scenarios. Under competition, they can and should do things that lower their cost to provide the service. After all this was the driver to open the electricity market up to competition. But no, it seems the easiest solution the ESC has found is to simply decimate the FiT price paid to rooftop solar owners for their generated electricity in order to subsidise the electricity retail companies.

This is simply not fair or reasonable and the Victorian public expect better.

4. **The ESC already has the power under the Act to ensure small renewable energy generation feed-in terms or conditions and prices is fair and reasonable.**

The *Electricity Industry Act 2000* provides the ESC with the legislative authority to set the FiT. But squirrelled away in the Act is also the power for the ESC to evaluate if the prices it set are fair and reasonable, as per the following extract, as follows: [30]

---

[28] https://www.esc.vic.gov.au/electricity-and-gas/prices-tariffs-and-benchmarks/victorian-default-offer/victorian-default-offer-price-review-2024-25 Accessed 20 January 2025

[29] ACCC. *Inquiry into the National Electricity Market.* December 2024. p.74

[30] *Electricity Industry Act 2000 ver.68* 19 December 2024S.40J(3) p.130

Figure 2 **Section 40J(3) of the *Electricity Industry Act 2000***

S. 40J(3) amended by No. 41/2009 s. 9(4).

(3) ESC recommended general feed-in terms and conditions must include either or both of the following—

(a) a variation to any price, term or condition that the Commission has (as part of the assessment) assessed as not being fair and reasonable to make that price, term or condition fair and reasonable;

(b) a new price, term or condition to apply in substitution of a price, term or condition that the Commission has (as part of the assessment) assessed as not being fair and reasonable.

The Act of course is very convoluted and I think this section relates to a referral that the Minister may make to the ESC about complaints of unfair terms, conditions or prices not fair and reasonable from an electricity retailer ('licensee' re Act terminology). But given that the ESC sets minimum FiT rates, and a retailer is legally able to offer the minimum flat fee FiT rate, then the only price complaint that could be brought would be in relation to the ESC's rate it has set.

In other words, the conditions already exist for the FiT rate of 0.04 c/kWh to be considered not fair and unreasonable, as has been demonstrated above.

It would be a show of good faith (but more importantly good management) for the ESC to reconsider the near zero rate of 0.04 c/kWh in light of the revelations and provisions of the Electricity Industry Act.

This would demonstrate to the community and the Minister that the ESC is willing to work hard for all Victorians to live up to its goal of protecting the long-term interests of all Victorians.

5.0 *Avoided market fees and ancillary service charges* and *Value of avoided distribution and transmission losses* – a marriage of convenience or just economic laziness?

For the first time the two previously separate and distinct FiT components *Avoided market fees and ancillary service charges* and *Value of avoided distribution and transmission losses* are seamlessly and wordlessly combined into a single factor under the lonely heading: *Other avoided energy costs.*[31]

This is quite astonishing!

The ESC has provided no rationale or discussion for this arbitrary change. It was not subject to any consultation process. The only explanation provided is the following on page 12 of the Draft Decision:

> *These components are usually positive, but for this draft decision, the negative value of the line losses outweighs the positive value of the market fees and ancillary service charges.*

Given the lack of supporting information to make this assertion, it is not possible to determine the actual truth of this statement. And given the lack of attention by the ESC to simple one or two decimal numbers as previously identified it is reasonable to ask the question – what is going on here?

The ESC should be bothered to do the full analysis of the two discrete components and provide that data in the Draft Decision. Unfortunately, Victorian consumers are unable to accept this proposition without the ESC at least putting in some effort to explain its reasoning.

These two components are completely different, which the ESC concedes as one is normally negative and the other positive.

Upon examination of these two factors over the preceding years in Table 2 it can be seen that they do indeed differ in the rate. And to arrive at a combined value of -0.8 c/kWh means that someone, somewhere has made some assumptions and calculations about each of these. As demonstrated with the failure in the previous section to add three simple numbers correctly, it is even more important that the Draft Decision contains all of the detail in relation to these two components in the interests of transparency and accountability.

I'm sure that the ESC understand that Victorian consumers are unable to accept this negative combined FiT component at face value and we look forward to the full analysis being provided in the Final Decision.

[31] Essential Services Commission 2025, *Minimum Electricity Feed-in Tariffs from 1 July 2025*: *Draft Decision* 10 January. p.12

6.0 *Value of avoided social cost of carbon*- still not updated after eight years – and here's why:

The Feed-in Tariff (FiT) component *Value of avoided social cost of carbon* has not been updated for eight long years, inconsistent with the requirements and intent of the *Electricity Act 2000.*

The ESC's Draft Decision states on page 13:

> *We have used a value of 2.49 cents per kWh for the avoided social cost of carbon, as specified in the February 2017 Order in Council.*

The ESC has consistently referred to the 2017 Order in Council's *'Order specifying a methodology and factors for the determination of the avoided social cost of carbon'* for specifying the rate.[32] It is true that the Order in Council document provides the methodology and provided the initial factors to make the initial calculation of this FiT component in 2017, which was 2.5c per kWh.

But for reasons only known to the ESC they have declined to update the variables in this methodology for eight years, despite the Order stating on several occasions that the two key variables (Price factor and Volume factor) should be for the *relevant period.*[33] Obviously in this Draft Decision the relevant period is 2025-26.

It is strange that the ESC can forecast with great vigour and energy to the half-hour the future forecasted declining cost of wholesale electricity for one FiT component, but when it comes to the *Value of avoided social cost of carbon,* an update of two simple numbers in a simple equation has been actively avoided for eight years. Why has this been a case of set and forget economics or is the ESC trying to hide something?

In a rare moment of clarity, the ESC recognised their failure to update this FiT component in their 2023 Final Decision when public submissions again pressed them on this failing and the ESC reluctantly admitted the following:

> *If we were to update the prices of Victorian Energy Efficiency Certificates to calculate the social cost of carbon we would also have to update the emissions intensity factor. The increase in Victorian Energy Efficiency Certificate prices and the decrease in the emissions intensity factor would largely offset each other.* [34]

This admission is immediately disturbing on a number of levels:

- It demonstrates the ESC know they have the power and obligation to update the *Avoided social cost of carbon* component
- It acknowledges their failure to do so

---

[32] Victoria Government Gazette. *Electricity Industry Act 2000. ORDER SPECIFYING A METHODOLOGY AND FACTORS FOR THE DETERMINATION OF THE AVOIDED SOCIAL COST OF CARBON* Order in Council. No. S 36 Tuesday 21 February 2017

[33] As defined by the Order in Council: **Volume factor** is the volume of CO2e that is avoided by each kilowatt-hour of small renewable energy generation electricity purchased by a relevant licensee, expressed in tonnes and calculated in accordance with the formula in clause 7. **Price factor** is the value of a tonne of CO2e for the *relevant financial year*, expressed in dollars and calculated in accordance with the formula in clause 8.

[34] Essential Services Commission 2023, *Minimum Electricity Feed-in Tariffs to Apply From 1 July 2023: Final Decision*, 27 February p.35

- It sounds like it could be mighty difficult work, as a total of two numbers have to be sourced
- But most amazingly, the ESC also knows the result of any such update before doing the work! The comment '*would largely offset each other*' is not the comment worthy of an active economic regulator who in all other cases follows the methodology with great zeal as specified to the nearest 0.01 c/kWh. It is quite breathtaking in its admission of dereliction of responsibility and obligation to Victoria's 787,000 small-scale generators.[35]

Why are the ESC so shy in wanting to provide an updated figure for the *Value of avoided social cost of carbon?*

Maybe the two numbers do indeed 'largely offset each other'? But it's impossible to know unless the work is done.

Let's find out.

Let's use an extract from ESC's 2024 Final Decision that clearly describes how the *Value of avoided social cost of carbon* is calculated. In the ESC's own words, yet again:[36]

> "In February 2017, the Victorian Government issued an Order in Council ('Order') specifying a methodology for determining the social cost of carbon and the factors we must consider when applying this methodology.
>
> It defines the avoided social cost of carbon as the avoided 'cost per kilowatt-hour (kWh) of small renewable energy generation electricity purchased by a relevant licensee' (e.g., retailer), determined in accordance with the following methodology and factors:
>
> $$Avoided\ social\ cost\ of\ carbon = Volume\ factor \times Price\ factor$$
>
> The volume factor, in the Order is an emissions intensity coefficient factor of 1.27 kilograms (kg) of carbon dioxide equivalent (CO2e) per kWh of electricity exported by a small renewable energy generator. This means that 1.27 kg (or 0.00127 tonne) of CO2e is assumed to be avoided for each kWh of electricity exported by a small renewable energy generator.
>
> For the price factor, we have used the method specified in the Order to determine the value of a tonne of CO2e. It results in a value of $19.63 per tonne of CO2e. The resulting avoided social cost of carbon is 2.5 cents per kWh."

So, there are only two variables that need to be updated to arrive at a current $Avoided\ social\ cost\ of\ carbon$. These are the Volume factor and the Price factor.

Where can we find the current value of these two variables? Well, this may be hard to believe, but the ESC already has the Volume factor at hand on their own website and the Price factor is easily available from a Victorian Government website. That was pretty easy research, about five minutes in all. That didn't require a 32-page consultant's report. Let's see what the numbers currently are. After all, the ESC would be interested in ensuring that the economic model is informed by the current and most up to date data and not eight-year-old data – surely?

---

[35] As at November 2024. There would be more of us by now.

[36] Essential Services Commission 2024, *Minimum Electricity Feed-in Tariffs from 1 July 2024: Final Decision*, 27 February p.40

Volume factor:

In 2022 the ESC stated in a circular to electricity retailers that the factor is:

> *1.06 kg CO2-e / kWh (kilograms of carbon dioxide equivalent emissions per kilowatt hour).* [37]

Refer to the Appendix A6 for the full document (it's only half a page).[38]

This makes the most current Volume Factor 0.00106 tonne of CO2e.

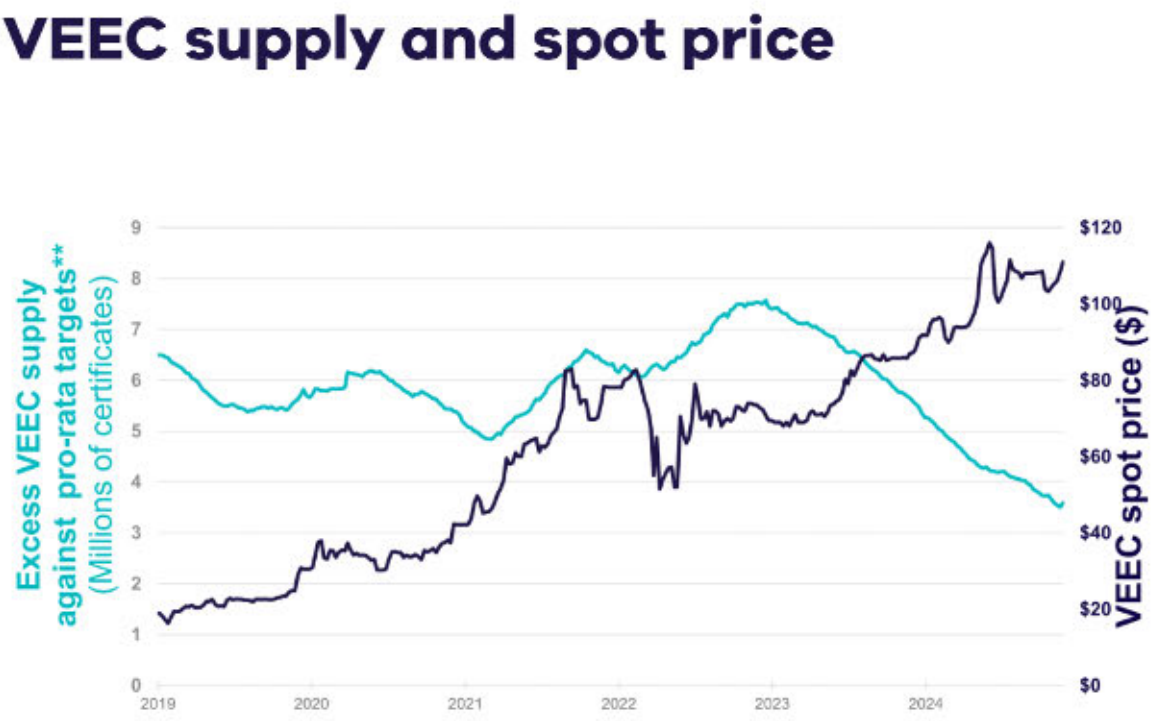
Price factor:

The Order in Council states:

> *The Price factor relates to the value of one tonne of CO2e for the relevant financial year, expressed in dollars, and the VEET average market spot price for one tonne of CO2 for the relevant period is used.*

Note there's plenty of emphasis on that 'relevant financial year' again! On 10 December 2018 the Victorian State Government renamed the Victorian Energy Efficiency Target (VEET) scheme to the Victorian Energy Upgrades (VEU) program.[39] In doing so, it changed the name of the VEET certificate (in reference to the cost of one tonne of CO2e in the Order in Council) to VEEC (Victorian Energy Efficiency Certificate).

The current cost of one VEEC is easily obtained on the Victorian Energy Upgrades website via their following chart: [40]



[37] Essential Services Commission. *Greenhouse gas co-efficient 2022*

[38] This 2022 data is the latest I could locate; the ESC should easily be able to provide updated data.

[39] By the way, the ESC also administers the VEU, so again this data should be easily available.

[40] https://www.energy.vic.gov.au/victorian-energy-upgrades/installers/industry-market-update-work-program Accessed 20 January 2025

This chart shows that the VEEC (or Price factor) has been steadily increasing as shown by the dark blue line and the right-hand side axis.

The current VEEC is about $110. If the price trend were to continue to rise, it would probably be about $120 next financial year. But we'll leave forecasting to the professionals and conservatively adopt $110 as the market spot price for one tonne of CO2e in 2025-26.

Let's now put those two values back into the equation as provided by the ESC and calculate a current *Value of avoided social cost of carbon*.

$$Avoided\ social\ cost\ of\ carbon = Volume\ factor \times Price\ factor$$

$$= 0.00106 \text{ x } 110$$

$$= 0.1166$$

The result is in dollars, so the *Avoided social cost of carbon* is 11.66 cents per kWh. We could round it up to 11.7 cents but in keeping with the two decimal places approach we'll keep it at 11.66 c/kWh.

So, there are three immediate observations:

1. This is an astonishing result, as it is approximately 9 c/kWh higher than the current proposed value of 2.49 c/kWh, which was fine in 2017, but the factors have changed since then, and will be expected to change again next year, consistent with a dynamic environment
2. This is apparently why the ESC was so keen to avoid updating the figures for this FiT component, as they no doubt knew the order of magnitude of the difference to the proposed 2.49 c/kWh.
3. In my mind the ESC has forfeited all credibility in their statement earlier:

   "The increase in Victorian Energy Efficiency Certificate prices and the decrease in the emissions intensity factor would largely offset each other."

   This is so obviously not the case.

For the avoidance of doubt, and to be crystal clear, here is a table summarising the above analysis:

Table 3 Variables used in the calculation of *Avoided social cost of carbon*

Year	**Volume factor** Volume of CO2e avoided per kWh, expressed in tonnes	**Price factor** Value of the spot price of one tonne of CO2e ($)	**Avoided social cost of carbon =** Volume factor x Price factor ($/kWh)
2017	0.00127	19.63	0.0249
2025	0.00106	110.00	0.1166

The ESC goes to great lengths to point out that residential owners of rooftop solar should be treated as small-scale generators. If that is the case (which I think is debatable anyway) then it is clearly not commercially acceptable to them that they are expected to accept a lower rate of return on their investment due to the ESC's inaction and indifference that a large-scale generator would simply not tolerate.

If the ESC does not have the courage to update the *Value of avoided social cost of carbon* consistent with the facts presented above, then they should at the very least commit to the following in the Final Decision:

- In the interests of transparency, acknowledge that the *Value of avoided social cost of carbon* has not been updated for eight years, which is against the intent of the legislation, against good economic practice and is extremely unfair to small-scale solar generators
- Commit to engaging with their political masters to seek permission to ensure this FiT rate is updated by 1 July 2025 so that small-scale solar generators receive their full legal entitlement

If the ESC does not commit to these actions, then there is one final action they need to do, and that is to review their corporate goals as listed on their website. In particular, these two could be considered redundant and should be removed: [41] [42]

- We will be a strong and fair regulator
- We will be an active regulator

7.0 *Avoided human health costs* are avoided again

The ESC has once again set a zero value to this FiT component as per the following statement:

> *We maintain the standalone avoided human health costs at 0 cents per kWh.*[43]

This has been the case since 2017. One would think that the ESC might be interested in commissioning some research to determine the latest thinking or research in this important area consistent with their stated goal of being an active regulator. But apparently not. This regulator is too passive.

There was a glimmer of interest and hope with the 2023 Final Decision and the following comment that inferred some action might be possible:

> *This area is also the subject of ongoing review by the Department of Energy, Climate and Energy Action and we will continue to monitor developments in this area.*[44]

So, the ESC said in 2023 they would 'continue to monitor developments in this area'.

Since it's been two years since the ESC made that statement, could the ESC please list for the record in the Final Decision what they have done to 'monitor developments' in this area? This could include, but not be restricted to:

- Meetings held with DEECA staff
- Meetings held with relevant academic research institutions
- Journal papers researched and read

---

[41] https://www.esc.vic.gov.au/about-us/what-we-do Accessed 22 January 2025
[42] See Appendix A7
[43] Essential Services Commission 2025, *Minimum Electricity Feed-in Tariffs from 1 July 2025: Draft Decision* 10 January. p.13
[44] Essential Services Commission 2023, *Minimum Electricity Feed-in Tariffs to Apply From 1 July 2023: Final Decision,* 27 February p.37

- Journal papers written
- Contact with other similar like-minded economic regulators in other jurisdictions e.g. interstate and/or international
- Attendance at any relevant conferences either interstate and/or international
- Discussions with other colleagues in structured meetings
- Internal research papers written
- Internet searches on key terms

This list will give Victoria's generators of rooftop solar electricity confidence that the ESC is true to their word and are indeed continuing to 'monitor developments' in this area. After two years, one would expect quite a bit of action from Victoria's strong and active economic regulator.

In order to spur the ESC into some reportable action on this FiT component, it may be a good idea for them to set the rate at 0.01 c/kWh, the smallest rate available (unless of course three decimal places are suddenly and without explanation introduced). This near zero rate should be very uncomfortable to the ESC and propel them into action to provide research into the actual *Avoided human health costs* of solar energy, as provided by small-scale generators.

Surely the rate can't continue to be zero, otherwise what is the point of removing all that nasty particulate matter, noxious gases (sulphur dioxide) and heavy metals (mercury) from coal-powered generators I'm constantly hearing about? [45] [46]

And in fact (not surprisingly), the health cost is not zero. As a starting point, the ESC may like to consider the following statement from Environmental Justice Australia:

> *In August 2020, we released new research by a team of volunteers from the Actuaries Institute of Australia, which calculates the economic cost of the health impacts of coal-burning power stations at an annual health bill of $2.4 billion.*[47]

Given that this figure is provided by the Actuaries Institute of Australia, one would have every confidence in its veracity.

And also given that Victoria has 19.7% of Australia's total small-scale rooftop installations,[48] then it stands to reason that small-scale generators in Victoria are responsible for a fair proportion of mitigating those expensive health impacts.

In addition, it is reported by SolarCitizens on their website:

---

[45] https://environmentvictoria.org.au/2018/09/21/exposed-the-dirty-secrets-of-victorias-coal-burning-power-stations/ Accessed 22 January 2025

[46] Victorian coal plants producing highest mercury pollution in the country, report shows. https://www.abc.net.au/news/science/2019-04-01/coal-fired-power-emissions-mercury/10958128 Accessed 22 January 2025

[47] https://envirojustice.org.au/publication/health-costs-of-coal-burning-power/#:~:text=In%20August%202020%2C%20we%20released,health%20bill%20of%20%242.4%20billion. Accessed 27 January 2025

[48] https://cer.gov.au/markets/reports-and-data/small-scale-installation-postcode-data Accessed 27 January 2025. This shows that Victoria has 787,457 rooftop solar installations with the total across Australia being 3,989,852. Accessed 27 January 2025.

Based on research by the Australian Academy of Technological Sciences and Engineering, each kWh of solar PV that displaces coal fired electricity contributes 1.3c in reduced health costs.[49]

Now that the ESC has a starting point of a verifiable economic dollar cost health benefit from two reputable entities in Australia, perhaps they would like to show us how to calculate the *Avoided human health costs*. This can be shown in the Final Decision.

This is normal work that would be expected of a strong and active regulator.

8.0 Conclusions – will the ESC redeem themselves?

This paper has conclusively identified major deficiencies by the ESC in both the *process* and *content* that make up this Final Decision.

The *process* itself is unclear in the intent of the engagement and exhibits deficiencies consistent with the definition of unconscionable behaviour by the ACCC as the ESC abuses its position of strength in this one-sided negotiation process. There is no evidence of following accepted or recommended Victorian State government practices for engagement and despite the ESC having their own *Stakeholder Engagement Framework* (which they do not reference), their actions do not match their commitments made in that document. In short, the ESC has failed Victoria's residents and businesses (who are narrowly defined as small-scale generators) in not attempting to engage with them meaningfully. A three-week engagement period in the middle of the holiday season does not meet the ESC's own guideline of four weeks or any test of reasonableness.

These failings of process mean that citizens of Victoria are being denied their rightful opportunity and sufficient time to examine in detail a very complex proposal and provide thoughtful, researched responses.

But that be just as well, as history shows the ESC has no intention of altering its Draft Decision in response to feedback.

We now turn to the *content* of the Final Decision, and has been demonstrated, each individual Feed-in Tariff (FiT) component has been tainted by obvious unconscious (and possibly very conscious) bias by the regulator to zealously drive the FiT down to net zero.

In summary, the key deficiencies are:

- Reliance on single sources of information to forecast future wholesale electricity prices, rather than actively seeking additional and alternative viewpoints
- Failure to provide sufficient quality control between technical documents and drafting of the Final Decision so that simple numbers in the Final Decision simply do not add up. This just demonstrates their overall approach to this process – minimal care and minimal interest.
- An inconsistent use of stating FiT figures to one or two decimal places in a less than subtle attempt to not have the FiT calculate as 0.0, accompanied with a complete lack of transparency around this practice

[49] https://www.solarcitizens.org.au/fairpricefacts#:~:text=much%20higher%20value.-,Health%20benefits,c%20in%20reduced%20health%20costs. Accessed 27 January 2025.

- Wordlessly combining two previously separate FiT components (*Avoided market fees and ancillary service charges* and *Value of avoided distribution and transmission losses*). In addition, no supporting information or analysis is provided that enable the reductions in these FiT components to be verified at all.
- A complete failure to update the *Value of avoided social cost of carbon* after eight years of inaction, despite publicly recognising it needed to be done, and then, stating that that there wouldn't be much difference anyway even if they did. Analysis by this submission has revealed that the two numbers required to update this FiT are readily available and make a major difference to the overall FiT in favour of the small-scale generator. Such a blatant move to deliberately ignore this component is just incredible to believe, until one remembers the quest to drive the FiT to effectively zero.
- A complete failure to undertake any effort to monitor developments on the *Avoided human health costs* despite publicly pledging to do so and easily available publicly information from two of Australia's respected entities suggesting indeed this cost can be easily identified and quantified.

The overall outcome has been to shortchange Victorian small-scale generators what is rightfully theirs under Victorian legislation, whether the ESC agrees with the outcome or not. The ESC's Draft Decision recommends a flat rate of 0.04 c/kWh, whereas when the above points are properly considered, the real rate is shown to be closer to 9.22 c/kWh.

The ESC state they are a strong, fair and active regulator. This analysis has shown they are the complete opposite; being demonstrably weak, unfair and passive to the detriment of Victorian citizens they purport to act for.

If they wish to regain the trust of Victorian residents who happen to be small-scale rooftop generators of solar electricity, then this paper has identified clear actions they can undertake between now and the Final Decision to correct their errors and redeem themselves.

Appendix

A1 Consultation timeframe of 21 days as provided by the ESC [50]

Draft decision
10 January 2025

Consultation closes
31 January 2025

A2 Extract from ESC document Stakeholder Engagement Framework for an annual update (undated) [51]

Example 2: an annual update of guidance or minor amendments to guidelines

Stage of process	What will happen	Indicative time frame
Notification of intent	• Discuss opportunities for improvement with sector stakeholders – request input to identify relevant issues – promote timelines and opportunities for input	**Where possible, up to three months** ahead of any changes
Engage on key issues - test initial thoughts	• Discuss project as part of usual engagement e.g. regular forums and catch ups	**Part of usual engagement program**
Distribute draft for input	• Distribute draft updated guidance or guideline and invite submissions • Hold stakeholder forums to test the draft	**Up to four weeks**
Release updated guidance	• Distribute updated guidance or guideline	**Up to eight weeks** (depending on other priorities and competing timelines)
Evaluate process	• Conduct a self-assessment to identify areas for improvement.	**Commence within six weeks** of final decision

11

Whatever happened to the first two stages…?

Small generators have been unfairly excluded from the full process, if indeed it was ever conducted.

The ESC had four weeks to have the Draft Decision open for feedback, yet chose only three in the middle of the January holiday period. Why?

[50] https://www.esc.vic.gov.au/electricity-and-gas/prices-tariffs-and-benchmarks/minimum-feed-tariff/minimum-feed-tariff-review-2025-26 Accessed 24 January 2025

[51] https://www.esc.vic.gov.au/sites/default/files/documents/ESC02%20Stakeholder%20Engagement%20-Final.pdf p.11 Accessed 24 January 2025

A3 Changes made to the flat Feed-in Tariff in the Final Decision following feedback (c/kWh)

The following table shows that the ESC has not changed the Draft Decision in response to numerous and well-argued feedback submissions from residents of rooftop solar over the past five years. The only minor differences made were the result of changes to the forecast wholesale electricity price between the Draft Decision and Final Decision periods.

Table A1 Changes made to the flat Feed-in Tariff in Final Decision following feedback (c/kWh)

Year	Draft Decision	Final Decision	Difference
2025-26	0.04	TBD	TBD
2024-25	3.3	3.3	0.0
2023-24	4.8	4.8	0.0
2022-23	5.2	5.2	0.0
2021-22	7.1	6.7	-0.4
2020-21	10.0	10.2	+0.2

A4 Extract from The Australian newspaper. 18 January 2025 p.25

Heat on wholesale electricity prices amid coal outages

COLIN PACKHAM

Wholesale electricity prices have jumped in recent weeks amid coal power outages and transmission issues, threatening to elevate the next default pricing benchmark for electricity bills.

RBC Capital Markets analyst Gordon Ramsay said recent partial outages at NSW's two largest coal power plants, Origin Energy's Eraring and AGL Energy's Bayswater, were major drivers of increased wholesale electricity futures in November – stoking already elevated prices.

Since November, base contracts have risen about 5 per cent across the board.

Electricity base contracts for 2024 are up in NSW (4.6 per cent), Victoria (5.6 per cent) and Queensland (7.5 per cent), Mr Ramsay said.

Year-on-year, contract prices have increased by 19 per cent in NSW, 17 per cent in Victoria, and 25 per cent in Queensland.

Any upward revision to the Default Market Offer, which is reset in July 1 each year as a benchmark for electricity bills paid by households and businesses, would be a hammer blow to households under a cost-of-living crisis, as well as the re-election prospect of the federal Labor government.

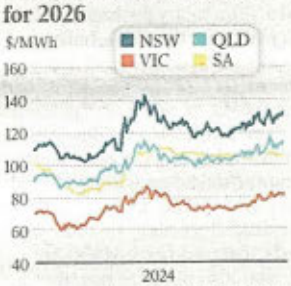
However, it would boost retailers such as AGL Energy and Origin Energy.

While the Default Market Offer includes a plethora of retailer costs, wholesale prices are the largest contributor to how tariffs will be set by the Australian Energy Regulator.

The watchdog includes wholesale costs over a multi-year period, so even higher wholesale prices in recent months are not guaranteed to lead to higher tariffs when they are reset on July 1.

Still, the prospect alone will be hard for the government as it tries to placate voter frustration amid inflation struggles – the central bank has lifted interest rates 13 times to a 13-year high, with electricity prices a major driver of inflation.

Power futures contracts for 2026



Source: RBC Capital Markets

The government has sought to highlight the impact of Russia's invasion of Ukraine as a catalyst for the global energy crisis, but with coal prices tumbling, much of the recent jumps are driven by Australia's precarious energy mix.

Coal remains the dominant source of the nation's energy, but several power stations have shuttered in recent years as renewables make them increasingly unprofitable.

With the government struggling to accelerate the rollout of more renewables, Australia remains dependent on coal, though many stations are nearing the end of their technical lifespan, which has led to unreliability.

This week, CS Energy's Callide C in Queensland experienced problems. The B1 unit was removed from service on Tuesday and was supposed to be back two days later. But CS has since revealed the unit will now not return until Sunday.

"Crews were unable to positively verify the proper functioning of a valve during regular fortnightly testing of safety systems," the operator said.

"Our inspections of the unit

Continued on Page 26

A5 Extract from Electricity Brokers website

Rising Energy Costs and the Search for Cheap Electricity in Melbourne

According to the Australian Energy Regulator (AER), electricity prices in Melbourne are projected to rise by as much as 25% in 2025, primarily due to higher wholesale costs and network charges.

Electricity prices in Melbourne have risen sharply in recent years, primarily due to increased demand and network infrastructure upgrades. According to the Australian Energy Regulator (AER), wholesale electricity prices in Victoria increased by 141% between Q2 2022 and Q2 2023, with 2024 seeing further upward pressure due to supply issues . This has prompted many businesses to search for "cheap electricity Melbourne," which is becoming more challenging to find.

The Victorian Energy Market Report 2024 (Victorian Energy Market Reports – Essential Services Commission) highlighted that energy bills for small and medium businesses increased by an average of 15% over the past year due to a tightening supply and demand imbalance.

The volatile pricing is expected to continue, driven by factors such as:

- **Decreased Coal Plant Output:** As ageing coal plants are phased out, there is greater reliance on renewable energy, which hasn't fully stabilised the market yet.
- **High Network Costs:** Transmission upgrades to support renewable energy are adding to electricity bills.

A6 Current Volume Factor as provided by the ESC [52]

Greenhouse gas co-efficient 2022

The commission's Guideline 13: Greenhouse gas disclosure on electricity customers' bills for customers other than small customers and clause 25A of the Energy Retail Code require the greenhouse gas co-efficient for a calendar year to be calculated and advised to retailers.

The Department of Environment, Land, Water and Planning has advised the new co-efficient retailers are to use in Victoria is: 1.06 kg CO2-e / kWh (kilograms of carbon dioxide equivalent emissions per kilowatt hour). This figure should be applied directly to the amount of electricity consumed by the end-user.

We aim to publish the new yearly co-efficient in December of the preceding year, so retailers have time to update their billing systems to reflect this information. This year's publication of the information has been delayed.

The commission understands retailers will require some time to incorporate this new information into their billing systems and require the new co-efficient be reflected in bills by 1 July 2022.

[52] The Volume Factor can also be referred to as the Greenhouse gas co-efficient

A7 ESC organisational goals

We will be a strong and fair regulator

To increase trust that we will deliver in the best interests of consumers we will:

- hold regulated businesses to account and deter behaviour that is not consistent with the rules we administer
- promote behaviour in the best interests of consumers
- make use of all the powers available to us in our legislation.

We will be an active regulator

To continue to respond effectively to the changing environment and solve real problems we will:

- engage with the community and stakeholders to understand their needs and expectations
- use data sources and intelligence to assess what is happening in regulated sectors
- continuously improve our regulatory processes and reform our codes
- look for ways to proactively solve issues