

Re Minimum feed-in tariff for solar PV

Professor Peter Seligman

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I note that the ESC has again omitted to set a component of the feed-in for the avoided health cost from solar PV, the rationale being that “the causal chain was too lengthy and uncertain to reliably attribute a given quantum of health benefit with a given unit of output from distributed generation”. I believe that I have developed a valid methodology for estimating this benefit.

Whilst I would agree that the methodology is subject to inaccuracy, I maintain that it is as valid, if not more valid than the other means used in the FiT determination. For example the “social cost of carbon” being determined by a simple market value, not a scientific analysis.

I further suggest that the actual value of solar PV exceeds the ESC Social Cost. My rationale is as that it reflects export only and not generation. So whilst an FiT based on export is one method of determining the social and health costs, this neglects the benefit of self-consumption, which also clearly reduces fuel use.


I attach my methodology re the health benefit but make the further point that the proposed *Value of avoided distribution and transmission losses* and *Value of avoided social cost of carbon* of 0.4 and 2.5 cents/kWh should reflect generation rather than just the export portion. These should be multiplied by 1.5

My estimate of the avoided human health cost is 2.9 cents/kWh as detailed in the attached spreadsheet and document.

Therefore I propose a FiT rate of 15.4 c/kWh.

Fit component	2019 – 2020 (ESC proposal)	2019 – 2020 (my proposal)
Forecast solar weighted average wholesale price	8.0	8.0
Avoided market fees and ancillary service charges	0.1	0.1
Value of avoided distribution and transmission losses	0.4	0.6
Value of avoided social cost of carbon	2.5	3.8
Value of avoided human health cost	0	2.9
FiT rate	11.0	15.4

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My credentials:

I am the author of Australian Sustainable Energy – by the numbers, published by the Melbourne Energy Institute.

https://energy.unimelb.edu.au/_data/assets/pdf_file/0006/1944060/Australian_Sustainable_Energy-by_the_numbers.pdf

This work has been responsible for the initiation of the Cultana Pumped Hydro Project

<https://www.energyaustralia.com.au/about-us/energy-generation/energy-projects/pumped-hydro>

I have been awarded a Doctor of Engineering Honoris Causa, by the University of Melbourne and work part-time at the Bionics Institute of Australia.

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