

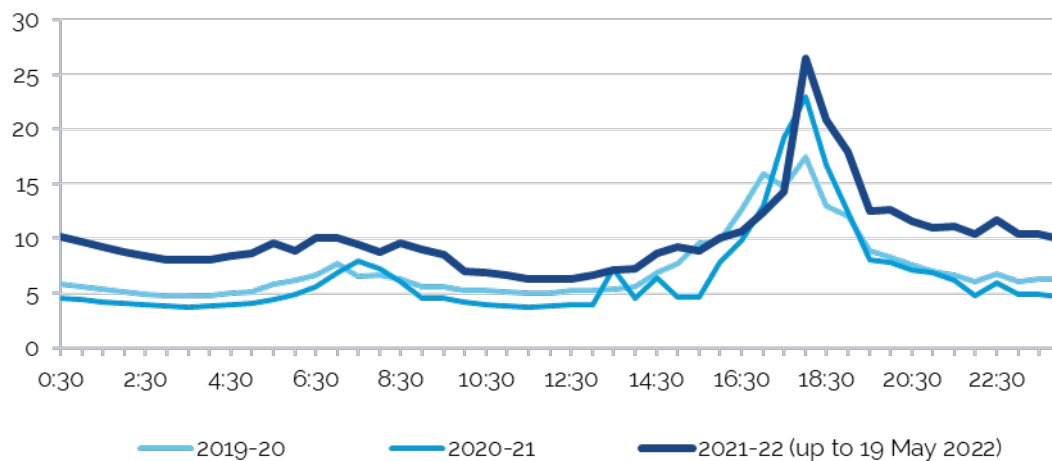
IPART's time-of-day solar feed-in tariff benchmarks 2022-23

10 June 2022

IPART sets time-of-day solar feed-in benchmarks which provide guidance about the value of solar exports at different times of the day. Figure 1 shows that typically, wholesale prices are:

- Lower through the middle of the day (when solar energy meets a proportion of demand) and late at night (when demand is lowest), and
- High in the late afternoon and evening (when demand is highest, and when solar energy meets little or none of this demand).

Figure 1 Average annual wholesale electricity spot prices by time of day (c/kWh)



Note: 0:30 means the period between 0:00 to 0:30.

Source: IPART analysis based on AEMO's [aggregated price and demand data](#), accessed 20 May 2022.

IPART's benchmarks reflect the above variation in prices. Our benchmarks for 2022-23 are below.

Table 1 Time-of-day solar feed-in tariff benchmark ranges

Time period	2021-22 (c/kWh)	2022-23 (c/kWh)	% of solar exports ^a
6 am to 3 pm	4.3 to 5.1	5.6 to 9.7	90.91
3 to 4 pm	6.6 to 8.1	7.7 to 14.3	6.23
4 to 5 pm	9.6 to 12.4	12.3 to 24.8	2.28
5 to 6 pm	11.5 to 14.5	11.1 to 20.0	0.41
6 to 7 pm	8.5 to 9.9	16.3 to 27.4	0.03
7 to 8 pm	6.3 to 7.3	9.9 to 16.5	0.01
8 pm to 6 am	4.3 to 5.1	6.3 to 10.5	0.12

a: Proportions are based on exports in 2020-21.

Source: IPART analysis based from annual solar export data from Ausgrid, Essential Energy and Endeavour Energy

Wholesale prices peak in the evening

Table 1 shows that our highest time-of-day benchmark for 2022-23 is around 27 c/kWh during 6 to 7pm (up from 14.5 c/kWh between 5 and 6 pm currently). Less than 0.1% of exports currently occur between 6 and 7 pm. However, as batteries become more widespread, customers will have more control over when they can export power to the grid.

As electric vehicles become more affordable, more customers will have access to batteries. Solar customers with electric vehicles will be able to charge their car battery during the day with their solar panels. In the future, new technology could mean that as well as powering their car, the car batteries could be used to power household usage, or export electricity to the grid at high value times.

Most retailers are not currently offering time-varying tariffs

Retailers may offer different feed-in tariffs throughout the day in line with our benchmarks to reflect the variation in wholesale prices. However, retailers are not required to offer different tariffs throughout the day. We have found that most retailers are continuing to only offer an all-day rate for solar exports.

The benchmarks are higher in 2022-23

Figure 1 above shows that wholesale prices are currently higher than previous years. We expect prices will continue to rise, and so our time-of-day feed-in tariff benchmark ranges for 2022-23 are higher than the current benchmark ranges.

Factors that are contributing to the higher forecast wholesale prices include:

- reduced thermal generation from planned and unplanned outages at power plants
- higher coal and gas prices, exacerbated by the ongoing war in Ukraine
- extreme weather conditions in NSW and Queensland which have affected coal supplies and electricity demand.¹

¹ AER, [Default market offer prices 2022-23: Final determination](#), 26 May 2022, p 2