

Lightfoot Enterprises Energy Diary – Note for teachers and parents (February 2022)

1. Properties with Solar PV panels receive kWh from the panels as well as from the National Grid so an alternative version of Page 6 ("Meter Watch") is needed for such installations.
2. Both the kWh drawn from the grid and the kWh supplied by the PV panels are metered. The total of the two overstates the amount used by the property because it doesn't allow for the automatic diversion to the grid of power from the PV panels that exceeds the property's demands, while ignoring the kWh from the Panels understates the property's usage. The understatement is very considerable on sunny days when the Panels generate far more than the property demand and the grid supply will be nil for many hours.
3. As there is no Export Meter the amount diverted to the grid from the PV supply over time is not actually known, but a figure is required for the purposes of calculating the FIT export credit payable to the Occupier. Ofgem assumes that, on average, the amount exported is 50% of the total and, in the absence of any more logical basis, it seems reasonable to adopt the position that the other 50% is the amount used by the property.
4. The simplest way of modifying the Meter Watch page to take account of the assumed amount is to add two "Solar PV" columns in which can be entered 50% of the solar PV meter readings. A Solar PV version of the Meter Watch page has been devised for this purpose and is attached as Page 2 of this note.

METER WATCH (Solar PV version) Please ask an adult to help you take the meter readings at the same time each day and work out how many units of electricity (kWh) are used in a day. For more information about which items need the most energy see: <https://www.ovoenergy.com/guides/energy-guides/what-is-a-kwh-kwand-kwh-explained.html> To help you with the next section have a look at this website: <https://www.funkidslive.com/learn/smart-meters/what-is-a-gas-and-electricity-meterwhere-is-my-gas-or-electricity-meter/>

Meter Readings, kWh			Minus (totals)	Meter Readings, kWh			Equals	Units of electricity used per day (kWh)
Electricity	Solar PV*	Total		Electricity	Solar PV*	Total		
Day 2			-	Day 1			=	
Day 3			-	Day 2			=	
Day 4			-	Day 3			=	
Day 5			-	Day 4			=	
Day 6			-	Day 5			=	
Day 7			-	Day 6			=	
		Total	-			Total	=	

A **Smart Meter** is provided by your energy supplier. It measures energy, as you use it in the home, both in kWh and cost.

Do you have a Smart Meter?

If yes, do you use it to see how you can save money on bills?

YES NO

YES NO

* Enter the solar PV meter readings divided by 2 (see page 1 for explanation)