Performance and consumption task

A detailed guide on the consumption task can be found here.

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Where is section C, D and E of the performance report?

These sections are displayed in both the **MCS performance report** and the **performance and battery pages of the customer proposal**. You can find the performance report from the 'forms' drop-down or by clicking the three dots in the top corner of the Performance task.

Easy PV will only show these sections in the MCS performance report if the MCS self-consumption calculation has been completed. The MCS method can only be completed if the generation is less than 6000kWh, the consumption is between 1500-6000kWh and the usable battery capacity is less than 15.1kWh. An alternative method is offered in the Consumption task.

As long as the Easy PV or MCS method is selected in the Financial task, the equivalent to section C and D (if there is a battery) can be found in the bottom left corner of the performance and battery storage pages of the Customer Proposal. If there is no battery, sections A-C will appear in the bottom left corner of the performance page.

What is self-consumption?

Self-consumption is the proportion of electricity generated that is then consumed within the property. This could be directly or via a battery:

> **Self consumption = Solar PV electricity consumed within property (kWh) / Solar PV electricity generated (kWh)**

Energy that is not self-consumed is then exported to the grid. A higher self-consumption typically means a faster payback period since this reduces the amount spent on energy bills. Read here for guidance on how to reduce your payback period.

What are the differences between the MCS and Easy PV self-consumption calculations?

> This guide applies to easy-pv.co.uk. For easy-pv.ie only the Easy PV method is available.

There are a few differences between the Easy PV and MCS self-consumption calculations:

1. **System size**
   - MCS: can be used for projects with consumption between 1500-6000kWh, generation below 6000kWh and usable batter capacity below 15.1kWh.
   - Easy PV: can be used for any system size and consumption level.
2. **Consumption profiles**
   - MCS: choice between domestic consumption profiles: home all day, home half the day and out all day.
   - Easy PV: additional choices between commercial consumption profiles. You also have the option to upload half-hourly meter data to ensure the consumption profile is entirely accurate to the customer's usage.
3. **Method**
   - MCS: self-consumption is determined based on lookup tables specified in MGD 003.
   - Easy PV: uses the same total generation figure but then uses PVGIS data to model how this is distributed across the year. Easy PV then calculates steps minute by minute over the course of the year, looking at how much is being generated, how much is being consumed and how charged the battery is and diverting the energy accordingly.
4. **Additional options**
   - Since Easy PV calculates how the generated electricity is used minute-by-minute rather than annually, it means **export limits**, **variable tariffs** and **forced charging/discharging of batteries** can be factored into the model. Easy PV also factors in **inverter clipping**.

The MCS self-consumption calculations in the Performance task don't work for my project - why?

The MCS calculations won’t work for projects with an annual generation greater than 6000 kWh, annual consumption not between 1500-6000kWh or with battery storage over 15.1kWh.

For these situations, we recommend using the Easy PV Consumption task to generate accurate system projections and then ensure you select the Easy PV calculations in the Financial task.