The Sheffield Solar Farm

Micro-Generation Database

March 2013, Report 20

Home Solar Energy Calculator App.

You may remember some articles last summer on an iPad app that some of our students, Jamie and David were developing.

It has been a long time in the making, but the iPad app project which they have been working on is finally complete. The app, called 'Home Solar Energy Calculator', is now available to download for free.

The app allows users to enter information about their PV installation along with some information about their electricity consumption. It then displays a typical years' worth of generation and consumption data on a graph, along with the amount of PV being exported at a given time.

This is version 1.0 and so we'd really appreciate some direct feedback from our Microgen users. If you've got an iPad, please download the app and let us know what you think via email. If you like the app, please rate it on the app store so that we can gain more exposure.

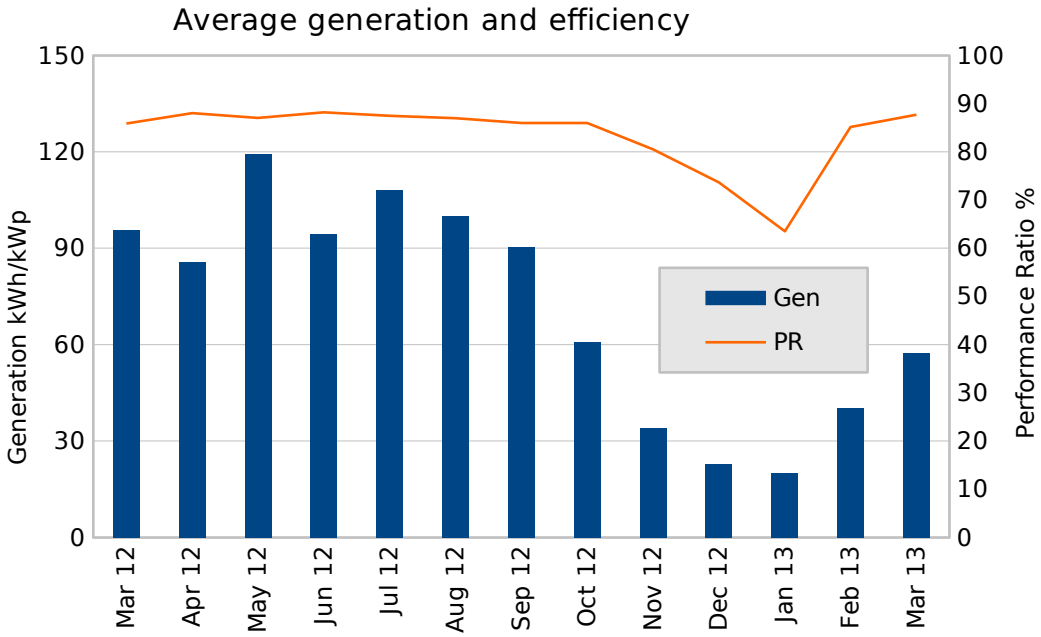
We're also hoping the app will provoke some discussion about the concept of combining domestic PV generation with batteries or other storage technologies, so feel free to talk about it on the Microgen forums.

The Home Solar Energy Calculator App.

- Enter your PV system and home details on the left

- Adjust the battery size that you want to add using the slider below

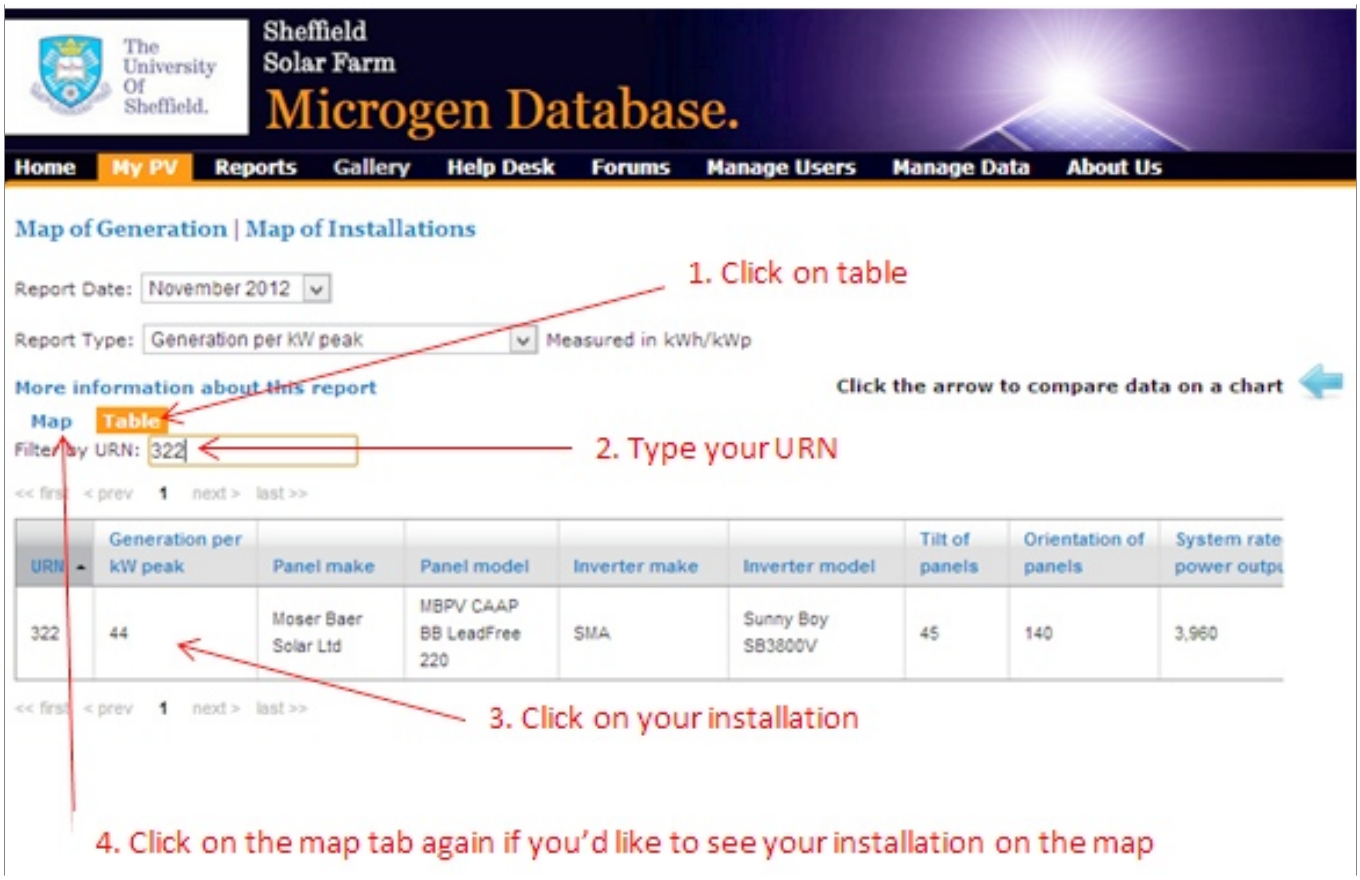
- See the effects that battery storage could have in the graphs on the right.



Average generation and efficiency graph

Generation in March this year was significantly lower than last year, down nearly 40% from 95 to 57kWh/kWp. It is likely that April will bounce back as it was a bad month for generation last year, yielding less than March.

The March drop in generation was reflected in the year on year average generation which fell by 4% from 869 kWh/kWp last month to 832 this month.



How to use the site...

If you think any part of the site is hard to use, email us and we will include an article here.

How to find your installation

A few of you have contacted us recently to say you cannot find your installation on the maps. We realise this part of the website is a bit tricky to use, especially as we randomise your location slightly to protect your privacy.

Instead of clicking many systems on the maps to find your own, there are a couple of ways to find it:

1. Click on the 'Map of Installations' link just under the banner menu (see image above).

2. follow the four steps in the illustration above on the 'Map of Generation' page.

If you still cannot find yourself it may be that we do not have sufficient data to include you. To calculate your monthly generation we need at least one reading from within 10 days of the start and the end of at least one month. If you have checked your data and still cannot find your installation then please let us know and we'll look into it for you.

Forum debates

There has been a lengthy debate on the forum recently on whether it is worth investing in solar PV in the north east of England in a topic entitled 'Basics for Beginners'.

A new member has been wondering whether to invest. He has used the site to see what other generators in the area are producing, and discussed this along with the financial side of PV versus other options such as financial investments. We don't provide any financial data on PV systems and are not geared to discuss the ins and outs of investment, but it is a good example of how users of the site can share their knowledge to educate possible new PV generators. Telegram Sam remains sceptical of the financial benefits of a PV system at his location, but is still considering the idea.

Another user, rogerhoward provided a wealth of useful advice for someone considering installing a system. kwakefield added some good practical tips such as choosing the colour of your panels and siting of balance of system equipment for neatness and good access. avalanche rounded the discussion off by pointing out that an investment in PV is an investment in the future for our children.

Another discussion was focussed on system shading from new objects. As some of you will know through experience, the effects of shading can be disproportionately high with close objects. Even cables can cause a reduction in generation. Rick M, one of our members in Sheffield, has raised the issue of shading from a new street light outside his house. He is in Sheffield, where all of the street lighting across the city is due to be replaced over the next few years, so he may not be alone in this.

Steve Rogers raised the idea of using light trespass as a grounds for objection, where you can object if light falls onto your house from a new source. Of course he may find his system begins generating during the night, but that is unlikely to make up for the losses!