|  |  |
| --- | --- |
| CEW logo colour | SOLAR PV  MONITORING REPORT |
| October 2013 |

**Cloudy September reduces PV output**

A cloudy September has been followed by a mostly dull October, with the solar PV arrays at both Stratford and Warwick hospitals both generating less electricity in October 2013 than in the same month last year. However, the two arrays are still likely to produce a higher level of generation in 2013 than in 2012.

**Warwick Hospital – performance in October 2013**

As in September, less energy was generated by the solar PV array at Warwick Hospital in 2013 than in the same month last year. A total of 2,527 units were generated during the month – an average of 81.5 units a day. This was nearly 13 per cent less than the average of 93.6 units a day generated in October 2012. Peak performance was on 6 October – by coincidence, the same day as peak performance in October last year - when 205.9 units were generated, while lowest output for the month was nearly 90 per cent less at 21.0 units on 21 October. Daily output exceeded 200 units once and exceeded 100 units on 11 days during September, while daily output fell below 50 units on 8 days.

Daily output: Warwick Hospital October 2012 (green) & October 2013 (blue)

Daily generation during October 2013 was less than one third the level seen during July, with average daily output falling to its lowest level since February. The declining power of the sun and an increase in the amount of cloudy weather is having its effect.

**Warwick Hospital – generation to date in 2013**

In the first ten months of 2013, the solar PV array at Warwick Hospital has generated a total of 44,750 units, saving over 22 tonnes of carbon. The graph below shows the average daily output in the first ten months of the year, with average daily output for 2012 shown for comparison. Note there is no data for January 2012, and data for February 2012 is for 12-29 February only.

Average daily output by month: Warwick Hospital January – October 2013

**Stratford Hospital – performance in October 2013**

In October 2013 the solar PV array at Stratford Hospital generated a total of 542 units of electricity - an average of 17.5 units a day. This was nearly 60 units less than the total generated in in October 2012. Highest output was 44.1 units on 6 October; lowest output was over 90 per cent less at 4.2 units on 13 October. Daily output was above 40 units on just one day, and exceeded 20 units on 12 days during the month. Output was below 10 units on 8 days during October

Generation during October 2013 was 10 per cent lower than during October 2012 – so relatively speaking, generation during the month was slightly better at Stratford hospital than at Warwick Hospital.

Daily output: Stratford upon Avon Hospital October 2012 (green) & October 2013 (blue)

**Stratford Hospital – generation to date in 2013**

In the first ten months of 2013, the solar PV array at Stratford Hospital has generated nearly 9,220 units – equivalent to saving over 4.5 tonnes of carbon. To date, the array at Stratford has produced nearly 3 per cent more electricity per kW installed than the array at Warwick.

**More information**

For more information about the performance of the solar PV arrays at Warwick and Stratford upon Avon Hospitals, and for more information about Community Energy Warwickshire in general, e-mail [info@cew.coop](mailto:info@cew.coop).