

## Very hot weather : why the yield of photovoltaic panels is declining ?



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Unlike the intuitive opinion, **the big heats are not always meaning better outputs for the solar panels**. Of course, the strong light when the weather is very hot is good for the photovoltaic production, because the yield is directly linked with the level of the solar radiance (the yield of a solar panel collapses by 90% when it is raining). But **in a reverse way, increasing the temperature of the cells is entailing a decrease of the yield of the panels**.

This decrease of the performance is the consequence of the increase of the cells' temperature which induces a proportional weakening of the voltage. « The global effect is that the power of the panel is decreasing while the working temperature of the cells is raising », like the site «[energiedouce.com](http://energiedouce.com)» is explaining it.

Thus in Belgium, although the month of July is a good month for the solar energy because there is usually a weak solar radiance at other times, the photovoltaic production has been far to reach the level of the previous year, while it was overloading the ORES net (ORES is the manager of the electric net and a gas supplier). A spokesman of the Belgian network gave more precisions to [rtbf.be](http://rtbf.be) :

« A photovoltaic panel whose the temperature of surface clears the 25°C is progressively losing 0.5% of output for each additional °C over 25 degrees. **Therefore, for example, a panel that would have a temperature of surface of 85 degrees, please notice that I am telling about the temperature of surface of the panel, it would have a loss of output of 30%. For a temperature like we have now, because the photovoltaic panels are remaining very hot, it doesn't cool significantly, and the output decreases ».**

Thus it is recommended, of course if it is possible, to install the solar panels in a well aired area, to avoid the overheating.

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