



Case study

Baxi Solarflo Evacuated tubes

In 2007 Tom McCarthy installed evacuated tubes on the south facing roof of his semi-detached house in Blackpool, to provide a solar thermal domestic hot water system. The installation comprises a Baxi Solarflo set of 20 direct flow evacuated tubes, fixed on the tiled roof, a 210 litre indirect Heatrae Sadia Megatech solar cylinder and a solar controller to control the hot water system.

Tom explains: "The system was installed by Grisedale Solar on the recommendation of a colleague. We met with them first to discuss the project and find out exactly what it would entail. It took approximately two days to install the full system. We called them back a week later to remove air that had accumulated in the system.

"We have slightly altered our lifestyle to take full advantage of the free hot water we generate" he continues. "We try to shower or bathe at night when we have most hot water. And our washing machine has a hot water feed, so we put on the washing either at night or first thing in the morning. We use as much hot water as we can during the evening so that the cylinder is ready to be heated up again the next day.

The cylinder is so well insulated that if you don't use all the hot water at night it is still hot the next day and you can't maximise the energy from the sun.

"Another thing is that the pump cannot pump liquid above a certain temperature otherwise it gets damaged, if the tubes reach high temperatures and the cylinder is already hot enough the pump automatically gets switched off.

Tom and his family have saved substantially on their hot water bills. "I have a fixed rate tariff at 2006 prices of 9.33 pence per kWh. In 2007/2008 I saved approximately £144. The summer of 2008 was very poor for UV irradiation, but I still saved around £87 on my hot water bills"

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"It is also nice to think that we are doing our bit for the environment."



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