



Solar Panel Case Study

[Carr Hill Primary School](#) is situated in the Market Town of Retford in North Nottinghamshire. It is within walking distance of the Town centre and serves a predominately urban population with pupil numbers currently at 439 including nursery.



The school buildings are single story arranged in an L shape with the majority facing South East. In the summer of 2016 installation of the solar panels was completed, which consisted of 115 x 260Watt solar panels, by Solar Options For Schools Ltd.

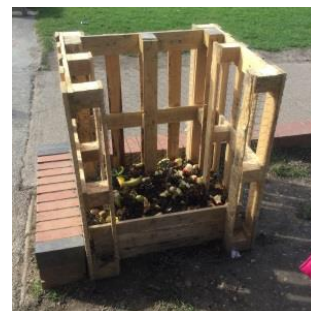
The solar installation benefits the school financially through:

- A Feed-in –Tariff which is a subsidy for the electricity generated
- An additional payment for electricity exported to the national grid
- A reduction in the school's electricity bill
- As well as contributions to the schools education on sustainability

The large numbers of panels cover the roof area of most of the KS1 and KS2 classrooms and are very obvious from the playground. This provoked a lot of questions from the children and we decided to use the panels to kick start a 'Green Initiative' within school. Two volunteers from each class across KS1 and KS2 were nominated as 'Green Champions' to undertake research and projects within school in order to feed back to whole school community.

Green Champion Projects

In the Autumn Term we took part in the EDF POD initiative - 'Switch Off Fortnight' where the children initially carried out an energy audit and subsequently encouraged staff to switch off electrical equipment when not in use.



In the first half of the Spring Term the Green Champions made a large compost bin from timber pallets left over from school paper deliveries. The school kitchen now saves fruit and vegetable peelings and there is a small bin in the dining room for fruit, both of which are collected on a daily basis. The children are also encouraged to deposit their fruit cores directly into the compost bins at break times.

The Green Champions are currently working on a recycling project and so far they have initiated the collection of ice cream tubs and yoghurt pots from the dining room. We are also revitalising the collection of waste paper within the school and ensuring that it is processed in the appropriate way.

As for future projects, we hope to carry out some research to establish power consumption vs power generation via the panels. We are just starting to get reliable data from the PV monitoring system after one of the inverters needed replacing.

We are also embarking on a whole school growing project, 'Carr Hill In Bloom'.