



SOLAR PV CASE STUDY **WESTCLIFF HIGH SCHOOL FOR GIRLS**



Westcliff High School for Girls is a selective Grammar School which is based in Southend and has grown to its present size of around 1080 pupils. Westcliff High School for Girls has an enviable reputation for academic excellence and pastoral care. They are a Specialist College for Science and Engineering which blends traditional values with preparation for the future.

Many of the decisions at the school take into account sustainability and in particular minimising energy use: Solar PV was therefore an excellent option.

“With increasing energy prices, the idea that we might produce our own electricity and sell the extra that we generate back to the National Grid was an opportunity that we should not miss”.

Dr Paul Hayman - Headmaster.



Background:

Westcliff High School for Girls had investigated many alternative energy projects but found most of them to be inefficient and financially unviable. Following Evogreen's presentation, Dr. Hayman, the Headteacher, was impressed by the "technical aspect and the system efficiency", whereas Colin Bott, the Bursar, was impressed by the "financial returns".

The detail:

3 x 10kWp flat roof systems, which means:

- The panels are not visible from the ground
- No drilling or alteration to the roof required

and 1 x 7.05 kWp pitched roof system.

Panel model: Winaico WSSP-235

Number of panels: 84

Inverter: SMA Tripower 10,000 TL

Monitoring system: Sunny Beam 3000

Annual output: 28,934.9 kWh / year



The benefits:

Forecast lifetime performance:

- Reduced energy costs
 - 699,997 kWh saved = £173,970
- Revenue generated through FiT and export tariff
 - £447,888
- Reduction in CO₂ emissions
 - 640 tonnes saved

"Pupils will be able to see how much electricity we have produced each day. When compared to the overall size of the school's electricity bill, it will help them realise why it is so important that we monetise our school energy use by turning off lights and shutting down computers when they are not needed."

Client testimonials:



“Many of the decisions made at the school take into account the idea of sustainability - solar panels to produce our own electricity contributes to this idea”.

“This was the first solution that works and meets all our criteria for an eco-friendly system that has a significant chance of paying for itself and making savings for the school in years to come”.

Dr Paul Hayman - Headteacher

“We were not in a position to commit the amount of funds required for an outright purchase, so we decided to rent the equipment over 12 years”.

“The whole process was relatively painless. The school is benefitting financially, our carbon footprint has been reduced and I am a little greener than I used to be”.

Colin Bott - Bursar





“Evogreen moved very quickly and the whole of the first phase was installed over one weekend”. Colin Bott - Bursar.

Evogreen focuses on helping organisations achieve their sustainable energy ambitions.

Our differentiator is that we can provide market leading, Carbon Trust approved, finance options. This enables the cost of a project to be spread over a number of years.



Pictured left to right - Denis O'Connell - Director, Evogreen plc. Dr Paul Hayman - Headmaster and Colin Bott - Bursar.



Solar PV • Solar Thermal • Biomass • Voltage Optimisation

Want to find out more?

Our experienced team are ready to talk you through the benefits of sustainable energy and how we can:

- Reduce your energy costs
- Lower your carbon emissions
- Generate additional revenue

To find out more, please get in touch with one of the Evogreen team:

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