

# Waterside Holiday Group

(Waterside and Chesil Vista sites)



**Project cost**  
£89,091.87

**Estimated Savings**  
£16k (£15.5k from solar, £550 from LEDs and £90 from pipe lagging) / 65 tonnes of CO<sub>2</sub>e per year

**Equipment / Installer**  
115 kWp of solar PV (Dorset Energy Solutions), Pipe lagging (Wessex Insulation), Exterior LED lighting (Edmundson Electrical Ltd)

**Grant awarded:**  
**£35,636.75**

**Estimated Annual Savings:**  
**£16k / 65 tonnes of CO<sub>2</sub>e\***

## The Project

The Waterside Holiday Group operate three holiday parks in Weymouth. This project focused on improving the energy efficiency and increasing the renewable energy at their Waterside and Chesil Vista sites. By installing 115 kWp of solar PV, switching all exterior lighting to LEDs, and fully lagging all pipes in their pool plant room Waterside Holiday Group will reduce their emissions by 65 tonnes of CO<sub>2</sub>e a year and save around £16k a year in energy costs.

## Getting started

The Waterside and Chesil Vista parks are home to over 750 caravans and several large buildings which host a variety of leisure facilities - including swimming pools, spa, amusement arcades, restaurants, bars, auditorium and on-site convenience store.

Prior to contacting Low Carbon Dorset Waterside had already taken steps to reduce their emissions. All buildings had fully insulated walls and roofs, and double glazing. LED lights had been installed throughout many of the buildings. Some of the fleet had been swapped for electric vehicles and charging points installed. And the roof of the site's leisure complex already hosted a 50 kWp solar PV array.

However, even with these measures the site still emits over 1k tonnes of CO<sub>2</sub>e a year – mainly as a result of electricity use and high heating demands.



\*CO<sub>2</sub>e, or carbon dioxide equivalent, is a term used to describe different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO<sub>2</sub>e signifies the amount of CO<sub>2</sub> which would have the equivalent global warming impact. And allows us to express a carbon footprint consisting of lots of different greenhouse gases as a single number.

## Swimming Pools

Most of the site's heating demand can be attributed to the running of their swimming pools. There are several renewable energy options which can reduce the associated carbon emissions from pools (see one example of this in the Riversmeet case study). These measures require significant capital investment, this was not feasible for Waterside but the group plans to explore this in the future. In the meantime, funding from Low Carbon Dorset helped to make the pool's plant room more thermally efficient. This involved fully lagging all pipes. This simple, cheap measure will prevent heat being lost and save around 5 tonnes of CO<sub>2</sub>e a year!

## Solar PV

The Waterside Bowleaze Cove site has a large electricity demand, and unlike many businesses it uses more in the summer than the winter. This makes solar PV a great option for the holiday park especially as lots of electricity is used in the day. With the help of a Low Carbon Dorset grant Waterside were able to add to the PV already installed on the roof of their leisure complex – this additional 65.5kWp of solar PV will generate around 41% of the leisure complex's current demand for exported electricity, and save around 33 tonnes of CO<sub>2</sub>e a year. They were also able to cover the roof of their entertainment venue with solar panels. Combined these arrays will add 115kWp of installed renewable energy to the site – and reduce emissions by an estimated 57 tonnes of CO<sub>2</sub>e.

It is expected that these panels will save Waterside around £15.5k a year and, with the help of the grant, pay for themselves in three years.

## LEDs

Many of the interior lights within the Waterside and Chesil Vista sites had already been converted to LEDs prior to contact with Low Carbon Dorset. However, both sites have lots of exterior lighting which illuminates the paths and roads which connect the caravans to each other and the central services. With the help of Low Carbon Dorset, Waterside replaced all of these exterior lights with LEDs. This switch is estimated to save them around £550 a year and reduce emissions by 2 tonnes of CO<sub>2</sub>e.

**'Having the chance to work with Low Carbon Dorset has been a fantastic opportunity for our business.'**

Justin Smith, Aftersales & Business Compliance  
Manager – Waterside Holiday Group

