



## Holiday park looked to Tresco to provide the best green energy solution for its 4,800 sq ft complex

*“Cofton was after a green energy solution for our hot water needs. Tresco worked closely with us to find the best solution and then managed the design and build of the scheme from the beginning to the end. We chose Tresco due not only to their locality, but also their vast knowledge demonstrated and their willingness to take our current biomass boiler and encompass it all into one district heating system for the park. We would recommend Tresco to other businesses – they are a pleasant team and can’t do enough to help.”*

**Mellony Kirby, Director**

### The system:

- 3 x Lindner and Sommerauer SL-250T biomass boiler
- Runs on wood pellets, replacing main gas
- Supplies heating and hot water to the main leisure complex including indoor pool and restaurants, six cottages, four shower blocks and the laundrette



### The result: (Compared to LPG. Source: Biomass Energy Centre)

- **CO<sub>2</sub> reduced:** Up to 750 tonnes per annum
- **Financial benefit:** The RHI payments and fuel cost saving make the project both sustainable and financially viable
- **Biomass fuel cost saving:** £48,954 compared to using LPG

### About Tresco

We design, supply, install and maintain a wide range of complete biomass boiler heating systems that will burn logs, wood chips, wood pellets, grain or miscanthus.

### A Tresco biomass boiler helps you to:

- Reduce fuel costs by 60%-80%.
- Reduce CO<sub>2</sub> emissions by 98%.
- Gain Renewable Heat Incentive (RHI) compliance.

## Overview

Cofton Country Holiday Park in Dawlish, Devon is set within 80 acres of countryside and consists of a mixture of camping and caravan plots, and static caravans and lodges. It hosts a wide range of amenities such as an outdoor pool, gym, sauna, fishing lakes, playgrounds and shopping facilities.

The multi award-winning holiday park is surrounded by an amazing natural habitat, which they've nurtured over the years resulting in numerous conservation awards including over 15 years' of Gold Awards from the David Bellamy Conservation Award Scheme.

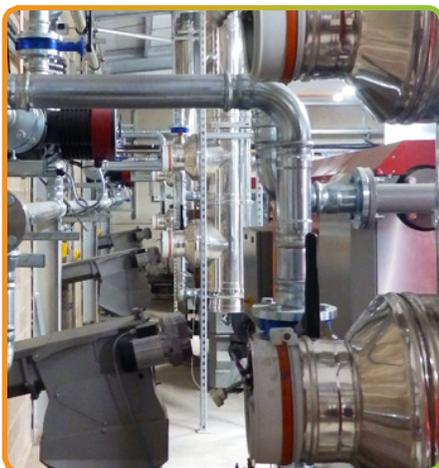
## Our Solution

Part of the site was being heated via a 199kW wood chip boiler, but Cofton wanted the rest of the site to be heated by a renewable source.

Our solution was to install three additional boilers to add capacity to the site. In addition, we also installed back up LPG boilers within the shower blocks. We moved the original boiler to a new, purpose-built building housing the three new boilers which alleviated current issues Cofton was experiencing with fuel deliveries and provided one point of delivery for fuel.

As the central boiler house is located some distance from the holiday complex, the heating water is distributed through 1,300 meters of highly insulated underground pipe, linking the main leisure complex including indoor pool and restaurants, six cottages, four shower blocks and the laundrette.

While installing a biomass system is fairly straightforward, the linking of the numerous buildings, with various heat requirements and differing uses from pool heating to space heating, showers to laundrette requires careful calculation.



## The Big Reveal

Taking its green credentials to new heights, Cofton launched the state-of-the-art biomass hub that will provide heat and hot water to Cofton's 4,800 sq ft leisure and dining complex, cottages, and shower blocks.

Funded by a half million pound loan from Natwest Bank, Cofton's biomass hub is the largest of its kind in Devon, and is expected to produce on average 1.9 million kWh of energy that will constantly charge four 5,000 litre thermal stores of hot water, heating its indoor pool, cottages, outdoor pools during the summer months, 24 showers and Cofton's amenity blocks.

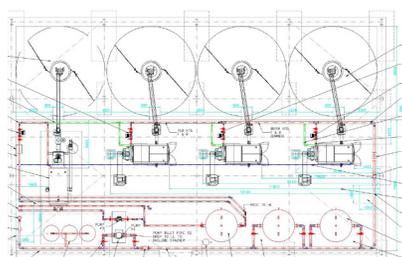
We were delighted Cofton Holidays appointed us to oversee the biomass heating system. With reduction in carbon emissions becoming more and more important to businesses both large and small, it was a great opportunity to be involved in a local scheme of this scale.

With CO<sub>2</sub> savings of over 750 tonnes annually, and fuel sourced locally from sustainable forestry, the scheme helps both national carbon reduction targets and supports local jobs.

It has been a pleasure to have the opportunity to work with a local business which places as much importance to conservation and the local environment as financial reward.



## Plan view: boiler room



## Technical information

Lindner and Sommerauer SL-250T 6R biomass boiler system.



### Specifications:

- Dimensions: 1,800h x 2,650d (mm).
- Max heat output: 250kW
- Min heat output: 70kW
- Combustion efficiency: 91.1% min - 95.3% max
- Depth: 2,650mm
- Flow & return diameter: 73mm
- Flue diameter: 250mm
- Flue connection height: 1,370mm
- Boiler weight (assembled): 2,100kg
- Auger weight: 180kg
- Water content: 390 litres
- Power supply: 16A, 400V

## Key facts\*

### Project included:

- 3 x Lindner and Sommerauer SL-250T 6R wood chip biomass boiler system including flue and thermal store.
- Distribution pipework including internal connections to heat exchangers and all aspects of district heating scheme.

### Total project price

£593,000

### Fuel cost saving:

Approximately £48,954 per annum

(comparison between the site using wood chip or LPG, based on LPG at 5.5p/kWh and wood chip at 3p/kWh)

### CO<sub>2</sub> saving: (Source: Biomass Energy Centre)

Up to 750 tonnes a year vs LPG.

### RHI payments:

A project of this size would gain an average of £84,870 every year for 20 years, index linked to inflation.

### Payback period:

5 years (if combining RHI income & fuel cost saving).

\*Financial information is not specific to this project – figures are based on an average of several typical projects of this size. Information on RHI payments are for guidance only and not to be considered a guarantee. RHI figures quoted are correct at time of printing and may not reflect current tariffs due to degeneration.