

## 2.4MWth, 130kWe Waste Wood Power Station Harnessing heat to create power

### A Novalux Case Study



#### WHAT WE WANTED

Novalux Energy are installing their own power station using Organic Rankine Cycle (ORC) technology. The unit harnesses excess heat from a biomass boiler and turns it into power.

Unlike traditional power stations Novalux are harnessing the heat produced through the running of the machines and using it on site alongside the generated power.

#### WHAT WE DID

We wanted to provide all of the heat and electricity needs for the industrial estate. Having secured a grid connection and a suitable site we agreed it needed two 1.2 MW Kriger boilers and two 65 kW ORC's.

The main benefits are:

- The site now has access to cheap, clean heat and discounted electricity despite having no heating systems previously
- As a business Novalux is able to obtain Biomass RHI, Biomass CHP RHI, Renewable Obligation certificates and selling the heat and power to both the industrial estate and the grid

With the excess heat Novalux are able to dry wood chip for existing biomass customers whilst having access to the enhanced capital allowance, this makes the business highly tax efficient.



*"Novalux are looking forward to offsetting an entire sites heat and power usage in addition to showcasing how you can integrate this technology into a working industrial estate"*



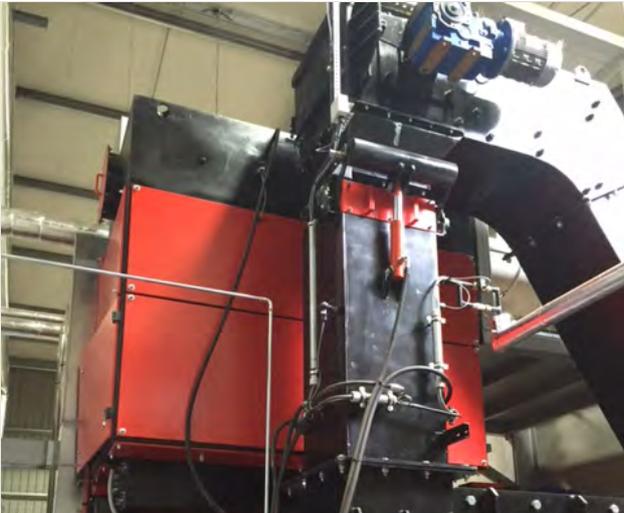
As the boilers will generate a 20 year income Novalux have hired a full time operative to maintain the plant and run the wood chip processing.



### WHY WE RECOMMEND IT

Guaranteed long term income streams will support payback and be a valuable asset for sale. Additional benefits include:

1. High return on investment
2. Easy operation
3. Sustainable heat and power



### ANNUAL SAVINGS AND INCOME FROM ELECTRICITY

Excess energy export income **£78,703**

### ANNUAL INCOME FROM INCENTIVES

Renewable Obligation Certificates **£78,965**

Biomass CHP RHI **£644,576**

Biomass RHI **£211,297**

**Total £934,578**

Time to payback cost of power station **3.7 years**

### A HEALTHY RETURN ON OUR INVESTMENT

The power station on the industrial site is generating savings in fuel costs and a guaranteed income for 20 years.

### TOTAL NET BENEFIT OVER 20 YEARS

**£11,778,676**

### NOVALUX AFTERSALES SERVICE

We provide a full monitoring and maintenance service for all of our customers.



FOR MORE INFORMATION OR TO ARRANGE A  
FREE SITE SURVEY PLEASE CALL US ON

**01600 463 008**