

# Ignite: Woodfuel Production and Supply

## At a glance...

### Assessed Customised Provision

Duration Notes:	3 days
Delivery Method:	Classroom
Recognised by:	Lantra Awards

## Introduction

Ignite is an innovative training programme with a focus on woodfuel.

It is designed for those wanting to know more about woodfuel and to equip new and existing woodfuel businesses with the skills and knowledge required to meet the increasing demand from this growing alternative market.

## Overview in brief

With oil at high prices and concerns over supply, there has been a dramatic increase in the uptake of wood fuelled heating systems in recent years, particularly with improvements in boiler technology.

Ignite: Woodfuel Production and Supply is our flagship three day course providing trainees with a comprehensive introduction to the entire woodfuel supply chain and is aimed at existing or potential suppliers and end users.

It includes modules on fuel types, energy characteristics, woodfuel resources, boiler systems, processing technology, financial analysis and economic modelling of supply chains.

The course will provide you with an essential background to the woodfuel industry, running



an efficient and profitable woodfuel business, how, where and when to start out in woodfuel, an introduction to woodfuel heating systems and the opportunities afforded by the Renewable Heat Incentive.



## Who should attend?

Ignite courses are aimed at anyone involved in the woodfuel supply chain sector, whether they be woodfuel users, specifiers, processors, growers or woodland owners.

## What will be covered?

### Day One – The Woodfuel Resource:

- The course begins with an overview of the day's objectives and an introduction to the tutor and the 3-day programme
- We then cover the background to the growth of renewable energies, and woodfuels in particular, before moving onto comparisons in costs, characteristics and the environmental performance of woodfuels against fossil fuels
- We introduce the Renewable Heat incentive and how this is impacting the market for woodfuels and the requirements around meeting government sustainability and greenhouse gas emission criteria
- The session then progresses logically onto the three main types of woodfuel in use today - logs, chips and pellets – and the basic units and conversion factors for wood into energy
- It ends by looking at the UK woodfuel market, how it has grown over recent years and how the market is predicted to grow
- Ranging from arboricultural arisings and woodlands to recycled and reclaimed timber products, we'll cover all the major sources of woodfuel, looking in turn at quantities, qualities and issues affecting availability and conversion for use as a fuel product
- We undertake practical exercises on converting weight to solid and bulk volumes for roundwood, firewood and woodchip at given moisture contents.

### Day Two - Session 3 – Woodfuel Systems

- Starting with an exploration of what a woodfuel customer may look like, we aim to give participants a solid grounding in the kinds of woodfuel schemes that they might find themselves supplying
- Systems ranging from woodchip and pellet heating systems in the 50kW – 5MW range
- The session looks in detail at fuel delivery logistics, reception and handling at boiler installations, the process of combustion in a modern woodfuel boiler and discusses the relative benefits of different types of systems
- The afternoon of this day is taken up with a visit to local working woodfuel installations
- Where time and logistics allow, we will visit more than one scheme or will look at elements of the supply chain to the boiler in question.



## Day 3 - Session 4 – Woodfuel Technology



- This session takes an objective look at the technology currently available to chip, split, grind, shred and pelletise wood and turn it into a valuable woodfuel product.
- Following on from the processing, we look at handling, storage and delivery of woodfuel products to customers.
- The session includes an introduction into woodfuel quality standards and introduces the European wide CEN standards for solid biofuels and woodfuel quality assurance schemes.
- It ends with an overview of the requirements of the Biomass Suppliers List, the government run scheme of auditing all biomass suppliers wishing to supply and or use biomass in RHI biomass systems.

The course ends with an hour-long written assessment, with opportunities for questions and a short revision session before this starts.

### Other areas of interest

- Ignite: Firewood Production and Supply (1 day course)
- Ignite: Managing Woods for Woodfuel (1 day course)
- Ignite: Woodfuel Quality Standards (1 day course)
- Basic Wildfire Training (1 day course)
- Forestry and Climate Change (2 day course)
- Trees and Timber Measurement (1 day course).

