

Ignite Lantra Awards Customised Award

Course Outline 2015



Day 1 - 9.30 am to 4.30pm

Session 1 – Setting the Scene

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.

Following this, the drivers for woodfuel are explored, with particular attention to the legislative framework and carbon reduction targets in the UK economy. We introduce the Renewable Heat incentive and how this is impacting the market for woodfuels and the requirements around meeting government sustainability and green house gas emission criteria. Whilst this is a classroom based session, the focus is very much on giving trainees the information needed to argue the case for woodfuels.

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.

The session ends by looking at the UK woodfuel market, how it has grown over recent years and how the market is predicted to grow. It also looks at the types of customers for which woodfuel is a viable option.

Session 2 – The Woodfuel Resource

Picking up on the conversion factors, these are given practical application in a variety of settings as we examine the UK's available woodfuel resource in detail. 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.

Throughout this session, and the rest of the course, participants will complete short exercises individually, in pairs and in groups. These exercises focus on specific aspects of woodfuel and help participants gain a better understanding of the subject matter.

Day 2 – 9.00am to 4.30pm

Session 3 – Woodfuel Systems

Starting with an exploration of what a woodfuel customer may look like and what they want from wood as a fuel source, 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. Throughout the day constant reference is made to real-world examples of both good and bad practice to illustrate the range of systems and solutions currently in place in the UK and overseas.

The afternoon of this day is taken up with a visit to a local working woodfuel installations and fuel supply set ups. Visits in the past have included country house hotels, community district heating schemes, office accommodation, blocks of flats, swimming pools and a University building. 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 – 9.00am to 4.30pm

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. We will look at the main manufacturers, innovations



and the range of products on offer. Following on from the processing, we look at handling, storage and delivery of woodfuel products to customers, drawing on good practice and experience from across the globe. Time is dedicated to understanding the price structures of woodfuel products and how each element of the supply chain can be costed effectively to ensure that you are producing a profitable product. The session includes an introduction into woodfuel quality standards and quality assurance 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.

Integrated Assessment

The course ends with an hour-long written assessment, with opportunities for questions and a short revision session before this starts. The assessment is straightforward and focuses on the practical application of the knowledge gained in the preceding two and a half days.

General Information

Throughout the course participants are encouraged to contribute their own experience either of woodfuel or of other aspects of forestry or arboriculture to the course. There is a lively, good humoured atmosphere at courses, where participants can discuss issues of particular relevance or interest to themselves and the group within the framework of the course. We also offer trainees a comprehensive workbook, a resources CD and unlimited post course mentoring (telephone/e-mail).

Those who complete Ignite successfully will receive a Lantra Customised Award in Woodfuel Production and Supply and will be issued with a certificate of competence.

If you're not familiar with some of the terminology in this document, don't worry - by the end of the 3 day Ignite course it'll be second nature!

For content or technical enquiries please contact Will Richardson on 01765 609355 or e-mail will.richardson@ruraldevelopment.org.uk.



Ignite is a programme of training courses on the production and supply of woodfuel developed and run by Rural Development Initiatives Ltd. In addition to the three day course the programme includes: -

- An Introduction to Woodfuel (1 day)
- Woodfuel Quality Standards (1 day)
- Managing Woodlands for Woodfuel Production (1 day)
- Firewood Production & Supply (1 day)
- Ignite Urban (2 days)
- Energy Crops (2 days)

For enquiries regarding attending or hosting an Ignite course please contact Erica Spencer on 01765 609355 or Erica.spencer@ruraldevelopment.org.uk

