

**Review of the Position of  
Isle of Wight  
Woodland Economic Development  
Officer**

Danny Horne

# Why the Woodland Economic Development Officer Role was Created

The aim of the role was to try & increase the economic and environmental value of Island woodlands and to act as a stimulus for the expansion of a woodland products market, alongside positively influencing suppliers and end users to help realise the potential for Island woodland, and Island woodland schemes.

- The main reason for the lack of Island woodland management has been down to sheer economics.
- Many of the traditional woodland products could no longer compete with cheap alternatives.
- The aim of natural enterprise and AONB has been to facilitate cost-effective woodland management through increasing existing markets and finding alternative markets for Island wood products.

# Background to Isle of Wight Woodlands



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- 3,474 ha of the Isle of Wight is wooded. This includes ASNW, PAWS, recent secondary woodland, wet woodland and wood pasture.
- Within this 1,614 ha is considered ancient woodland. Of this 714 ha of this is plantation of non-natives
- 84 ha has been destroyed in the past 150 years
- 228 ha of secondary woodland has been identified on the Island
- There is also 1,632 ha of conifer plantation on a variety of habitats including heathland and chalk grassland



# Background to Isle of Wight Woodlands

- Since 2002, 220 ha of new woodland has been planted under the Forestry Commission's JIGSAW scheme
- The largest areas of ancient woodland can be found on clay soils at Briddlesford with important sites at Parkhurst Forest (clay), Rowridge (chalk), Great and Cliff Copses (greensand)
- Over 278 individual woodland blocks over 1 ha have been identified across the Island, the majority being north of the central chalk ridge
- 321 ha ancient woodland is protected as SSSI and a further 592 ha as SINC
- However, only areas of over 3 ha qualify for a woodland management grant.



# Background to Isle of Wight Woodlands

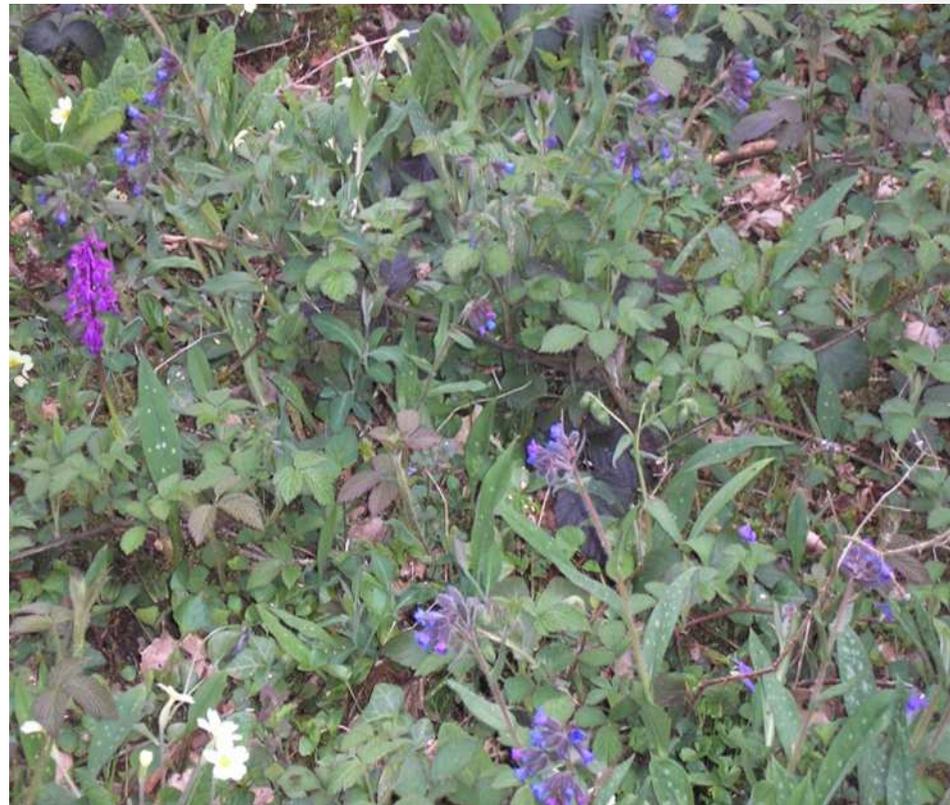
- Distribution of ancient woodland on the Isle of Wight



# Wildlife/Biodiversity

## Woodland biodiversity includes

- Red squirrel
- Common dormouse
- Bechstein and Barbastelle bats
- Wood Calamint
- Isle of Wight Helleborine
- Narrow-leaved lungwort
- Pearl-bordered fritillary
- Nightjar
- Red wood ant
- Common Fanfoot



# Wildlife/Biodiversity

- Isle of Wight woodland has been designated for its international (SAC for bats at Briddlesford), national (stronghold for red squirrel in native lowland woodland) and local (all ASNW is SINC) importance for wildlife
- The Island's woodland mammal fauna is unique in the British Isles.
- A number of key organisations are working to maintain the management of these woods for these interests



## Wildlife/Biodiversity

- Forestry Commission
- People's Trust for Endangered Species
- National Trust
- Wildlife Trust
- Woodland Trust
- Isle of Wight Council
- Wight Nature Fund
- RSPB

All own and manage woods for their nature conservation value



# Woodland Management Plans

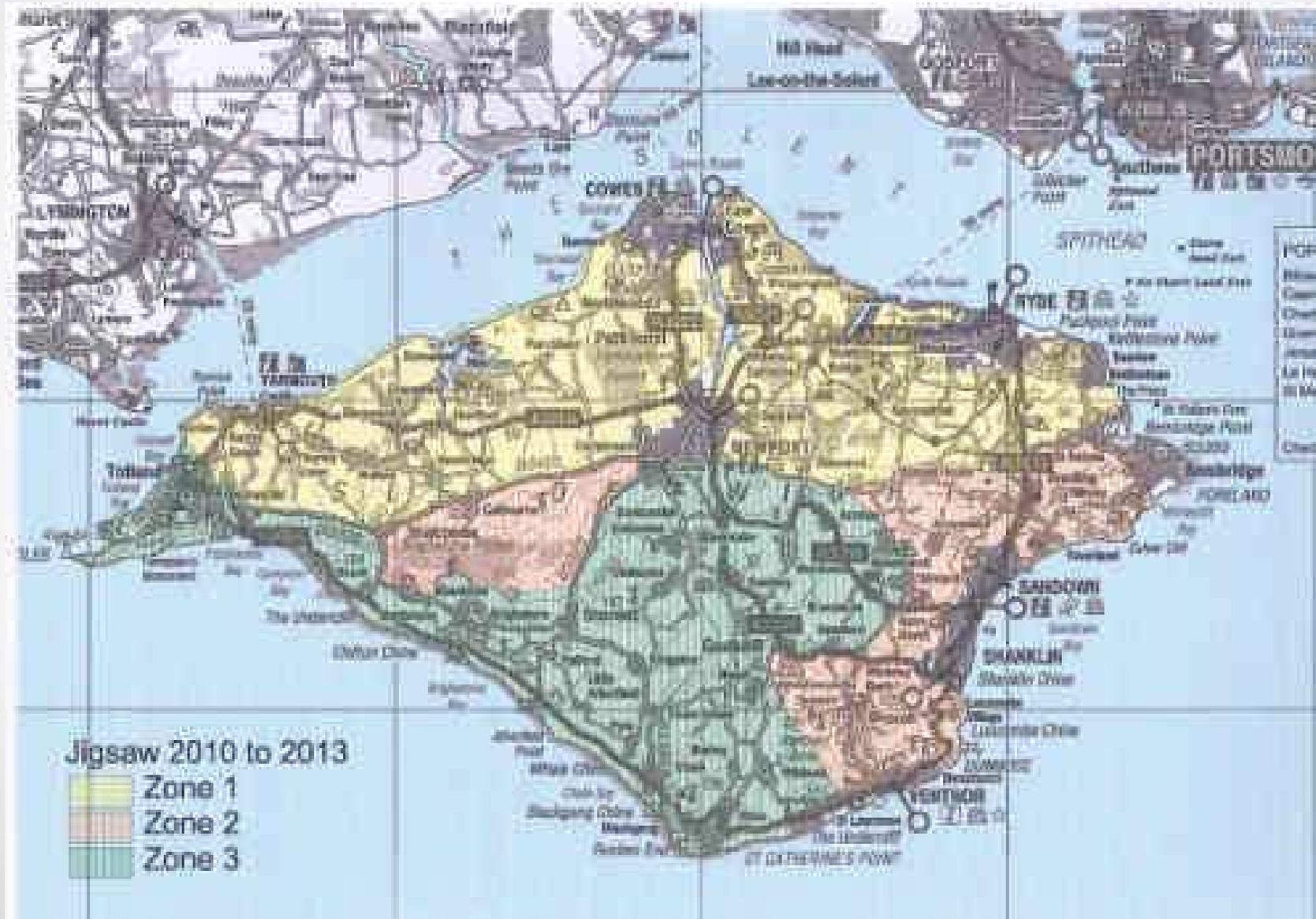
- The Forestry Commission estimates over 200 woodland grant schemes cover Isle of Wight woodlands
- Over twenty woodland owners have had written management plans for over 350 ha woodland in 2009/10 alone
- Woodland management plans are identified as an important step towards regeneration, coppicing and tree planting grants including the new JIGSAW scheme and as such have been actively promoted
- I believe there will be more management plans written throughout 2011 as very early in the financial year of 2010 the Forestry Commission grant pot ran dry, which effected grant incentives for most schemes in 2010

# JIGSAW "Joining and Increasing Grant

## Scheme for Ancient Woodland"

- Jigsaw intends to provide the greatest possible benefit to the red squirrel, by linking and extending areas of ancient woodland. The target areas have now been expanded to cover the whole island, although preference will be given to applications within the original target areas.
- The map on the next slide shows the island divided into three zones:
  - **Zone 1** - applications here will take precedence where funding is oversubscribed. Grants will be offered for both linking and expanding ancient woodland
  - **Zone 2** - applications will be considered after those in Zone 1 and will also be offered for both linking and expanding ancient woodland.
  - **Zone 3** - applications here will be considered after those in Zone 2. All applications in this area must demonstrate that they are linking ancient woodlands.

# JIGSAW Zone Map



## Evaluative Visits

- Before the practical implementation of the role began I felt it was necessary to meet with the contractors and owners involved with the woodland sector to ascertain views and opinions surrounding the role.  
Contractors Views:
  - Forestry Commission –
    - Only short term tenders, not allowing for planning
    - Mostly larger parcels offered for tender
    - Large amounts of resources being moved off of the Island
  - Lack of collaboration between contractors
  - Difficulties in arranging training
  - Felt that woodland owners often had an unrealistic notion of the value of the product
  - Felt that woodland owners underestimated the amount of work that was required
  - Woodland owners often expected contractors to work within time constraints i.e. shooting season and rearing season
- This leads to difficulties in agreements being reached between owners and contractors which in turn leads to a lack of woodland management.

# Evaluative Visits

- Woodland owners:
  - Historically low value of timber as a resource
  - Contractor makes all the money
  - Time constraints i.e. shooting season, rearing season
  - Owner has own objectives for woodland, i.e. recreational purposes
  - Historic damage done to woodlands by machinery, particularly mainland contractors with Parkhurst being cited as a popular example
  - Concerns over Public access being created once the woodlands are back in management

However, some woodland owners and contractors have very good working relationships.

# Woodland Directory Website

- The aim of the website was to generate business, and advertise the different services contractors provided, but was also to act as a one stop site for customers requiring woodland products or services. It also provides information and guidance on woodland products, for example by answering the frequently asked questions posed by a customer of firewood.
- The woodland website has been very well received with contractors able to alter details as required via the Natural Enterprise office. Also, any new contractors have been added as requested.
- There is also now a comprehensive Machinery List that can be accessed.

[www.woodworkswight.co.uk](http://www.woodworkswight.co.uk)



# Training



# Training

- One of the first things that I arranged was a first aid course, as I thought this would be a good opportunity to get the industry together in an informal setting, but still create networking whilst furthermore achieving a worthwhile qualification. I had arranged this day to be for the sole benefit for people within the industry so it could focus on their particular problems/hazards posed by the industry. This training was a great success with most of the contractors attending, and the course was full.
- The second training opportunity was the medium and large tree felling course. This focused on the more experienced chainsaw operators and was again very well attended, with two courses having to be run to cater for the high demand. This had the added benefit of using as Island based training provider so contractors didn't have to go to the mainland to receive training, so we were able to bring an assessor to the Island because of the numbers involved.
- Another important training course was in the use of the e-tender system which the Forestry Commission now uses for anybody wanting to buy any parcels of standing timber from the Forestry Commission, this course was once again very well attended.

# Assurance Schemes

- I asked opinions on this issue and looked at the HETAS scheme. However, this was expensive to join with a fee per tonne and was very paperwork heavy, and difficult to police.
- The contractors I spoke to felt if they did a good product that it is unlikely that it needed to be part of a scheme especially as most of them already had strong markets and felt the 'Buy With Confidence' scheme – which is run by Trading Standards, and is free – was as good as anything.
- I personally feel that if collaboration continues it may be worthwhile having a logo for Island products which have been sustainably sourced.

# Investment

- Although it has been a very difficult year financially I believe there has been sensible investment in the Woodland sector.
- Most of the main investment has been for larger types of machinery due to the larger quantities and size of timber being purchased from the Forestry Commission especially.
- There has been some smaller investment on the furniture making side of the business.
- The need for a larger 'wood hub' has been considered and two sites identified as potential locations. These will require investment but in the short term they could cope with the initial requirement, but until there is firm commitment from potential customers they are not being developed further at the moment.

# Contractors Collaboration Firestone and Brighstone

- Firestone and Brighstone were two blocks of wood put up for tender by the Forestry Commission which would normally have been too large for individual contractors to work. What we have been able to do is have individual contractors take on the tender, but share the resource with other contractors. Normally, within a parcel of wood a contractor would have pockets of product which were unsuitable for their requirements, however by collaborating with other contractors the whole resource within the woodland has been put to good use, i.e. six different contractors will have had the benefit of these two tenders, involved in harvesting, extraction, saw logs, woodchip and firewood production.
- This not only helps the contractors but also makes the resource more valuable as far more of the product is put to good use.
- We have gone one step further with this in recovering the tops of the trees which will be chipped, mixed with by-products from sawmills i.e. sawdust etc. dried and turned into eco logs. This has the potential to give almost 100% recovery where required in a stand of wood.
- It is hoped that this system of collaboration will continue in the future, and was considered a success.



## Contractors Collaboration at Firestone



## Architecture in the Wood

- I was asked to source the wood for this project organised by Island Architecture and a mobile saw mill from the website was required at this site. This was an event held at Richard Spence's farm for architecture students from all over the UK.
- Their brief was to take a given amount of round timber, come up with a design, give the plans to the mobile saw mill and create their design. Andy Toms was on the saw mill over a very long three days. In the evenings there were guest speakers on green buildings etc.
- The timber was sourced from Island woodlands by myself and the project served to promote the use of wood throughout different industries and also to give students an insight into using as much of a product as they could with as little waste as possible.

# Wolverton Show

- I arranged with the Wolverton Show committee to have an area dedicated to woodland products, and a demonstration area at no cost to the individual businesses. Island contractors were invited alongside the smaller wood product businesses and we had a good cross section from the industry, and from those who could not attend we had their products or promotional material. However from those in attendance we had;
  - Wooden Yurt - Hurdle Making
  - Timber Joints for Buildings - Firewood Products
  - Woodchip - Furniture Making
  - Website Promotion - Sign Making/Writing
  - Mobile Sawmill - Stick Making

Furthermore children were able to paint on different species of wood and a general interaction with wood was encouraged. This generated a lot of interest and I believe that it was enjoyed by both the individuals involved and the wider public and led to over 1100 hits on the Woodland Directory website.

I have already been asked if we would do this again by the Wolverton Show Committee



# Wolverton Show









# Woodfuel

- One of my first objectives was to try and encourage outlets that didn't sell Island logs to try and do so. The reasons given for not stocking Island wood products are normally down to central purchasing. However, some businesses have said that they will consider Island products in the future. Most producers have not had surplus firewood to try and sell this year anyway due to higher demand.



# Biomass Woodfuel

This is potentially the biggest market for the poorer wood on the Island, because the poorer quality wood can find a market it makes the woodland stand far more commercially viable.

There are six domestic boilers being looked into, one will be using the owners own managed wood, two are looking at bringing their woodlands back into management to source the fuel for their boilers, and three others are looking at purchasing woodchip alongside growing short rotation coppice.

At present there are three large scale potential boilers in the pipeline, Waitrose, Pan Meadows and Cowes High School. These are all due online in 2011/2012 .

I have met with boiler installers, design teams and aggregators re these projects. The supply of woodfuel being the biggest cause for concern. The main reason for this is in the huge difference in demand for woodfuel from present, it is estimated that instead of a few hundred tonnes pa the new installations will require thousands of tonnes pa, and could potentially take up the Island woodland resource in its entirety.





# Biomass Woodfuel

The main stumbling block has been most organisations want to deal with larger companies, or buy fuel by the kwh. No contractors on the Island would be considered big enough to enter these sorts of agreement alone, as the risks would be far too high for both the contractor and the purchaser. The next step has been to look at setting up a business which all interested parties could join running an open book policy on costs. This would consist of woodland owners, contractors, tree surgeons and boiler installers, whilst this is still being worked on it is very much underway and has firm commitments from many of the interested parties.

## Resource

At present the Forestry Commission control about 30% of the woodland, but probably 60% of the resource. This year probably two thirds of wood used on the Island will have come via Forestry Commission holdings.

If the meetings I have had with owners and agents come to fruition I believe this will be 50/50 next year with the private sector.

This will have been achieved by discussions, site visits, making owners aware of market options, collaboration and trust.

Conifers growth rate is between four and ten cubic metres a year.

Hardwood is about four cubic metres a year.

Sweet Chestnut is about six cubic metres a year.

## Resource – Rowborough Woods





## What Next?

- Continuation of collaboration between contractors
- Continuation of the woodworkswight website
- Collaboration through the biomass woodfuel business project
- The potential use of Natural Enterprise office space to hold meetings with potential customers for the industry which will create a beneficial professional image
- I believe it would be beneficial if a sum of money presided over by the grant committee could be made available for individual projects that needed more research, but benefited the whole industry

# Challenges and Issues

- The Forestry Commission as discussed.
- The Forestry Commission grant money being committed early in the 2010 financial year
- It has been difficult to promote new plans for biomass boilers knowing the potential resource on the Island could well have been used. Until the decision is made and a commitment made by the Forestry Commission on how to use this resource and the length of tenders the promotion of other biomass boilers would be difficult to justify at present.
- Private land owners having confidence in both the market place and contractors if they are to be persuaded to bring their woodlands back into management.
- Woodland resource being moved off the Island.



# Coverage of woodland management plans

- It is estimated that approximately 75% of Island Woodland is now in a scheme.
- Most of the major woodlands are now in contact with the Forestry Commission.
- Of the remaining 25% many of these woodlands will be included in the Natural England Schemes such as farmland stewardship.



**Where are we now?**

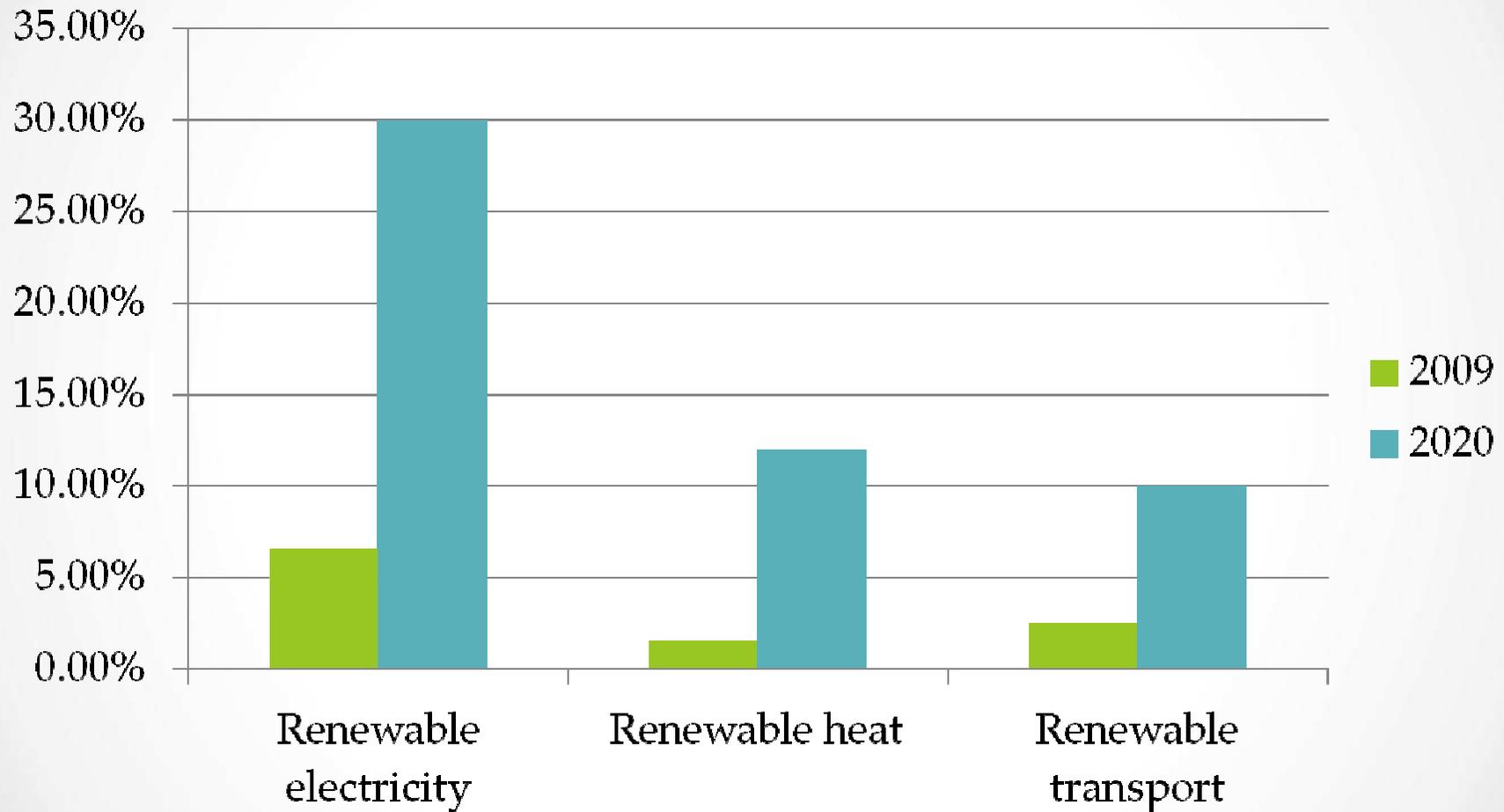




# Island Sustainable Heat and Power Ltd.

- Island Sustainable Heat and Power Ltd has now been set up with a huge amount of help from Simon Clarke.
- We will be able to offer woodchip boilers through to the supply of woodchips, we have the agency for Austrian woodchip boilers for Hampshire.
- Our hope is that clients will be able to buy heat and power by the kilowatt hour.
- We have funds available to buy boilers if capital cost is an inhibiting factor for our clients i.e. if a school would like to run on woodchip we could buy the boiler and supply the fuel and the school would be invoiced for what they use, the same as with conventional fuels.
- THIS IS ALL SUBJECT TO THE RENEWABLE HEAT INCENTIVE THAT IS BEING AGREED AT THE END OF NOVEMBER.

# UK Renewable Energy Mix



Information from the DECC (estimates)

# Renewable Heat Incentive - Overview

## What is it?

- Payments based on amount of renewable heat produced - form of Feed in Tariff
- Ofgem to administer scheme – accreditation, payments, monitoring
- Includes some, but not all, renewable heat generating technologies
- Rolled out over two phases
- 1<sup>st</sup> Phase – non- domestic only

## Renewable Heat Incentive - Tariff

### Biomass

- <200kW                      7.6p/kWh
- 200kW-1MW                4.7p/kWh
- >1MW                        2.6p/kWh
- 20 years

Note: First figure is only payable on the first 1314 operating hours, this is deemed the average number of hours a boiler will run a year. After this amount it will only be paid at 1.9p/kWh.

This is to be paid for by the carbon tax, which large companies will be paying on each tonne of carbon emitted, this is believed to be at £16 per tonne.



# Weight and calorific value relative to volume and water content

Water content (wet basis)	Volume weight in kg/bulk m <sup>3</sup>				Calorific value in kWh/bulk m <sup>3</sup>			
	Beech	Oak	Pine	Spruce	Beech	Oak	Pine	Spruce
20%	277	280	216	188	1048	1062	867	759
30%	316	320	246	216	1022	1034	846	740
40%	369	374	287	251	986	998	919	716
50%	443	449	345	302	936	948	780	682

1 bulk m<sup>3</sup> of spruce wood chips (water content 30% has the calorific value of 74 litres of heating oil, while beech, at 102 litres, has a considerably higher calorific value.

# To conclude

I think the future holds opportunities but with these opportunities come responsibilities.

I would like to thank both Natural Enterprise and the AONB for this opportunity, I believe many of the benefits will be seen after the role has finished, but in my opinion that was always going to be the case. I do believe that the jigsaw has come together and that it is now up to the industry to keep it together.

N.B. Some of the figures for this presentation have been obtained from Richard Grogan, the Hampshire and Isle of Wight Wildlife Trust and the Forestry Commission