

## Woodfuel potential in South East England

### Woodland cover in south east England:

Total land area: 1,909,600 ha

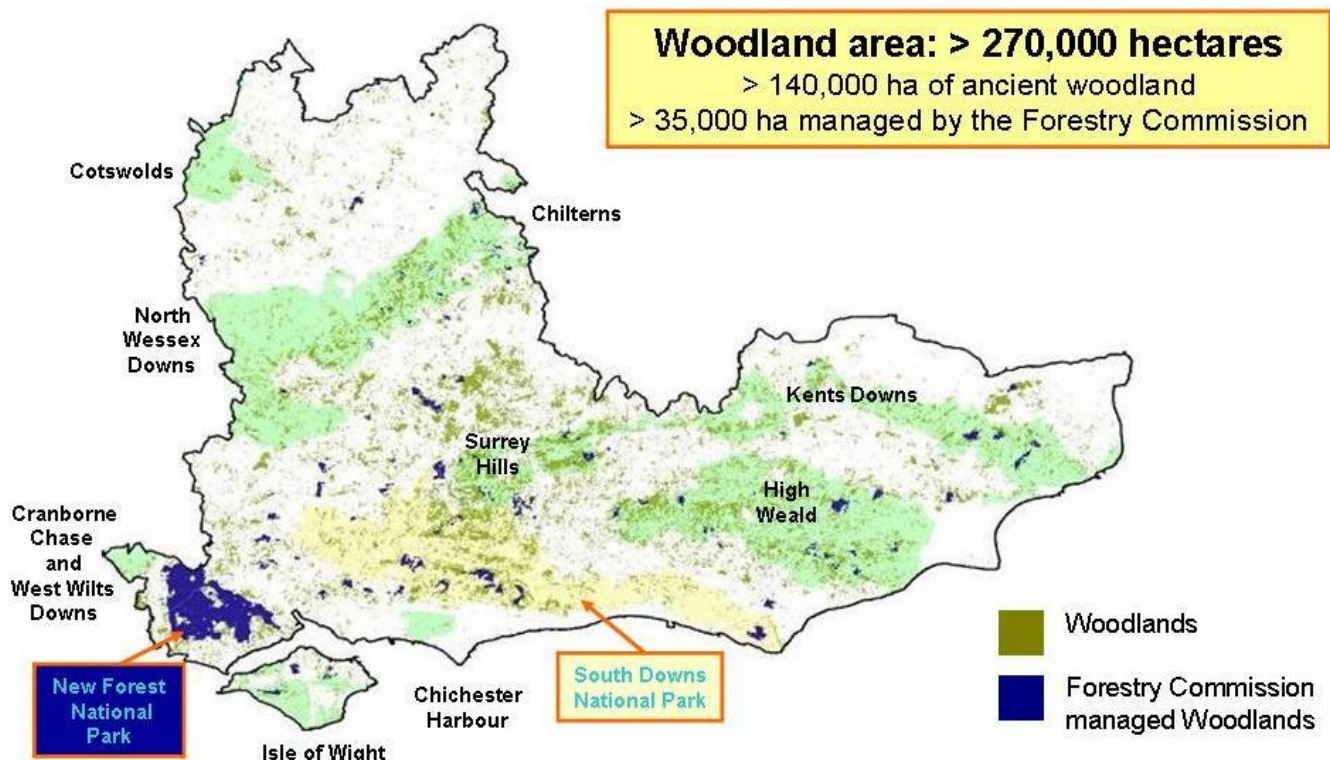
**Total woodland area: > 270,000 ha** 14% of SE land area

**Total ancient woodland: 130,885 ha**

> 48% of SE woodland and 36% of England's ancient woodland  
 Includes > 87,000 ha of Ancient & semi-natural woodland (ASNW) and  
 < 44,000 ha of Plantation on ancient woodland sites (PAWS)

**Forest Commission managed woodland: > 35,000 ha**  
 (= 13% of SE woodland & 16% of FC managed woodland in England)

### Woodland cover and protected landscapes (National Parks and Areas of Outstanding Natural Beauty) in South East England



### Major species in South East England:

Oak	> 44,000 ha (16%)	Scots pine	> 23,000 ha (8%)
Ash	> 26,000 ha (10%)	Corsican pine	> 6,000 ha (2%)
Birch	> 25,000 ha (9%)	Norway spruce	> 5,000 ha (1.8%)
Beech	> 23,000 ha (8%)	Larch	> 4,500 ha (1.7%)
Sycamore	> 5,900 ha (2%)	Douglas fir	> 3,800 ha (1.4%)
Sweet chestnut	> 18,000 ha (2%)	<b>Note:</b> this adds to just over 50%, which implies a lot of mixed woods!	
Poplar	> 1,900 ha (>1%)		

**Total broadleaf > 219,000 ha (81%)**      **Total conifer > 51,000 ha (<19%)**

**Note:** all figures drawn from NIWT (National Inventory of Woodland and Trees published in 2002. NIWT '2' will shortly be available to update these figures.

Sweet chestnut coppice figures drawn from FC Bulletin 64 (published 1987)

### Comparison to rest of England:

Region	Woodland Area	% Woodland Cover	% of England's total woodland
<b>South East</b>	<b>270,000</b>	<b>14.1</b>	<b>24.6</b>
South West	212,000	8.9	19.3
East England	139,000	7.3	12.7
North East	103,000	12.0	9.4
West Midlands	99,000	7.6	9.0
North West	96,000	6.8	8.8
Yorkshire & the Humber	92,000	6.0	8.4
East Midlands	80,000	5.1	7.3
London	6,000	3.9	0.5
<b>TOTAL</b>	<b>1,097,000</b>	<b>8.4</b>	<b>100</b>

### **Existing wood/timber production in south east England:**

- From 35,000 ha (growing 40% conifer/60% broadleaves by area) the Forestry Commission is harvesting about 160,000m<sup>3</sup> per year (approx 80% of this is conifer)
- We estimate that a similar amount is harvested from the other 235,000 ha of woodland (15% conifer/85% broadleaves). Of these woods less than a third (by area) are subject to a Forestry Commission grant scheme or felling licence. Note: licences are only needed for those parts of the wood being thinned or felled so this represents a low estimate of active management, however, permission to fell is often sought but does not proceed due to poor markets.

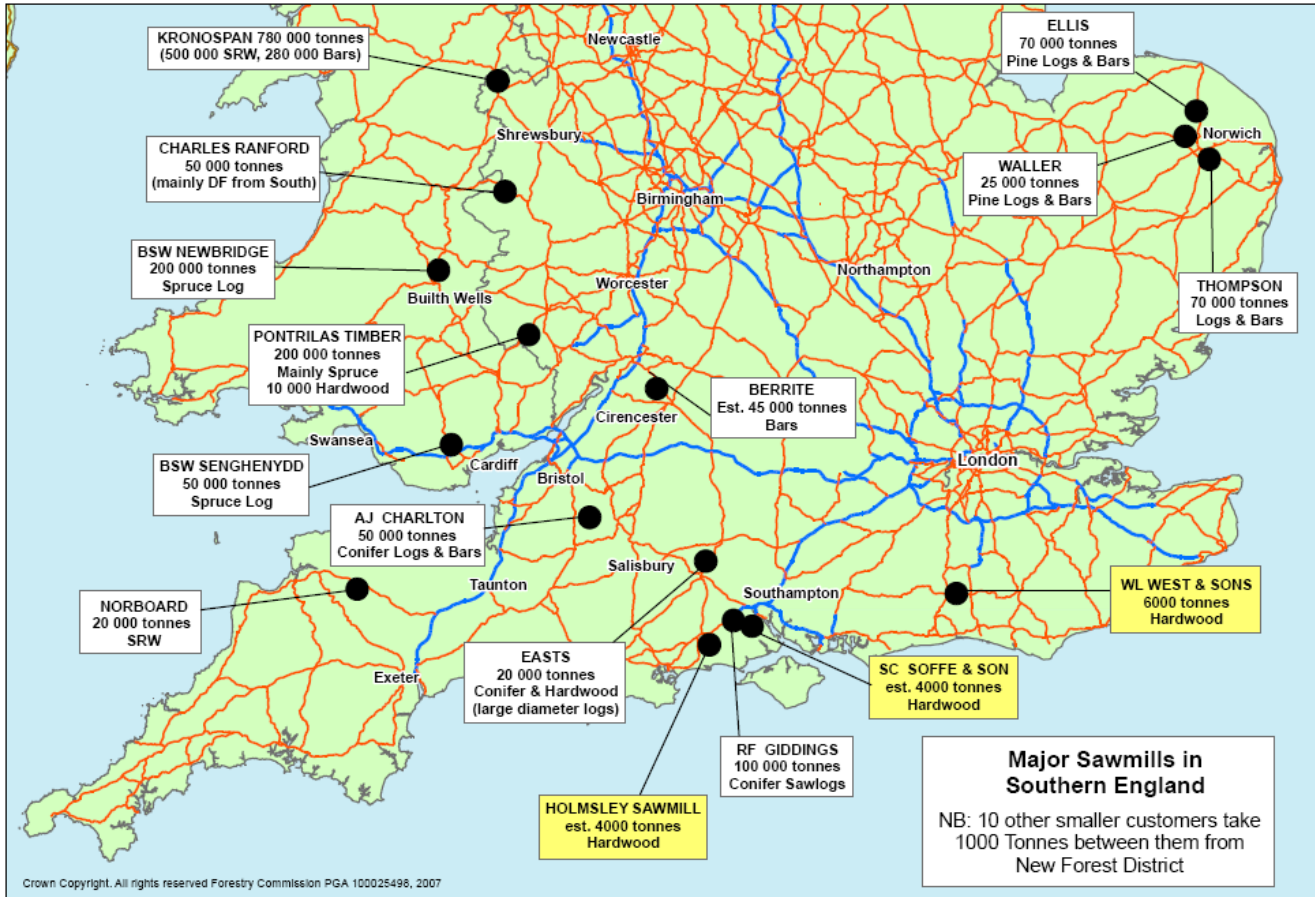
### **Current Markets:**

Markets for wood products from south east England have declined over the last century as fossil fuel based products were substituted for those traditionally provided by wood: mainly fuel and building material. The woodland resource was heavily harvested during both World Wars and the cash and workers weren't always available to allow woodland owners to replant afterwards. The Forestry Commission bought or leased many woods in SE England to facilitate their replanting. Markets for conifers remained (see map of major sawmills in southern England below) but are affected by international market forces including exchange rates. Markets for broadleaf wood have declined. Over the last 25 years this has included:

- Decline in market for sweet chestnut spile fencing (in the 1980's SC coppice was sold at local auctions and regularly sold for £1,000 to £1,500 per hectare, standing on a 15 year rotation);
- Loss of the St Regis pulp mill at Sittingborne in Kent – which in the 1980's provided a market for up to 100,000 m<sup>3</sup> of low quality broadleaf wood (including any sweet chestnut coppice which couldn't be cleft into spiles);
- Loss of Kent Woodware – which until the 1990's sought out birch, alder, sycamore of 15-20 years old to be 'turned' into broom handles etc;
- Loss of several small sawmills where the sites were valuable as development land and owners came to retirement age; and
- Loss of the other St Regis pulp mill near Chepstow – which even with transport costs provided a market for some low quality broadleaved wood from the SE.

Some markets survived as illustrated by the map of major sawmills in southern England overleaf but most concentrate on conifer sawlogs. Very limited markets remained for the produce from the 219,000 ha of broadleaf woodland in the south east. The result is that it is the norm to see woods which have not seen active management for many years, in marked contrast to Austria and Finland where it is rare to see an unmanaged wood.

## Major sawmills in southern England



## Typical examples of undermanaged woods in south east England:



### Implications of undermanagement:

#### 1. Carbon:

- Wood locks up (or 'sequesters') carbon.
- A tree will absorb carbon from the atmosphere during its' life and if left will eventually rot and release that carbon back to the atmosphere. An untouched wood or forest will eventually reach an equilibrium where the carbon absorbed each year is balanced by the carbon released through decay each year. However, the standing trees in the wood will sequester carbon.
- A harvested tree either releases carbon when the wood is burnt or sequesters that carbon for a period of time as a solid wood product.
- A managed wood will sequester carbon in the growing trees in the wood, even though some may be harvested each year. Note: in a well managed wood some the amount of wood harvested each year will balance the amount of wood which is 'grown' each year (though ideally slightly less as there is ecological benefit in leaving some wood to rot as a habitat for native plants and animals).
- Well managed woods absorb more carbon per ha per year than unmanaged woods.
- Overall an unmanaged wood delivers less in carbon benefits than a well managed wood.

## 2. Biodiversity:

- In a forested landscape without the impacts of humans it is likely that a diversity of woodland habitats (niches suited to particular species of plants and animals) will be provided by natural processes such as storms, fire and disease.
- In south east England most of the woodland we have today has been retained because it provided things which man needed: mainly fuel and building material. As such it was intensively managed in the past often under a coppice, or coppice with standards management regime. This management provided a diversity of habitats within woods which has suited many of our native plants and animals.
- Loss of active management, particularly of the coppice cycle, has led to some native species declining severely.
- Restoring sensitive management, particularly coppice management, will restore that diversity of habitat and benefit many of our native plants and animals.

## 3. Landscape:

- Woods are an iconic part of our landscape.
- It is no coincidence that the National Parks and Areas of Outstanding Natural Beauty in SE England are our most wooded areas.
- Undermanaged woods are more vulnerable to dramatic events such as storms, as illustrated by the impacts of the Great Storm of 1987.
- Well managed woods also provide a diversity in the local landscape, including within the woods themselves.

## Protection of our forests:

In the United Kingdom there are various statutory Regulations which help ensure that trees and woods are not adversely affected by management. These include:

- **The Forestry Act:** Anyone wishing to fell more than 5m<sup>3</sup> of wood per calendar quarter must obtain a felling licence from the Forestry Commission (The UK Governments Department responsible for administering forestry regulations). Licences are only granted if the proposals adhere to the principles laid down in the UK Forestry Standard (copy can be downloaded from the FC's website: <http://www.forestry.gov.uk/forestry/infd-6dfk2u> and the associated best practice guidelines. All felling, other than thinning (which is designed to provide more space for the retained trees to grow), will be subject to a legal requirement that the wood is restocked by planting or natural regeneration. The only exceptions are if there are over-riding public benefits such as the restoration of rare habitats such as heathland.  
<http://www.forestry.gov.uk/website/forestry.nsf/byunique/infd-6dfk86>
- **Environmental Impact Regulations:** Anyone wishing to create a new wood, convert a wood to another land use, build a forest road or a forest quarry which is likely to have a significant impact on the environment may be subject to an environmental impact assessment. The EIA regulations relating to forestry are administered by the Forestry Commission and provide robust powers to address adverse environmental impacts. For instance if an area of ancient and semi-natural woodland were converted to a field the regulations could be used to require the landowner to restore the field to woodland. <http://www.forestry.gov.uk/forestry/infd-6dfkbc>
- **European Protected Species Regulations:** Provide protection for rare animals. In the UK we have developed a series of best practice guidelines for individual species to help woodland managers protect and enhance habitats for these species  
<http://www.forestry.gov.uk/forestry/infd-75tju5>

## **Policy (and other) impacts on woodlands of south east England:**

- From the 1940's to 1985 there was a strong ethos to convert broadleaved woods and less productive land to conifer woodland to produce timber.
- In the 1980's appreciation of the value of ancient woodland (sites which have been wooded since the earliest map records and which retain many of our native woodland plants and animals) grew culminating in the broadleaved woodland policy of 1985 which stopped broadleaf woodland being converted to conifer.
- The 'Great Storm' of 1987 and subsequent storm in 1990 saw major tracts of woodland in south east England blow over. Conifer woods were particularly badly affected. Encouraged by higher grants to replant with broadleaf trees, the advent of the 'tree shelter' which appeared to be more effective in protecting young trees from herbivores and a greater interest in broadleaf and ancient woodland most of the damaged woods were replanted, or allowed to regenerate, with broadleaf trees.
- Forestry Commission grants over the last 25 years have encouraged planting and replanting woodland which delivers a range of benefits and hence most new woodlands and most restocking has been with broadleaf trees.

### Potential for woodfuel production:

- 235,000 ha of woodland not managed by the Forestry Commission;
- Of this around 39,000 ha are coniferous and 196,000 ha are broadleaved;
- If we assume this has the potential to grow at at least 4 m<sup>3</sup> per ha per year this equates to nearly **1,000,000m<sup>3</sup>** of increment per year. **Note:** this is a conservative estimate for managed woods as Scots pine will achieve YC8 (even allowing for open space in the wood) and sweet chestnut or ash coppice will yield > 100m<sup>3</sup> per ha at the end of a 15 year rotation equating to YC6 (and up to 12m<sup>3</sup> per ha per year if the rotation is extended to 20 – 25 years), however, most woods have not been actively managed for some time and are currently not achieving their optimal growth rates.
- If half of this increment were harvested for woodfuel each year this equates to 500,000m<sup>3</sup> per year. This reflects the target outlined under the England Woodfuel Strategy of 2,000,000m<sup>3</sup> per year by 2020 and can be broken down further to a possible target for each county:

#### South East England - Woodfuel Strategy suggested targets by County

County	Woodland Area (hectares)	% woodland cover	FC holding (Hectares)	% of woodland cover	Non FC holding (hectares)	Woodfuel Strategy target by % non FC woodland area (m <sup>3</sup> /yr)	Woodfuel Strategy Suggested County Target (m <sup>3</sup> /yr)
<b>Berkshire</b>	<b>18,308</b>	<b>14.5</b>	444	2.4	17,864	38,103	<b>35,000</b>
<b>Bucks</b>	<b>17,573</b>	<b>9.4</b>	1,753	10.0	15,820	33,743	<b>33,000</b>
<b>Oxfordshire</b>	<b>18,235</b>	<b>7</b>	629	3.4	17,606	37,553	<b>35,000</b>
<b>Surrey</b>	<b>37,564</b>	<b>22.4</b>	1,588	4.2	35,976	76,735	<b>70,000</b>
<b>Hampshire</b>	<b>66,939</b>	<b>17.7</b>	20,136	30.1	46,803	99,828	<b>105,000</b>
<b>Isle of Wight</b>	<b>4,549</b>	<b>12</b>	1,146	25.2	3,403	7,258	<b>7,000</b>
<b>West Sussex</b>	<b>37,507</b>	<b>18.9</b>	3,789	10.1	33,718	71,919	<b>70,000</b>
<b>East Sussex</b>	<b>29,924</b>	<b>16.7</b>	2,643	8.8	27,281	58,189	<b>55,000</b>
<b>Kent</b>	<b>39,487</b>	<b>10.6</b>	3,540	9.0	35,947	76,673	<b>90,000</b>
	<b>270,086</b>	<b>14.4</b>	<b>35,668</b>		<b>234,418</b>	<b>500,000</b>	<b>500,000</b>

### **What might this mean in energy terms:**

1m<sup>3</sup> of wood (standing or recently felled) *comprises about 50% water (by total weight)*

= approximately 1 tonne of unseasoned/fresh/wet wood

= approx. 0.72 tonnes of seasoned wood *comprising about 30% water (by total weight)*

= *about 3m<sup>3</sup> of loose woodchips (by volume)*

*= about 2,500kWh of usable heat energy for broadleaf wood*

*or about 1,800kWh of usable heat energy for conifer wood*

If we exclude woods currently managed by the Forestry Commission on the premise that most of the growing resource is currently sold we can assume that the 500,000m<sup>3</sup> per year will be derived from the 198,000 ha (85%) of broadleaf woodland and 37,000 ha (15%) of conifer woodland. If we further assume that a higher proportion of the conifer wood is likely to be used in sawmills we can estimate that 90% of the woodfuel is likely to be broadleaf and 10% conifer.

Hence the resource is:

- 450,000 m<sup>3</sup> of broadleaf wood with an energy value (when seasoned to 30% moisture content – by overall weight) of > 2,500kWh per m<sup>3</sup> OR 1,125,000,000kWh; and
- 50,000 m<sup>3</sup> of conifer wood with an energy value (when seasoned to 30% moisture content - by overall weight) of > 1,800 kWh per m<sup>3</sup> OR 90,000,000 kWh.

**Overall this resource equates to a potential resource of more than 1,200,000,000 kWh per year; enough to heat more than 80,000 homes (assuming each has a heat requirement of about 15,000kWh per year)**

### **Net carbon costs of woodfuel:**

All traditional fuel (i.e. excluding nuclear) releases carbon dioxide (CO<sub>2</sub>) when it is burnt. However, the net CO<sub>2</sub> released by burning sustainably produced wood is considerably less than the CO<sub>2</sub> released when fossil fuels are burnt:

<b><u>Net CO<sub>2</sub> emissions by fuel type</u></b>	
<b>Fuel type:</b>	<b>Life cycle CO<sub>2</sub> emission:</b>
Wood	7 kg/MWh
Natural Gas	270 kg/MWh
Oil	350 kg/MWh
Coal	480 kg/MWh
Electricity	530 kg/MWh

In essence you don't save any CO<sub>2</sub> by burning woodfuel - only be displacing fossil fuel, and the savings will depend on what fuel you are displacing.

<b><u>CO<sub>2</sub> savings when wood is substituted for fossil fuels</u></b>			
		Net CO <sub>2</sub> released	<b>CO<sub>2</sub> Saved by substituting 1m<sup>3</sup> of wood for fossil fuel</b>
1 m <sup>3</sup> of broadleaf wood provides 2,500kWhrs of energy (when seasoned to 30% moisture content)		17.5kg	
Fossil fuels delivering the same amount of energy	Natural Gas	675kg	<b>657kg</b>
	Oil	875kg	<b>857kg</b>
	Coal	1,200kg	<b>1,182kg</b>
	Electric	1,325kg	<b>1,307kg</b>

Hence our 500,000m<sup>3</sup> of wood per year from the south east's existing woods could save **more than 400,000 tonnes of CO<sub>2</sub> per year**

(assuming wood is predominantly substituting for oil)

OR

**more than 100,000 tonnes of carbon per year**

**Note:** To convert from CO<sub>2</sub> saved to carbon you divide by 44 (the molecular weight of CO<sub>2</sub>) then multiply by 12 (the atomic weight of carbon). So 1kg of CO<sub>2</sub> would equate to 0.27 kg of carbon.

## Other sources of woody biomass:

### *Existing:*

- I. **Lop and top:** branchwood which is removed from the main tree following felling. This material is traditionally burnt in the wood to leave a tidy site for restocking. In recent years the costs of burning up have grown and in most cases the lop and top is left to rot on site (with the benefit of returning the nutrients embedded in the wood to the soil). Removal of all of this material would remove nutrients and reduce the growth of the next generation of trees so is generally unsustainable. Removal of a proportion is acceptable, particularly if just the woody material is removed as most nutrients are held in green leaves and needles. It may become more common as whole tree harvesting techniques as seen in Finland become established (in which case leaving the felled trees on the ground or in stacks to allow green leaves and needles to fall off before chipping is recommended).
- II. **Stumps:** In some areas stumps have been removed to reduce the spread of root fungi which could damage the next generation of trees (e.g. the sandy soils of Thetford Forest). In upland areas harvesting stumps from conifer plantations is also carried out (to supply the wood fuelled powerplant at Lockerbie in south Scotland). However, in the woods of south east England this is unlikely to be a viable as removal of coppice stools would prevent rapid regrowth of coppice and disturbance of ancient woodland soils or the undisturbed soils of former heathland would be ecologically very damaging. Hence we don't believe this is viable in SE England.
- III. **Sawmill co-products:** Converting a round log into a square or oblong cross section creates sawdust and 'slabwood' which collectively can account for 50% of the volume of the log taken to the sawmill. This material can be converted into woodchips or logs. The new wood pellet production plant installed by Verdo renewables in Andover <http://www.verdorenewables.co.uk/> draws half it's raw materials from sawmills in southern England. This provides a useful market for sawmills who can debark the wood prior to chipping to allow production of high quality wood pellets.
- IV. **Arboricultural products:** Arboriculture is the management of individual trees. With huge urban areas in SE England there are many trees in gardens, parks and along roads all of which need intermittent management. Chipping the branches etc on site allows easier transport of the arisings. Considerable amounts of woody material are produced which has to be 'disposed of'. In the past this might have been treated as waste and deposited in land fill sites but increasingly arboricultural material is being collated (for instance at the Croydon Tree Station) and sorted (using sieves). Better quality material might be dried and used in local woodfuelled boilers and lower quality material is sent to the wood fired power station at Slough.
- V. **Reclaimed wood:** In the UK we import 85% of the wood products we use and there is inevitably a lot of woody material 'thrown away'. If this can be 'reclaimed' from the 'waste stream' it can be used as woodfuel. However, if it has been painted or treated with chemical preservatives it can only be burnt in a system which is compliant with the Waste Incineration Directive (sometimes called WID compliant). There are varying estimates of the quantities available but it is likely to be more than the resource available from existing woods!

**New:**

- VI. **Short Rotation Forestry:** Fast growing tree species like poplar and Eucalypt species can be grown on relatively short rotations (15 to 25 years as opposed to 50-16 years for traditional conifers and > 100 years for broadleaf trees – except when coppiced). Poplar is common in many European countries but less so in the UK. A lot of work has been undertaken in countries like Belgium to select fast growing clones and overall this could become attractive as wood markets evolve. It is well suited to damp soil conditions which are liable to flooding. Eucalypts have been used by energy companies extensively in warmer countries and interest is growing in the UK. However, there are concerns about the impact of large areas of Eucalypts and their vulnerability to severe frosts. Hence the FC is currently carrying out a series of trials around the country to identify the facts.
- VII. **Short Rotation Coppice:** Willows are fast growing broadleaved trees which can be managed on a short coppice cycle of 3 years. Growth rates are high with 20 solid cubic metres of wood per ha per year being possible, however, the density of the wood is lower than other broadleaf trees and hence their energy density is lower. Despite support available to land owners through Defra's Energy Crops Scheme to plant energy crops interest has been low, mainly due to lack of markets for the product. As energy prices and familiarity with woodfuel increases we are likely to see more interest from land owners in planting SRC. It is particularly well suited to damp or flood vulnerable land and could be attractive on low quality agricultural land which is costly to grow traditional agricultural crops on.
- VIII. **New Woodland:** England as a whole is not well wooded with only about 8% woodland cover. The south east is the most wooded part of England with over 14% woodland cover (Surrey is the most wooded county in England with > 22% woodland). There are major opportunities for planting new woodland and the evolving market for woodfuel may provide land owners with the motive to plant new woods (to supply their own energy needs). It's important to remember that well designed new woods in the right places deliver a range of other benefits to land owners, the environment, the landscape and society including carbon sequestration and substitution for fossil fuels. It is likely that the markets for carbon will develop in the future which may provide additional encouragement to landowners to create new woods.

## **Evolving markets for wood in south east England:**

The woodfuel market seems to be developing at three complementary levels:

- 1. Firewood:** The growing market for conventional logs is resulting in good prices for easily harvested broadleaf wood (particularly straight stemmed species which can be converted easily in a firewood processor), around £20m<sup>3</sup> standing and £35+ at ridside – mainly going to local firewood producers. Some firewood producers are finding it difficult to locate suitable wood to meet demand and this is stimulating interest in restoring management to smaller woods which owners haven't been able to actively manage for many years.
  
- 2. Large scale:** Key developments:
  - a. **Slough Heat and Power:** have been using up to 350,000m<sup>3</sup> of wood per year from a multitude of sources including waste wood, woodchips from sawmill slabwood, arboriculture, heathland re-creation, and some from existing woods but prices delivered have been in the low £20's per tonne. We understand that prices have increased slightly as they appreciate the benefits of higher quality fuel. UPM Tilhill have a major woodchip depot at South Warnborough which provides a degree of 'buffer' fuel storage for the plant.
  - b. **Giddings sawmill:** continue as the largest sawmill in SEE taking up to 100,000m<sup>3</sup> of softwood from across southern England. Up to 50% of the volume (slabwood sand sawdust) is converted into woodchips and sold to major buyers which may include Slough and/or the new Verdo pellet production plant at Andover –see below.
  - c. **Verdo Renewables:** have recently commissioned a pellet production plant at Andover. They will produce 55,000 tonnes of top quality pellets and 15,000 tonnes of wood briquettes per year. This will provide a reliable supply of high quality (A1) pellets providing security for those considering wood pellet heating systems. Their raw material is sourced about 50/50 from chipped sawmill slabwood and virgin conifer small roundwood (1,200 – 1,500 tonnes per week).
  - d. **British Airports Authority (Heathrow):** Have recently tendered for a supplier of 40,000m<sup>3</sup> of woodchips per year.
  - e. **Estover Energy:** Are looking for suitable site in Kent to site a medium scale (5MWe & 10MWth) CHP (Combined Heat and Power) plant (conventional steam turbine requiring about 60,000m<sup>3</sup> of wood per year). They are seeking a site where they can utilise the heat effectively. It is encouraging to note that they are following the example of our colleagues in continental Europe and seeking a site where they can utilise the heat effectively, thereby providing a more robust financial investment and making optimal use of the woodfuel resource. They have also been building their fuel supply chain by approaching wooded estates across the south east and exploring long term relationships.
  - f. **BkyB:** are rumoured to be looking for around 16,000m<sup>3</sup> per year for their new HQ near Heathrow.

- g. **Waitrose:** are installing a CCHP (Combined Cooling, Heat & Power) plant at one of their stores on the Isle of Wight. This system is based on Stirling DK engines and will require about 2,000m<sup>3</sup> of wood per year. This has the potential to establish a useful market for some of the products from the Islands 4,500 ha of woodland
- h. **Port of Southampton Biomass Plant:** Helius are considering building a CHP plant, however, the fuel resources seem likely to be mainly imported.

**3. Local Woodheat:** There are a growing number of estates (e.g. West Dean, Stansted Park, Torry Hill), schools (e.g. Beacon Community College – Crowborough, Bognor Regis Community College, Valley Park – Maidstone, Bexhill Community College), farms (e.g. Brockwood Park, Hillfields Farm, Manor Farm) and other establishments (e.g. Birtley House – retirement home, Surrey University Sports Centre – Guildford and Maidstone District Council offices) which are now heated with woodchips supplied from local woods. The general price for delivered quality woodchips is currently £80 per tonne (equivalent to about 2.6 pence per kWhr).

Overall we feel the greatest opportunity for woodland owners and managers lies with local supply of quality woodfuel or woodheat (where as demonstrated in the Woodheat Solutions study tours to Austria and Finland individuals or groups of owners/managers install the woodfuelled boiler and infrastructure and sell heat – what is called an ESCo - Energy Services Company approach). While direct woodheat supply is not for everyone it can be particularly attractive in supplying a woodland owners own heat requirements. In several cases entrepreneurs have installed systems to supply their own heat needs, learnt the ropes and are now exploring opportunities to supply heat to nearby 'blue chip' customers such as schools.

In addition we are seeing the stirrings of markets for other wood products including:

- Increasing interest from architects and builders to use locally sourced wood and some estate sawmills and mobile sawmilling systems are finding markets;
- Increasing interest in sweet chestnut coppice products – Torry Hill estate in Kent has established a chestnut products factory and has located interest both in the UK and the rest of Europe; including the use of bundles of sweet chestnut branchwood (which is traditionally burnt in the wood to leave a tidy site) called 'faggots' being used in river bank maintenance and flood defence; and
- Major wood product distributors starting to explore opportunities to source their produce closer to the point of use (partly due to costs of transport and partly due to increasing buyer appreciation of the benefits of locally sourced wood).

However, overall there remains a huge area of woodland which is currently not managed to deliver its' potential in south east England. The growing, ideally local, market for woodfuel could help restore active management to these woods and deliver a range of economic, social and environmental benefits.

## **Forestry Commission support for woodfuel development in SE England:**

### **1. General support:**

- a. Advice about potential woodfuel resources;
- b. Linking potential buyers to suppliers;
- c. Promoting good practice – for instance Stansted Park as an exemplar installation;
- d. Supporting and/or working in partnership with local initiatives including:
  - i. **Surrey Hills Woodfuel Group** – have convinced Surrey CC to implement a policy under which all boiler replacements on Council properties will be woodfuelled (unless there is a good reason why not);
  - ii. **West Sussex CC** – Andrew Tolfts has just been recruited as the Woodfuel Development Officer – this post is jointly funded by WSCC and FC;
  - iii. **Bordon/Whitehill ecotown** – where we have obtained resources to assess the potential woodfuel supply close to the town (via a more detailed assessment of the potential from local woods);
  - iv. **TIMBER Project** – helping develop the woodfuel industry in the Chilterns.

### **2. Leading the Woodheat Solutions Project:**



For those less familiar with the project: WhS is supported by Intelligent Energy Europe and involves working with Thames Valley Energy and a range of EU partners to transfer experience from Finland and Austria where woodfuel is well established as an industry to 'developing' Regions: South East England, Slovenia and Croatia.

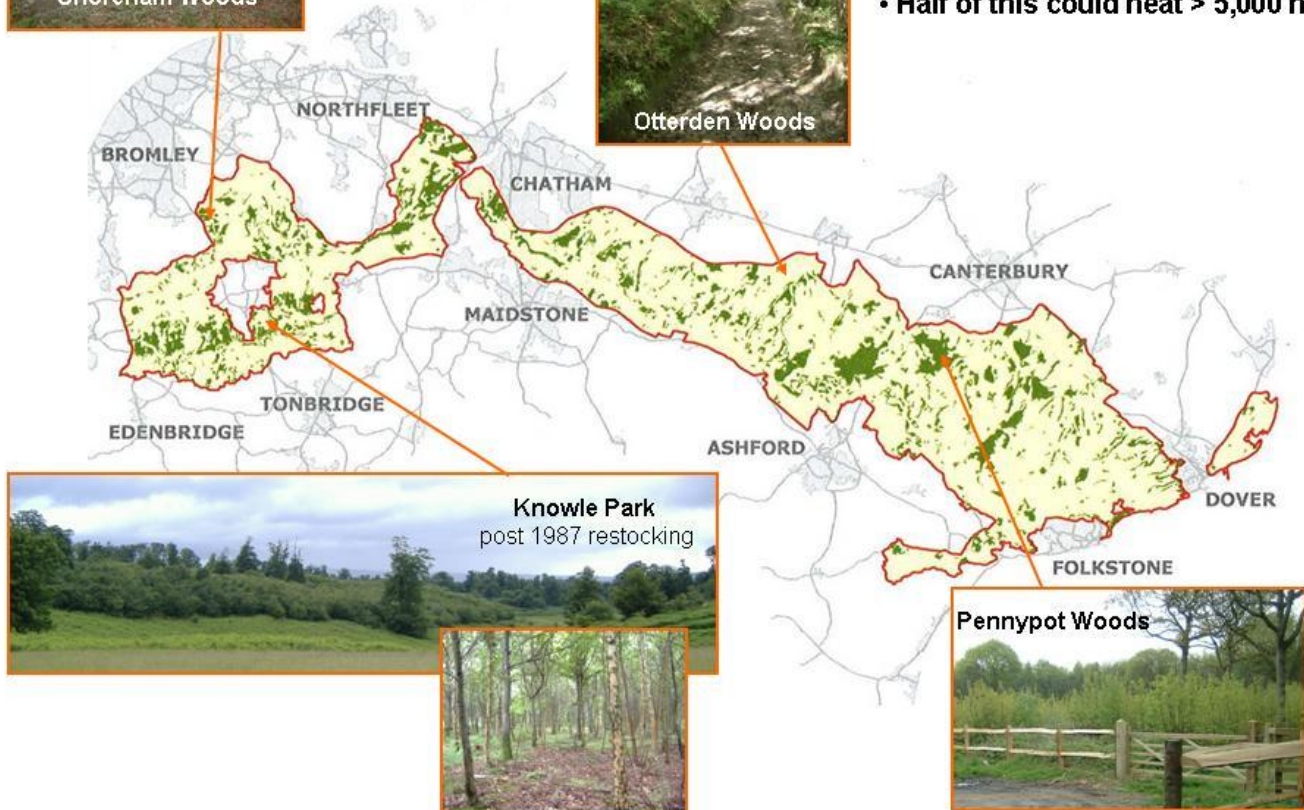
Project included study tours to Finland (30 English delegates) and Austria (40 English delegates), technical advice to sites in SEE from Austrian and Finnish specialists and a series of technical training seminars highlighting the lessons learnt, which we have just completed. For further information please see: <http://www.woodheatsolutions.eu/>

**3. Kent Downs Woodfuel Pathfinder:** As part of the Forestry Commission's Woodland Carbon Task Force this national pathfinder is focusing significant FC and partner resources to work with a range of stakeholders to identify and test a range of temporary support measures to establish the woodfuel industry in the Kent Downs AONB.



### Kent Downs AONB

- > 15,000 ha of woodland
- > 600 woodland owners
- > 80,000 tonnes annual growth
- Half of this could heat > 5,000 homes



Our objective is to establish:

- A robust woodland industry supported by local markets for woodland products
- Sensitive woodland management of our cherished biodiversity and landscapes
- Secure local jobs (including opportunities for farm diversification)
- An 'environment' requiring minimal state regulation and support

To help achieve this we have brought together a team with a diverse range of experience to help woodland owners and heat users consider and grasp the opportunities. The pathfinder builds on the experience gained through the Woodheat Solutions project and is supported by DECC's (Department of Energy and Climate Change) Renewable Heat Incentive launched on the 10<sup>th</sup> March 2011, the English Woodland Grant Scheme's Woodfuel WIG (Woodland Improvement Grant) and the wider grants available for rural business development under the Rural Development Plan England (for instance via LEADER and SEEDA – see [www.forestry.gov.uk/forestry/inf-d-7bbkmw](http://www.forestry.gov.uk/forestry/inf-d-7bbkmw)).

Ultimately, when we have tested what temporary support mechanisms help establish a robust wood fuel industry in Kent, we can identify the most effective support which could then be considered in other parts of England.

*Matthew Woodcock*

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