

# APSE

## Climate Change and Renewables Advisory Group

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# Realising the Wakefield Asset

- 700 hectares
- 70 – 30 split (hardwood/  
softwood)
- 140 pockets of woodlands  
containing 3 major sites

# Maximise the Resource Through “IN HOUSE HARVESTING”

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- In House Tractor Drawn Harvesting
  - Sustainable approach to small pocket woodlands
  - Scandinavian method
  - Comparable cost to contract harvesting  
£17 (CH) £19 (TDH) per tonne

# Benefits of In-House Harvesting (Added Value)

- 
- Increase the asset
  - Increased access to woodlands
  - Social and health benefits
  - Reduced exposure to HAVS
  - Employment Opportunities

# How Do We Fund The Harvesting Initiative?

## Option 1 - "FELL TO SELL!"

- Identified capital programme through "Invest To Save"
- 1,000 tonne per annum (sustainable)-Timber markets
- 22% return on investment using Forestry Commission figures
- 5 year period to pay back investment
- Creates a job opportunity
- Total return of approximately £240K over a 10 year period



# Harvester in Action

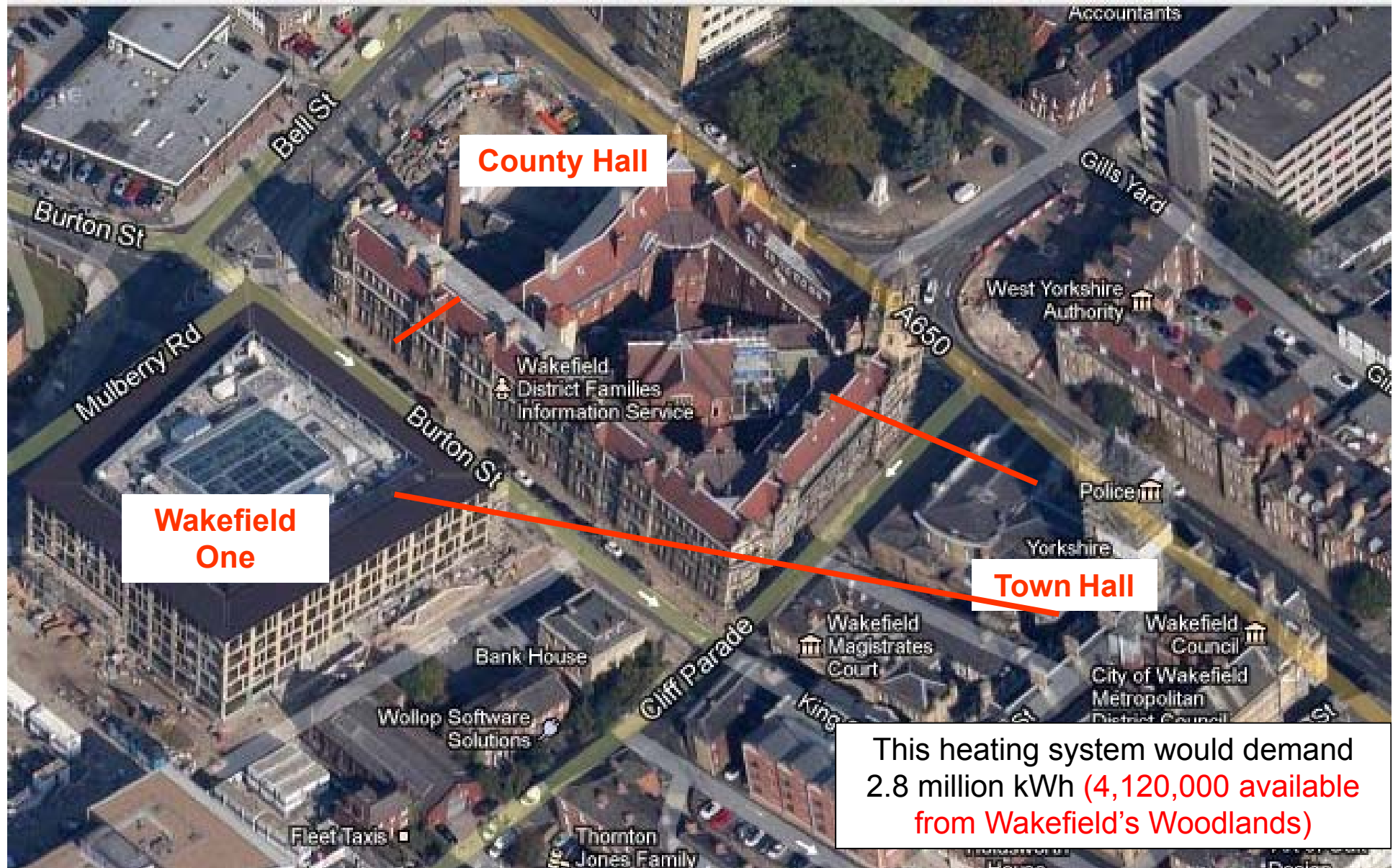


# Potential Energy Output from Wakefield's Woodland

| Fuel  | Annual yield per hectare (t/ha.a) | Energy per ha p.a. |          |           |
|---|-----------------------------------|--------------------|----------|-----------|
|   |                                   | GJ/ha.a            | MWh/ha.a | Kwh       |
| Wood<br>(forestry residues, SRW, thinning's, etc.)<br>@ 30% MC (these figures are <b>per hectare</b> )        | 2.9 (2 odt)                       | 37                 | 10.3     | 10,300    |
| Amount of available heat from Wakefield's woodland holding  |                                   |                    |          |           |
| <b>Amount of available woodland in hectares</b><br>400 ha (total hectares = 700ha, leaving 300ha contingency) | 800(odt)                          | 14,800             | 4,120    | 4,120,000 |

# Maximising the Woodland Asset

## Option 2 - District Heating Scheme







# How to Ensure Consistency of Timber Supply

## The sustainable approach:

- United Kingdom Woodland Assurance Scheme (UKWAS)
- Forestry Stewardship Council (FSC)
- 5 years accreditation at this global standard

# Sustainability – Forestry Stewardship Council (FSC)



Independent standard for use in UK woodlands demonstrating that woodland are sustainably managed.

**In the near future, timber sold into the markets (including wood fuel) will have to be sourced from certified Woodlands.**

We have successfully achieved the UKWAS accreditation for a further 5 years, recognising the quality of our woodland asset management



# How to Ensure Consistency of Supply

- Woodland Management Plans
- 20 year Management Plans
- We are confident we have 1,000t for the next 20 years

**Haw Park Wood  
Management Plan**

|          |   |    |      |
|----------|---|----|------|
| Date:    | 2011                                    | to | 2019 |
| Owner:   | Wakefield Metropolitan District Council |    |      |
| Contact: | Bill Lawery                             |    |      |

**1. BACKGROUND INFORMATION**

**1.1 Location**

|                                  |           |
|----------------------------------|-----------|
| Nearest town, village or feature | Crofton   |
| Grid reference                   | SE 634152 |
| Total area (ha)                  | 73ha      |

**1.2 Description of the woodland(s) in the landscape**

Haw Park Wood Local Nature Reserve is situated approximately 6km south east of Wakefield. Bordered to the north by the Waterton Park Golf Club and the Waterton Park Hotel, to the west and south by the Barnsley Canal and Cold Hildesley Reservoir and to the east by farmland adjoining Wintersett Reservoir and Anglers Country Park.

**1.3 History of Management**

Wakefield M D C acquired Haw Park in 1991 from the Forestry Commission, which undertook much of the softwood planting during 1948 – 88, in order to support the drive at the time towards home-grown timber self-sufficiency and the supply of timber to the mining industry.

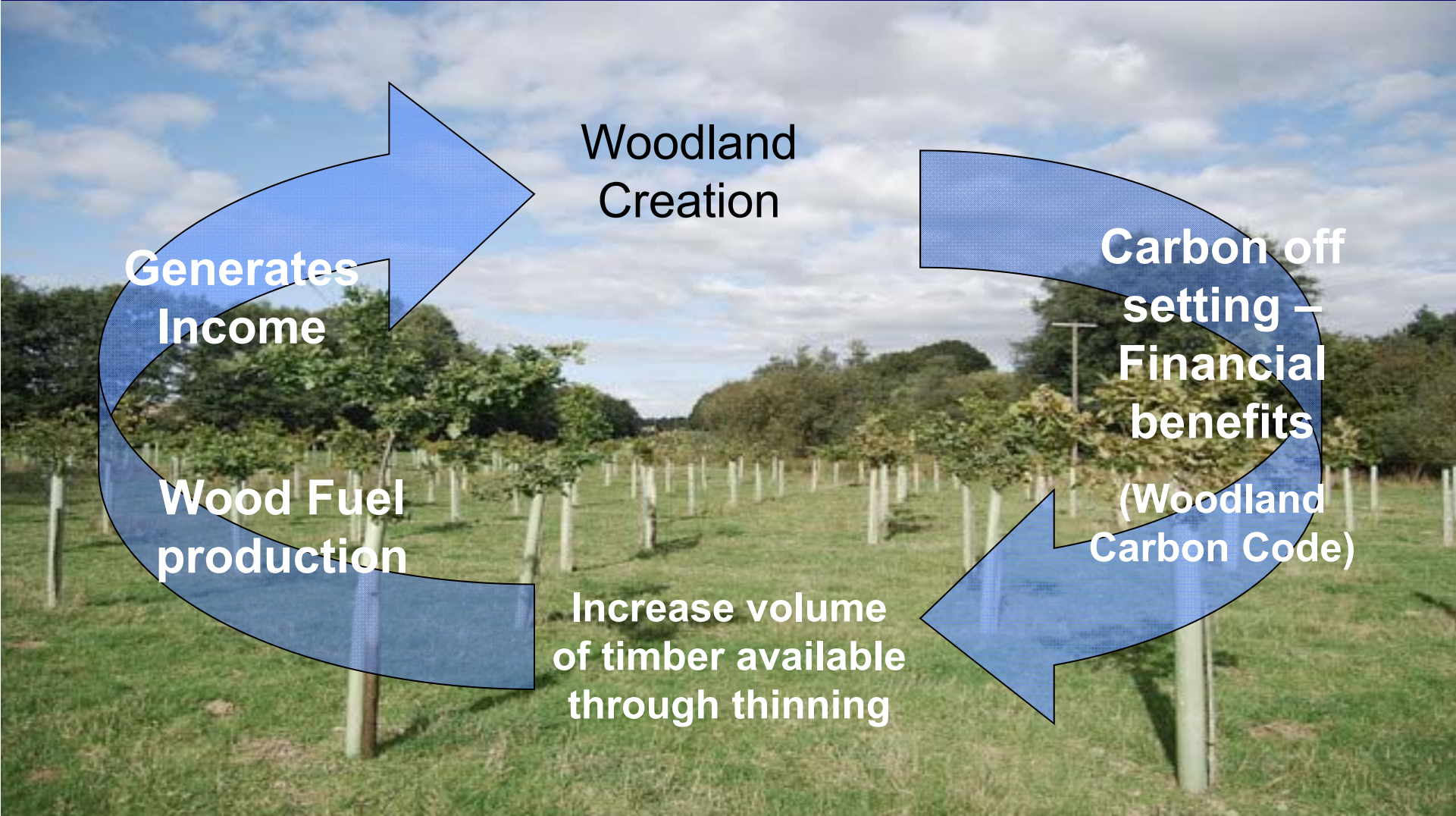
The woodland was formally designated a Local Nature Reserve on 19 May 1992. In 1991 it was designated a Site of Scientific Interest because of its diverse habitat, and redesignated in 1991.

Neither the Forestry Commission nor Wakefield Council records of timber harvesting exist.

Wakefield Council manages Haw Park Wood to Forestry Commission's England Woodland Grant Scheme criteria, and is committed through Treescape, a Tree and Woodland Strategy

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# Woodland Creation



# Carbon off setting – Financial benefits

## Woodland Carbon Code

### Primary

- **Climate change legislation – strive to be a low carbon Council**
- **Woodlands hold potential - soak up CO2**
- **A subsection of the Forestry Commission handling carbon projects on a voluntary basis**
- **White Rose Forest Collaboration “Pilot Group”**
- **Land availability up to 90 hectare**
- **First step – 11.5 hectare project starting 2013/14**

# Wakefield's Contribution to the Carbon Code

- ❑ Shaw Cross, and Gillcarr, are two re-claimed pit spoil sites.
- ❑ The two sites were chosen as part of a pilot Carbon Code scheme, initiated by the Forestry Commission to promote woodland creation for the sequestration of carbon.
- ❑ Both projects delivered through a joint initiative with our partners - the White Rose Forest group.
- ❑ A collective total of 11.5ha of new native woodland was planted across both sites, equating to 27,000 new trees, complementing the woodland that already exists and enhancing bio diversity across the two sites.

# Project Launch

The project was launched at the Shaw Cross site at the start of National Tree Week 2013.





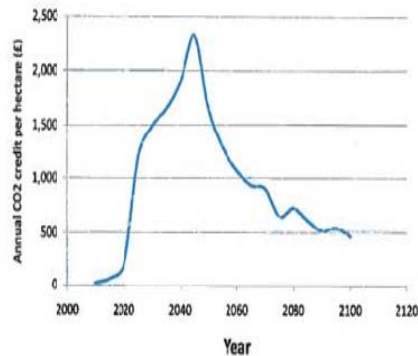
# Added Benefits

- ❑ Increased and enhanced the asset whilst minimising cost
- ❑ Providing greater access to woodlands in Wakefield
- ❑ Health and well-being benefits associated to woodland walks (91% surveyed felt parks and public open space improved their quality of life.(MORI)
- ❑ Protecting and enhancing biodiversity and natural habitat
- ❑ Sustainable improvements

# Financial Benefits - Carbon Trading



## The future price of carbon?



- WCC look up tables
- DECC carbon prices
- Significant income stream
- A good investment?

- ❑ Woodland Trust forecast carbon trading figure of £2,300 per hectare by 2040
- ❑ Potential income of £26,450 from this project in 2040



# Pause for Thought!

“While there may be no “right” way to value a forest, a river, or a child, the wrong way is to give no value at all”

*Hawker et al. (1999) Natural  
Capitalism – the Next Industrial  
Revolution*





Thank you