

## Biomass Energy Production in 'Landscapes of Energy'

Trees, woods and forests are often critical to the construction of 'place'. Changes to forestry and arboricultural management brought about by increased biomass production have the potential to disrupt established sense of forest place. However, as part of this energy production has the potential to re-forge links between people and forests as places of energy. Drawing together a range of evidence, this project considered the most likely changes to place and discussed them using the emerging theoretical framework of 'landscapes of energy'.



*"Our heads accept the need for these landscape changes; our hearts need to learn to love them."*

Paul Selman, 2010, *Landscape Research*

### Background

With the growing interest in wood as a major source of renewable energy it is hoped and expected that sustainable forest management will increase both in extent and scale. Government policy has, for example, explicitly tied the woodfuel agenda to addressing 'under-management' of UK woodlands. Increased management has the potential to affect the sense of 'place' that is created by the presence of trees, woods and forests. Sense of place refers to the personal and social meanings and attachments that people associate with physical spaces such as forests. It is important for public agencies to consider this change: its likely extent and form, and whether it may be positive and/or negative. There is widespread scepticism about and objection to tree felling and other management of trees, woods and forests. However, the idea of 'landscapes of energy' has emerged to emphasise the role of energy as a driver of landscape change and as a framework within which to consider both the positive and negative dimensions of this.

### Objectives

This project aimed to:

- Describe the changes to local communities' and individuals' forest sense of 'place' likely to result from increased production of biomass energy from the UK's trees, woods and forests.
- Analyse these changes using the concepts associated with the literature on 'landscapes of energy'.

### Methods

This project involved a substantive review of policy and evidence relating to biomass energy production in the UK. Subsequent to this, theoretical analysis was undertaken drawing on the established concepts of 'place', such as sense of place and place-attachment. These theories were used to structure the analysis of the prior reviews.

## Findings

Increased biomass production for energy is a high governmental priority in the UK and will impact on sense of forest place in various ways. It appears unlikely that biomass production will result in rapid changes in silvicultural practices, tree species presence or mix, or overall woodland cover. Rather, initially modest, but increasing, silvicultural change in the extent of active forest management, along with increasing woodland cover can be expected over the long term. Consequently the change to forest sense of place resulting from change in the physical characteristics of trees, woods and forests is likely to be relatively limited and gradual. Perhaps the most significant exception to this is the *potential* impact of short rotation forestry or short rotation coppice, although these silvicultural systems appear unlikely to make a widespread impact on landscapes.

More substantive and far reaching changes to forest sense of place are likely to result from changes in social and economic interactions and experiences relating to woodfuel. As this sector continues to grow, more and more individuals and organisations will be drawn into a network of social and economic exchanges with the use of wood for energy at its core. Given the historical role of forest wood as a source of fuel, biomass energy production has the potential to re-forge connections between people, communities and their local trees, woods and forests as *places of energy*. Change in sense of forest place may thus be more positive than negative and is most likely at small 'local' scales. The visibility of renewable energies such as biomass within locally meaningful landscapes is likely to raise consciousness of the consequences of energy use and do so in such a way as to directly challenge established ideas about energy.

## Recommendations

- Given the emergence of a widespread woodland culture as current forest policy objective, the Forestry Commission could support locally focused initiatives that increase social and economic interaction around woodfuel. Such initiatives are likely to re-establish forests as places of energy.
- Impacts on sense of forest place should be considered alongside other social, economic and environmental benefits when evaluating biomass energy projects.

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### Reports and Publications

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