Carbo-BioCrop and UKERC Spatial Mapping
Research update and user feed-back meeting
25 January 2012
Charles Darwin House, London

Carbo-BioCrop *Understanding processes determining soil carbon balance under perennial bioenergy crops.* **Carbo-BioCrop** aims to improve understanding of how second generation bioenergy crops such as short rotation coppice (SRC) and Miscanthus will influence the UK greenhouse gas balance. Currently a significant knowledge gap exists in this understanding. The UK is committed to an 80 % reduction of 1990 CO_2 emissions by 2050 and such dedicated second generation bioenergy crops will contribute to the UK's renewable energy generation with a resulting change in land-use. Carbo-BioCrop will provide information to quantify how the land-use change to SRC or Miscanthus will influence soil carbon emissions, under-pinning the production of 'carbon opportunity maps' for the UK where land identified as optimal for conversion is converted to SRC or Miscanthus. The contribution of soil augmentation with biochar to soil carbon processes will also be investigated as a potential CO_2 sequestration strategy for the UK landscape.

UKERC Spatial Mapping of biomass bioenergy supply *Mapping the supply of biomass bioenergy crops in relation to land-use constraints.* The aim of this project is to apply process-based models for SRC and Miscanthus, alongside a knowledge of soils and climate, to predict the yield and supply of these second generation bioenergy crops.

Programme

Carbo-BioCrop Project

13:30 - Counting the cost of carbon for bioenergy crops, Carbo-BioCrop Project overview — Professor Gail Taylor, University of Southampton
13:50 – The ETI Ecosystem Land Use Model Project (ETI-ELUM) – Dr John Finch, CEH, Wallingford
14:05 -Why do we need to model the carbon balance of biomass crops? Dr Jon Finch, CEH, Wallingford
14:20 -Investigating the case for biochar in bioenergy systems– Dr Saran Sohi, University of Edinburgh
14:35-Question and answer session

15:00- TEA

UKERC Bioenergy Spatial Mapping Project

15:30 – Mapping the UK second generation bioenergy crop resources in Great Britain, project overview – Professor Andrew Lovett, University of East Anglia 10 min?
15:40 - Process-based models for the second generation energy crops and the generation of production maps – SRC and Miscanthus – Dr Matt Tallis, University of Southampton and Dr Astley Hastings, University of Aberdeen
16:00 –Incorporating landscape considerations into assessments of the potential second generation bioenergy resource? – Professor Andrew Lovett, University of East Anglia?
16:15 – Questions and answer session

16:45 – feedback on both project, gaps, omissions and future direction for research?