



The Initiative for Carbon Accounting : Workshop Series 2012-13

Carbon Accounting and Land-use: is it possible to have an integrated land-use planning tool for Scotland?

Tuesday 5 February 2013, Edinburgh Centre for Carbon Innovation

Minutes by Professor Sue Roaf, Heriot-Watt University and Vicky West, Forestry Commission

The workshop heard **presentations on accounting for carbon** in woodlands, agriculture and in peatlands:

- Accounting for woodland creation in the Woodland Carbon Code (Vicky West, Forestry Commission)
- CSort, Carbine and accounting for changes to management of existing woodlands (Paul Henshall, Forest Research)
- The Cool Farm Tool (John Hillier, University of Aberdeen)
- WISE Peatland Choices: A scoping tool for the prioritisation of restoration needs of peatlands in Scotland (Rebekka Artz, James Hutton Institute)
- Reconciling greenhouse gas emissions from measurements and modelling in the land use sector (Bob Rees, SRUC)
- Carbon Accounting for Land Managers – Including Woodland Creation into CLA's model farm-level GHG balance tool (Vicky West, Forestry Commission)

Attendees **discussed the following questions in groups.**

The tools:

- Do tools account for everything / is there anything missing?
- Are tools fit for purpose? Where are improvements required?

Combining tools:

- Do we need to create an integrated carbon accounting tool for land-use?
 - *If yes*: What are the aims? How to achieve them?
 - *If no*: How to make land managers aware of the benefits of each tool and how/when to use each?

Action:

- 3 Actions we can take in next year to improve tools/accessibility of tools available to land managers
- What can/should ICARB do to help in next year?

The **points from the discussion** are summarised below:

Policies

How would a robust integrated land use ghg accounting tool gain traction in practice to inform behaviours aimed at reducing ghg emissions? One proposed solution was that money could be paid for avoided emissions from the land-use. One issue is how to account for leakage and what happens if a land owner receives payments for avoided emissions then reverts to ghg intensive uses?

Standards for ghg accounting in agriculture or peatland management would need to be developed with a validation/verification process as exists for the Woodland Carbon Code (a Peat Carbon Code is currently under development)

If developed could standards and carbon credits incentivise correct behaviours and provide motivations within new land use policy development? (This is being trialled for N₂O in Canada?).

How can land use ghg measurements also take into account changes to biodiversity that result from changes in land use?

The risk of subsequent loss/emissions of carbon should be considered and any subsequent losses minimised.

Combining Tools

The meeting agreed that an integrated forestry / agriculture / horticulture 'tool' would be very useful to inform both decision making on the ground and at policy level. Integration between tools was considered possible but to be a non-trivial challenge.

The meeting felt that coming together to discuss differing carbon accounting tools in forestry, agriculture and peatlands was very useful and further interaction would be welcomed. It would be useful to scope out whether and how an integrated 'tool' might be developed, with a view to getting greater read-across between landuse ghg accounting techniques.

Woodland Carbon Code (WCC) specific: More options in Look-up Tables and a method for dealing with roots and stumps retained onsite during clearfell would be welcomed.

How can knowledge provided by such tools and accounting exercises be used to change landowner behaviour? Work on understanding the relationship between tools outputs, psychology and behaviours would be useful.

Traditional Institutional 'divisions' don't help compatible data being assembled that could bring together crops, animals, forestry, peat etc. on one carbon accounting platform.

We're getting better at combining soil carbon information but different definitions still exist in JHI / FC / NSRI.

Things Missing

A Peatland Tool that serves both forestry and agriculture.

Data on fertiliser/Nitrogen application practices and emission rates in practice.

Actions

Glossary:

An on-line Glossary of terms, metrics and methods might be useful? Its purpose needs definition.

Methods Review:

The range of methods currently available to account for GHG emission from agriculture, forestry and peatland need to be clearly set out, making clear the purpose/attributes/scope/limitations of each method, so characterising the overlaps and gaps between them. This exercise could inform the development of any unified method.

Key to that attribute analysis should be a review of how the methods serve different audiences including land owners, managers, users, government etc., what functions they could and do have in relation to those audiences.