

## The EU Emissions Trading System: Opportunities for Forests?

European forestry has a potentially significant role to play in climate change mitigation. However, until recently the value of carbon sequestration provided by European forests has not been recognised by markets.

The EU Emissions Trading System is currently the world's largest carbon market. It does not cover carbon sequestration by forests at present, but may offer future opportunities to European forest owners. Potential opportunities were explored as part of a wider review covering emerging carbon markets.



### Background

The EU Emissions Trading Scheme (ETS) came into operation on January 1<sup>st</sup> 2005. Recently renamed the EU Emissions Trading System, its aim is to create an efficient European market in greenhouse gas (GHG) emission allowances at the level of private enterprises to help meet EU and Member State reduction commitments under the Kyoto Protocol. It is currently the world's largest carbon market, accounting for over 70% of the estimated total volume and value of transactions worldwide in 2008 (and currently valued at over €70,000m). Focusing primarily on emissions abatement in the power generation sector and by other major industrial sources, the system covers over 11,000 installations accounting for half of total EU carbon emissions and two-fifths of total EU GHG emissions. Although the EU ETS does not currently cover forestry carbon sequestration and there is no indication that this will change in the short term, its inclusion in the longer term remains a possibility.

### Objectives

This research aimed to:

- Explore the reasons for the present exclusion of the forestry carbon from the EU ETS.
- Consider potential opportunities associated with the EU ETS and carbon sequestration that may arise for owners of European forests.

### Methods

- Review of literature and web-based documents associated with the EU ETS that shed light on reasons for the current exclusion of forestry carbon sequestration, potential for its future inclusion, and funding for external activities, focusing on material published from 2003 onwards.

### Findings

The EU ETS was designed principally as a technological driver for emission abatement by energy and industrial sources. It focuses upon permanent reductions by emission sources. A feature of forestry projects is the possibility of re-release of carbon stored due to fire or other risks.

Potential reversibility of carbon sequestration by forests is reported to be the primary concern of most Member States opposing inclusion of forestry credits in the scheme. Other major impediments to inclusion of carbon sequestration by forests are considered by the European Commission to include high transaction and administrative costs, added complexity, remaining uncertainties in quantification, monitoring and verification of emission removals, and unresolved leakage issues. The latter issues relate to potential reductions in sequestration, or increases in GHG emissions, outside the project boundary as a consequence of a project going ahead. Monitoring, reporting and verification with the same level of accuracy as for emissions sources currently covered by the ETS is viewed by the European Commission as a prerequisite for the scheme's extension. However, this is difficult and costly to achieve for forests.

From 2008 onwards, companies have been allowed to use Kyoto Protocol emission reduction credits from Clean Development Mechanism (CDM) and Joint Implementation (JI) projects to count towards their ETS targets, with the aim of reducing EU emissions abatement costs and contributing to global sustainable development. Although CDM and JI include forestry projects, as some Member States were concerned that credits from these would be relatively cheap and inclusion could undermine technology transfer activities, they were excluded.

Despite strong support for inclusion of at least some elements by certain Member States, it is unlikely that carbon sequestration by forests will be covered by the EU ETS in the near future. Inclusion of new types of credit is conditional upon international negotiations within the UNFCCC framework, so this situation could change rapidly once a post-2012 agreement on climate change is reached.

The EU ETS could potentially provide a significant source of funding for EU forestry carbon sequestration activities. Afforestation and reforestation are among activities listed for potential funding using revenues from at least half the proceeds of auctioning EU emission allowances (EUAs) by Member States. Although relatively little used to date, auctioning of EUAs is set to become the primary means of allocating allowances from 2013, with over half of total EUAs expected to be auctioned by 2013, and 70% to 80% by 2020.

## Recommendations

- Creating an institutional framework that values carbon sequestration by European forests will be important if the EU forestry sector is to be encouraged to play a greater role in cutting atmospheric GHG concentrations. This is important if significant opportunities for climate change mitigation by the forest sector are not to be missed.

### Partners

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### Reports and Publications

Ciccarese, L., Elsasser, P., Horattas, A., Pettenella, D. and Valatin, G. (2011) Innovative market opportunities related to carbon sequestration in European forests?, Chapter 9 of Weiss, G. et al (eds) Innovation in Forestry, CABI, Wallingford.