Scandinavian Forest Economics
No. 44, 2012

Proceedings of the Biennial Meeting of the
Scandinavian Society of Forest Economics
Hyytiälä, Finland, May 2012

Anne Toppinen, Heimo Karppinen & Kati Kleemola (eds.)
Modelling the Economics of the Reference Levels for Forest Management Emissions in the EU

Laturi, J., Lintunen, J. and Uusivuori, J.

Finnish Forest Research Institute, Jokiniemenkuja 1, FIN-01301, Vantaa, Finland

In the recent climate change conferences of UNFCCC new accounting rules have been suggested for forestry sector to provide incentives for forest management and emission mitigation actions. There has also been pressure to modify accounting rules to avoid giving credits for sequestration which would occur naturally. Country-specific reference levels for Annex I countries have been suggested to be used as baseline for carbon sequestration target of forest sector. Each country has proposed a reference level based on baseline harvest and growth of forest, accounting for the effect of policies implemented before 2009. A country will gain carbon credits if emissions from forest management are below the baseline reference level, while a country whose emissions exceed the baseline reference level will lose carbon credits. Gains and debits are limited with caps which are proportional of the national carbon emissions in the year 1990. With an economic model we study how the setting of reference levels will affect to the forest sector, harvesting volumes, carbon reservoirs in harvested wood products and price of wood. Also the effects of setting caps for gains and debits as a function of the carbon dioxide emission allowance (EUA) are studied. We also investigate analytically the proposed reference levels and study how to proceed into ‘more correct’ baseline reference levels.

Keywords: Carbon reservoirs, harvested wood products, wood consumption and price