

Public goods and services from multi-functional forests

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Overview



- forestry in EU-27
- forest public goods and services
- sustainable forest management
 - securing the supply of public goods
 - RDP forestry measures 2007-13
- the debate about forest public goods

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Forests of Europe



- EU has 5% of world's forests
- 42% of the EU land area is forests and 'other wooded land'
- mostly semi-natural forest and plantations, very little 'old-growth' forest left
- growing in area, timber volume and carbon stock
- EU volume of timber removed is not keeping pace with annual growth (only 60% of annual increment is felled)






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Forest types



forest type	mono-functional	multi-functional	conservation
<i>perception of the forest</i>	primary production	production plus environmental and social benefits	managed for nature and people
<i>characteristics</i>	intensive production of timber and other wood products	'closer to nature' forestry, some timber production, with trade-offs between different functions	old-growth forests, nature reserves, protective forests, urban forests
			

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Forest goods and services

Forest market goods

- wood
 - sawn timber, wood-based panels, pulp for paper
 - cork
 - renewable energy - firewood, chips and bark
- non-wood
 - berries, mushrooms, game

Forest public goods

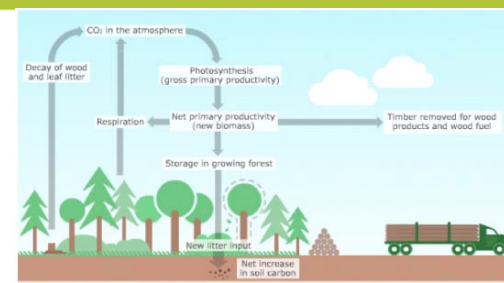
- carbon storage and sequestration
- biodiversity
- protection of soils and water
- social public goods

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Carbon stored in EU forests



- estimated 9.8 billion tC stored in EU forest biomass
- forest biomass carbon
 - 73% above ground 20% below ground 7% in deadwood
- each year the increase in EU forest biomass carbon is equivalent to about 9% of EU emissions
- potential long-term carbon storage in wood products

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Carbon sink or carbon source?



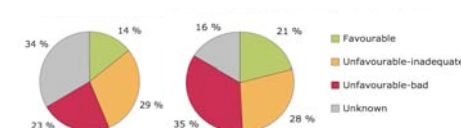
- at present EU forests are a carbon 'sink', storing more carbon than they produce
- meeting EU renewable energy targets could increase by a factor of 2 or 3 the demand for biomass from agriculture and forests
- if fellings exceed annual growth some forests will become a temporary source of carbon after 2020
- fell more timber or plant more trees?

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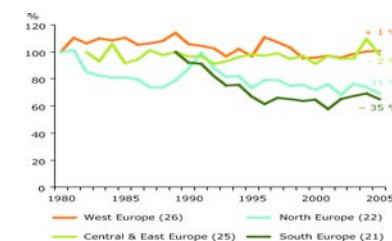
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Forest biodiversity

- species, forest structure, genetic material and soil
- 'old growth' forests, undisturbed by man have richest biodiversity and carbon stores
- 30% of terrestrial Natura 2000 sites are forest habitats
- 170 forest species identified in the Habitats Directive



status of Natura 2000 forest habitats and species



populations of common forest bird species

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Forests protecting soils and water



- prevent soil erosion by limiting run-off and reducing windspeed
- enrich soil organic matter
- store and purify rain water, improving water quality and reducing flooding
- protective functions important in alpine and Mediterranean regions

Social public goods



- quality of life
 - micro-climate buffer around urban areas
 - recreation opportunities
 - improving physical and mental health
 - cultural and historic values
- jobs and businesses
 - vitality of remote rural areas
 - 350 000 people directly employed in forest management

Sustainable forest management

- Forest Strategy for the EU is based on **sustainable forest management (SFM)**:

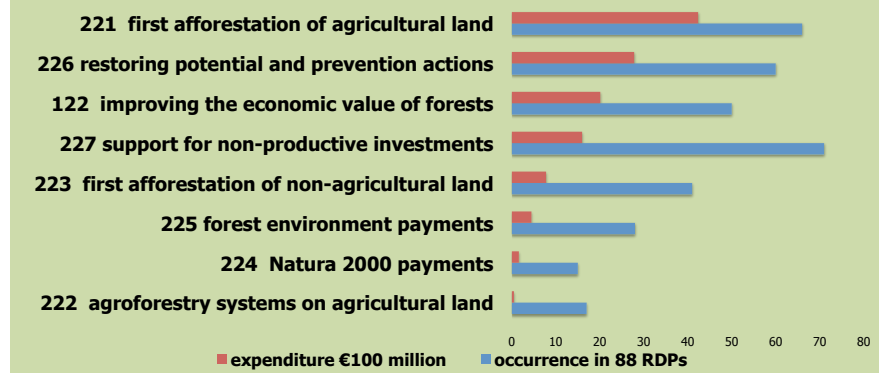
“ the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems ”

Securing the supply of forest public goods



- trade-offs
 - bio-energy and biomass vs. carbon storage and enriching biodiversity?
 - farming or forestry or both?
- coping with the effects of climate change
 - risks of fires, storms, forest pathogens
 - shifting climatic range of forest types
- rewarding the future supply of forest public goods

RDP forestry measures 2007-13

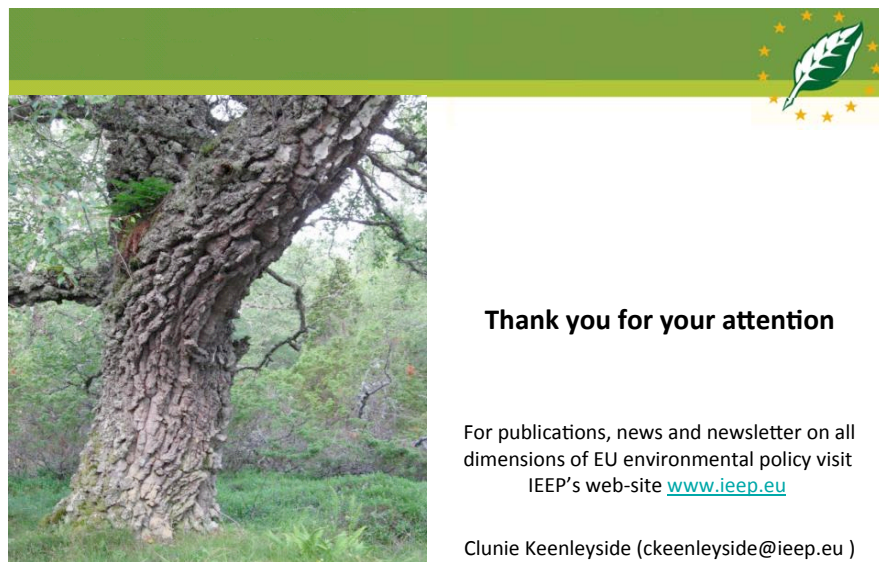


€16 billion of RDP expenditure allocated to these and other forestry related measures, equivalent to 7-8% of total RDP funding for 2007-13

The forest public goods debate?



- why now?
 - delivering EU policy priorities
 - CAP reform
- some key issues to discuss
 - policy measures and funding needed to deliver forest public goods in the long term
 - decisions about the type, location and role of new forests
 - landscape scale management of multiple forest units



Thank you for your attention

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