

**Education eSeminar; December
9th, 2014**

European forests and wood mobilisation

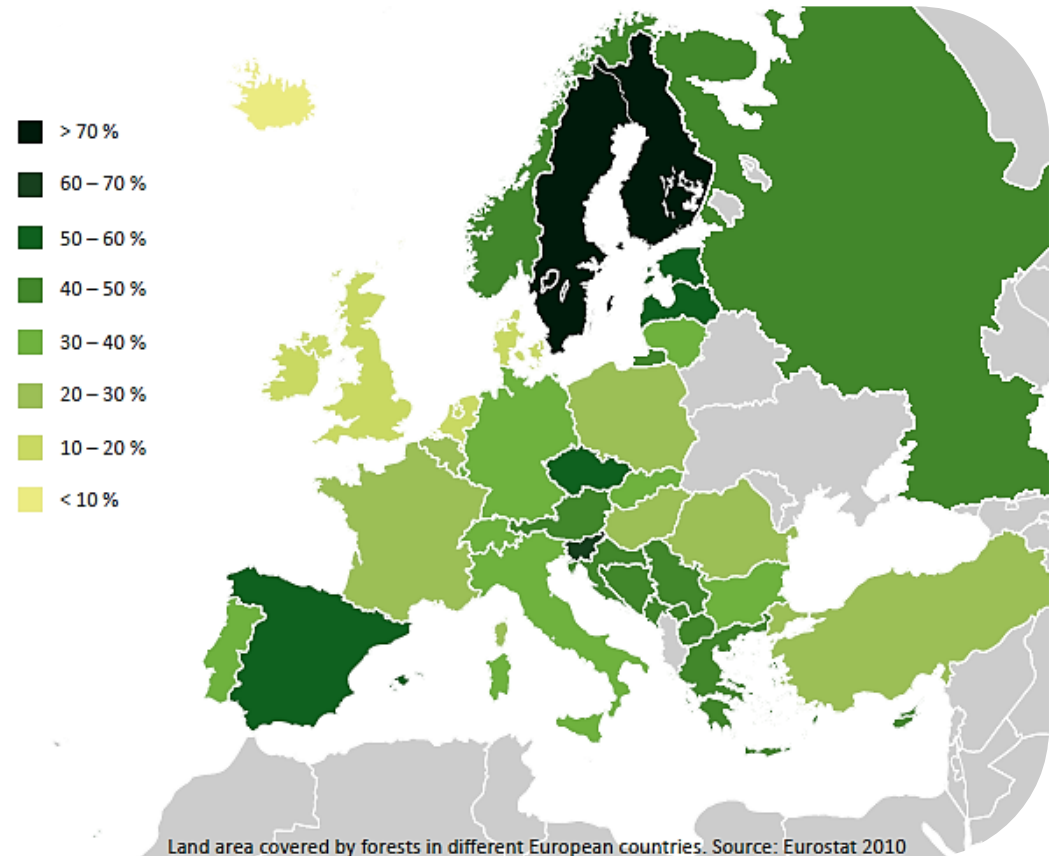
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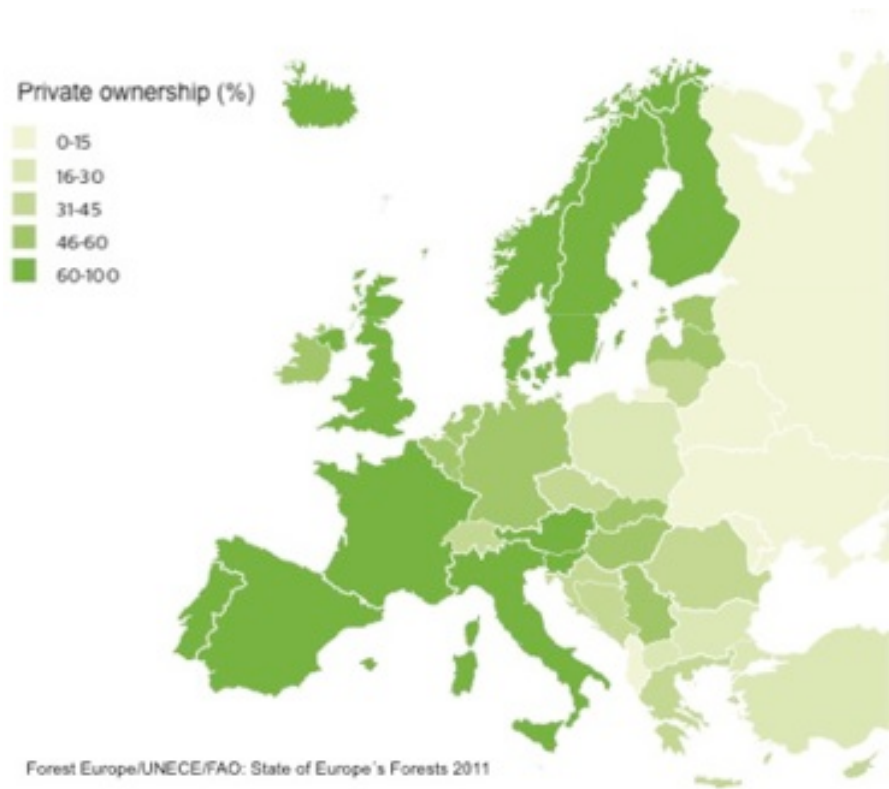
What is the forest area of Europe?

- 1 billion hectares of forest
- 25% of world's total
- Most forest-rich region in world (forests covering 45% of land area)
- Majority located in Russia (80%)
- Forest area expanding (increase of 17 million hectares over past 20 years)



Who owns Europe's forests?

- All Russia's forests publicly owned
- Rest of Europe (50% private; 50% public)
- Big variation within countries
- % privately owned increasing



Who are the owners of the private forests?

Past

- Farmers
- Rural based
- Forest used for income
- Forest used for firewood



Present/future

- Non-farmers
- Urban based
- Income from forests not needed
- Forests not managed



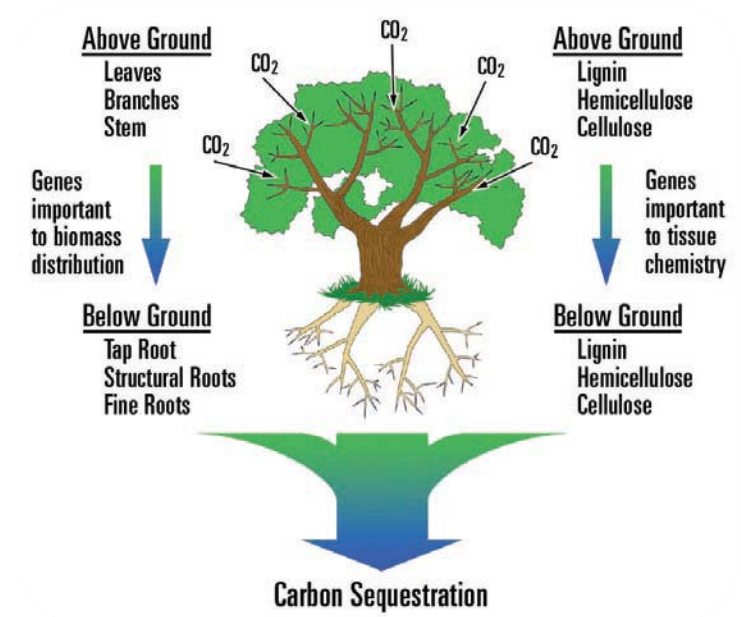
How are European forests managed?

According to the principles of sustainable forest management (SFM)

- The management of forests to meet the needs of society and industry while preserving the forest's health
- Aims to strike a balance between the demand for the resources of a forest and the vitality of a forest



What are the forests used for?



Biodiversity

- Biodiversity describes the variability among living organisms and the ecosystems of which they are part
- Forests are among the most diverse and complex ecosystems in the world, providing a habitat for a multitude of flora and fauna
- 4% of forest area protected in Europe with the main management objective of biodiversity (10% excluding Russia)



Protection

- Prevent erosion and loss of soil
- In steep areas help to prevent land slides etc
- Preserve drinking water resources
- Help stabilize stream banks or sand dunes
- Reduce noise pollution



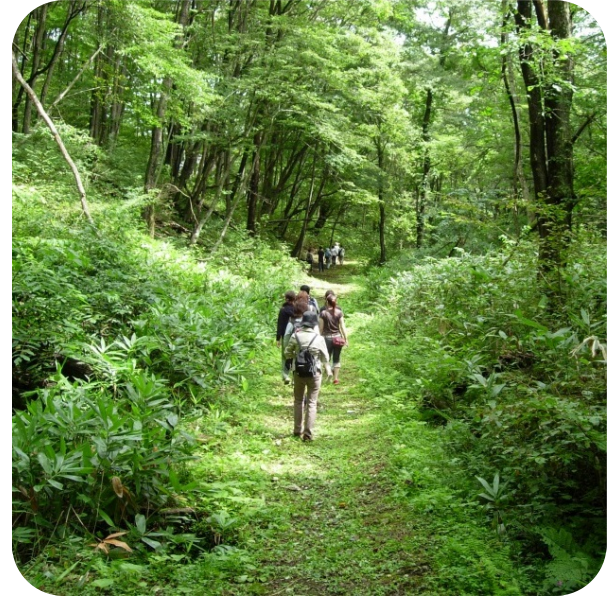
Recreation

- Provide varied recreational opportunities
- Robust, natural environment
- Good capacity to absorb users and noise



Human health and well-being

- Spending time in nature (including forests) good for physical and mental health
- Recognised relaxation and/or stress management activity
 - Reduces stress hormones levels
 - Reduces blood pressure
 - Enhances human immune system
 - Improves mood



Non-wood products



Wood production

- The amount of wood in forests increased by nearly 9 billion cubic metres between 1990 and 2010
- In 2010, more than 578 million cubic metres of roundwood were produced



What is the wood used for? Pulp, paper and packaging



What is wood used for? Construction and furniture



What is wood used for? Energy

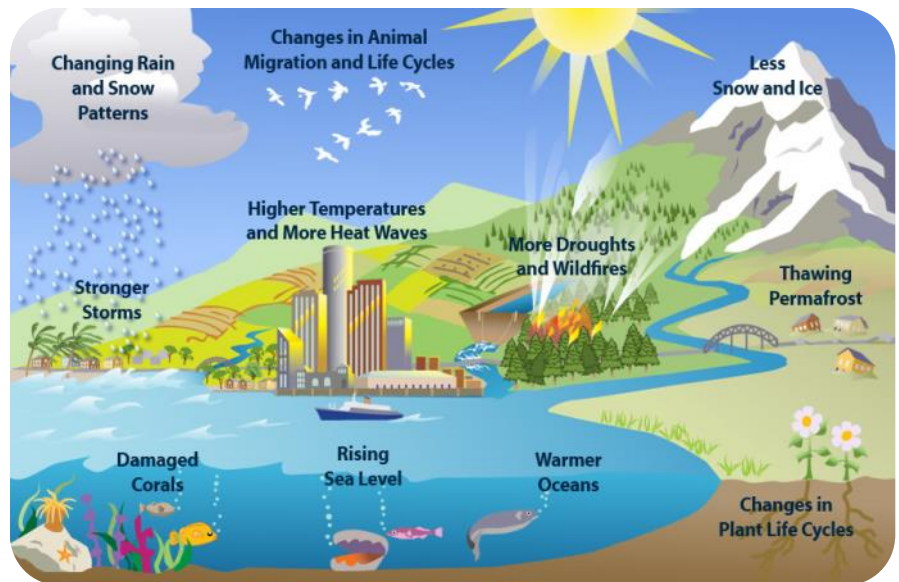


Europe's Energy Policy

- Aim is to increase renewable energy use
- Target to 2020: renewable energy share of 20%
- Target to 2030: renewable energy share of at least 27% (binding at EU level)
- Renewables include wind, solar, hydro-electric and tidal power as well as geothermal energy and biomass.
- 50% of renewable energy in EU comes from wood
- Why increase renewable energy use?
 - reduce EU domestic greenhouse gas emissions by at least 40% below the 1990 level by 2030

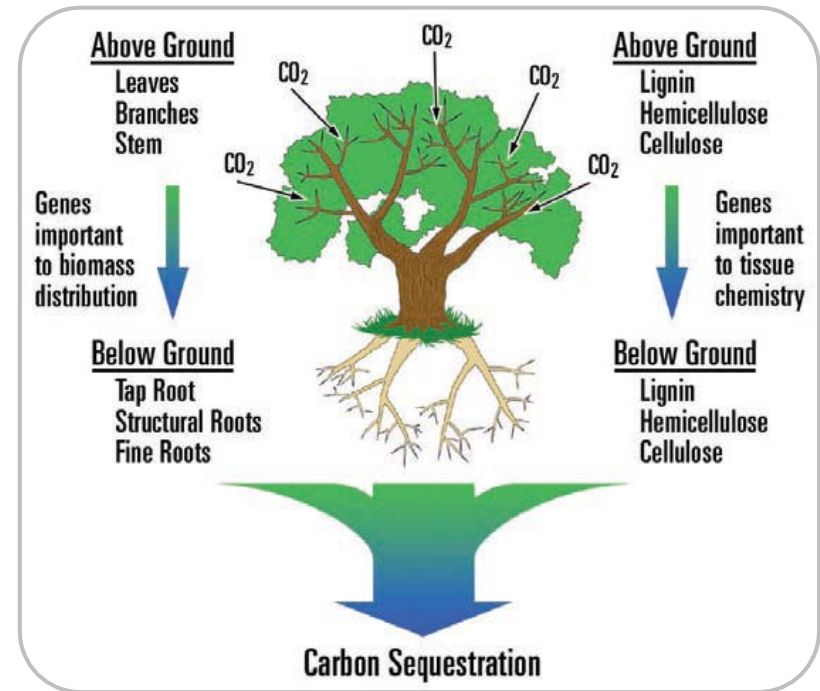
Climate change

- The global temperature has risen by about 0.8 °C over the past 150 years
- The United Nations Framework Convention on Climate Change (UNFCCC) aim to limit the global mean temperature increase since pre-industrial times to below 2 °C.



Forests, carbon and climate

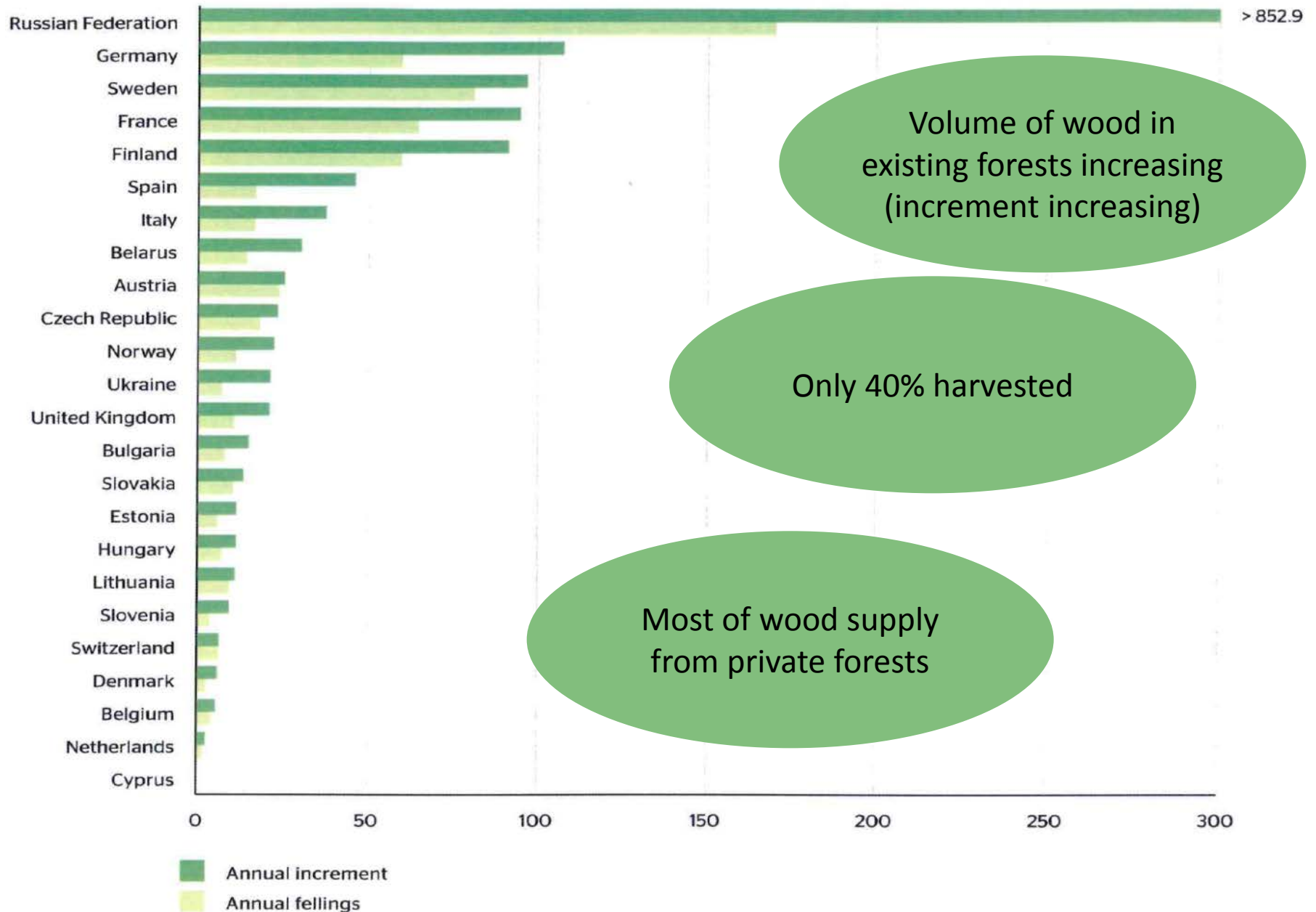
- More carbon in forests than in the atmosphere (they sequester carbon)
- Deforestation contributor to increasing carbon in atmosphere
- Forests and climate change mitigation
 - Afforestation/reforestation
 - Reduced deforestation
 - Forest products for bioenergy replacing fossil fuels
- 870 million tons of CO₂ sequestered (absorbed) from atmosphere each year by forests (equivalent to 10% of European greenhouse gas emissions)



Wood for energy

- Rising share of wood being used for energy
- Where will the timber come from to satisfy this demand?
 - Increased domestic wood mobilisation from existing forests
 - Increase forest area
 - Import more wood into EU
 - Optimised cascade use
(where wood should be used according to an order of priority:
woodbased products, re-use, recycling, bioenergy and disposal)

Increase wood mobilisation





SIMWOOD

Sustainable Innovative Mobilisation of Wood

EU FP7 Collaborative Project 2013-2017
Grant Agreement No. 613762



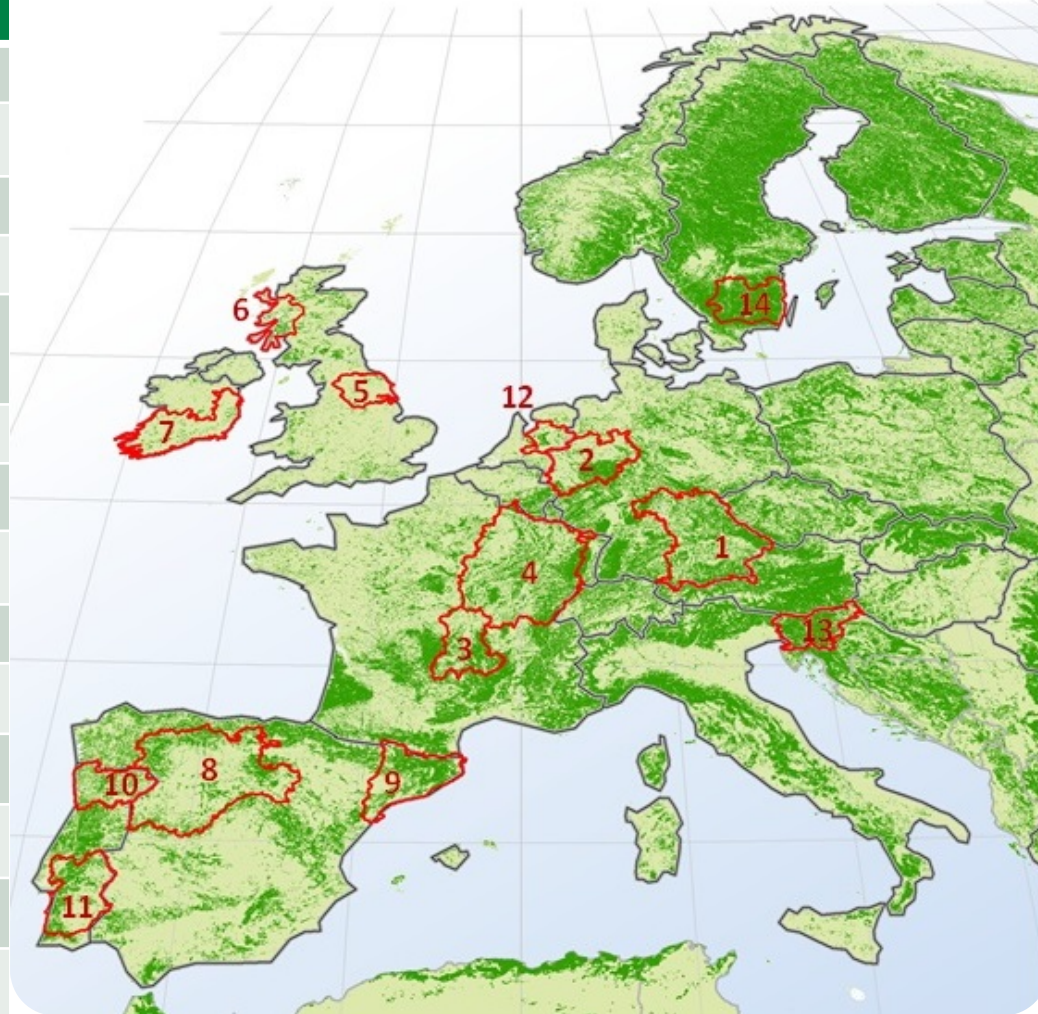
Overall objective of SIMWOOD

*Increased supplies of wood
through collaborative wood mobilisation
in the context of sustainable
forest management in Europe*

Focuses on 14 regions

The SimWOOD Regions

	Region	Country
1	Bavaria	Germany
2	North Rhine-Westphalia	Germany
3	Auvergne	France
4	Grand-Est	France
5	Yorkshire & North-east England	UK
6	Lochaber	UK
7	South-Eastern Ireland	Ireland
8	Castile and León	Spain
9	Catalonia	Spain
10	Nordeste	Portugal
11	Alentejo	Portugal
12	Overijssel & Gelderland	Netherlands
13	Slovenia	Slovenia
14	Småland	Sweden

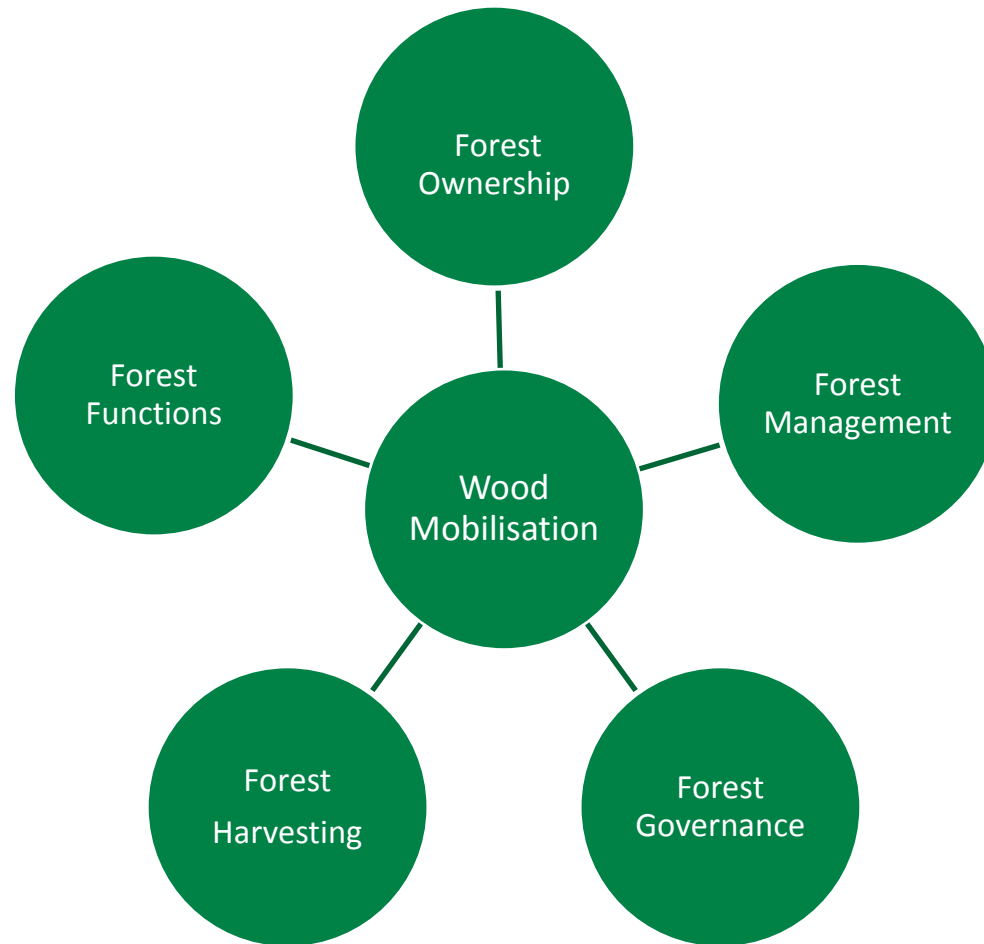


SIMWOOD Regions

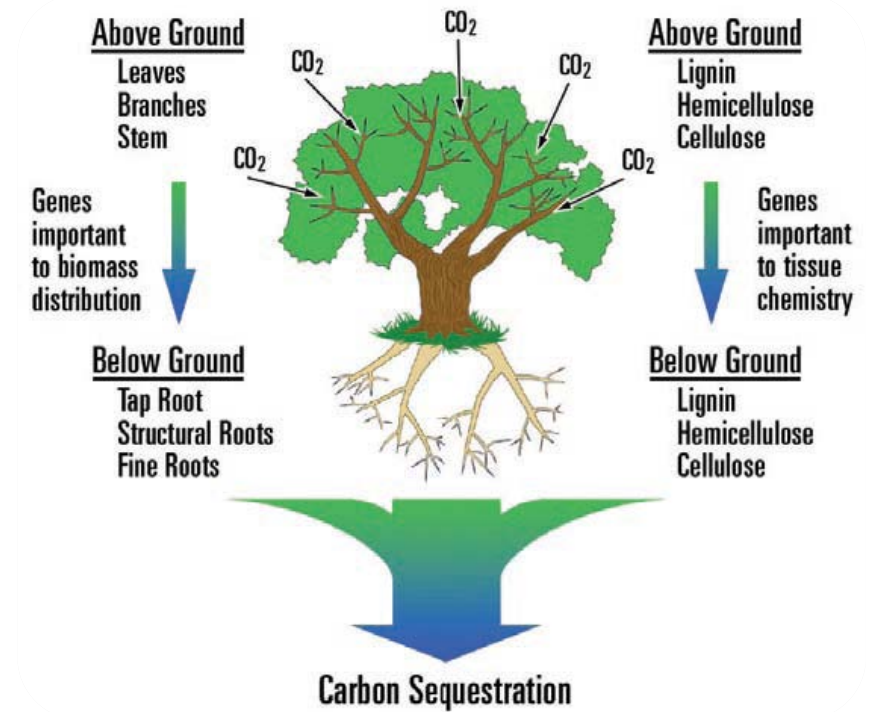
- Differ
 - Site conditions, species, forestry tradition, risks, steep slopes
- Similar
 - Demand for wood increasing
 - Significant proportion of increment not harvested
 - Private forests – small and fragmented
 - New urban based owners – lost tradition of management

*Opportunities to learn from each other –
what works in one region might work in another*

Socio-economic/technical-logistical factors influencing wood mobilisation



Forest functions



Forest ownership

- Who owns the forests?
 - State/local government/industry/non-industrial private forest owners (e.g. farmers; families etc)
 - What size are the forests?
 - What are the objectives of the owners?



Forest governance

- Regulations (e.g. felling licences)
- Incentives (e.g. roading grants)
- Organisations that exist to help owners make decisions re mobilisation
- Advice and information re mobilisation



Forest management

- Species
- Age-class
- Form of management
- Management plans
- Certification



Forest harvesting

- Markets
- Costs of harvesting
- Logging enterprises (e.g. availability of harvesters)
- Roading/access
- Terrain



Work in project

- Identify:
 - main barriers to stronger wood mobilisation
 - means of overcoming these barriers
 - existing initiatives that have resulted in greater wood mobilisation
 - new initiatives that could be “trialled” in the project
 - evaluate how successful these initiatives have been at end of project (have they resulted in increased mobilisation)?

What is my background/what is my role in SIMWOOD?

- BAgrSc in Forestry/PhD in Forestry
- Lecturer in Forestry in University College Dublin
- Research areas:
 - Why do some landowners opt for forestry?
 - Private forest owners (aims and objectives for their forests)
- Lead a work package (2)
 - Collect the best-available data and information on all wood mobilisation domains in all the region
 - Identify gaps/carry out specific studies to address these gaps
 - Identify barriers/opportunities for greater wood mobilisation

Thank you!

Any questions?