COST ACTION FP 0703

Echoes: Expected Climate cHange and Options for European Silviculture

Country Report: Major points

IRELAND

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Background information

- Climate – Oceanic, high rainfall, cool summer, mild winter, windy
- Future climate – drier summers, warmer & wetter winters, wind?
- Forest area 79 kHa in 1920 to 709 kHa 2005 (10%)
  - 74% of species are conifers
  - 26% broadleaved species
  - 53% of stands single age monoculture – mainly SS
  - 13% stands mixed broadleaf and conifer
  - 56% of forest area on peatland or cut-over peatland
- 70 million m^3 growing stock, harvest ~ 3 M m^3 an^{-1}

Impacts

- Observed
  - Phenology (advanced bud break -delayed bud set)
  - Drought (and interactions)
- Expected
  - High res RCM (C4i) – IPCC scenarios A2, B1 2020 to 2100
  - Species suitability
  - Drought
  - Windthrow
  - Pests and diseases
- Monitoring
  - ICP level I & II (FutMon)
  - Phenological gardens (30 years +)
  - Research (ecosystem studies and dendroclimatology)
  - Permanent sample plot since 1950s (good basis for investigation)
  - Pests (spruce aphid and pine weevil)

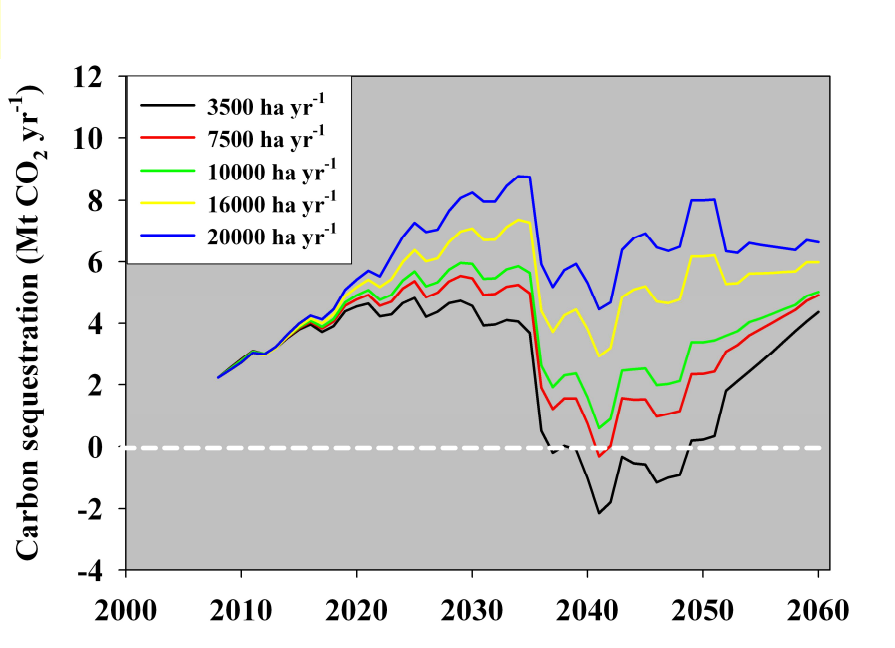
Adaptation

- Policy and measures
  - Windthrow risk assessment
  - ESC system (2009) - CLIMADAPT
    - Species choice
    - Risk assessment and measures
  - Spread risk
  - Mix species
  - Adjust silviculture

Mitigation

- C account
  - Ireland 23 % above 1990 (13 % target)
    - Art 3.3 forests offset ~40 % emission excess over 1st CP
  - Art 3.3 forest sink 2 M t CO_2 in 2008 increase to 5 M t CO_2 in 2020 (350 kHa)
  - Art 3.4 forest +2 to -2 Mt CO_2 (2008-2020)
    - Not elected 2008-2012
    - No CDM or JI activities
- Bioenergy
  - CHP accounted for 9 PJ or 1.3 % total primary energy requirement in 2006 (mostly industry by-products)

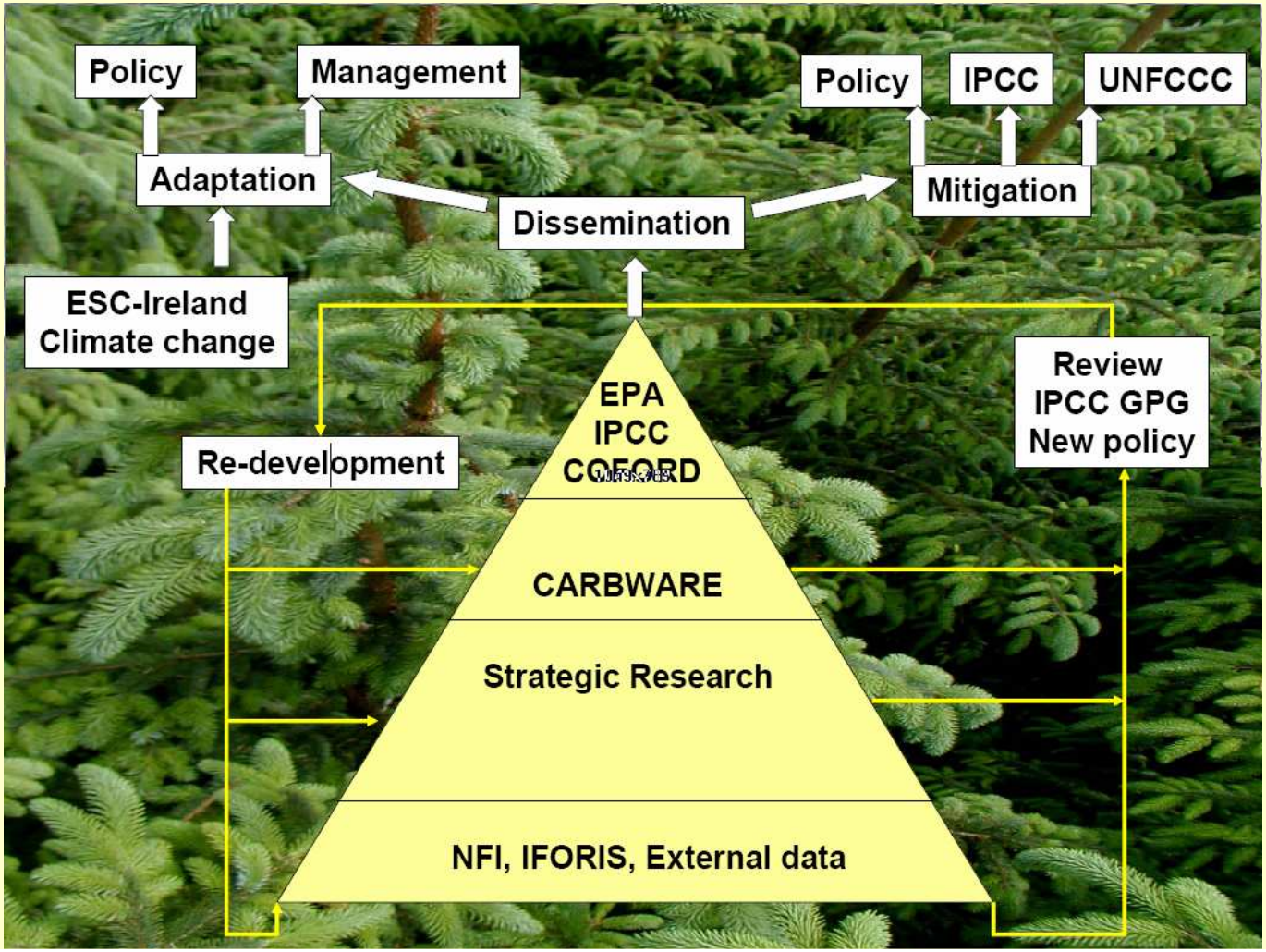
- Policy
  - Mitigation
    - Afforestation grant scheme Art 3.3 forest sink 2 M t CO2 in 2008 increase to 5 M t CO2 in 2020 (350 kHa)



  - Bioenergy
    - Target 25 PJ by 2020 from wood
    - Renewable heat deployment programme approved wood fuelled boilers producing 36 MW Heat saving ~47 kt CO2 per year

Reseach-policy interface

- CLImate MITitgation and adaptation (2007-2012)
- Research and development aimed at reporting and policy requirements



Test on windows