63rd FEFPEB Congress

Alex McCusker
Forest Products Annual Market Review

Valencia, Spain
5 October 2012
State of World’s Forests 2012
5 Key Messages

• Forests as critical life support systems
• Forestry as an engine of economic development and equity
• Wood as a vital means to a sustainable future

• Forestry as a key component of greening the other sectors
• Forests as a source of cultural, aesthetic and recreational fulfilment
• Plant trees and invest in ecosystem services
• Promote small and medium forest-based enterprises, and gender equity
• Use wood for energy, reuse and recycle wood products
• Enhance communication, and coordinate development
Process – *Forest Resources Assessment and State of Europe’s Forests*

**Global FRA 2010**
- 233 countries and areas
- 7 themes, >90 variables, 4 points in time (1990, 2000, 2005 & 2010)
- 178 national correspondents
- 10 regional workshops
- > 900 specialists involved

**SoEF 2011**
- 6 Criteria for SFM:
- 16 qualitative indicators
- 222 national experts directly working on data provision

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Forest Area Change – FRA2010

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Forests in the UNECE Region – FRA2010

36% of land area
Growing Stock – FRA2010

Europe
Europe excl. Russian Fed.

Billion m³

1990  103
2000  107
2005  109
2010  112

0.0  20.0  40.0  60.0  80.0  100.0  120.0

1990  23
2000  27
2005  29
2010  31

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FRA 2010 Europe Changes

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Forest Cover - Europe

45% of total land area (32% without Russia)

SoEF 2011
Forest Area Increasing by 0.8 million ha/yr
Growing stock has increased by 8.6 billion cubic meters since 1990
# Sustainability of Forest Management

<table>
<thead>
<tr>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>Part A</th>
<th>Part B</th>
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</thead>
<tbody>
<tr>
<td>Forest resources and global carbon stock</td>
<td>Health and vitality</td>
<td>Productive functions</td>
<td>Biodiversity</td>
<td>Protective functions</td>
<td>Socio-economic functions</td>
<td>Overall policies, institutions and instruments for sustainable forest management</td>
<td>Policies, institutions and instruments by policy area</td>
</tr>
<tr>
<td>Russian Federation</td>
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<td>North Europe</td>
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<td>South-West Europe</td>
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<td>South-East Europe</td>
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<td>European Union</td>
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SoEF 2011

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Forest Area Growth - 2030

Change in Forest Area by % points
- >20
- 10 - 20
- 5 - 10
- 2 - 5
- 0 - 2
- -3 - 0
- nd

Other countries

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European Forest Sector Outlook Study II

Consumption of wood products in the EFSOS Reference scenario, 2010-2030
The scenario explores how much more carbon could be sequestered by European forests without reducing the annual harvest of stemwood for products and energy, and without expanding the area of forests.

Assumes a change in silvicultural methods.
- Rotation lengths were increased in 5-year steps to a max increase of 25 years.
- Max age of thinning was increased accordingly. The thinning shares were varied between 25 to 100% of the total harvest.

Assumes forest owner has incentives to maximise forest carbon stock and cover the extra costs of the modified regime.
## EFSOS II Projections

<table>
<thead>
<tr>
<th></th>
<th>Reference Scenario</th>
<th>Maximising Biomass Carbon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
<td>2030</td>
</tr>
<tr>
<td><strong>unit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Forest area</strong></td>
<td>1000 ha</td>
<td>204,870</td>
</tr>
<tr>
<td><strong>Forest available for wood supply</strong></td>
<td>1000 ha</td>
<td>166,724</td>
</tr>
<tr>
<td><strong>Forest non available for wood supply</strong></td>
<td>1000 ha</td>
<td>38,146</td>
</tr>
<tr>
<td><strong>Growing stock</strong></td>
<td>million m³</td>
<td>29,042</td>
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<tr>
<td></td>
<td>m³/ha</td>
<td>174</td>
</tr>
<tr>
<td><strong>Increment</strong></td>
<td>million m³ / year</td>
<td>913</td>
</tr>
<tr>
<td></td>
<td>m³ per ha/year</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>Carbon in biomass</strong></td>
<td>Tg C</td>
<td>11,507</td>
</tr>
<tr>
<td></td>
<td>Mg C ha⁻¹</td>
<td>69.0</td>
</tr>
<tr>
<td><strong>Average age</strong></td>
<td>yr</td>
<td>54.3</td>
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</table>
## Future of roundwood and product prices

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit (2005 USD)</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
<th>Growth rate, 2010-2030</th>
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</thead>
<tbody>
<tr>
<td>C Sawlogs</td>
<td>USD/m³</td>
<td>65</td>
<td>76</td>
<td>93</td>
<td>1.8%</td>
</tr>
<tr>
<td>NC Sawlogs</td>
<td>USD/m³</td>
<td>89</td>
<td>112</td>
<td>143</td>
<td>2.4%</td>
</tr>
<tr>
<td>C Pulpwood</td>
<td>USD/m³</td>
<td>50</td>
<td>64</td>
<td>86</td>
<td>2.7%</td>
</tr>
<tr>
<td>NC Pulpwood</td>
<td>USD/m³</td>
<td>51</td>
<td>63</td>
<td>85</td>
<td>2.6%</td>
</tr>
<tr>
<td>Sawnwood</td>
<td>USD/m³</td>
<td>174</td>
<td>177</td>
<td>198</td>
<td>0.6%</td>
</tr>
<tr>
<td>Panels</td>
<td>USD/m³</td>
<td>216</td>
<td>233</td>
<td>279</td>
<td>1.3%</td>
</tr>
<tr>
<td>Paper</td>
<td>USD/mt</td>
<td>540</td>
<td>567</td>
<td>624</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

EFSOS II Reference Scenario, EFI-GTM

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• The US Lacey Act Amendment (2008) and the EU Timber Regulation (2013) are placing new obligations on suppliers to demonstrate “low-risk” status
• should benefit hardwood supplies in regions where there is strong evidence of good forest governance
Carbon Markets / Climate Policy

• The volume of carbon traded in the global markets grew by 17% in 2011, with its value increasing to a total of $175.6 billion – a 10% increase from 2010.

• Despite the overall growth, carbon trade has been slow to take off, having suffered from the prolonged financial and economic crises in Europe, political obstacles in the US, slow progress in the negotiation process of the United Nations Framework Convention on Climate Change (UNFCCC), and the absence of full operational details for REDD+.

• The second compliance period of the Kyoto Protocol starts as a voluntary agreement in 2013, and is characterized by a lack of interest outside Europe for a binding treaty (Canada, Japan, the Russian Federation and the US do not intend to commit).
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Consumption of forest products

Index (2007=100)

2007: Europe 96
2008: CIS 643
2009: North America 528
2010: Total

million m³ roundwood equivalent

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Driver: Housing Market

Housing Starts

- Europe
- North America

UNECE/FAO FPAMR

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Driver: China

Share of selected ECE country exports

UN COMTRADE, exports by value, US, Canada, Russia, Finland

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Roundwood Markets

Consumption of coniferous industrial roundwood

UNECE/FAO FPAMR

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Sawn Softwood Markets

Consumption of sawn softwood

UNECE/FAO FPAMR

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Sawn Hardwood Markets

Consumption of sawn hardwood

- Europe
- CIS
- North America

Index (2007=100)

2007 2008 2009 2010 2011
Wood-based Panels Markets

Consumption of wood-based panels

Index (2007=100)

2007  2008  2009  2010  2011  2012 (Q)

Europe  CIS  North America

UNECE/FAO FPAMR

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Consumption of paper and board

Index (2007=100)

2007 2008 2009 2010 2011

CIS
Europe
North America

UNECE/FAO FPAMR

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Packaging Trends - Europe

Million tonnes, UNECE/FAO TIMBER database

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Driver of paper trends

Source: GAO, USPS, in billions of pieces

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