



# Potential Sustainable Wood Supply in Europe

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UNECE/FAO Timber Section



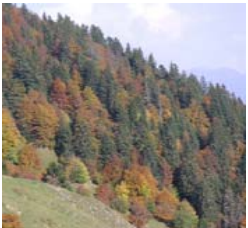
Policy Dialogue on  
**Potential Sustainable Wood Supply in Europe**  
22 October 2008 – Rome



# Content

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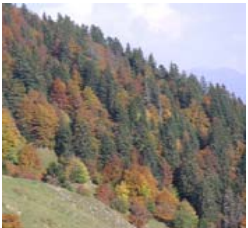
1. Background
2. Methodology & Data used
3. Results & Food for thought
4. Is there enough wood?
5. Next steps



# 1. Background

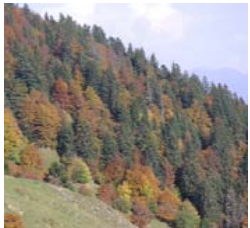
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- Growing demand for wood:
  - Bioenergy (2020 targets)
  - Demand for wood products
- More wood seems to be available (on a sustainable basis)
- Information and data often unclear



# 1. Background – UNECE/FAO activities

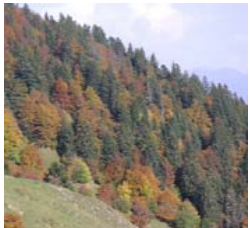
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- European Forest Sector Outlook Study (2005)
- State on Europe's Forests 2007
- Joint Wood Energy Enquiry (2006 & 2008)
- Workshop on wood mobilization (Jan 2007)
- Task Force on Wood Availability and Demand (and study)
- Workshop on Wood Resource Balances (Apr 2008)
- Work Potential Wood Supply (2008)

# 1. Objectives of the Study

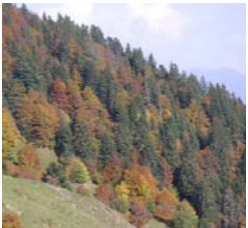
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- Present, analyse and explain currently available data on potential wood supply
- Raise awareness on methodology for wood resource assessment
- Provide policy measures for sustainable increased wood mobilization

## 2. Methodology

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- Best international available data, different sources
- Current use
- bio-technical potential (theo. maximum)
- assumption on socio-economic potential

## 2. Methodology

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### **Forest:**

- Stemwood
- Other aboveground biomass
- Belowground biomass

### **Non-forest:**

- Other wood land
- Trees outside forest

### **Co-products and waste:**

- Chips, wood residues
- Post consumer recovered wood

### **Agriculture:**

- Fruit trees, vines, olives

### **Forest Expansion**

- on fallow agriculture land

Influencing factors for wood supply: Forest age class distribution

Increment from forest area NOT available for wood supply

## 2. Data – current use

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Forest	State of Europe's Forest (SOEF) FRA, TBFRA
OWL, Trees outside forest	TBFRA
Forest Expansion	n.a.
Agriculture	?
Industry co-products	Wood Resource Balance / JFSQ
Post-consumer rec. wood	COST E31, Wood resource balance



## 2. Data – bio-tech potential

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Forest	State of Europe's Forest (SOEF) FRA, TBFRA
OWL, Trees outside forest	TBFRA (increment), SOEF (area)
Forest Expansion, Agriculture	Eurostat statistics on land use + general figures for increment
Industry co-products	EFSOS, Wood resource balance
Post-consumer rec. wood	Expert estimates (Mantau / Leek)

## 2. Data – socio-economic potential

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Forest	35 % (0% below ground)
OWL, Trees outside forest	35 %
Forest Expansion, Agriculture	Eurostat statistics on land use + general figures for increment
Industry co-products	EFSOS, Wood resource balance
Post-consumer rec. wood	Expert estimates (Mantau / Leek)

# 3. Results

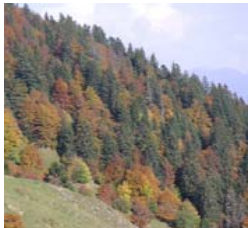
Source of wood supply (EU 27)	current use (2005) [M m <sup>3</sup> ]		additional bio-technical potential [M m <sup>3</sup> ]		additional socio-economic potential [M m <sup>3</sup> ]	
Stemwood (FAWS)	355.2	68%	232	31%	81.2	35%
Aboveground biomass (FAWS)	11.2	2%	148.8	20%	52.1	22%
- from current harvest						
- from additional harvest		0%	28.8	4%	10.1	4%
Belowground biomass (FAWS)	2.6	1%	176.2	23%	0	0%
Other Wooded Land	1.1	0%	18.7	2%	6.5	3%
Trees outside forest	7.1	1%	3.6	0%	1.3	1%
Forest Expansion	0	0%	65.1	9%	22.8	10%
Wood fibre from agriculture	?	0%	25	3%	18.7	8%
Co-products and residues from wood-processing industry	113.8	22%	2	0%	2	1%
Post-consumer recovered wood	28.6	6%	52.5	7%	39	17%
<b>SUM</b>	<b>519.6</b>	<b>100%</b>			<b>233.7</b>	<b>100%</b>

# 3. Data Quality

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- Forest data: “as good as it gets”
- Woody biomass outside forest: “quite poor, but best available (?)”



- Co-products: “fairly good”
- Recovered wood: “informed guessing”



- Agriculture: “good data basis, little knowledge about actual use (?)”

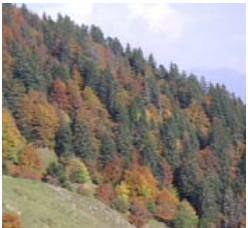


- Forest expansion: “good data basis and wild speculations”

# 3. Food for thought

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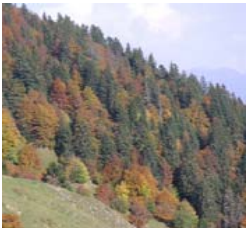
- Data Quality
- How much is already used but not reported to statistics?
  - In some countries (e.g. Germany some of the “potential” is already in use, but not reported
  - Good statistics needed, crucial for planning



# 3. Food for thought

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- Age class structure of the forest could influence level of sustainable harvest
  - Uneven age class structures in forests could lead to changing harvest levels



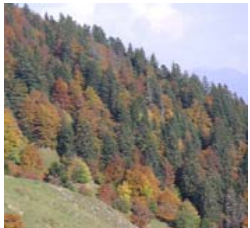
## AGE CLASS STRUCTURE IN EUROPE'S FORESTS

country	-20	-40	-60	-80	over 80	country	-20	-40	-60	-80	over 80
Albania	-	+	0	0	0	Lithuania	0	0	0	0	0
Austria	0	0	0	0	0	Luxembourg	0	0	0	-	+
Belarus	0	0	+	0	-	Malta	0	0	0	0	0
Belgium	0	0	0	-	-	Moldova	0	0	0	0	-1
Bosnia	0	0	0	0	0	Montenegro	0	0	0	0	0
Bulgaria	0	0	0	0	0	Netherlands	-	0	0	0	0
	0	0	0	0	0	Norway	0	0	0	-	+
Cyprus	0	0	0	0	0	Poland	0	0	0	0	0
Czech Republic	0	0	0	0	+	Portugal	0	0	0	0	0
Denmark	0	0	0	-	0	Romania	0	0	0	0	0
Estonia	0	0	+	0	0	Russia	0	0	0	0	+
Finland	0	0	0	0	0	Serbia	+	0	0	0	-
France	0	0	0	0	0	Slovakia	0	0	0	0	0
Georgia	0	0	0	0	0	Slovenia	-	-	0	0	+
Germany	0	0	0	0	+	Spain	0	0	0	0	0
Greece	0	0	0	0	0	Sweden	0	0	0	0	0
Hungary	0	+	0	0	0	Switzerland	-	0	-	-	+
Iceland	0	0	0	0	0	Macedonia	0	0	0	0	0
Ireland	0	0	0	0	0	Turkey	0	-	0	+	0
Italy	0	0	+	-	-	Ukraine	-	0	+	0	0
Latvia	0	0	0	0	0	United Kingdom	0	0	0	-	0
Liechtenstein	0	0	0	0	0						

# 3. Food for thought

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- Forest Area not available for wood supply
  - Forests excluded from harvesting for protection or economic reason
  - Often high conservation value (and other benefits, e.g. soil, water)
  - EFI / CEPI study estimated 67 million m3 not felled for protection status
  - NAI on FnAWS in EU27: 37 million m3

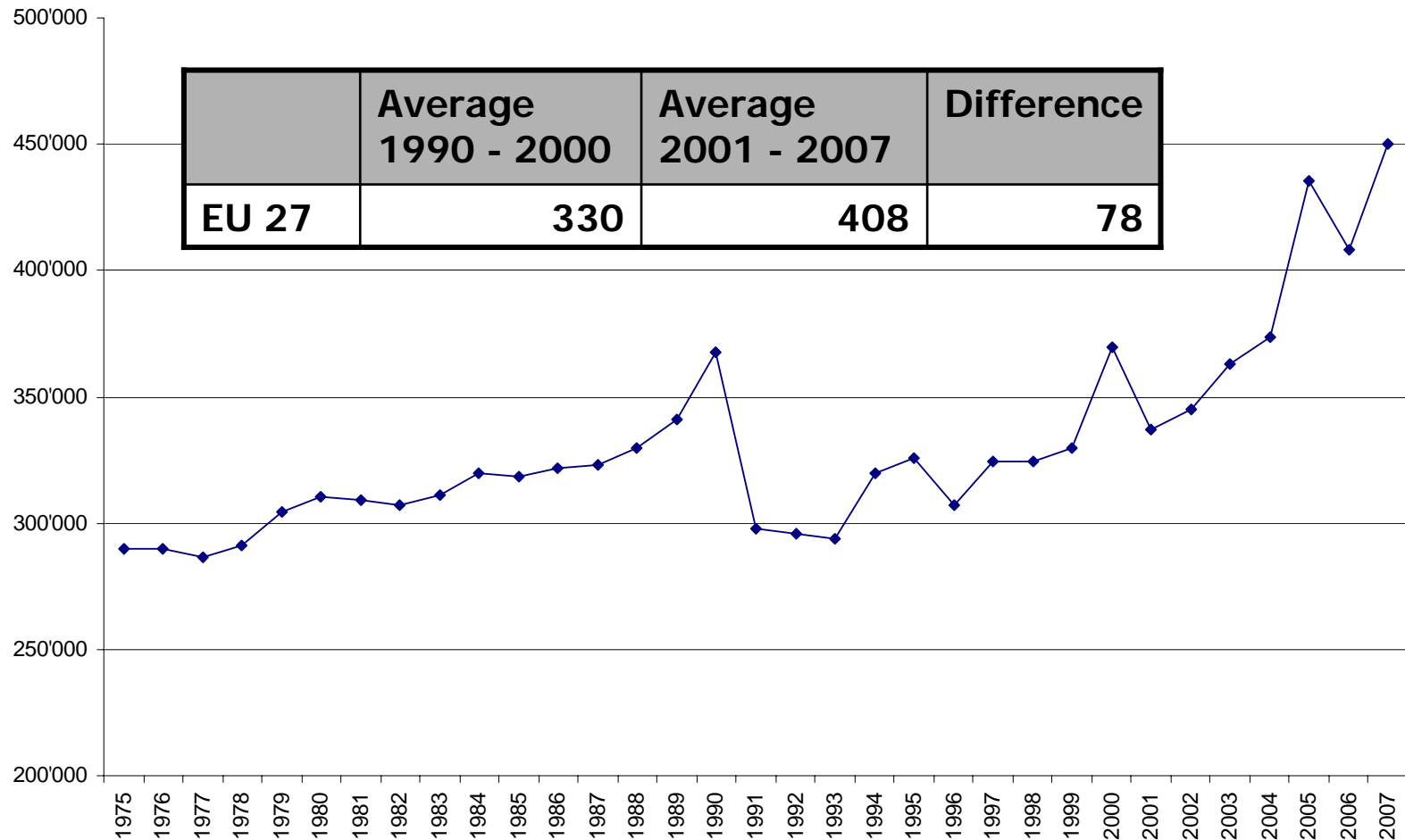
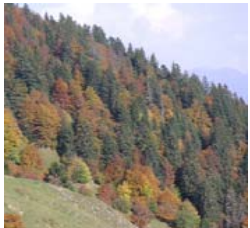


	NAI	fellings
EU 27	36'991	1'128



# 3. Food for thought

- Increase in removals in the last years:

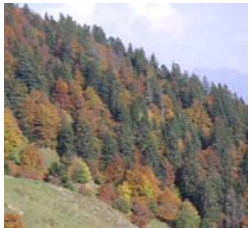


# 3. Results

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## 4. Is there enough wood?

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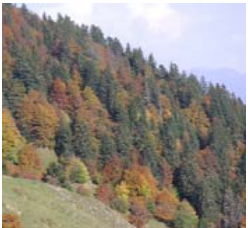


- Considering earlier UNECE/FAO work based on simple scenarios, a “gap” between current supply and pot. future demand of 395 / 237 million m<sup>3</sup> were calculated
- This analysis shows a potential additional supply of 233 million m<sup>3</sup>  
***BUT...***
- Results identify potential (mainly bio-technical)

## 4. Is there enough wood?

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- “Real” socio-economic potentials depend on mobilization of these potential
  - Study assumes 35% - arbitrary figure (based on studies) – BUT it really depends on adequate measures to mobilize these resources



# 4. Is there enough wood?

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How to mobilize?



- Understand obstacles and bottlenecks to mobilization on local and national level
  - Workshops (e.g. Geneva Jan 2007)
  - Working groups (EC, CEPF, national)
- Implement adequate measures

## 5. Next steps

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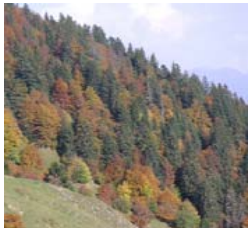


- Study should give an input on methodology and data to assessment of potentials
- Detailed work has to be carried out on national level
- Mobilization and implementation of adequate measures crucial

## 5. Next steps – UNECE/FAO

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- UNECE work on forest sector outlook study
- New Team of Specialists
- Further improving data (e.g. Wood Energy)





*Thank you for your attention!*

