

1) Guidance for Estimating Potential Sustainable Wood Supply

2) Good practice guidance on sustainable mobilisation of wood

By Matthias Wilnhammer



Joint Working Party on Forest Economics and Statistics,
Geneva, 24-25 March 2010



Background

- International and national renewable energy targets
- Various national approaches to assess PSWS
- Need to bring together experiences and to harmonise studies
- Workshops on PSWS in March 2009: UNECE/FAO was asked to prepare more detailed guidelines for estimating PSWS



7 Good practice principles defined

- Based on PSWS 2009 workshop conclusions
- Guidance for estimation of PSWS on national level
- At the disposal of countries on a voluntary basis in order to
 - ease preparation of future PSWS studies
 - harmonize PSWS on European level
- In addition: Excel sheet as guidance framework



Overview of principles I

- Cover and define all elements of wood supply
 - forest, trees outside the forest, expansion of forest area, co-products from industry, recovered wood, imports
 - Provide at least “as good as it gets” estimates
- Present study in harmonized way
 - Reference period, u.b. or o.b., cbm or ODMT, conversion factors, estimates



Overview of principles II

- Identify potential constraint screens

- Theoretical (TP)
- Bio-technical (CS1)
- Social (CS2)
- Economic (CS3)

$$\text{PSWS} = \text{TP} - \text{CS1} - \text{CS2} - \text{CS3} + \text{industry co-products} / \text{residues} + \text{post-consumer wood} + \text{imports}$$

- Identify the sources of uncertainty

- Indicate sources and amount of uncertainty
- Unused stem wood, unregistered fellings



Overview of principles III

- Apply different wood supply and demand scenarios
 - “Business as usual” and “Highest sustainable supply”
 - Sustainability indicators (e.g. age class distributions, growing stock and NAI)
- Coordinate data research
- Make estimates which are consistent with all dimensions of sustainable development



Questions

- Should principles be more detailed or less detailed?
- Are there any principles missing?
- Do you see any chance to further develop towards „Best practice principles“? If yes, how should we proceed?
- Should principles be presented to an additional audience / published in an additional context (now: background note to WP members)?
- Any other comments or questions?



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Sustainable wood mobilisation is crucial

- Meet the ambitious targets set by policy makers, notably 20% renewable energy by 2020 in EU 27
- Meet the needs of wood-based industry and bio-energy sector
- Ensure maximum climate change mitigation through the forest sector



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MCPFE, EC and UNECE/FAO jointly developed Good Practice Guidance

- As a follow-up to Grenoble workshop and as an activity of the MCPFE Work Programme on the follow-up of Warsaw Conference
- Project outputs:
 - Guidance document (45 pages, main document)
 - Brochure (4 pages, interest raising instrument)
 - Documents available by May 2010 (hard copy)



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Guidance structured in 3 main parts

- European wood resources and their mobilisation potential (= > PSWS)
- Guiding Principles of Wood mobilisation
- Good practice examples (core part)



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8 focus areas identified ...

- Land tenure, management, coordination and planning
- Infrastructure and logistics
- Markets and marketing: organisation and transparency
- Recovery channels
- Education and skills of forest sector workforce
- Sources of and mechanisms for financing
- Legal and fiscal measures
- Silvicultural measures



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... measures proposed ...

Example: Focus area „Land tenure, management, coordination, planning “

- Improve organisation of forest owners
- Enhance co-operation between forest management units
- Consolidation of land management units
- Utilisation of woody biomass outside the forest



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... and case studies recommended

Example: Improve organisation of forest owners

Name	Enhanced economic cooperation of forest owners
Location	Estonia, Lääne-Viru County
Description	<p>Situation: The Estonian private forest is characterised by a large number of owners with small forest holdings. Sustainable forest management and harvesting activities are not always common practice and the low level in organisation poses a considerable challenge for wood supply.</p> <p>Approach: A project was initiated to establish joint selling procedures and sales contracts of forest owners. Accredited advisors inform owners on different management options, on economic opportunities or support in the establishment of joint timber selling procedures.</p> <p>Results: Sales of cutting rights from private forests by forest owners cooperatives in form of public auctions have begun. Joint sales of round wood to the industry and of logging residues for bio-energy production have been established, and the establishment of an exemplary "bioenergy village" has been started. Private owners profit from better supervision of logging operations and higher prices through the mobilisation of larger volumes. 6,000 m³ of round wood were sold in one year through the local forest owner's association. In the Jõgeva region, owners formed a Ltd. to produce wood heat.</p>
Lessons learned	Initial wood mobilisation needs extensive consultation of forest owners. Furthermore, the start of such a project should fit with the market needs. The development of joint sales activities can be complex.
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Reference	http://www.eramets.ee

For illustration



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Comments and questions

- WP is invited to take note of the document and to comment on it
- Concept of developing good practice guidance – applicable to other work areas?



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Thank you for your attention.

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UNUSED SLIDES



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PSWS excel sheet

Country:

Albania

Unit

WOODY BIOMASS FROM THE FOREST	Stemwood from FAWS* (above national threshold)	Theoretical biomass potential from stemwood		1,000 m
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraints screen		
		Available biomass from stemwood	0	
	Above-ground biomass other than stemwood	Theoretical above-ground biomass other than stemwood		
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraints screen		
		Available above-ground biomass other than stemwood	0	
	Below-ground biomass	Theoretical below-ground biomass potential		
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
Social constraint screen				
Economic constraints screen				
Available below-ground biomass		0		
Total available biomass from the forest			0	

WOODY BIOMASS OUTSIDE THE FOREST	Other wooded land	Theoretical biomass potential from OWL		1,000 m ³
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraintscreen		
		Available biomass from other wooded land	0	
	Trees outside forest	Theoretical biomass potential from trees outside the forest		
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraint screen		
		Available biomass from trees outside forests	0	
Total available biomass from outside the forest			0	

FOREST EXPANSION	Short Rotation Plantations / Afforestation	Theoretical biomass potential from SRP / afforestation		1,000 m
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraint screen		
		Available biomass from SRP / afforestation	0	
Total available biomass from forest expansion			0	

AGRICULTURE	Fruit trees,olives and vineyards	Theoretical biomass potential from agriculture		1,000 m3
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraints screen		
		Available biomass from agriculture	0	
Total available biomass from agriculture			0	

Total available biomass from all sources excl. Co-products and waste			0	1,000 m3
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CO-PRODUCTS AND WASTE	Chips, residues, post-consumer wood	Theoretical biomass potential** from co-products and waste		1,000 t
		Constraint screens (sum)	0	
		Bio-technical constraint screen		
		Social constraint screen		
		Economic constraint screen		
		Available biomass from co-products and waste	0	



Objectives of the guidance

- Identify **concrete measures** and explain their applicability in different conditions;
- Present “**good practice examples**”, linked to each measure;
- Help decision-makers and practitioners make sound choices and **implement appropriate actions**;
- Contribute to the preparation of nREAPs of the EU, and to help countries to achieve their **climate change** and energy commitments.
- **Ensure sustainability** of wood mobilisation efforts at all stages



European wood resources and their mobilisation potential

Source of wood supply	Current use (2005)		Additional bio- technical potential ^[1]		Additional socio- economic potential ^[2]	
Stem wood (FAWS)	355.2	68%	232	31%	81.2	35%
Aboveground biomass (FAWS)	11.2	2%	148.8	20%	52.1	22%
- from current harvest		0%	28.8	4%	10.1	4%
- from additional harvest						
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%
<u>SUM</u>	<u>519.6</u>	100%			<u>233.7</u>	100%

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Guiding principles of wood mobilisation

Major aspects

- An **integrated approach** should be applied: local / regional conditions should be considered, policy measures should complement each other
- **Sustainability** needs to be assured at all stages;
- All measures should ideally operate in a **free market**;
- All approaches should incorporate high standards for energy and resource **efficiency**, cost-effectiveness and environmental performance;
- Measures should be taken which are **easy to implement** in the short- and medium-terms, whilst **overcoming barriers** in the long-terms;
- **Forest owners** should be encouraged to form “clusters” and improve supply capacities.

