

PPP: FoF/EeB/EGCI Topic FoF.NMP.2012-1
Title “Forest Industry Factory of the Future” - FIFoF

Objectives (forestry-wood chain):

- Significantly decreasing energy & emissions / m³ produced wood
- Increasing and objectively measuring raw materials sustainability
- Affordable wood traceability using RFID and laser technology
- Systems and results demonstration in several EC-countries
- Training activities to increase uptake of new technology

Expected results:

- Wide adaption of FIFoF methods & technology in EC countries
- Increased global forest & society sustainability
- Measurable energy decrease for processing throughout the chain

Organisation Name:

SP

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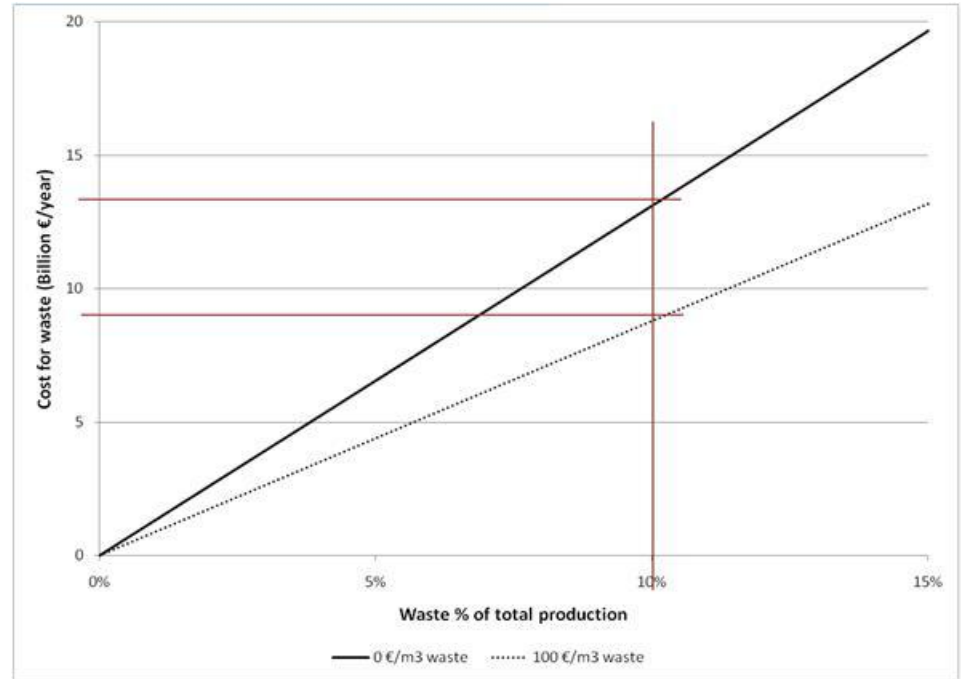
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Example: Nonexistent raw material control for specific final products



Compacting waste – the most valuable wood products are fillets – by milling to chips because of quality reasons.



Simplified dependence of waste % and world cost in Billion € based on average cost for round wood¹ (50 €/m³ * 2) and average price for sawn wood¹ (200 €/m³) when cost for waste is 0 € - the solid line- and 100 €/m³ - the dotted line.

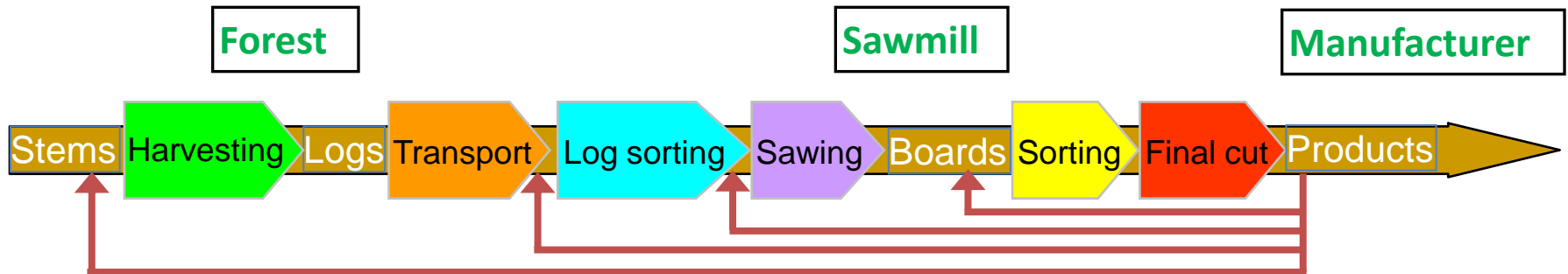
Resulting in 10 % global waste or some 10 Billion Euros per year!

¹ <http://www.skogsstyrelsen.se/en/AUTHORITY/Statistics/Subject-Areas/Prices/Prices/>

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Implementing solutions for an automatic forestry-wood-chain feed-back system



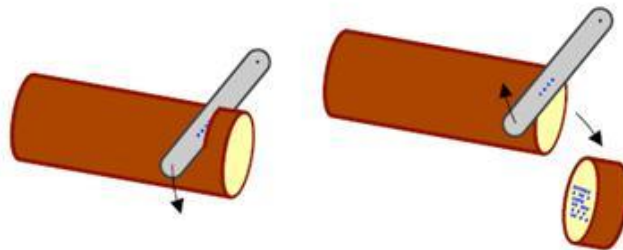
Feed-back even in smaller loops facilitates: a higher yield, significantly reduced energy & emissions, much improved final products and efficient means for the sustainable society

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Present Knowledge & Networks



SKOG-DATA AS



SVEASKOG



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Further actions in RTD & demo:

- Reducing energy consumption & emissions along the forestry-wood chain
- Efficiency demonstrations of lean forestry-wood production
- Decentralising systems through scalable data storage & transfer
- Reducing RFID cost and size by innovative solutions
- Enhancing rugged code readability for logs & boards

Involvements of industry & experts concerning:

- Forest industry Factories
- Energy related research and development
- Laser technology
- Sensors, microelectronics & RFID-chips

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Info about project/project structure:

A structure of some 10 Workpackages covering
the FIFoF objectives to be obtained.
To be decided among FIFoF partners ...

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Known Partners				
S.No	Partner Name	Type	Country	Role in the Project
SP	Sveriges Tekniska Forskningsinstitut SP	RES	SE	Co-ordinator, process/energy efficiency
IVL	IVL Svenska Miljöinstitutet	RES	SE	KPIs, increased efficiency & decreased emissions
KTH	Kungliga Tekniska Högskolan	RES	SE	Low energy components & integrated solutions
SDC	SDC Ek. För.	IND	SE	Forest to Industry log/data transfer solutions
FCBA	Institut Technologique FCBA	RES	FR	Demonstration of results and training
MAUCHAMP	Etablissements Pierre Mauchamp S.A.	IND	FR	Implementation of software solutions
IDS	IDS Microchip	IND	SI	Development of RFID-chips
TampUnit	Tampere University of Technology	RES	FI	Development of RFID-extrusion technology
Gaia	Oy Gaia Plastics Ltd.	IND	FI	Manufacturing of extruded RFID-transponders
FEIG	FEIG ELECTRONIC GmbH	IND	DE	Development/implementation of RFID-readers
....	IND/RES	GR, EE, CH, CY..	Development and implementation of SW & HW
Required Partners				
S.No	Profile	Type	Country	Role in the project
Forest industry	Forest industry technology users	IND	SE, FR, DE, ?	Technique Implementers and demonstrators
Technology dev.	Developers of laser technology	IND/RES	US, LT, CH, ?	Laser solutions/Implementing of wood coding

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