# Functioning of roundwood markets in Finland

Workshop of the Baltic-Nordic Forest Statistics Group Sep 15. 2017/Aarre Peltola



# Forest statistics of Natural Resources Institute Finland (1)

# Fconomy Structure and production

Economy	Structure and production
Industrial roundwood trade	Ownership of forest land
Energy wood trade	Forest protection
Foreign trade	Industrial roundwood removals and
Forest industries' wood consumption	labour force
Wood in energy generation	Industrial roundwood removals by region
Wood pellets	Total roundwood removals and drain
Total wood consumption	Silvicultural and forest improvement work
Stumpage earnings	
Operating profit in NIPF	Monthly statistics bolded

Weekly monitoring of roundwood trade

Forestry as an investment

Fuelwood in small-scale housing



Small sawmills

### Forest statistics of Natural Resources Institute Finland (2)

Forest resources	Other		
Land use categories	Forest biodiversity		
Growing stock volume	Harvesting and long-distance		
Annual increment of growing stock	transportation of roundwood		
Other data on forest resources	Forest sector labour force		
	Energy		
	Forest industry		

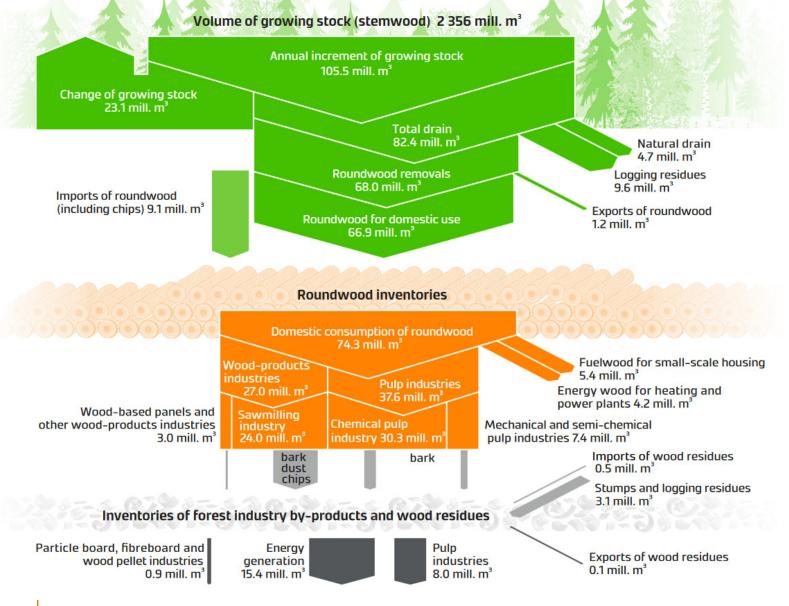
#### Statistics include

- 1) Database (PX-Web)
- 2) Release (text, figures, pre-shaped tables)
- 3) Description
- 4) Quality description
- 5) Trilingual (Finnish, Swedish, English)

# http://stat.luke.fi/en/



### Wood flows from forest to industry products in 2015





### Industrial roundwood removals in 2016, 1000 m<sup>3</sup>

	Total	Non-industrial private forests (NIPF)	NIPF standing sales	NIPF	Forest industries and the state
Grand total	61790	51076	42409	8667	10714
Pine logs	10673	8490	7254	1236	2183
Spruce logs	14256	13163	11971	1192	1093
Hardwood logs	1091	1033	845	189	58
Logs total	26020	22686	20070	2616	3334
Pine pulpwood	16468	11679	8899	2781	4789
Spruce pulpwood	10044	8640	7245	1395	1404
Hardwood pulpwood	9258	8071	6196	1875	1188
Pulpwood total	35770	28389	22339	6051	7380

#### http://stat.luke.fi/en/industrial-roundwood-removals-by-region

- Monthly and annual statistics
- Disproportionate stratified sample, stratification by company size
  Stratum of the biggest companies the sampling fraction is 1



# Traded timber assortments and volumes in 2016, non-industrial private forests, 1000 m<sup>3</sup>

		Regeneration First				Delivery
	Grand total	Total	felling	Thinning	thinning	sales
Total	41357	33824	22948	9289	1468	7190
Pine logs	6808	6016	4796	1170	24	792
Spruce logs	10779	9853	8907	908	15	926
Birch logs	786	655	511	140	2	131
Logs total	18373	16523	14214	2218	41	1849
Pine pulpwood	10916	8125	3347	3925	822	2791
Spruce pulpwood	5520	4565	3056	1299	188	955
Birch pulpwood	5068	3596	1750	1436	400	1473
Pulpwood total	21504	16285	8153	6660	1410	5219
Small-sized logs, pine	849	762	381	362	14	87
Small-sized logs,						
spruce	288	253	200	49	3	35
Special roundwood						
assortments	344					

Note: compare timber trade grand total to NIPF fellings 51076 (1000 m<sup>3</sup>) in 2016

- The roundwood trade volumes of the data providing companies are recorded in the roundwood trade statistics as they are, and they represent more than 90 per cent of the quantity of roundwood purchased from non-industrial private forests.
- Trade statistics are based on timber sales agreements, which typically underestimate the volume of wood

# Stumpage and roadside prices in 2016, non-industrial private forests, €/m³

	Stumpage price	Roadside			
	Standing sales	Regeneration felling	Thinning	First thinning	price
Pine logs	53.26	54.98	46.50	38.34	56.83
Spruce logs	55.32	56.17	47.30	40.34	57.22
Birch logs	41.49	42.90	36.56	30.95	46.99
Pine pulpwood	15.50	17.51	14.66	11.31	27.88
Spruce pulpwood	17.26	18.58	15.09	11.08	30.04
Birch pulpwood	15.17	17.03	14.04	11.15	28.52
Small-sized logs, pine	22.50	24.79	20.31	16.90	35.28
Small-sized logs, spruce	24.14	25.15	20.46	17.39	36.01

#### Statistical difficulties:

- Large amount of different roundwood assortments
- The price in the roundwood trade agreement may not be the final price
- No price at all in the roundwood trade agreement
- Data provider finds it hard to decide, if it is standing sale or delivery sale
- The company that makes the roundwood trade agreement with NIPF forest owner and pays the price for the forest owner is responsible to provide data to the roundwood trade statistics.

# Number and structure of wood sellers in 2013

		Forest land area of forest property entities 1000 ha
Forest owners, private persons	376186	10473
Alone or with spouse	276033	7711
Real property partnerships	55367	1723
Undistributed estates of deceased persons	44786	1039

Forest property size class	1-1,9	2-4,9	5-9,9	10-19,9	20-49,9	50-99,9	100-199,9	200-499,9	500-		Average size of properties bigger than 2 hectares
Number of forest property entities	29240	65413	61394	73081	88433	40508	14663	3115	339	376186	
Forest land area of forest property entities, 1000 ha	42	214	445	1058	2818	2799	1955	851	291	10473	30.1

http://stat.luke.fi/en/ownership-forest-land



# Number and structure of wood buyers in 2013

- Wood procurement is quite concentrated
- 10 biggest companies: about 87 per cent of fellings, 20 biggest companies: about 96 per cent of fellings
- Companies included in data collection of wood trade statistics:
  wood procurement more than 100 000 m³ per year
- Member companies of Finnish Forest Industries Federation procure approximately 83 per cent of commercial roundwood from non-industrial private forests



# Trade of energy wood in 2016

			00 0	Unpruned stems		Energy- wood, total
Standing sales	1000 m <sup>3</sup>	77	1078	68	671	1894
<b>Delivery sales</b>	1000 m <sup>3</sup>	6	207	144	534	891
Grand total	1000 m <sup>3</sup>	82	1285	212	1205	2785
Standing sales	e/m³	1.54	3.24	2.02	4.32	3.51
<b>Delivery sales</b>	e/m³	13.36	14.81	20.03	22.74	20.40

The recorded prices do not include government subsidy and the prices may also be negative

http://stat.luke.fi/en/volumes-and-prices-energy-wood-trade



# Thank you!



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