

Timber Harvesting and Long-distance Transportation of Roundwood 2015



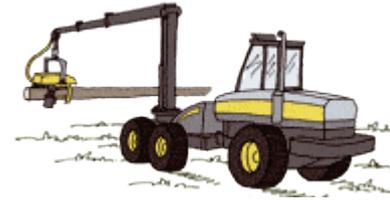
Metsätehon tulokalvosarja 4b/2016

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Metsäteho Oy

About statistics

- Includes volumes and direct harvesting costs of timber assortments concerning domestic roundwood by the forest industries and State forest enterprise as well as proportions of harvesting methods.



Statistic 2015 - Summary

- The average cost of timber harvesting for the Finnish Forest Industries and State Forest Enterprise was 10.94 € per solid cubic metre (over bark).
 - change -4.3%
- The average cost in the long-distance transportation of roundwood was 8.40 € per solid cubic metre (over bark)
 - change -5.7%



Statistics 2015 Tables



Statistics of Metsäteho

Costs and Timber Volume, 2015

	Costs		Timber volume	Transport volume	
	Mill. €	%	Mill. m ³	Mill. m ³ km	%
Harvesting	408.3		37.3		
Long-distance transportation	373.1	100		7 052	100
Road transportation	308.3	83		4 143	59
Rail transportation	56.2	15		2 530	36
Water transportation	8.6	2		379	5

Unit Costs in Harvesting by Felling Method, 2015

€/m ³	First thinning	Other thinning	Regeneration felling	Total
Harvesting				10.94
Mechanised harvesting ^{*)}	17.41	14.12	8.35	10.92
- share of volume	7.9	32.2	59.9	100
- share of costs	12.5	41.7	45.8	100

^{*)} Includes mechanised felling as well as forest haulage related to mechanised and motor-manual felling

Unit Costs in Harvesting and Long-distance transportation by Timber Assortments, 2015

€/m ³	Mechanised harvesting ^{*)}	Long-distance transportation
Pine logs	7.69	7.60
Spruce logs	7.16	6.46
Plywood logs	8.03	9.57
Logs average	7.43	7.11
Pine pulpwood	12.83	9.58
Spruce pulpwood	12.95	8.09
Birch pulpwood	14.91	9.32
Pulpwood average	13.38	9.14
Average	10.92	8.40

^{*)} Includes mechanised felling as well as forest haulage related to mechanised and motor-manual felling

Long-distance Transportation of Roundwood, 2015

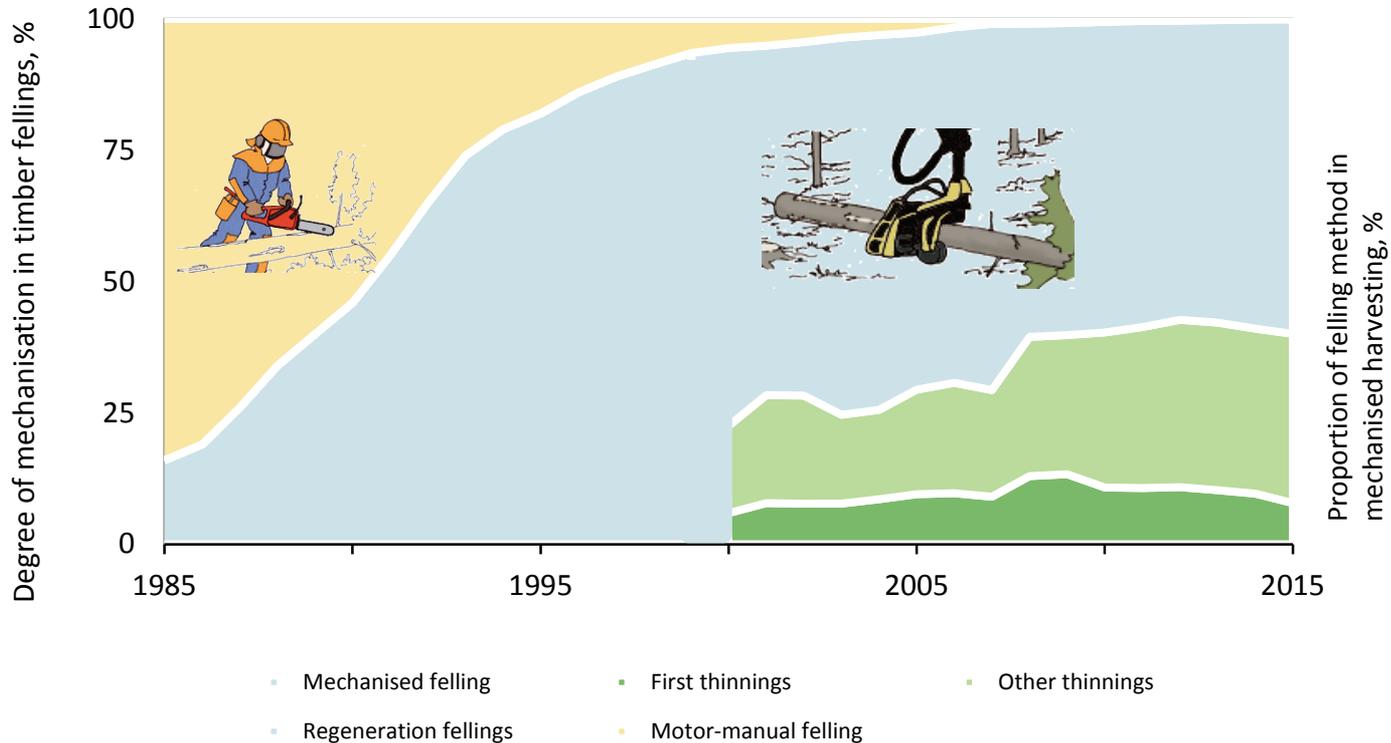
	Domestic roundwood				
	1 000 m ³	%	km	cent/m ³ km	€/m ³
Total long-distance transportation	44 422		158	5.3	8.40
Total by road	44 695	100.6	93	7.4	6.90
By road to mill	34 075	76.7	107	7.0	7.51
Rail transportation sequence	9 032	20.3	328	3.4	11.29
By road to railway	9 381	21.1	49	10.2	4.97
Rail transportation	9 032	20.3	280	2.2	6.22
Water transportation sequence	1 311	3.0	289	3.8	11.00
Floating sequence	532	1.2	317	3.5	11.25
By road to floating point	532	1.2	45	9.6	4.38
Floating	532	1.2	272	2.4	6.52
Barge transportation sequence	779	1.8	270	4.0	10.82
By road to barge	647	1.5	49	10.2	5.02
Barge transportation	779	1.8	221	3.0	6.66



Short Term Trends of Finnish Wood Supply

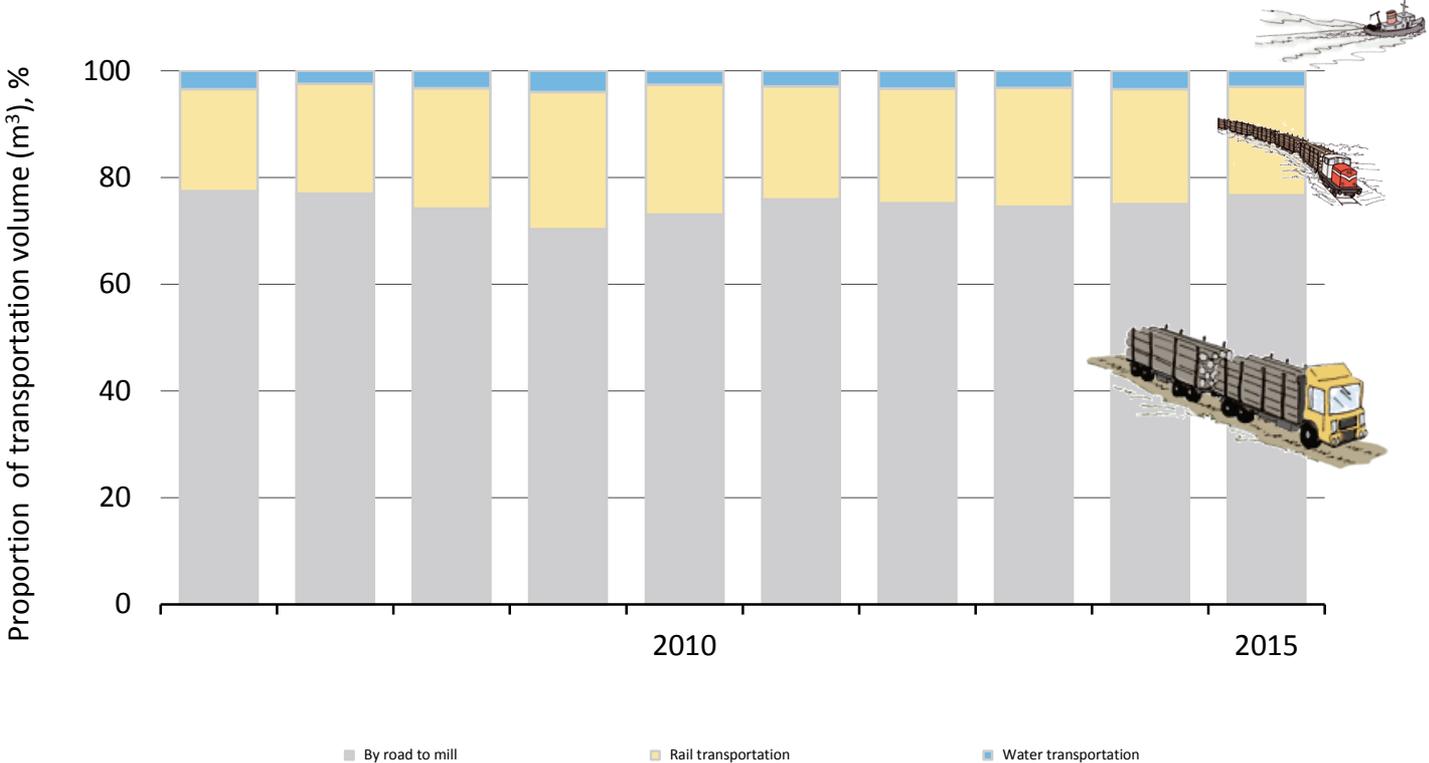
Statistics of Metsäteho

Mechanisation of Felling, 1985–2015

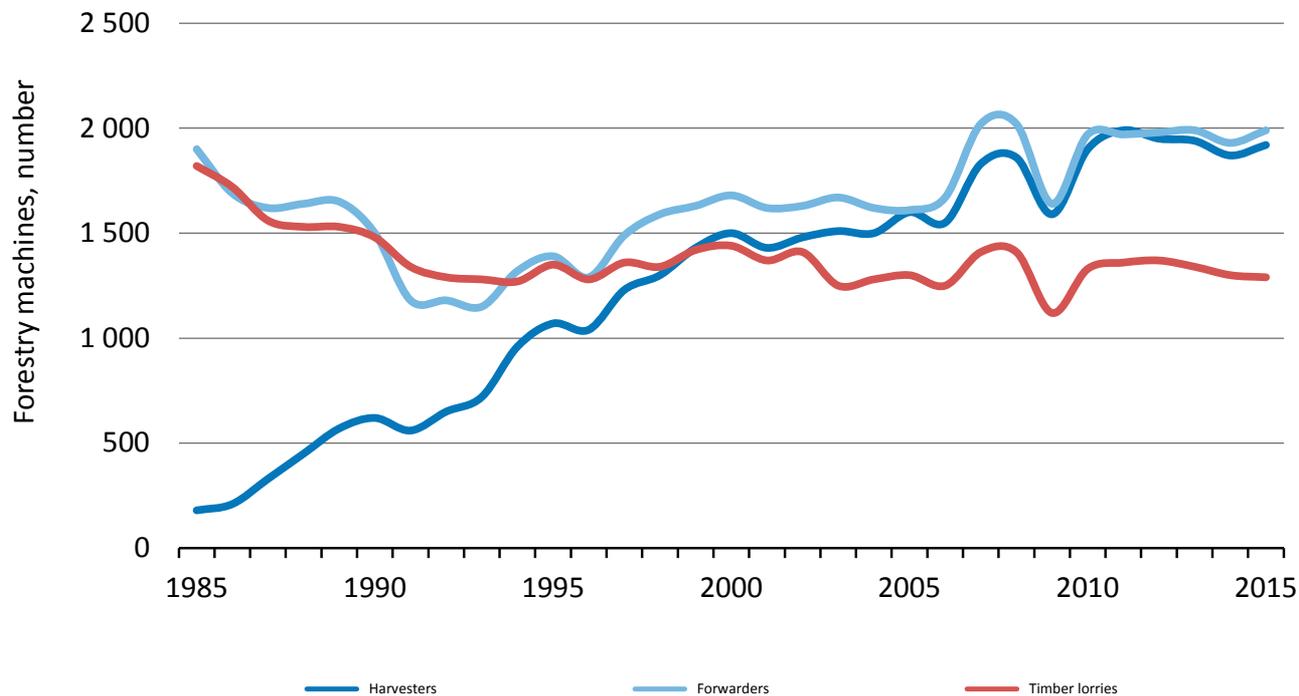


Per cent of mechanised felling year 2015: 99.9%

Long-distance Transportation Techniques, 2006–2015

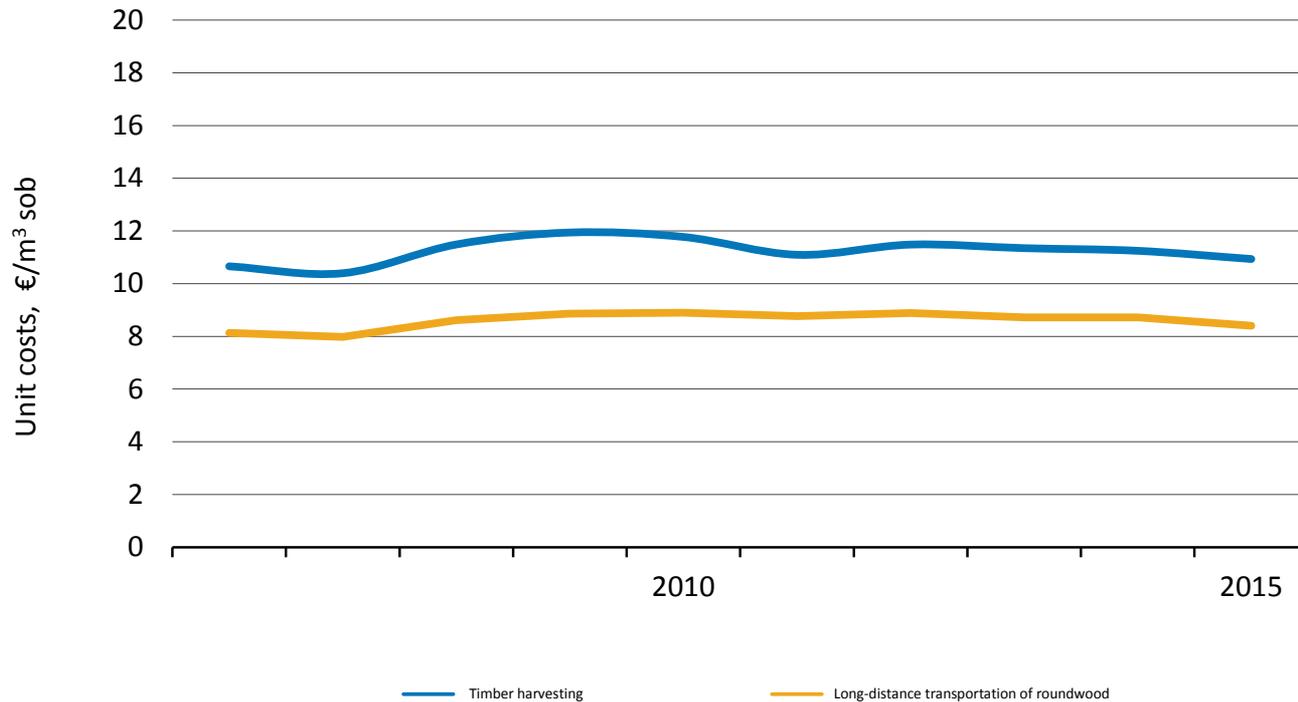


Forestry Machines, 1985–2015



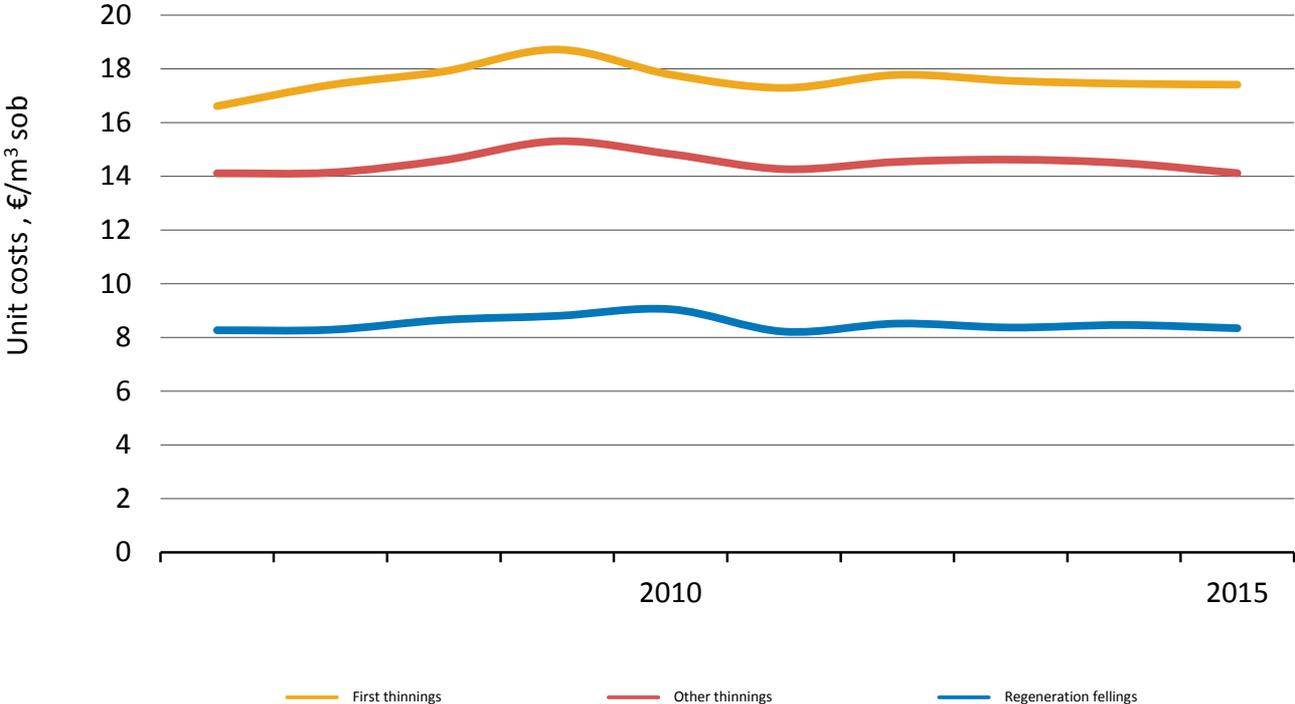
Source: Natural Resources Institute Finland

Unit Costs in Timber Harvesting and Long-distance Transportation of Roundwood, 2006–2015



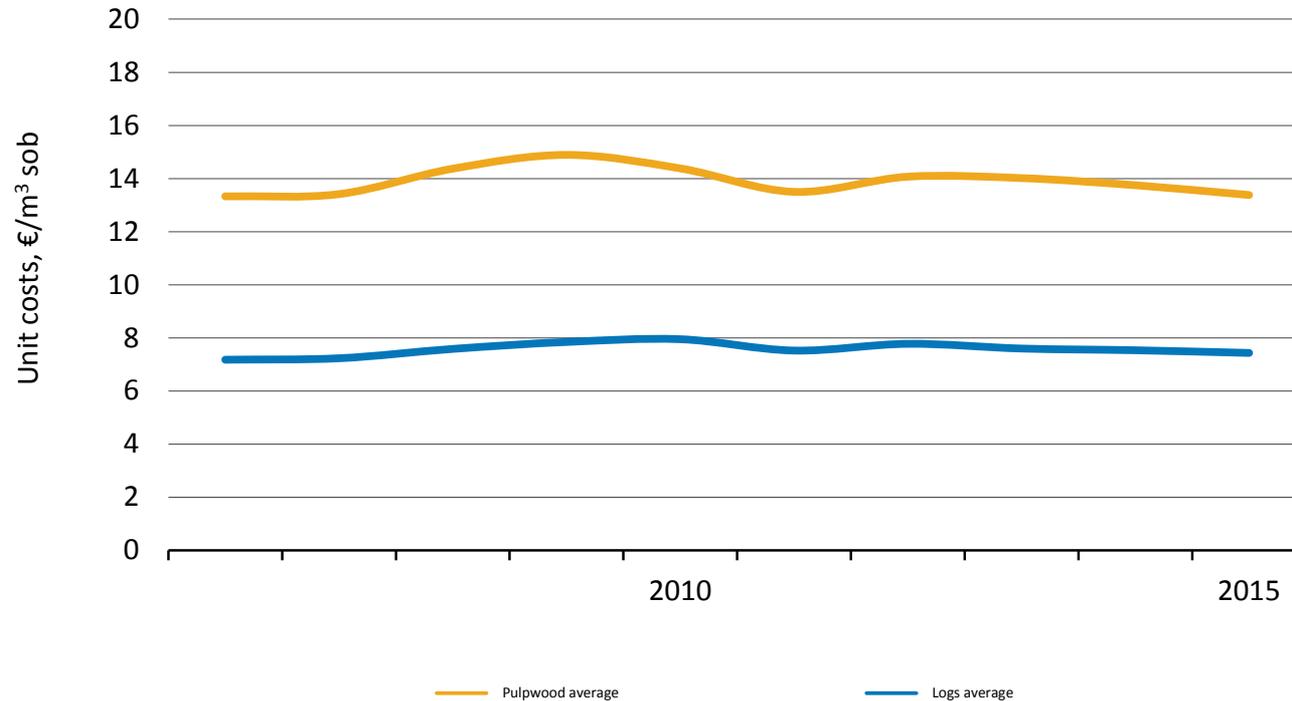
Costs have been deflated by Indexes of forest machinery costs and lorry traffic costs (2015=100).

Unit Costs in Mechanised Harvesting by Felling Method, 2006–2015



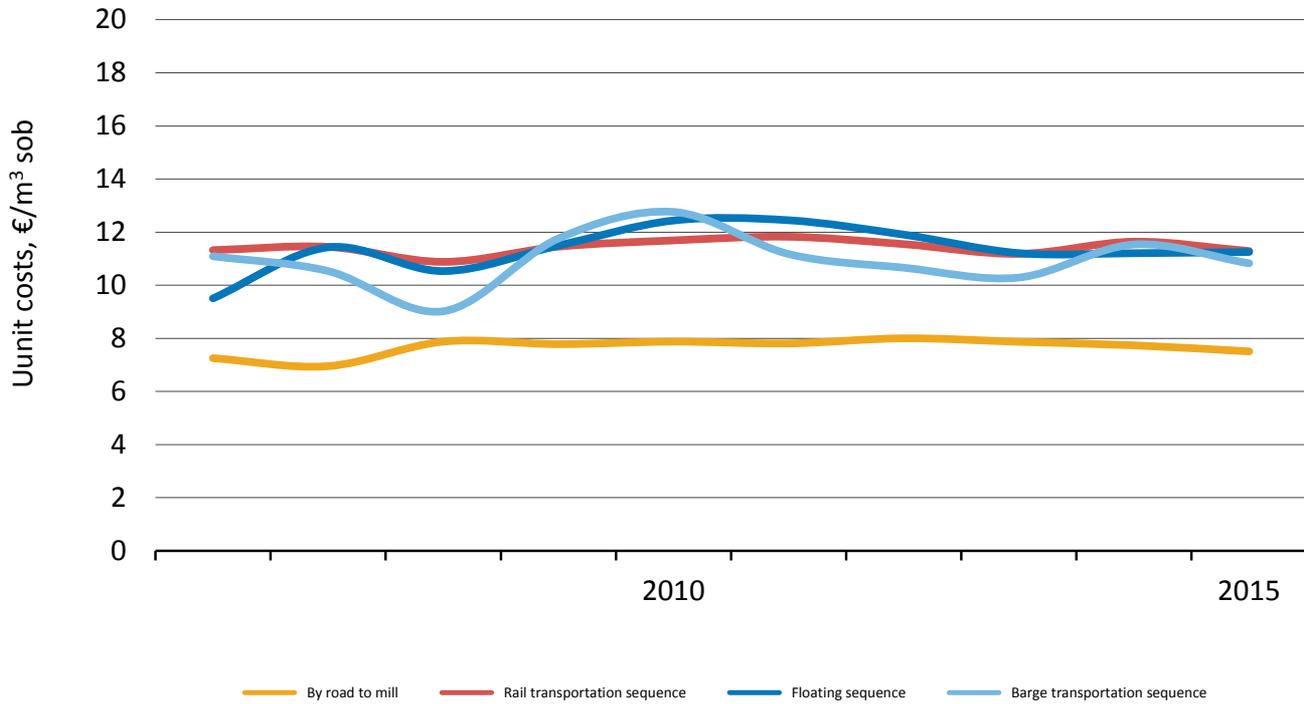
Costs have been deflated by Index of forest machinery (2015=100).

Unit Costs in Mechanised Harvesting by Timber Assortments, 2006–2015



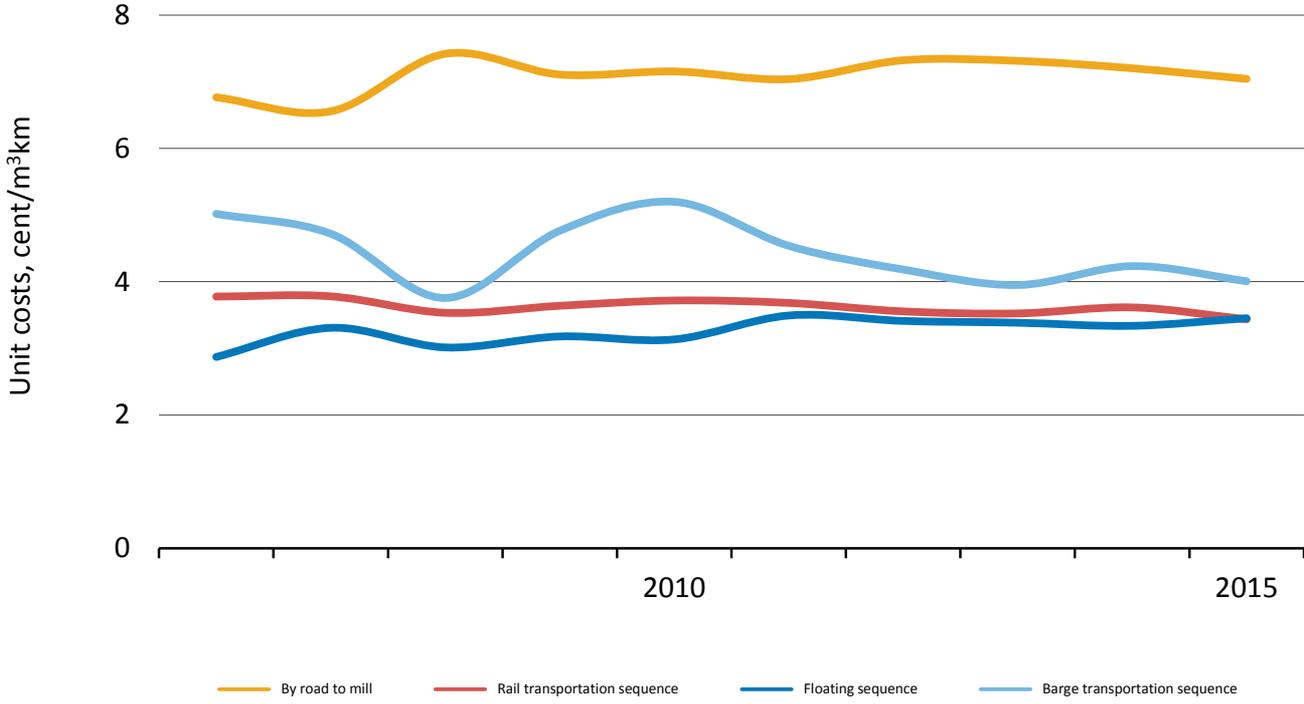
Costs have been deflated by Index of forest machinery (2015=100).

Unit Costs in Long-distance Transportation of Roundwood 2006–2015 (I)



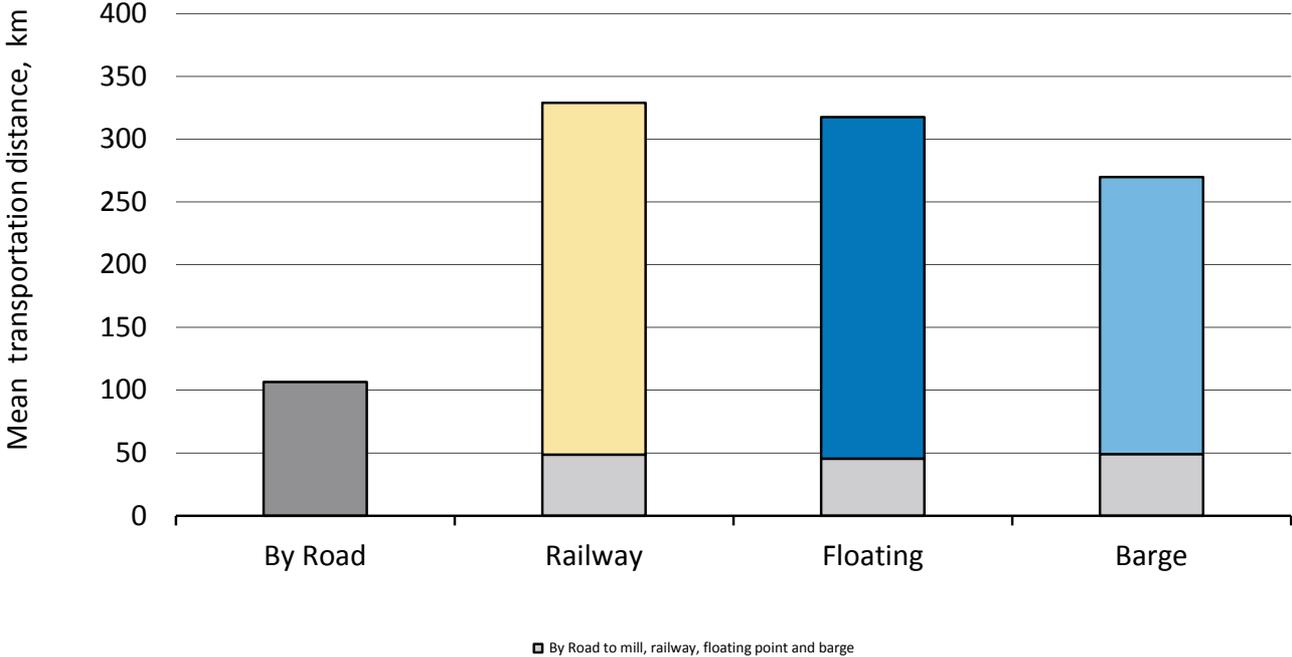
Costs have been deflated by Index of lorry traffic costs (2015=100).

Unit Costs in Long-distance Transportation of Roundwood 2006–2015 (II)

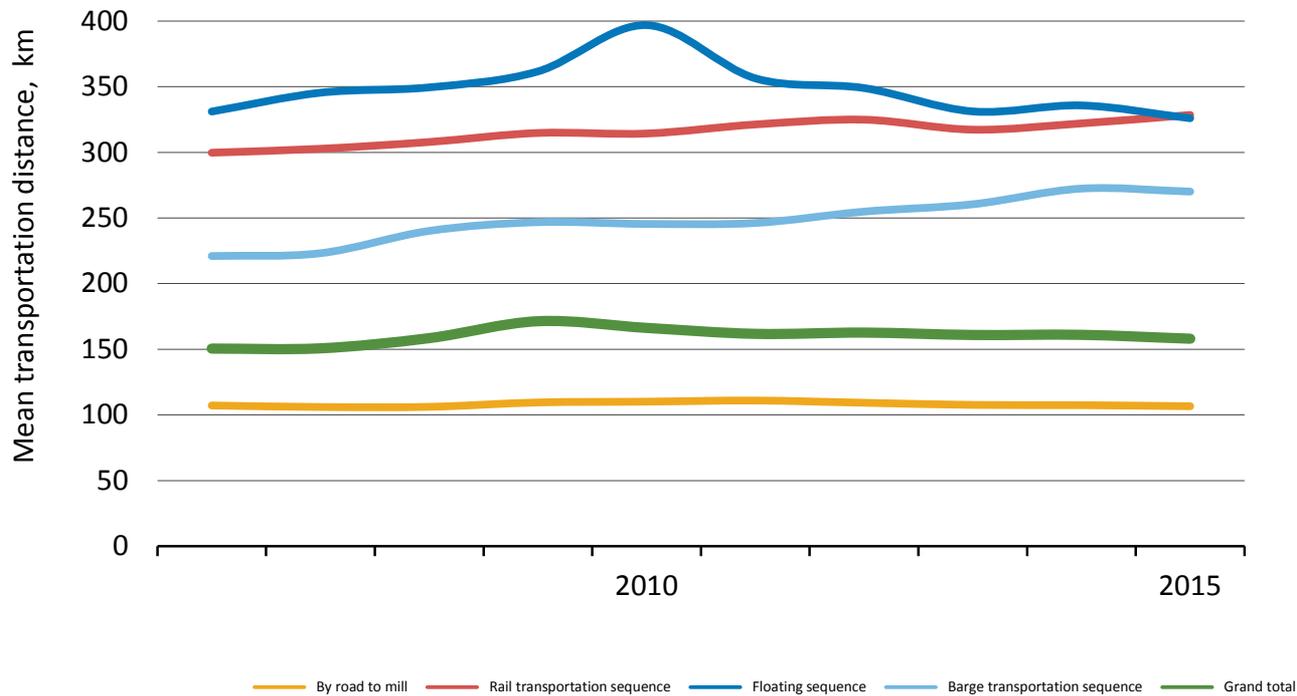


Costs have been deflated by Index of lorry traffic costs (2015=100).

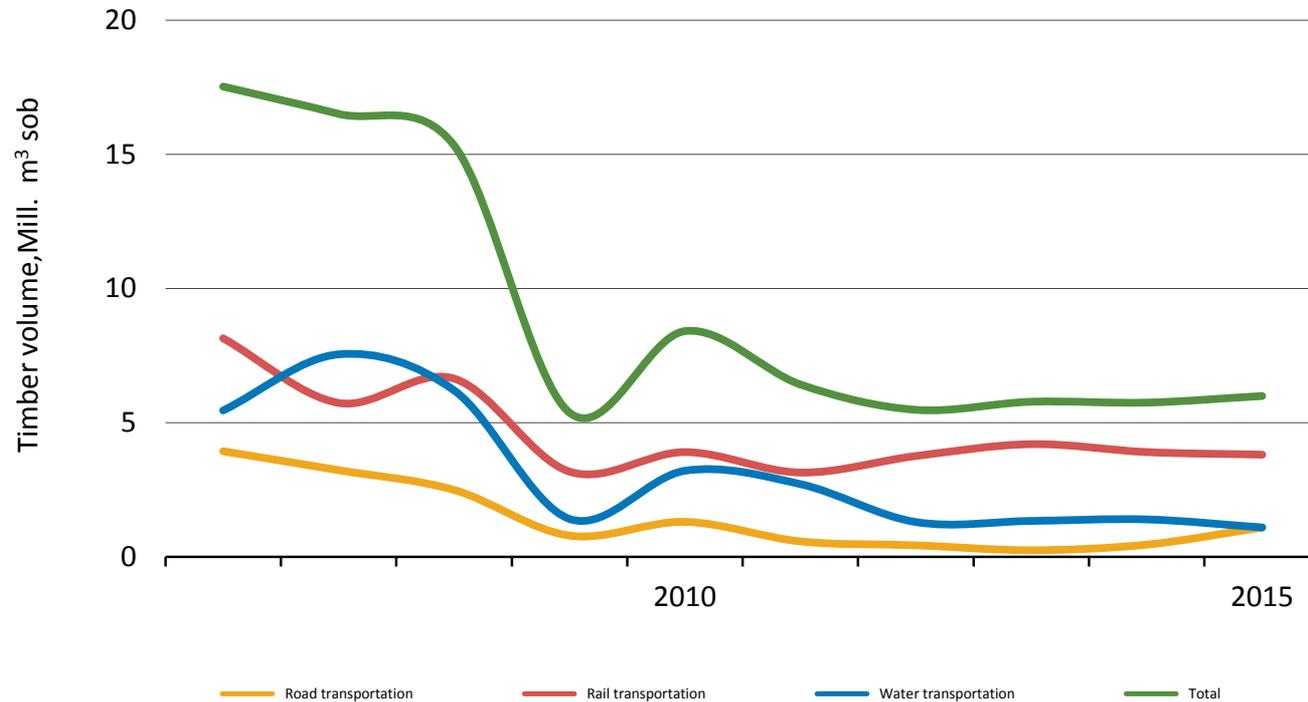
Mean Transportation Distance, 2015



Mean Transportation Distance, 2006–2015



Volumes of Imported Roundwood by Transportation Method, 2006–2015

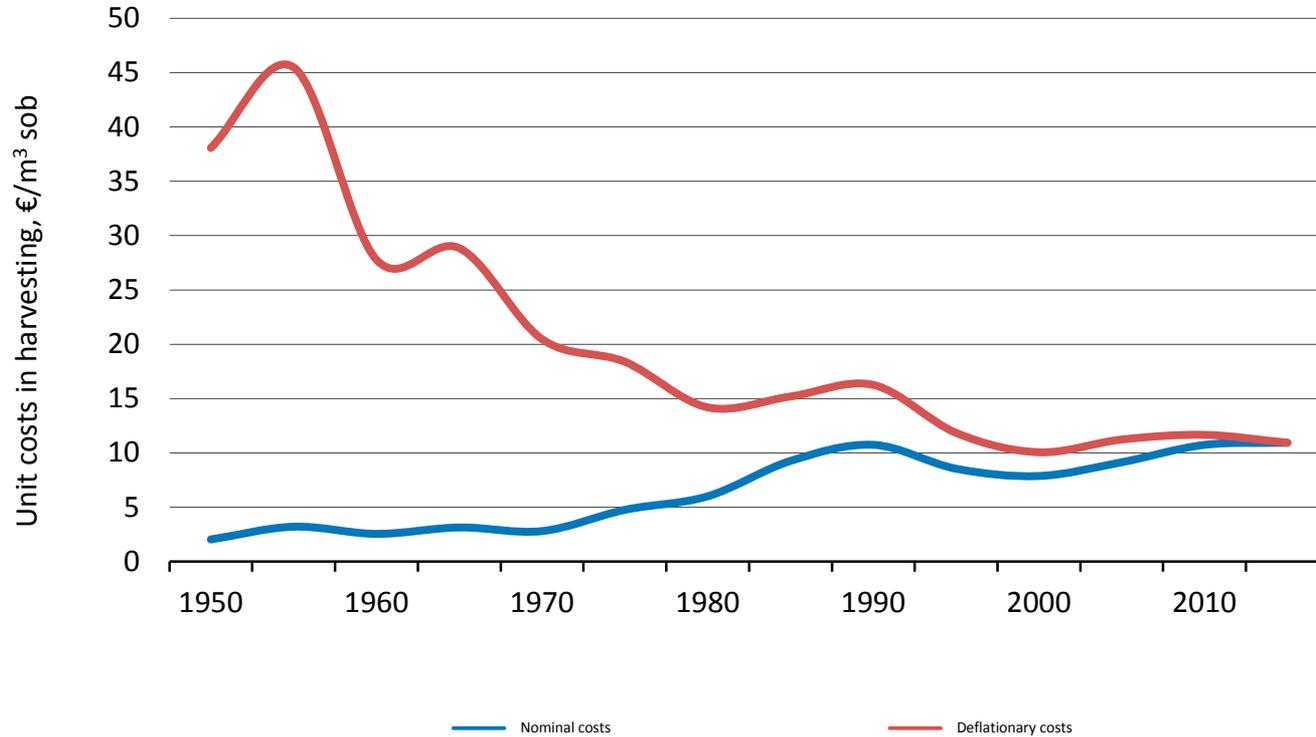




Long Term Trends of Finnish Wood Supply

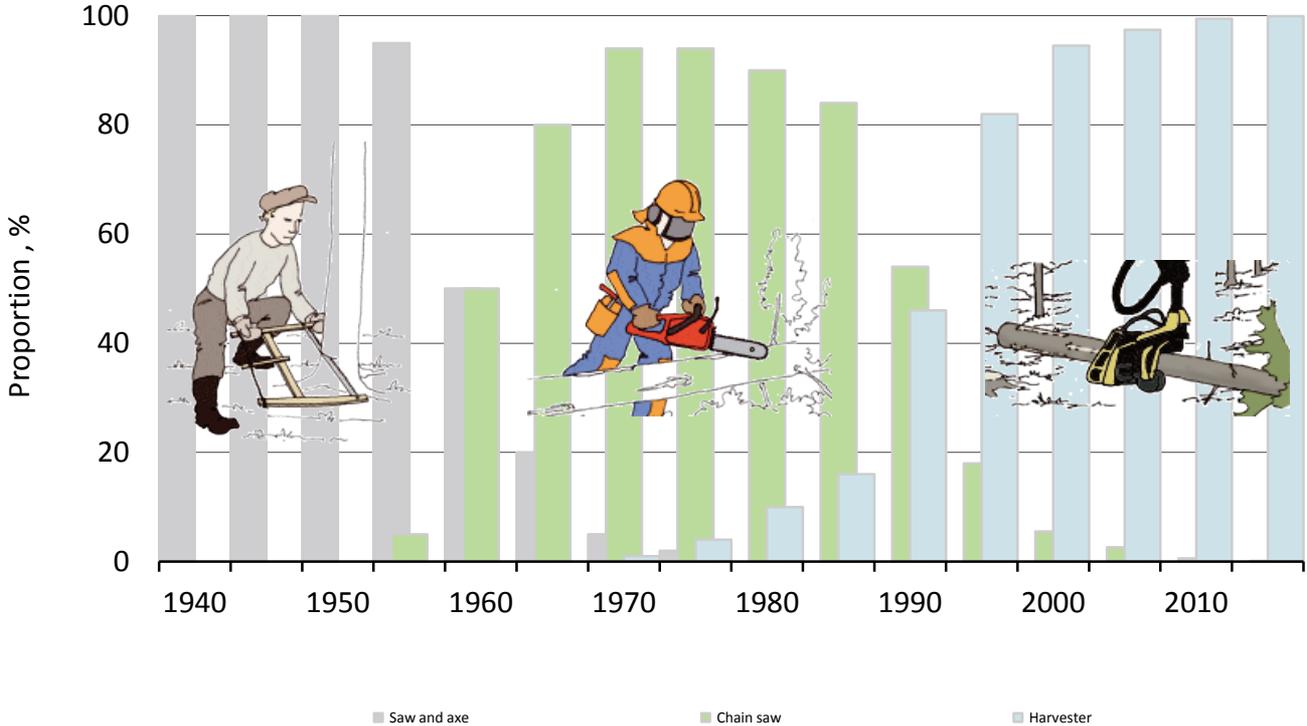
Statistics of Metsäteho

Unit Costs in Timber Harvesting, 1950–2015

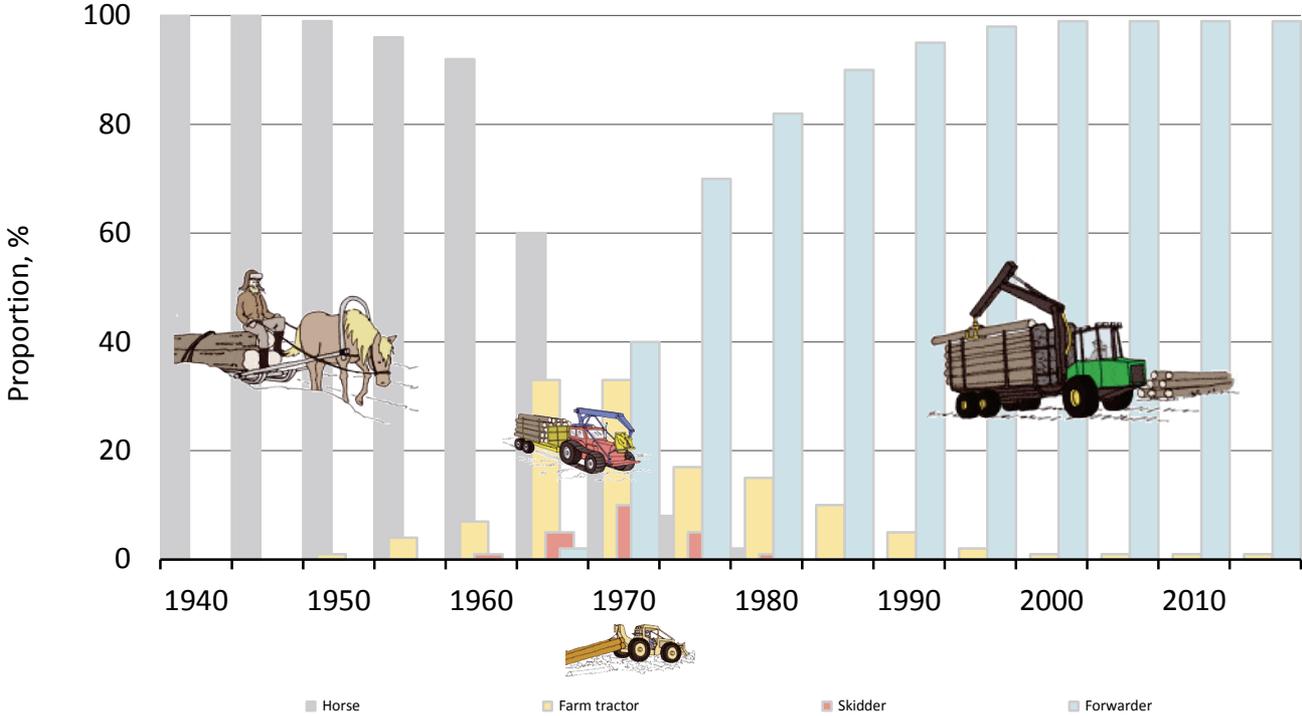


Costs have been deflated by the wholesale price index (2015=100).

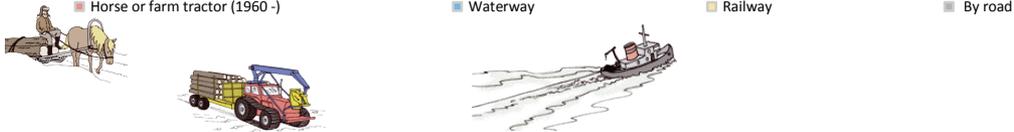
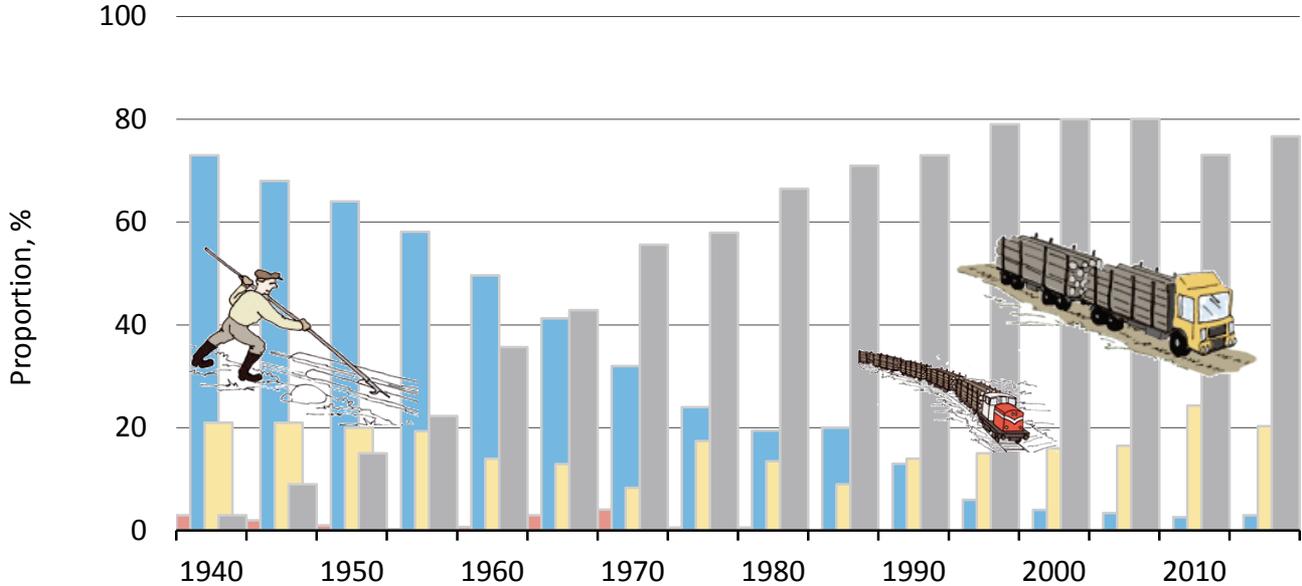
Felling Techniques, 1940–2015



Forest Haulage Techniques, 1940–2015



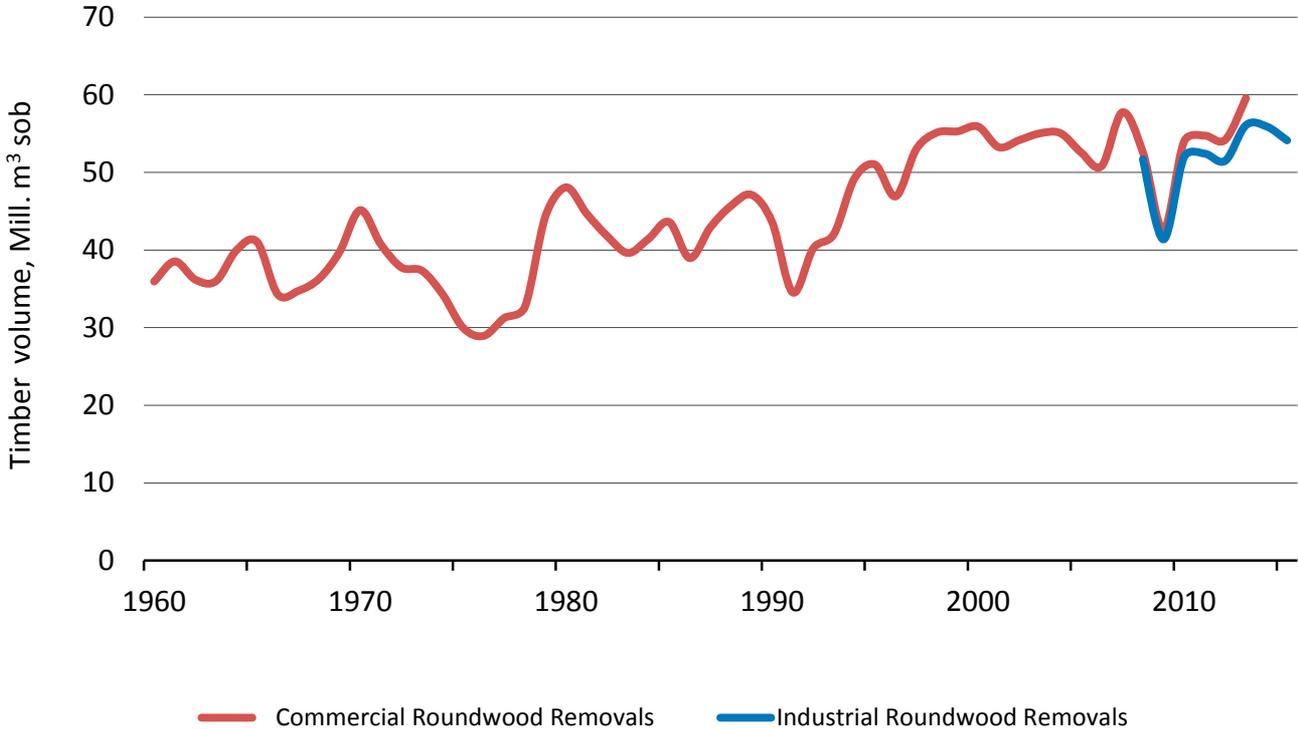
Long-distance Transportation Techniques, 1940–2015





Background Information of Finnish Wood Supply

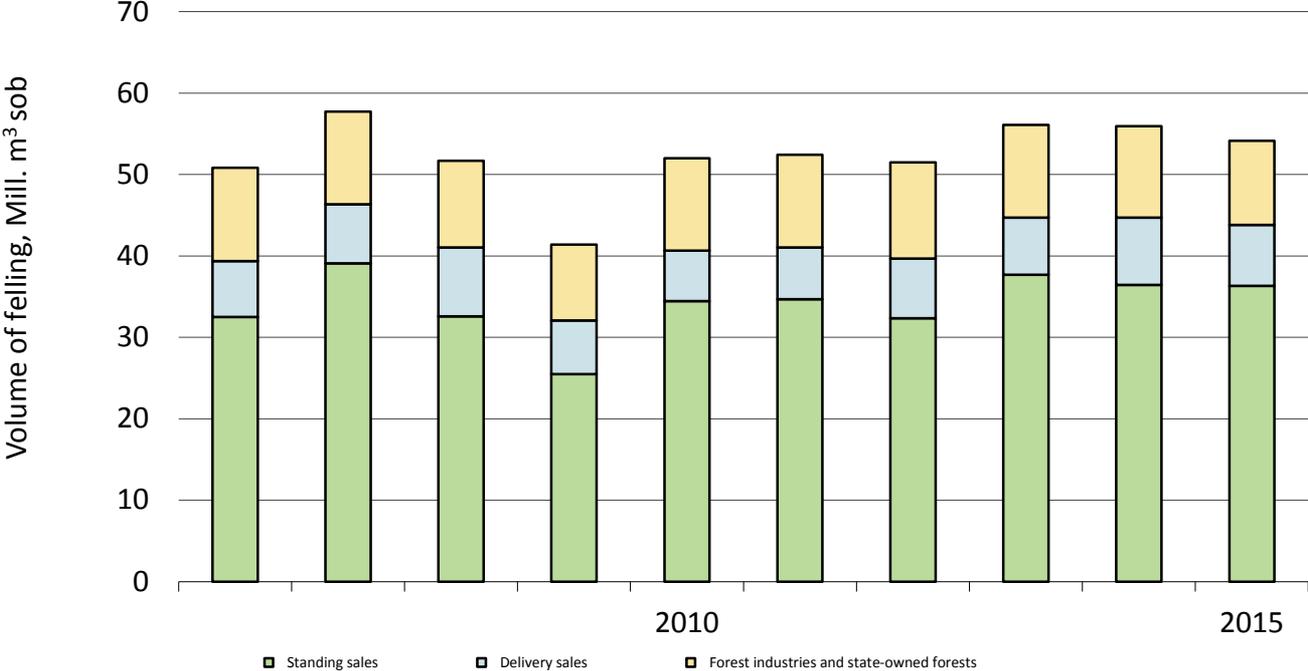
Commercial Roundwood Removals, 1960–2015



Commercial roundwood removal = industrial roundwood (logs and pulpwood) and energy wood (mainly small-sized trees)

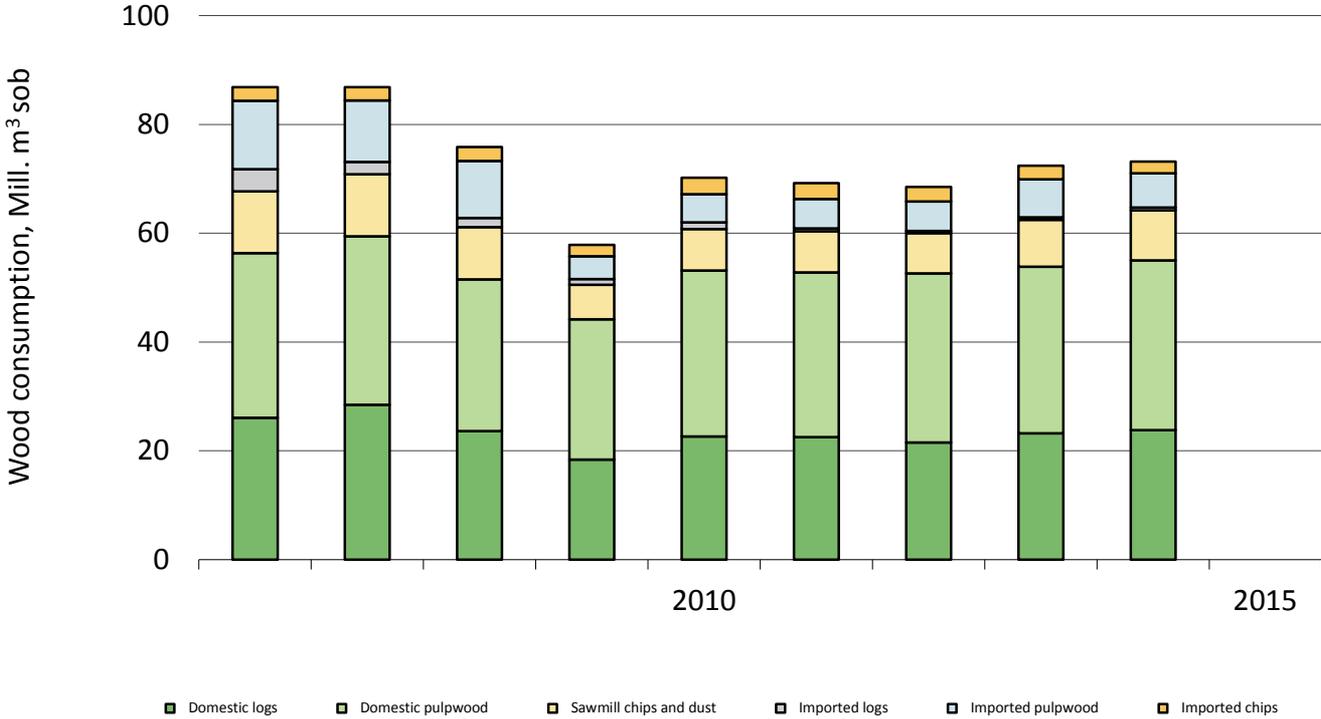
Source: Finnish Forest Research Institute / Natural Resources Institute Finland

Industrial Roundwood Removals by Forest Ownership Category, 2006–2015



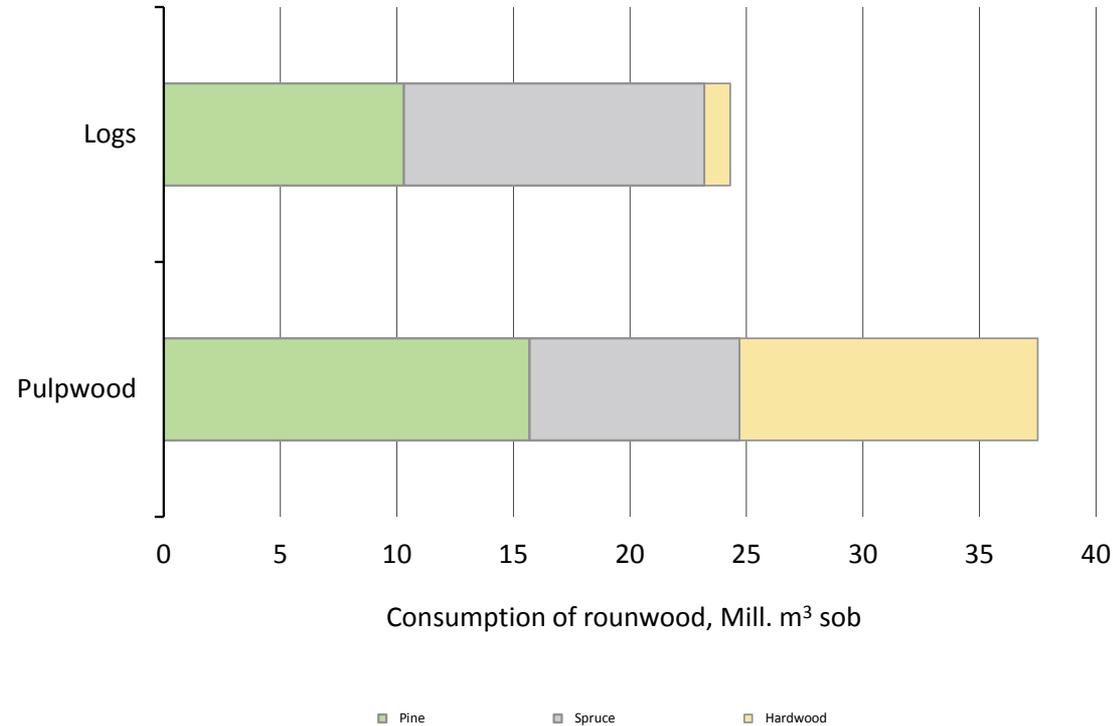
Source: Natural Resources Institute Finland

Roundwood Consumption by Forest Industries, 2006–2015



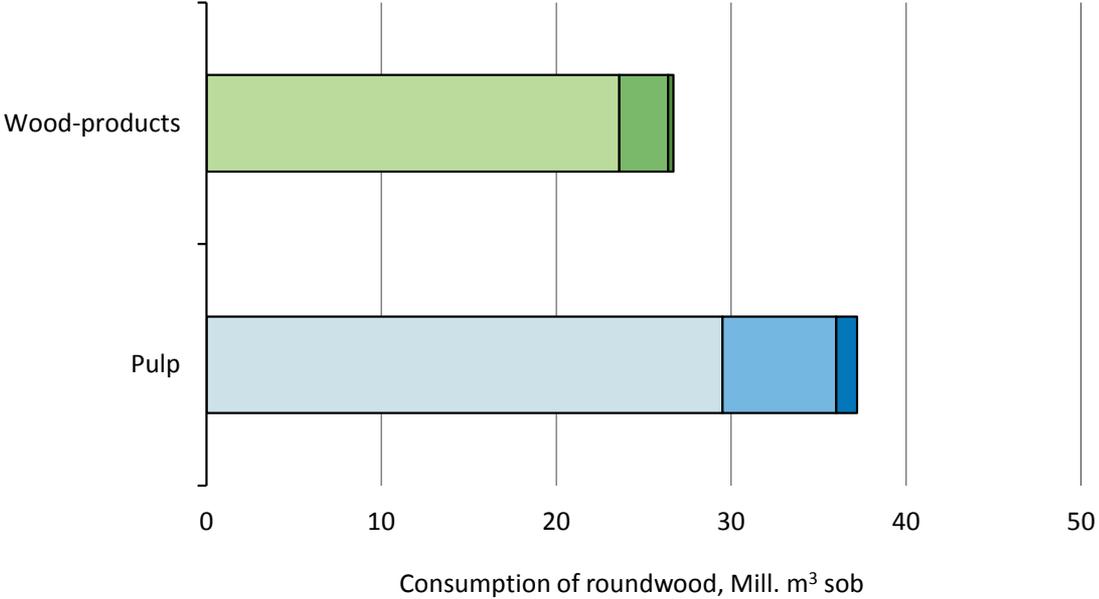
Source: Natural Resources Institute Finland

Wood Consumption by Forest Industries, 2014



Source: Natural Resources Institute Finland

Roundwood Consumption by Forest Industries by Branch of Industry, 2014



■ Sawmilling ■ Plywood and veneer industry ■ Other wood-based ■ Chemical pulp industry ■ Mechanical pulp industry ■ Semi-chemical pulp industry

Source: Natural Resources Institute Finland