

Timber Harvesting and Long-distance Transportation of Roundwood 2014



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Markus Strandström

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.



Statistics 2014 – Summary

- The average cost of timber harvesting for the Finnish Forest Industries and State Forest Enterprise was 11.42 € per solid cubic metre (over bark).
 - change -1.1%
- The average cost in the long-distance transportation of roundwood was 8.91 € per solid cubic metre (over bark)
 - change +0.3%



Statistics 2014 Tables

Statistics of Metsäteho

Costs and Timber Volume, 2014

	Costs		Timber volume	Transport volume	
	Mill. €	%	Mill. m ³	Mill. m ³ km	%
Harvesting	438.5		38.4		
Long-distance transportation	402.5	100		7 322	100
Road transportation	327.4	81		4 214	58
Rail transportation	64.4	16		2 648	36
Water transportation	10.6	3		460	6

Unit Costs in Harvesting by Felling Method, 2014

€/m ³	First thinning	Other thinning	Regeneration felling	Total
Harvesting				11.42
Mechanised harvesting ^{*)}	17.72	14.71	8.60	11.40
- share of volume	9.6	31.4	58.9	100
- share of costs	15.0	40.6	44.4	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, 2014

€/m ³	Mechanised harvesting ^{*)}	Long-distance transportation
Pine logs	7.90	8.00
Spruce logs	7.37	6.81
Plywood logs	8.29	10.36
Logs average	7.65	7.51
Pine pulpwood	13.44	10.25
Spruce pulpwood	13.38	8.71
Birch pulpwood	15.61	9.81
Pulpwood average	13.96	9.76
Average	11.40	8.91

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

Long-distance Transportation of Roundwood, 2014

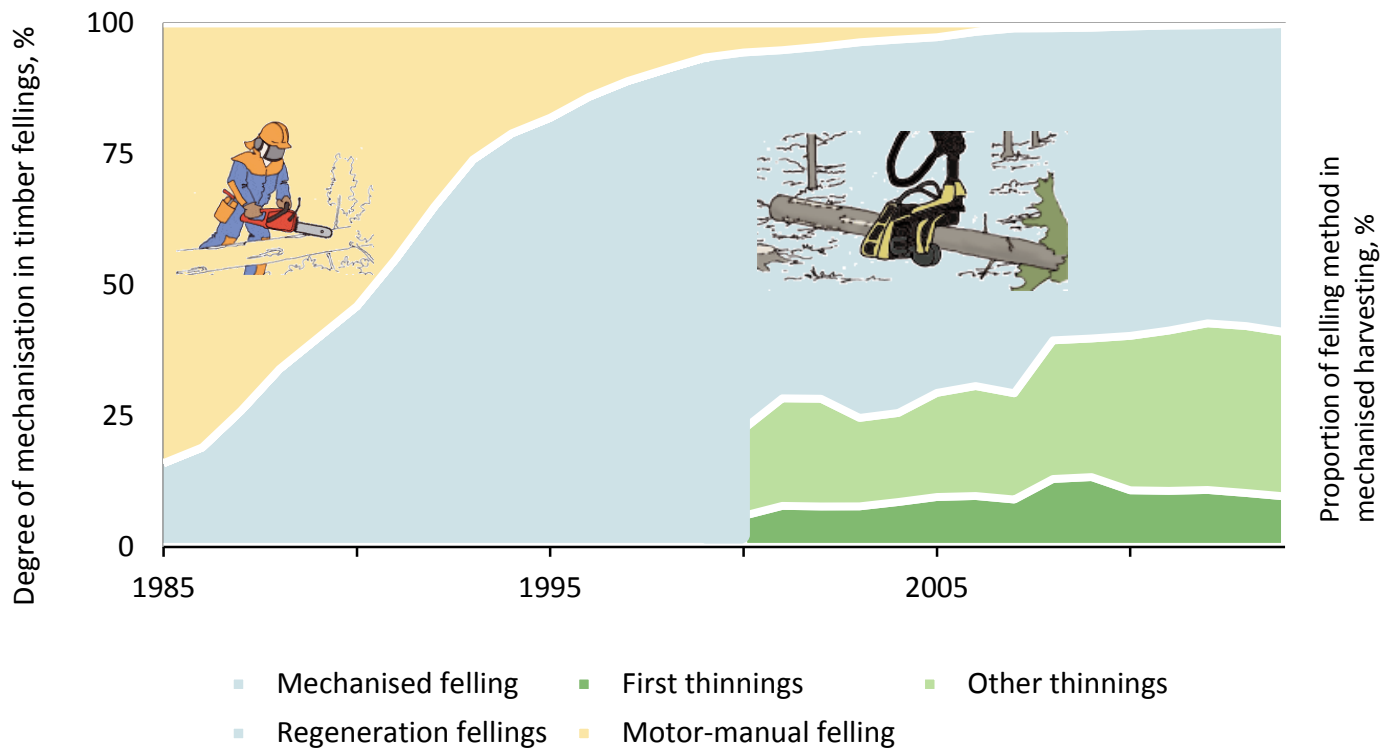
	Domestic roundwood				
	1 000 m ³	%	km	cent/m ³ km	€/m ³
Total long-distance transportation	45 171		161	5.5	8.91
Total by road	45 527	100.8	93	7.8	7.19
By road to mill	33 894	75.0	107	7.4	7.90
Rail transportation sequence	9 725	21.5	322	3.7	11.89
By road to railway	10 091	22.3	50	10.4	5.17
Rail transportation	9 725	21.5	272	2.4	6.63
Water transportation sequence	1 562	3.5	295	3.9	11.63
Floating sequence	719	1.6	320	3.4	11.44
By road to floating point	719	1.6	46	9.8	4.52
Floating	719	1.6	274	2.3	6.21
Barge transportation sequence	843	1.9	272	4.3	11.78
By road to barge	753	1.7	50	10.4	5.17
Barge transportation	843	1.9	223	3.2	7.17



Short Term Trends of Finnish Wood Supply

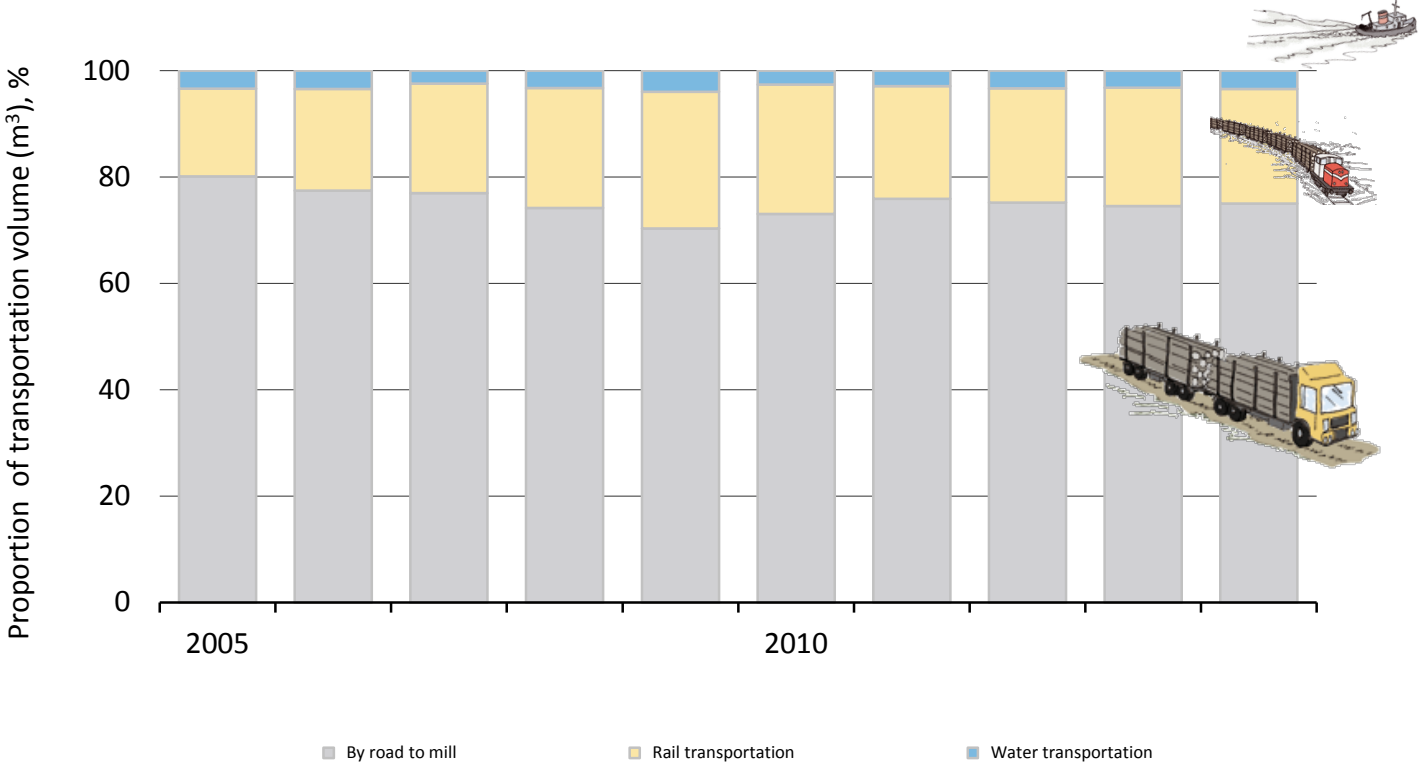
Statistics of Metsäteho

Mechanisation of Felling, 1985–2014

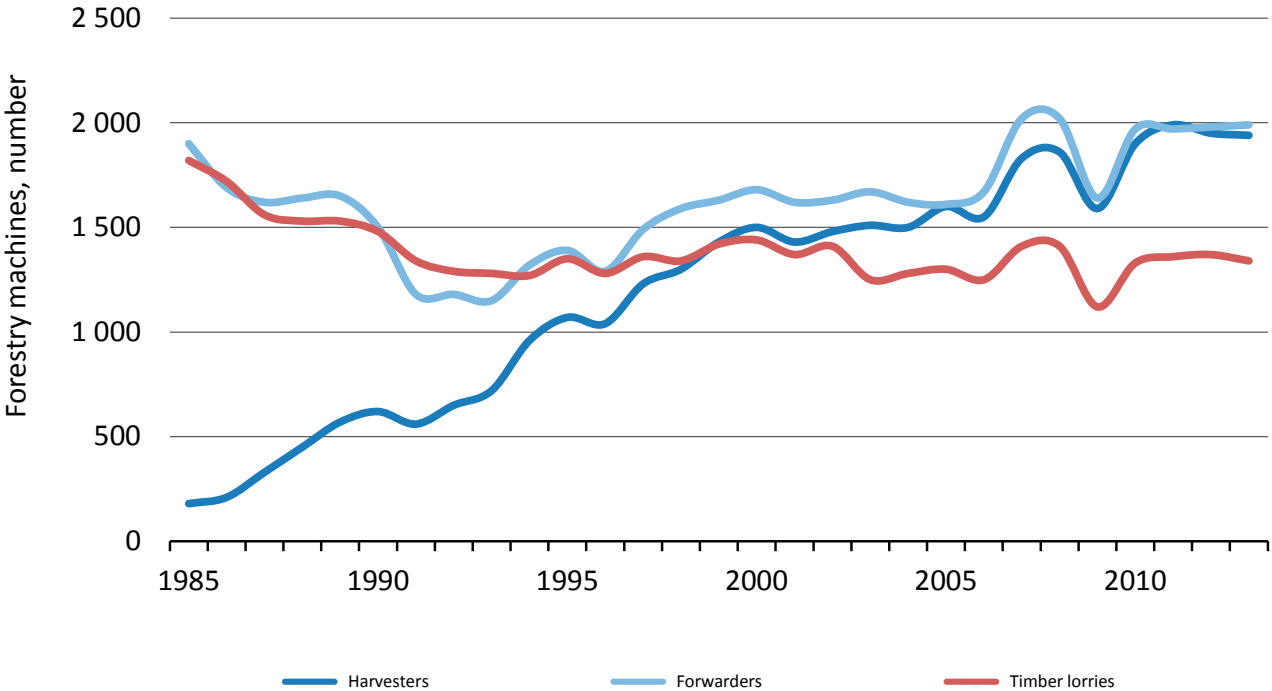


Per cent of mechanised felling year 2014: 99.9%

Long-distance Transportation Techniques, 2005–2014

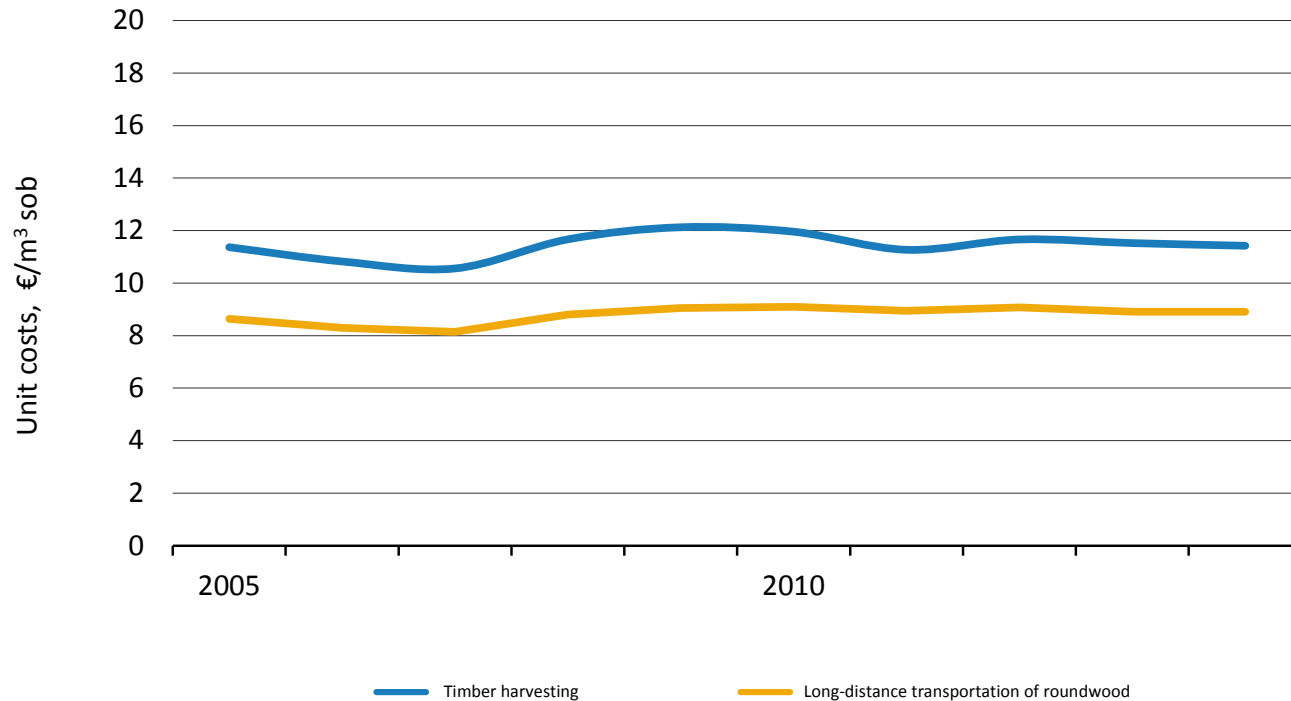


Forestry Machines, 1985–2013



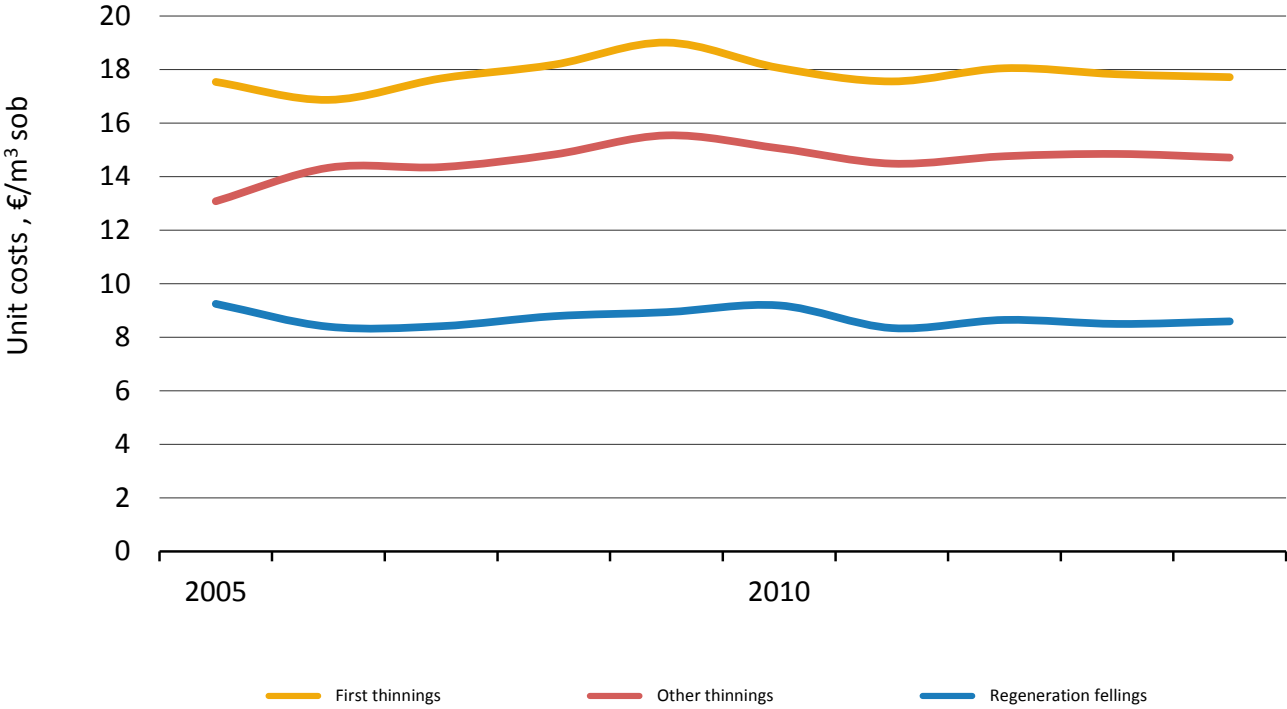
Source: Finnish Forest Research Institute

Unit Costs in Timber Harvesting and Long-distance Transportation of Roundwood, 2005–2014



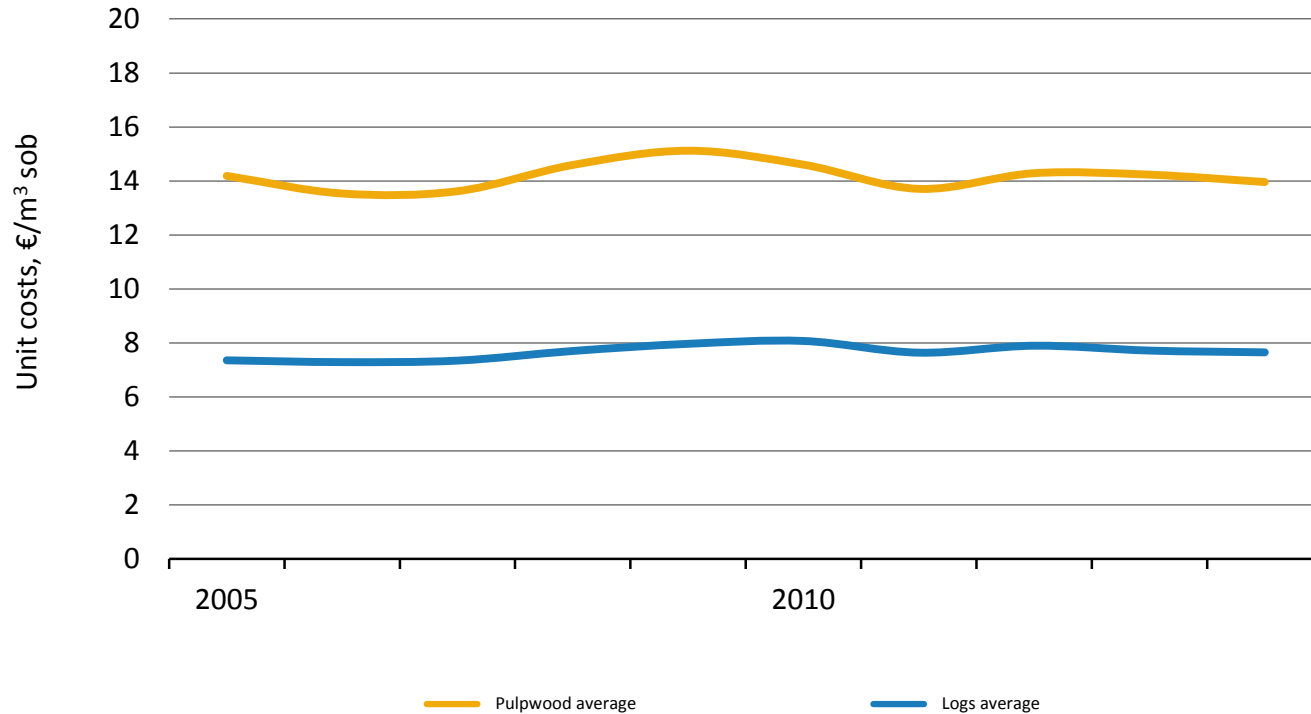
Costs have been deflated by Indexes of forest machinery costs and lorry traffic costs (2014=100).

Unit Costs in Mechanised Harvesting by Felling Method, 2005–2014



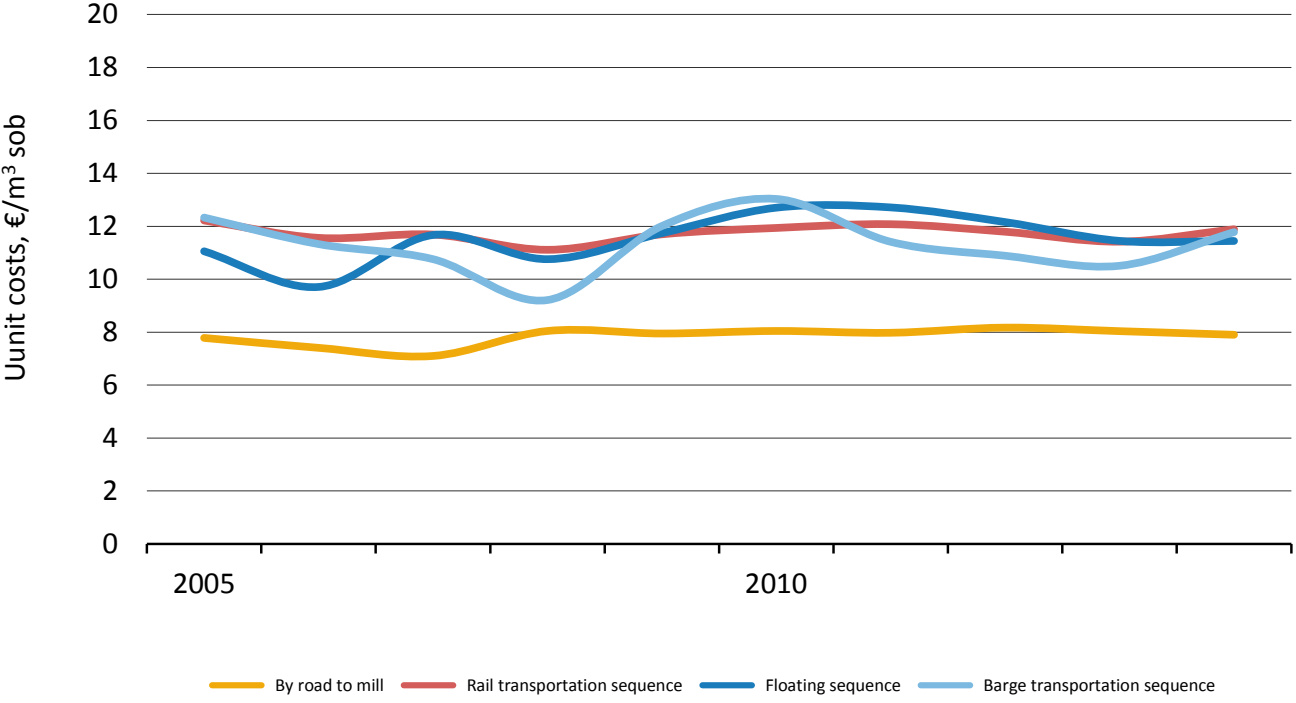
Costs have been deflated by Index of forest machinery (2014=100).

Unit Costs in Mechanised Harvesting by Timber Assortments, 2005–2014



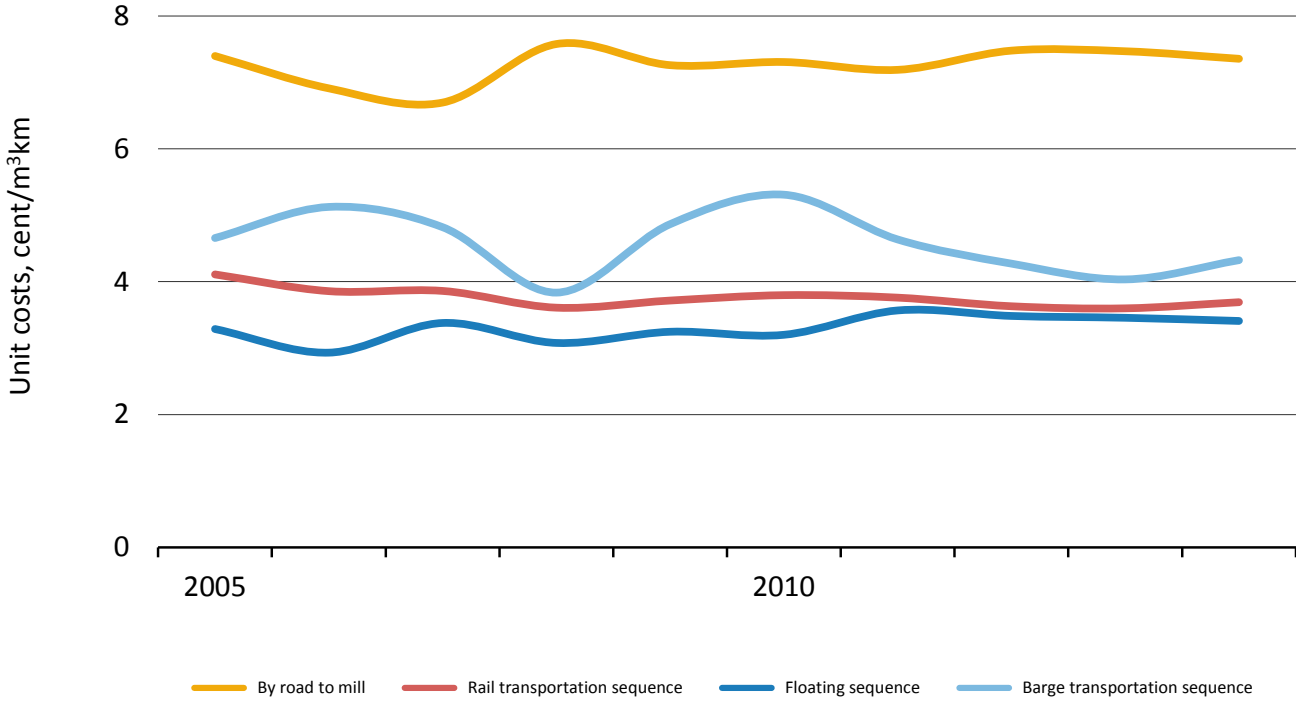
Costs have been deflated by Index of forest machinery (2014=100).

Unit Costs in Long-distance Transportation of Roundwood 2005–2014 (I)



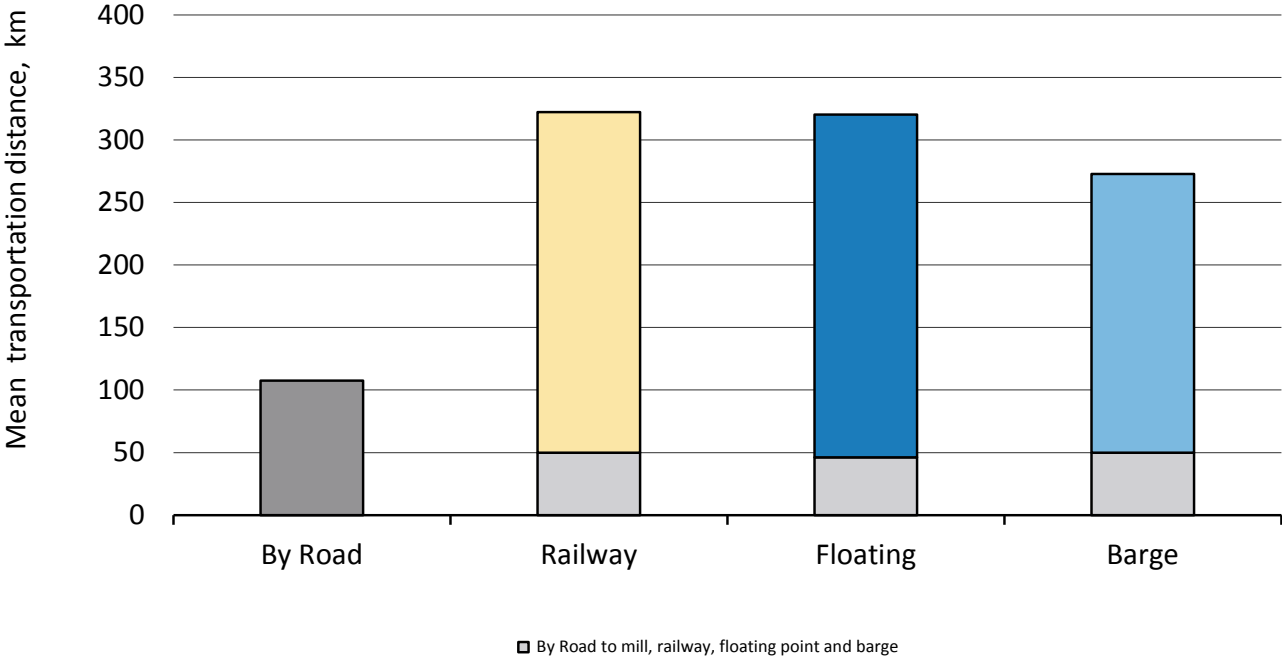
Costs have been deflated by Index of lorry traffic costs (2014=100).

Unit Costs in Long-distance Transportation of Roundwood 2005–2014 (II)

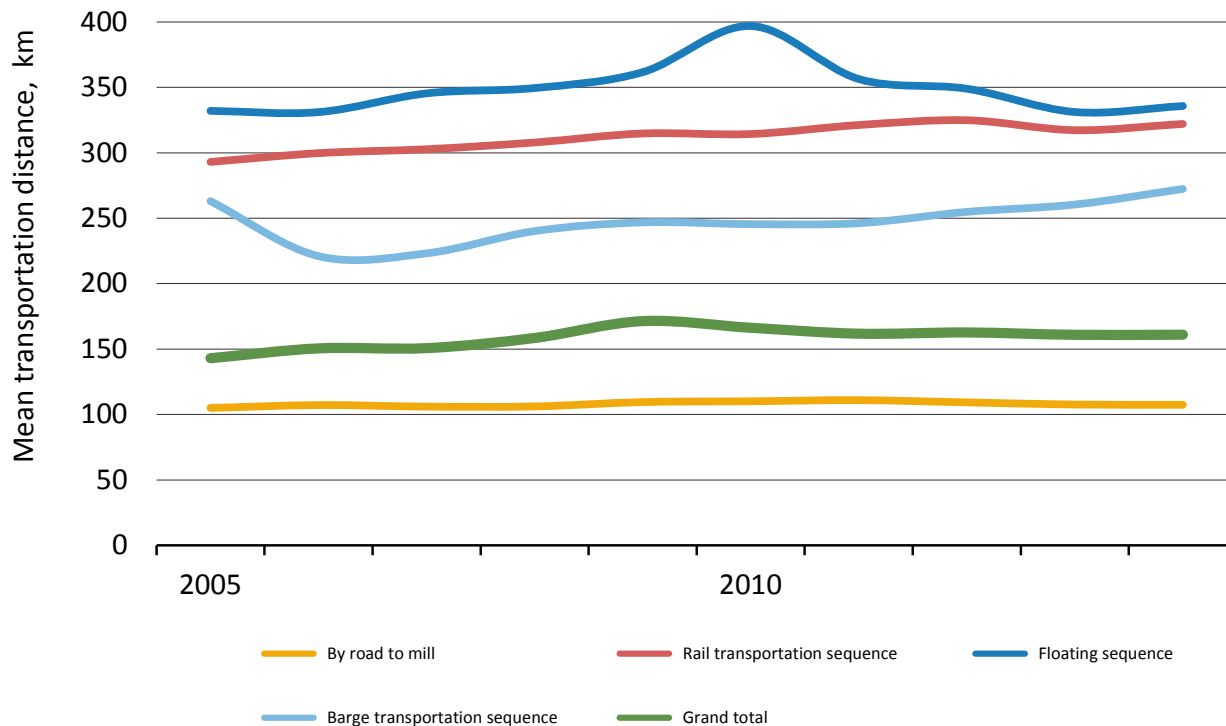


Costs have been deflated by Index of lorry traffic costs (2014=100).

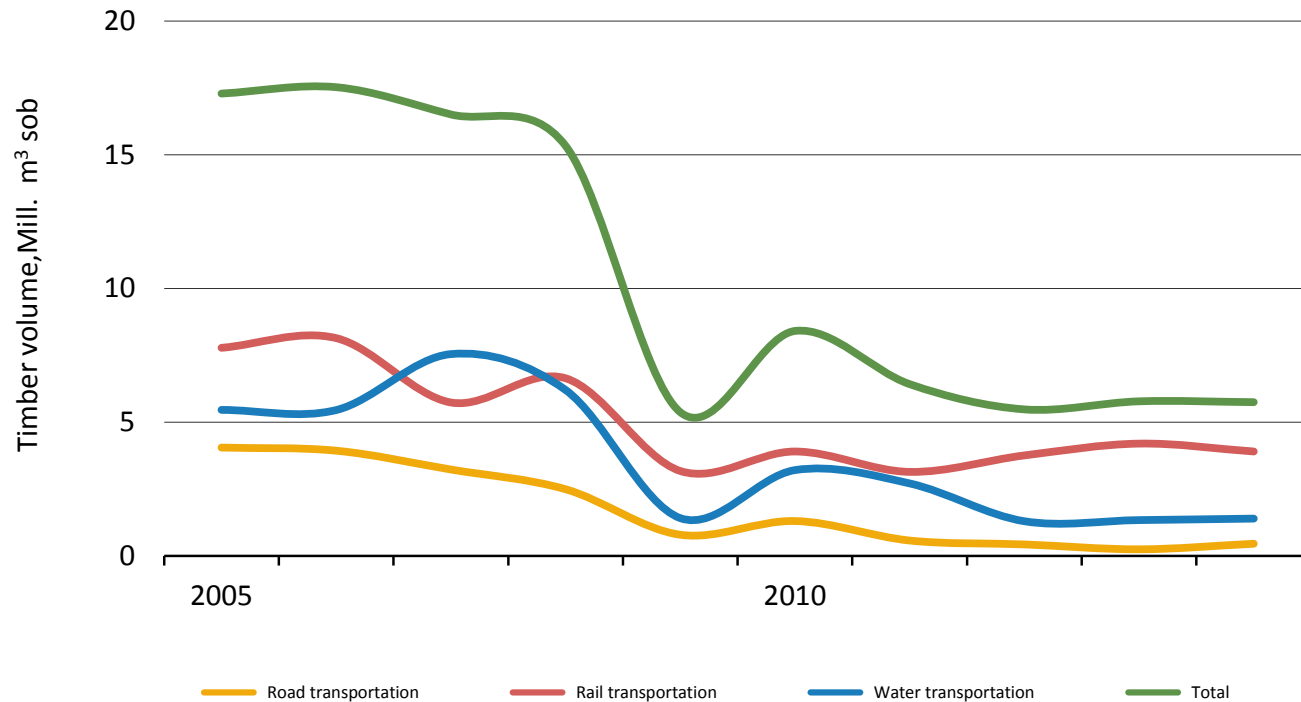
Mean Transportation Distance, 2014



Mean Transportation Distance, 2005–2014



Volumes of Imported Roundwood by Transportation Method, 2005–2014

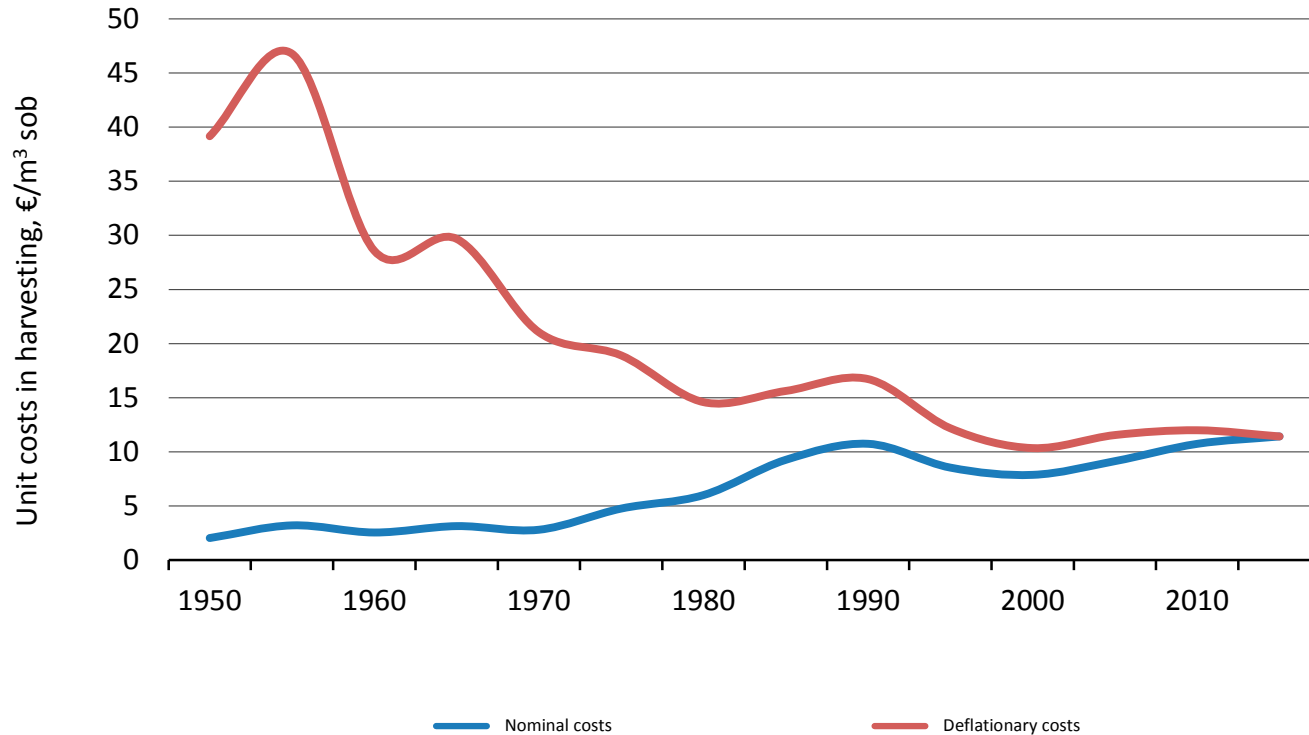




Long Term Trends of Finnish Wood Supply

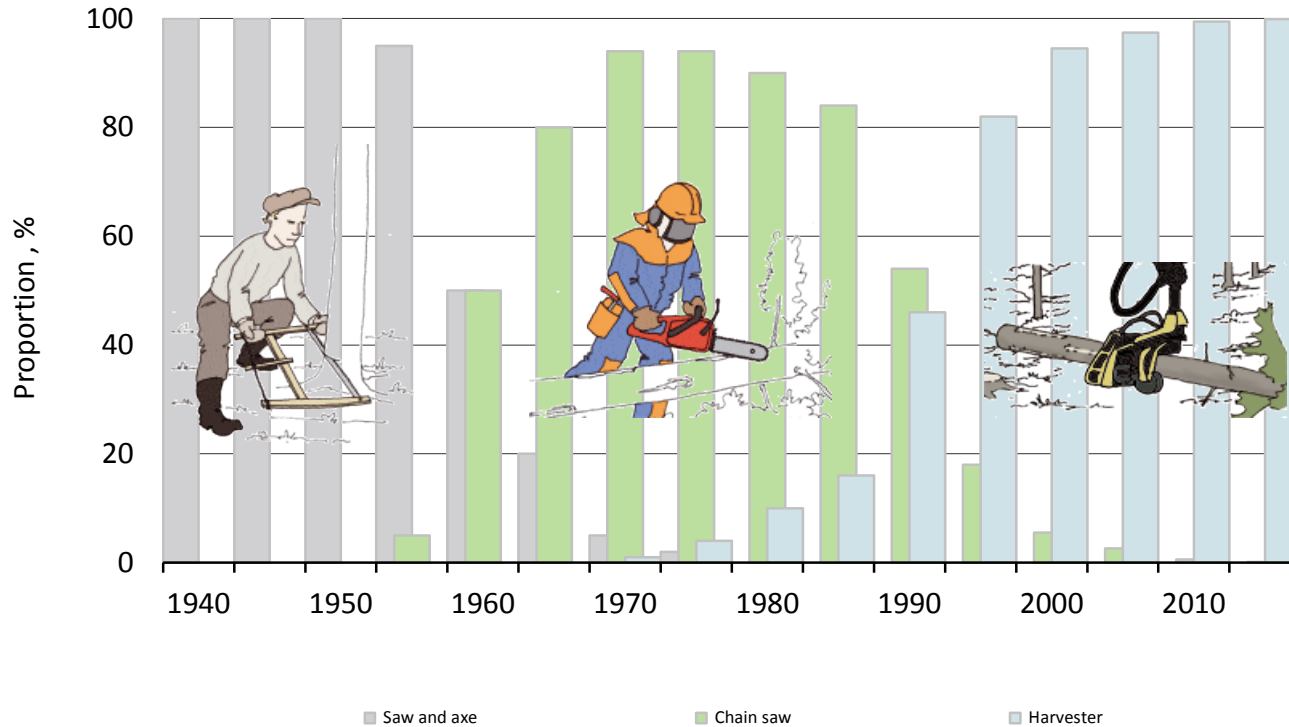
Statistics of Metsäteho

Unit Costs in Timber Harvesting, 1950–2014

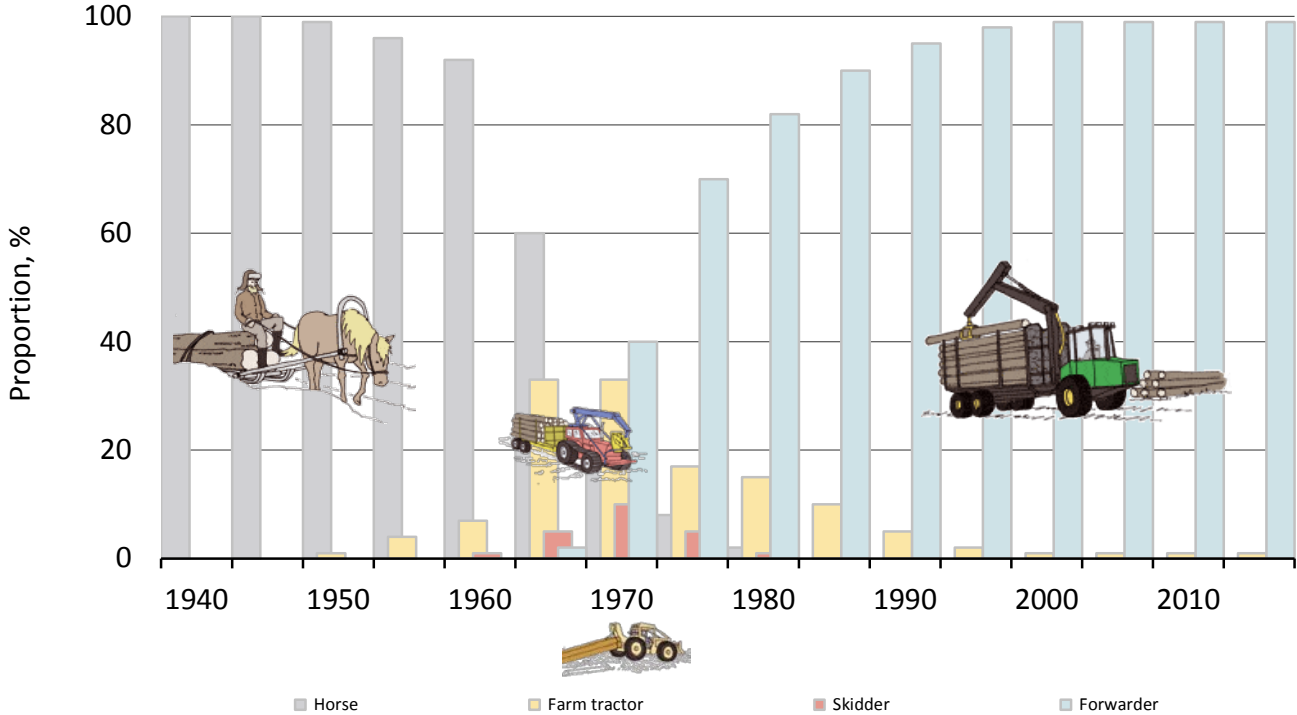


Costs have been deflated by the wholesale price index (2014=100).

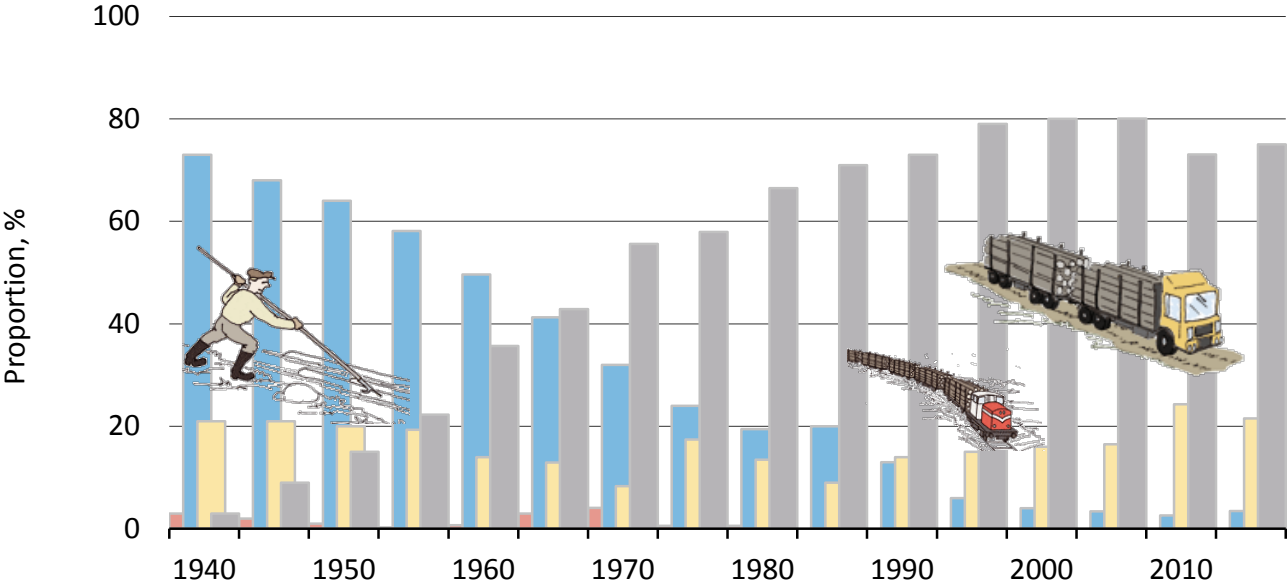
Felling Techniques, 1940–2014



Forest Haulage Techniques, 1940–2014



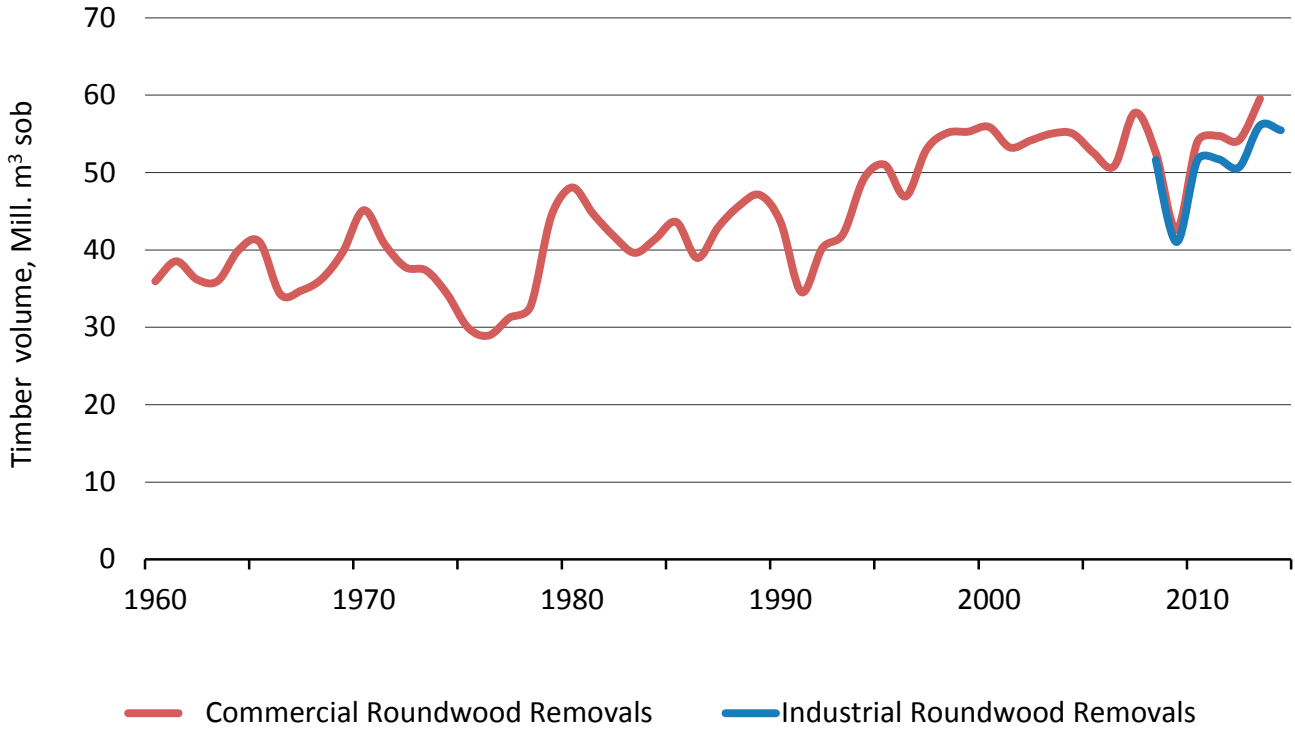
Long-distance Transportation Techniques, 1940–2014





Background Information of Finnish Wood Supply

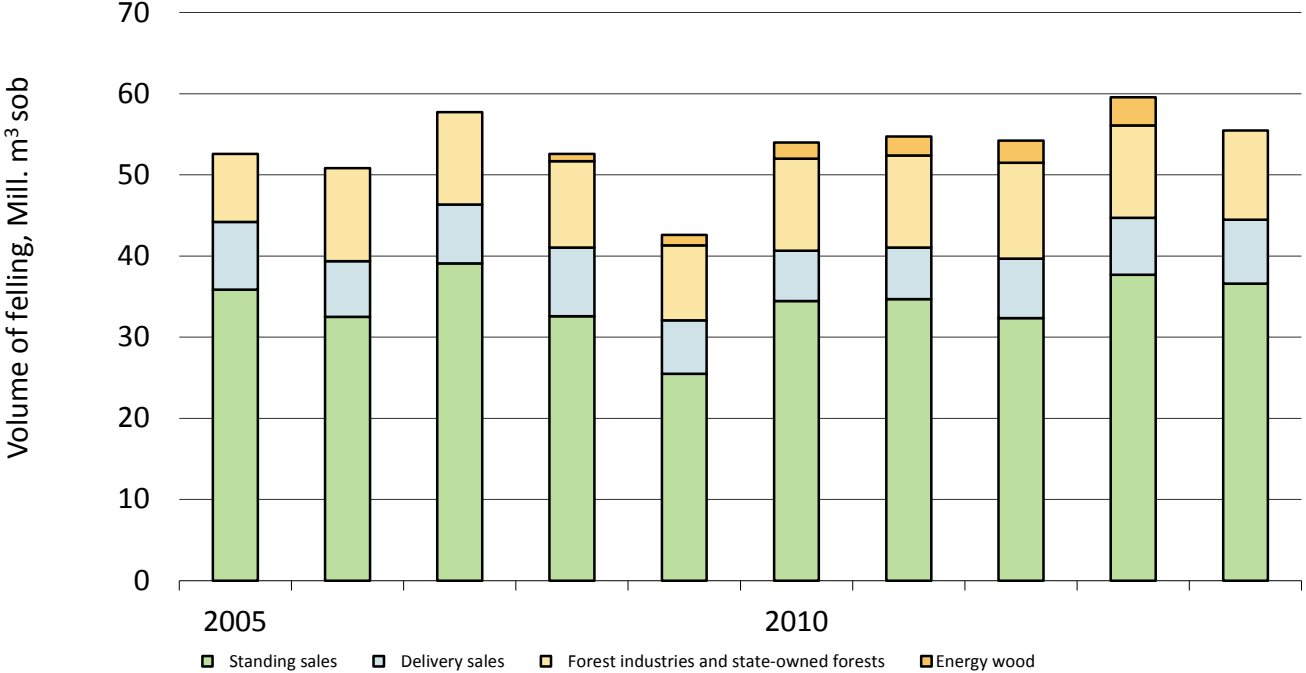
Commercial Roundwood Removals, 1960–2014



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

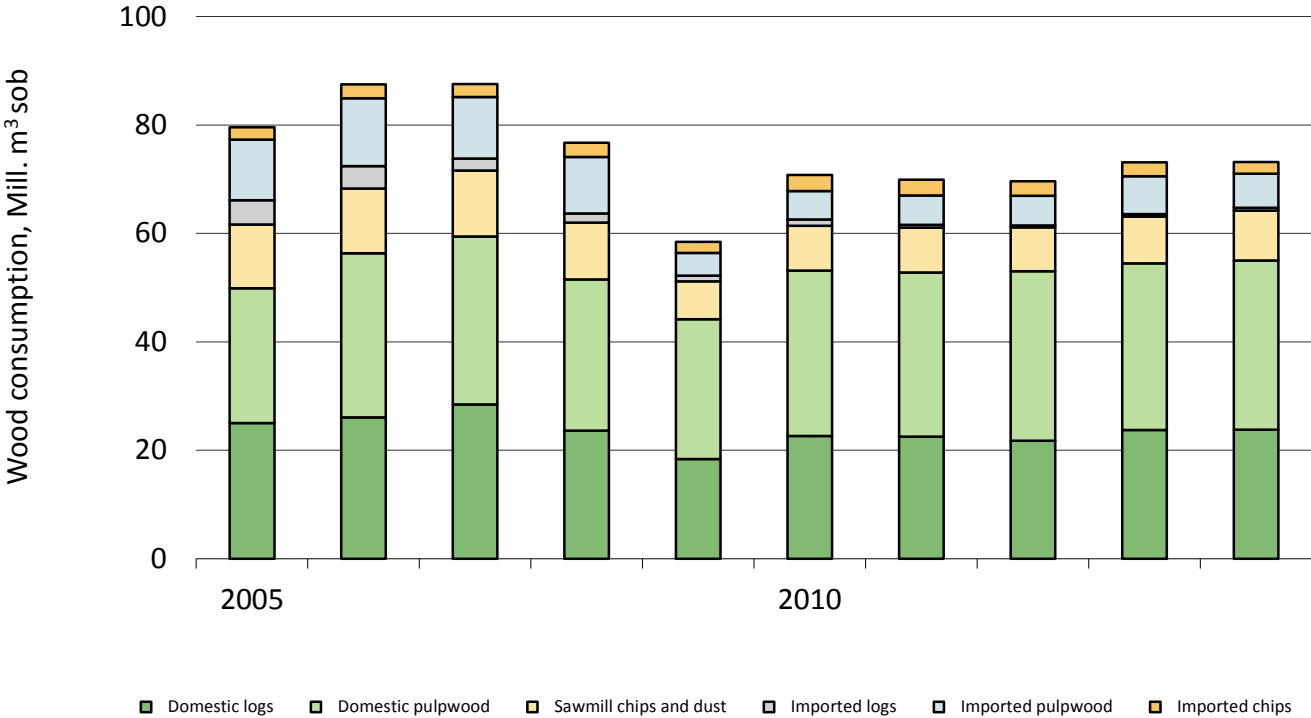
Source: Finnish Forest Research Institute / Natural Resources Institute Finland

Commercial Roundwood Removals by Forest Ownership Category, 2004–2013



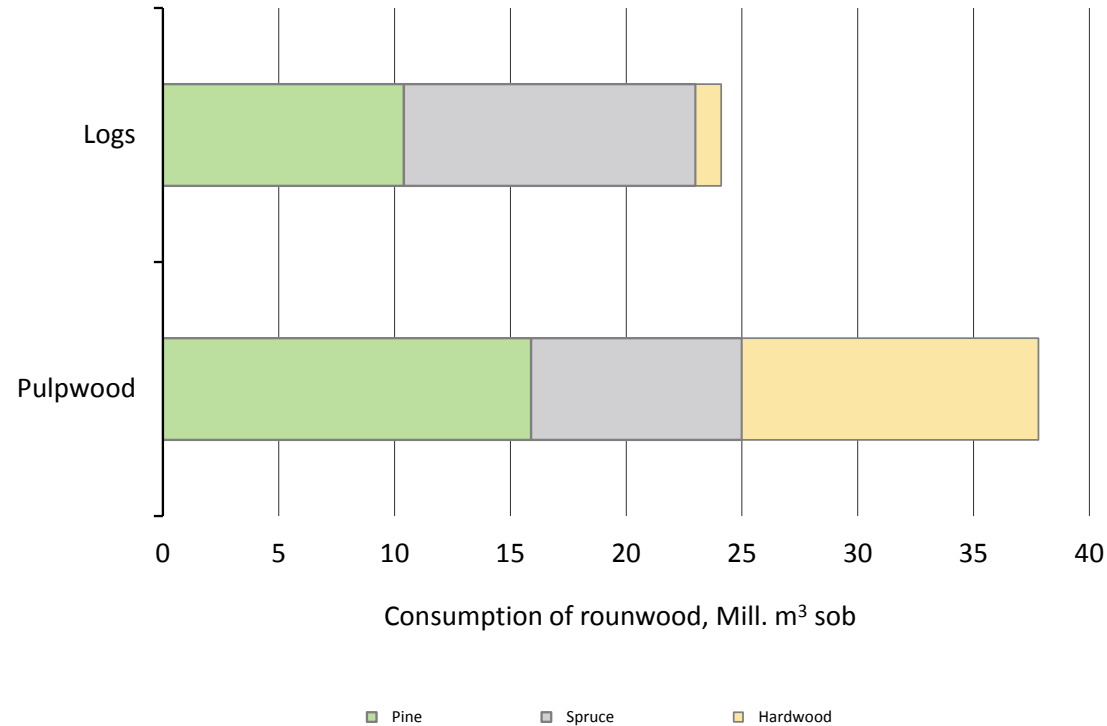
Source: Finnish Forest Research Institute / Natural Resources Institute Finland

Roundwood Consumption by Forest Industries, 2005–2014



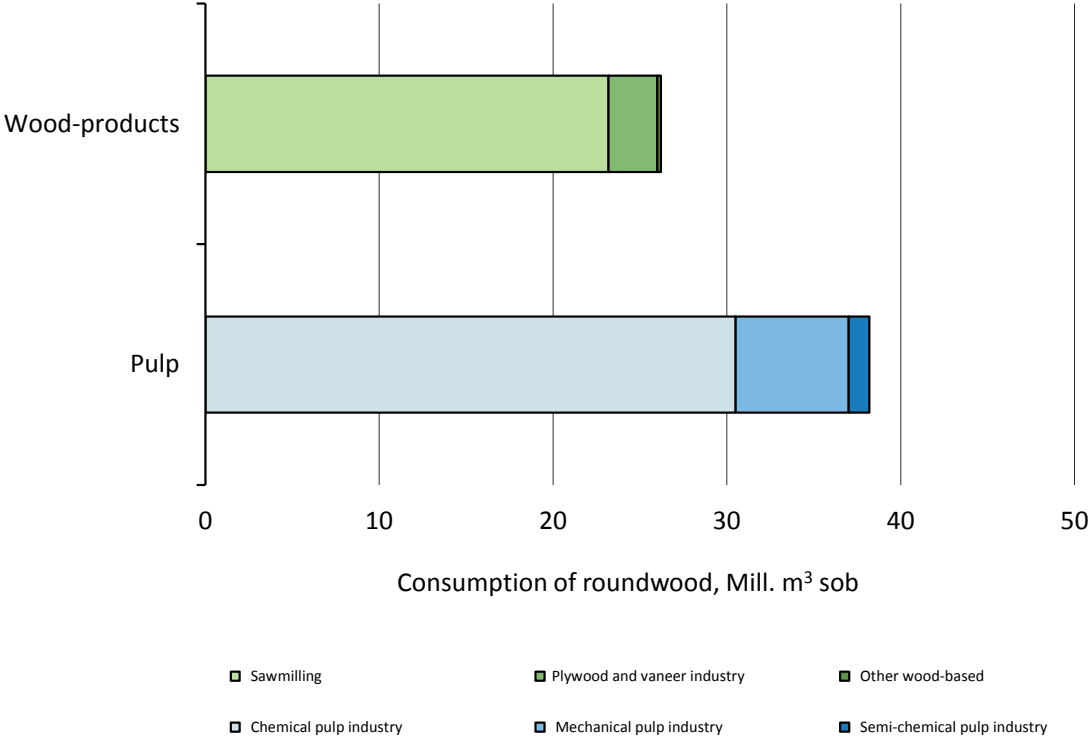
Source: Finnish Forest Research Institute / Natural Resources Institute Finland

Wood Consumption by Forest Industries, 2013



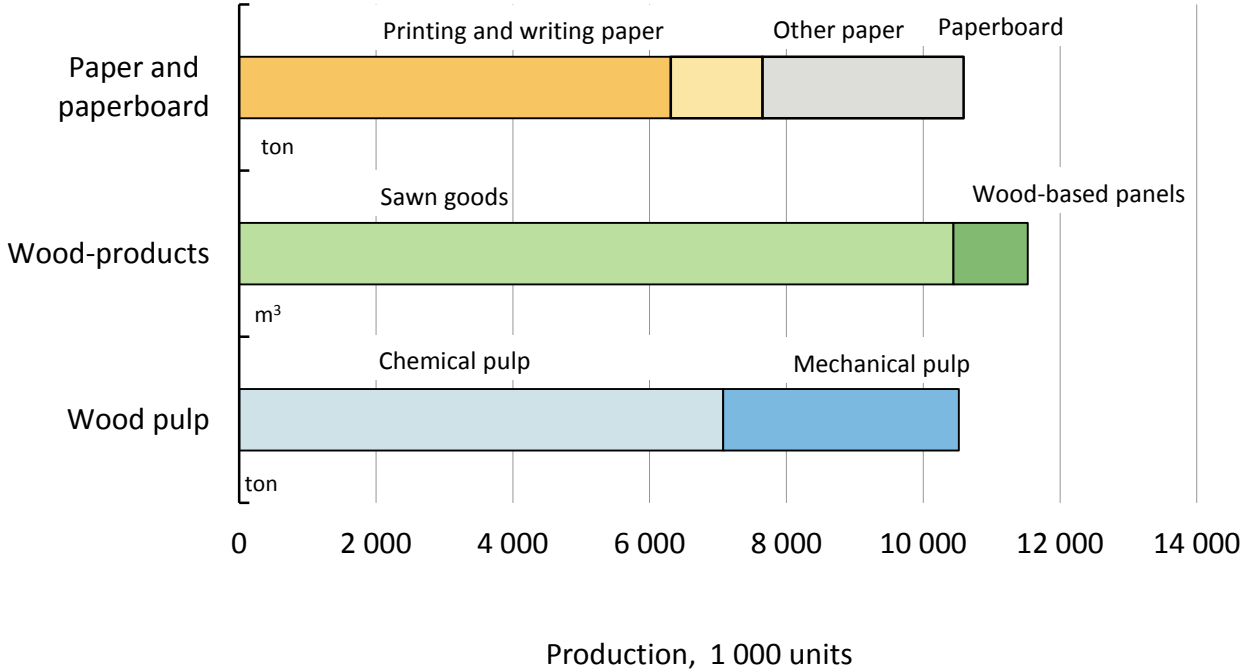
Source: Finnish Forest Research Institute

Roundwood Consumption by Forest Industries by Branch of Industry, 2013



Source: Finnish Forest Research Institute

Production of Forest Industry Products, 2013



Source: Finnish Forest Research Institute