

Timber Harvesting and Long-distance Transportation of Roundwood 2016



Metsätehon tuloskalvosarja 1b/2017

Markus Strandström

Metsäteho Oy

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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 2016 - Summary

- The average cost of timber harvesting for the Finnish Forest Industries and State Forest Enterprise was 10.82 € per solid cubic metre (over bark).
 - change -1.0%
- The average cost in the long-distance transportation of roundwood was 8.06 € per solid cubic metre (over bark)
 - change -4.0%



Statistics 2016 Tables



Statistics of Metsäteho

Costs and Timber Volume, 2016

	Costs		Timber volume	Transport volume	
	Mill. €	%	Mill. m ³	Mill. m ³ km	%
Harvesting	432.0		39.9		
Long-distance transportation	375.6	100		7 342	100
Road transportation	307.6	82		4 222	58
Rail transportation	60.6	16		2 807	38
Water transportation	7.4	2		313	4

Unit Costs in Harvesting by Felling Method, 2016

€/m ³	First thinning	Other thinning	Regeneration felling	Total
Harvesting				10.82
Mechanised harvesting ^{*)}	16.71	13.91	8.18	10.82
- share of volume	8.7	33.0	58.3	100
- share of costs	13.5	42.4	44.1	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, 2016

€/m ³	Mechanised harvesting ^{*)}	Long-distance transportation
Pine logs	7.63	7.46
Spruce logs	7.01	6.29
Plywood logs	7.89	9.58
Logs average	7.31	6.95
Pine pulpwood	12.70	9.11
Spruce pulpwood	12.80	7.76
Birch pulpwood	14.57	8.88
Pulpwood average	13.19	8.71
Average	10.82	8.06

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

Long-distance Transportation of Roundwood, 2016

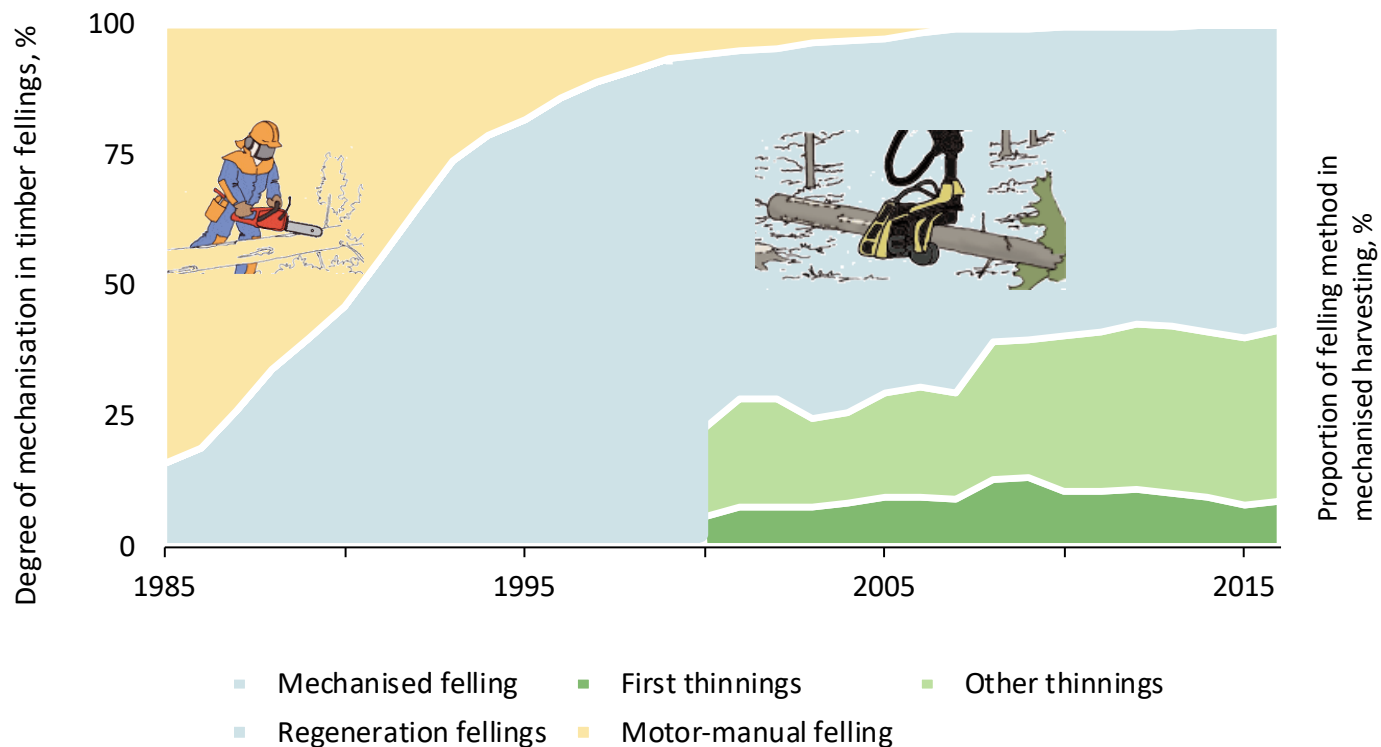
	Domestic roundwood				
	1 000 m ³	%	km	cent/m ³ km	€/m ³
Total long-distance transportation	46 602		157	5.1	8.06
Total by road	46 418	99.6	91	7.3	6.63
By road to mill	35 233	75.6	105	6.9	7.23
Rail transportation sequence	10 278	22.1	320	3.3	10.56
By road to railway	10 217	21.9	48	10.0	4.76
Rail transportation	10 278	22.1	273	2.2	5.90
Water transportation sequence	1 097	2.4	286	3.8	10.74
By road to floating/barge	927		47	9.7	4.53
Water transportation	1 097		238	2.9	6.90



Short Term Trends of Finnish Wood Supply

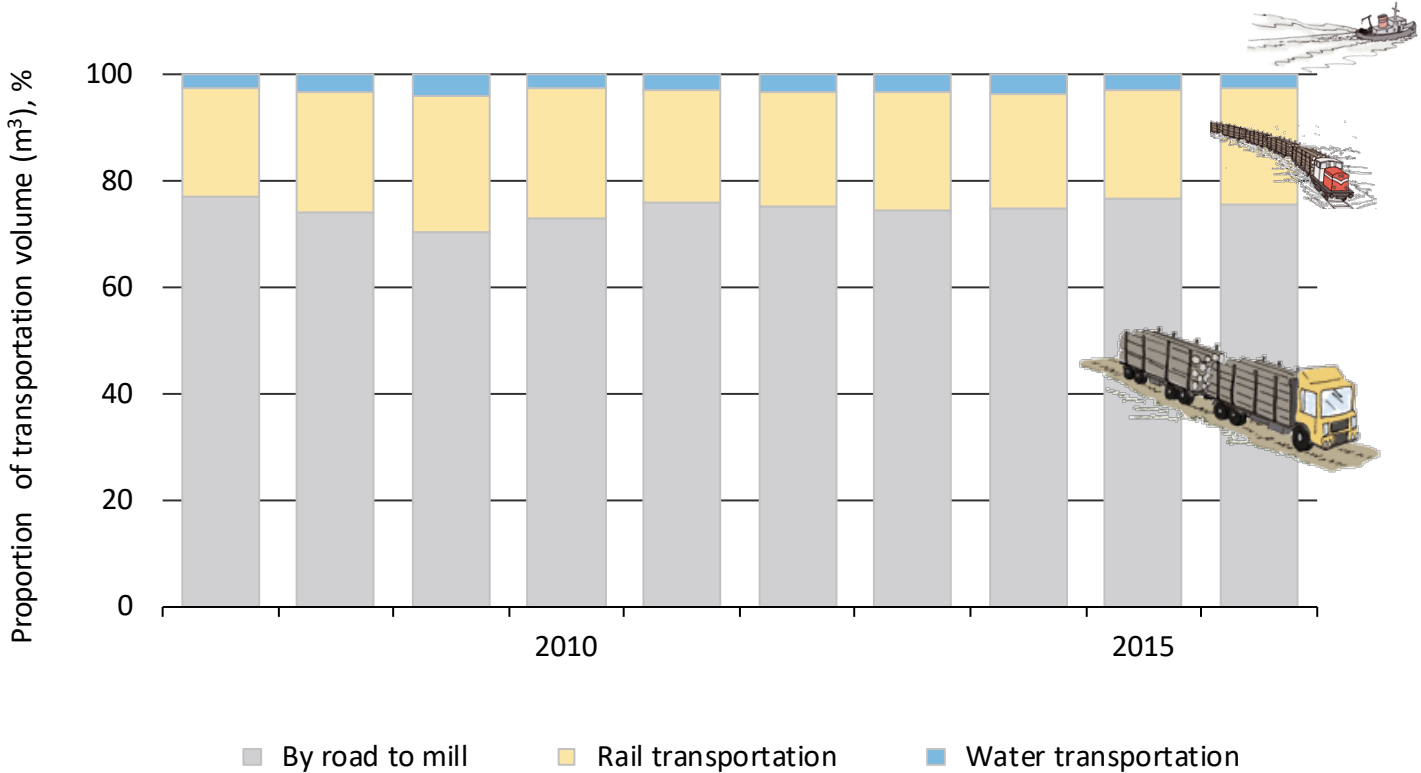
Statistics of Metsäteho

Mechanisation of Felling, 1985–2016

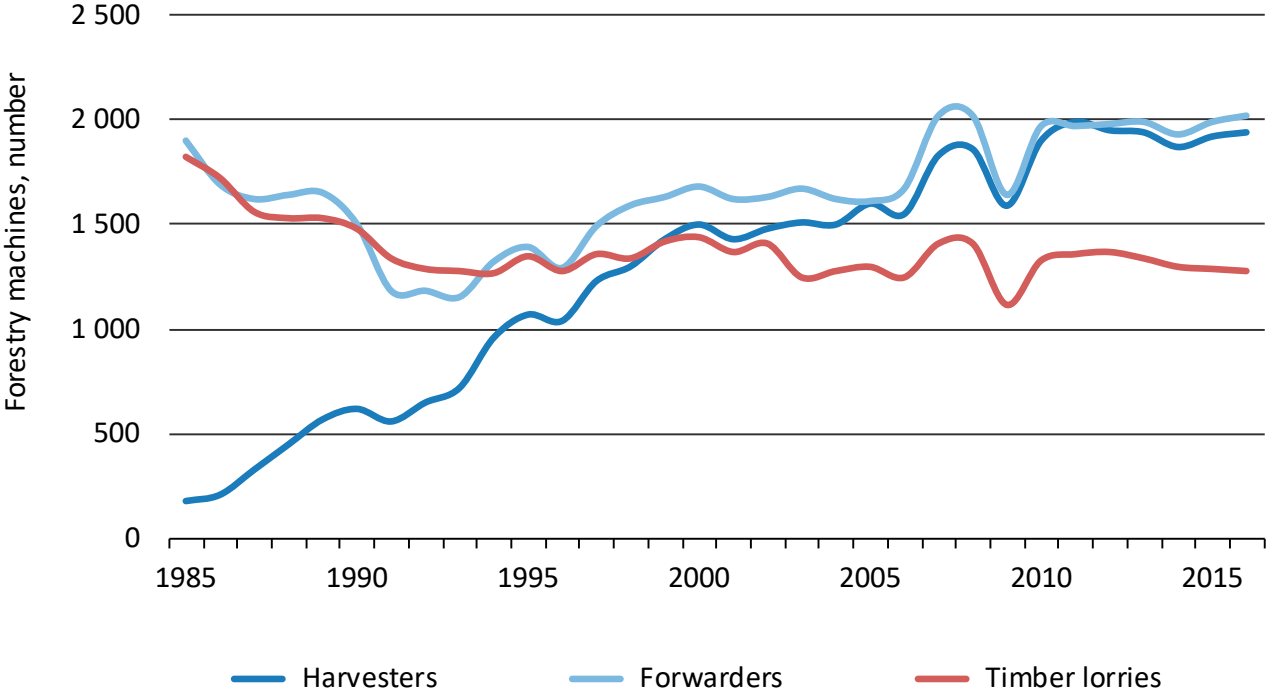


Per cent of mechanised felling year 2016: 99.96%

Long-distance Transportation Techniques, 2007–2016

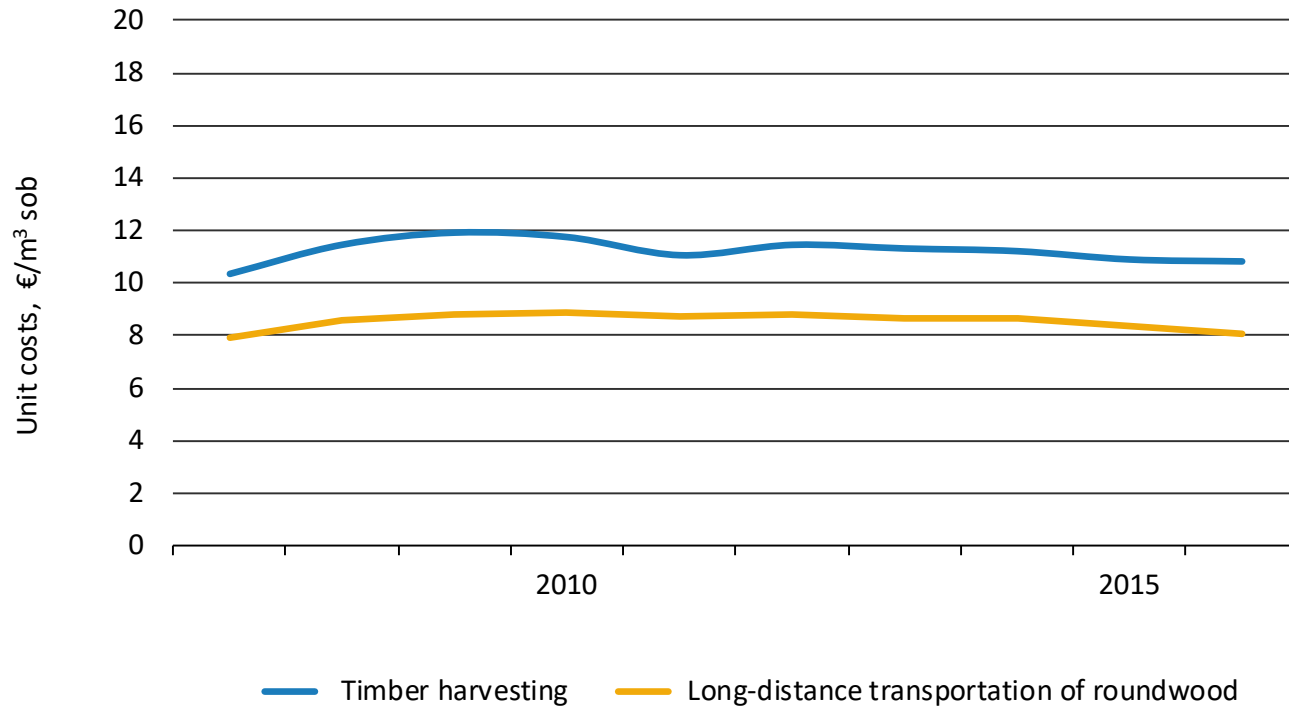


Forestry Machines, 1985–2016



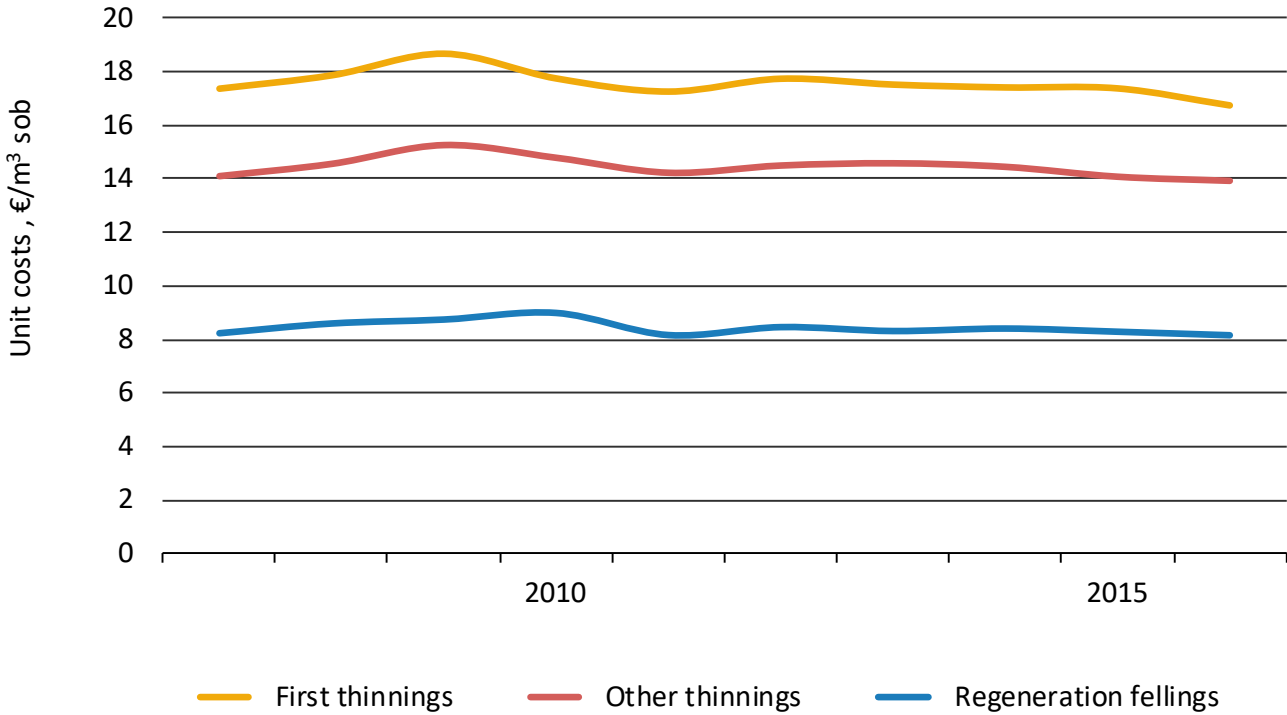
Source: Natural Resources Institute Finland

Unit Costs in Timber Harvesting and Long-distance Transportation of Roundwood, 2007–2016



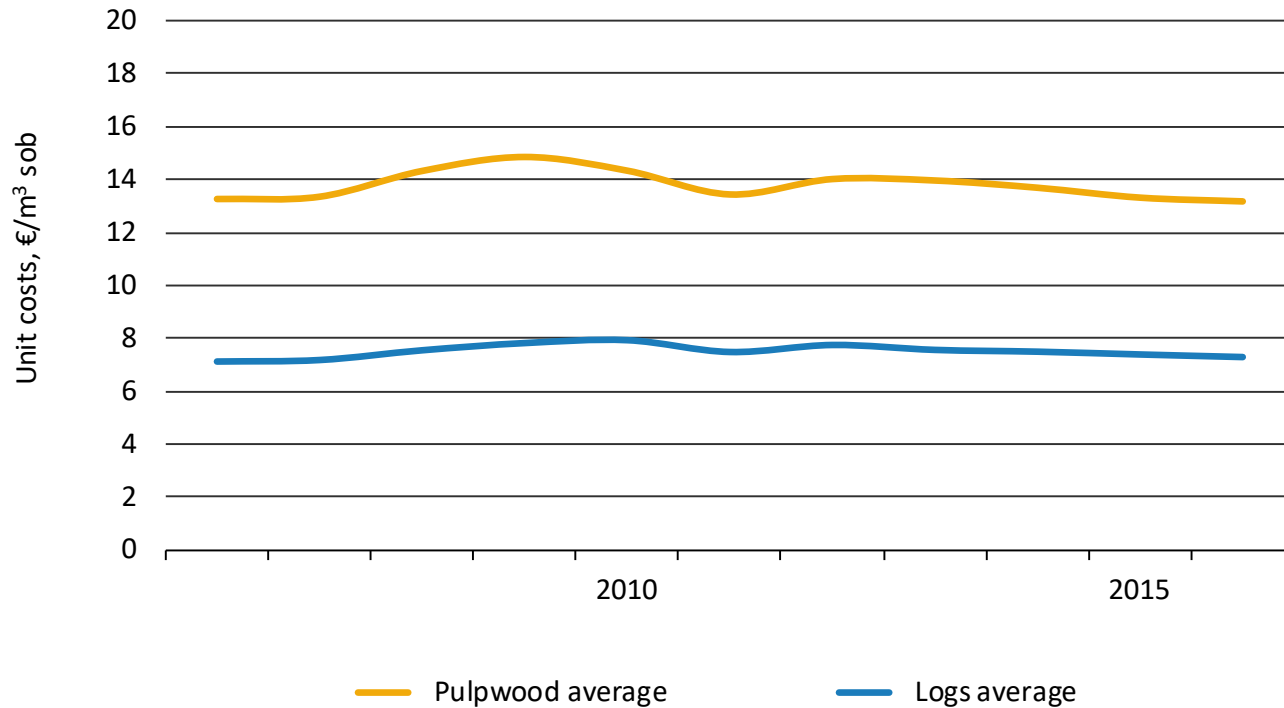
Costs have been deflated by Indexes of forest machinery costs and lorry traffic costs (2016=100).

Unit Costs in Mechanised Harvesting by Felling Method, 2007–2016



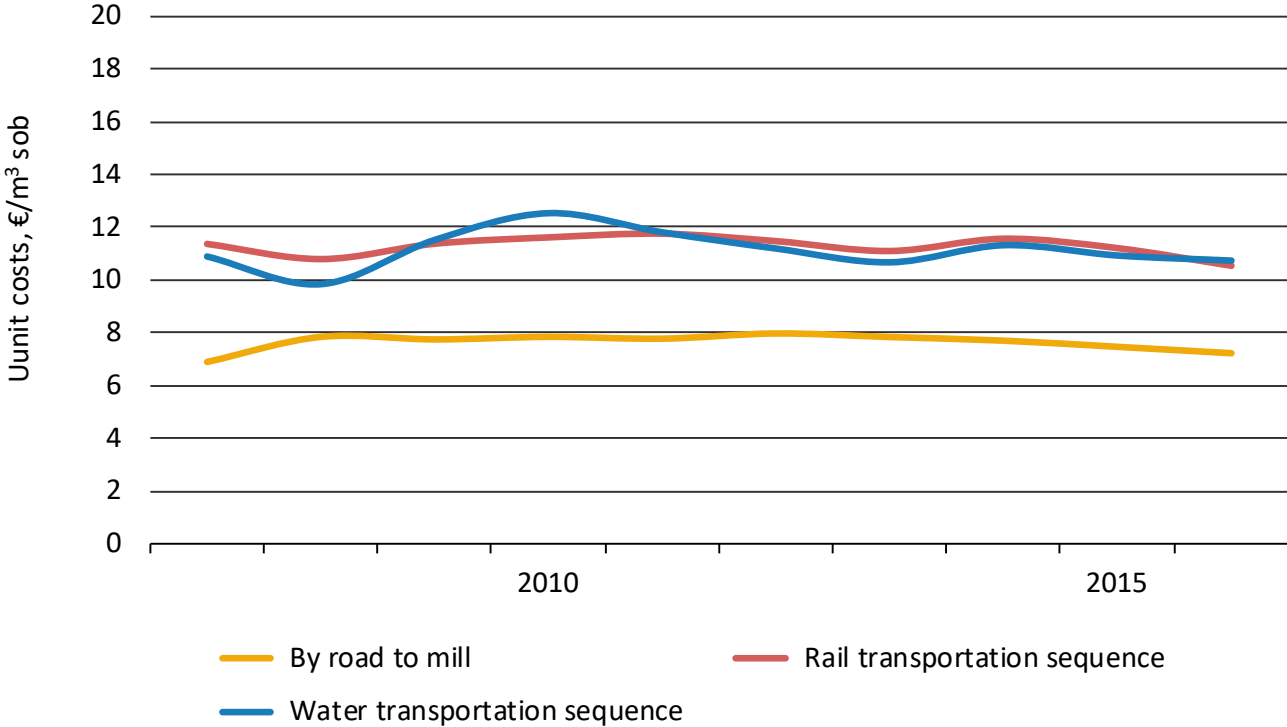
Costs have been deflated by Index of forest machinery (2016=100).

Unit Costs in Mechanised Harvesting by Timber Assortments, 2007–2016



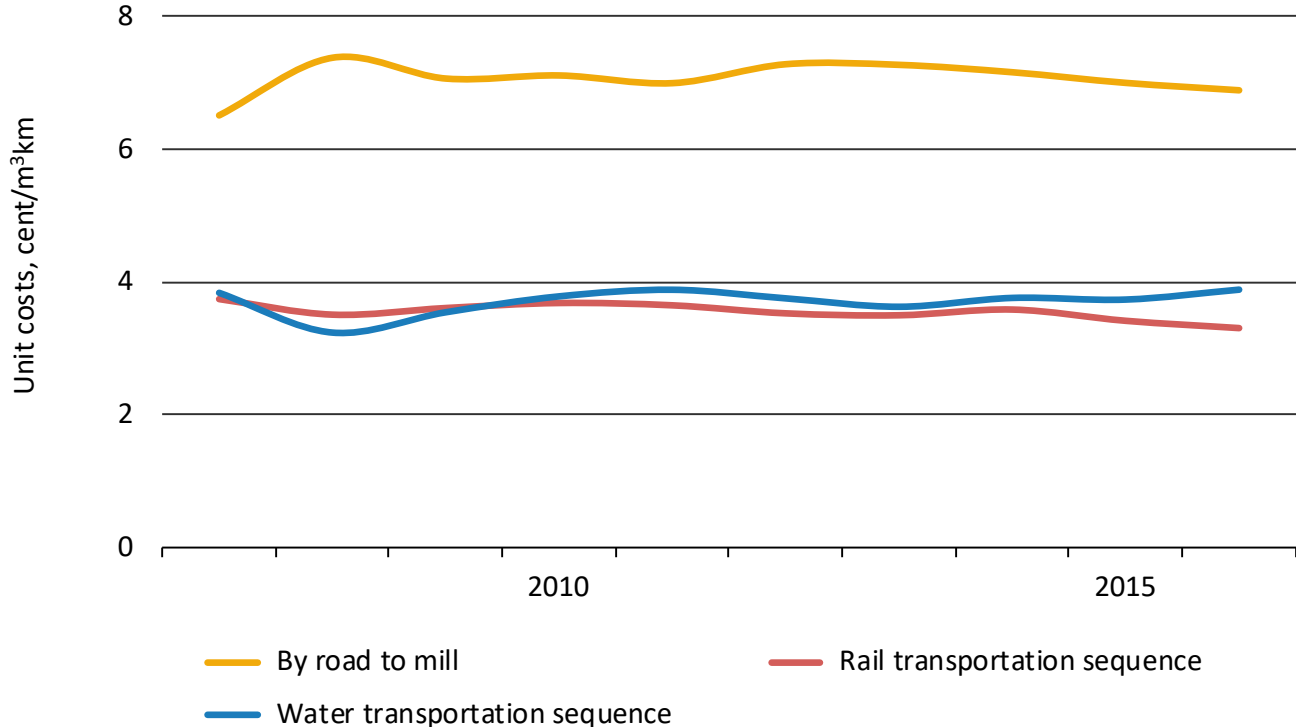
Costs have been deflated by Index of forest machinery (2016=100).

Unit Costs in Long-distance Transportation of Roundwood 2007–2016 (I)



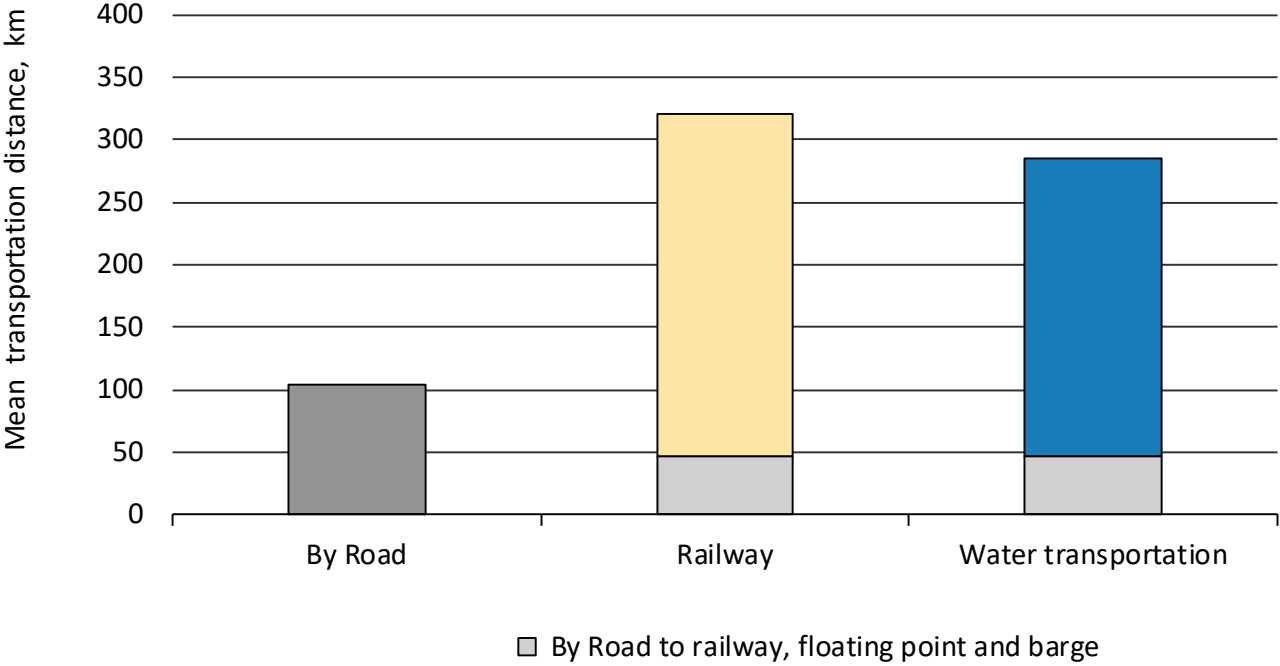
Costs have been deflated by Index of lorry traffic costs (2016=100).

Unit Costs in Long-distance Transportation of Roundwood 2007–2016 (II)

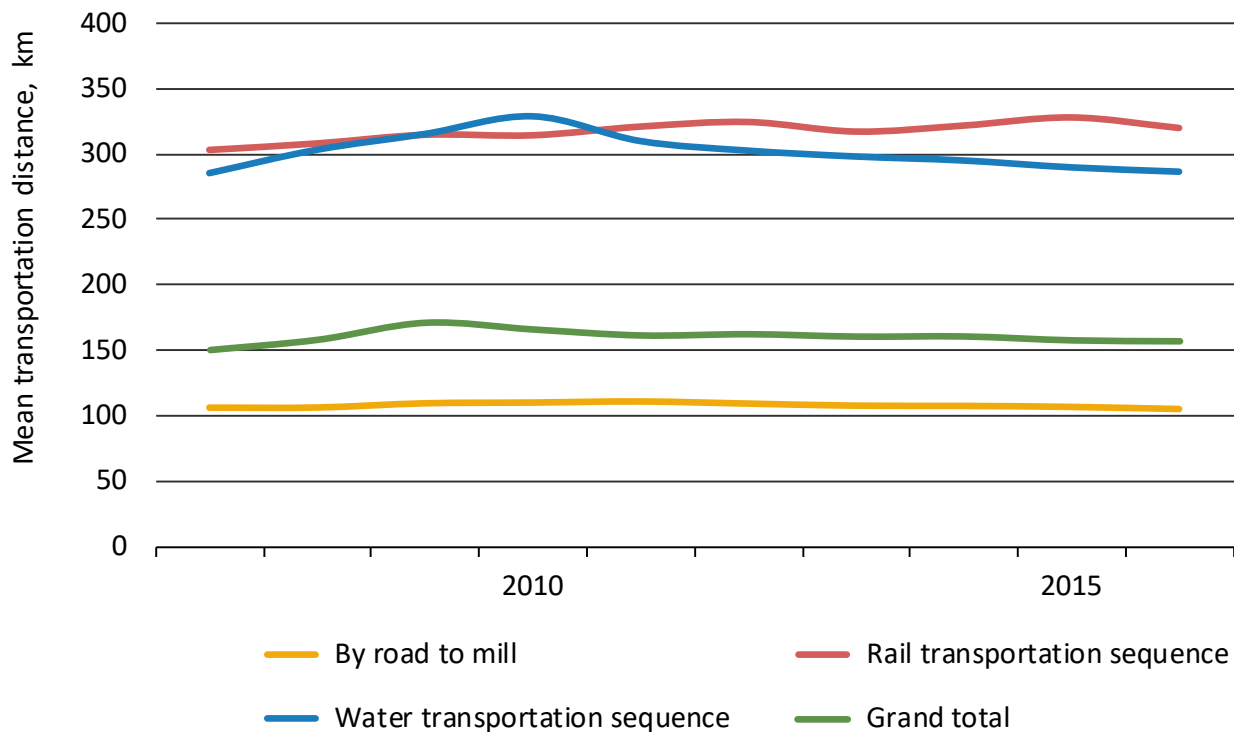


Costs have been deflated by Index of lorry traffic costs (2016=100).

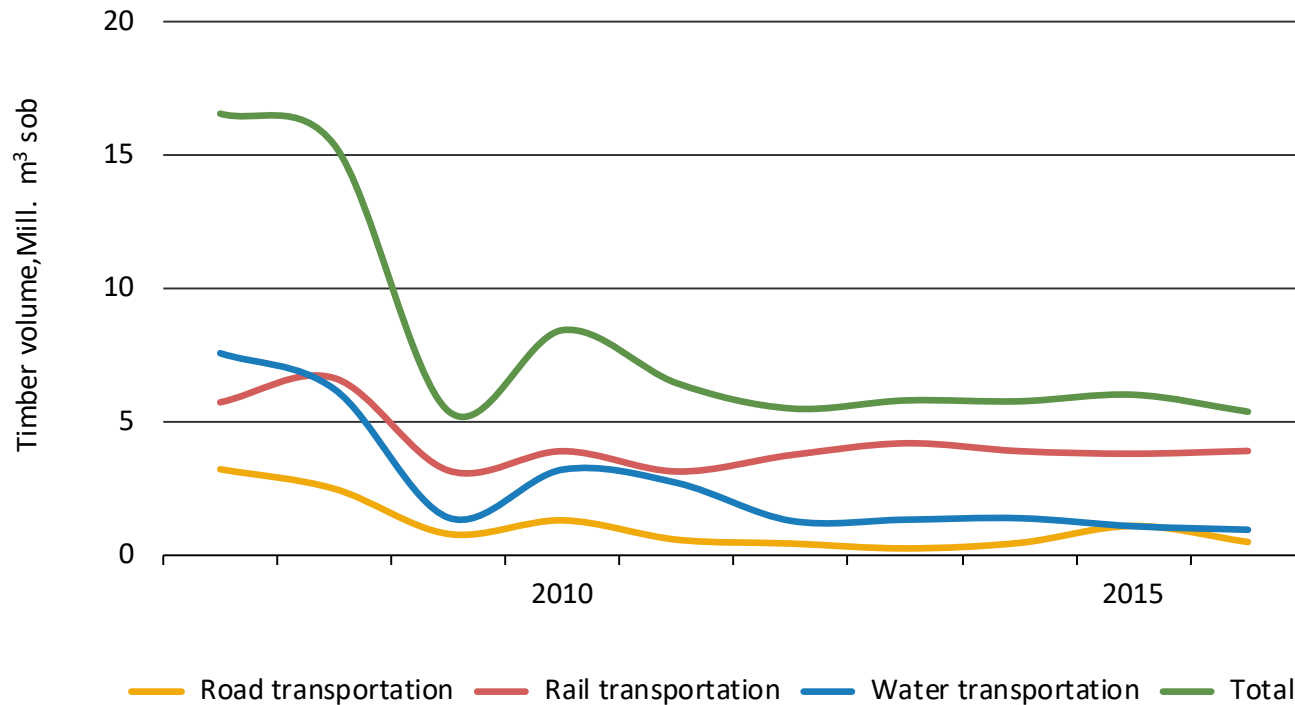
Mean Transportation Distance, 2016



Mean Transportation Distance, 2007–2016



Volumes of Imported Roundwood by Transportation Method, 2007–2016

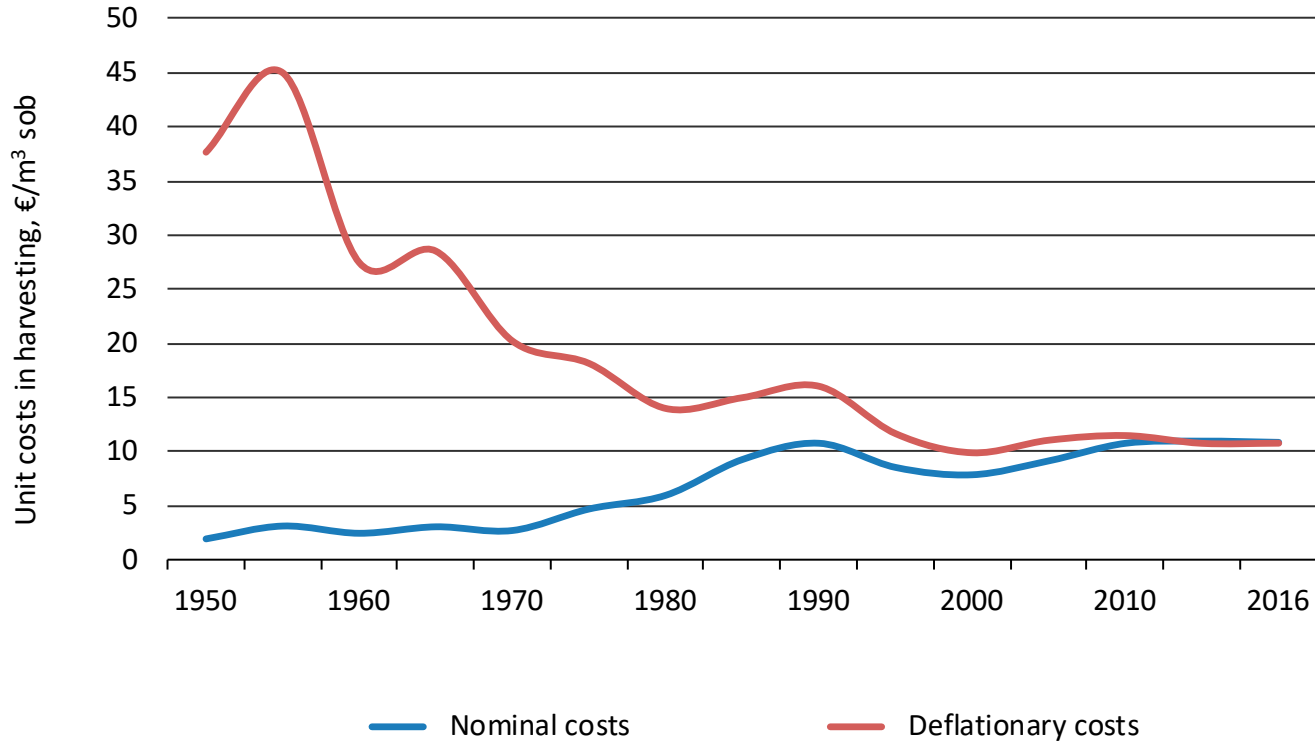




Long Term Trends of Finnish Wood Supply

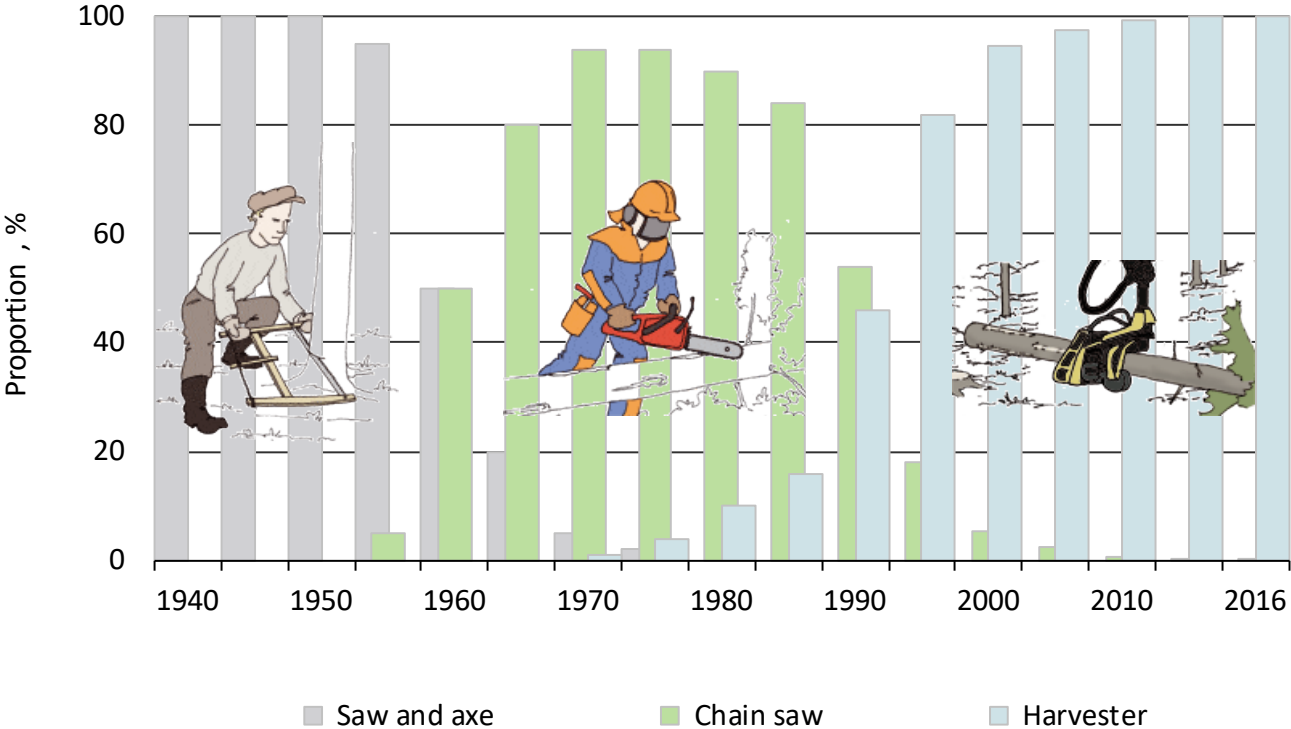
Statistics of Metsäteho

Unit Costs in Timber Harvesting, 1950–2016

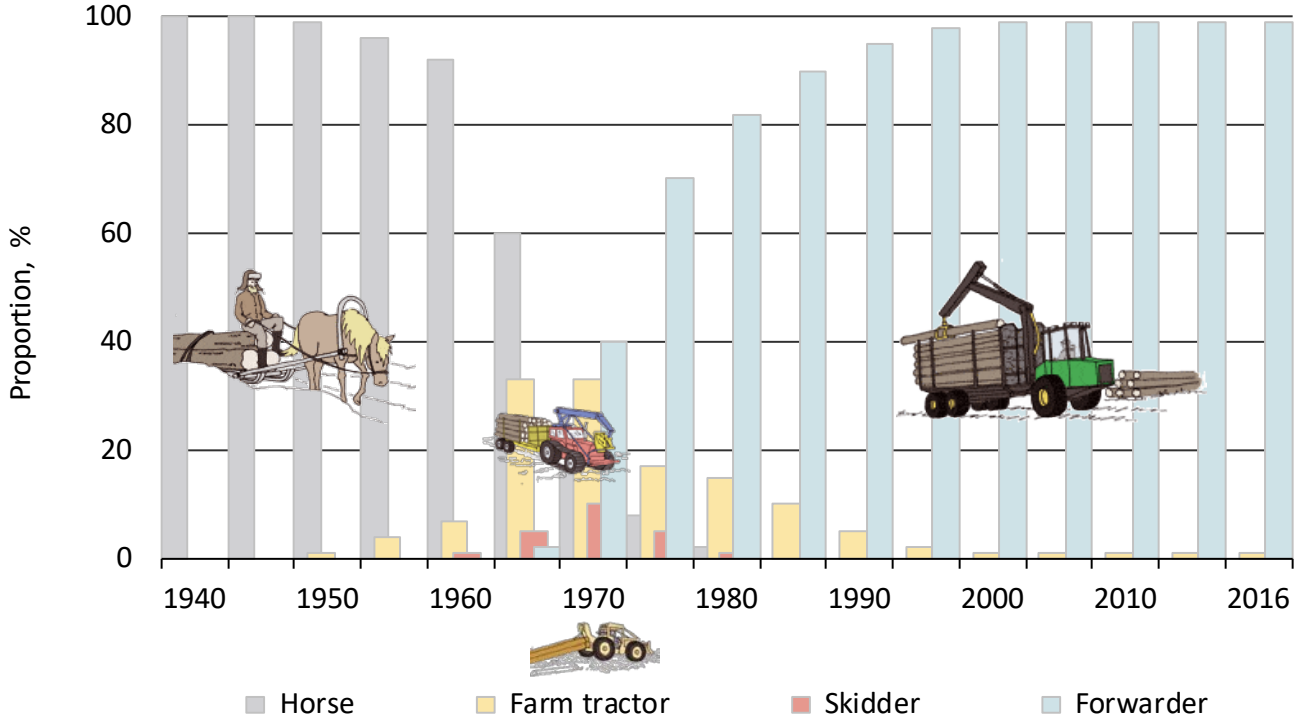


Costs have been deflated by the wholesale price index (2016=100).

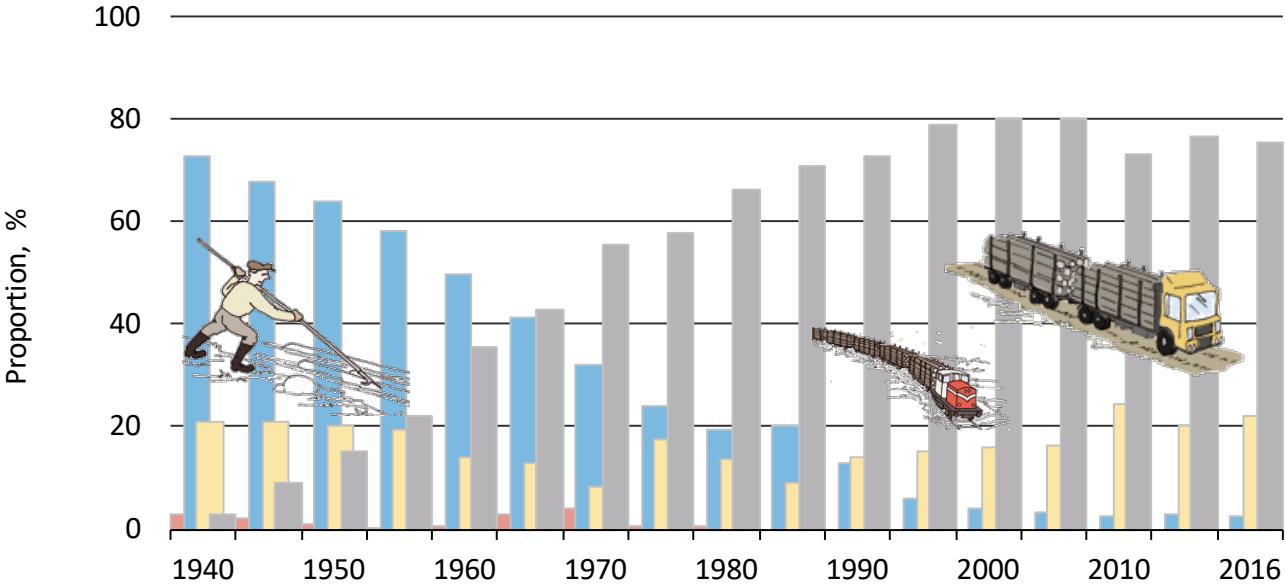
Felling Techniques, 1940–2016



Forest Haulage Techniques, 1940–2016



Long-distance Transportation Techniques, 1940–2016

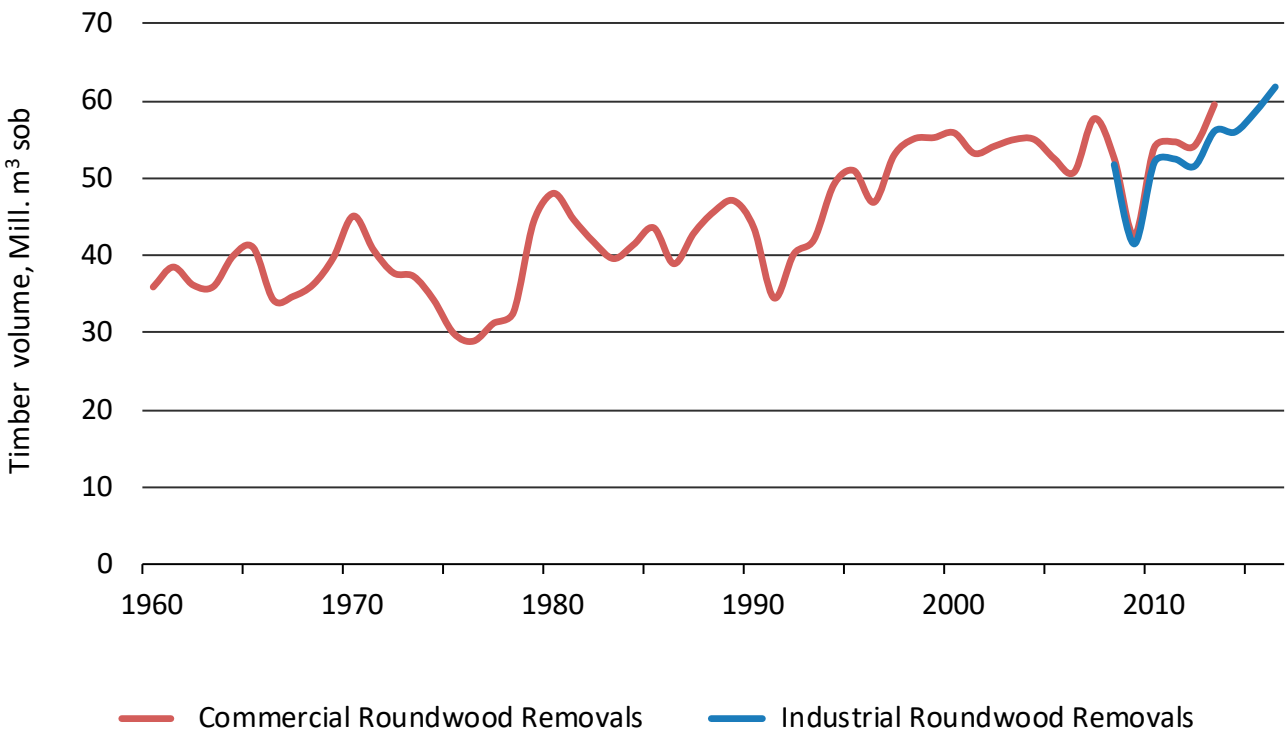


■ Horse or farm tractor (1960 -)
 ■ Waterway
 ■ Railway
 ■ By road



Background Information of Finnish Wood Supply

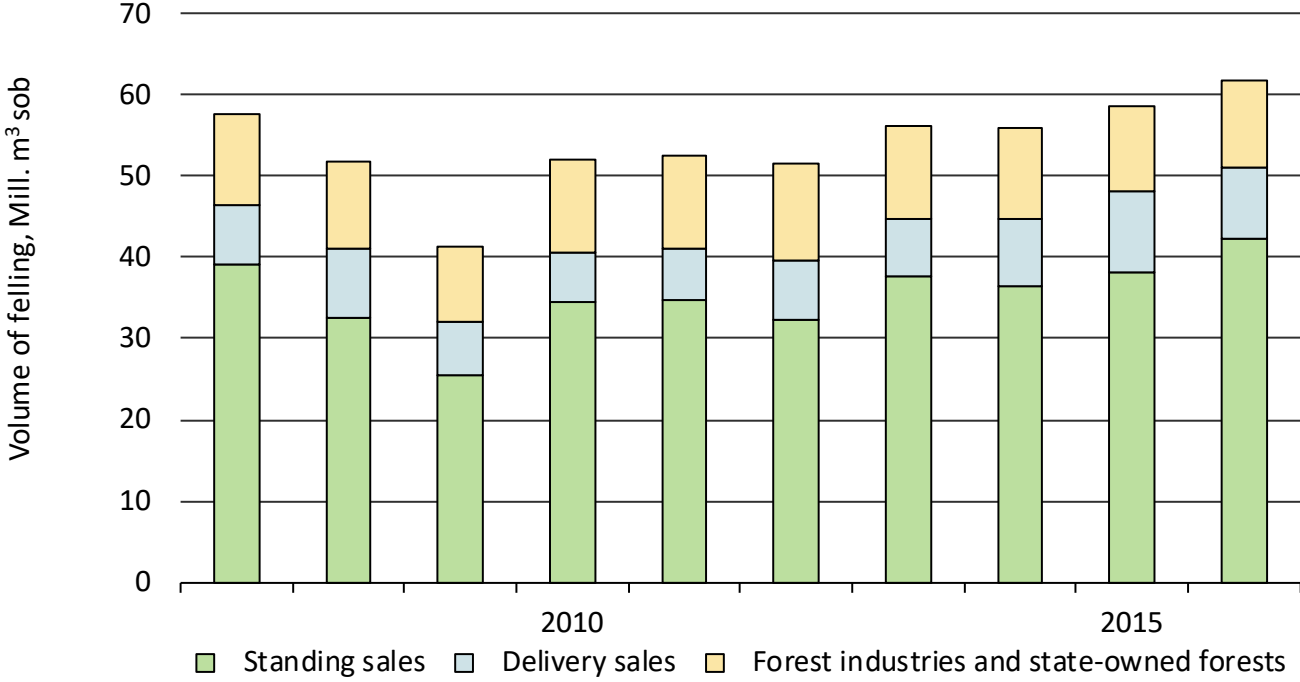
Commercial Roundwood Removals, 1960–2016



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

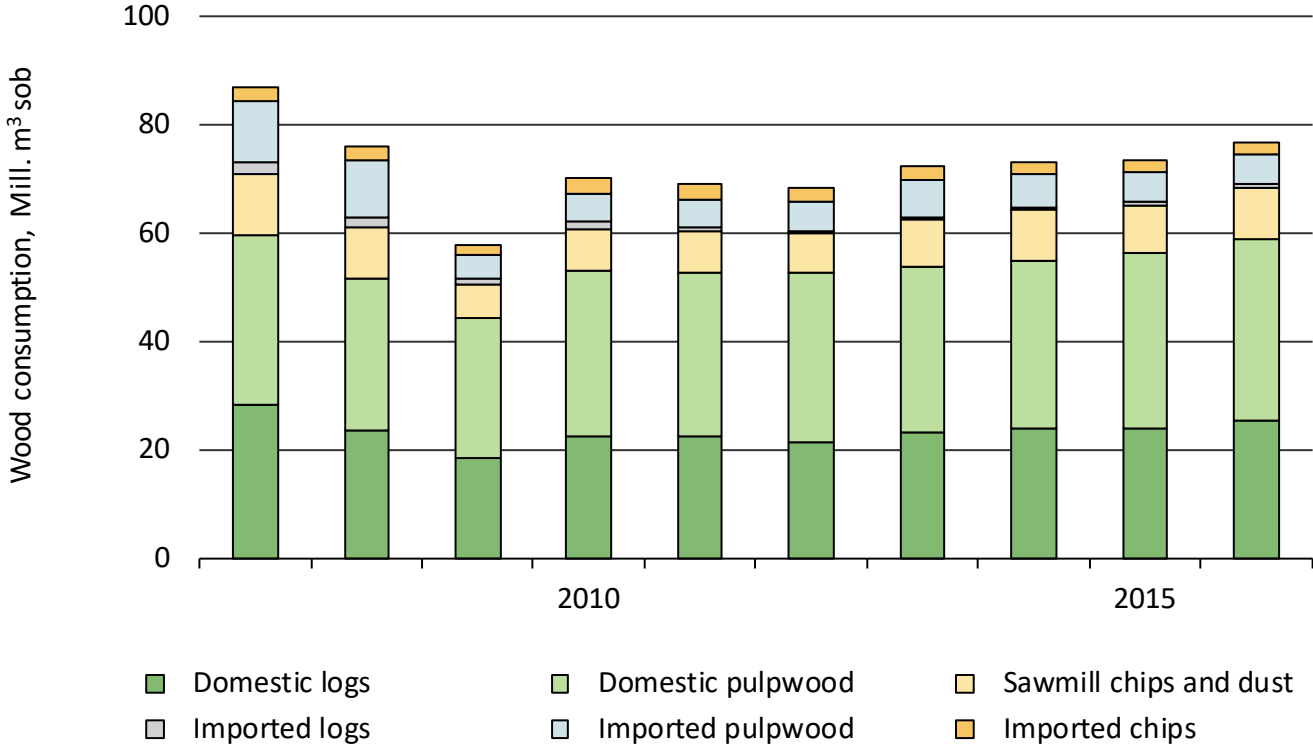
Source: Natural Resources Institute Finland

Industrial Roundwood Removals by Forest Ownership Category, 2007–2016



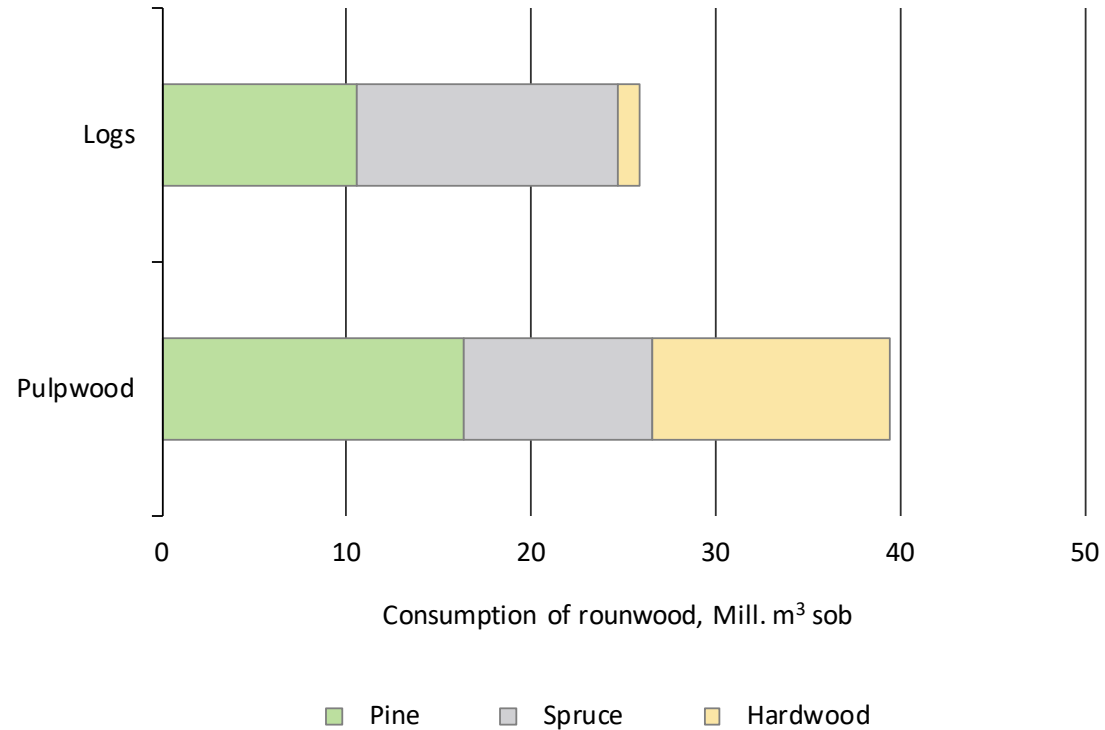
Source: Natural Resources Institute Finland

Roundwood Consumption by Forest Industries, 2007–2016



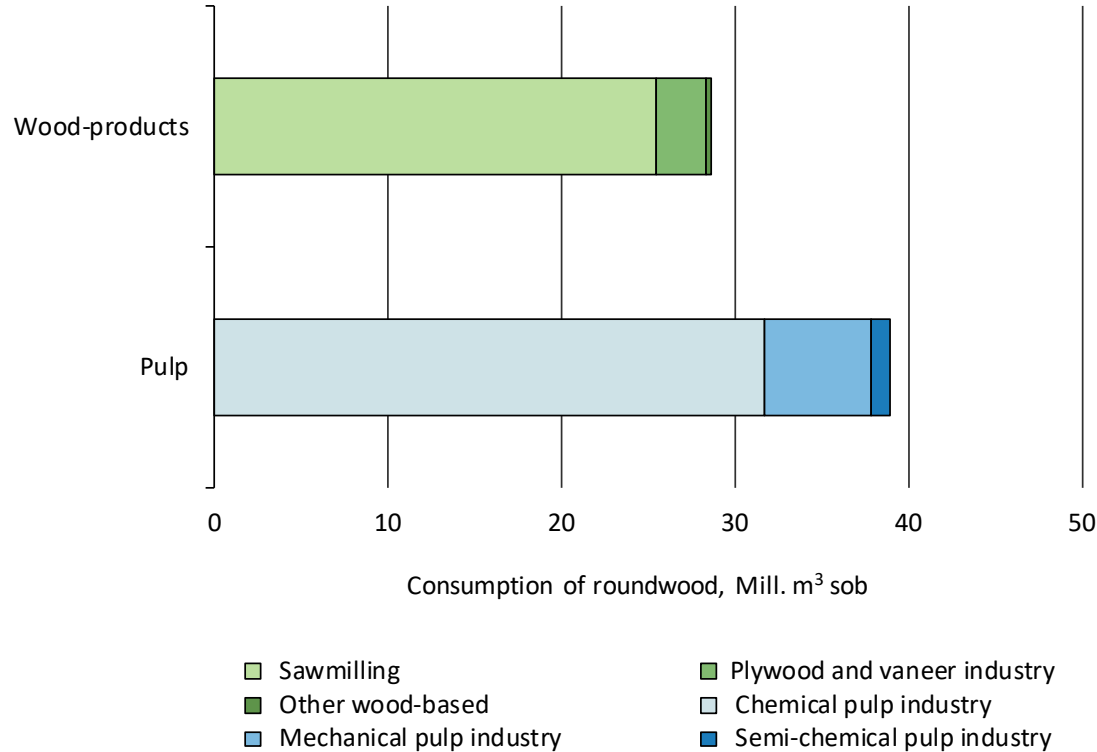
Source: Natural Resources Institute Finland

Wood Consumption by Forest Industries, 2016



Source: Natural Resources Institute Finland

Roundwood Consumption by Forest Industries by Branch of Industry, 2016



Source: Natural Resources Institute Finland