

Timber Harvesting and Long-distance Transportation of Roundwood 2017



Metsätehon tulokalvosarja 8b/2018

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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.



Statistics 2017 – Summary

- The average cost of timber harvesting for the Finnish Forest Industries and State Forest Enterprise was 10.59 € per solid cubic metre (over bark).
 - change -2.2%
- The average cost in the long-distance transportation of roundwood was 8.14 € per solid cubic metre (over bark)
 - change 1.0%



Statistics 2017 Tables



Statistics of Metsäteho

Costs and Timber Volume, 2017

	Costs		Timber volume	Transport volume	
	Mill. €	%	Mill. m ³	Mill. m ³ km	%
Harvesting	424.8		40.1		
Long-distance transportation	395.9	100		7 704	100
Road transportation	326.4	82		4 385	57
Rail transportation	62.4	16		3 007	39
Water transportation	7.1	2		312	4

Unit Costs in Harvesting by Felling Method, 2017

€/m ³	First thinning	Other thinning	Regeneration felling	Total
Harvesting				10.59
Mechanised harvesting ^{*)}	16.81	13.71	8.12	10.59
- share of volume	7.8	32.1	60.2	100
- share of costs	12.3	41.5	46.1	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, 2017

€/m ³	Mechanised harvesting ^{*)}	Long-distance transportation
Pine logs	7.55	7.63
Spruce logs	6.94	6.43
Plywood logs	7.78	9.96
Logs average	7.24	7.12
Pine pulpwood	12.44	9.06
Spruce pulpwood	12.75	8.04
Birch pulpwood	14.44	8.86
Pulpwood average	13.01	8.74
Average	10.59	8.14

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

Long-distance Transportation of Roundwood, 2017

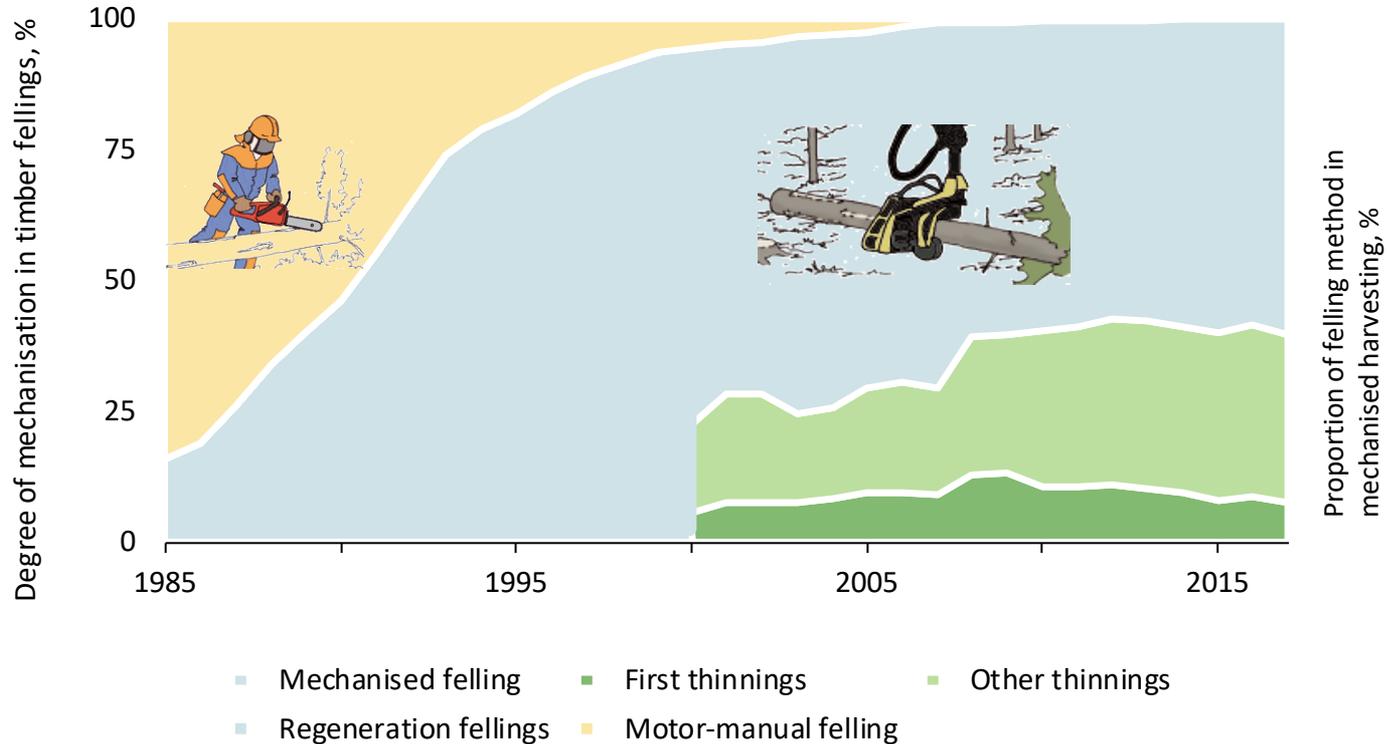
	Domestic roundwood				
	1 000 m ³	%	km	cent/m ³ km	€/m ³
Total long-distance transportation	48 627		159	5.1	8.14
Total by road	47 897	98.5	92	7.4	6.81
By road to mill	36 549	75.2	105	7.1	7.45
Rail transportation sequence	10 989	22.6	323	3.2	10.16
By road to railway	10 430	21.4	49	9.9	4.80
Rail transportation	10 989	22.6	274	2.1	5.68
Water transportation sequence	1 089	2.2	287	3.6	10.26
By road to floating/barge	918		43	10.1	4.42
Water transportation	1 089		243	2.7	6.53



Short Term Trends of Finnish Wood Supply

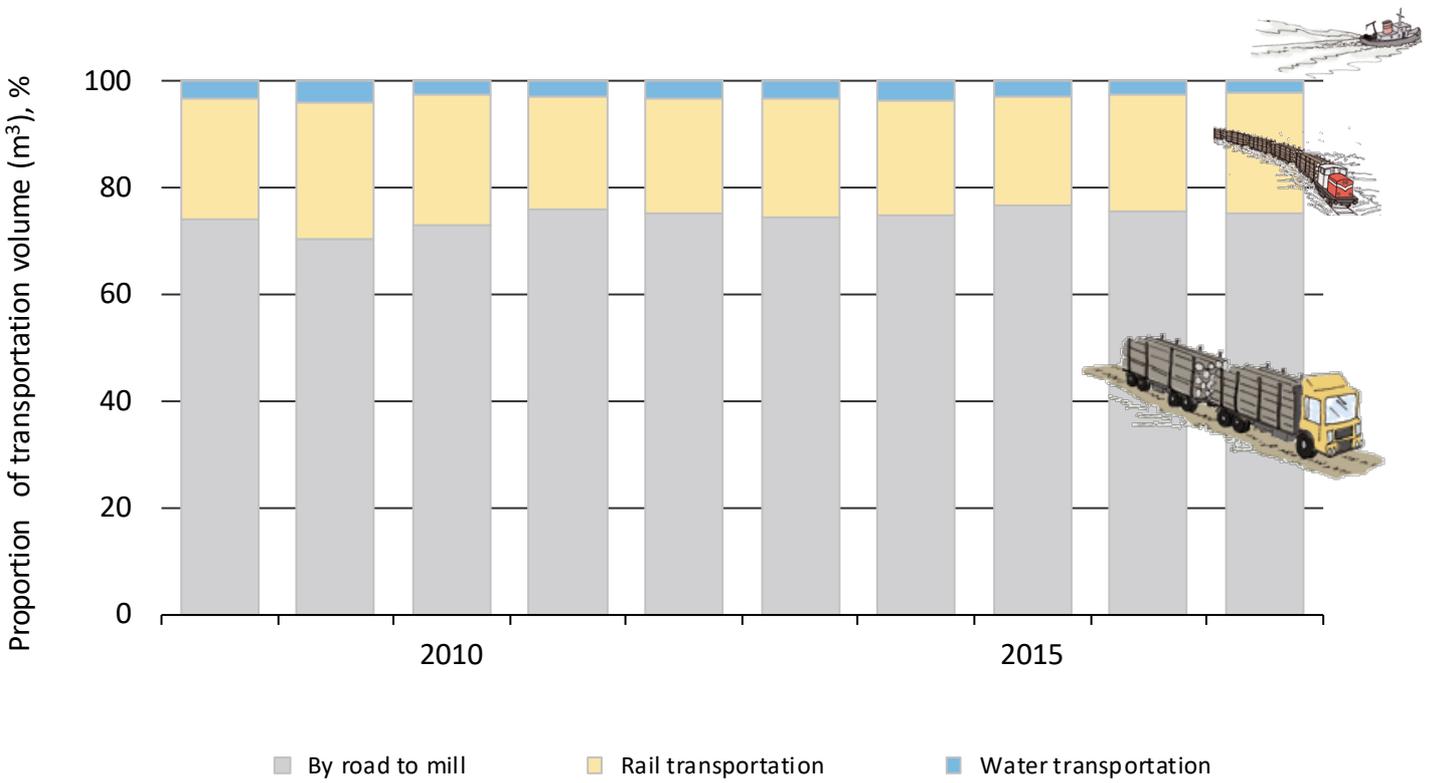
Statistics of Metsäteho

Mechanisation of Felling, 1985–2017

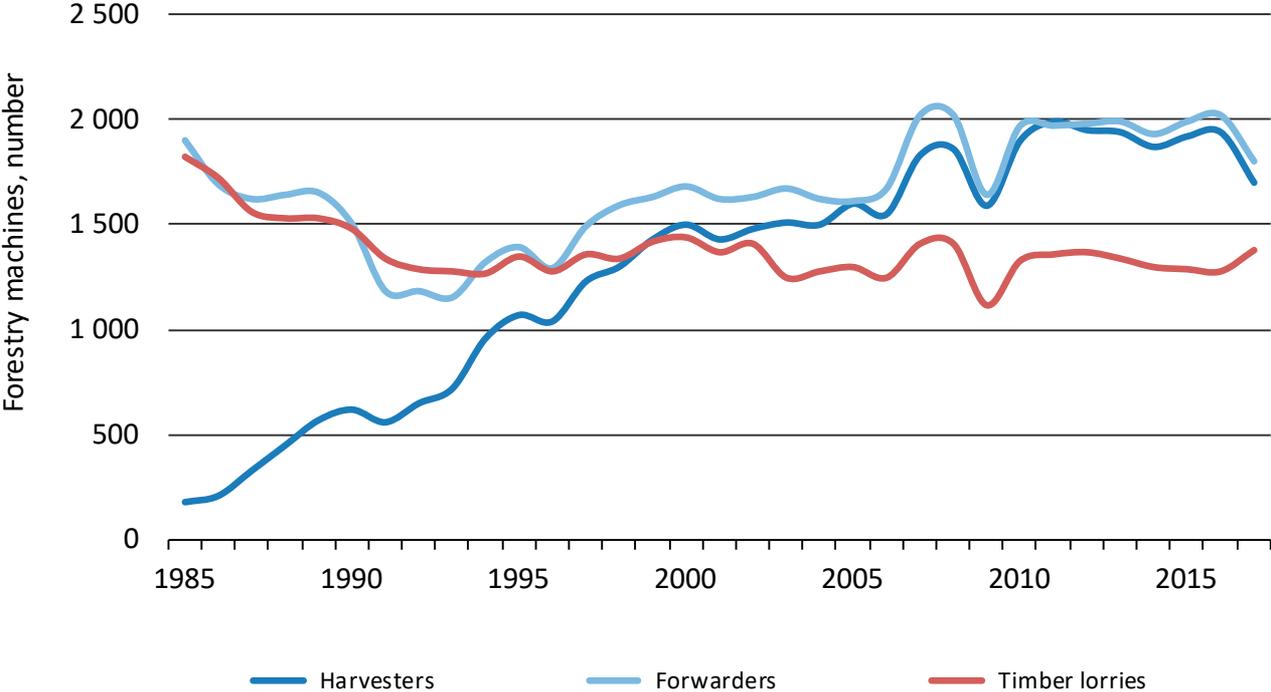


Per cent of mechanised felling year 2017: 99.98%

Long-distance Transportation Techniques, 2008–2017

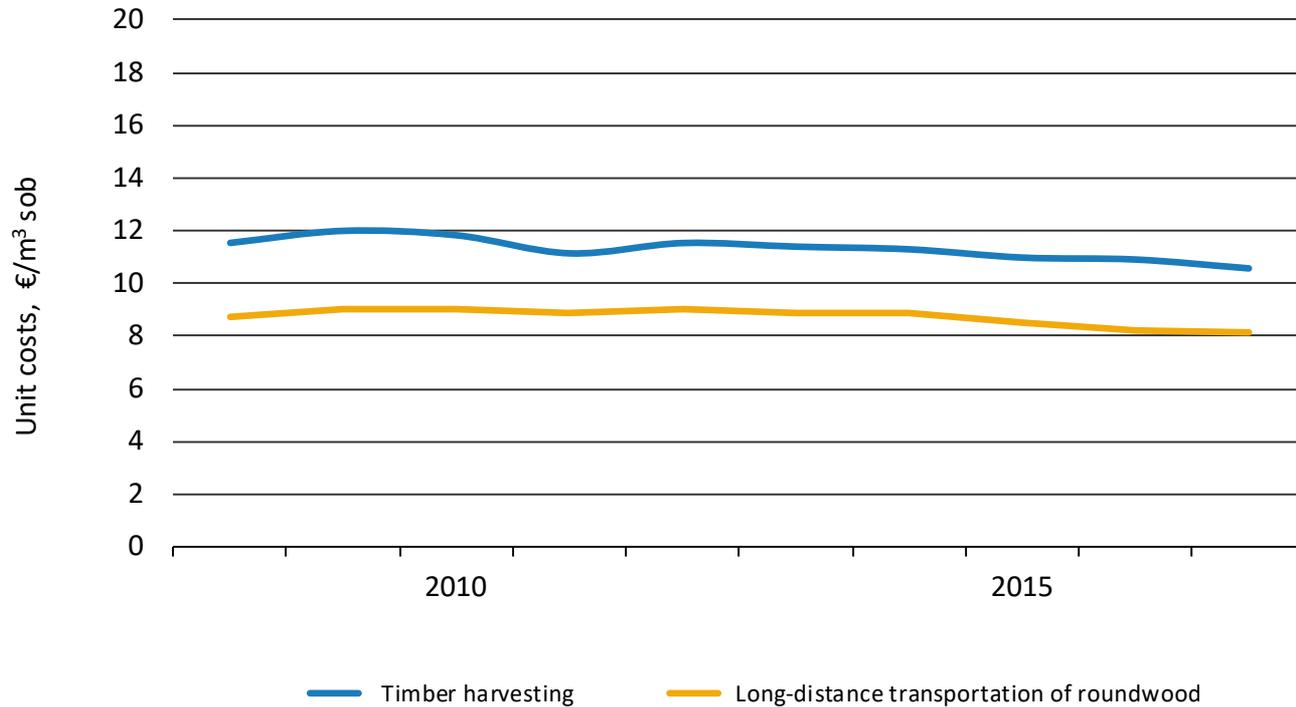


Forestry Machines, 1985–2017



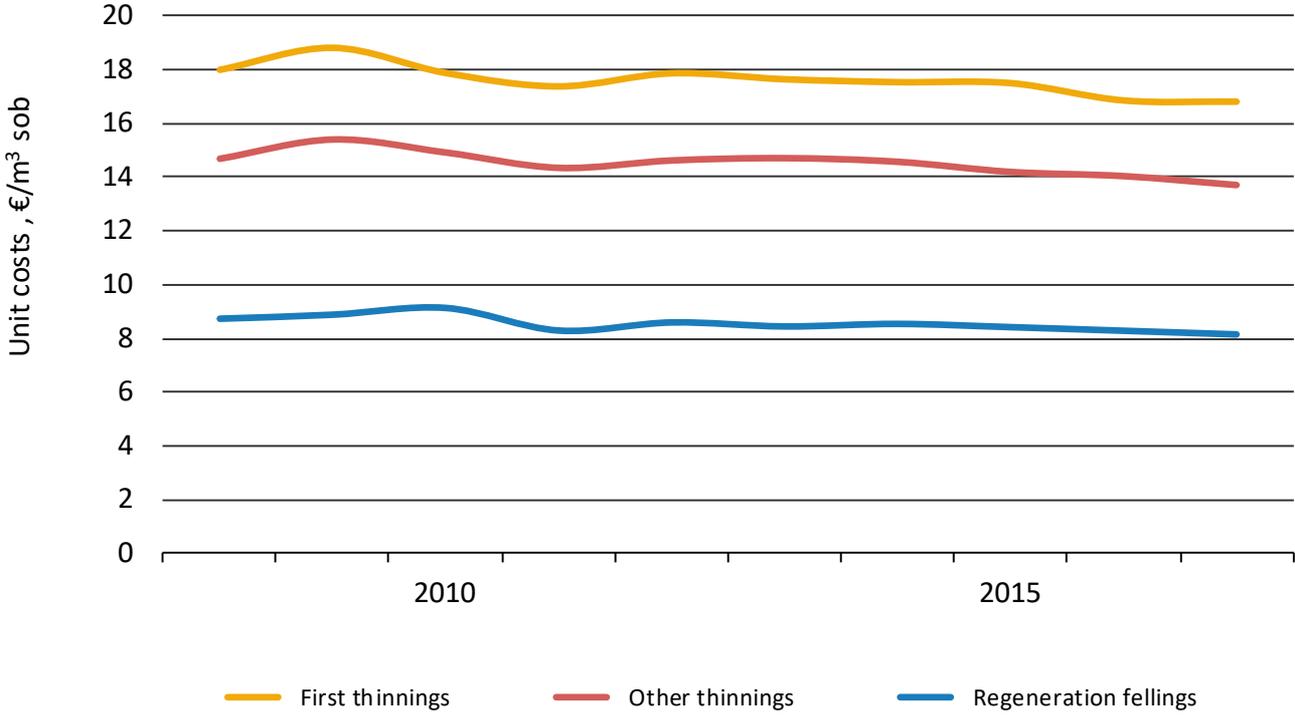
Source: Natural Resources Institute Finland

Unit Costs in Timber Harvesting and Long-distance Transportation of Roundwood, 2008–2017



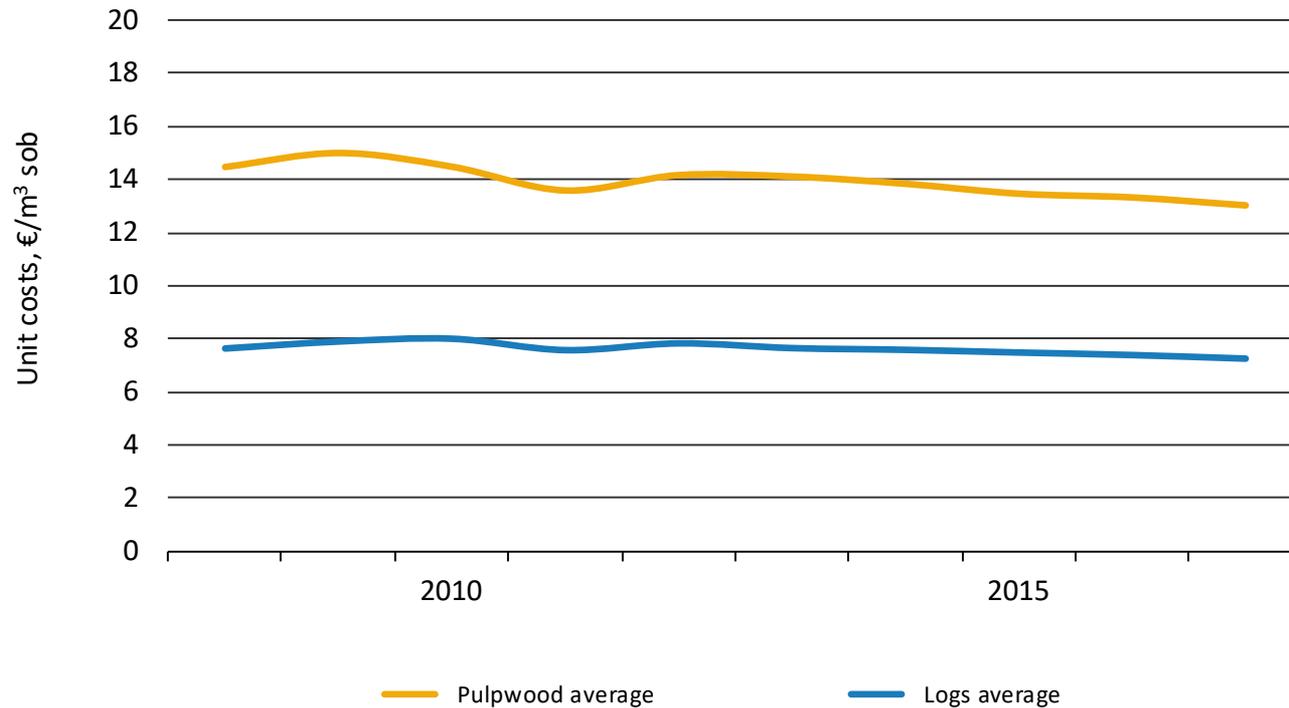
Costs have been deflated by Indexes of forest machinery costs and lorry traffic costs (2017=100).

Unit Costs in Mechanised Harvesting by Felling Method, 2008–2017



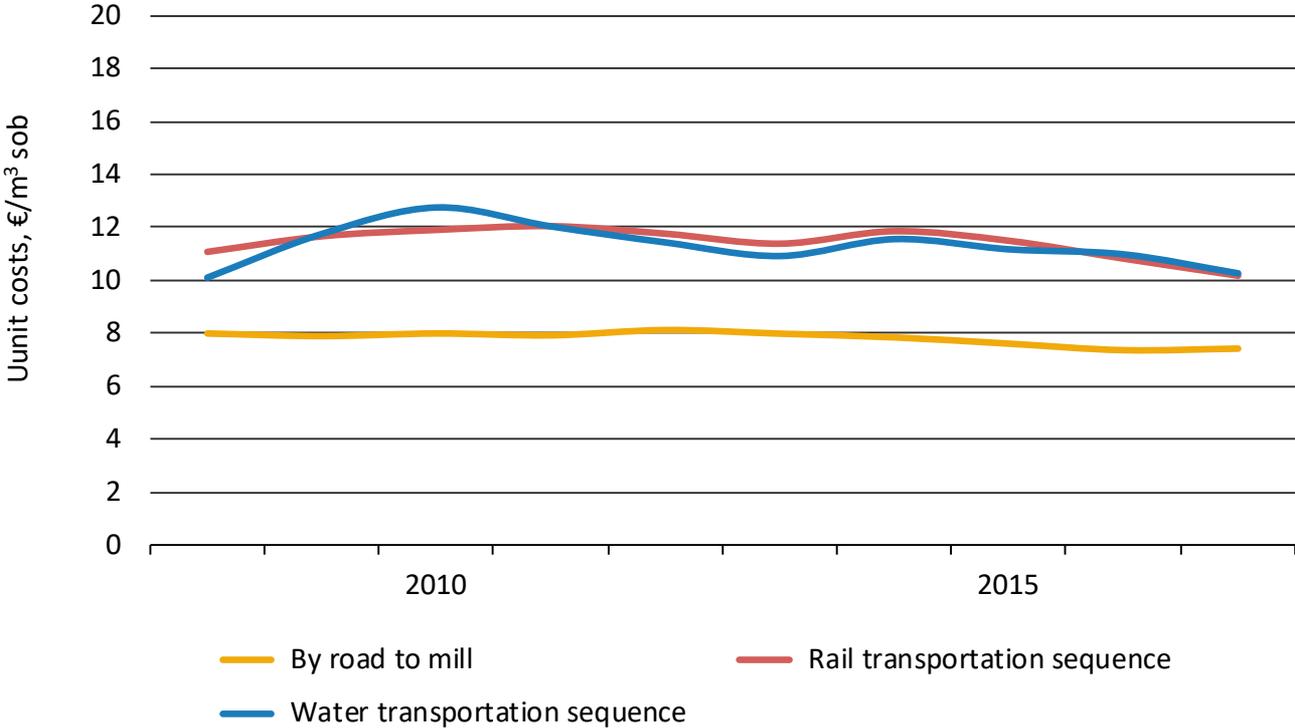
Costs have been deflated by Index of forest machinery (2017=100).

Unit Costs in Mechanised Harvesting by Timber Assortments, 2008–2017



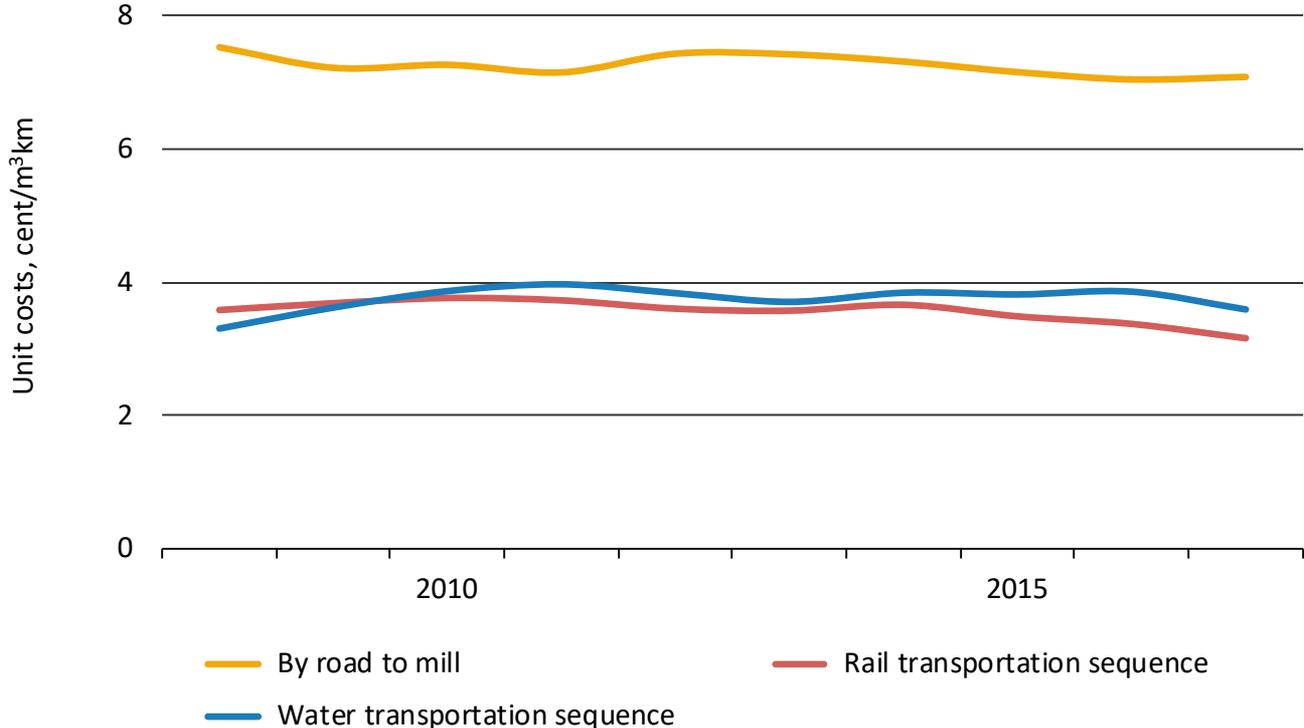
Costs have been deflated by Index of forest machinery (2017=100).

Unit Costs in Long-distance Transportation of Roundwood 2008–2017 (I)



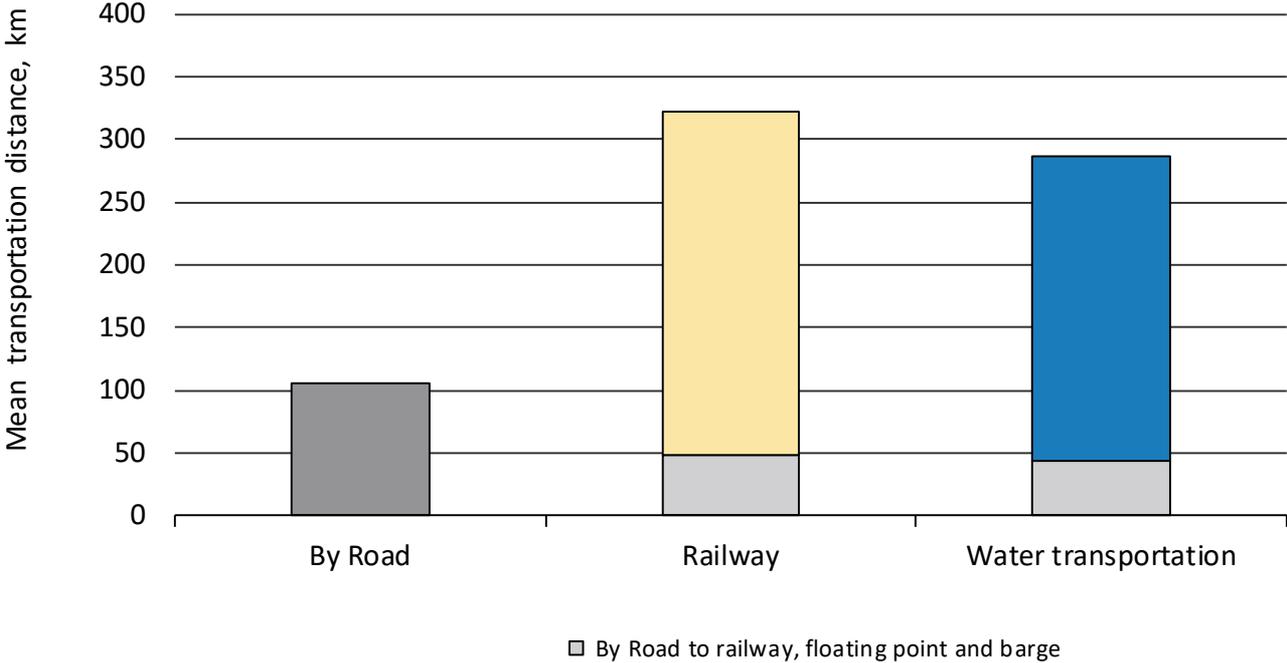
Costs have been deflated by Index of lorry traffic costs (2017=100).

Unit Costs in Long-distance Transportation of Roundwood 2008–2017 (II)

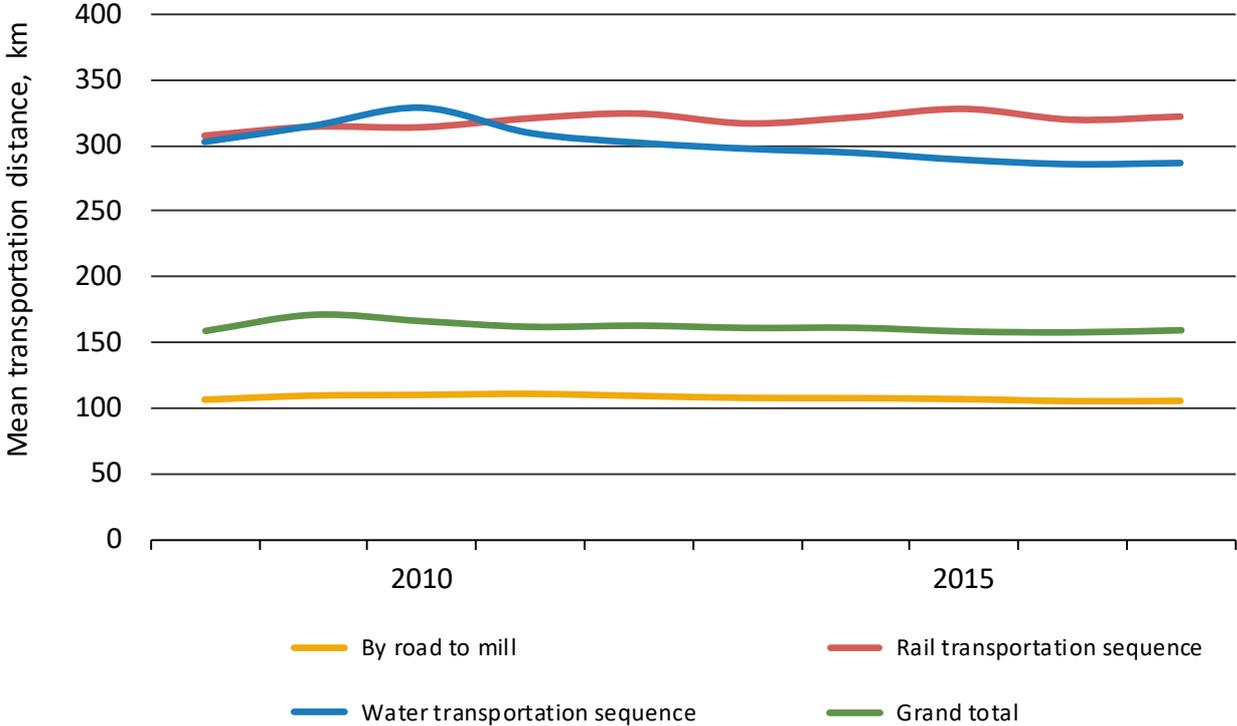


Costs have been deflated by Index of lorry traffic costs (2017=100).

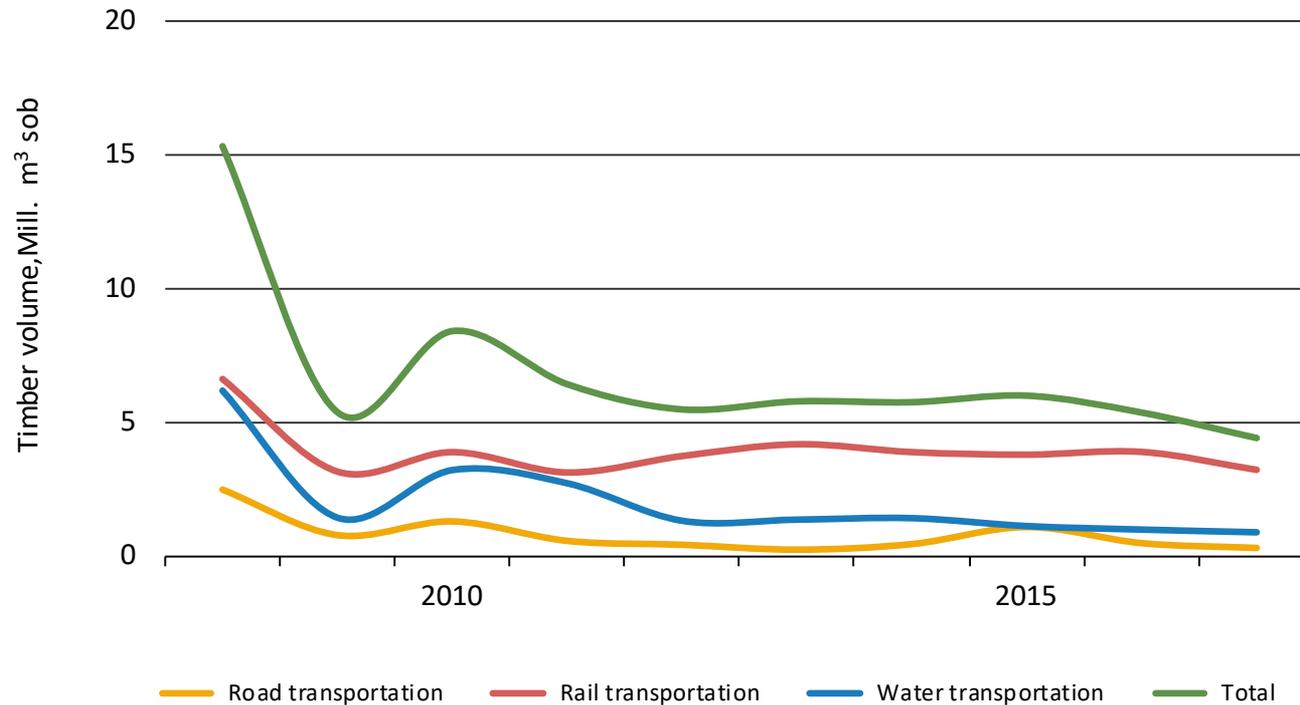
Mean Transportation Distance, 2017



Mean Transportation Distance, 2008–2017



Volumes of Imported Roundwood by Transportation Method, 2008–2017

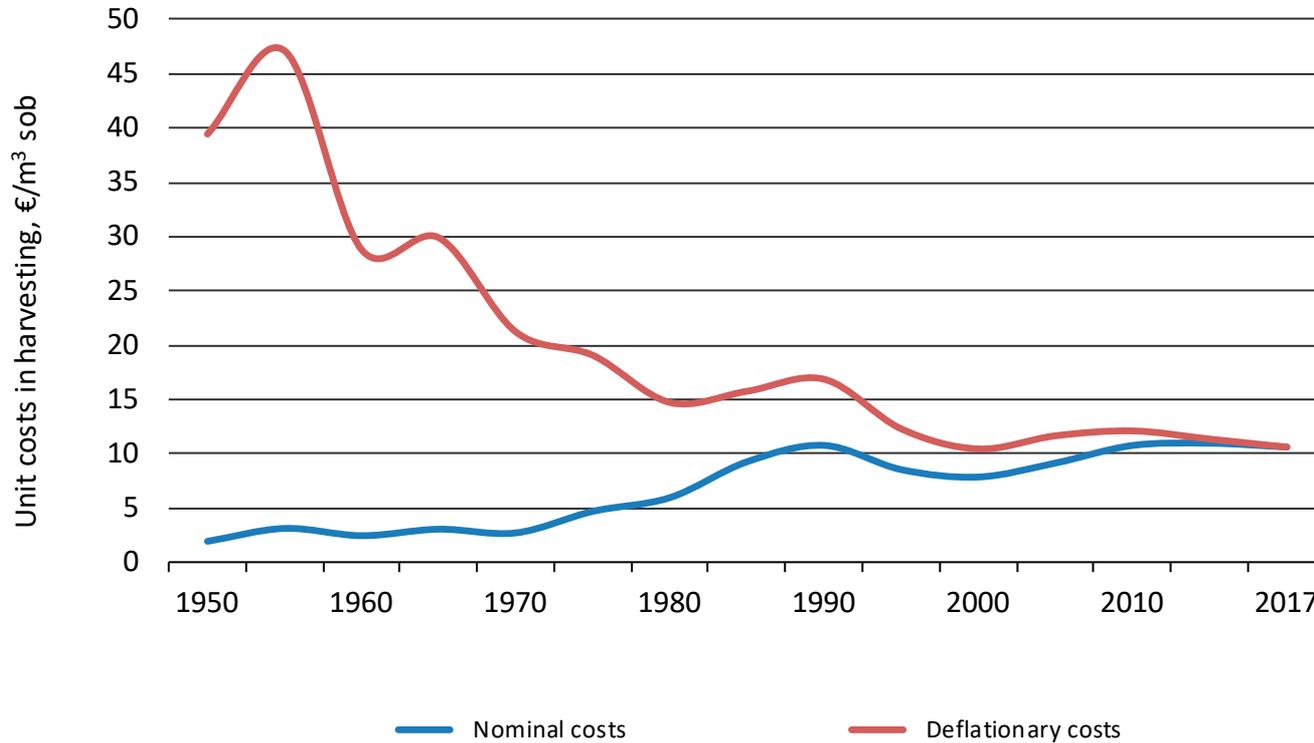




Long Term Trends of Finnish Wood Supply

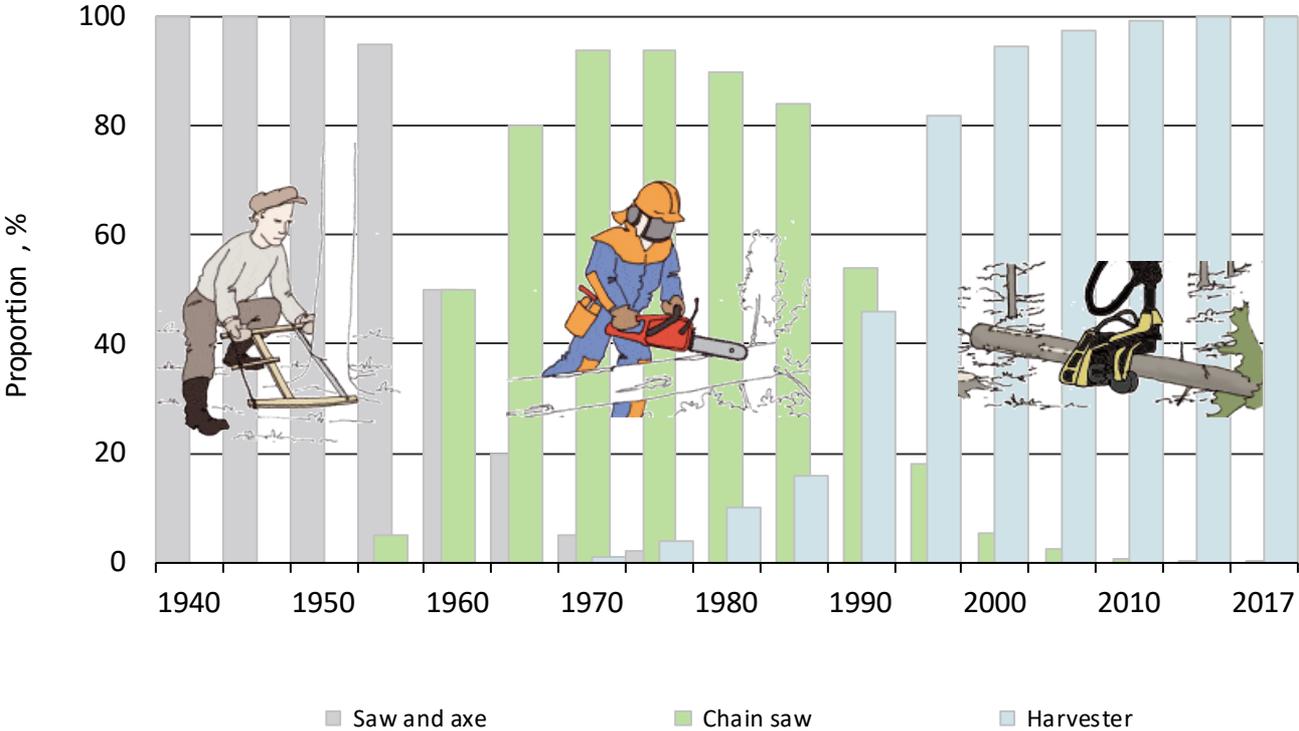
Statistics of Metsäteho

Unit Costs in Timber Harvesting, 1950–2017

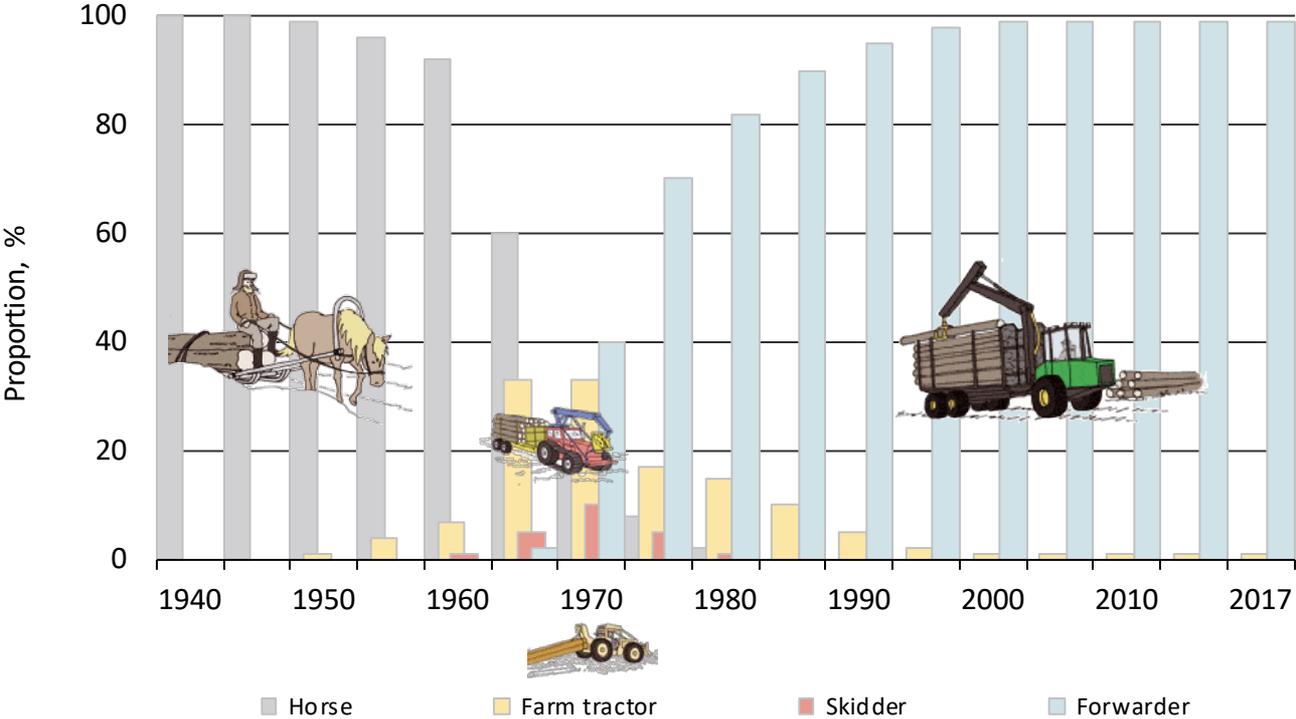


Costs have been deflated by the wholesale price index (2017=100).

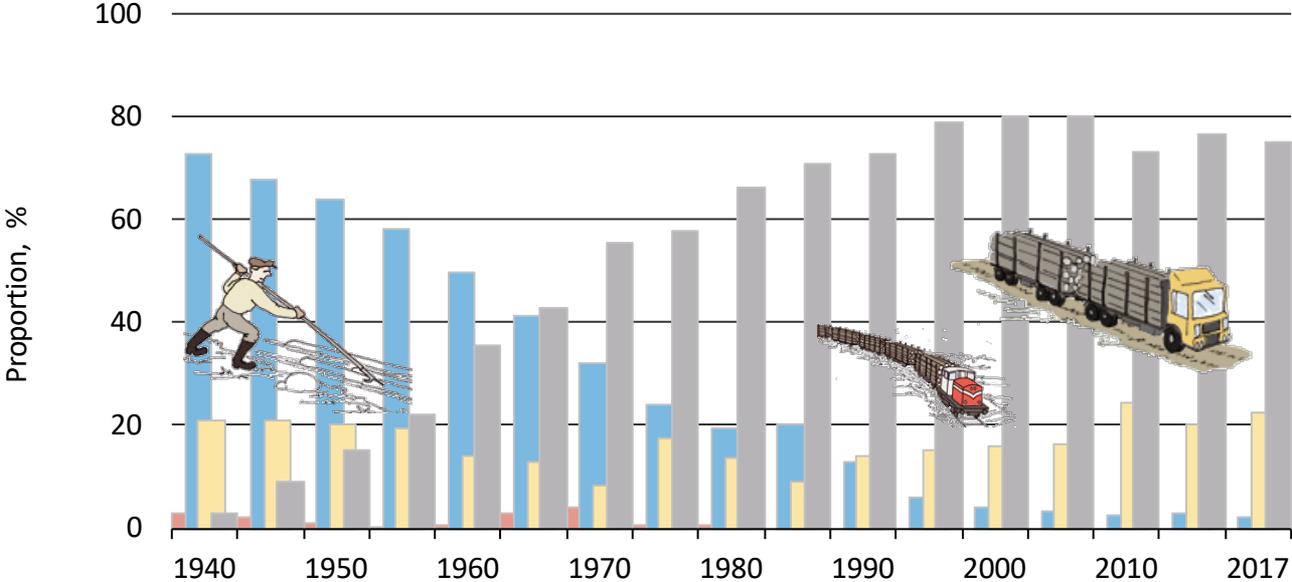
Felling Techniques, 1940–2017



Forest Haulage Techniques, 1940–2017



Long-distance Transportation Techniques, 1940–2017

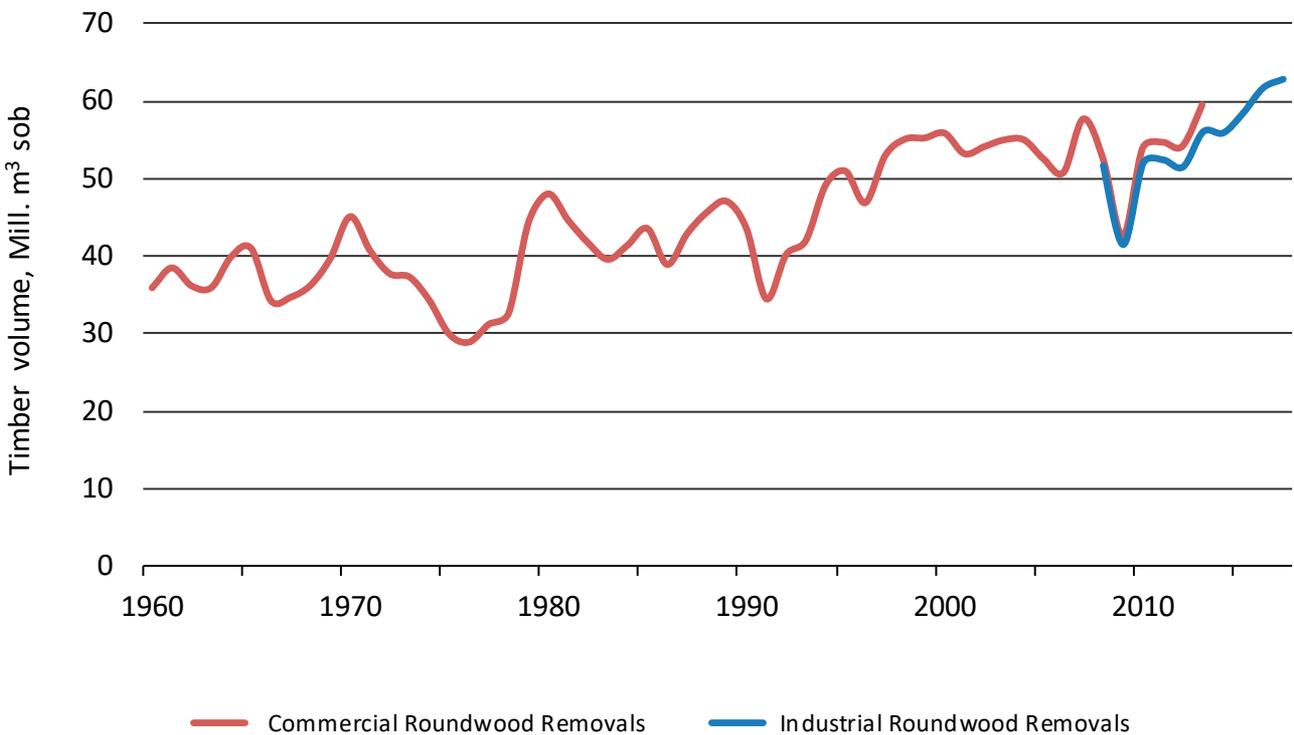


■ Horse or farm tractor (1960 -)
 ■ Waterway
 ■ Railway
 ■ By road



Background Information of Finnish Wood Supply

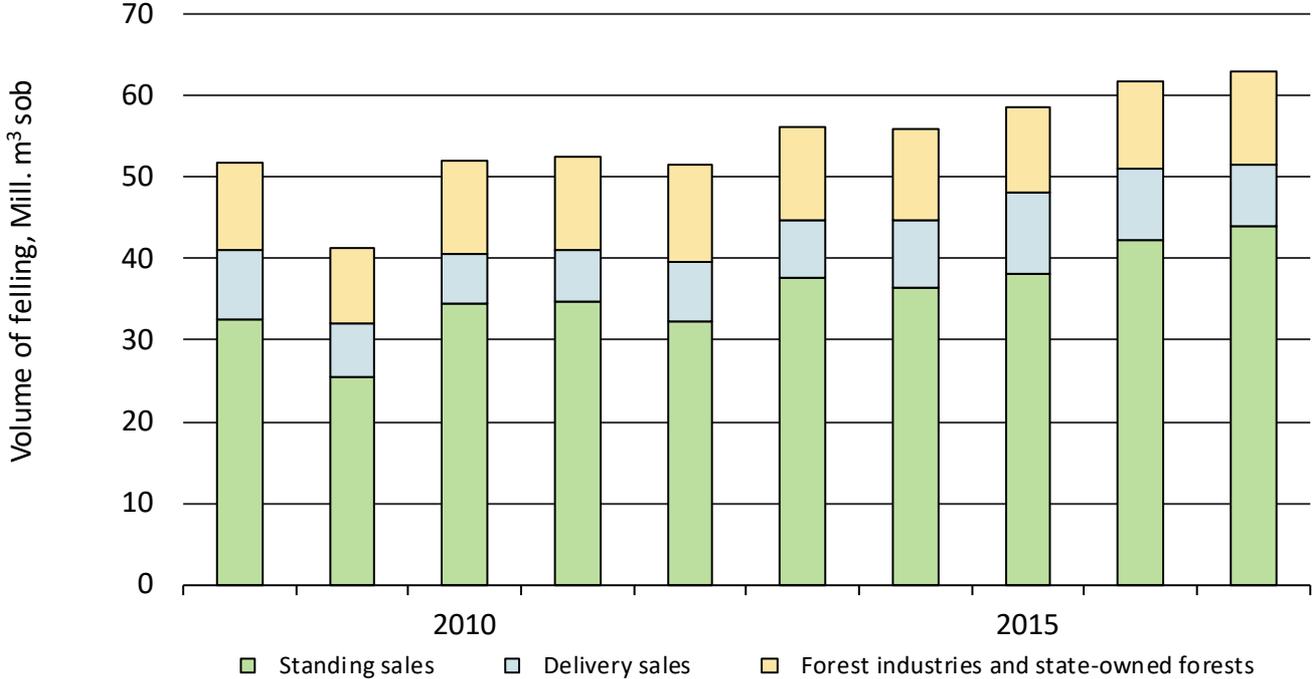
Commercial Roundwood Removals, 1960–2017



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

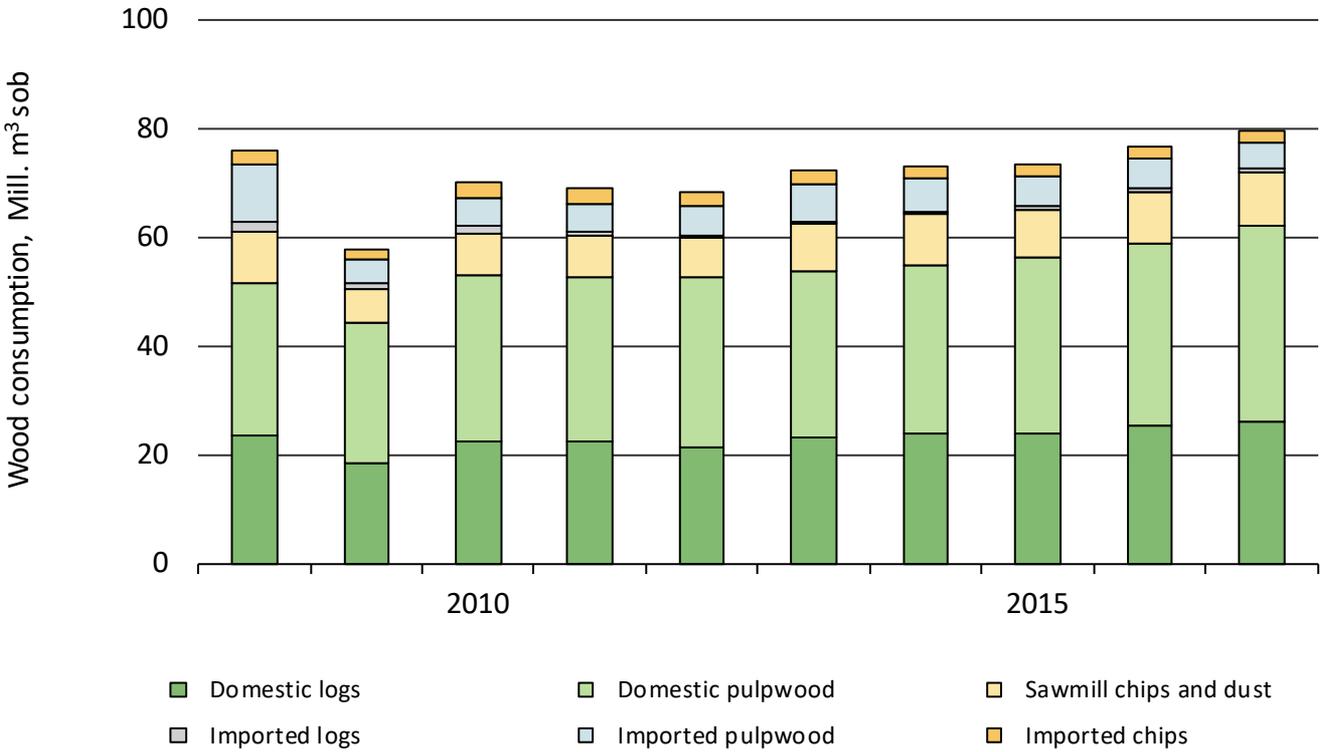
Source: Natural Resources Institute Finland

Industrial Roundwood Removals by Forest Ownership Category, 2008–2017



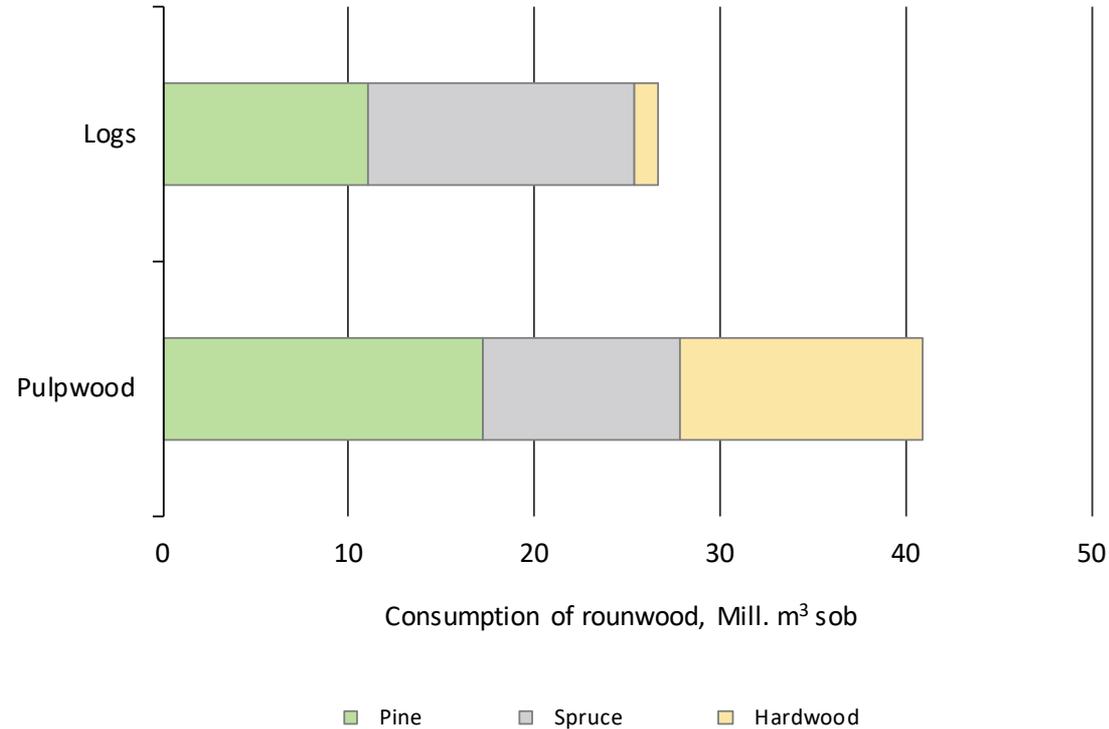
Source: Natural Resources Institute Finland

Roundwood Consumption by Forest Industries, 2008–2017



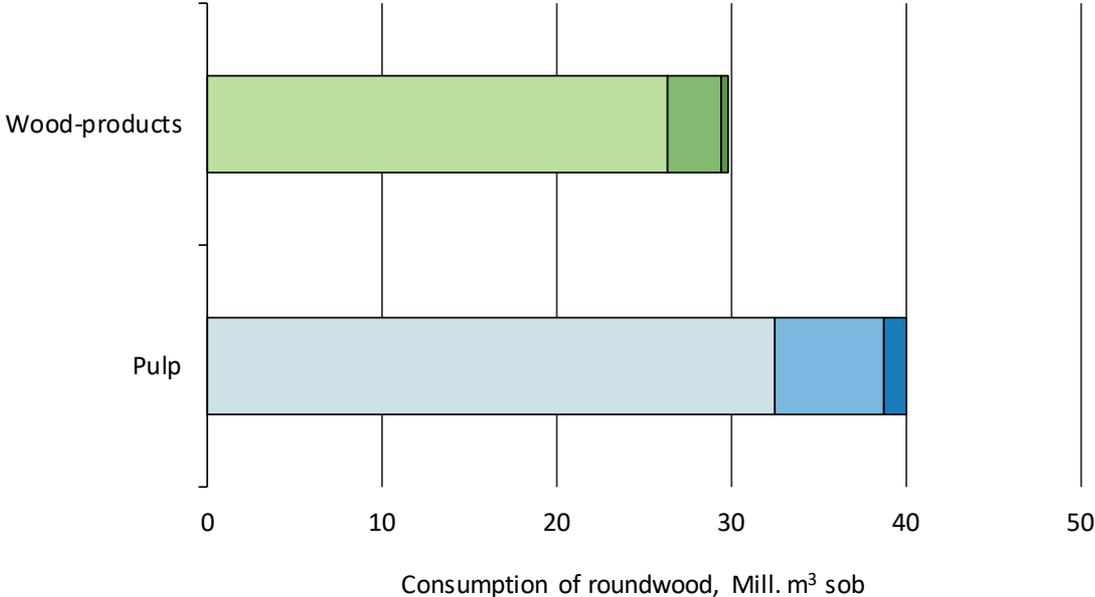
Source: Natural Resources Institute Finland

Wood Consumption by Forest Industries, 2017



Source: Natural Resources Institute Finland

Roundwood Consumption by Forest Industries by Branch of Industry, 2017



Source: Natural Resources Institute Finland