

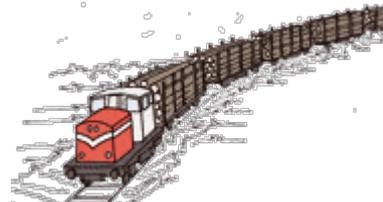
Timber Harvesting and Long-distance Transportation of Roundwood 2019

Metsätehon tulokalvosarja 9-EN/2021
Metsäteho Result Series 9-EN/2021

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Metsäteho Oy

About statistics

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



Timber Harvesting Costs 2019

Unit cost of timber harvesting increased from 2018

- The average cost of timber harvesting was 11.23 €/m³ (over bark)
 - change +4.4%, real cost change +3.5%
- The average cost of mechanised timber harvesting was 11.23 €/m³ (over bark)
 - change +4.4%
- Costs by felling method:
 - First thinning 17.18 €/m³ (change +1.3%)
 - Other thinning 14.17 €/m³ (change +2.2%)
 - Regeneration felling 8.30 €/m³ (change +1.5%)
- The share of mechanised timber harvesting was 100.0%
- The share of timber from regeneration felling was 54.5% (change -4.2 percentage points)
- The share of delivery sales in domestic wood supply was 14.1%



Long-distance Transportation Costs of Roundwood 2019

Unit cost of long-distance transportation of roundwood increased from 2018

- The average cost of long-distance transportation was 8.78 €/m³
 - change +4.3%, real cost change +2.9%
- The average cost by timber truck to mill was 7.92 €/m³
 - change +4.0%, real cost change +2.6%
- The average transport distance lengthened and was 166 km
 - changes: road transportation (−0.5%), railway (+7.2%) and water transportation (+15.9%)
- The share of road transportation decreased by −1.3 percentage points, share of rail transportation and water transportation increased by +1.1 and +0.2 percentage points
- The average overhead of domestic wood procurement was 3.02 €/m³
 - change +12.6%



Statistics 2019 Tables

Metsäteho Statistics



Costs and Timber Volume, 2019

	Costs		Timber volume	Transport volume	
	Mill. €	%	Mill. m ³	Mill. m ³ km	%
Harvesting	492.5		43.8		
Long-distance transportation	445.5	100		8 454	100
Road transportation	370.6	83		4 592	54
Rail transportation	66.9	15		3 448	41
Water transportation	7.9	2		414	5



Unit Costs in Harvesting by Felling Method, 2019

€/m ³	First thinning	Other thinning	Regeneration felling	Total
Harvesting				11.23
Mechanised harvesting ^{*)}	17.18	14.17	8.30	11.23
- share of volume	8.6	36.9	54.5	100
- share of costs	13.2	46.5	40.3	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, 2019

€/m ³	Mechanised harvesting ^{*)}	Long-distance transportation
Pine logs	7.86	8.03
Spruce logs	7.26	6.91
Plywood logs	8.19	10.08
Logs average	7.56	7.55
Pine pulpwood	13.33	9.93
Spruce pulpwood	13.39	8.74
Birch pulpwood	15.10	9.70
Pulpwood average	13.80	9.55
Average	11.23	8.78

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



Long-distance Transportation of Roundwood, 2019

	Domestic roundwood				
	1 000 m ³	%	km	cent/m ³ km	€/m ³
Total long-distance transportation	50 754		166	5.3	8.78
Total by road	50 493	99.5	91	8.1	7.34
By road to mill	38 058	75.0	104	7.6	7.92
Rail transportation sequence	11 411	22.5	352	3.2	11.38
By road to railway	11 318	22.3	50	11.4	5.69
Rail transportation	11 411	22.5	302	1.9	5.86
Water transportation sequence	1 258	2.5	329	3.0	9.94
By road to floating/barge	1 044		42	10.4	4.38
Water transportation	1 258		287	2.2	6.29

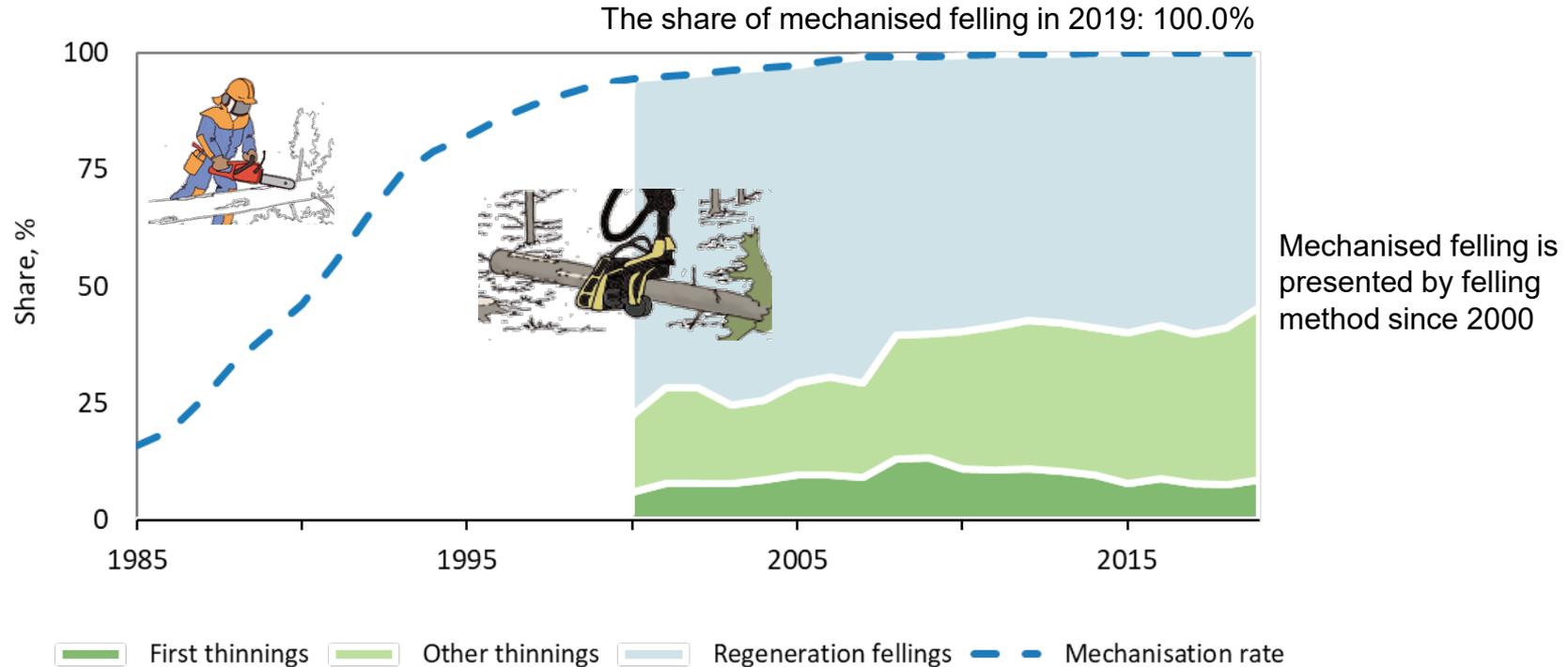


Short Term Trends of Finnish Wood Supply

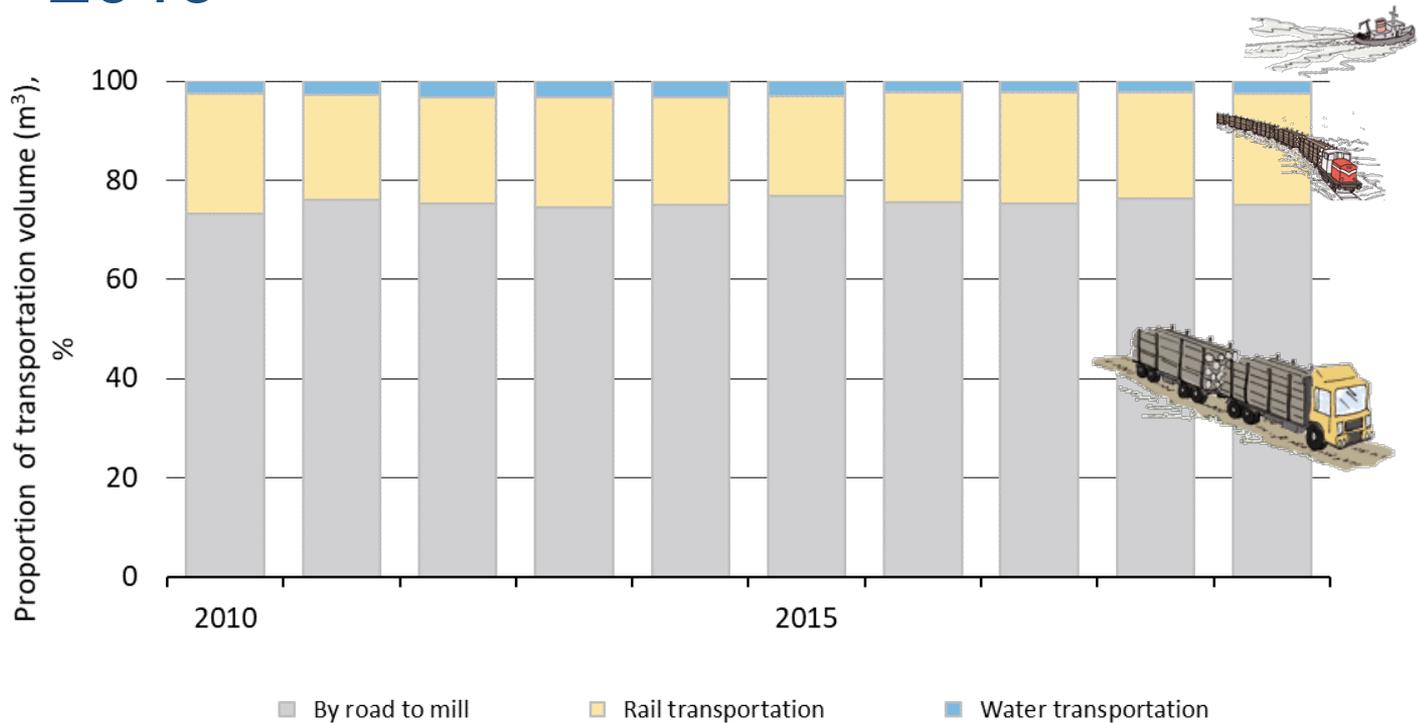
Metsäteho Statistics



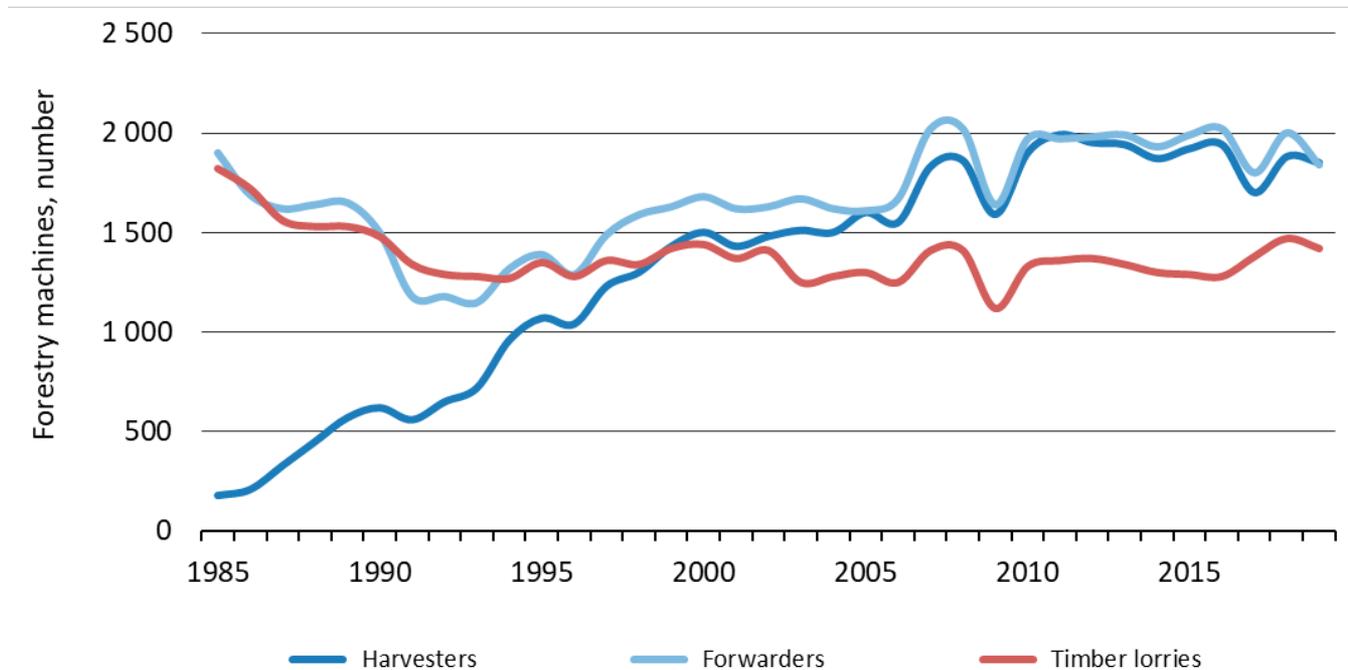
Mechanisation of Felling, 1985–2019



Long-distance Transportation Techniques, 2010–2019



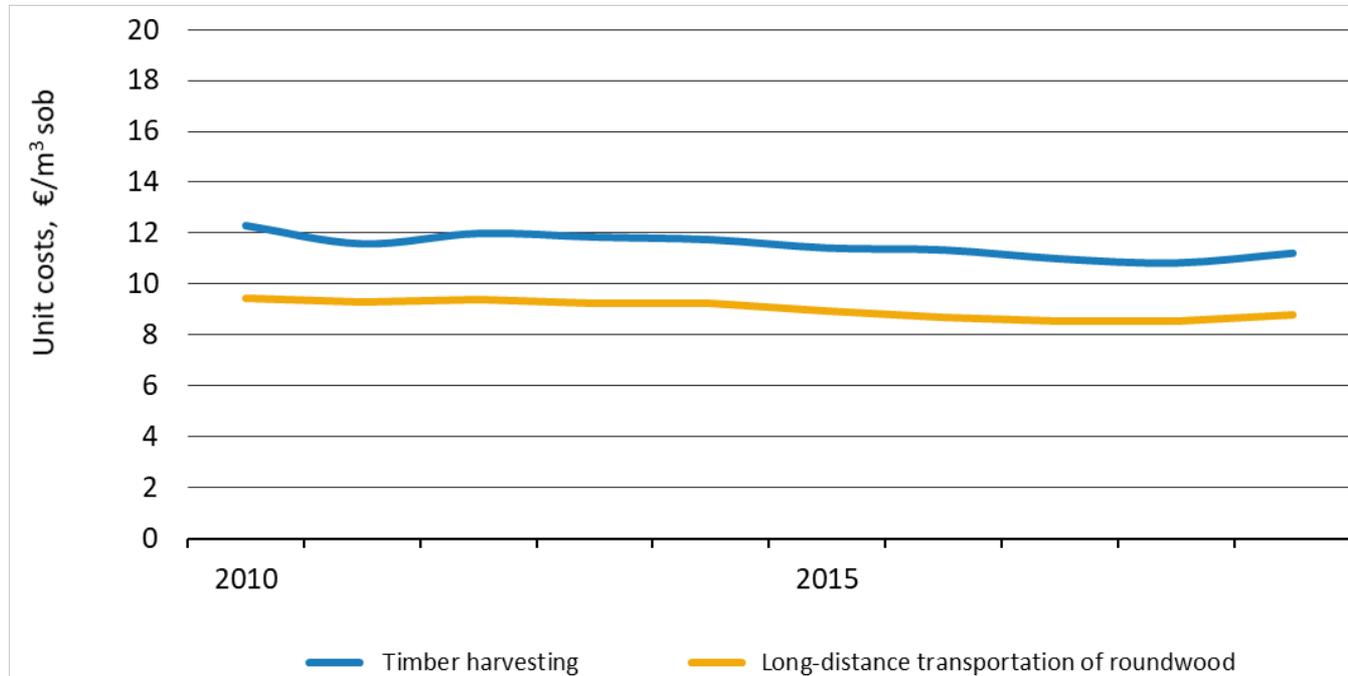
Forestry Machines, 1985–2019



Source: Natural Resources Institute Finland



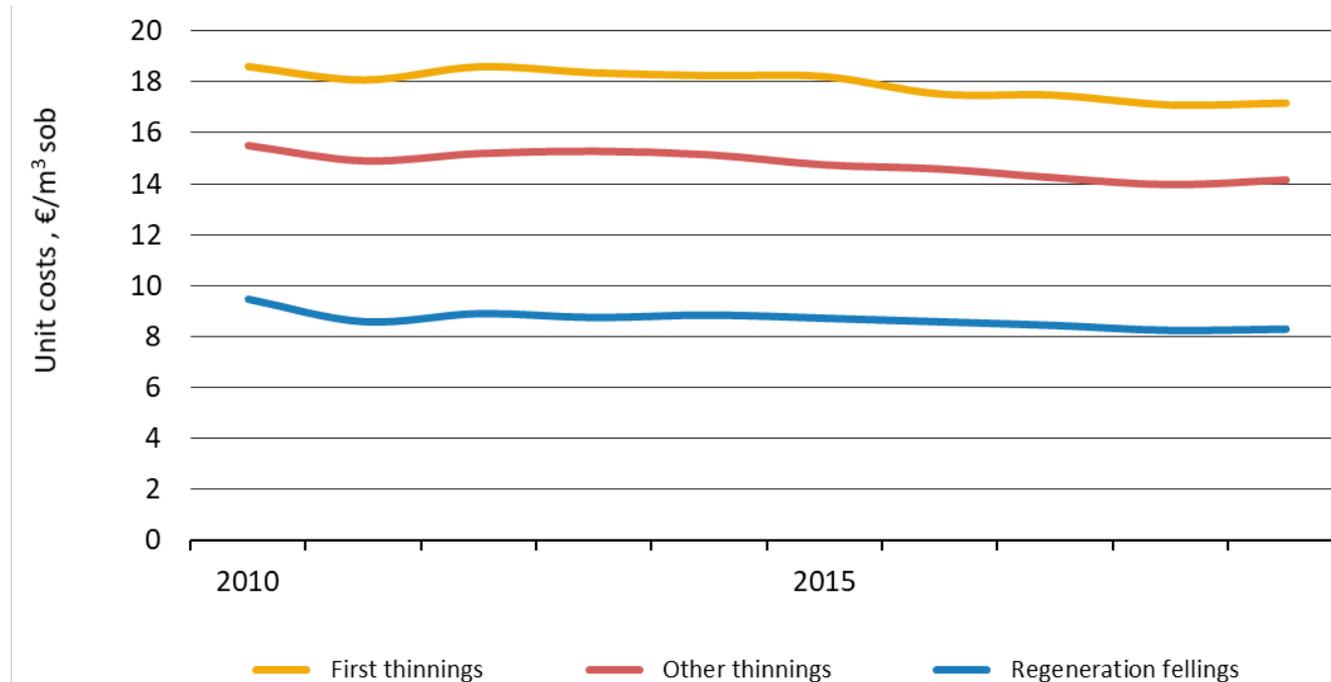
Unit Costs in Timber Harvesting and Long-distance Transportation of Roundwood, 2010–2019



Costs have been deflated by Indexes of forest machinery costs and lorry traffic costs (2019=100).



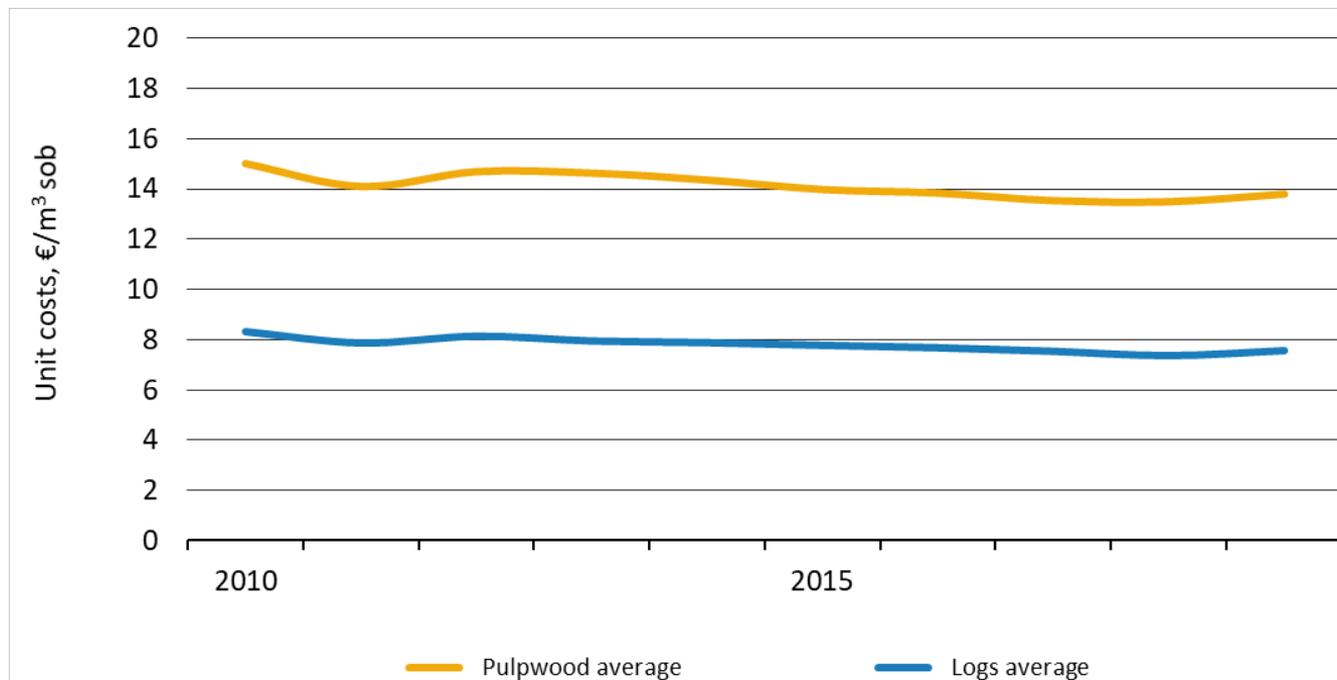
Unit Costs in Mechanised Harvesting by Felling Method, 2010–2019



Costs have been deflated by Index of forest machinery (2019=100).



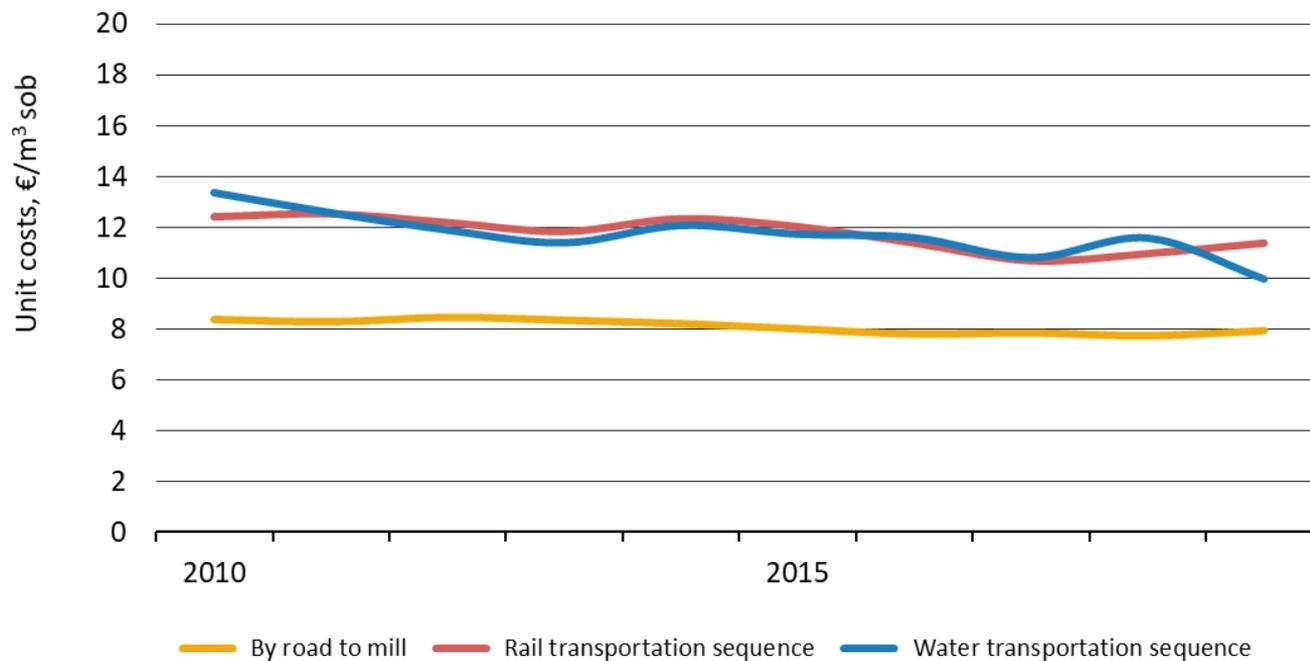
Unit Costs in Mechanised Harvesting by Timber Assortments, 2010–2019



Costs have been deflated by Index of forest machinery (2019=100).



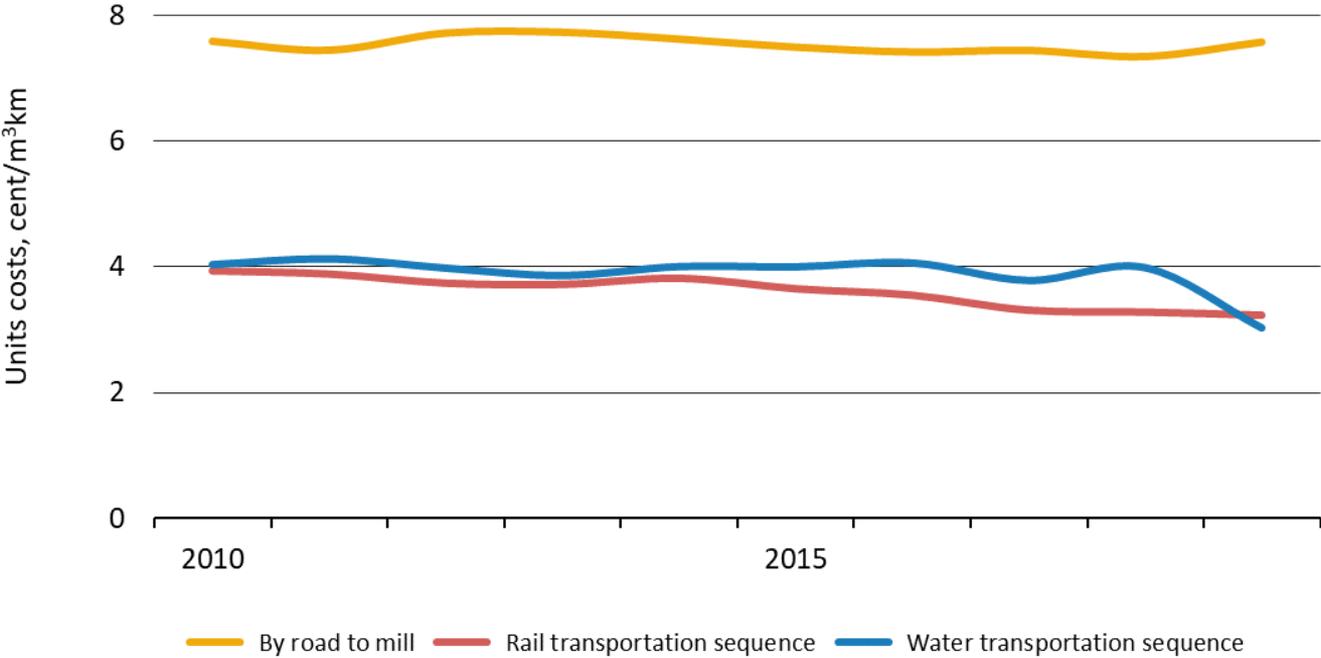
Unit Costs in Long-distance Transportation of Roundwood 2010–2019 ^(1/2)



Costs have been deflated by Index of lorry traffic costs (2019=100).



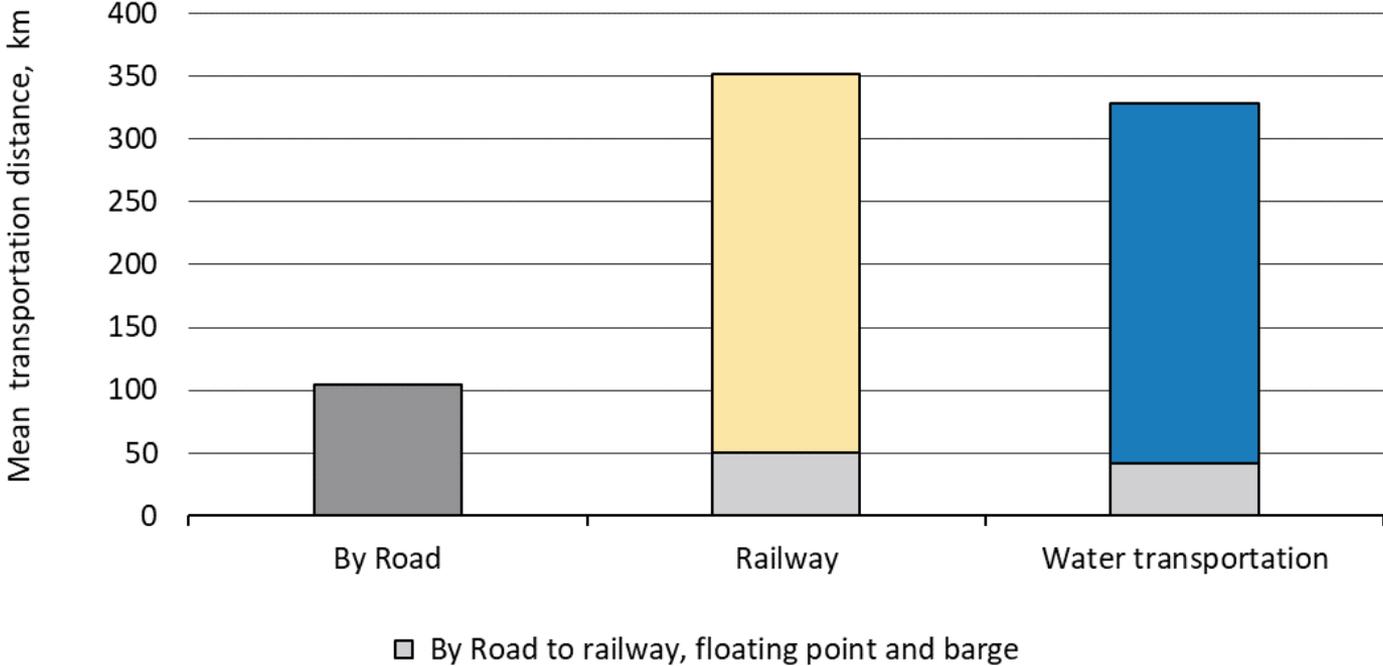
Unit Costs in Long-distance Transportation of Roundwood 2010–2019 (2/2)



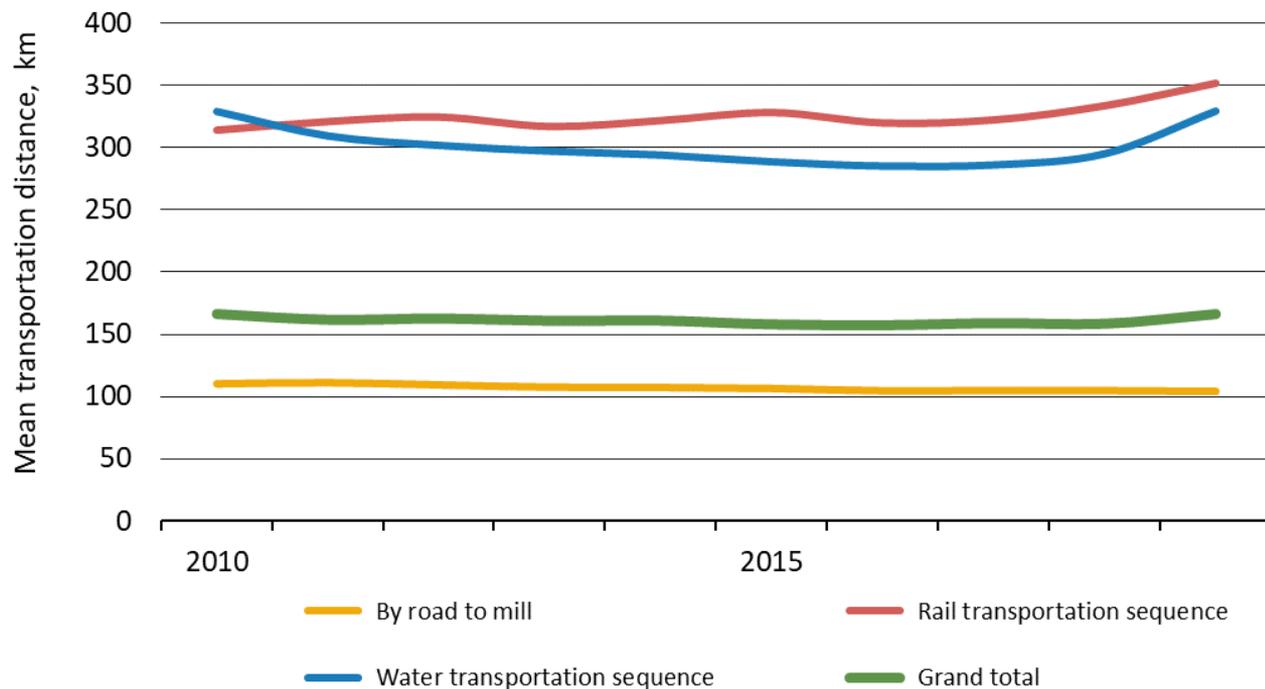
Costs have been deflated by Index of lorry traffic costs (2019=100).



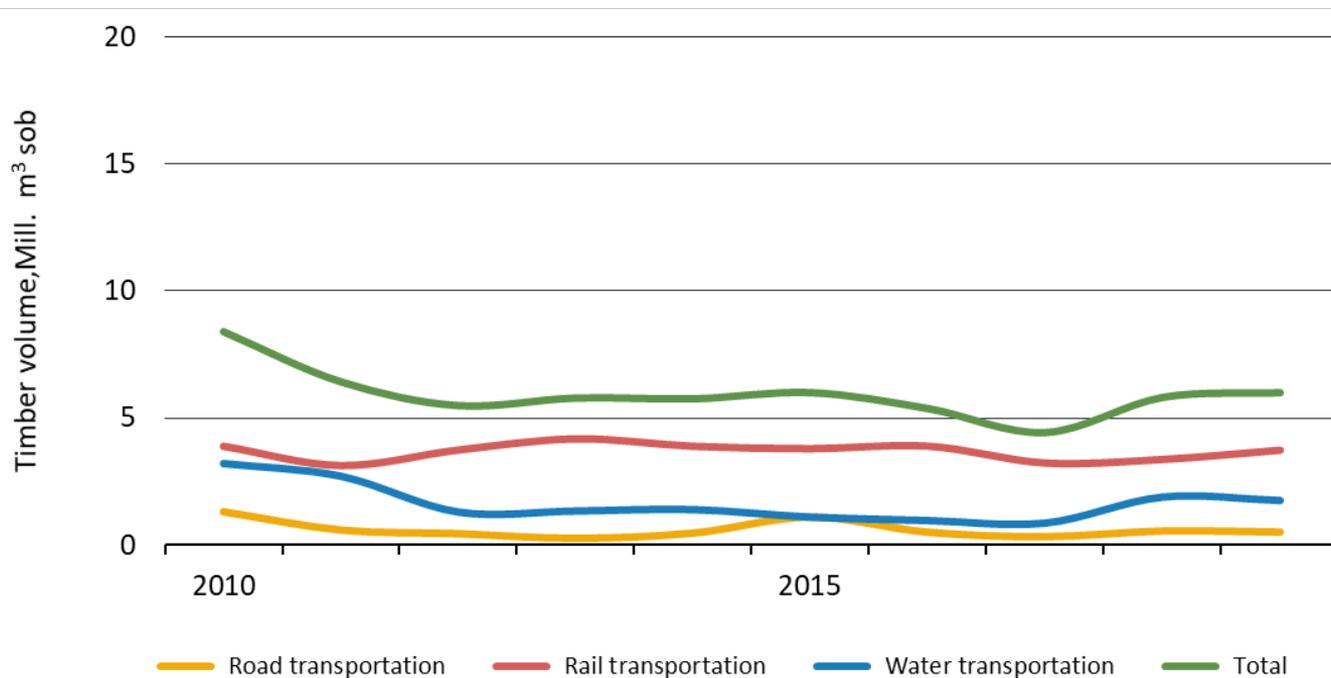
Mean Transportation Distance, 2019



Mean Transportation Distance, 2010–2019



Volumes of Imported Roundwood by Transportation Method, 2010–2019

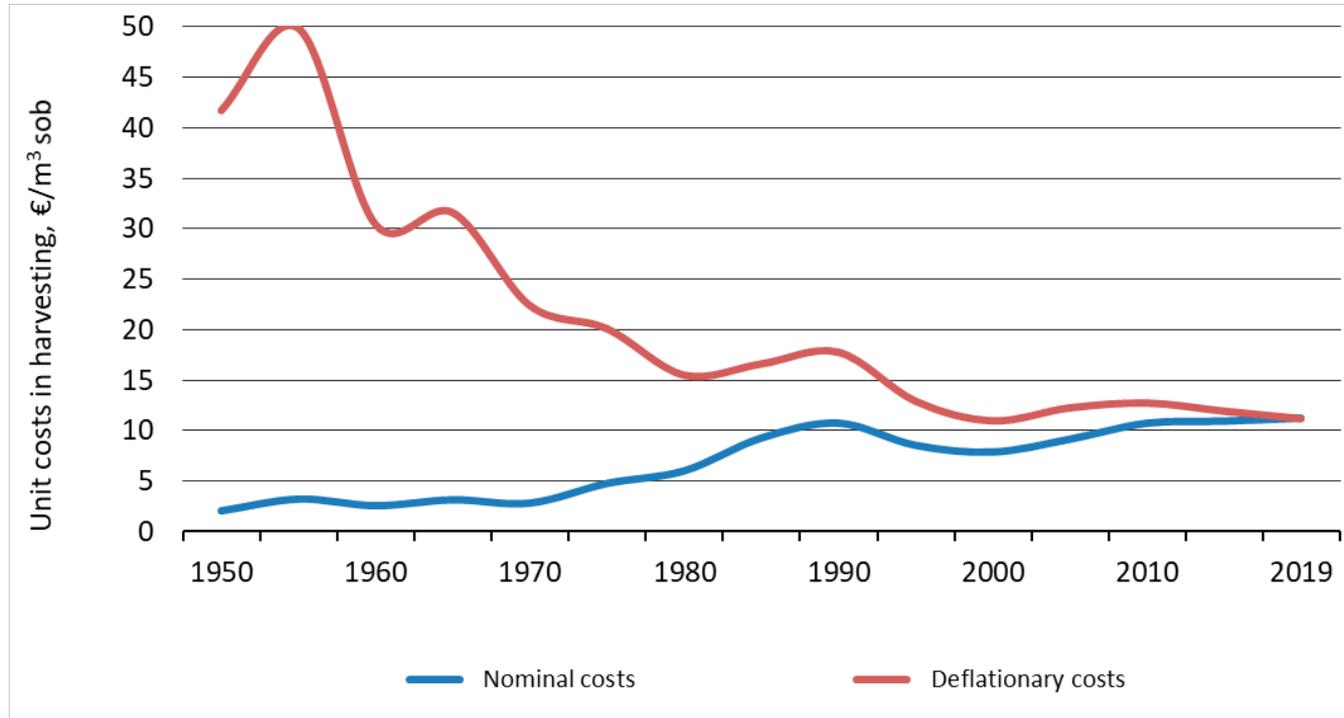


Long Term Trends of Finnish Wood Supply

Metsäteho Statistics



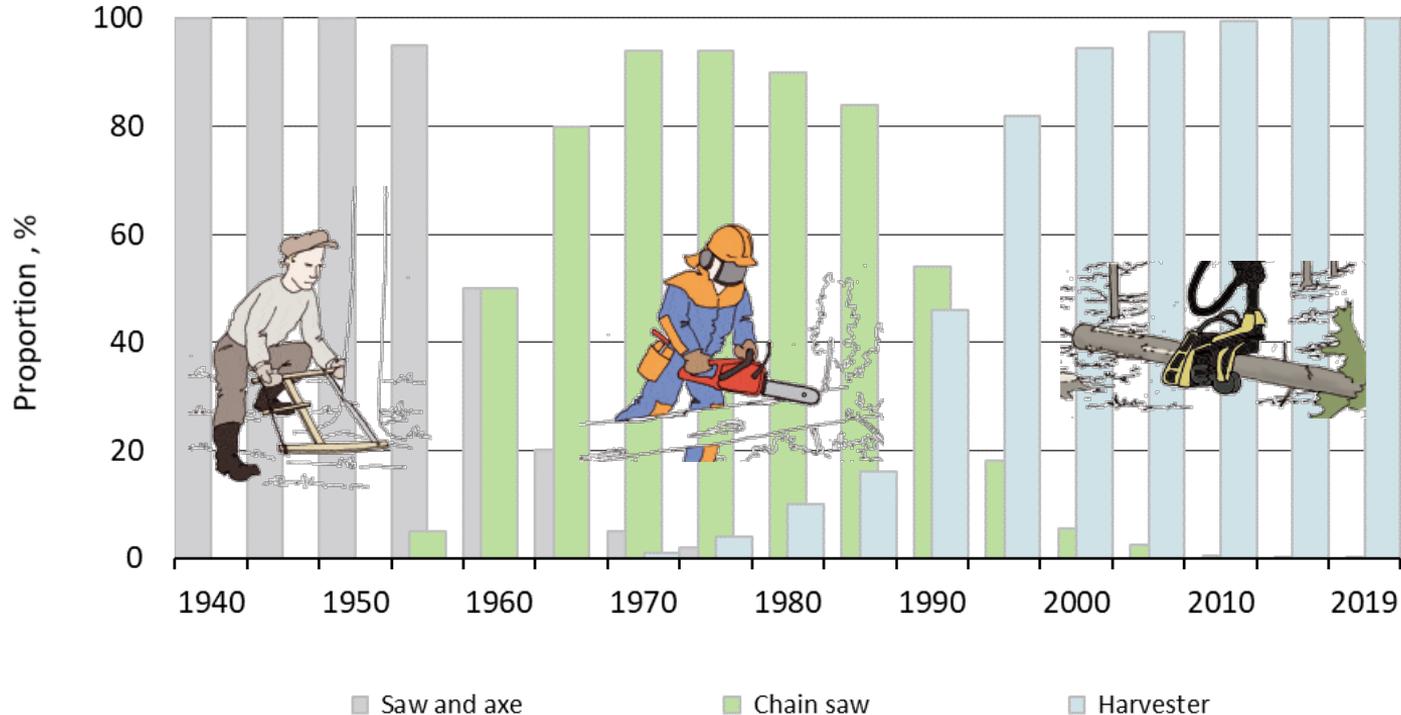
Unit Costs in Timber Harvesting, 1950–2019



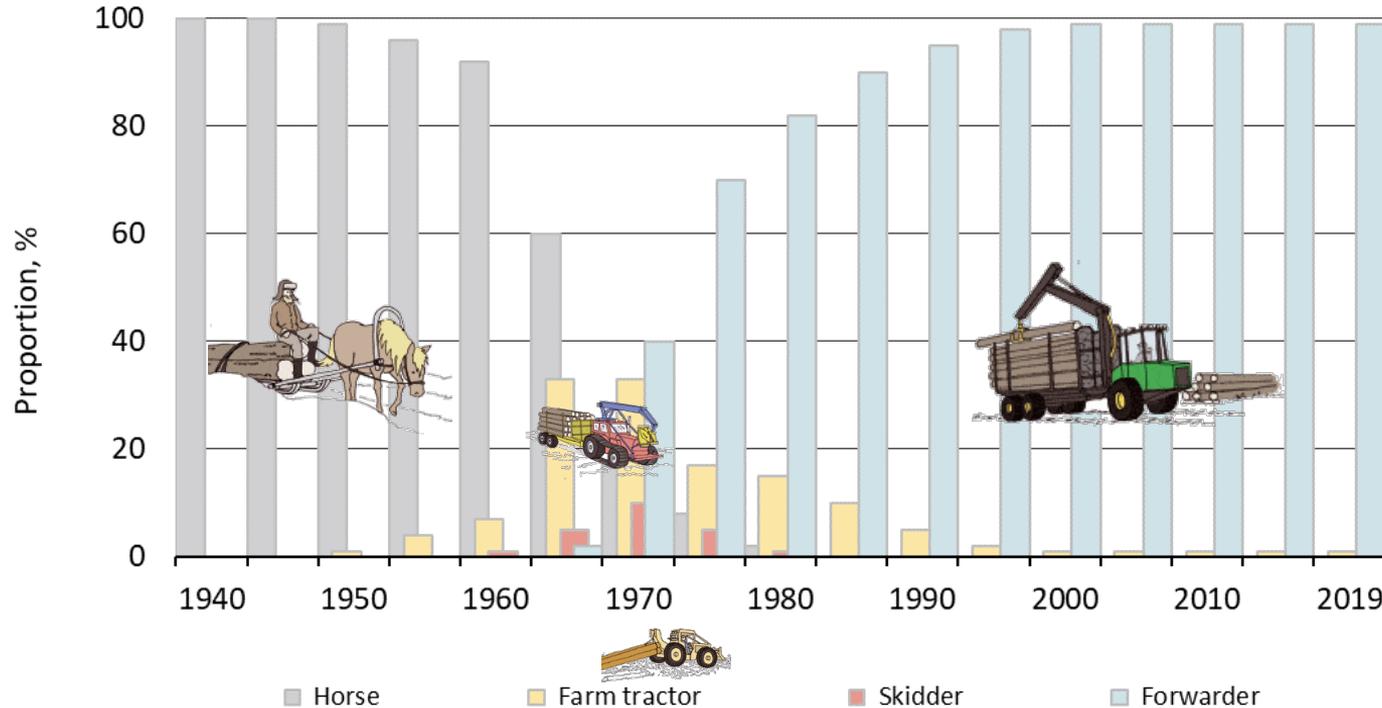
Costs have been deflated by the wholesale price index (2019=100).



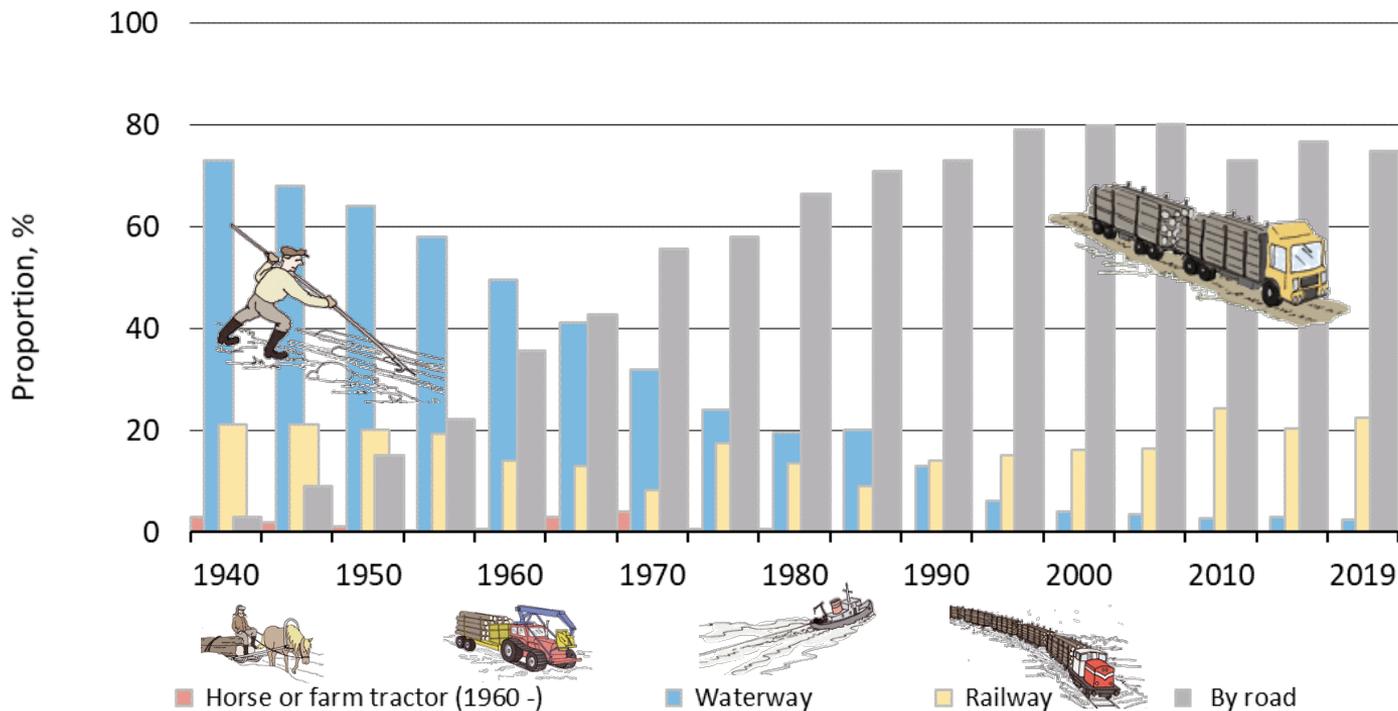
Felling Techniques, 1940–2019



Forest Haulage Techniques, 1940–2019



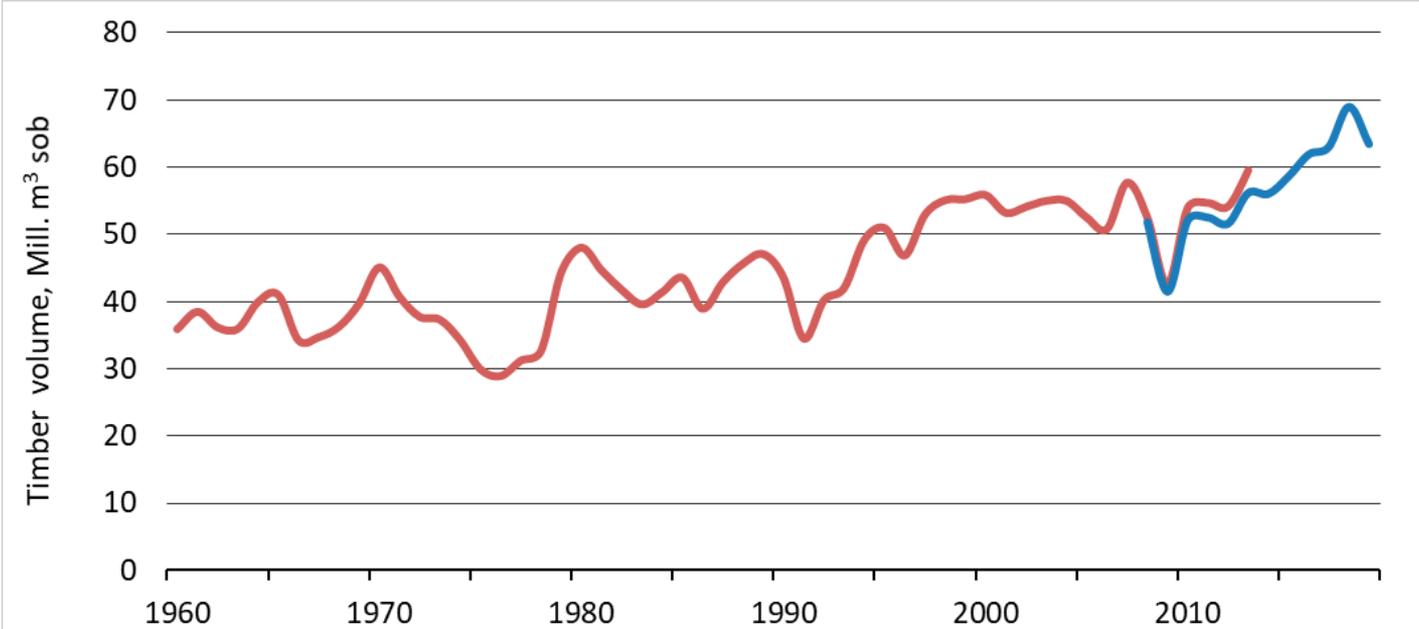
Long-distance Transportation Techniques, 1940–2019



Background Information of Finnish Wood Supply



Commercial Roundwood Removals, 1960–2019



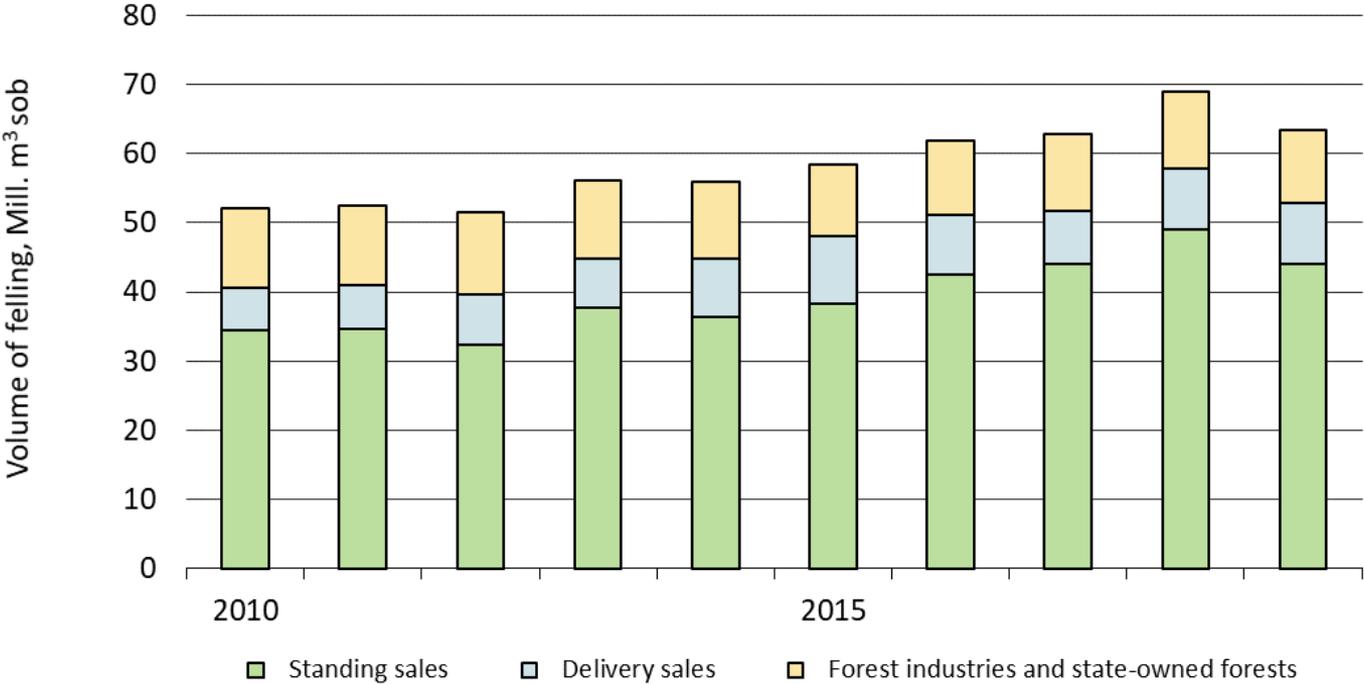
Commercial roundwood removal = industrial roundwood (logs and pulpwood) and energy wood (mainly small-sized trees)

— Commercial Roundwood Removals — Industrial Roundwood Removals

Source: Natural Resources Institute Finland



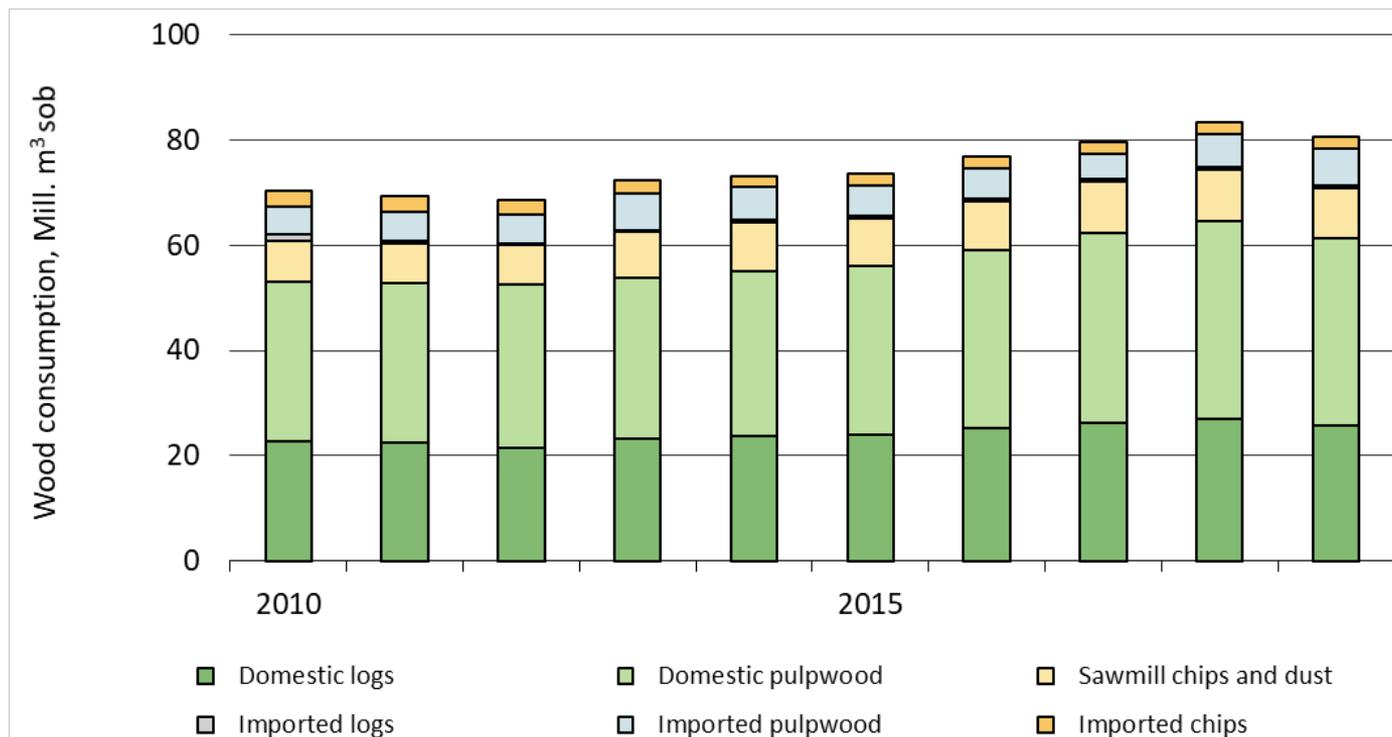
Industrial Roundwood Removals by Forest Ownership Category, 2010–2019



Source: Natural Resources Institute Finland



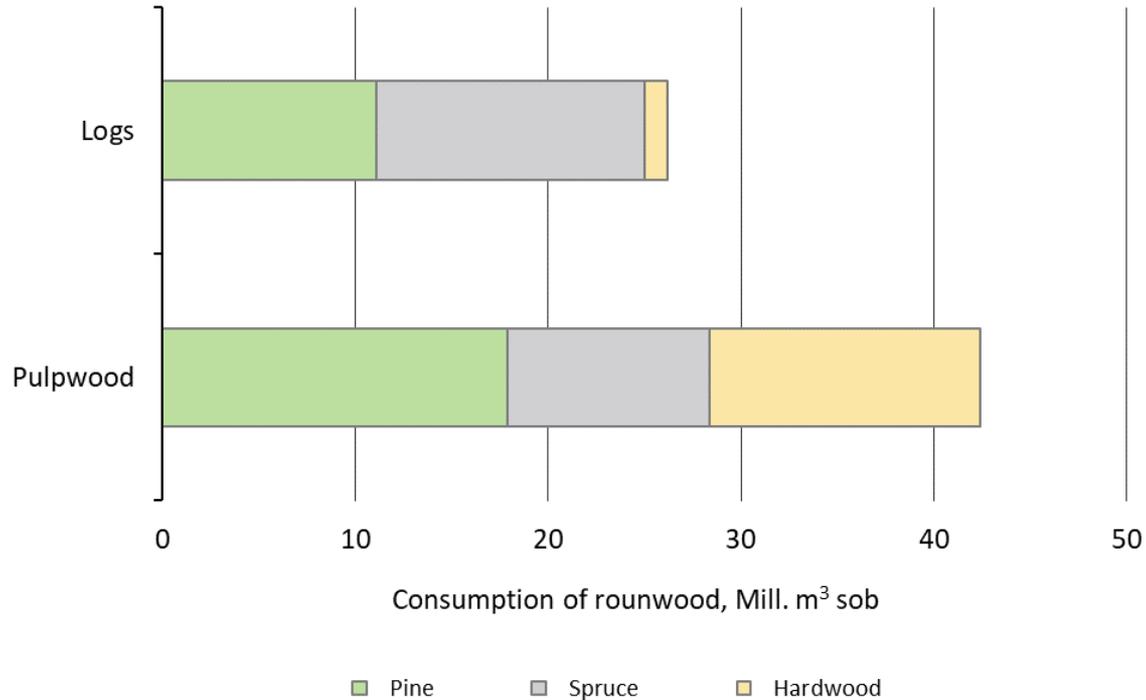
Roundwood Consumption by Forest Industries, 2010–2019



Source: Natural Resources Institute Finland



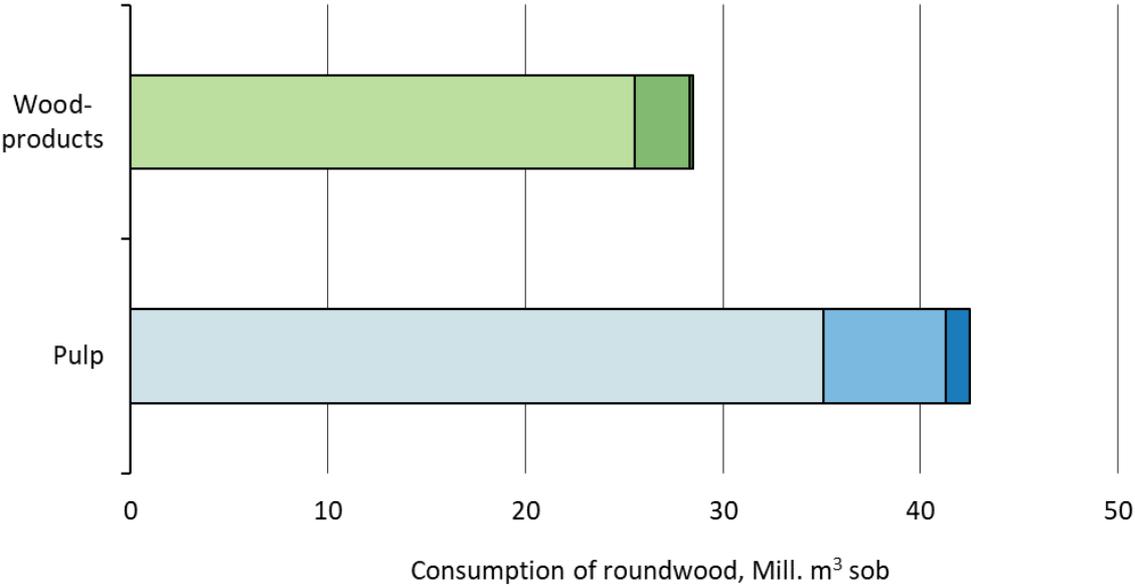
Wood Consumption by Forest Industries, 2019



Source: Natural Resources Institute Finland



Roundwood Consumption by Forest Industries by Branch of Industry, 2019



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

Source: Natural Resources Institute Finland

