

# Trade, Demand and Availability of Roundwood in the Baltic Sea Region

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Roundwood Markets in the Baltic Sea Region  
– Now and Tomorrow

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METSÄMIESTEN SÄÄTIÖ

*Ihminen ja metsä*



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# Baltic Sea Region (BSR hereafter)



BSR:

- Denmark
- Estonia
- Finland
- Germany
- Latvia
- Lithuania
- Norway
- Poland
- Sweden
- North-West Russia

Forest land for roundwood production: 140 mill. ha

# Roundwood Markets in the Baltic Sea Region (BSR)

- In 2016, intra-BSR roundwood flows (incl. wood chips) totalled 23 M m<sup>3</sup> roundwood and extra-BSR flows ca. 13 M m<sup>3</sup>.
- Roundwood markets of the BSR countries are closely linked through the intraregional roundwood trade.
- Market changes in one country will affect the markets in other countries via roundwood trade flows.
- BSR is an important producer and net exporter of forest products, sawnwood, panels, paper, paperboard, pulp, etc.
- BSR forest sectors are highly dependent on changes in demand for final products both in the global and European markets.
- Roundwood markets in the BSR are affected by international-, EU- and national policies, e.g., related to carbon sink of forests and climate –neutrality of wood energy, origin of wood, etc.

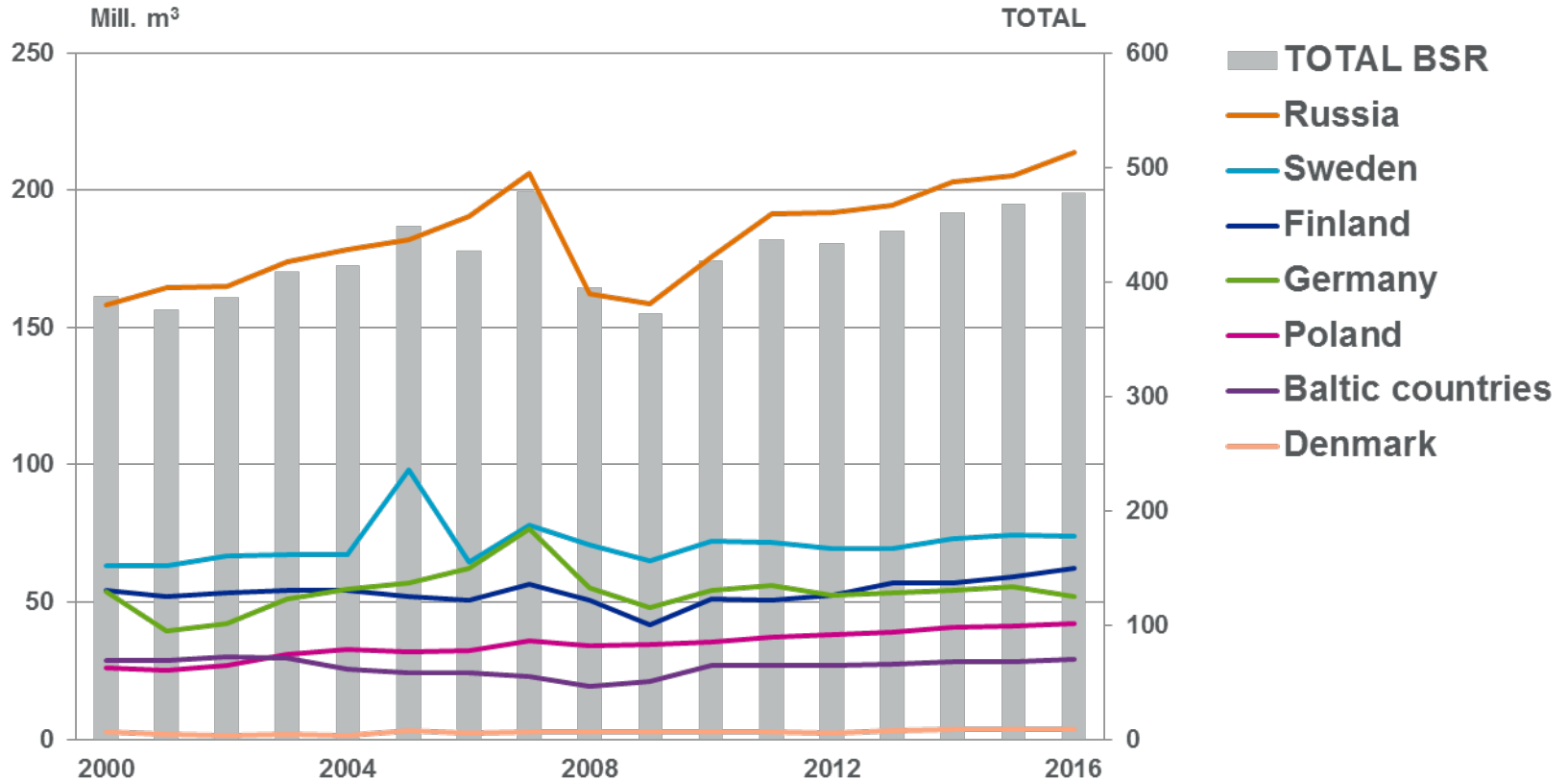
# New Investments in Wood-based Bioeconomy

New investments and investment plans, if realised, imply increasing competition on wood resources in the BSR

- Especially NBSK production is growing (Finland, Sweden, Russia, Estonia?). Also, large scale plans to investment in wood based energy.
- Estimates of increasing use of wood in Finland are around 10–15 M m<sup>3</sup>

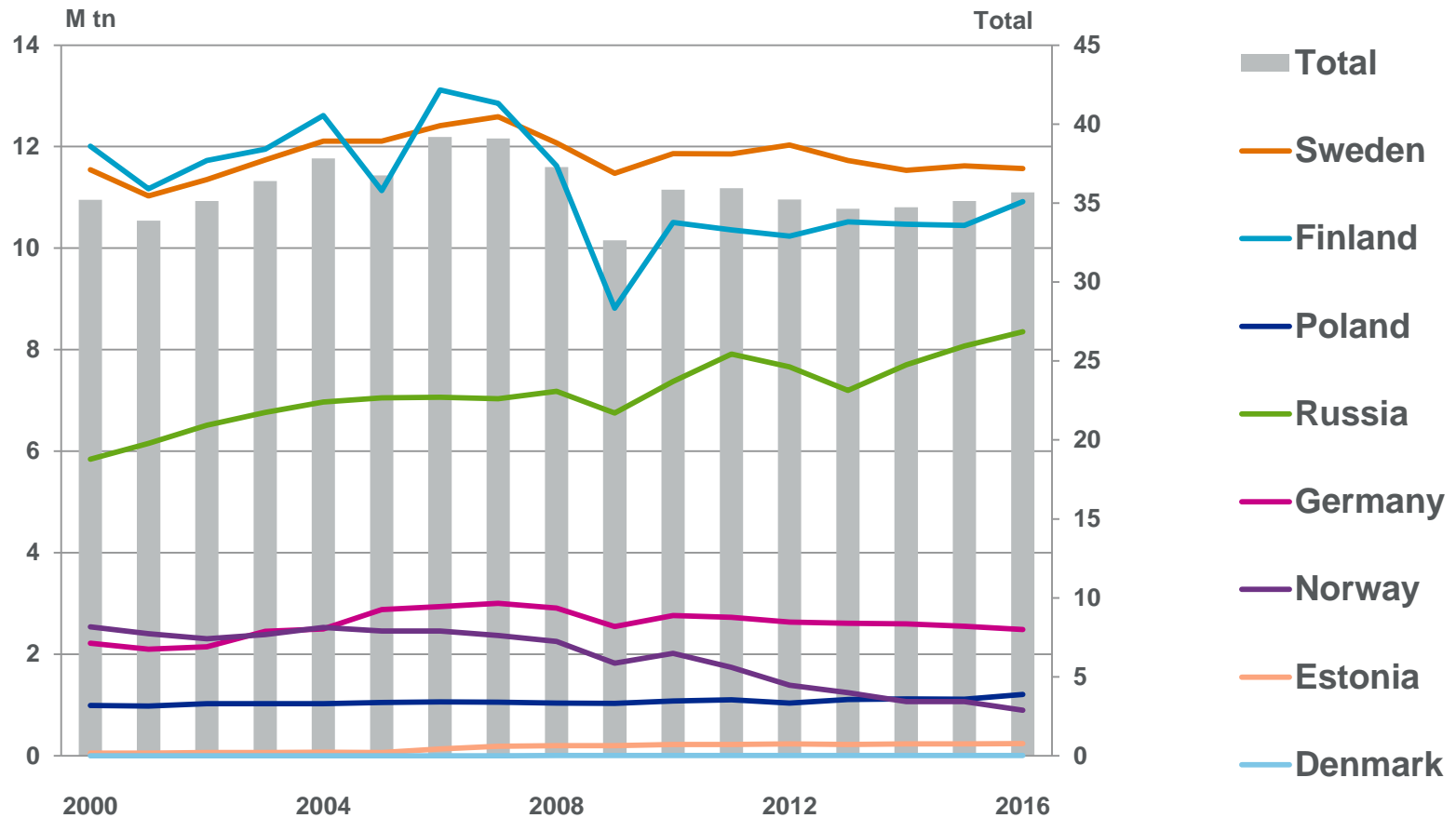
Mill	Capacity	Increase in wood use	Status
Äänekoski, Metsä Group	1.3 M t pulp	4 M m <sup>3</sup> /y	Start 2017/8.
Kouvola, UPM	Enlargement	0.8 M m <sup>3</sup> /y	Under construction.
Kuopio, Finnpulp	1.2 M t pulp	6.7 M m <sup>3</sup> /y	No investment decision, planned to start 2020
Kemijärvi, Boreal Bioref	0.4 M t pulp	2.4 M m <sup>3</sup> /y	No investment decision, planned to start 2020

# Roundwood Production in the BSR 2000–2016



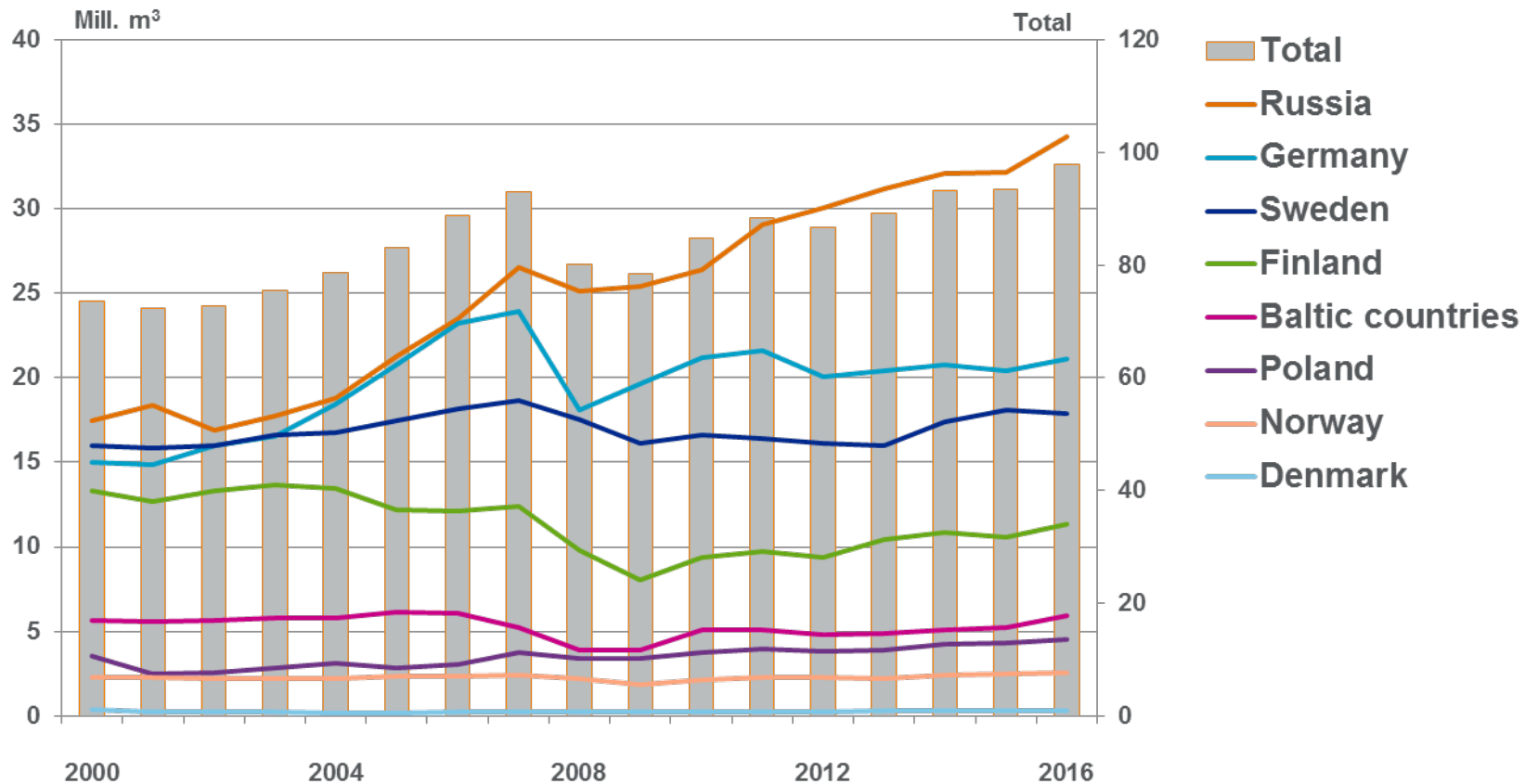
Source: Faostat

# Production of Wood Pulp in the BSR 2000–2016



Source: Faostat

# Production of Coniferous Sawnwood in the BSR 2000–2016



Source: Faostat

# Key Figures of Forests in the BSR

	Forest stock	Growth	Roundwood removals	Intensity
	M m <sup>3</sup>	m <sup>3</sup> /ha/a	M m <sup>3</sup> /a	%
<b>Denmark</b>	120	11.3	3.9	63
<b>Estonia</b>	430	5.7	7.3	64
<b>Finland</b>	2 100	4.8	68.2	73
<b>Germany</b>	3 490	10.9	95.2	80
<b>Latvia</b>	620	6.2	12.8	65
<b>Lithuania</b>	420	6	8.6	78
<b>Norway</b>	1 030	3.1	12.9	50
<b>Poland</b>	2 190	7.7	46.6	75
<b>NW Russia <sup>1</sup></b>	7 780	1.5	51.9 <sup>2</sup>	52
<b>Sweden</b>	2 390	4	80.8	102

All figures on the land of wood production. <sup>1</sup> National expert assessment; <sup>2</sup> Harvests without waste and residues. Sources: State of Europe's Forests 2015. NW Russia: FRA 2015, Gosudarstvennaya statistika, Lesnoy reyestr 2013.

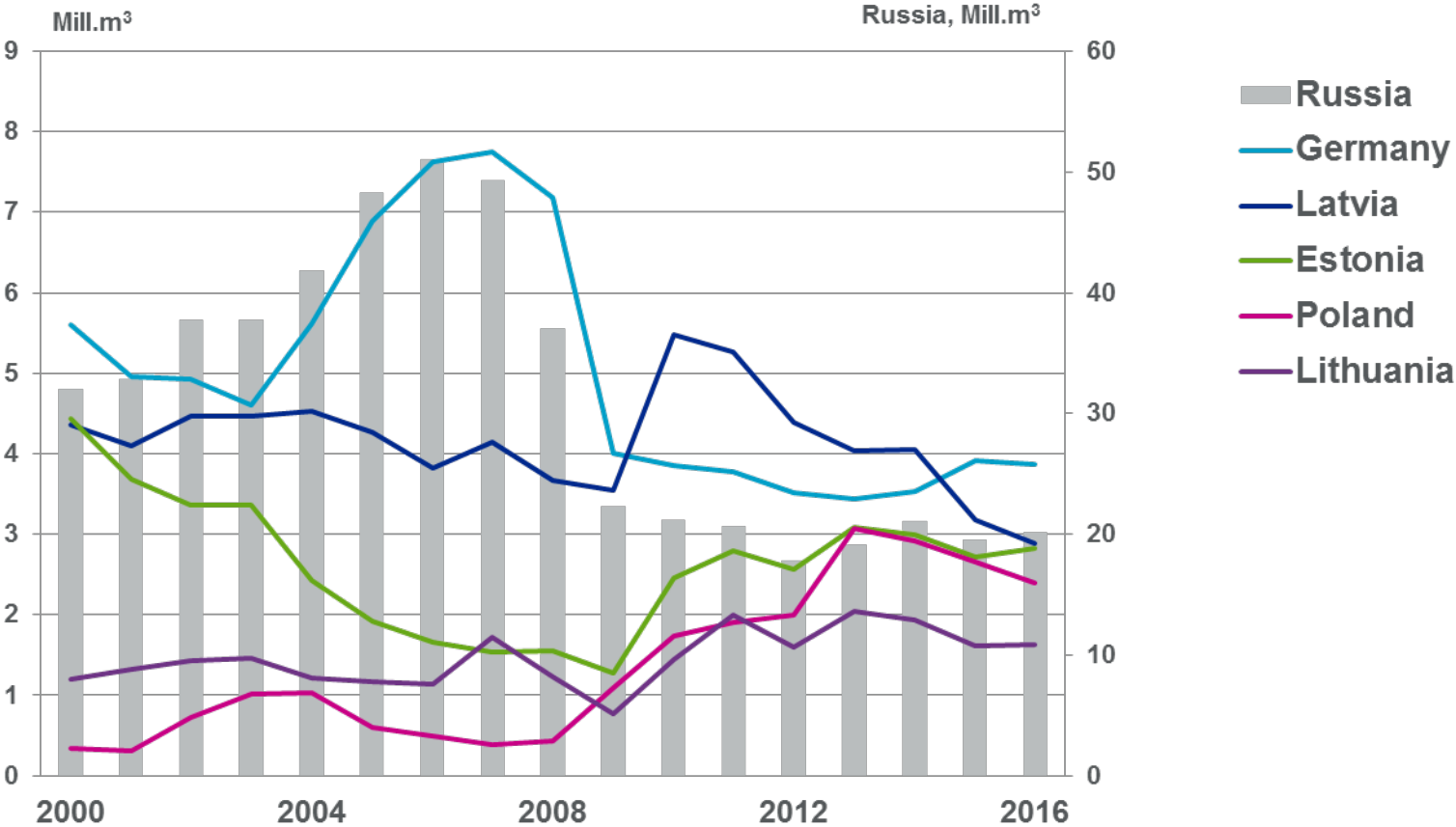


# Net Trade and Average Roundwood Consumption 2010–2015, million m<sup>3</sup>

	Coniferous logs		Coniferous pulpwood		Birch logs		Birch pulpwood	
	Net trade	Consum.	Net trade	Consum.	Net trade	Consum.	Net trade	Consum.
<b>Denmark</b>	-450	210	130	520	-10	160	0	90
<b>Estonia</b>	-70	2 590	1 100	-220	-30	680	-960	90
<b>Finland</b>	130	19 680	<u>980</u>	20 990	<u>100</u>	970	<u>3 780</u>	10 290
<b>Germany</b>	<u>2 790</u>	27 710	<u>2 090</u>	11 010	10	3 160	40	3 860
<b>Latvia</b>	220	5 350	-1 390	-270	-180	1 670	-1 280	720
<b>Lithuania</b>	-450	1 830	-500	300	-110	1 200	-200	390
<b>NW Russia*</b>	-520	18 030	-690	7 420	-170	8 360	-4 620	4 830
<b>Poland</b>	-970	11 160	-40	12 190	10	2 960	<u>510</u>	5 010
<b>Sweden</b>	520	34 000	<u>2 820</u>	29 960	0	200	<u>1 980</u>	5 420

Sources: Eurostat; Database Forestry, Comext ; Fedstat.ru, Russian Customs, \*2013–2015 expert assessment

# Largest Roundwood Exporters in the BSR, 2000–2016



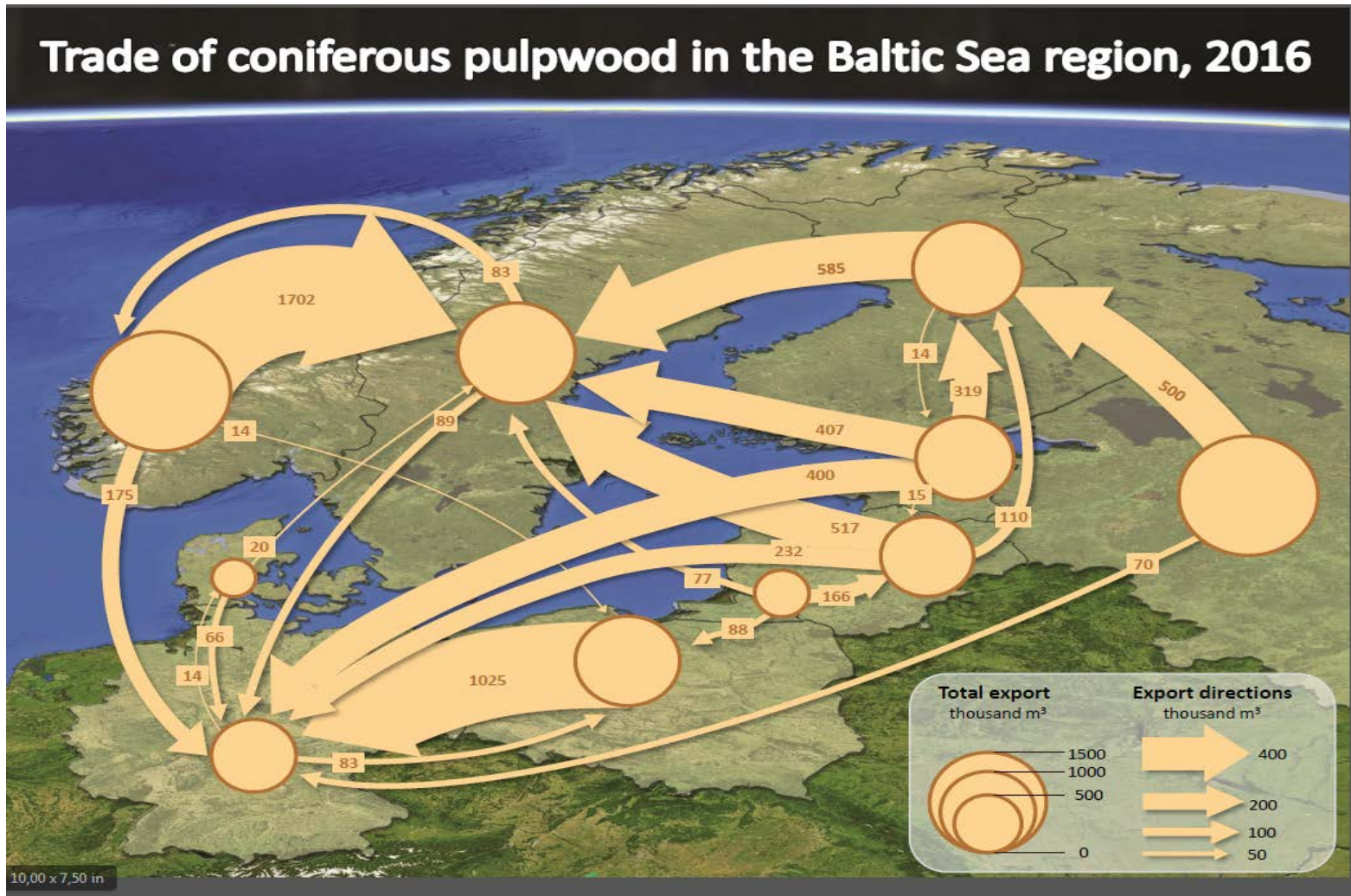
Source: Faostat

# Trade Flows of Coniferous Sawlogs



Sources: Eurostat, UN Comtrade, CustomStat RU.

# Trade Flows of Coniferous Pulpwood



Sources: Eurostat, UN Comtrade, CustomStat RU.

# Trade Flows of Non-Coniferous (birch) Pulpwood



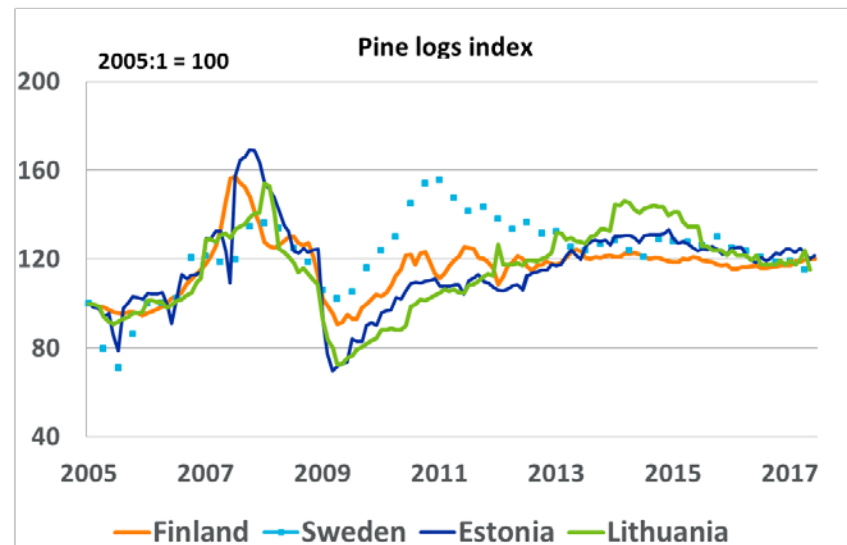
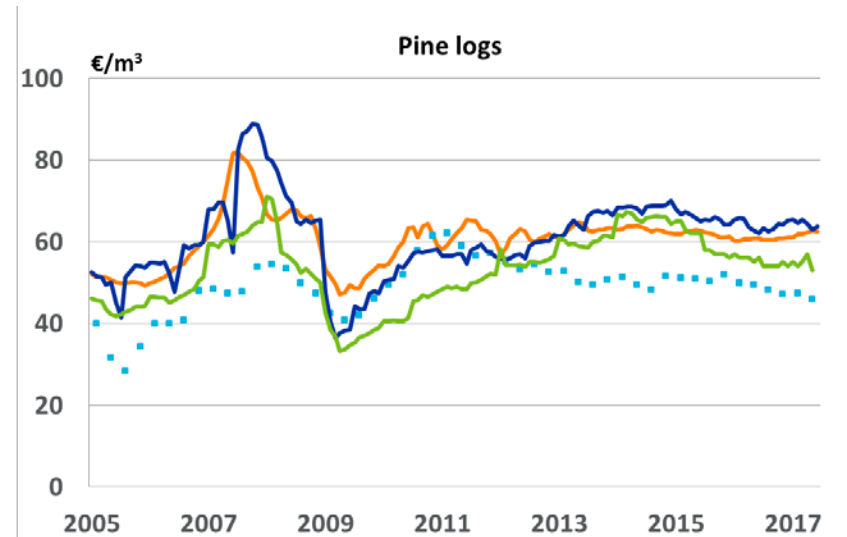
Sources: Eurostat, UN Comtrade, CustomStat RU.

# National Prices of Pine Sawlogs, nominal, 2005–2017

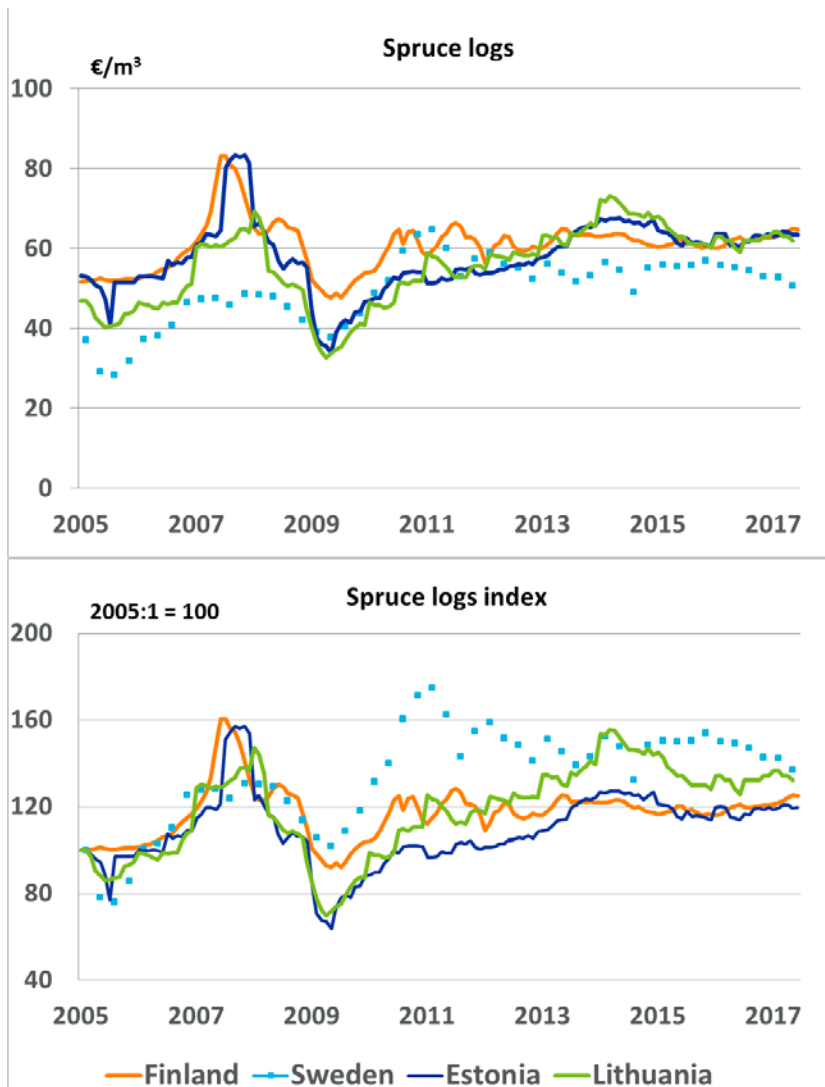
## Price statistics of all wood assortments

- Roundwood prices in **levels** are not directly comparable:
  - Finland – stumpage prices from NIPF
  - Estonia – delivery prices from state forests,
  - Lithuania – combined delivery and stumpage prices from state forests and NIPF,
  - Sweden – delivery prices consisting all ownership categories, but low coverage
  - €/m<sup>3</sup> without bark.
- Coverage of national statistics of total roundwood volumes transacted in the markets vary between the countries.
- Price index describes general development of the national prices.

Sources: [www.idanmetsatiето.info](http://www.idanmetsatiето.info), Metinfo



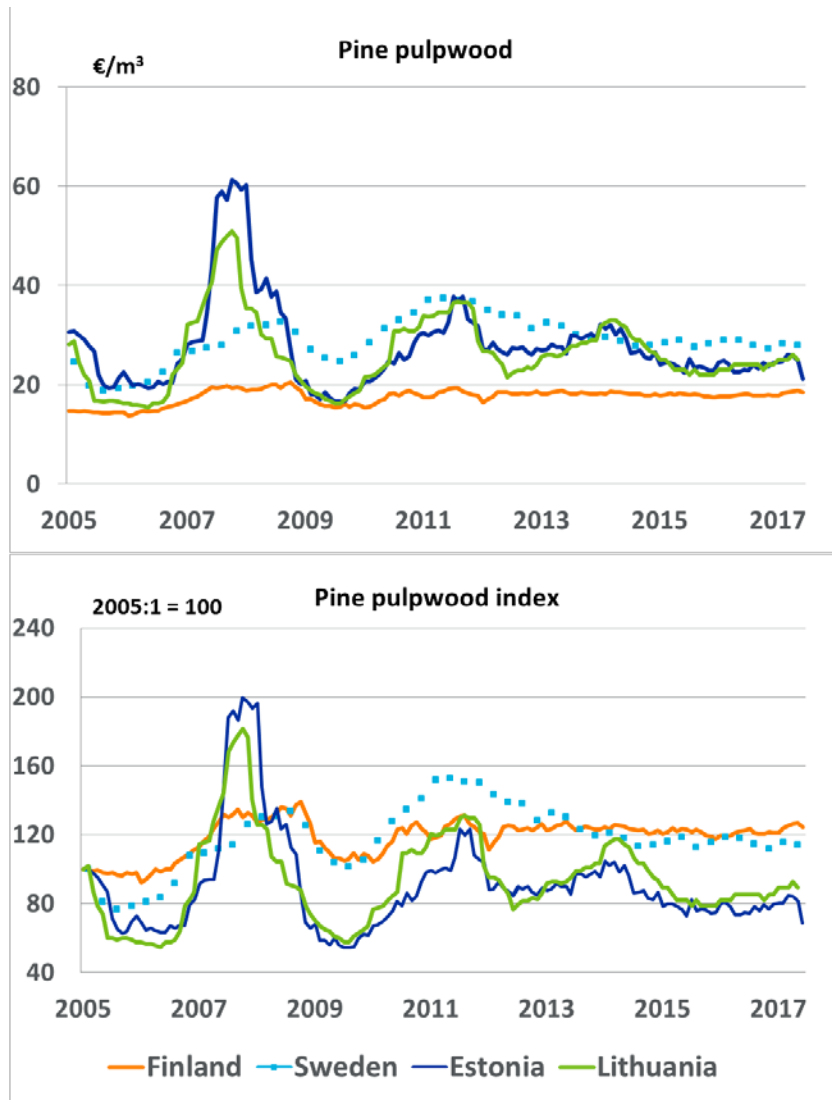
# National Prices of Spruce Sawlogs 2005–2017



- The relative discount of Swedish coniferous sawlogs (especially spruce) in 2005–2010 was based on the impact of massive storm damages on the roundwood market.
- The international business cycles in the final product markets are reflected rather similarly in the national roundwood markets within the BSR:
  - The sawnwood boom in 2006–2007
  - Deep recession in 2009
  - The economic recovery after 2010
- The prices seem to be somewhat integrated and to follow the same pattern.

Sources: [www.idanmetsatieto.info](http://www.idanmetsatieto.info), Metinfo

# National Prices of Pine Pulpwood 2005–2017



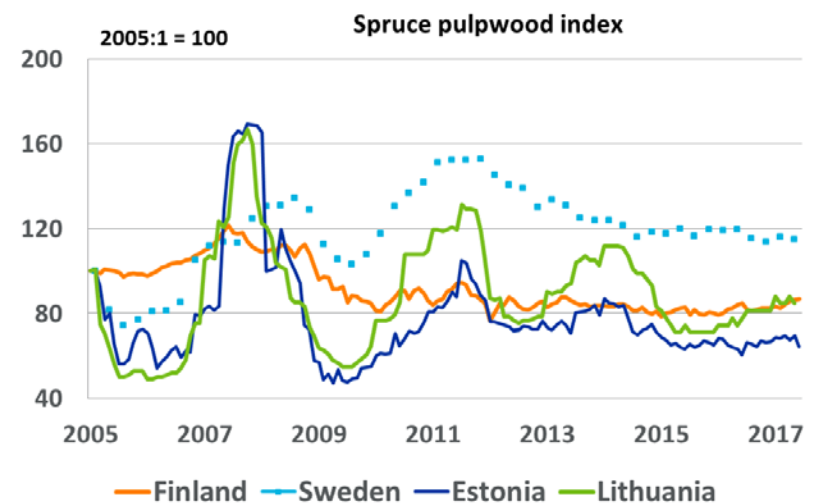
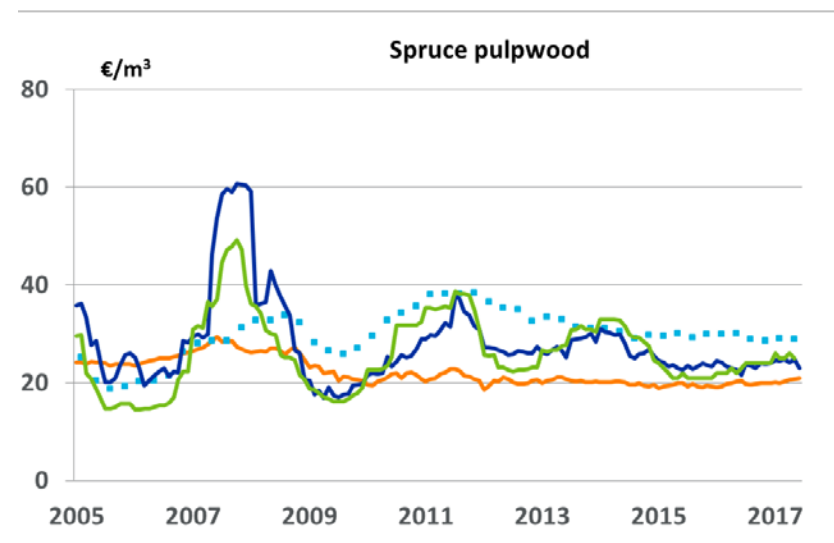
- In Finland, the stumpage prices of pine pulpwood have been rather stable.
- In the Baltic States, the prices have been more volatile.
- In the Baltic States, pulpwood is mainly used for energy production:
  - Coniferous pulpwood have been exported to Finland and Sweden.
  - In recent years, exports to Germany have also increased significantly.

Sources: [www.idanmetsatieto.info](http://www.idanmetsatieto.info), Metinfo



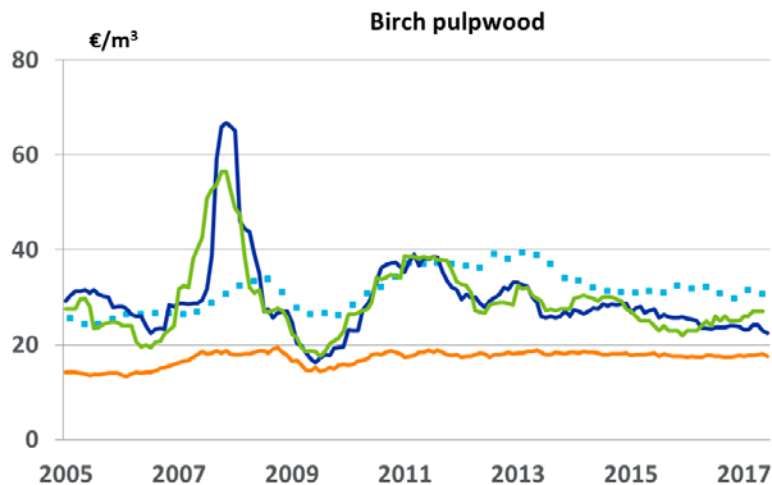
# National Prices of Spruce Pulpwood 2005–2017

- The spruce pulpwood prices follow similar adjustment as pine pulpwood prices.
- In Finland, the demand for spruce pulpwood decreased after the structural changes in chemical forest industry:
  - Decrease of mechanical pulp production.

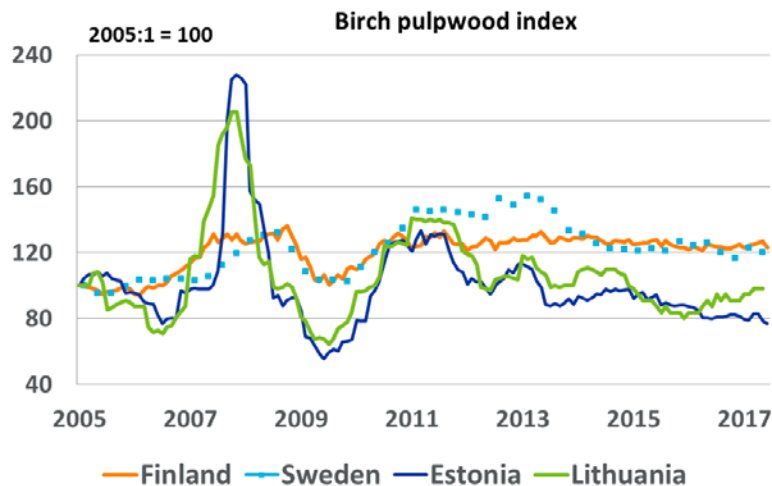


Sources: [www.idanmetsatieto.info](http://www.idanmetsatieto.info), Metinfo

# National Prices of Birch Pulpwood 2005–2017



- The main trade flows of birch pulpwood are from Russia to Finland and from the Baltic States to Sweden.
- In both cases, the availability of birch pulpwood in the exporting countries has exceeded the countries' domestic demand.



Sources: [www.idanmetsatieto.info](http://www.idanmetsatieto.info), Metinfo

# Mobilisation of Roundwood from Forests to Markets

## Tightening competition from roundwood in future indicate

- Rising stumpage prices are earnings for forest owners, but lower profitability, competitiveness and investment activity for the bioeconomy industries in the BSR.
- Need to develop more value added production
- Mobilising more wood from forests to market, e.g. in the Finnish forest policy, this is currently important target

## ”Market clears”

- Prices and price expectations, especially sawlogs, are the main determinants for the NIPF owners’ selling decisions.

## Factors affecting roundwood markets’ functioning are country specific

- Forest ownership: state or private – sizes of holdings
- Forest owners’ objectives, diversity and the role of forestry income
- Subsidies granted for forest sector and forest management
- Level of harvesting costs, infrastructure
- Competition between different uses of land – food security, energy crops, conservation, biodiversity, carbon , etc.

# BSR Roundwood Markets Tomorrow?

## Tendency for higher roundwood prices?

- More competition from wood between energy and other industries.
- Roundwood imports into the BSR from other areas may support wood supply.
- Also, the increasing growth of forests counterweight the pressure on roundwood prices.

## Trade between BSR countries gains importance in future

- Price changes are probably transmitted from country to country more quickly and price cycles are likely to continue.
- In the short term, the Baltic States and Russia may offer larger amounts of energy wood and wood chips to the markets – in the long run, future energy systems may change trade.
- Demand for coniferous pulpwood is projected to increase – sawmills have important role in mobilizing wood to markets
- Mobilisation of wood to markets requires also common efforts – more information is needed on the determination of wood supply and prices in the BSR countries.

## Participating international policy making

- Policies concerning, for example, climate change and carbon sequestration affects the use of forests, forest management, and roundwood production.
- Trade policies, regulations on the origin of wood

# Country Specific Observations

## Baltic States

- Intensities of forest use 64-78%. Pulpwood is currently used mainly for energy or exported
- Potential future forest industry investments reduce export possibilities

## Russia

- Intensity 52%.
- Investment plans exist for pulp and forest energy, but poor infrastructure and uncertain operational environment postpone investments decisions.
- Export duties have reduced exports of roundwood.
- Birch pulpwood (d<15cm) is currently dutyfree and domestic demand remains low. Regionally, supply of coniferous pulpwood exceeds the demand.

## Sweden

- Intensity is high.
- Demand for coniferous pulpwood is increasing. The main import sources are Norway and the Baltic States.
- Demand for sawlogs is high, main import source is Norway.
- Investments in wood based energy production.

# Observations...

## Finland

- Intensity 73%.
- Demand for coniferous pulpwood and energy wood is increasing.
- Demand for sawlogs remains high
- Pulp production depends on birch pulpwood imports from Russia.
- Forest policy actions to increase domestic supply of wood

## Germany

- Intensity 80 %
- Large importer of coniferous pulpwood, main sources are the Baltic States and Poland.
- Large net importer of coniferous sawlogs, 10 % from total consumption is imported mainly from Poland and Norway.
- Poland is developing its own forest industry -> roundwood imports from Poland may decrease in future.

# Luke's Database for International Roundwood Prices

Roundwood Prices in the Baltic Sea Region

- <http://www.metla.fi/metinfo/tilasto/roundwoodprices/index.html>

## On-line price data – based on official national statistics

- Estonia, Finland, Lithuania, Norway and Sweden from 1996
  - Monthly prices by roundwood assortment, if available
  - Price levels between countries are not comparable: dimensions, measurement units and -points (roadside, standing, etc.) vary by countries
- 
- **Data collection:** The Baltic-Nordic Forest Statistics Group BNFSG
  - workshop 15.9.2017

Thank you!