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 m³ roundwood and extra-BSR flows ca. 13 M m³.
• 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 m³

<table>
<thead>
<tr>
<th>Mill</th>
<th>Capacity</th>
<th>Increase in wood use</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Äänekoski, Metsä Group</td>
<td>1.3 M t pulp</td>
<td>4 M m³/y</td>
<td>Start 2017/8.</td>
</tr>
<tr>
<td>Kouvola, UPM</td>
<td>Enlargement</td>
<td>0.8 M m³/y</td>
<td>Under construction.</td>
</tr>
<tr>
<td>Kuopio, Finnpulp</td>
<td>1.2 M t pulp</td>
<td>6.7 M m³/y</td>
<td>No investment decision, planned to start 2020</td>
</tr>
<tr>
<td>Kemijärvi, Boreal Bioref</td>
<td>0.4 M t pulp</td>
<td>2.4 M m³/y</td>
<td>No investment decision, planned to start 2020</td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th></th>
<th>Forest stock</th>
<th>Growth</th>
<th>Roundwood removals</th>
<th>Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M m³</td>
<td>m³/ha/a</td>
<td>M m³/a</td>
<td>%</td>
</tr>
<tr>
<td>Denmark</td>
<td>120</td>
<td>11.3</td>
<td>3.9</td>
<td>63</td>
</tr>
<tr>
<td>Estonia</td>
<td>430</td>
<td>5.7</td>
<td>7.3</td>
<td>64</td>
</tr>
<tr>
<td>Finland</td>
<td>2,100</td>
<td>4.8</td>
<td>68.2</td>
<td>73</td>
</tr>
<tr>
<td>Germany</td>
<td>3,490</td>
<td>10.9</td>
<td>95.2</td>
<td>80</td>
</tr>
<tr>
<td>Latvia</td>
<td>620</td>
<td>6.2</td>
<td>12.8</td>
<td>65</td>
</tr>
<tr>
<td>Lithuania</td>
<td>420</td>
<td>6</td>
<td>8.6</td>
<td>78</td>
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<tr>
<td>Norway</td>
<td>1,030</td>
<td>3.1</td>
<td>12.9</td>
<td>50</td>
</tr>
<tr>
<td>Poland</td>
<td>2,190</td>
<td>7.7</td>
<td>46.6</td>
<td>75</td>
</tr>
<tr>
<td>NW Russia ¹</td>
<td>7,780</td>
<td>1.5</td>
<td>51.9 ²</td>
<td>52</td>
</tr>
<tr>
<td>Sweden</td>
<td>2,390</td>
<td>4</td>
<td>80.8</td>
<td>102</td>
</tr>
</tbody>
</table>

# Net Trade and Average Roundwood Consumption 2010–2015, million m\(^3\)

<table>
<thead>
<tr>
<th></th>
<th>Coniferous logs</th>
<th>Coniferous pulpwood</th>
<th>Birch logs</th>
<th>Birch pulpwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>-450</td>
<td>210</td>
<td>130</td>
<td>520</td>
</tr>
<tr>
<td>Estonia</td>
<td>-70</td>
<td>2 590</td>
<td>1 100</td>
<td>-220</td>
</tr>
<tr>
<td>Finland</td>
<td>130</td>
<td>19 680</td>
<td>980</td>
<td>20 990</td>
</tr>
<tr>
<td>Germany</td>
<td>2 790</td>
<td>27 710</td>
<td>2 090</td>
<td>11 010</td>
</tr>
<tr>
<td>Latvia</td>
<td>220</td>
<td>5 350</td>
<td>-1 390</td>
<td>-270</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-450</td>
<td>1 830</td>
<td>-500</td>
<td>300</td>
</tr>
<tr>
<td>NW Russia*</td>
<td>-520</td>
<td>18 030</td>
<td>-690</td>
<td>7 420</td>
</tr>
<tr>
<td>Poland</td>
<td>-970</td>
<td>11 160</td>
<td>-40</td>
<td>12 190</td>
</tr>
<tr>
<td>Sweden</td>
<td>520</td>
<td>34 000</td>
<td>2 820</td>
<td>29 960</td>
</tr>
</tbody>
</table>

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

Trade of coniferous saw logs in the Baltic Sea region, 2016

Sources: Eurostat, UN Comtrade, CustomStat RU.
Trade Flows of Coniferous Pulpwood

Trade of coniferous pulpwood in the Baltic Sea region, 2016

Sources: Eurostat, UN Comtrade, CustomStat RU.
Trade Flows of Non-Coniferous (birch) Pulpwood

Sources: Eurostat, UN Comtrade, CustomStat RU.
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
  - €/m³ 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.idanmetsatieto.info, Metinfo
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.idanmetsatiisto.info, Metinfo
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
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, Metinfo
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, 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 counterweights 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!