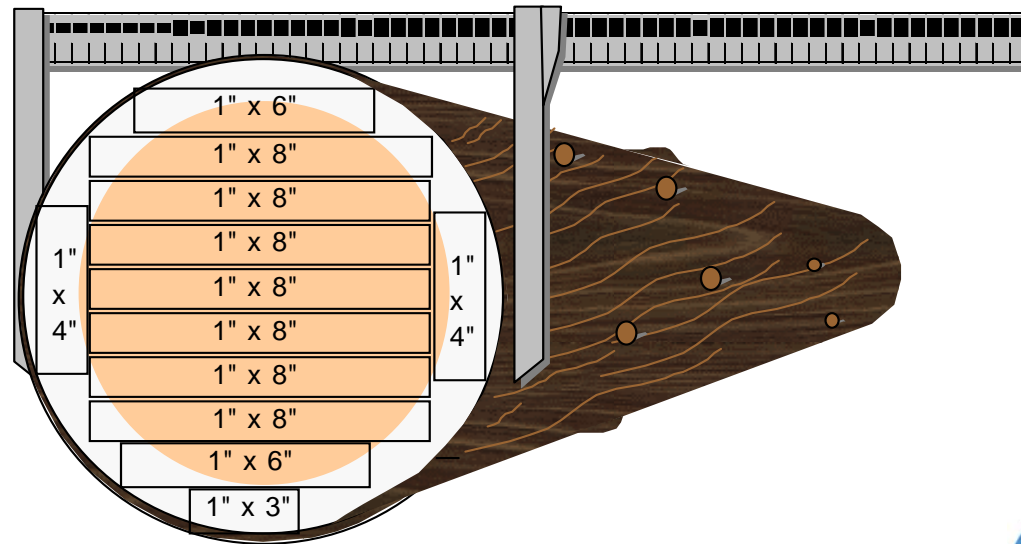




UNECE/FAO Forest Product Conversion Factors



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Work accomplished and current status



- April 2008, Task Force formed
- June 2008, Task Force met in Geneva
 - Developed list of desired conversion factors
 - Units and definitions
 - Handling countries with no data (regional grouping)
 - Questionnaire
- November 2008, questionnaire submitted to Task Force members and country correspondents
- November 2009, questionnaires received from 13 countries and one trade association
- Report is currently in Drafting (rough draft available)

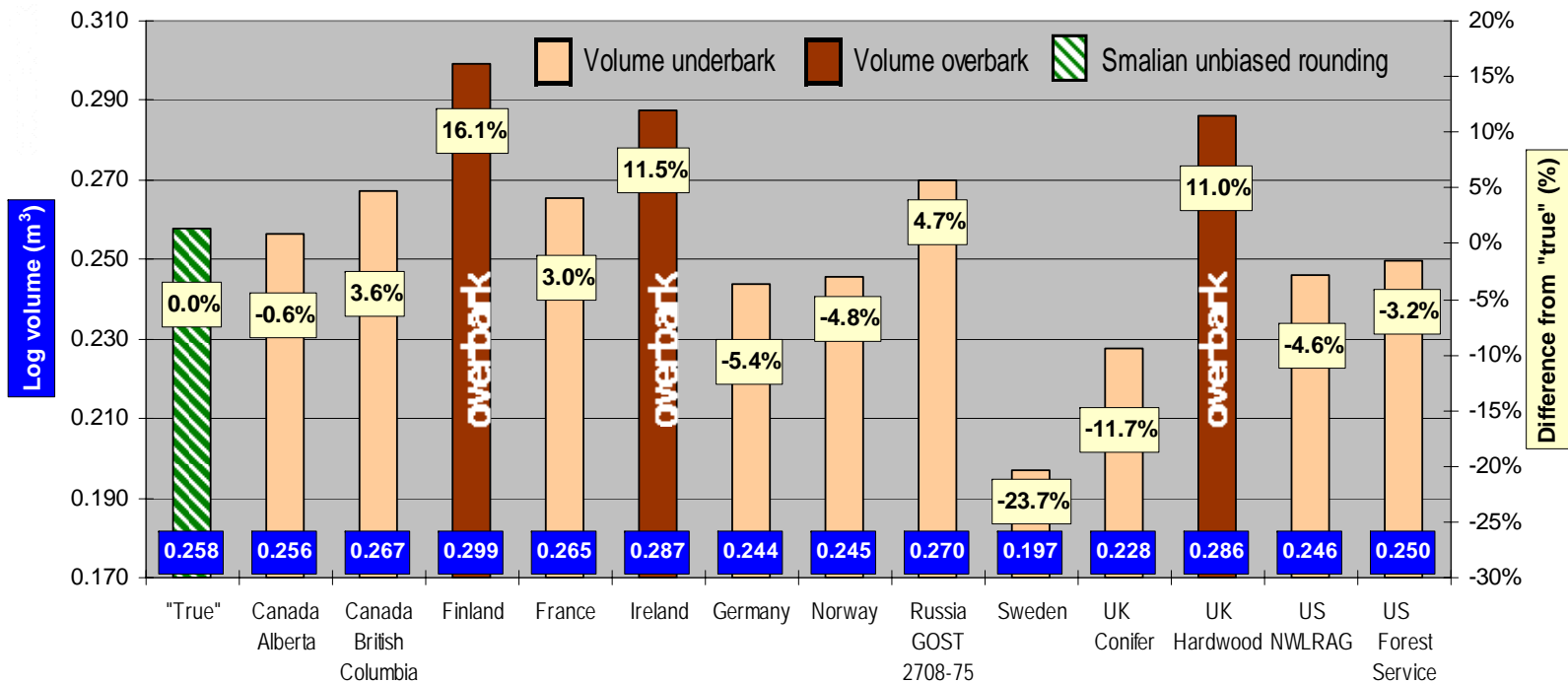
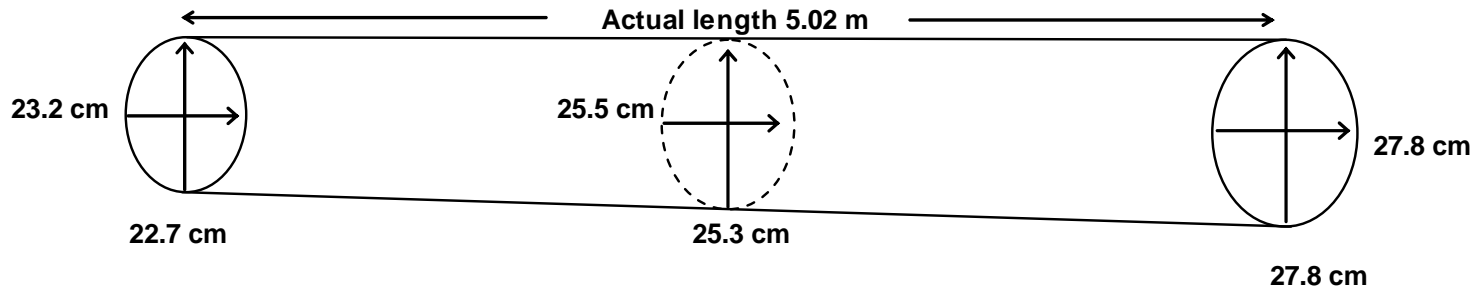
| | |
|--------------------|-----------------------|
| Canada | Slovakia |
| Finland | Spain |
| France | Sweden |
| Germany | Switzerland |
| Ireland | United Kingdom |
| Netherlands | United States |
| Norway | CEPI |

Conversion factor issues



- Roundwood volume
 - One m^3 by one national standard is not always the same volume as an m^3 by another system.
 - Some countries “actualize” volumes for reporting.
 - We requested that submitted conversion factors be based on “actual” volumes.

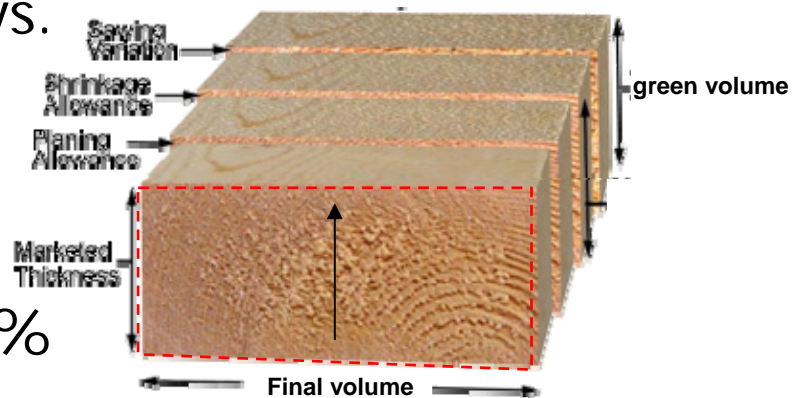
Roundwood volume



Sawnwood units



- Differences in volume determination
- Caused by:
 - Volume based on nominal sizes
 - Measuring volume in different states of manufacture, e.g., boules, rough green, dried and surfaced.
 - Approximate difference between rough green vs. surfaced dried
 - » Shrinkage $\pm 6\%$
 - » Grade trim $\pm 9\%$
 - » Planing loss $\pm 13\%$



Sawnwood: nominal vs. actual volume



| Product | Wolseley Code | Nominal Size (mm) | Finished Size (mm) | | |
|---------------|---------------|-------------------|--------------------|---|-----|
| Redwood PSE | G06955 | 12 x 38 | 8 x 33 | | 58% |
| Redwood PSE | G06957 | 12 x 50 | 8 X 44 | | 59% |
| Redwood PSE | G06006 | 16 x 38 | 12 x 33 | | 65% |
| Redwood PSE | G06013 | 16 x 50 | 12 x 44 | ✉ | 66% |
| Redwood PSE | G06031 | 16 X 100 | 12 X 94 | ✉ | 71% |
| Redwood PSE | G06050 | 16 X 150 | 12 X 144 | | 72% |
| Redwood PSE | G06074 | 19 x 38 | 14.5 X 33 | | 66% |
| Redwood PSE | G06082 | 19 x 50 | 14.5 X 44 | | 67% |
| Redwood PSE | G06101 | 19 x 75 | 14.5 X 69 | | 70% |
| Redwood PSE | G06116 | 19 x 100 | 14.5 x 94 | | 72% |
| Redwood PSE | G06157 | 19 x 150 | 14.5 x 144 | | 73% |
| Whitewood PSE | G06188 | 22 x 50 | 18.5 X 44 | | 74% |
| Whitewood PSE | G06191 | 22 x 75 | 18.5 X 69 | | 77% |
| Whitewood PSE | G06194 | 22 x 100 | 18.5 x 94 | | 79% |
| Whitewood PSE | G06200 | 22 x 125 | 18.5 x 119 | | 80% |
| Whitewood PSE | G06203 | 22 x 150 | 18.5 x 144 | | 81% |
| Whitewood PSE | G06206 | 22 x 175 | 18.5 x 169 | | 81% |
| Whitewood PSE | G06207 | 22 x 200 | 18.5 x 194 | | 82% |
| Whitewood PSE | G06209 | 22 X 225 | 18.5 X 219 | | 82% |

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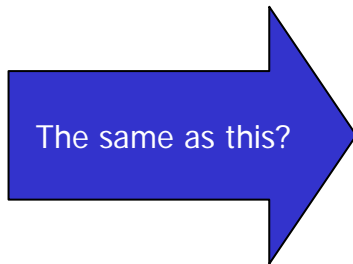
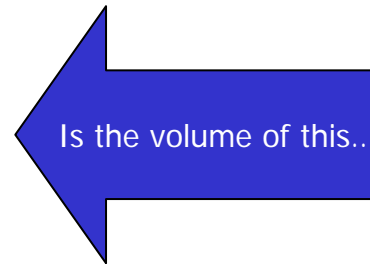
- Anecdotal evidence that volume is sometimes reported bases on nominal not actual volume

- In this example, actual volume is 58-82% of reported volume

- We reduce North American volumes to 72% of reported to actualize their volume

- Do we have the same issue in Europe? If so to what degree?

Sawnwood: state of manufacture



•Logs made into flitches will produce 40-90% more volume vs. dried, edged and trimmed sawnwood

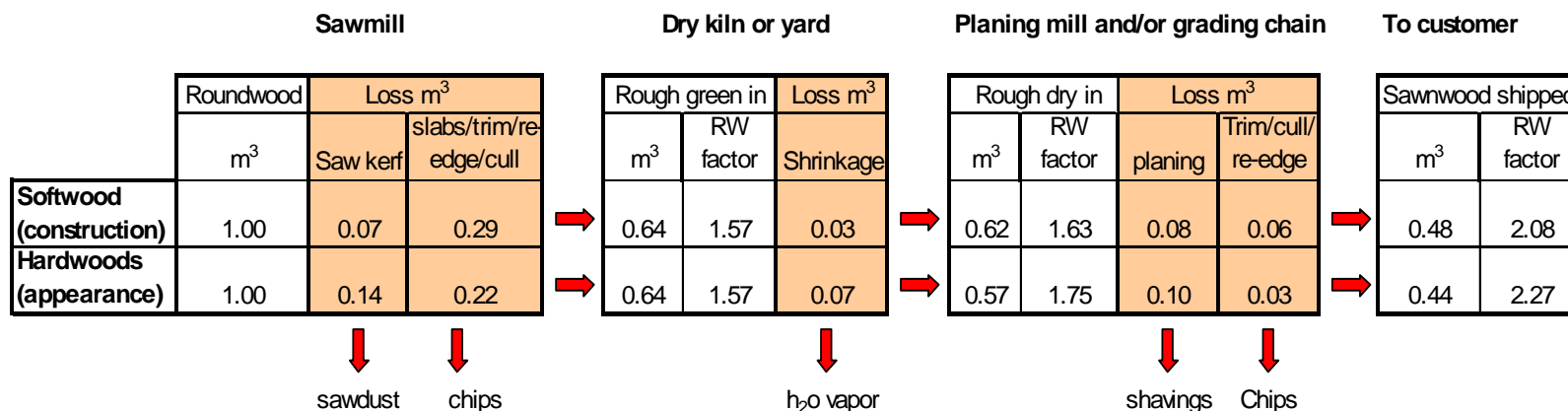
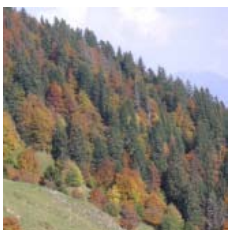
•Are we grouping "apples and oranges"? If so, this could have consequences on wood balances, conversion factors and regional aggregation

•Flitches or sawnwood measured green will have roughly 4% (sw) to 8% (hw) more volume vs. wood dried to stable moisture contents

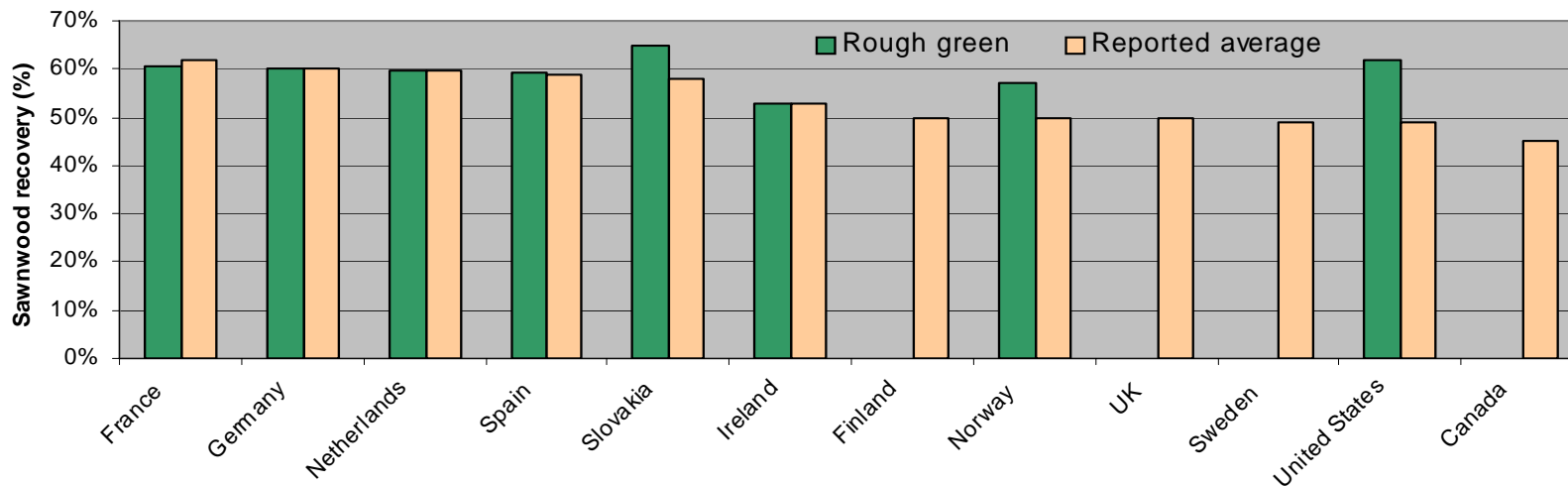
State of manufacture



Example of Roundwood to Sawwood Factors by Stage of Manufacture



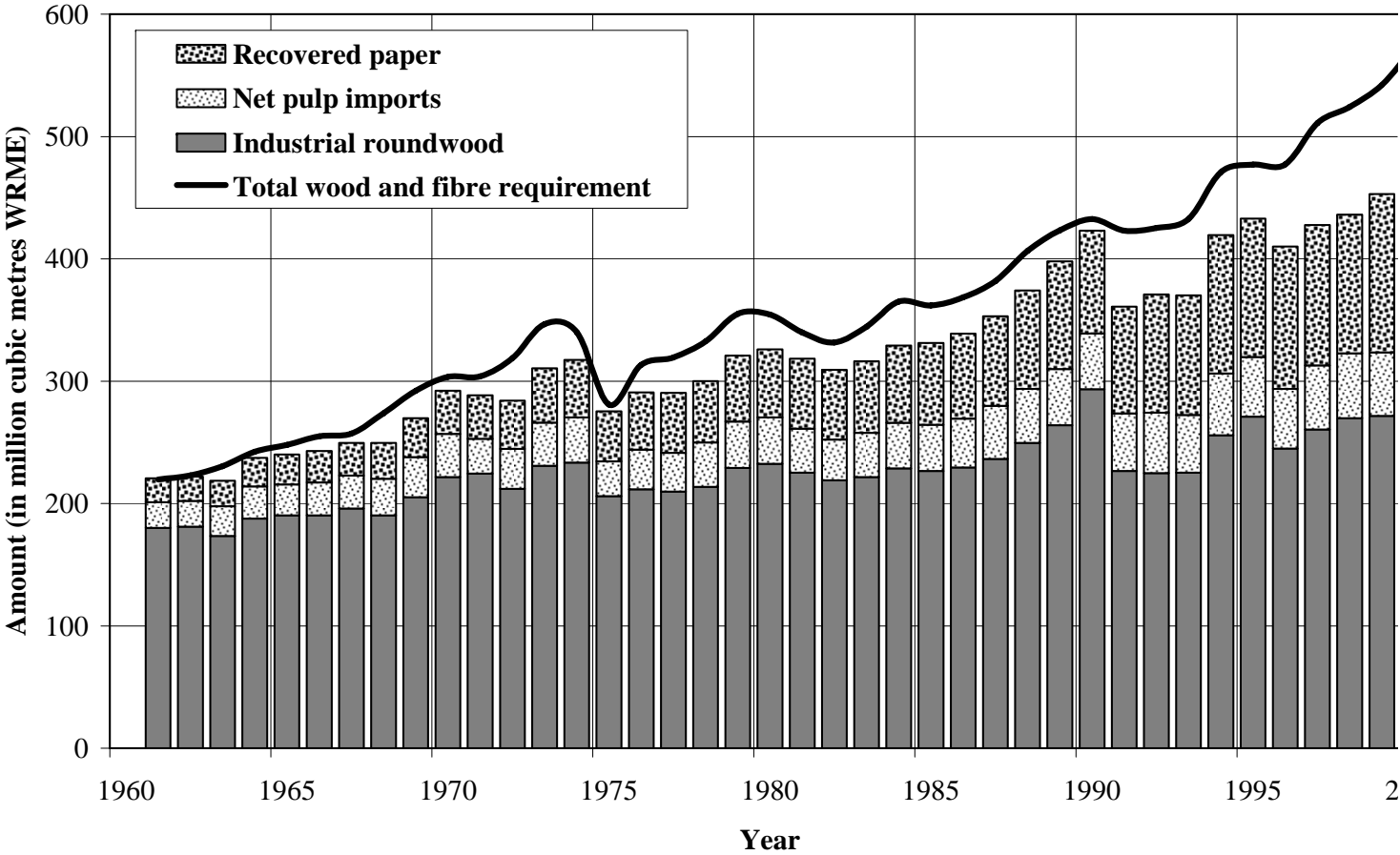
Coniferous Sawwood Yield by Country



Wood balance from EFSOS 2000: wood raw materials vs. conversion factor determined



Figure 1 Trends in wood raw material consumption in Western Europe from 1961 to 2000



Source: derived from FAOSTAT production and trade statistics (<http://faostat.external.fao.org>).

Thank you for your attention!



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