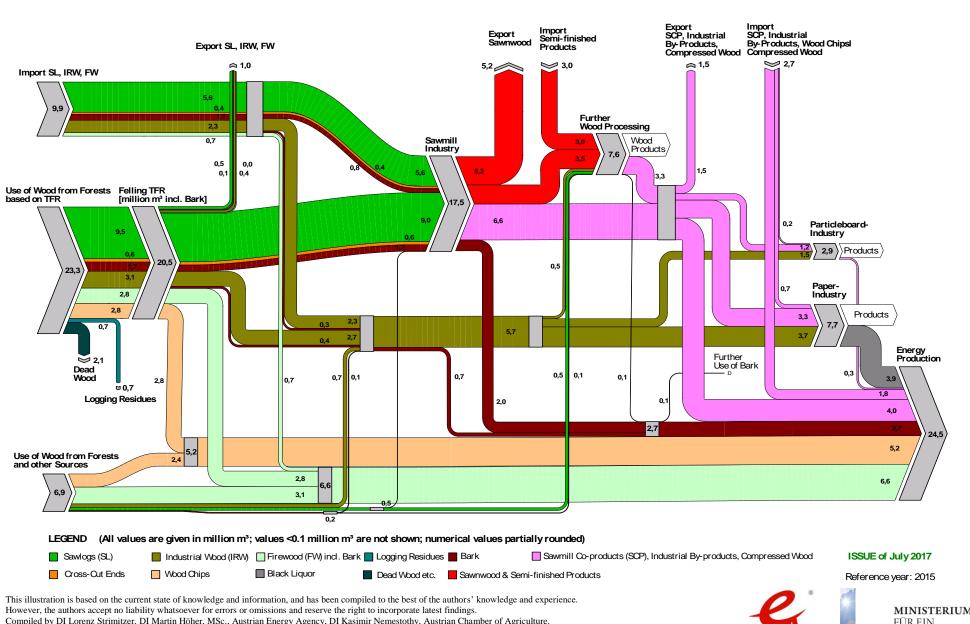




# **WOOD FLOWS in AUSTRIA**



Compiled by DI Lorenz Strimitzer, DI Martin Höher, MSc., Austrian Energy Agency, DI Kasimir Nemestothy, Austrian Chamber of Agriculture. Copyright: Federal Ministry of Agriculture, Forestry, Environment and Water Management





#### GENERAL REMARKS ON THE PRESENTATION OF THE "WOOD FLOWS in AUSTRIA"

(More information concerning this presentation is included in the accompanying description, which can be downloaded together with the illustration from www.klimaaktiv.at/energieholz.)

### SHORT DESCRIPTION

For reasons of representability the Woodflow assumes that saw logs gained from the Timber Felling Report (TFR) and from imports are exclusively processed in the sawmill industries, and does not include the share originating from "further wood processing" (e.g. from veneer mills). In addition, it should be noted that industrial round wood (as defined in the TFR) is also processed to some extent in the sawmill industry. The use of domestic semi-finished products (e.g. products of the panel board industry) is not shown in "further wood processing".

This illustration of the "Woodflow for Austria" takes into account the conversion factors for wood fuel assortments, which were established in consultation with key stakeholders and can be downloaded from the following website www.klimaaktiv.at/energieholz.

Wood assortments

Sawlogs (SL): Timber used in the sawmill industry. Additional quantities of saw logs can be traced in "further wood processing".

Cross-Cut Ends: The standard excess length and quality deductions of saw logs in commercial use: It is estimated based on samples and reference values of the Austrian Forest Inventory. The bark from SL and IRW is plotted as a separate stream due to debarking at the production sites. Contrastingly firewood and Wood Chips are plotted with included bark. Bark:

Timber used in the paper and pulp industry, as well as in the particle board and fibre board industry. Additional quantities of IRW can also be found in "further wood processing". Industrial Roundwood (IRW):

Firewood (FW) incl. Bark: Designated by the TFR as timber used for the purpose of fuel wood and energetic purposes in log wood boilers. The flow of fuel wood is displayed including bark in line with common practice.

Wood Chips: Wood chips are acquired from the forest and other sources, and are used for energy purposes.

Logging Residues: The residual biomass in the course of harvest. Dead wood, etc.: Description of dead trees due to natural die-off.

Sawnwood & Semi-finished Products: Products of the sawmill industry including exports and imported semi-finished products such as sawn timber, particle boards, fibre boards, planed products and plywood.

Sawmill Co-products (SCP), Industrial

By-products, Compressed Wood: Wood shavings, wood chips, edgings, slabs, briquettes, pellets, etc.

Wood Products: Various products of the wood processing industry, such as doors, furniture, floors, bridges, roofing, shuttering boards, timber, etc.

Residual lye from the production of pulp that can be used for producing energy. Black Liquor:

Nodes

The Timber Felling Report provides the total commercial amount of timber harvested in Austria, excluding bark. Apart from cross-cut ends, the node also displays the share of bark (m³ incl. Felling TFR:

bark). By further considering natural die-offs and logging residues, we can derive the "Use of Wood Based on Timber Felling Report" in m<sup>3</sup>.

Use of Wood from Forests and other

Sources:

Is that portion of timber available on the market that is not represented by imports, nor is it recognised in the TFR, but can be calculated as the difference to consumer demand (sawmills, panel and paper industry, wood processing, energy production). Sources for this volume include quantities from smaller forests, waste wood, copse and landscape care wood.

This includes wood processing facilities (e.g. carpentry, joinery, furniture and veneer mills) that consume sawn timber, semi-finished products as well as saw logs, and produce both intermediate Further Wood Processing:

and final products. The by-products are used for industrial and energy purposes. Other examples include the torrent and avalanche control, road authorities and the agriculture and forestry.

Energy Production: In this node wood assortments are combined which are used in the production of energy (CHP- facilities, woodchip-, pellet-, briquette- and firewood boilers).

## **SOURCES**

For the creation of this illustration data was used from various sources, such as the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), the cooperation platform Forest Wood Paper (FHP), the Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW), the Statistics Austria and own calculations by the Austrian Energy Agency and the Austrian Chamber of Agriculture.

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