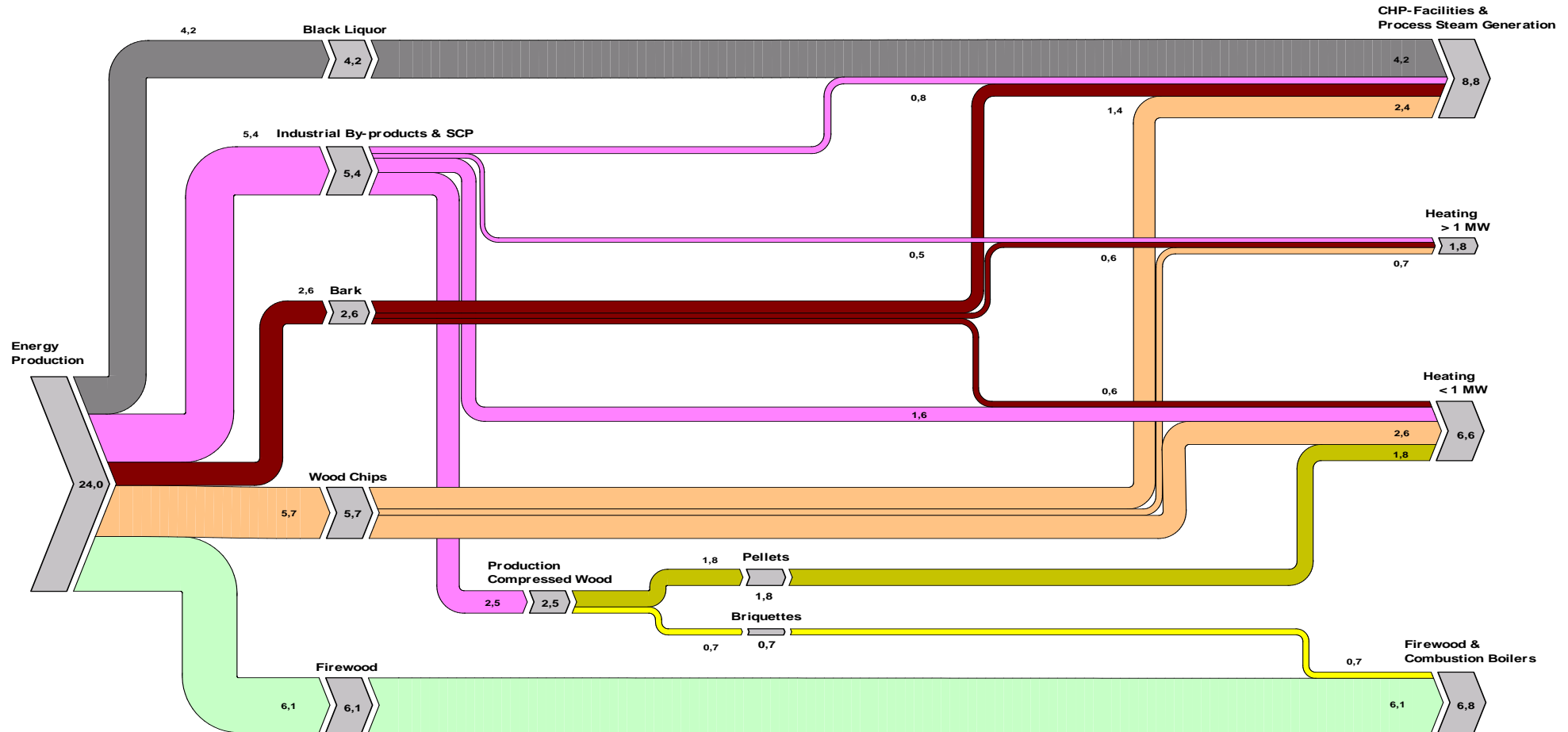




WOOD FLOWS in AUSTRIA

Energy Production



LEGEND (All values are given in million m³; values <0.1 million m³ are not shown; numerical values partially rounded)

- Black Liquor Briquettes Pellets Firewood incl. Bark
- Bark Wood Chips Industrial By-products & Sawmill Co-products (SCP)

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This illustration is based on the current state of knowledge and information, and has been compiled to the best of the authors' knowledge and experience. However, the authors accept no liability whatsoever for errors or omissions and reserve the right to incorporate latest findings.
 Compiled by DI Lorenz Strimtzner, DI Martin Höher, MSc., Austrian Energy Agency, DI Kasimir Nemestothy, Austrian Chamber of Agriculture.
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GENERAL REMARKS ON THE PRESENTATION OF THE “WOOD FLOWS in AUSTRIA – Energy Production“

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

SHORT DESCRIPTION

For reasons of representability the Woodflow exclusively portrays fuel wood assortments used within the domestic consumption – pellets and briquette volumes used for export and import purposes, are summarized in the main illustration within the assortment compressed wood.

This illustration of the “Woodflows in Austria – Energy Production” 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

Black Liquor:	Residual lye from the production of pulp can be used for producing energy.
Industrial By-products and Sawmill Co-products (SCP):	Shavings, wood chips, edgings, slabs, pellets, briquettes etc.
Bark:	The bark from sawmills and the timber industry is run as a separate stream opposed to firewood.
Wood Chips:	Wood chips are acquired from the forest and other sources and are used for energy purposes.
Firewood incl. Bark:	Designated by the TFR as timber used for the purpose of fuel wood and energy purposes in log wood boilers. The flow of fuel wood is displayed including bark.
Pellets:	Wood pellets made from sawmill by-products, which are essentially used in pellet boilers for the production of heat.
Briquettes:	Wood briquettes made from sawmill by-products and used for the production of energy.

Nodes

Energy Production:	Wood assortments from the main illustration are combined in this node for the purpose of energy production. The continuation in this illustration shows different ways of energy recovery from these wood assortments and from which facilities the energy is gained (CHP-facilities, woodchip-, pellet-, briquette-, and firewood boilers).
Production Compressed Wood:	This includes the production of pellets and briquettes from sawmill by-products and wood residues.
Firewood & Combustion Boilers:	This node summarizes the manually fed boilers and furnaces.
Heating < 1 MW or Heating > 1 MW:	This node summarizes automatically fed boilers and differentiates between fuel power capacities smaller than 1 MW and larger than 1 MW.
CHP Facilities & Process Steam Generation:	The quantities of wood and wood-like products that are mentioned here are those used in CHP facilities and in the production of heat and electricity.

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.

CONTACT

DI Lorenz Strimitzer

klimaaktiv energieholz, Austrian Energy Agency, Mariahilfer Straße 136, A-1150 Vienna
Tel +43 (1) 586 15 24 – 0, Fax +43 (1) 586 15 24 – 340

E-Mail: Lorenz.Strimitzer@energyagency.at; Internet: www.klimaaktiv.at/energieholz; www.energyagency.at

DI Kasimir P. Nemestothy

Austrian Chamber of Agriculture, Schauflergasse 6, A-1014 Vienna
Tel +43 (1) 53 441 8594, Fax +43 (1) 53 441 8529

E-Mail: k.nemestothy@lk-oe.at; Internet: www.lk-oe.at