**L I G N O V I S I O N E N**

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Band 2 / Issue 2

# Holz:

# Rohstoff – Werkstoff – Energiequelle der Zukunft

# Wood:

# Raw material – Material – Source of energie for the future

Holz ist der wichtigste nachhaltig verfügbare Massenrohstoff und das eröffnet ihm damit eine führende Rolle im Wettstreit der Werkstoffe. Durch die traditionelle Prägung des Holzes als Alltagswerkstoff werden die Zukunftsperspektiven des Holzes aber oft nicht erkannt. Der vorliegende Band 2 von LIGNOVISIONEN gibt das Fachsymposium „Holz – Rohstoff, Werkstoff, Energieträger der Zukunft" im Rahmen des Internationalen BOKU Kongresses 2001 „ Leben und Überleben – Strategien für die Zukunft" wieder.
Exemplarisch wird darin aufgezeigt, wie Holz zu einem der wichtigsten Werkstoffe für das Leben und Überleben der Menschheit wird.

Wood is the most important sustainable mass raw material available. As wood has always been a traditional material used in everyday life, we do not immediately realize its importance for the future. It was the target of the symposium „Wood – Raw Material and Source of Energy for the Future", which was organized within the International BOKU Congress „Life and Survival –Strategies for the Future", to point out the future importance of wood. The present issue 2 of LIGNOVISIONEN summarizes this symposium, where the potential of wood was demonstrated and selected innovative developments were discussed.

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# Die Ressource Holz in Europa - Verfügbarkeit – Handelsströme – Wertschöpfung

Peter Schwarzbauer

"Holz ist genial" lautet die neue Botschaft der proHolz Imagekampagne. Aussagen dieser Art sollen weit verbreitete Fehleinschätzungen über Holz relativieren und damit Barrieren für den Einsatz dieses Werkstoffes aufheben helfen. Im folgenden Beitrag wird ebenfalls versucht, Missverständnisse durch die Vorstellung einiger "harter Fakten" zur Forst- und Holzwirtschaft in Österreich bzw. in Europa zu korrigieren. Die Ressource Holz wird hinsichtlich ihrer Verfügbarkeit, der Auswirkungen der Nichtausschöpfung des naturalen Nutzungspotenzials und den damit zusammenhängenden Folgen für die Holzwirtschaft beleuchtet. Weiters werden internationale Handelsverflechtungen sowie die volkswirtschaftliche Bedeutung der Holzwirtschaft dargestellt.

# The Wood Resources in Europe – Availability – Trade Flows – Value Added

35% of the total EU-land base are forests, in Austria almost half of the country is covered by forests. Unlike in other world regions (e.g. tropical countries) forest area and growing stock have steadily been increasing over the last decades. The main reason for the increase in forest area is abandoned farmland, which has been afforested. The increase of growing stock is mainly caused by the past and current under-utilisation of the forests. In the EU-countries one third of the sustainably available wood supply remains unused, about 30% in Austria.

This situation causes two problems for the timber industry. On the one hand, industry cannot get enough wood from their respective countries and has to import roundwood, on the other hand, wood quality goes down. It may sound strange, but Austria is the 3rd largest importer of coniferous industrial roundwood worldwide. But also other countries with a strong timber industry, such as Finland and Sweden, are on the top of the list of roundwood importers. For economic reasons the timber companies had and have to expand (economies of scale) and have built up production capacities, which cannot be met anymore by domestic wood supply. In addition, a large share of forests in these countries is privately owned. These owners cannot be forced to harvest just to meet the demand of the industry. Much – if not all – of the European roundwood imports from other regions could be avoided, would the sustainably available wood resources be fully used.

Forecasts based on the data of the Austrian Forest Inventory show that the constant under-utilisation of forests leads to an increase in the average age of the trees; this in turn means more thick trees with less quality. This situation leads to an additional procurement problem for the timber industry, especially for the sawmill industry which – according to a technological change in production – has shifted its requirements from thick trees to small trees.

While the large "wood"-countries in Europe have a deficit in roundwood, they are among the biggest international players in wood-products exports (sawnwood, panels, paper & paperboard). Austria e.g. is ranking 5th in co-niferous sawnwood exports worldwide, after Canada, Finland, Sweden and Russia. Most of these exports go to neighbouring countries (like Italy) but further distant countries, like Japan, have emerged as important trade partners over the last years. One explanation for the latter is the sensitivity of Austrian entrepreneurs in dealing with other cultures and mentalities, another one is the significant decrease in transportation costs, especially in ocean-traffic.

Not the least because of the international discussion about tropical deforestation quite a substantial share of the population In Europe as a whole and also in Austria believes that forests even in Europe are endangered, that forest area declines and that the use of wood is a contribution to forest destruction. This attitude is in conflict with the fact that wood is the only widely available raw material which is renewable, can function as a carbon sink and is neutral regarding carbon emissions when used for energy. The image campaign "Proud of Wood" which started in Austria some years impressively demonstrates that the attitude of the population can be altered – even with small financial means. While in 1994 50% of the Austrian population believed that the forest area in Austria is declining, only 29% believed this in 2000.

From a macro-economic point of view the timber industry in Europe as a whole and in Austria in particular makes very important contributions. Many companies operate in regions suffering from lacking employment opportunities and thus are sometimes the biggest employers in these areas.

In addition, calculations from Statistics Austria show that the multiplier effects of some timber industry branches are even higher than those of some so-called "high-tech" branches. A multiplier factor of e.g. 2,3 in the branch "veneers and wood-based panels" means that to produce one unit (1 Mill. EURO) in veneers and wood-based-panels an total input of other goods valuing 2,3 Mill. EURO is required. The multiplier factor for telecommunication is only about 1,8.

The future of the timber industry in Europe will largely depend on how it will succeed in positioning wood as a renewable, environmentally friendly material in the heads of the people (including politicians). Another important factor is the development of "high-tech"-wood products. The development of the resource base will also play a fundamental role, namely whether the potentially sustainably available wood resource can be fully utilised. There is enough wood available in Europe, although much of it is standing in the forest and is not on the market.