

# Progress report: The eco<sup>2</sup>building



June 2008



*The eco<sup>2</sup>building keeps growing and growing. In Niklasdorf in Upper Styria, Europe's first eco<sup>2</sup>building is being raised for all the world to see: Its constructional elements and wall units largely consist of wood, a renewable resource; the carbon-neutral heating system is based on the combustion of wood chips; and direct access to railroad lines makes it possible for most of our goods to be delivered by rail. Once again, Eine Welt Handel AG proves to be a pioneer when it comes to sustainable management.*

## The new storage and administrative building keeps growing

Fair Trade pioneer runs a showcase project in energy efficiency

Eine Welt Handel AG is Europe's leading importer of fair-traded basketwork. The company was founded as a private company more than twenty years ago but has been a corporation for the last several years, something which is quite exceptional in Fair Trade. Thus, our clients, suppliers, partners and the public have the opportunity to hold a share in the business and actively participate as stock owners in Fair Trade as well as in the development of the company.

Right from its establishment, Eine Welt Handel AG has been committed to the principles of sustainability: Providing and preserving decent employment in developing countries, dealing in products of renewable resources, and shipment by water or rail whenever possible – such are the principles that characterize the daily work of Eine Welt Handel AG, such are the principles that show that ecological, economical and social aspects are indeed very compatible. A two-digit growth in sales

per annum made it necessary for us to increase the storage capacity of the Leoben headquarters in Upper Styria. A solution had to be found. A thorough site analysis made it clear that our original location, Niklasdorf, only a few kilometres from the current site in Leoben, would be the ideal spot for our new headquarters.



*Returning to Niklasdorf, the original headquarters of Eine Welt Handel AG.*

*Breaking ground during the Sustainability Weeks in 2007 in the presence of more than two hundred visitors.*



*In January 2008 demolition of the old building was begun.*

# A European showcase project gaining ground

## Sustainability - top criterion

For Marianne and Karl Pirsch, chief executives of Eine Welt Handel AG, it was clear from the beginning that the company would not go for a conventional type of storehouse. "Admittedly, a common reinforced concrete construction with a thin exterior wall would have been cheaper than the wood construction that we have eventually opted for, but that would not have been a sustainable solution. Wood is a renewable resource, and we will heat the building with wood chips in order to show that a company can be considerate of people and the environment and still be successful", says Karl Pirsch, founder of and driving force behind Eine Welt Handel AG.

## EWH goes HOLIWOOD

During the planning phase, the initial idea was to use solar energy to the maximum – by proper orientation of the building on the one hand, and by means of photovoltaic cells and solar panels on the other hand. After various advance talks with potential planners it became clear that the building project would be ideal for the European pilot scheme HOLIWOOD, which stands for the extensive utilization of heat-treated hardwood. HOLIWOOD is an international research project financed by the EU with funds from its sixth research program. Twenty partners from nine countries participate in HOLIWOOD, setting new standards in the utilization of wood. Without any doubt Eine Welt Handel AG would be ideally suited for the project.

## The first eco<sup>2</sup>building

The first eco<sup>2</sup>building is a showcase project within the HOLIWOOD framework. Its aim is to show that commercial and industrial buildings, too, can be constructed as passive buildings by means of pre-fabricated wooden compound units. "Compared to a conventional commercial building, heating energy could be reduced by up to 90%", said architect Dr. Helmut Poppe during the ground-breaking ceremony in Niklasdorf on October 5<sup>th</sup>, 2007: "Our aim here is to set a new standard with respect to sustainability and carbon dioxide emissions in the industrial sector. This building is Fair Trade for the environment. Compared to cars, industrial buildings get 3.3 kilometres per litre. This building will get 66!" The architecture office Poppe \* Prehal, based in Steyr, Upper Austria, specializes in wood constructions and contributes all its expertise in residential as well as industrial and school building to this project. Thanks to the use of modular architecture, it will be possible to extend the building at a later date.

## Applied research

PROFACTOR GmbH, based in Steyr-Gleink, coordinates the work of the companies that participate in HOLIWOOD. PROFACTOR itself is Austria's no. 1 in applied manufacturing research; it is thus ensured that the latest research findings flow into the building project, that all the companies involved are fully integrated in the proceedings, and that future ventures will benefit from the findings of this building project.

The entire building control system will be developed by the engineering office Ebök from Tübingen, Germany. Ebök, a pioneer in the field of low energy and passive energy solutions, has its headquarters in a former barrack building that was the first refurbished edifice worldwide to obtain the passive house standard certificate.

The timber units are fabricated by Obermayr, a company from Schwanenstadt with a long tradition, specialized in glued laminated timber and timber building units, and supplying a broad range of standard passive house elements. Obermayr has been awarded several wood building prizes for its timber constructions.

The Gafrenz company Mitteramskogler specializes in the thermal treatment of timber both for the interior and exterior. For higher resistance and durability, the innovative thermo wood flooring additionally undergoes Profactor's sol-gel treatment. A powder coating by TIGER makes the thermo wood cladding panels weather resistant. Mitteramskogler supplies the showcase project eco<sup>2</sup>building with prototypes of newly developed products, which is another example of how the latest research findings flow into the eco<sup>2</sup>building.



The rubble is broken down, sorted and, if possible, reused.

Building the foundations for the wooden support pillars.



The STRABAG at full steam.

# European partners on the job

## Carbon neutral heating

Revivo, a company from Traboch, Styria, will deliver the heating system: Solar energy, collected by solar panels, supplements heat provided by the wood chip fuelled furnace. In addition to heat, electricity will also be produced. Provision is made for power generation by means of photovoltaic cells, but this project remains to be realized at a later date.

## Regional added value

Eine Welt Handel AG puts its trust in skilled craftsmen from the region to construct the new headquarters and storehouse. All the preparations on the building site as well as the construction of the foundations and building shell were carried out by STRABAG with its headquarters in Graz and a branch office in Leoben. Mocharitsch, a Leoben company, has been commissioned to realize the plumbing work; the electrical installations will be fitted by Elektro Gruber from Timmersdorf. Thus, there is both a high amount of regional added value and the assurance that, upon completion, our partners will always be close at hand if necessary.

## Optimized mobility

With the new building, Eine Welt Handel AG improves the environmental balance of its freight transportation. In future, the delivery of goods will mainly be carried out by train. As for our field representatives: They already drive eco-friendly natural gas vehicles.

## Project financing

As regards the financing, we managed to win over the Steiermärkische Bank- und Sparkassen AG as a reliable partner.

Since the new storage and administrative building of Eine Welt Handel AG presents an innovative project which could potentially give direction to the building activity in Austria, its realization is subsidized both by the Republic of Austria and the European Union under various programs. The European Union promotes the overall project by way of funds from its sixth research program for innovative projects.

[www.holiwood.org](http://www.holiwood.org)



The building meets the standards of the klima:aktiv house program of the Federal Ministry of Agriculture, Forestry, Environment and Water Management – a program which shows that the criteria of sustainability can be met both in residential and in commercial construction and that, by building cleverly, the impact on the climate can be efficiently reduced.

[www.klimaaktivhaus.at](http://www.klimaaktivhaus.at)



The project is granted additional support via the programs Energy of the Future and House of the Future under the aegis of the Ministry for Transport, Innovation and Technology in collaboration with the Austrian Research Promotion Agency (FFG).

[www.hausderzukunft.at](http://www.hausderzukunft.at)  
[www.energiesderzukunft.at](http://www.energiesderzukunft.at)



## Information

You are welcome to follow the construction progress on the Eine Welt Handel AG website and inform yourself on the Fair Trade product range. Moreover, get to know our project partners from all over the world and find out where there is a Fair Trade retailer in your area. Become a shareholder and promote the development of the company as well as of Fair Trade!

[www.eine-welt-handel.com](http://www.eine-welt-handel.com)

### Contact:

Marianne Pirsch  
EINE WELT HANDEL AG  
Turmgasse 52 | A-8700 Leoben  
T: +43 (3842) 83 468  
F: +43 (3842) 83 468 - 66  
E: [office@eine-welt-handel.at](mailto:office@eine-welt-handel.at)  
W: [www.eine-welt-handel.com](http://www.eine-welt-handel.com)

Karl Pirsch on a visit to the Obermayr headquarters.



PROFACTOR'S engineer Wiesbauer explains the advantages of thermally treated wood.

The wooden construction units are pre-fabricated by Obermayr in Schwanenstadt.



# EUROPE'S FIRST ECO<sup>2</sup>BUILDING

# The partners of Eine Welt Handel AG



PROFACOR GmbH  
Im Stadgut A4, A-4407 Steyr-Gleink  
[www.profactor.at](http://www.profactor.at)



Mitteramskogler GmbH  
Markt 113, A-3334 Gaflenz  
[www.mirako.at](http://www.mirako.at)



IBS - Institut für Brandschutztechnik  
& Sicherheitsforschung GmbH  
Petzoldstraße 45, A-4017 Linz  
[www.ibs-austria.at](http://www.ibs-austria.at)



POPPE\*PREHAL Architekten  
Direktionsstraße 15, A-4400 Steyr  
[www.popperehal.at](http://www.popperehal.at)



STRABAG AG  
Maggstraße 40, 8042 Graz  
[www.strabag.at](http://www.strabag.at)



Steiermärkische Sparkasse  
Sparkassenplatz 4, 8010 Graz  
[www.steiermaerkische.at](http://www.steiermaerkische.at)



Obermayr Holzkonstruktionen GesmbH  
Johann-Pabst-Straße 20  
A-4690 Schwanenstadt  
[www.obermayr.at](http://www.obermayr.at)



Mocharitsch - Installateur-Fliesenleger  
Josef-Heißl-Straße 5, A-8700 Leoben  
[www.mocharitsch.at](http://www.mocharitsch.at)



revivo GmbH  
Madstein 9, A-8772 Traboch  
[www.revivogroup.com](http://www.revivogroup.com)



Ingenieurbüro ebök  
Schellingstraße 4/2, D-72072 Tübingen  
[www.eboek.de](http://www.eboek.de)



Elektro Gruber GmbH  
Bundesstraße 7, A-8772 Timmersdorf  
[www.elektro-gruber.com](http://www.elektro-gruber.com)



UNILUX AG  
Handelsvertretung Österreich West  
Maisgasse 3, A-4063 Hörsching



KONE Aktiengesellschaft  
Raiffeisenstraße 46, A-8010 Graz  
[www.kone.com](http://www.kone.com)



Since late April 2008 the wood units have been assembled at the building site in Niklasdorf.

Owing to the use of pre-fabricated units, the construction work makes good progress.



Completion of the building is scheduled for fall or winter 2008.