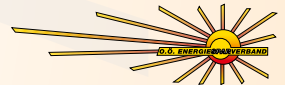




Living and working in a

passive building

Examples from Upper Austria –
leading in passive buildings





Active living – passive buildings

Upper Austria, the number 1 region for passive buildings

In Upper Austria, hundreds of passive buildings were constructed in the past years, including homes, public buildings, office buildings, services and industry buildings, supermarkets and even churches! The activities of individuals, companies, public bodies and politicians, of the O.Oe. Energiesparverband and the Oekoenergie-Cluster (the network for green energy businesses in Upper Austria) have resulted in innovative, highly efficient and comfortable buildings around the region. The Upper Austrian boom for passive buildings was boosted by the "Wohnbauförderung" (sustainable housing programme), the energy technology programme (ETP) and the energy award of Upper Austria "Energie-Star". Leading planners of passive buildings and suppliers of components are partner of the "Oekoenergie-Cluster" network. They can be found at: www.oec.at

Buildings in passive house standard

Passive houses are buildings where a comfortable indoor temperature is maintained by the "passive" use of insulation and heat output of appliances and occupants – therefore the name "passive building". Passive buildings need only 1/5 of the space heating compared to conventionally built new houses. Usually, a small scale heating is sufficient to cover the remaining heat demand. Advantages of passive buildings are a constantly good room air quality in combination with energy savings and lower energy costs.

Common characteristics:

- very high insulation standards
- prevention of thermal bridges
- high level of airtightness
- orientation to the south, solar shading
- high-efficient windows
- mechanical ventilation with heat recovery
- objective: end energy demand for heating, hot water and electric appliances < 42 kWh/m² per year



Austria's first music school in passive building standard

Contact:

Franz Schillhuber (mayor), Municipality of Wolfern

OEC partners were involved in the project.

Music school Wolfern

Year of construction: 2004

Building owner: Municipality of Wolfern

Location: Wolfern

Winner of the "Energie-Star 2005"



First exhibition centre in passive building standard

Contact:

Robert Schneider, Messe Wels

OEC partners were involved in the project.

Exhibition centre Wels

Year of construction: 2007

Building owner: Messe Wels

Architect: PAUAT Architekten

Location: Wels



Renovated apartment building Linz

A renovation to passive building standard, with a solar façade

Contact:

Alfred Willensdorfer, GIWOG Leonding
OEC partners were involved in the project.

Year of constr./retrofitting: 1957/2005

Property developer: GIWOG

Architect: ARCH+MORE ZT

Location: Linz

Winner of the "Energie-Star 2006"



Kindergarten Lengau

Passive house kindergarten in Upper Austria

Contact:

Erich Rippl (mayor), municipality of Lengau
OEC partners were involved in the project.

Year of construction: 2005

Building owner: Municipality of Lengau

Location: Lengau

Winner of the "Energie-Star 2006"



Commercial building Steyr

First European commercial building in passive house standard

Contact:

Christian Stadler, Stadler Energie-Systeme – Schloßgangl, Steyr

OEK partners were involved in the project.

Year of construction: 2002

Building owner: Stadler Energie-Systeme – Schloßgangl

Location: Steyr

ETP R & D project



Church Wels

First passive house church St. Francis, timber construction

Contact:

Samy Schrittwieser (parish assistant), pastoral centre St. Franziskus, Wels

OEK partners were involved in the project.

Year of construction: 2004

Building owner: Roman Catholic Parish Wels – St. Franziskus

Location: Wels

ETP R & D project



Austria's first police station in passive house standard

Contact:

Ulrich Gutenthaler, Ing. Singer Bau, Gutau

Police station Pregarten

Year of construction: 2005/2006

Building owner: Federal Ministry of the Interior

Location: Pregarten

Planning/construction: Ing. Singer Bau, Gutau

Winner of the "Energie-Star 2007"



Office building in passive house standard

Contact:

Poppe*Prehal Architekten, Steyr

Office building Steyr

Year of construction: 2005

Building owner: Poppe*Prehal

Location: Steyr

OEC partner



First retrofitting of a school to passive house standard

Contact:

Karl Staudinger (mayor), Schwanenstadt
OEC partners were involved in the project.

Retrofitted school Schwanenstadt

Year of construction: 2005/2007

Building owner: City of Schwanenstadt

Architect: PAUAT Architekten

Location: Schwanenstadt



Passive home in lightweight construction

Contact:

Willibald and Edith Koller

Home Koller Aschach/Steyr

Year of construction: 2006

Building owner: Willibald and Edith Koller

Location: Aschach/Steyr



First supermarket in passive house standard in Europe

Contact:

Pfeiffer Großhandels GmbH, Traun

OEC partners were involved in the project.

Supermarket

Pfeiffer, Kirchberg/Thening

Year of construction: 2003

Building owner: Pfeiffer

Architect: Poppe*Prehal

Location: Kirchberg/Thening



Small passive house with a complete apartment on a surface area of 35 m²

Contact:

Hertl.Architekten, Steyr

Garden cabin

Steyr

Year of construction: 2004

Building owner: Alfred Hertl

Location: Steyr



High efficiency insulation system,
solar façade

Contact:

Alfred Willensdorfer, GIWOG

OEC partners were involved in the project.

Apartment building solarCity, Linz

Year of construction: 2003

Property developer: GIWOG

Location: Linz



Supermarket for organic products ("Biohof Achleitner"), constructed of wood, straw and clay

Contact:

Biohof Achleitner, Eferding

OEC partners were involved in the project.

Supermarket Eferding

Year of construction: 2005

Building owner: Achleitner

Location: Eferding

ETP R & D project



The world's smallest passive building - a snack bar!

Contact:

Johann Weidinger, Weidinger Energiesysteme, Seewalchen

Snack bar Seewalchen/Attersee

Year of construction: 2003

Building owner: Johann Weidinger

Location: Seewalchen/Attersee

Partner of the OEC



Rotunda in timber construction as a passive building

Contact:

Franz Xaver Kumpfmüller (director), Stadl-Paura

OEC partners were involved in the project.

Office building MIVA Christophorus House, Stadl-Paura

Year of construction: 2002

Building owner: BBM (Affiliate of MIVA, purchase and logistics)

Location: Stadl-Paura

ETP R & D project



Using the waste heat of the restaurant as an “energy source”

Contact:

Golfclub St. Oswald

OEC partners were involved in the project.

Golf clubhouse St. Oswald

Year of construction: 2003

Building owner: Golf und Tourismusförderung St. Oswald

Location: St. Oswald bei Freistadt



Passive home, using ecological building materials

Contact:

Manfred and Magdalena Rußmann

OEC partners were involved in the project.

Home Rußmann Molln

Year of construction: 2003

Building owner: M. and M. Rußmann

Location: Molln

Winner of the “Energie-Star 2007”



Passive home in massive construction

Contact:

Rainer and Claudia Freyhammer

Home Freyhammer Steyr

Year of construction: 2006

Building owner: Rainer and Claudia Freyhammer

Location: Steyr



The "Energy cube" – the complete building automation on show for visitors

Contact:

Alois Neudorfer, Rutzenmoos

OEC partners were involved in the project.

Installer Neudorfer, Rutzenmoos at Regau

Year of construction: 2005

Building owner Neudorfer

Location: Rutzenmoos at Regau

ETP R & D project



Production hall Obermayr

Timber constructions

Large production hall (3,500 m²) in passive house standard

Contact:

Christian Obermayr, Schwanenstadt

Year of construction: 2005

Building owner: Obermayr Holzkonstruktionen

Location: Schwanenstadt

Partner of the OEC , ETP R & D project



Home Eder

Vöcklabruck

Passive house partly in lightweight, partly in massive construction

Contact:

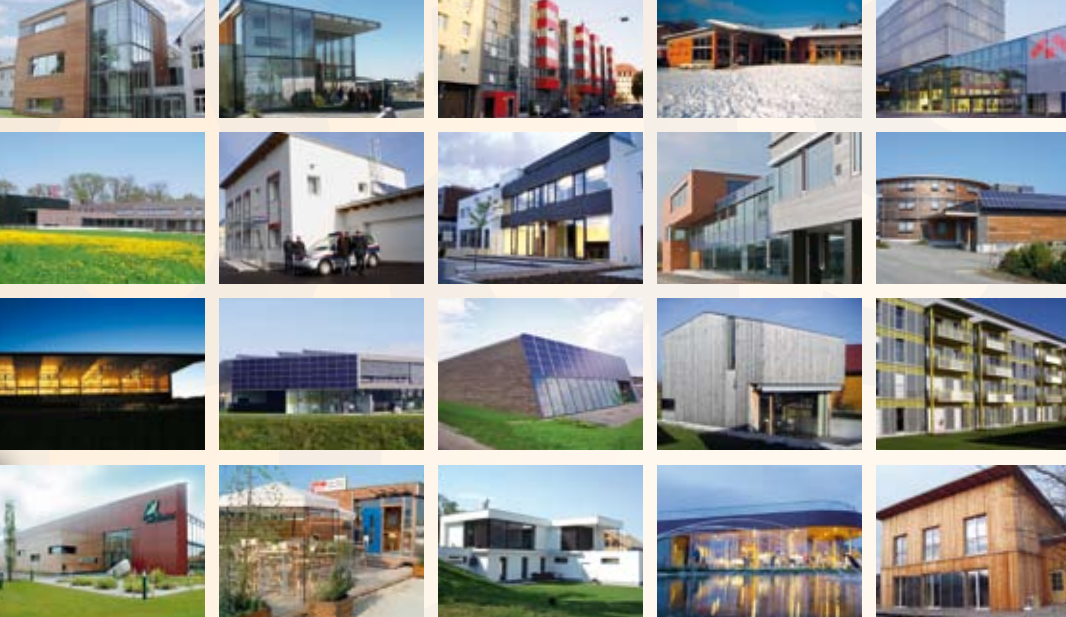
Friedrich and Edith Eder

OEC partners were involved in the project.

Year of construction: 2006

Building owner: Friedrich and Edith Eder

Location: Vöcklabruck



The O.Oe. Energiesparverband is the energy agency of Upper Austria, founded by the regional government with the aim of promoting energy efficiency, renewable energy sources and innovative energy technologies. It is the central institution for energy information in Upper Austria and one of Europe's largest energy advice and information providers. The O.Oe. Energiesparverband is also responsible for the management of the OEC, the network of 150 green energy companies in Upper Austria.

Target Groups and Partners:

- Private Households
- Companies
- Public bodies on local, regional, national and European levels

Services:

- Energy information and public awareness
- Energy advice for households, public bodies and businesses
- Sustainable building programmes
- Training
- Management of the green energy business network "OEC"
- Regional energy R & D programme
- Energy Performance Contracting Programme
- Local energy strategies
- European projects, international cooperation

O.Oe. Energiesparverband

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