

# City of Nuremberg



The City of Nuremberg, which became the first German GreenBuilding Partner in March 2006, received the partner status for the refurbishment of the 19th century administration and cantina building of the Nuremberg abattoir. In the conversion of the 3-storey building to a nursery school with an information centre, the energetic standard of the building in neo-renaissance style has been enhanced significantly.

A reduction of the total primary energy demand by more than 80 % has been achieved due to an optimised building envelope, a very efficient lighting system and the installation of a highly efficient condensing boiler.

The building's energy demand is 32 % below the German building regulations and even 5 % below the requirements for comparable new buildings. The thermographic analysis, which was performed after the refurbishment measures were completed, proves the excellent thermal standard of the building.



## Building data

### Building type

Office Building (Modernisation)

### Size

1.862 m<sup>2</sup>



Nursery School Philipp-Körber-Weg 2 in Nuremberg



### Energy savings

- More than 80 % primary energy savings compared to before the renovation
- Heating energy demand reduced by 75 %
- CO<sub>2</sub> savings: 80.000 kg CO<sub>2</sub> / a

### Measures performed

- Installation of an efficient gas condensing boiler for heating and warm water supply (80 kW, 350 litre storage tank)
- Floor heating in ground floor and first floor with single room regulation, steel panel radiators in the top floor
- Installation of energy saving fluorescent tubes with electronic ballasts
- Installation of wood frame windows and doors with enhanced thermal protection (U 1,5 – 1,6)
- Interior insulation of all outer walls (U 0,5 - 0,7)
- Insulation of the cellar ceiling (U 0,25)
- Insulation of the outer walls (U 0,25 – 0,7)
- Insulation of the roof (U 0,25)