

Most sustainable office in the world

July 1 2013, by Corinna Barnsted

In Munich, a newly erected office building, called the <u>NuOffice</u>, has been awarded an internationally recognised green design certification in platinum, called the Leadership in Energy and Environmental Design (LEED) certificate.

Much effort has been put into its planning and construction to reach this high-level of sustainability, which makes it the most sustainable newly erected office building worldwide, according to LEEDS standards.

The ambitious project has been supported by the European funded research project <u>DIRECTION</u>. Thick insulated exterior walls and triple glazed windows provide a good <u>thermal insulation</u>. Scientists from the Fraunhofer Institute for Building Physics (IBP) in Germany have been involved, too. Their aim was to optimise <u>energy reduction</u> as well as to adopt <u>renewable energy resources</u>. To do so, they used radiant heating and cooling systems, switchable glazing and innovative insulating material.

"At the end of the year we expect a primary energy consumption of about 30 kilowatt-hours per square meter and year," says Michael Krause, group manager Systems Engineering at the department for Energy Systems at IBP. "Conventional new office buildings which don't have any ambitions concerning energy savings range between 100 and 150 kilowatt-hours per square meter and year." Compared to older office buildings he expects an energy saving of up to 90%.

The tenants appreciate the low energy consumption of the building;



especially, as local energy costs have been rising by more than 50% in the past ten years.

Provided by Youris.com

Citation: Most sustainable office in the world (2013, July 1) retrieved 18 April 2024 from https://phys.org/news/2013-07-sustainable-office-world.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.