



Panattoni Park Cheb South (Autodoc Hall) – The Greenest Industrial Building in the World

CAN AN INDUSTRIAL BUILDING BE CONSTRUCTED IN THE CZECH REPUBLIC THAT SURPASSES SUSTAINABLE CONSTRUCTION ANYWHERE ELSE IN THE WORLD? THE ANSWER IS YES. THE GOAL WAS NOT ONLY TO BUILD AN ENVIRONMENTALLY FRIENDLY INDUSTRIAL HALL BUT ALSO TO PROVE THAT, THROUGH COLLABORATION BETWEEN THE DEVELOPER, INVESTOR, GENERAL CONTRACTOR, AND TENANT, IT IS POSSIBLE IN THE CZECH REPUBLIC TO CREATE AN INDUSTRIAL PROPERTY THAT OUTPERFORMS PROJECTS WORLDWIDE IN ALL MEASURABLE SUSTAINABILITY PARAMETERS.

The modern Autodoc industrial building in **Panattoni Park Cheb South** addresses key challenges related to sustainability and environmental protection right from the project planning phase. With sustainable elements integrated into every aspect of its design, the building has become a **model for future industrial projects worldwide**. This unique hall has become **the greenest industrial building in the world**, earning an **Outstanding** rating and a record score of **94.2%** under the prestigious BREEAM New Construction certification.

The hall covers a total area of **over 40,000 square meters**, with most of the space leased by the German online car parts retailer **Autodoc**. The industrial park was built on a brownfield site in the area of the former Cheb machinery factory. Two buildings within the park—Autodoc and Kaufland eCommerce Fulfillment—received the Outstanding rating. The hall, used by the company as a distribution center, is literally filled with sustainable features. Strict measures were applied even during construction. More than 85% of construction waste from the original brownfield buildings was diverted from landfill. Materials and construction components were selected with regard to their environmental impact over their entire life cycle. Priority was given to materials from ecological sources. More than 14% of installed materials hold ISO 14001, BES, or FSC certifications. Many materials also have environmental product declarations. Finally, a Life Cycle Assessment (LCA) study was conducted.

The **landscaping** was carefully selected, and the site is planted with **native species** that require low maintenance and minimal water consumption. A Suitably Qualified Ecologist study was performed. This greenery not only aesthetically enriches the environment but also provides habitat for various species of birds, insects, and small vertebrates.

while reducing surrounding temperatures. Additionally, special features such as insect hotels, lizard habitats, and squirrel nesting boxes were created on the site to support biodiversity.

For building employees, **outdoor fitness areas**, a **cafeteria**, **relaxation spaces**, and **outdoor seating** are available. Transportation to the site is provided by a **regular bus line** aligned with employees' work shifts. For those who cycle to work, **outdoor bike racks** are provided under a shelter equipped with artificial lighting. Employees can also take advantage of car sharing. Charging stations for electric vehicles have also been installed.

The Autodoc building is exceptional in its energy management. A **rainwater collection system** was installed to reduce potable water consumption. Thanks to water-saving sanitary fixtures and a rainwater flushing system, potable water consumption was reduced by 85%. The total primary energy consumption was reduced by 59.2% compared to the reference state, resulting in a 68.6% decrease in CO₂ emissions produced by the building. This saves approximately 2,474 tons of CO₂ emissions annually.

All interior and exterior lighting consists of highly efficient LED fixtures. Optimal natural light is ensured by large, operable windows fitted with blinds. The roof is prepared for the installation of a photovoltaic power plant.

All energy use in the building is precisely measured on a secondary basis, providing not only real-time monitoring of consumption and potential equipment failures but also allowing the tenant to pay only for the actual energy consumed. Detailed measurement provides an accurate overview.

of the most energy-intensive areas or technologies and a tool for optimization.

As part of the energy design, Dynamic Energy System Simulation, Low and Zero Carbon Technologies, and Passive Design studies and analyses were conducted.

EXAMPLES OF GOOD PRACTICE

This unique hall has become the greenest industrial building in the world. It received an **"Outstanding"** rating and a record score of **94.2%** according to the prestigious **BREEAM 2016 New Construction certification**. The Autodoc building was awarded the **Sustainability Star 2024**.



85% CONSTRUCTION WASTE WAS DIVERTED FROM LANDFILL

85% POTABLE WATER CONSUMPTION WAS REDUCED BY THIS AMOUNT

59.2% PRIMARY ENERGY CONSUMPTION WAS REDUCED BY THIS AMOUNT

68.6% CO₂ EMISSION LEVELS WERE REDUCED BY THIS AMOUNT