



Photo:Jan Bitter

Allee der Kosmonauten

Berlin, Germany

Spacious green areas surround the largest new building in Berlin's school construction initiative. And this building is not only impressive to look at, but also literally sustainable and has already been awarded the BNB Silver Standard. This rating system, developed by the German Ministry of Construction, is in many ways equivalent to the Austrian klimaaktiv initiative.

In addition to district heating, the school building also uses air-to-water heat pumps for its heating supply. A central exhaust air system with decentralised supply air elements in the façade ensures high indoor air quality in the class-rooms. Their waste heat is recovered by means of an exhaust air heat pump and used for central hot water production. External sun protection prevents overheating in summer. Quality assurance of the comprehensive sustainability criteria was carried out with the aid of calculations and simulations during construction. Comprehensive product and chemical management complements the future-proof design of the school campus.

PPAG Architects won an EU-wide competition with their design and, together with a team consisting mainly of Austrian experts and specialist planners, also implemented it, setting standards for sustainable new school construction.





Companies involved

Architecture

PPAG Architects

Client

HOWOGE Wohnbaugesellschaft Ltd.

General planning

ARGE FC|P|PAG

General planning coordination, structural engineering, building physics, costs

FCP Ingenieure

Landscape architecture

EGKK

Sports facility planning

RAUM PLUS

Electrical planning

Kubik Project Ges.m.b.H.

HLS-TGA planning

Bauklimatik GmbH

Facts

School building

Completed 2024

Area: 31,783 m²

Energy and environmental aspects

- District heating combined with air-water heat pump
- Hot water preparation via exhaust air heat pump
- Comprehensive product and chemical management
- Generously landscaped outdoor areas
- Accessibility with guidance system inside and outside
- Spacious sports facilities

Characteristics

CO₂ emissions: 18.69 kg/m²a

Primary energy requirement: 52.57 kWh/m²a

Blower door: 0.72 1/h

Daylight quotient: > 2 %

Building labels and awards

BNB Silver Standard

