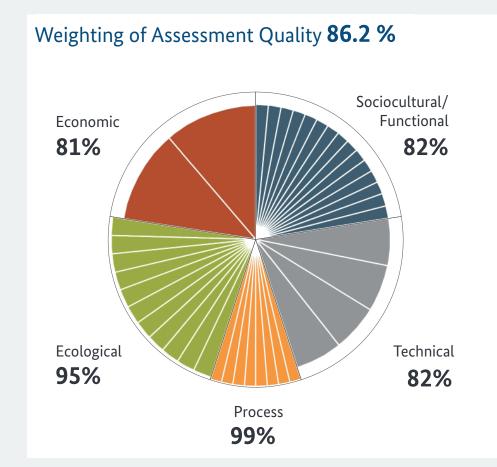
# Ministry of Education and Research

## New Construction | Berlin | Grade 1.3 | GOLD



Office Building (New Construction)	Gold according to BNB_BN 2011
Client	Institute for Federal Real Estate
Architect / Planner	Christian Pelzeter, Heinle, Wischer und Partner
Auditor	Thomas Thümmler, WSGreenTechnologies Gmb
Completion	August 2014
Gross Floor Area (GFA)	58,273 m <sup>2</sup>
Gross Construction Costs	€ 114.5 million
Construction Costs (KG 300, 400)	1,151 €/m² <sub>GFA</sub> (net)
Operation Costs	772 €/m² <sub>GFA</sub> (net)
Life Cycle Costs	1,922 €/m² <sub>GFA</sub> (net)
Primary Energy Demand (LCA)	total: 101 kWh/(m² <sub>NFAa</sub> a)
Global Warming Potential (LCA)	21.86 kg CO <sub>2</sub> eqv./(m <sup>2</sup> NFAa a)

The new building of the Federal Ministry of Education and Research (BMBF) is the first civilian building project implemented by the Federal Government in the context of a Public Private Partnership (PPP), and is also the first project of this size and type awarded with a BNB Gold certificate.

#### **Ecological and Energetic Quality**

The reduction of the energy demand by 71.6 % according to EnEV 2009 shows the success of the energy concept as an optimally matched combination of building physics measures on the one hand and conventional and alternative technology systems on the other hand. Particular systems for example are an activated ceiling with integrated ventilation, the realized combined heat and power and cooling production with CHP and fuel cell as well as the façade-integrated photovoltaic.

#### **Economic Quality**

Despite high energy quality and high comfort, the project could be realized economically and on schedule.

#### **User-relevant Quality**

Due to the selection of low-emission construction products and the use of mechanical ventilation the BMBF fulfils the highest requirements for BNB in the area of pollution control and indoor air hygiene.

The accessibility of public spaces and areas used as workplaces has been realized in a maximum. Art on building was realized according to the "Guideline Art on Building" including a corresponding competition with a total budget of 500,000 €. A total of 282 bicycle stands were established. Higher noise control requirements have been implemented against both external noise and noise emitted from other work areas.

### **Process Quality**

Throughout the planning and construction process, the requirements of the BNB were optimally integrated into the respective coordination, decision-making and monitoring processes as well as implemented with regard to the documentation. This is shown not only by the structural result but also by the excellent evaluation of the process quality of 99 % fulfilment.









