## Assessment System BNB

## System Variants and Module Applications

The dimensions, principles and qualities of sustainable building described in the Assessment System for Sustainable Building (BNB) equally apply to all types of buildings.

However, different types of buildings have many typespecific characteristics. This may call for a different focus, other individual aspects or a different weighting factor in the sustainability assessment.

## **System Variants for Different Building Types**

System variants consider the special requirements of different building categories.

The following variants are available:

- Office and Administration Building
- Educational Building
- Laboratory
- Outdoor Facility

Office and Administration Buildings account for the largest part of federal buildings. Therefore this type was starting point for the basic development of the BNB.

Hence the overall basis for all variants derives from the "New Construction" BNB module with the system variant "Office and Administration Buildings".

Buildings for science, research and development activities are a key building task. The variant for Laboratory Buildings provides specially adapted criteria profiles for instance with the so-called virtual laboratory building for the ecobalance and life cycle costs assessment and the consideration of the quality of the technical building systems.

Education is an important part of our society. Educational Buildings are part of the public stage and can be a link between different social groups. They also must adapt continuously to changes in society. The BNB variant for Educational Buildings must hence offer sufficient flexibility.

In addition sustainability requirements must be addressed regarding outdoor facilities on federal properties.

## **Modules and their Application**

A building as well as its use and operation processes can undergo major changes during its life cycle. For this purpose the BNB has a modular structure. The BNB modules reflect the cases planning and erecting new buildings, using and operating buildings, as well as planning and performing refurbishment and conversion projects.

The following modules are available:

- New Construction
- Use and Operation
- Complete Refurbishment

With a view to sustainable development, the same requirements as in new buildings are to be applied in principle to refurbishment projects.

However, it is necessary to meet cope with the specific features of the refurbishment project, while avoiding disproportionate expenses compared to its later use benefit. The utilisation and operation of a building usually represents the longest phase in its life cycle and usually also generates the most intensive economic and ecological effects.

















