



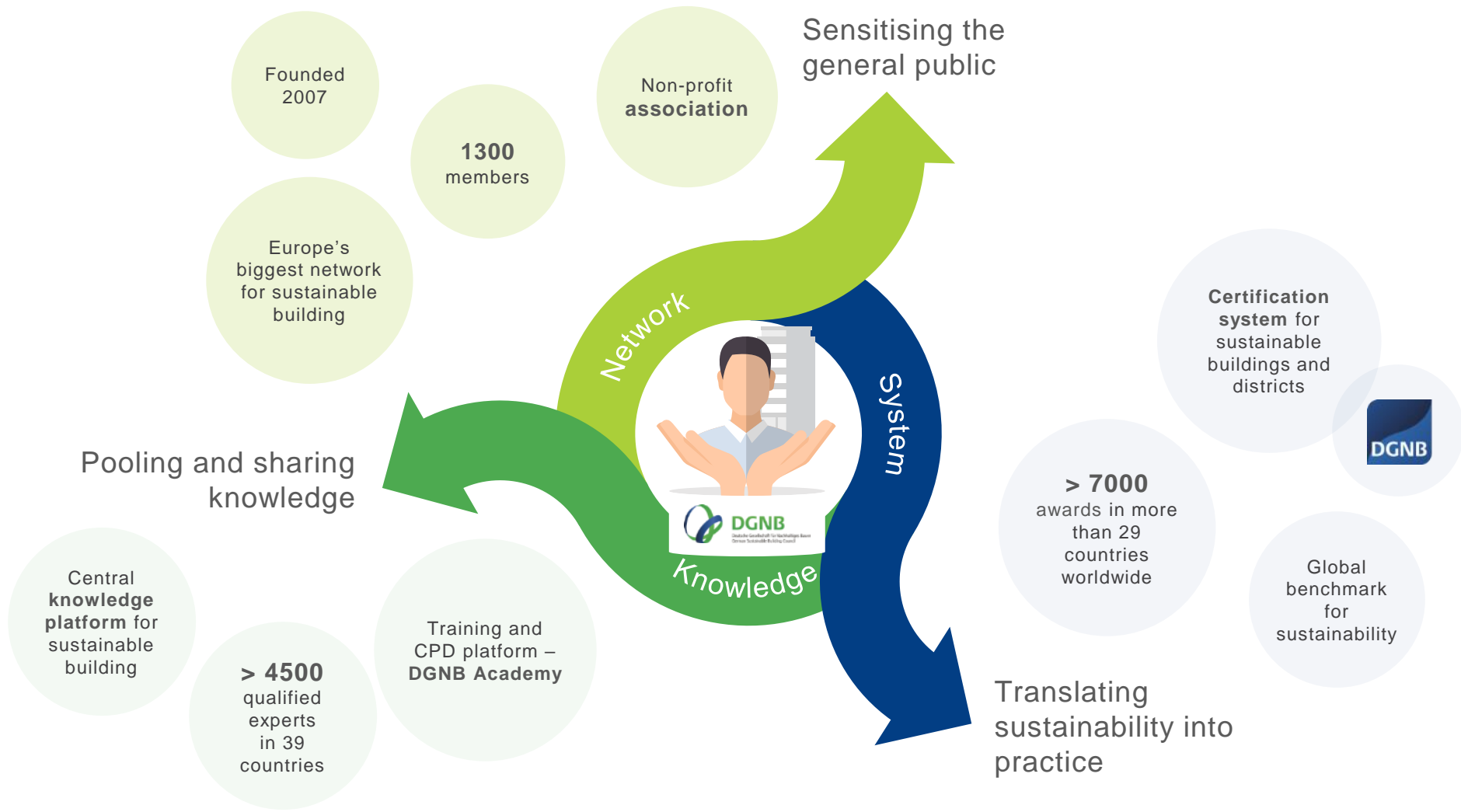
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Käthe-Kollwitz-Schule, Greifswald, © 2015 Adam Sevens

Sustainable Buildings & Cities

Connective Cities virtual Dialogue, 19/5/2021





A global network

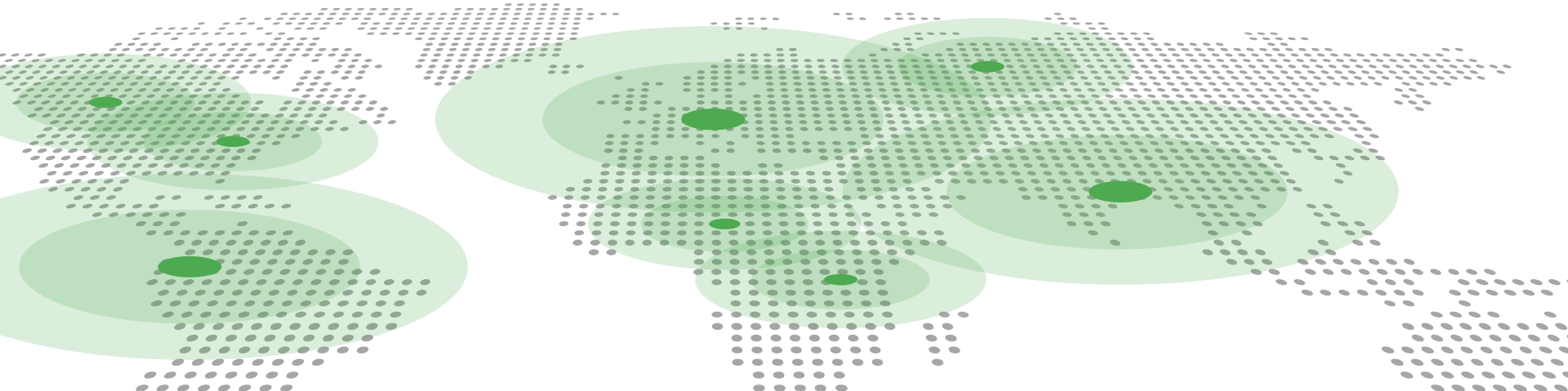
Strong partners on a common journey

Members from
30 countries

DGNB System Partner in
Denmark, Austria,
Switzerland and Spain

Collaboration with ~ 70
universities and colleges of
higher education

Network with partners in
more than 40 countries



**Build energy-efficiently =
take local climate into account**

Daily energy solar radiation

- **Consideration of topography, local geology and micro climate**
- **Use/new interpretation of local architectural traditions**



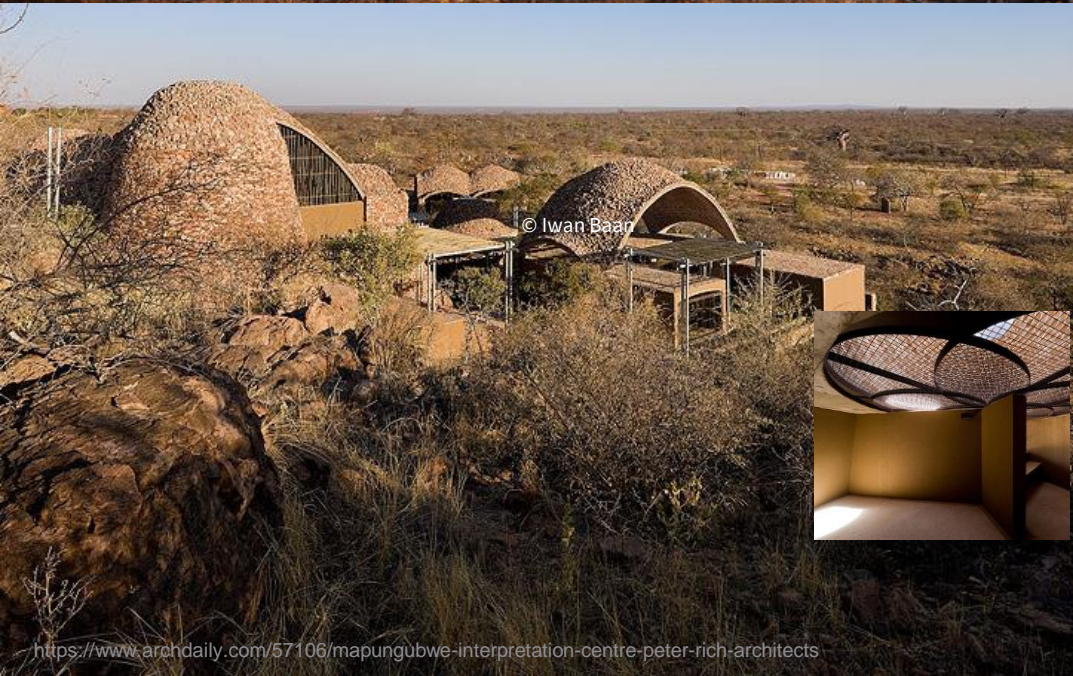
Non-vernacular building:
global cities compared

Traditional Toraja House, South Sulawesi, Indonesia



Interpretation Centre, Mapungubwe, South Africa

Peter Rich Architects



**Climate-neutral building is more than
just energy efficient**

Special Award for „Climate Positiv“ Buildings

www.dgnb.de/en/topics/climatepositive/

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Climate Positive

DGNB Definition: Climate positive

Thus, there is a simple definition for a building with carbon neutral operation:

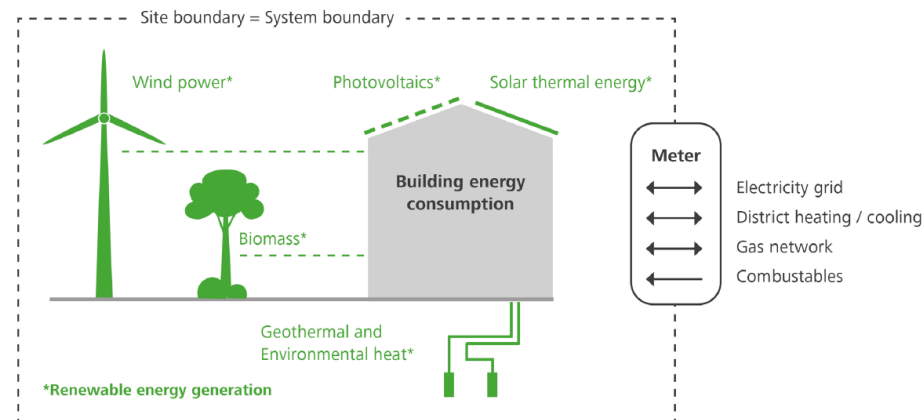
The annual balance of emissions emitted by building operation and emissions avoided by generation of CO₂-free energy exported off site is zero or less than zero.



FUNDAMENTAL ELEMENTS OF THE DGNB DEFINITION FOR THE CARBON NEUTRALITY OF BUILDINGS:

- Goal is a CO₂ balance of 0 or <0 for all building types
- User electricity (so-called plug loads) must also be taken into account
- All energy sources are considered with the CO₂ emissions actually caused
- No compensation measures to offset CO₂ emissions

Illustration of the system boundaries for building operation



Aktiv-Stadthaus Frankfurt



Aktiv-Stadthaus Frankfurt

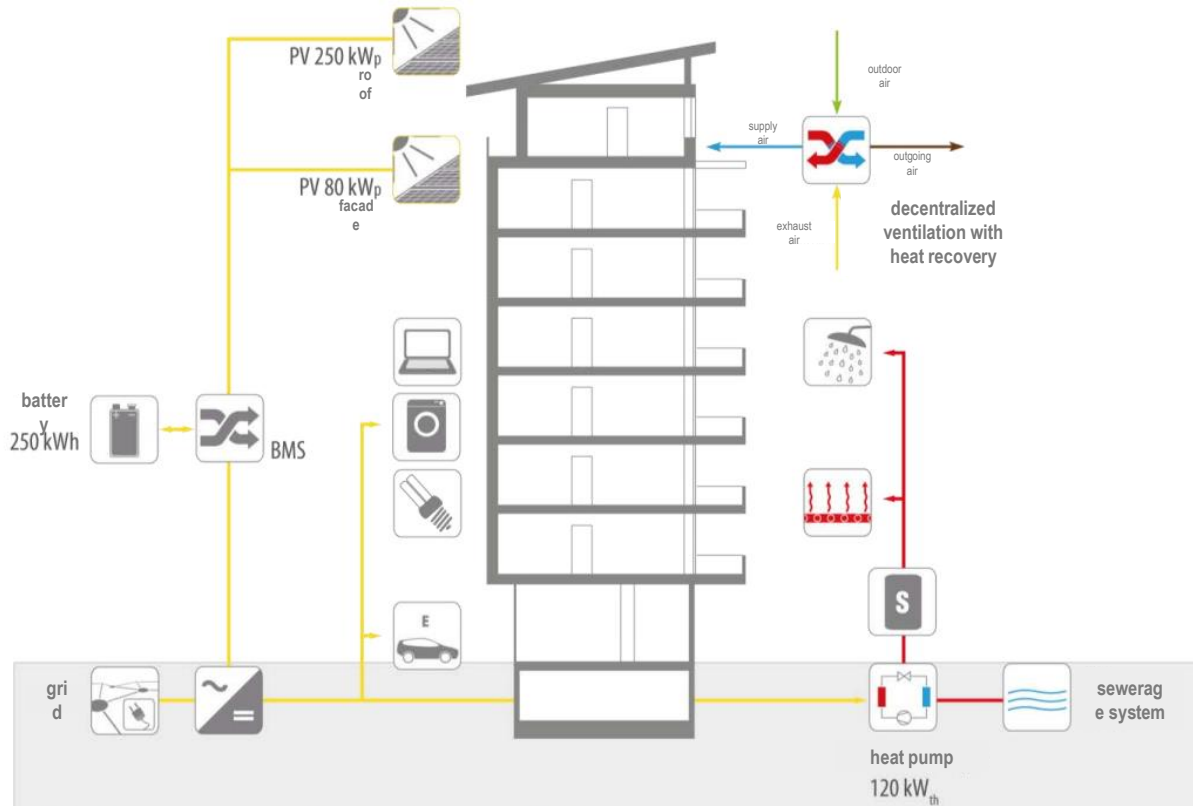
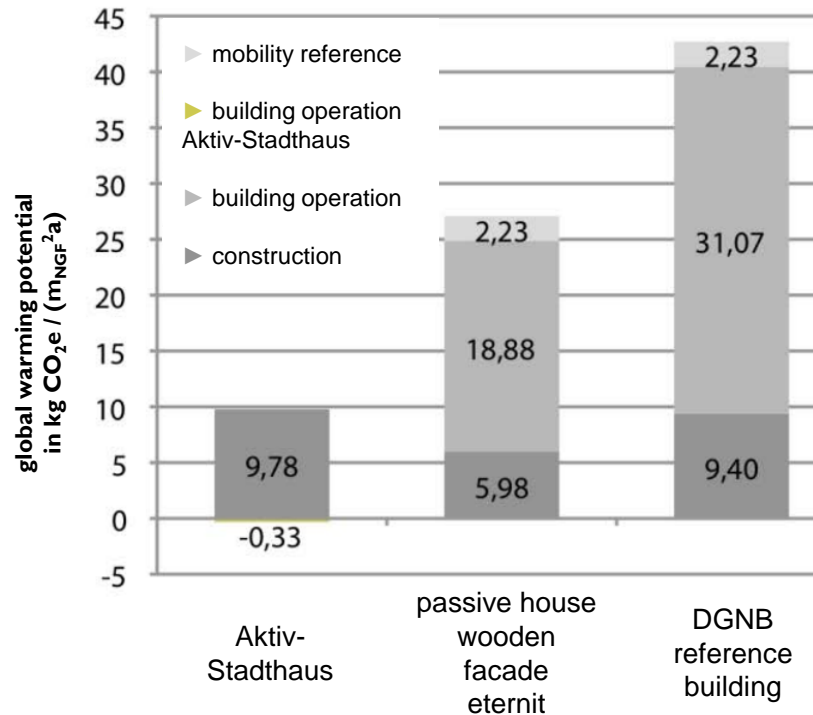


Abb. 56 Energieflussschema des Aktiv-Stadthauses; Quelle: STZ



Abb. 131 Interfaceanzeige: Energiebezug, Wochenanzeige Wärme ; Quelle der Grafik: FGee, TU Darmstadt; Rahmen: iPad, Apple Inc.

Life cycle assessment Aktiv-Stadthaus CO₂ (50 years)



The **DGNB System** as a tool for
sustainable planning, construction
and operation

Criteria: New Construction International, Version 2020



- Building life cycle impact assessment
- Local environmental impact
- Sustainable resource extraction
- Portable water demand and waste water volume
- Land use
- Biodiversity at the site



- Life cycle costs
- Flexibility and adaptability
- Commercial viability

**Request
DGNB criteria
for free**

www.dgnb-system.de/en/services/request-dgnb-criteria



- Thermal comfort
- Indoor air quality
- Acoustic comfort
- Visual Comfort
- User control
- Quality of indoor and outdoor spaces
- Safety and security
- Design for all



- Fire Safety
- Sound insulation
- Quality of the building envelope
- Use and integration of building technology
- Ease of cleaning building components
- Ease of recovery and recycling
- Immission control
- Mobility infrastructure



- Comprehensive project brief
- Sustainability aspects in a tender phase
- Documentation for sustainable management
- Procedure for urban and design planning
- Construction site / construction process
- Quality assurance of the construction
- Systematic commissioning
- User communication
- FM-compliant planning



- Local environment
- Influence on the district
- Transport access
- Access to amenities

The Certificate as a Proof of Quality

The Award Levels of the DGNB



Platinum



Gold



Silver



Bronze*

Total performance index	80% and higher	65% and higher	50% and higher	35% and higher
Minimum performance index	65%	50%	35%	-- %

* This award only applies to certification of existing buildings/the Buildings in Use certificate.

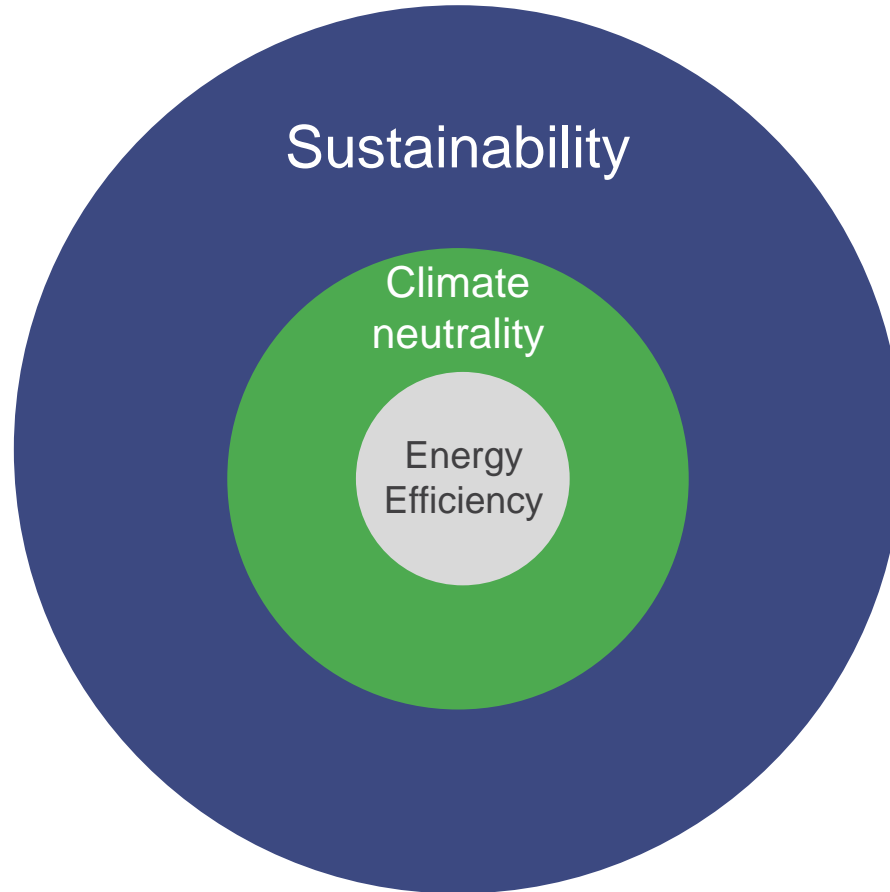
The DGNB evaluates holistically and world wide, **unique system adaptation features**



Awarding – e.g. trade fair, conference



Summary



Let's keep in touch !

Free Online events

May 21, 2021 09:00 am	Sustainable and climatepositive districts The development of sustainable districts is one of the key tasks of urban development today. Climate change, scarcity of resources and social division make change necessary. In this lecture, Dr Stephan Anders will present the DGNB system for districts, which promotes the creation of sustainable, liveable districts in which people feel comfortable without unnecessarily affecting the climate and the environment. > Registration	Dr. Stephan Anders	60 min.
May 27, 2021 09:00 am	What does certification mean? What are the benefits of certification and how does the process work? The online course explains how new buildings, existing buildings, interiors or urban districts can be optimised with the help of the DGNB. Role allocations, costs and awards are also discussed. The online course is a great starting point, giving you all you need to know for sustainability in the construction sector. > Registration	Dr. Stephan Anders	30 min + 30 min Q&A



DGNB CONSULTANT TRAINING

6 – 9 July 2021 DGNB System knowledge

each day from 10:30 – 12:00 and 13:00 – 14:30 CET

and

13 – 14 July 2021 Complementary workshops

each day from 10:30 – 12:00 CET

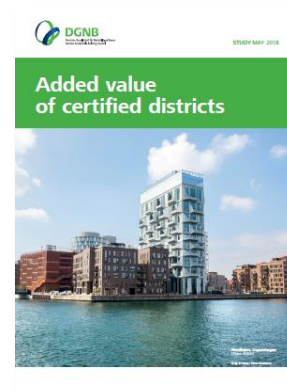
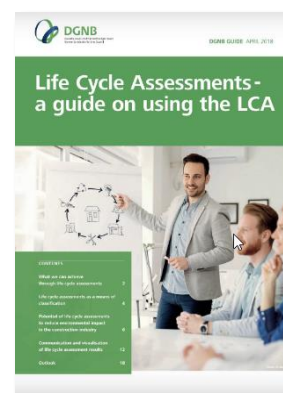
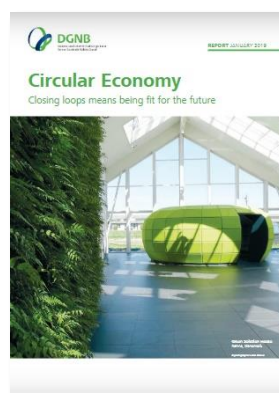
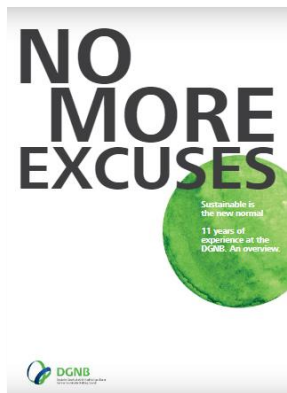
Become an **expert for sustainable building and the international application** of the DGNB Certification System (Version 2020, international)

More information and registration:

<https://www.dgnb-akademie.de/academy-international/events/>



DGNB Publications



Your Contact at the DGNB

Thank you for your
attention



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