

Sustainable Construction – a relevant topic for water infrastructure?

Report on a Workshop held in March 2019
at Karlsruhe University of Applied Sciences



Water Research Network Baden-Württemberg

3 Research Networks

- Challenges of Reservoir Management
- Impact of micro-pollutants on the aquatic environment
- Drought impacts, processes and resilience

+ Numerous Workshops

Scope: enhance the collaboration across disciplines and locations in Baden-Württemberg in order to meet the future challenges of water research.



<http://www.wassernetzwerk-bw.de/english/24.php>

Workshop

Sustainable Construction

– a relevant topic for water infrastructure?

Motivation: Sustainability is a guiding principle in water management **BUT** sustainability assessment is not widely practiced. Focus is on early comparison of alternatives and much less on construction.

Organisation: Key Note Speech on swiss SIA 112/2
Open Space

Participants: 22 individuals representing consulting engineers, utilities, River Authorities, Universities

Current Developments



Swiss Code (2016): Sustainable Construction – Public works

Approach:

- Guidance through a set of relevant aspects
- Sustainability is more than environmental protection
- No overall integration

Code

- Swiss Network for Sustainable Construction currently develops an Excel-Tool for the sustainability assessment of infrastructure
- CEN (European Committee for Standardization) develops both a Code for Sustainable Construction of Civil Engineering Works as well as Calculation Tools.

Topics identified in the Workshop

1. System Development
2. Sustainability in Operation
3. Sustainability Criteria
4. Economic Viability
5. Efficiency in Planning
6. Free design
7. Liveability
8. Strategic Planning of Infrastructure

Strategies of Acting

Effizienz

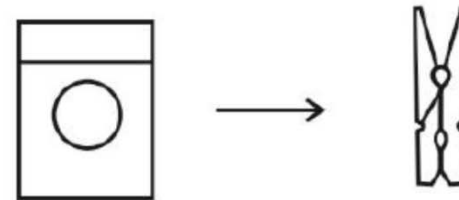
besser



Nachhaltigkeit

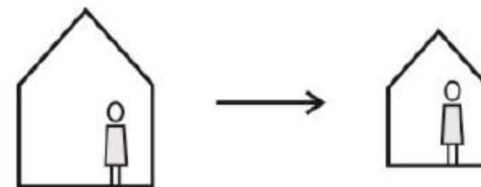
Konsistenz

anders



Suffizienz

weniger



5

Quelle: TU München, Lehrstuhl für energieeffizientes und nachhaltiges Planen und Bauen

Aus: <https://www.cradletocradlecafe.com/wp-content/uploads/2016/10/Presentation-Johannes-Kreissig-24.11.2016.pdf>; 12.3.19

Alternative Paths of Development

Cradle to Cradle® Grundlage einer Kreislaufwirtschaft

Quelle: EPEA GmbH 2009



<https://www.dreso.com/c2c/>; 12.3.19

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