## **Ecological Engineering Living Lab**



Research Associate, Research Group Ecotechnology, Institute of Natural Resource Sciences, bued@zhaw.ch



To the project "Ecological **Engineering Living Lab**"





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In Ecological Engineering, the processes in nature serve as a model for developing new technologies. As in a natural ecosystem, where nutrients and water circulate, the researchers at ZHAW are developing closedloop systems that function according to the same principle. The aim is to save resources and minimize the impact on the environment.

With the project "Ecological Engineering Living Lab", visitors can experience the research on circular technologies on Grüental campus. The researchers present six new ways in which resources can be reused sustainably and innovatively in closed-loop systems:

- full cycles instead of empty oceans
- microalgae as do-gooders

- the urban farmer
- food waste
- closed-loop washing machine
- treasure hunt in the toilet

In guided and self-guided tours, visitors can discover the research facilities on campus and, through their visit, become part of the research. The self-guided tour is based on the app "1001 Kreislauf" (only in German) and can be conducted at any time of the day and without pre-registration. Using virtual reality and personal insights into the research activities of the researchers, the app provides a glimpse behind the usually closed greenhouse doors into the interior of the ZHAW's research premises. The same can also be experienced in a guided tour for school classes and interested groups. ■



**Ecotechnology excursions** for school classes (excursions only available in German)



The principles of closed cycles in the Ecological Engineering Living Lab