

# 

### #EUCircularTalk – 26.3.2025 Continuing Education at ETHZ Regenerative Materials

*Dr. Arnaud Evrard Chair of Sustainable Construction* 



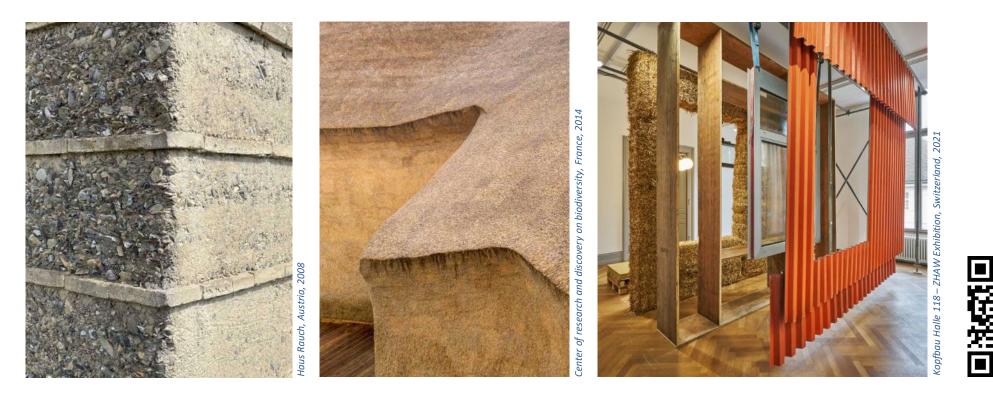
Chair of **Sustainable Construction** *Prof. Guillaume Habert* 



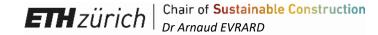


oubeyran, Geneva. 2017. ATBA architect:

## **CAS/DAS ETH in Regenerative Materials**



International teaching programs entirely dedicated to earth, bio-based and reused materials and construction techniques.



# **CAS/DAS ETH in Regenerative Materials**



**CAS-RM-ESS** (Every year, FS) Next edition: Jan 2026

### CAS-RM-HYGRO

(Every two years, HS) Next edition: Sept 2025

### **CAS-RM-STRUCT**

(Every two years, HS) Next edition: Sept 2026 **DAS-RM** (Combining two CAS-RM)

## **CAS/DAS ETH in Regenerative Materials**



Theoretical and experimental lectures



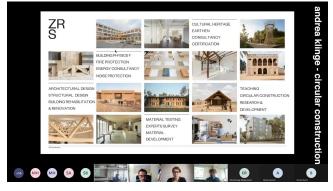
Participative engagement



Hands-on exercises



Visits of inspiring projects



Digital guest lectures (public)



Project-based learning

### **CAS ETH in Regenerative Materials - Essentials**

Module 1 : Discovering Regenerative Materials (KW5)	Monday 27.1.25 - Friday 31.1.25
Module 2 : Earth construction (KW10)	Monday 3.3.25 - Friday 7.3.25
Module 3 : Bio-based construction (KW15)	Monday 7.4.25 - Friday 11.4.25
Module 4 : Re-valuing the building stock (KW20)	Monday 12.5.25 - Friday 16.5.25
Module 5 : Regenerative renovation (KW25)	Monday 16.6.25 - Friday 20.6.25

This program is structured with five Modules of one week each, distributed over one semester.

They aim to question our conventional construction techniques to promote regenerative building materials from resource extraction to construction site, during building operation and until the end of its use.

### **Target Audience**



### Project managers, engineers, architects, building contractors, members of city technical services, NGO representatives...

A limited group of professionals to favor intense interactions and high-quality learning.

### **MOOC ETH in Regenerative Materials and Construction**

Format: Massive Open Online Course

Partnership: Inbar, Amaco, Hilti Foundation

Territorial audience: Global

Pre-requisites and intended audience: open for all with interest in

sustainability in construction, including suppliers builders carpenters public sector, etc.

**Content:** regenerative sustainability in construction: system thinking, materials and technologies

**Scope**: disseminate, educate, create momentum, inform on further resources and valuable trainings and directories for professional

Accessibility: online course, open access

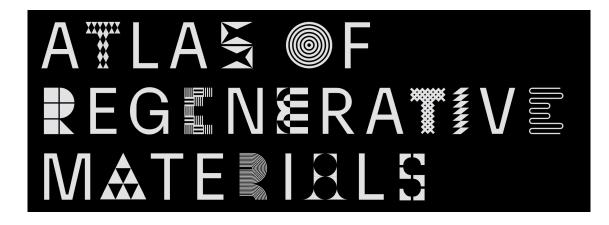


# **Atlas of Regenerative Materials**

Project. Atlas of Regenerative Materials

Partnership: ETHZ, EPFL

**Territorial audience:** 



First step: Switzerland

Long term: Connect with existing database in Europe and elsewhere

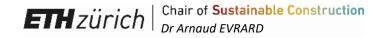
**Content:** non-profit website that assembles and interconnects knowledge

about construction with bio- and geo-sourced building materials.

Scope: collaboration of researchers from academia and industry, create a

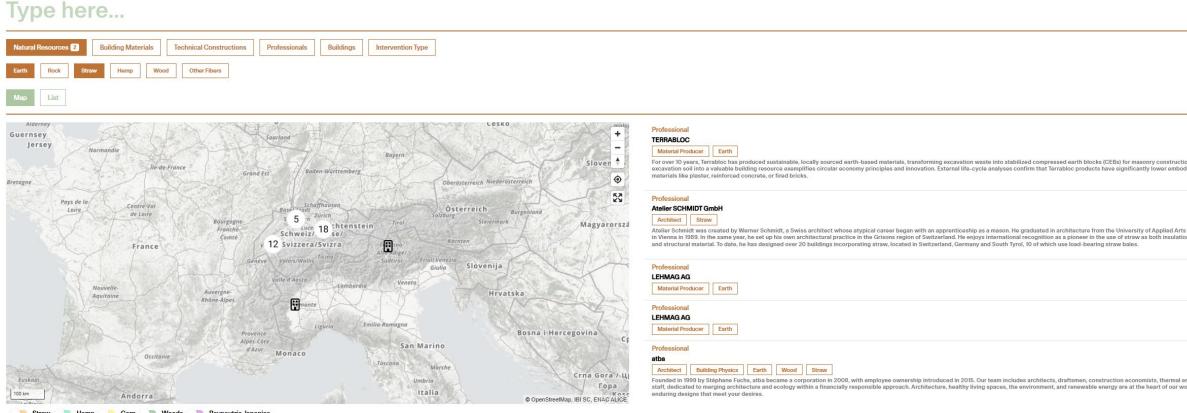
comprehensive and reliable repository

Accessibility: open access, community-driven web repository



### ATLAS OF REGINERATIVE MATERIALS

### FILTERS



Straw Hemp Corn 📄 Woods 📄 Reynoutria Japonica

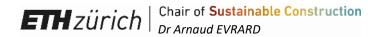
📄 Hard stone 📄 Limestone 📄 Conglomerate 📄 Sandstone 📄 Volcanic

For over 10 years, Terrabloc has produced sustainable, locally sourced earth-based materials, transforming excavation waste into stabilized compressed earth blocks (CEBs) for masonry construction. This recycling of excavation soil into a valuable building resource exemplifies circular economy principles and innovation. External life-cycle analyses confirm that Terrabloc products have significantly lower embodied energy than conventional

in Vienna in 1989. In the same year, he set up his own architectural practice in the Grisons region of Switzerland. He enjoys international recognition as a pioneer in the use of straw as both insulation

Founded in 1999 by Stéphane Fuchs, atba became a corporation in 2008, with employee ownership introduced in 2015. Our team includes architects, draftsmen, construction economists, thermal engineers, and administrative staff, dedicated to merging architecture and ecology within a financially responsible approach. Architecture, healthy living spaces, the environment, and renewable energy are at the heart of our work, aimed at creating

### About Imprint Disclaimer Copyright





# Thank you for your interest! Any questions?

Continuing Education in Regenerative Materials Chair of Sustainable Construction ETHZ

Contact: aevrard@ethz.ch



ETHZÜRICH Chair of Sustainable Construction