In 2005 for the first time the United Nations count more than 20 mega cities – the urbanization in the world increases constantly. Since 2007 just as much people have lived in cities as in the countryside. Forecasts of the UNO predict that the proportion of urban population will increase to more than 60 percent by 2030 and will achieve 70 percent in 2050.

Due to the increasing urbanization greening of urban sites becomes more and more interesting. On the one hand green areas are used as design elements and on the other hand greening can contribute to noise reduction, air pollution control, and rainwater retention. Furthermore greening can improve the microclimate and contributes to energy saving due to insulating or cooling effects.

**Keywords**
- Vertical greening
- Noise reduction
- Air pollution control
- Microclimate

**Industrial sectors**
- Civil engineering
- Architecture
- Infrastructure
Cypress-leaved plait-moss is widespread and easy to recognize. It grows in different vegetation formations.

**Our services**

- Monitoring of projects concerning vertical greening based on mineral supports
- Investigation of vertical greening regarding noise reduction
- Investigations on air pollution control
- Investigation of vertical greening regarding the improvement of microclimate

**Partner**

**UNIKA GmbH**
63110 Rodgau-Dudenhofen
Werk:
Ruhrbaustoffwerke GmbH & Co. KG
Moselstrasse 1
44579 Castrop-Rauxel, Germany

Wolfgang Hante
Phone +49 2305 97370-0
wolfgang.hante@unika-ruba.de

www.unika-kalksandstein.de

**biolit**
Berthold Adler
Stapenhorststrasse 35
45329 Essen, Germany

Dipl.-Ing. Berthold Adler
Phone +49 151 12536170
b.adler@biolit.de

www.biolit.de

**Vertical farming – strawberries.**

**Pilot wall in Castrop-Rauxel.**