

Developing Biodiversity in Business Areas – Time to act!

LIFE BooGI-BOP 2021



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LIFE17 GIE/DE/000466

naturvielfalt
Vorarlberg

**Office of the State Government
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ARGE natur vielfalt bauen

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Cradle to Cradle Certified™ (Waste = Food)

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* In the project LIFE BooGI-BOP seven European partners from Austria, Germany, Slovakia and Spain have teamed up to promote biodiversity-oriented design of business premises in Europe.

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* **Bodensee-Stiftung** Radolfzell, Deutschland
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www.ekopolis.sk

* **Ecoacsa Reserva de Biodiversidad, S.L.**
Madrid, Spain · www.ecoacsa.com

* **Global Nature Fund** Bonn/Radolfzell, Germany
www.globalnature.org

* **Institut für Lebensbezogene Architektur (ILBA)**
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Introduction

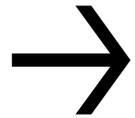
The Vorarlberg regional authority and its partner organisations in the EU's Life BooGI-BOP* project have prepared this brochure with the aim of providing a targeted stimulus to businesses, planners and local authorities. Industrial and commercial premises, also in the form of business parks and enterprise zones, hold enormous potential in terms of climate change mitigation and the promotion of environmental quality. Recognising biodiversity as an integral part of innovative and forward-looking urban development benefits more than the companies and local authorities involved; biodiversity-friendly renewal and development sets new standards and makes a significant contribution to easing environmental and social pressures.



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Time to act



... for our wellbeing

Today's working environments are extremely complex. Increased efficiency is the motto, and digitisation the means to this end. That is all the more reason why we need to strike a balance in our everyday working lives. Nature-inclusive business premises reduce stress, provide space for exercise and encounter, and regenerate our vital spirits.

- Stimulating well-being
- Bringing nature into the working world
- Encouraging fresh air and exercise
- Enhancing the quality of working environments

Toni-Areal university campus, Zürich (CH), 2014

A biodiverse roof garden provides an effective contrast to the high-tech architecture. Perennial flowers, kitchen herbs and small shrubs were cultivated in crates for two years. The crates were then stacked and arranged so that, as they decay, they form a gentle hilly landscape on the roof of the university campus. Studio Vulkan Landschaftsarchitektur
Photo © top & cover: Roland Bernarth
Photo © bottom: Filip Dujardin





High-Tech Campus Omicron, Klaus, Vorarlberg

The world market leading company in safety technology came up with a neighbourly gesture – the water bodies, lined with poplar trees, are more than habitat for plants and animals, they are a connecting lifeline within the business area. Landscape architecture: Kienast Vogt and Partner, Zürich; garden design and landscaping: Lothar Schmidt, Koblach
Photo © Lukas Hämmerle, Lustenau

... for climate protection

Many companies are now familiar with ecological construction and energy-efficiency standards. For a holistic approach to protection of the climate and the environment, however, we also need to consider the natural water balance, increase the percolation, retention and evaporation rates, promote cold air sources and as much foliage as possible and, at the same time, make sparing use of land for building.

- **Protecting the soil through intelligent construction**
- **Taking the landscape perspective**
- **Respecting the soil and water balance**
- **Generating cold air reservoirs**
- **Letting plants work on the building**

Primary School for Sciences and Biodiversity

Boulogne Billancourt, Paris

The building plays host to various species (plants, insects, small animals) and acts as the foundation for low prairie-type vegetation leading up to a shrubland fringe around a central grove of standard trees.

Design elements for hosting plant and animal species

need to be seen as part of the body of the building.

ChartierDalix architectes, Paris

Photos © Takuji Shimmura

(top and bottom right)

Photo © Myr Muratet (bottom left)

... for biodiversity

Cities and urban areas offer niche habitats for many species of flora and fauna, sometimes more so than the surrounding countryside – an asset that can be exploited in the context of urban, regional and business development. Gravelled roof areas on industrial buildings, for example, can be reanimated with the help of plants, thus creating habitats for animals and the strong appeal of an intelligent aesthetic.

- **Boosting urban, nature based business**
- **Awareness building**
- **Nature-inspired design**
- **Animals as teachers**
- **Rooftop protection of the species**





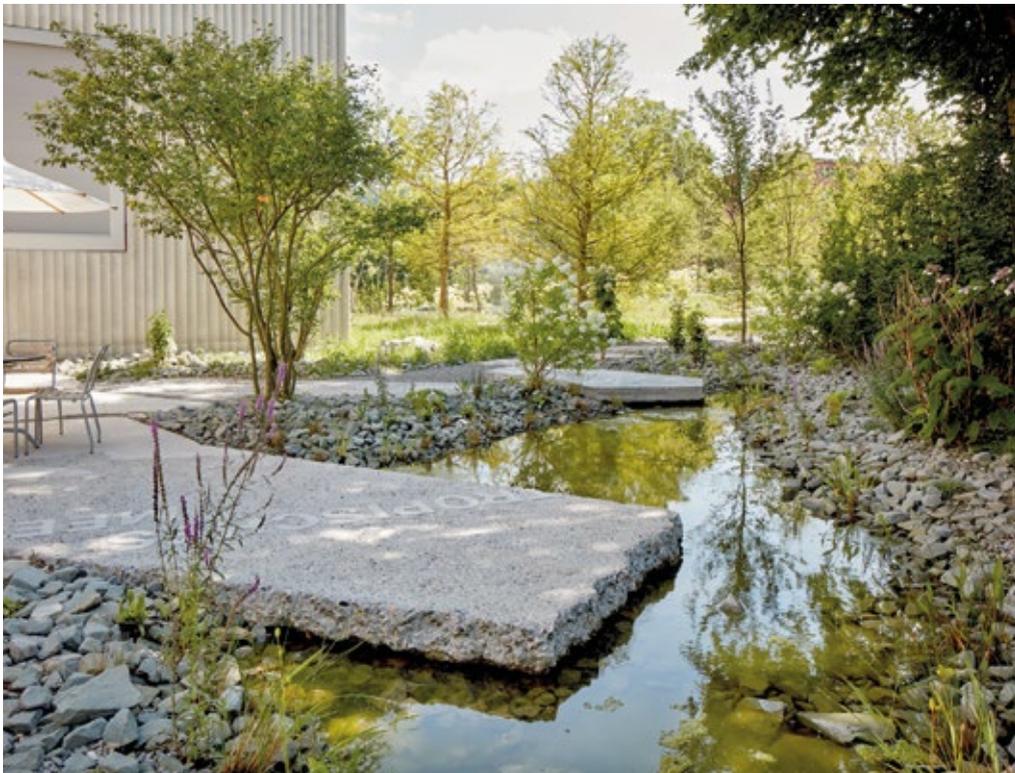
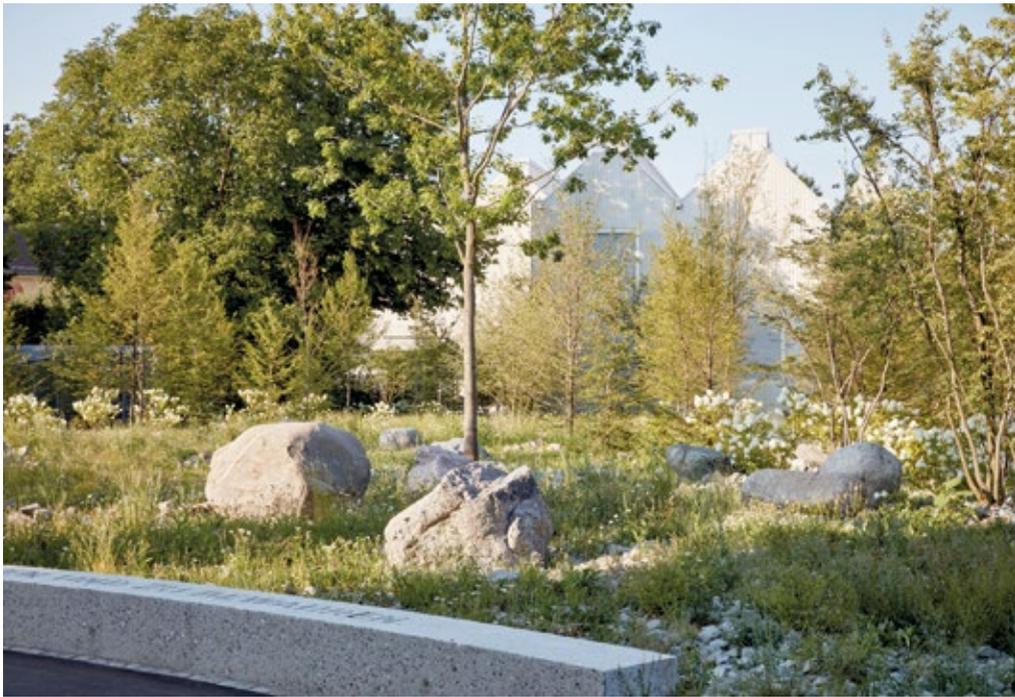
Groundless Theatre

a theatrical intervention taking place
at the business campus Millennium-
park, Lustenau, June 2020,
Caravan and walktanztheater.com,
Maria Fliri reciting Shakespeare
Photo © Marina Hämmerle

Proposals for action



The effect of biodiversity-friendly spaces and buildings on people, flora and fauna, as well as their benefits for companies and regional development have received adequate attention. However, how such measures will be promoted and adapted to the needs of specific regional locations still requires a common effort. In the following, a number of proposals are presented to show where action can be taken and the range of possible solutions available. The proposals made with reference to various fields offer a basis for discussion with politicians and authorities, planners and educators, and business and society. They show where and how action can be taken NOW.



Naturmuseum St.Gallen - Studio Vulkan Landschaftsarchitektur - Photo © Das Bild/Judith Stadler

→ for politicians and authorities

A Analysing beyond the site

Ecological and social functions must be maintained and improved in a wide-area context.

B Building with nature in business parks

In business parks, nature and construction must be given equal status with regard to health, climate regulation and the promotion of biodiversity.

C Facilitating nature-inclusive planning processes

Nature-inclusive planning for industrial estates and business parks calls for more expertise and communication.

D Promoting climate change mitigation and biodiversity in building culture

Nature-inclusive planning for business parks and premises calls for political advocacy and the corresponding funding.

→ for planners and educators

E Reversing the planning hierarchies

The landscape with its ecological and health-related functions is the point of departure for business area planning.

F Communicating nature-inclusive construction

A knowledge of the processes, techniques, practices and tools for nature-inclusive construction must be communicated to the occupational groups involved.

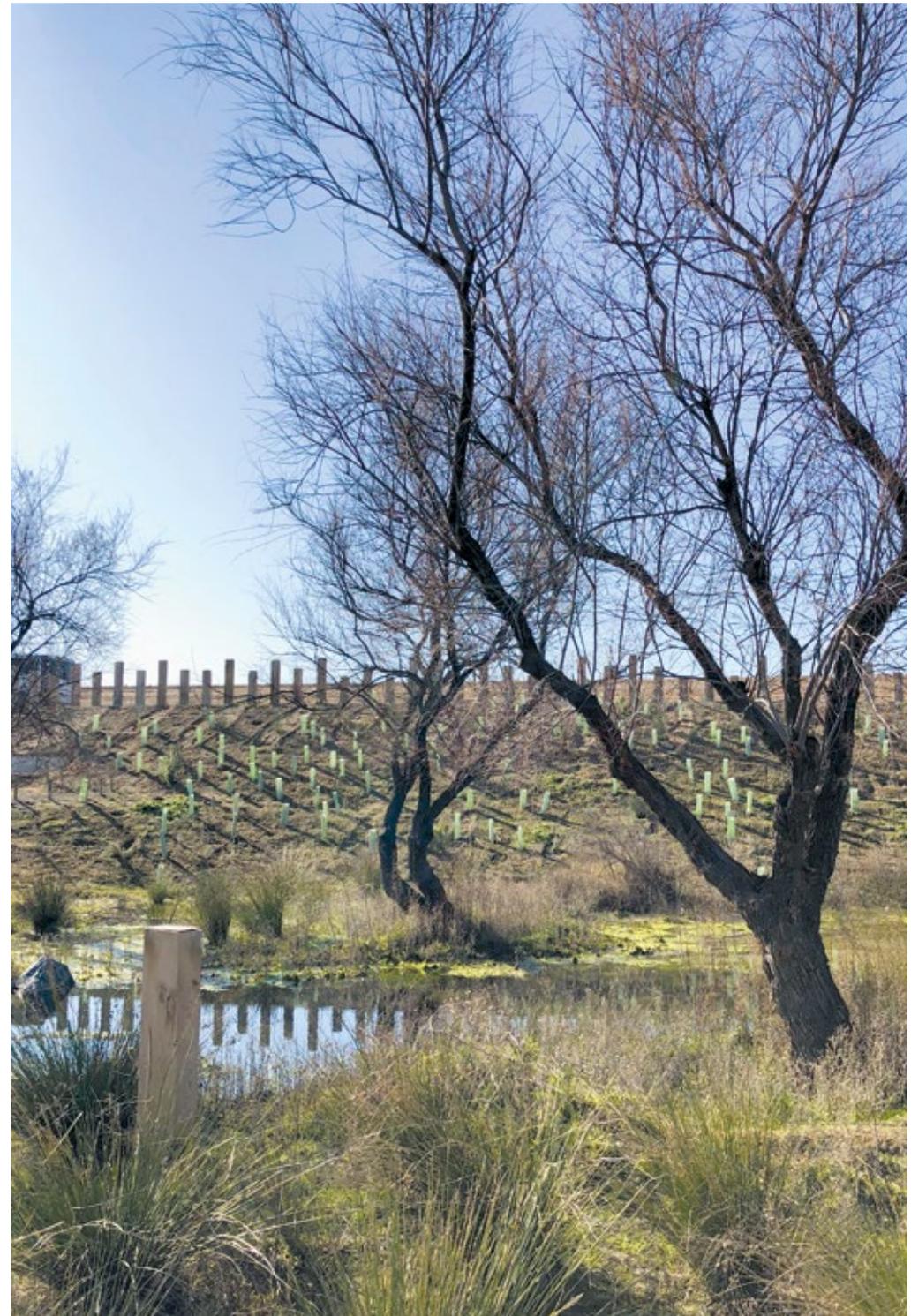
G Implementing nature-inclusive construction

Promotion of regulations, codes and standards for nature-inclusive construction in competition procedures, scales of fees and curricula.

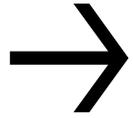
→ for business and society

H Biodiversity competence initiative

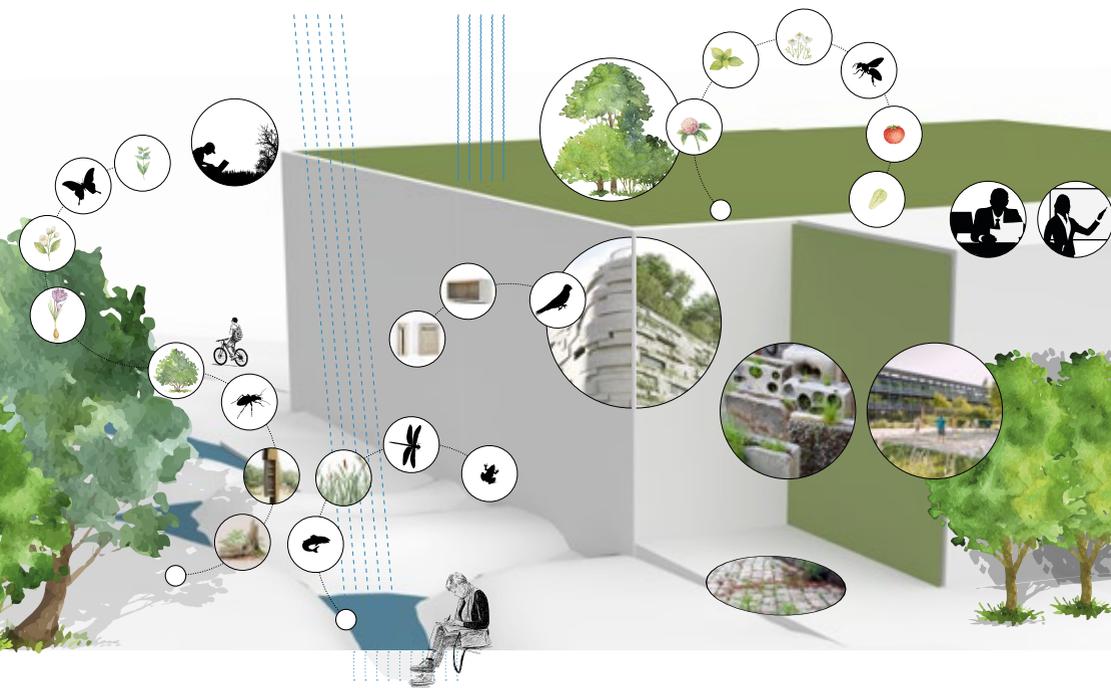
Attracting business and employees to the cause of biodiverse, nature-inclusive design.



Acting on principle



... a vision for tomorrow in the case of business premises

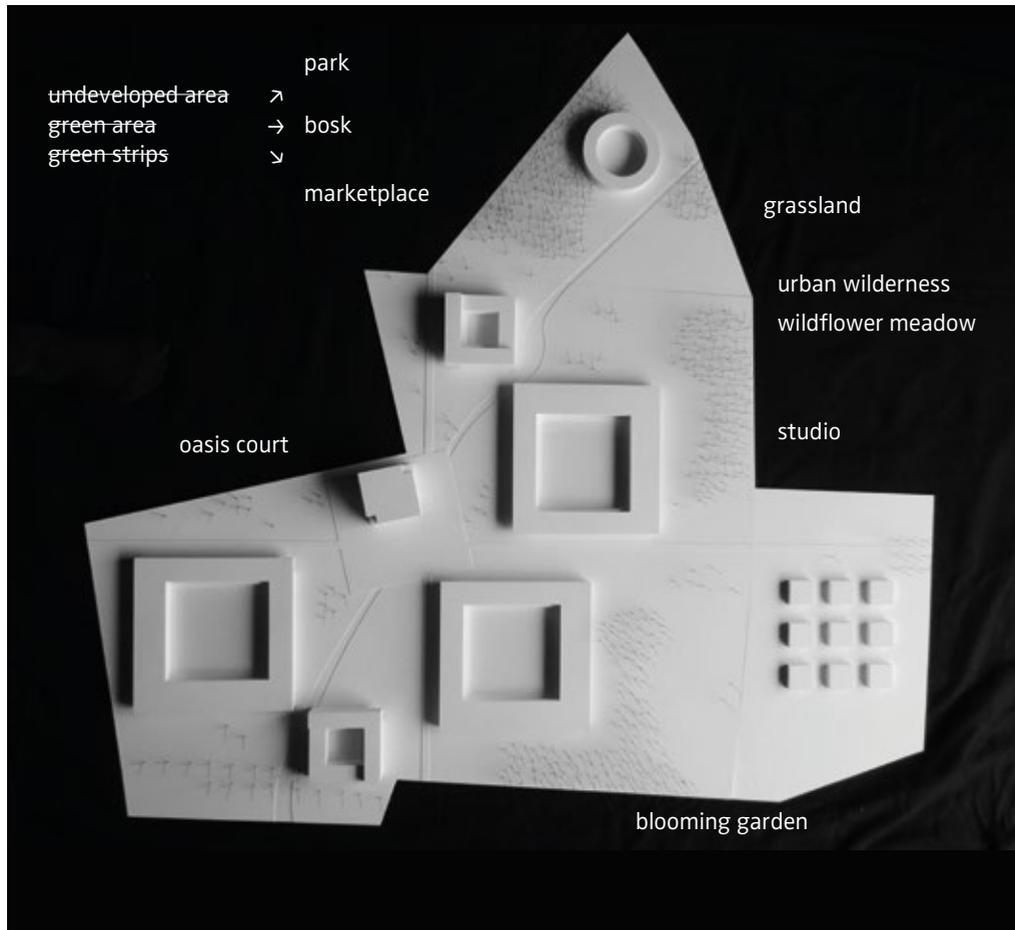


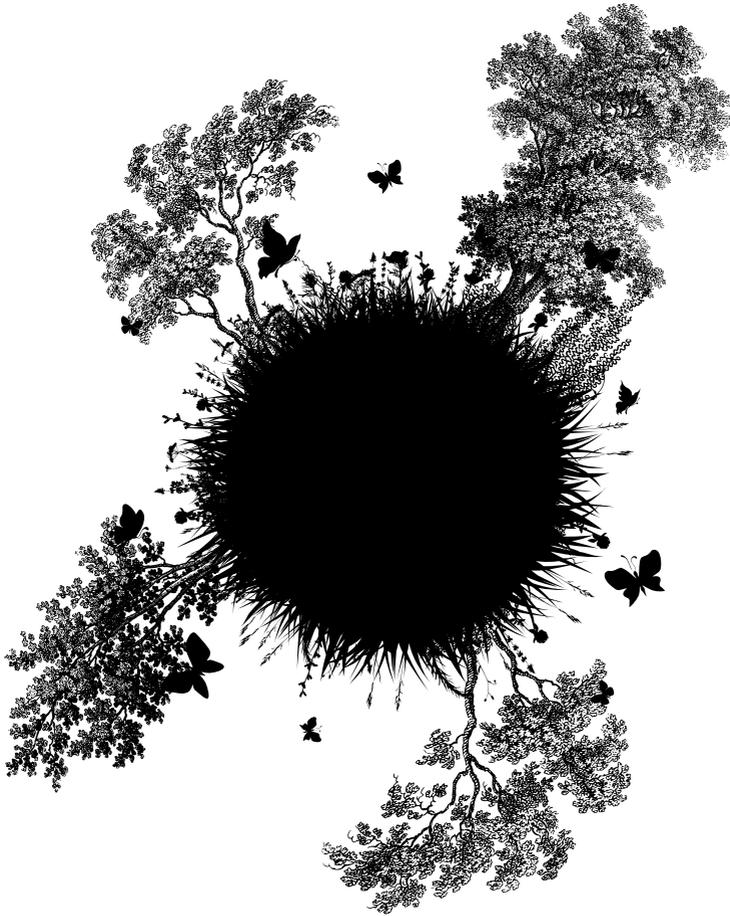
Business premises are located within existing settlement boundaries. On the periphery they act as a link between the natural rural landscape and the built-up area, offering passage for people and animals. Compact multi-storey commercial buildings designed for flexibility of use reference the surrounding countryside. Thanks to the unsealed soils, terrain modelling and greenery on and around the buildings, rainwater can seep away, evaporate or remain standing as surface water. It supplies the meadows and flowers and the shady trees, gardens and fruit hedges, which offer employees a healthy and relaxing place to take a break. Nature-inclusive business areas provide space for people and animals and are better equipped to cope with the effects of climate change.

- Integrated natural spaces at the workplace have positive effects on human health and performance.
- Wildlife habitat requirements are taken into account in planning and construction; they enliven the site.
- Water is a point of departure in business premise design; that avoids damage and costs.
- Plants are integrated in attractively arranged and species-rich groups; they contribute to climate regulation.
- Landscape and architecture enjoy equal status; together they conserve resources and the environment.
- Biodiverse business premises are part of a building culture that promotes a sense of identity and networking.

... and language has a say

Turning green spaces into gardens again. The use of language draws our attention to the fact that it is high time that the habitat needs of humans, plants and animals are given equal consideration in the field of urban development. What used to be densification is now environmental development.





EU LIFE Project BooGI-BOP

The project of seven European partners promotes biodiversity-oriented design of premises (BOP) as a part of green infrastructures and potential stepping-stones for biotope corridors. At the same time, the higher quality of stay due to the variety of elements also improves the well-being of the employees and thus of society: www.biodiversity-premises.eu

Further information is provided on www.naturvielfaltbauen.org