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BUND
FRIENDS OF THE EARTH GERMANY

Proposals and Criteria for the Anchoring of Nature-based Climate Mitigation and Climate Adaptation

In the ERDF funding period 2021–2027

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1 Initial situation

In Germany, most programmes of the European Regional Development Fund (ERDF) for the 2021 – 2027 funding period have been approved and the development of funding guidelines and project selection criteria is in full swing. Friends of the Earth Germany (BUND Deutschland e.V.) sees the sustainable implementation of the ERDF as a valuable opportunity to strengthen nature and climate protection in the context of socio-ecological transformation. In the following, it therefore formulates its own **proposals and selection criteria for projects to implement and strengthen Nature-based Solutions (NbS) for the challenges of sustainable management, focussing in particular on nature-based climate mitigation and local climate impact adaptation.**

1.1 Nature-based Solutions, nature-based climate mitigation, nature-based climate adaptation

The terms "Nature-based Solutions", "nature-based climate action" and "nature-based climate adaptation" briefly defined and differentiated:

- **Nature-based Solutions (NbS)**[1] utilise natural processes and properties of ecosystems to address societal challenges, such as climate change and, at the same time, contribute to various objectives e.g. climate and resource protection, resilience to the consequences of the climate crisis such as droughts and floods, human health, strengthening biodiversity, air pollution control, soil and water protection, water management and quality of life.

- **nature-based climate mitigation or natural climate protection** is part of Nature-based Solutions and, according to the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV, 2022, p.4) "at the interface between biodiversity conservation and climate protection"[2]. The focus of Nature-based Climate Protection is on the utilisation of ecosystem services "to **reduce greenhouse gas emissions**, preserve and expand carbon reservoirs" (BfN, 2014, p.4)[3]. This creates a positive side effect for the resilience of ecosystems and can also benefit biodiversity.

- "The aim of nature-based climate adaptation is to maintain the ecosystem services necessary for humans in the long term despite climate change, and to buffer the consequences of anticipated developments that adversely affect humans (e.g. heavier rainfall, more frequent flooding, but also heatwaves and droughts)" (BfN, 2014, p.4)[3].

Nature-based Solutions are therefore approaches and measures that can benefit both Nature-based Climate Mitigation and Nature-based Climate Adaptation. The term Nature-based Solutions or the abbreviation NbS is used in the following text.

[1] Schubert, D., Naturbasierter Lösungen in den EU-Strukturfonds in Deutschland 2021 –2027 Maßnahmen, Mehrwert und Möglichkeiten, Glossar (Stand 17.11.2022) https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Europa___International/nbs_strukturfonds_bf.pdf[August 2021]
[2] BMUV, Aktionsprogramm Natürlicher Klimaschutz -Entwurf, S.4 (Stand 14.11.2022) https://www.bmuv.de/download/aktionsprogramm-natuerlicher-klimaschutz
[3] BfN, Naturbasierte Ansatze fur Klimaschutz und Anpassung an den Klimawandel, S.4 (Stand 16.11.2022) https://www.bfn.de/publikationen/broschuere/naturbasierte-ansaetze-fuer-klimaschutz-und-anpassung-den- klimawandel

2 Seize the ERDF opportunity!

The advantages of Nature-based Solutions can be utilised in the specific design of the funding guidelines and project selection criteria. This enables decision-makers, the ministries of the federal states and the relevant specialist departments to execute the principle of environmental sustainability as widely as possible when implementing the ERDF programme.

This catalogue provides the basis for a **checklist**, which can be used to carry out a review of the ERDF funding guidelines with regard to the inclusion of Nature-based Solutions in funding offers.

We differentiate between **two types of ERDF funding measures**:

(1) those that can be clearly assigned to NbS (e.g. river renaturation as flood protection, peatland rewetting) and

(2) **those <u>not</u> primarily focused on NbS, but which have great potential to support Nature-based Solutions in tackling the current challenges**.

The **first category (1)** is primarily geared towards environmental, nature and/or climate mitigation objectives or adaptation to climate change (see Specific Objective - SO 2.4, SO 2.7). According to the Operational Programmes (OPs), Nature-based Solutions will only be directly addressed in individual federal states in the 2021 to 2027 funding period. The funding measures and project selection criteria in these areas are therefore very individual and depend on the specific measure itself as well as on location-specific ecosystem structures that require differentiated consideration (e.g. fens and raised bogs[4]). According to the OPs, these funding measures for nature-based climate mitigation account for a maximum of 270 million of the total ERDF funding volume and nevertheless must not be neglected.

The greater funding potential, which has so far been largely untapped, lies in the other Policy Objectives **(2)** and in Political Objective - PO1, among others, with a financial volume of up to 5.8 billion euros. These support measures, which are not primarily geared towards Nature-based Solutions include among others:

i. all measures that promote **infrastructures** in the broadest sense, be they research infrastructures, municipal buildings or mobility, supply and disposal infrastructures;
ii. the promotion of **companies**, in particular where this affects buildings and outdoor areas;
iii. Infrastructure-related measures for climate adaptation and risk prevention, such as flooding; and
iv. the **area-related development** of neighbourhoods, recreational areas, squares and paths, brownfield sites and green spaces.

Nature-based Solutions in the sense of utilising the diverse possibilities for the promotion of biodiversity, greening, energy efficiency, rainwater retention etc. can offer considerable added value for sustainable economic development and increasing resilience to the consequences of the climate crisis[5]. Therefore, the focus of the following considerations is also **on the second category (2)** and addresses **"proactive" measures** such as greening, shading, and the creation of green-blue infrastructures.

[4] Further Information can be found here: https://www.bund.net/themen/naturschutz/moore-und-torf/moortypen/
[4] Further information can be found at: https://www.bund.net/klimawandel/

The suggested criteria provide concrete suggestions for the possibilities of Nature-based Solutions. In addition, however, differentiated project selection criteria and procedures are required at country level, which need to include issues in relation to weighting, rating scales or scoring systems.

As a first step, BUND e.V. is calling above all for opportunities to be exploited for damage prevention. Examples here include:

- Prevention of construction work in flood plains and other protected areas
- No deforestation e.g. for the development of new building areas; instead utilisation of existing/remediation of brownfield sites
- In urban areas, additions to existing structures before building on new areas
- Preservation of existing, often undisturbed natural areas with high biodiversity before implementation of new green infrastructure (as artificial habitats often have lower biodiversity)

The 30-hectare target for land consumption[6] of the German Sustainable Development Strategy can only be achieved if damage is consistently prevented. Therefore, the national Sustainable Development Goals[7] as well as those of the individual federal states are fundamentally anchored in the implementation of ERDF funds.

An intensive preliminary assessment of project proposals, including the involvement of a critical public, is fundamental to the successful, target-oriented utilisation of funds.

3 Possible Nature-based Solutions in ERDF funding

Nature-based Solutions offer the advantage of synergistically combining positive impacts on climate change adaptation, climate mitigation, biodiversity and human well-being in one concept, due to their multifunctional character. To this end, they utilise ecosystem services and natural processes to ensure CO_2 sequestration, water retention (and thus reduced damage potential from flooding) and air purification and cooling through measures such as peatland rewetting[8] or the creation of green-blue infrastructures[9]. Furthermore, they offer cost advantages over technical solutions, conserve resources and have a long-term effective and therefore sustainable perspective due to their partially self-sustaining function.[10] Nature-based Solutions often contribute to the protection of human health (e.g. by reducing/preventing local heat islands, reducing flood risks, improving air quality) or to improve well-being (e.g. by improving the sojourn quality and the recreational function of public spaces).

Following, different **types of funding measures** are being considered, since a case-by-case consideration of all measures would not be expedient and too time-consuming. These types will be explained using the example of the investment funding for research, technology and start-up capacities (SO 1.1). Here, objects of funding are often new construction/extension/refurbishment of buildings and/or grounds or campuses.

[8] Further information on peatland wetting can be found at https://www.bund-niedersachsen.de/themen/natur- landwirtschaft/moore/ ; Further information on projects that have been implemented, including using ERDF funds, can be found at http://www.klimatools.de/ or https://www.moor-land.de/

[9] Definition of green-blue infrastructure by EcoLogic: "Green (land) and blue (water) natural areas connected by a strategic network are referred to as 'Green and Blue Infrastructure (GBI)'. They have the potential to strengthen the resilience of ecosystems and provide ecosystem services that are essential for humans and nature alike." (status as at 17/11/2022) https://www.ecologic.eu/de/14554

[10] Note "Self-sustaining function": Nature-based Solutions such as roof and facade greening, green areas and tree planting can be partly self-sustaining e.g. small biotopes. However, it is assumed that all of these measures require maintenance – especially in hot temperatures – ,which needs to be taken into account during project planning.

We see potential for NbS among others, in the following:

- the greening of facades and roofs; when greening roofs, utilisation of resource-saving construction methods
- the installation of nesting and hibernation aids for birds that breed in buildings and the avoidance of animal traps (manholes, open gutters, gullies)
- the nature-based shading of buildings/squares with primarily native trees
- the unsealing of squares with subsequent permanent, possibly self-dynamic greening with native plant species
- the creation of (even small) near-natural biotopes/green-blue infrastructures (green spaces, water retention areas, wetland biotopes, small bodies of water and their banks)

We see positive effects of these NbS:

- for **climate protection** in CO_2 sequestration by plants
- for **adaptation to climate change, human health and the reduction of economic damage potentials** in the water retention function through unsealed, green areas and thus a reduced potential for flood damage and at the same time strengthening the local water balance; in the reduction of heat stress through evaporative cooling and shading as well as in the improvement of air quality
- for **biodiversity**, in the creation of nesting and hibernation aids as well as habitats and food sources e.g. for birds, bats and insects; furthermore in the planting of native species and thus preserving these species for biodiversity and the networking of habitats.

3.1 Political Objective 1 – a smarter Europe

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
PO 1 - A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity			
SO 1.1 Development and expansion of research and innovation capacities and the introduction of advanced technologies	Investment support for research, technology and start-ups (new construction, expansion, refurbishment of buildings)	Use of NbS in the design of the campus/buildings: Greening of façades/roofs; when greening roofs, utilisation of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies) Nature-based shading Unsealing of squares with subsequent permanent greening with native plant species Creation of (even small) near-natural biotopes/green-blue infrastructures (green spaces, water retention areas, wetland biotopes, small bodies of water and their banks)	Nesting and hibernation aids e.g. for birds that breed in buildings, bats and insects Preservation of native biological plant diversity Reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows Water retention and thus reduced risk of damage caused by heavy rainfall as well as strengthening and relieving the local water balance Improving ecosystem services
	Promoting innovation and technology/innovation competitions	Promote research/innovation on NbS	Knowledge expansion for the effective application of NbS

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 1.3 Increasing the sustainable growth and competitiveness of SMEs and creating jobs in SMEs, including through productive investment	Investment support for SMEs/start-ups/tourist infrastructures (new construction, extension, refurbishment of buildings)	Use of NbS in the design of the company premises/of buildings: Greening of façades/roofs; when greening roofs, utilisation of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies) Nature-based shading Unsealing of squares with subsequent permanent greening with native plant species Creation of (even small) near-natural biotopes / green-blue infrastructures (green areas, water retention areas, wetland biotopes, small bodies of water and their banks)	Increasing the attractiveness of NbS Nesting and hibernation aids e.g. for birds, bats and insects Preservation of native biological plant diversity Reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows Water retention and thus reduced risk of damage caused by heavy rainfall as well as strengthening and relieving the local water balance Improving ecosystem services
	Business-related infrastructure/ logistics (transport infrastructure)	Greening/shading of traffic infrastructure (roadside greenery) Construction of troughs and trenches for the infiltration of rainwater	Reduction of heat stress Water retention and thus reduced risk of damage caused by heavy rain
	Consulting services/development of (climate-adapted) business models		Dissemination of knowledge/knowledge enhancement for the effective application of NbS Increasing the attractiveness of NbS

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 1.4 Developing skills for smart specialisation, industrial transformation and entrepreneurship	Promotion of young talent	Skills development for the NbS sector	Dissemination of knowledge/knowledge enhancement for the effective application of NbS

3.2 Political Objective 2 – a greener, Co_2-free Europe

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
PO 2 - a greener, low-carbon transition towards a carbon-neutral economy and a resilient Europe by promoting a clean and fair energy transition, green and blue investments, the circular economy, climate change mitigation and adaptation, risk prevention and management, and sustainable urban mobility			
SO 2.1 Promoting energy efficiency and reducing greenhouse gas emissions	Energy-efficient refurbishment/modernisation of buildings	In the case of refurbishment of green façades and roofs as well as nature-based shading of buildings, in the case of green roofs, utilisation of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies)	Nesting and hibernation aids, e.g. for birds that breed in buildings, bats and insects Reduction of heat stress Creation of evaporative cooling Water retention and thus reduced risk of damage caused by heavy rain Energy savings due to the "cooling effect" of shading the greening measures

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 2.1	Energy-efficient production (new construction, expansion, refurbishment of buildings and facilities)	Utilisation of NbS in the design of the company premises /of buildings: Greening of façades/roofs; when greening roofs, use of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies) Nature-based shading Unsealing of squares with subsequent permanent greening with native plant species Creation of (even small) near-natural biotopes / green-blue infrastructures (green areas, water retention areas, wetland biotopes, small bodies of water and their banks)	Nesting and hibernation aids e.g. for birds, bats and insects Preservation of native biodiversity, reduction of heat stress Creation of evaporative cooling, ensuring cooling and fresh air flows Water retention and thus reduced risk of damage caused by heavy rain
SO 2.1	(Expansion) Construction of energy and heating grids/storage facilities	Minimal sealing during the construction of networks If possible, carry out greening (e.g. of storage facilities and company buildings)	RWater retention and thus reduced risk of damage caused by heavy rain Creation of evaporative cooling, improvement of ecosystem services
SO 2.3 Development of smart energy systems, grids and storage systems outside the Trans-European Energy Network (TEN-E);	(Expansion) Construction of energy networks/storage facilities		Water retention and thus reduced risk of damage caused by heavy rain Creation of evaporative cooling, improvement of ecosystem services

Criteria for Nature-Based Climate Mitigation and climate adaptation

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 2.4 Promoting climate change adaptation and disaster prevention and resilience, taking into account ecosystem-based approaches	Local climate adaptation (protection against heat/drought/floods; improvement of water retention etc.)	Preference should be given to natural water retention measures (renaturation of floodplains and rivers, relocation of dikes) as far as is possible over grey/technical solutions Creation of urban green-blue infrastructures (can also serve as elements of the sponge city and cold air corridors)	Reduction of heat stress Creation of evaporative cooling Water retention and thus reduced risk of damage caused by heavy rain Improving ecosystem services
SO 2.6 Promoting the transition to a resource-efficient circular economy	Investment support for SMEs (possibly the construction of buildings and facilities)	In the case of the promotion of buildings and production facilities, the utilisation of NbS in the design of the company premises/buildings: Greening of façades/roofs; when greening roofs, use of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies) Nature-based shading Unsealing of squares with subsequent permanent greening with native plant species Creation of (even small) near-natural biotopes/green-blue infrastructures (green areas, water retention areas, wetland biotopes, small bodies of water and their banks)	Nesting and hibernation aids e.g. for birds, bats and insects Preservation of native biodiversity, reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows Water retention and thus reduced risk of damage caused by heavy rain Improving ecosystem services

Criteria for Nature-Based Climate Mitigation and climate adaptation

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 2.7 Improving the protection and conservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	(Expansion) Construction of green-blue infrastructures: Green and recreational facilities (e.g. noise reduction, reduction of radon pollution, urban green spaces, inner-city recreational areas, nature experience sites, particulate matter minimisation, removal of contaminated sites)	Planting of hedges and shrubs to reduce noise immission/greening of noise barriers Green-blue fresh air corridors (unsealing, cross-linking of corresponding surfaces) Green, unsealed and planted parking spaces shaded by greenery (e.g. pergolas)	Reduction of noise pollution Reduction of heat stress Ensuring cooling and fresh air flows Creation of evaporative cooling Water retention and thus reduced risk of damage caused by heavy rain Improvement of ecosystem services CO_2-reduction
SO 2.7	Revitalisation of brownfield sites/remediation of contaminated sites and industrial sites, with various reuse concepts (residential construction, commerce, research or education centres, green spaces)	Planting of hedges and shrubs to reduce noise immission/greening of noise barriers Green-blue fresh air corridors (unsealing, cross-linking of corresponding surfaces) Green, unsealed and planted car parks Phytoremediation (absorption of soil pollutants by plants)	Reduction of noise pollution Reduction of heat stress Ensuring cooling and fresh air flows Creation of evaporative cooling Water retention and thus reduced risk of damage caused by heavy rain Improving ecosystem services

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 2.8 Promotion of sustainable, multimodal urban mobility as part of the transition to a carbon-neutral economy	Infrastructure for sustainable urban mobility (construction of roads/paths/mobility centres / bicycle parking garages/charging stations)	Utilisation of NbS in the design of building infrastructure: Greening of façades/roofs; when greening roofs, use of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies) Nature-based shading Planting of hedges and shrubs to reduce noise immission/greening of noise barriers Green-blue fresh air corridors (unsealing, cross-linking of corresponding surfaces) Greening of the transport infrastructure (roadside greenery, street trees, water-permeable cycle paths) Construction of troughs and trenches for the infiltration of rainwater Green, unsealed and planted car parks shaded by greenery (e.g. pergolas)	Nesting and hibernation aids e.g. for birds, bats and insects Preservation of native biodiversity Reduction of noise pollution Reduction of heat stress Ensuring cooling and fresh air flows Creation of evaporative cooling Water retention and thus reduced risk of damage caused by heavy rain Improving ecosystem services

3.3 Political Objective 5 – a Europe closer to its citizens

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
PZ 5 - bringing Europe closer to its citizens by promoting sustainable and integrated development of all types of territories and local initiatives			
SO 5.1 Promote integrated and inclusive social, economic and environmental development, culture, natural heritage, sustainable tourism and safety in urban areas	Expansion / Creation of public recreation areas	Green-blue fresh air corridors (unsealing, cross-linking of corresponding surfaces) Promote the development of Urban Greening Plans	Water retention and thus reduced risk of damage caused by heavy rain Reduction of noise pollution Reduction of heat stress Ensuring cooling and fresh air flows Creation of evaporative cooling Improvement of ecosystem services CO_2-reduction
	Infrastructure for cycling and pedestrian traffic (construction of roads/paths)	Greening of the transport infrastructure (roadside greenery inc. hedges, water-permeable cycle paths)	Water retention and thus reduced risk of damage caused by heavy rain Improving ecosystem services
	Infrastructure for public transport	Greening of the transport infrastructure (roadside greenery inc. hedges)	Water retention and thus reduced risk of damage caused by heavy rain Improving ecosystem services

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 5.1	Urban and neighbourhood development (construction/refurbishment of buildings, streets/paths/squares)	Use of NbS in the design of the squares/buildings: Greening of façades/roofs; when greening roofs, utilisation of resource-saving construction methods	Nesting and hibernation aids e.g. for birds, bats and insects Reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows
		Installation of nesting and hibernation aids e.g. for birds nesting in buildings, bats and avoidance of animal traps (manholes, open gutters, drains); Nature-based shading	Improving ecosystem services Water retention and thus reduced risk of damage caused by heavy rain
		Unsealing of squares with subsequent permanent greening with native plant species	
		Green-blue fresh air corridors (unsealing, cross-linking of corresponding surfaces)	
		Greening of the transport infrastructure (roadside greenery)	
		Construction of troughs and trenches for the infiltration of rainwater	
	Ecological development & brownfield use/revitalisation of fallow/green spaces	Planting of hedges and shrubs to reduce noise immission/greening of noise barriers Green-blue fresh air corridors (unsealing, cross-linking of corresponding surfaces)	Nesting and hibernation aids e.g. for birds, bats and insects Reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows
		Green, unsealed and planted, planted by greenery (e.g. pergolas) shaded car parks Phytoremediation (absorption of soil pollutants by plants)	Improving ecosystem services Water retention and thus reduced risk of damage caused by heavy rain

Political/Specific Objectives	Types of support measures	(Criteria) Nature-based Solutions	Potential Impact/Objectives/Explanations
SO 5.2 Promotion of integrated and inclusive social, economic and environmental development, culture, natural heritage, sustainable tourism and safety in urban areas	Tourist infrastructures (construction/extension/refurbishment of buildings; Construction of cycling and hiking trails)	Installation of NbS in the design of grounds/buildings: Greening of façades/roofs; when greening roofs, use of resource-saving construction methods Installation of nesting and hibernation aids e.g. for birds that breed in buildings, bats and avoidance of animal traps (manholes, open gutters, gullies) Nature-based shading Creation of (even small) near-natural biotopes /green-blue infrastructures (green areas, water retention areas, wetland biotopes, small bodies of water and their banks) Unsealing of squares with subsequent permanent greening with native plant species Greening of the transport infrastructure (roadside greenery, water-permeable cycle paths, green, unsealed and planted car parks shaded by greenery e.g. pergolas) Construction of troughs and trenches for the infiltration of rainwater Prioritising the promotion of nature-based tourism and ecotourism	Nesting and hibernation aids e.g. for birds nesting in buildings, bats and insects Reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows Improving ecosystem services Water retention and thus reduced risk of damage caused by heavy rain Increasing the attractiveness of NbS Knowledge expansion for the effective application of NbS
	Community-Led Local Development etc. Remediation of contaminated sites and green infrastructure	Green-blue fresh air corridors (unsealing, cross-linking of corresponding spaces) Green, unsealed and planted car parks shaded by greenery (e.g. pergolas) Phytoremediation (absorption of soil pollutants by plants)	Reduction of heat stress Creation of evaporative cooling Ensuring cooling and fresh air flows Improving ecosystem services Water retention and thus reduced risk of damage caused by heavy rain

4 Approaches to implementation and examples

This section contains individual approaches and examples of Nature-based Solutions (in German). This list is not exhaustive; it serves merely as a source of ideas for further information.

Nature-based Solutions	Implementation Approaches	Examples
Utilisation of NbS in the redesign and/or refurbishment of grounds/buildings: • Greening of façades/ roofs Nature-based shading • Unsealing of squares • Creation of (also small) near-natural biotopes/ green-blue infrastructures	• Natureplus ecolabel as an orientation for sustainable building from **natureplus e.V.** as an alternative or in addition to the **rating system for sustainable building** • Elements for **bird protection on glass** • **Animal Aided Design Approach** • The topic of greening of buildings at the **Bundesverband Gebäudebegrün** • **Installation of nesting and hibernation aids for e.g. birds nesting in buildings, bats** • Specialist publication "**Bird-friendly Building with Glass and Light**" and "**Protecting Biodiversity in Buildings**" (in German) • BUND Working Group **Sustainable Land Use** • BUND – information on **Urban Trees / Urban Forest**	• Promotion of **biodiversity** with ERDF funds in the city of Braunschweig (bat nesting aids, guidance system for amphibian protection) • Klimabündnis AT, publication: **Compilation of Nature-based Solutions** – Good Practice examples of green space and rainwater management in Europe, produced as part of the project • The portal of the "**nature-based enterprises**", which aims to connect actors with one another
Preference over natural water retention measures instead of grey/technical solutions	• Concepts for sustainable storm water management • On the topic of **Sponge City** :**Berlin Rainwater Agency, Ingenieurgesellschaft Sieker mbH, Sponge City Bavaria, German Climate Protection portal**	• Project: **Experience Space Lippeaue** • Project: **Emscher Reconstruction** • City of Oberhausen **Ecological Optimisation of the Halde Alstaden slag heap wetland** with ERDF funds
Creation of urban green-blue infrastructures (can also serve as elements of the sponge city and cold air corridors)	• Establishment of **nature experience spaces** • Sustainable green space management • Cooperation with social institutions (e.g. daycare centres and schools etc.) • Approach of the **Animal Aided Design** • On the topic of **Sponge City** :**Berlin Rainwater Agency, Ingenieurgesellschaft Sieker mbH , Sponge City Bavaria, German Climate Protection portal**	• Good practice examples – **green infrastructure in the ERDF** • Klimabündnis AT, publication: **Compilation of Nature-based Solutions** – Good Practice examples of green space and rainwater management in Europe, produced as part of the project • **Ingenieurgesellschaft Sieker mbH** with the collaborative project "**Blue-green Streets**"