

Nature-based solutions in Europe:
Policy, knowledge and practice for climate change
adaptation and disaster risk reduction



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Europe: Policy, knowledge and
practice for climate change
adaptation and disaster risk
reduction**

European Environment Agency



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Nature-based Solutions (NbS)



solutions to societal challenges

inspired and supported by nature

cost-effective

simultaneously provide environmental, social and economic benefits

help build resilience

more (diverse) nature and natural features and processes into cities, landscapes and seascapes

locally adapted, resource-efficient and systemic interventions

must benefit biodiversity

support the delivery of a range of ecosystem services

- **Ecosystem approach and ecosystem-based approaches**
- **Green infrastructure and blue-green infrastructure**
- **Ecosystem-based adaptation**
- **Ecosystem-based disaster risk reduction**
- **Natural water retention measures**
- **Sustainable management and ecosystem-based management**
- **Sustainable climate actions and natural climate solutions**

This report provides up-to-date information:

- NbS as 'umbrella concept' (**CHAPTER 1**)
- Global and EU policy support NbS (**CHAPTER 2**)
- NbS applied in water management, forestry, agriculture, cities, coastal areas and mountains (**CHAPTER 3, 4**)
- Multi-benefits of NbS for CCA/DRR in Europe (**CHAPTER 3**)
- NbS applications in Europe (97 case studies) for CCA/DRR (**CHAPTER 4**)
- Financing NbS (**CHAPTER 5**)
- Opportunities for mainstreaming NbS into sectors in Europe (**CHAPTER 6**)
- 11 example cases of NbS in Europe (**ANNEX 4**)
- NbS in European knowledge platforms (**ANNEX 5**)



Global and European policy to support NbS

- NbS for CCA/DRR are embedded into **Global and EU policy frameworks** (SD, DRR, climate, environment)
- **UN 2030 SD agenda** linked directly and indirectly to nature - promote NbS and scale up implementation to **transformative change**
- Need to increase the level of ambition and support for NbS and to encourage new, innovative applications - to **enhance the coherence between relevant EU policies**
- Need for **EU agreed standards, quantitative and measurable indicators** to assess progress, effectiveness and the benefits of NbS

Policy area	Global policy	EU policy
Cross-cutting	<ul style="list-style-type: none"> • 2030 Agenda for sustainable development, Sustainable Development Goals (2015) • United Nations (UN) Convention to Combat Desertification (1996) ^(a) 	<ul style="list-style-type: none"> • European Green Deal (2019) • Bioeconomy strategy (2012) and its update (2018)
Biodiversity (including forestry)	<ul style="list-style-type: none"> • UN Convention on Biological Diversity (1993) ^(a) • Ramsar Convention (1975) ^(a) 	<ul style="list-style-type: none"> • Biodiversity strategy for 2030 (2020) • Green infrastructure strategy (2013) • Habitats Directive (1992) • Birds Directive (1979/2009) • EU forest strategy (2013) • LULUCF Regulation (2018)
Climate	<ul style="list-style-type: none"> • Sendai Framework for Disaster Risk Reduction 2015-2030 (2015) • UN Framework Convention on Climate Change (1994) ^(a), Paris Agreement (2015) 	<ul style="list-style-type: none"> • Action plan on the Sendai Framework for Disaster Risk Reduction (2016) • Strategy on adaptation to climate change (2013, 2021)
Water and agriculture		<ul style="list-style-type: none"> • Farm-to-fork strategy (2020) • Floods Directive (2007) • Water Framework Directive (2000) • Common agricultural policy (2013) • Nitrates Directive (1991)
Urban	<ul style="list-style-type: none"> • New urban agenda – Habitat III (2016) 	<ul style="list-style-type: none"> • Urban agenda for the EU (i.e. Pact of Amsterdam, 2016)

On-line Webinar

Nature as a solution - For resilience, mitigation and sustainable development

27 May 2021, 13:30 – 16:00

Webinar champion:

Sergio Castellari (*National Institute of Geophysics and Volcanology*)

Team members:

- Hilde Eggermont (*Biodiversa/European Biodiversity Partnership*)
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- Marianne Zandersen (*Aarhus University and iClimate, REGREEN project*)
- Karin Zaunberger (*EC DG ENV*)

Registration to this **online** event and draft programme available at: <https://www.ecca21.eu/>

