

# EU MISSIONS

ADAPTATION TO CLIMATE CHANGE

**Community of Practice** 

#EUmissions #HorizonEU #MissionClimateAdaptation





## Nature Based Solutions as Adaptation Options

January 23rd, 10:00hs CET





### **Agenda**

Duration (min)	Agenda item
5	Welcome & opening remarks
15	NbS overview: what are they and why are they relevant as climate adaptation options?
15	Q&A
50	Breakout session for sharing experiences
5	Closing remarks





#### Housekeeping

- The working language of the meeting is English.
- Please note that the meeting is being recorded.
   The recordings will be available at a later stage after processing.
   Breakout rooms are not recorded.
- Please keep your microphone muted <u>unless</u> you are speaking.
- Please turn your microphone and camera on during the breakout rooms.
- If you wish to speak, use the raise your hand option.



a question.



#### Slido

app.sli.do/event/hreDMaZq9XtzZyuPi... Plenary ~ 8 **□ Q&A** .|| Polls Type your question Click here to ask There are no questions asked yet. Ask the first one! slido Ask Acceptable Use - Slido Privacy - Cooki

Click here for accessing the polls.

Type your questions here.







#### PEER LEARNING PROGRAMME

- Dynamic extension of our ongoing knowledge exchange initiatives to facilitate in-depth exchanges between regions and local authorities.
- Four online meetups designed for active engagement and based on the needs and ideas of each group.

#### INTRODUCTORY

Validating topics and defining learning objectives

#### **MENTORING**

Group meetings with key experts on the topic

#### INTERACTIVE EXCHANGE

Facilitated exchange between groups

#### WRAP UP & SOLUTIONS

Linking learning with solutions, tools and funding

More information and registration link can be found here.







## NbS overview: what are they and why are they relevant as climate adaptation options?

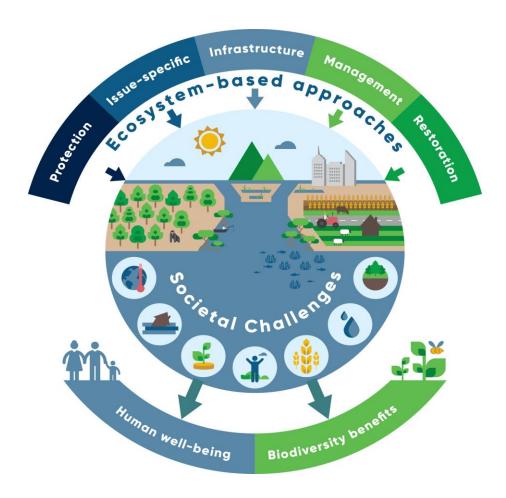
Susanna Gionfra, IUCN

NetworkNaturePLUS





#### What are Nature-based solutions?



"Actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits."

IUCN WCC 2016, Resolution 069
 UNEA-5 2022 Resolution





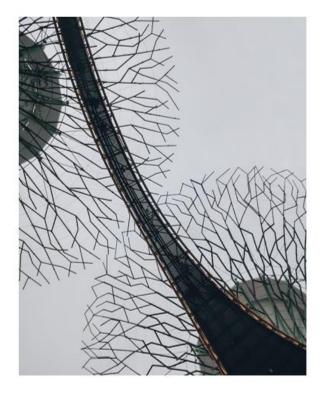
#### The importance of definitions



Nature-based solutions



Nature-derived solutions



Nature-inspired solutions





#### Features of nature-based solutions

- Nature-based solutions (NbS) are multifunctional
- Benefitting biodiversity and human wellbeing are pre-requisites for NbS
- Multiple societal challenges can be addressed
- NbS are applicable to all ecosystems
- NbS are context-specific
- NbS can replace and/or complement conventional solutions



Scan to learn more on NbS





### Benefits of NbS: Societal challenges addressed

- 1. Health & well-being
- 2. Social justice & social cohesion
- 3. Participatory planning & governance
- 4. Knowledge & social capacity building

for sustainable transformation

- 5. Place regeneration
- 6. Climate resilience
- 7. Land & green space management
- 8. Water management
- 9. Biodiversity enhancement
- 10. Air quality
- 11. Natural & climate hazards
- 12. New economic opportunities & green jobs









#### **Benefits of Nature-based Solutions**

Benefits of NbS are of **environmental** (e.g. healthy ecosystems), **social** (e.g. social cohesion) and **economic** nature (e.g. reduced healthcare, energy costs).

It is estimated that NbS working as infrastructure are 50% cheaper than grey infrastructure (World Economic Forum, 2022)

Protected areas provide large mental health benefits to visitors representing EUR 5.5 trillion benefits each year worldwide (Buckley et al., 2019)

Forest protection and restoration supports conservation of the 29% of forest species currently threatened with extinction (IUCN's Red List of Threatened Species)





#### Common misuses of NbS

#### If a project ...

- overlooks indigenous peoples' and local and vulnerable communities' rights;
- contributes to gentrification;
- unfairly distributes benefits;
- promotes industrial agriculture and monoculture planting;
- causes land grabbing and displacement of communities; and
- fails to contribute to biodiversity and ecosystem integrity.
- ... it may be inspired by nature, but it is not NbS

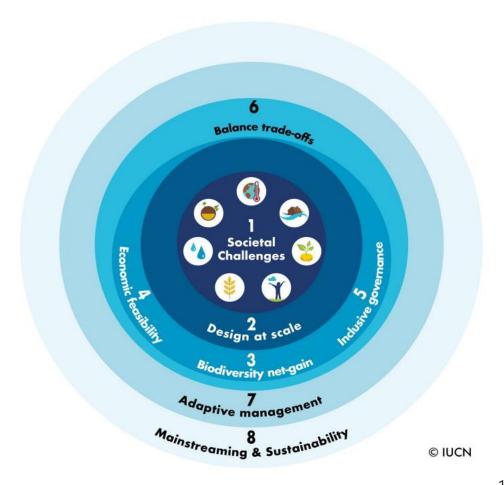




#### **IUCN Global NbS Standard**

#### Biodiversity pre-requisite

#	Criteria
1	NbS effectively address societal challenges
2	Design of NbS is informed by scale
3	NbS result in a net gain to biodiversity and ecosystem integrity
4	NbS are economically viable
5	NbS are based on inclusive, transparent and empowering governance processes
6	NbS equitably balance trade-offs between achievement of their primary goal(s) and the continued provision of multiple benefits
7	NbS are managed adaptively, based on evidence
8	NbS are sustainable and mainstreamed within an appropriate jurisdictional context







#### NbS case study

**Project**: the ReDuna project in Almada, Portugal (REGREEN)

**Intervention**: sand dunes restoration through Nature-based solutions

**Main actions**: sand nourishment, natural willow fences, invasive species removal, native species plantings (100 000)

#### Benefits:

- **Environmental**: over the first 2 years of the project, enhanced biodiversity including 90% survival of native species planted on site, and 49 new wildlife species identified
- Social: strong community engagement (NGOs, citizens, schools), increased social cohesion and recreational value
- Economic: 104 NbS local jobs created, including 12 permanent jobs, economic revenue from avoided damages to beach support-structure owners



**Adaptation**: improved resilience to sea-level rise and storms, flood mitigation, increased carbon sequestration and storage, increased water infiltration and retention







#### **Q&A** session

Giovanni Roberti

MIP4Adapt





### Breakout session: Sharing experiences

Martina Alvarez

MIP4Adapt





#### **Sharing experiences**

**Action:** In each breakout room, start by introducing yourselves. Then a poll will be launched to spark discussions:

Have you implemented or are considering implementing NbS in your region?

Share why you chose this option and how you applied it. What challenges and/or lesson learnt have you encountered?

**Closing Exercise:** We will return to plenary to close the workshop with one last exercise.









What are your main takeaways from today's discussion?







### **Closing remarks**

Martina Alvarez

MIP4Adapt





To what extent does this event give you the opportunity to discuss key adaptation topics with other members of the Community of Practice?







#### **Closing remarks**

- Recording, presentation and a summary report of the event will be shared on the online community site.
- Next events:
  - 25.01 How to Assess Climate Change Risks and Vulnerabilities?
  - 30.01 Presenting MIP4Adapt's Guide to Climate Change Risks and Vulnerabilities Assessment
- Peer-learning Programme first meeting on 19.02

More information to come at the beginning of February. Stay tune on the online site.







## Thank you!

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