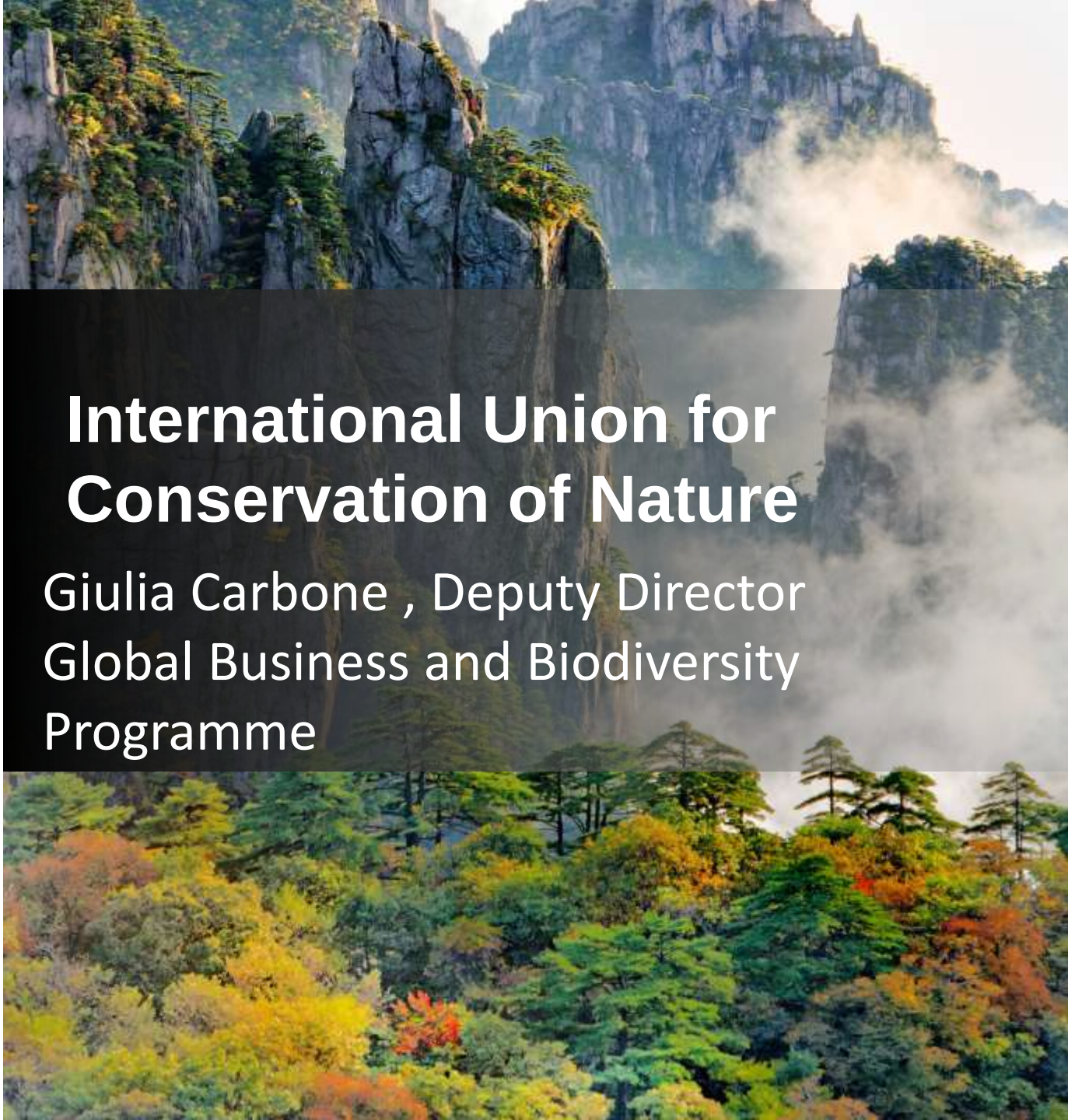


International Union for Conservation of Nature

Giulia Carbone , Deputy Director
Global Business and Biodiversity Programme

Safeguarding biodiversity

- Can Nature-based Solutions be an alternative?
- What are key steps and considerations for the protection of biodiversity if grey infrastructure are the best solution?

Nature based Solutions

Nature-based solutions (**NbS**) are defined as actions to protect, manage and restore natural or modified ecosystems, which address **societal challenges**, **effectively and adaptively**, providing human well-being and biodiversity benefits.

Applications include coastal protection, coastal re-alignment, water supply protection, waste water treatment, stabilization of slopes, drought effects management, landslide risk reduction, flood protection

Costs and benefits

To carry out a correct analysis it is critical to assess the effectiveness of the various options in terms of the main goal of the infrastructure (protecting lives).

In addition, the following should be considered:

- Cost-effectiveness of the interventions, considering construction and maintenance costs in the long terms.
- Biodiversity gains and losses should be accounted for.
- Consider co-benefits of NbS such as the creation of “green jobs” and “green enterprises”.

Hybrid Nature-based Solutions

Hybrid approaches, utilizing a combination of natural and grey infrastructure

Natural infrastructure **+** Grey infrastructure

Synergies

NbS standard development

1. Quality assurance
2. Engage stakeholders
3. Build common language and understanding
4. Increase demand
5. Incentivize positive sustainable change

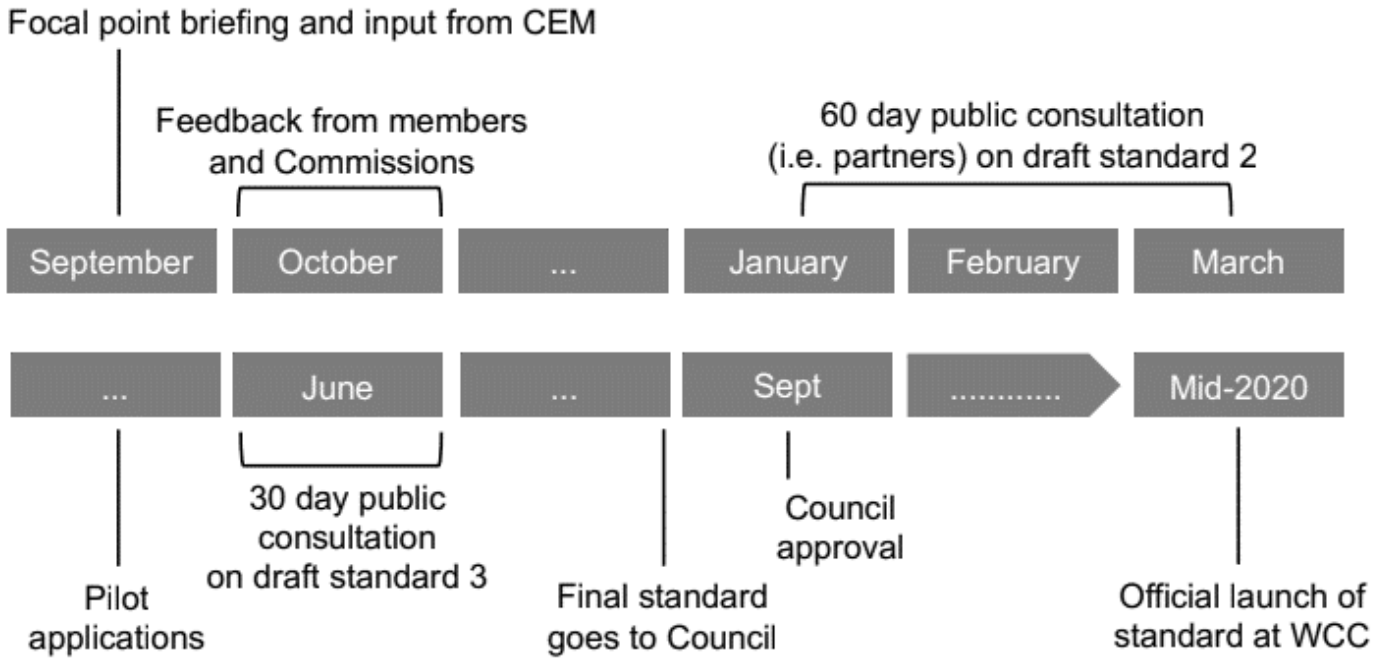
Current seven criteria

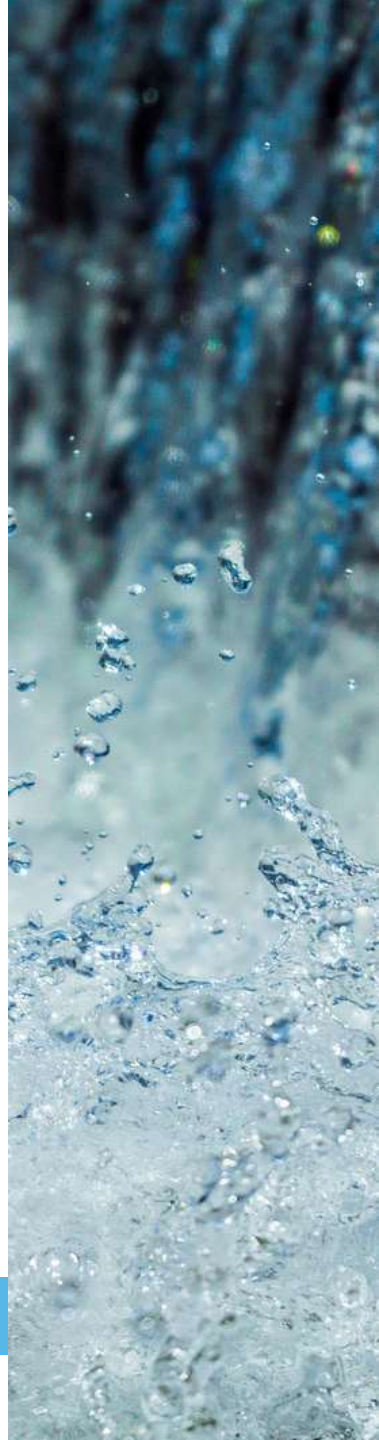
The standard is made up of seven criteria with relevant indicators to allow a self assessment in order to design, monitor and verify Nature-based Solution. They are broadly grouped around.

1. Nature and biodiversity
2. Transparency and inclusion
3. Adaptive management, governance & monitoring
4. Trade-offs
5. Land/seascape scale
6. Synergies
7. Mainstreaming

Example full criterion:
Criterion 7: NbS are incorporated into policies and regulations

How to engage





Prevent rather than cure

- Biodiversity conservation should become a much stronger component of **land use planning** which is the most effective way to minimize the negative impacts of infrastructure development.
- **ESIA at project level** should be conducted in such way to focus on impact prevention through avoidance and minimization rather than restoration or offsets.
- Financial institutions should adopt stronger **biodiversity safeguards** with regards to infrastructure developments designed to promote impact avoidance and minimization.
- **Protected areas management** should be strengthened.

Mitigation of biodiversity impacts at project level

- **Screen for biodiversity risks** early on in the project development (IBAT).
- Adopt the **mitigation hierarchy** as a preferred biodiversity management framework.
- **Avoid projects in protected areas** (and other areas designated for the conservation of biodiversity).

More on mitigation

- Strengthen mitigation measures in **Key Biodiversity Areas**.
- Promote a **Net Biodiversity Gain** for all infrastructure projects with well designed and effectively implemented biodiversity offsets.
- Integrate biodiversity safeguards in the **sourcing of building materials**.
- Apply the principle **of free, prior and informed consent (FPIC)** for projects on indigenous lands.

More on mitigation

- In all the risk and impact assessment include **direct, indirect as well as cumulative impacts** on biodiversity.
- Include in projects' decisions **local communities** (which are often key in the sustainable management of natural resources).

Thank-you!

And for more information visit:

www.iucn.org/theme/business-and-biodiversity

www.iucn.org/theme/ecosystem-management

Giulia.carbone@iucn.org

Daisy.hessenberger@iucn.org