



Wetlands as nature-based solution for climate change mitigation

Ján Kadlečík, CWI coordinator, State Nature Conservancy, SK
Viera Stanová ŠeffEROVÁ, Daphne – Institute of Applied Ecology, SK
Henk Zingstra, Wetlands International, NL
Piotr Mikolajczyk, UNEP GRID Warsaw, PL
Bohdan Prots, Danube-Carpathian Programme, UA

Meeting of the CC WG on Climate Change, 6 May 2021



Wetlands as NbS



- Wetlands are a key element of the **nature based solutions (NbS)** and play a crucial role in climate change mitigation and adaptation.
- Wetlands serve as an effective **carbon sink** and increase communities' resilience to the impacts of climate change through **reduction** of impacts from **natural disasters** including floods, storm surges and drought.
- Human adaptation to the impacts of climate change cannot be achieved without wetlands.

(<https://www.ramsar.org/resources/training-webinar-on-wetlands-as-nbs-for-ndcs>)





Wetlands as NbS



- A central element for implementing the Paris Agreement are the **nationally determined contributions (NDCs)** of each Party. Parties are encouraged to seek opportunities to integrate NbS into their NDCs.
- In cooperation with partner organisations the **Carpathian Wetland Initiative (CWI)** developed in 2020 a **project idea** aimed at restoration and improved protection of wetlands to enhance CO2 sequestration and storage.
- Additional objectives include **enhancing the knowledge and awareness of wetlands as NbS** for climate change mitigation and promote the **inclusion of wetland management, protection and restoration in national climate policies**.



CARPWET project



- “**CARPWET** - Carpathian wetlands as the nature-based solution for climate change mitigation” – project outline was submitted in January 2021 on behalf of the CWI and partner organisations by the NGO DAPHNE – Institute of Applied Ecology (SK) within 5th call of EUKI.
- The **EUKI (European Climate Initiative)** is a project financing instrument by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) aimed to foster cross border climate cooperation within the EU in order to mitigate greenhouse gas emissions.
- Project outlines are under evaluation - applicants with promising project outlines will then be asked to develop and submit a full project proposal
- Due to EUKI call limits (budget limits, number of project partners, eligibility of countries for funding) the CARPWET project outline focused on the Western Carpathians; German partner recommended



CARPWET project



Countries and partners involved:

1. Slovakia - DAPHNE – Institute of Applied Ecology
2. Czech Republic - Masaryk University in Brno
3. Hungary - Centre for Ecological Research
4. Poland – (subcontracting)
5. Germany - Institute of Sustainable Development of Landscapes of the Earth DUENE e.V.
6. Netherlands - Wetlands International – European Association

Number of project partners – limited to 5

- Poland – cooperation with UNEP GRID Warsaw
- Romania – cooperation with the Ministry of Environment, Waters and Forests and Maramures NP
- Serbia and Ukraine are not eligible for financing



CARPWET project



Project substance

- Recently carbon-rich wetland soils have emerged as important sources for the release of CO₂
- The climate impact of this is hardly addressed in EU and national climate policies
- The project will implement a large-scale survey of wetland carbon-rich soils in the Western Carpathians (CZ, HU, PL and SK) and quantify their carbon stock and actual and potential CO₂ emissions
- The outcomes will provide data for more reliable GHG reporting, support efforts to reduce CO₂ emissions, and enhance CO₂ sequestration through improved protection, management, and restoration of wetlands
- It will help countries to include soil management targets in their NDCs
- Training workshops and meetings will support knowledge sharing, networking, and crossborder dialogue



CARPWET project



Outcomes, Target groups

- The overarching outcome of the project is support to the Carpathian countries in reaching carbon neutrality by 2050 in line with EU policies.
- The main target group of this project are the contracting parties to the Carpathian Convention (CC) and relevant Working Groups (Climate Change, Biodiversity, SARD, Forestry).





CARPWET project



Project outcomes

- The project will **identify and map wetland carbon rich soils** in the Carpathians and assess their carbon stocks and current emissions.
- It will **identify priority areas** for stopping the CO₂ emissions and restoring carbon sequestration capacity along with restoring other ecosystem services.
- The participating countries will be encouraged to include the outcomes of the project in **soil and wetland restoration and management plans** and include them in their **national climate policies** like NDCs
- International networking events will **promote** the use of the project methodology for identifying and mapping carbon-rich soils and assessing their **carbon storage, emission and sequestration** capacity in other EU countries.
- Through **awareness raising, networking and training activities**, awareness on the role of carbon rich soils and wetlands in climate policies will be increased.



CARPWET project



Letters of Support

- Ministry of the Environment of the Czech Republic
- Ministry of Agriculture, Department for Nature Conservation – HU
- Ministry for Innovation and Technology, Climate Policy Department – HU
- Ministry of Climate and Environment, Department of Nature Conservation – PL
- Ministry of Environment, Waters and Forests – RO
- Ministry of Environment – SK
- UNEP, Vienna Programme Office, Secretariat of the Carpathian Convention
- Ramsar Convention Secretariat
- Scientific Steering Committee of the Science for the Carpathians (S4C SSC)
- Bavarian State Ministry for Environment and Consumer Protection – DE (EUSDR PA6)
- Steering Group of the Priority Area 5, representatives Danube Region countries
- Slovak Presidency to EUSDR

Thank you!



Examples of other projects



EEA and Norway Grants

- **SK-Climate Programme** - Climate Change Mitigation and Adaptation
- **Call for proposals „Restoration of degraded wetland ecosystems“ (ClimaLocal)** financed from the Norway Grants and the State Budget of the Slovak Republic
- The main objective is to restore and strengthen the capacity of degraded wetland ecosystems to adapt to climate change and ensure the sustainable fulfilment of their ecosystem services in order to mitigate the negative impacts of climate change on the environment and quality of life of the inhabitants





Examples of other peatland restoration projects



EEA and Norway Grants - Slovakia

- **Project Title:** Ecohydrological Restoration of Peatlands in the Carpathians (submitted)
- **Applicant:** State Nature Conservancy of the SR
- **Project partners:** NGO DAPHNE - Institute of Applied Ecology; PRO POPULO Poprad (forest and agricultural land manager); Municipality of town Spišská Belá; NINA - Norwegian Institute for Nature Research
- The project **aims** to reduce CO₂ emissions by restoring degraded peatlands and regenerating their function as carbon sinks.
- 12 sites in different parts of Slovakia on area 352.18 ha
- Besides locking carbon and supporting biodiversity, peatlands will provide climate related co-benefits like enhancing climate resilience of river basins by recharging aquifers and reducing flood risks.



Examples of other peatland restoration projects



EEA and Norway Grants - Poland

- **Sub/Programme:** Environment, Energy, Climate Change – Natural Environment and Ecosystems (submitted)
- **Project title:** Carpathians Unite – conservation of Orawsko-Nowotarskie peatbogs
- **Partnership:** UNEP/GRID-Warsaw (Project Leader); Fundacja Przyroda i Człowiek (Nature and Man Foundation); Asplan Viak Internet AS – Norway; Collaboration with the local National Forestry authority – manager of the large portion of the bog.
- **Aiming** to improve habitat conditions of valuable peatbog protected in the “Czerwone bog woodland” nature reserve and Ramsar site, and within the Natura 2000 site „Torfowiska Orawsko-Nowotarskie” (Orawsko-Nowotarskie Peatbogs)
- Restoration activities, monitoring, fostering proper management practices, education, promotion, dissemination, exchange of best practice



Examples of other peatland restoration projects



Dutch KNNV (nature society) - Ukraine

- **Project title:** Mountain peatland survival and local community: restoration support in the Ukrainian Carpathian Mts. (submitted)
- **Applicant:** Danube-Carpathian Programme NGO
- **Project aim:** Support for the local community on the restoration of botanical nature monument “Andromeda” in the Ukrainian Carpathians
- Restoration of bog vegetation and water retention

European Association for the Conservation of Nature (EOCA) (Voting for the best conservation project)

- Ukraine: Danube Carpathian Programme, project proposal „Rescue the Narcissi Valley“



Examples of other relevant projects



LIFE Integrated

- *Slovakia: LIFE - IP NATURA 2000 SVK* „Role of the Natura 2000 network and management of some prioritized habitats in the integrated landscape protection of the Slovak Republic“ (approved)
- Includes **management and restoration measures in peatland habitats**: restoration on the area of 1500 hectares and improved the conditions for 4 habitats

LIFE NAT

- *Poland*: application (Concept Note), focused on active protection of Carpathian grasslands in several sites (including transborder areas)



Support wetland conservation, management and restoration



- WE.PEAT – Green New Deal for Peatlands - H2020 project proposal – PL, RO, SK involved , submission supported by CWI, CC Secretariat
- Other restoration projects ? – please provide information
- We encourage partners and Parties to develop wetland and carbon rich soils restoration projects and integration into climate mitigation and adaptation policies and strategies

Thank you!

jan.kadlecik@sopsr.sk

