



## Case study // Round Table SDG 15: Sustainable Forest Management and the SDGs

### Carbon forests - a natural solution to enhance climate change mitigation efforts

#### ***The State Forests, Poland***

*Level: subnational*

#### Summary

Carbon forests is the Polish State Forests' innovative project for climate protection. Its primary aim is to promote the contribution of forests as one of the most cost-effective ways of reducing the concentration of greenhouse gases in the atmosphere. Specific management practices have been employed in order to enhance carbon stock in forests and to maximise the accumulation effect without causing any harm to biological diversity or to the water retaining function of forests. These include, for example, developing multi-annual programs for rebuilding forest stand species composition and silviculture methods aimed at shaping their multi-layer structure. The experimental activities have been introduced in 26 forest districts and carried out on the total area of nearly 12,000 ha. As a result, additional amounts of organic carbon will be captured and offered for sale by the State Forests at a trading auction for those who would like to support activities aimed at reducing greenhouse gas emissions. The project is planned for 2017 – 2026 and involves many partners, including practitioners, researchers and companies from the energy sector that are interested in purchasing CO2 units.

#### Situation

The State Forests National Forest Holding (SFNFH) of Poland plays a major role in ensuring the sustainable management of forests, which means that provision of non-productive functions of forests should go hand in hand with the supply of wood and a variety of other social and environmental services, whenever possible in a balanced way. At the same time, the organization dedicates a large part of its activities to raising public awareness of environmental concerns. Established in 1924, it takes care of over three-fourths of Polish forests today (7.6 of 9.3 million hectares) on behalf of the State Treasury. Its main mission is to manage national forests in a way that guarantees their preservation, protection and growth of their resources. The organisation is underpinned by two key principles: the three-tiered structure and the self-finance status. At the base of the management structure of the State Forests are 430 forest districts. At the next level, there are the 17 regional directorates of the State Forests. At the top of the organisation is the Director-General of the State Forests and their office, the Directorate-General.



### Strategy

The Carbon Forests project aims to promote the effectiveness of its approach and to discuss the most cost-effective policy options to reduce greenhouse gas concentration in the atmosphere.

A number of alternative approaches to utilizing forestry and forest management for carbon sequestration are examined, including the following phases of the project:

- Development of research on managing forest carbon and greenhouse gas balances;
- Determination and implementation of additional measures to be carried out on the plots included in the Carbon Forest project;
- Implementation and evaluation of additional forest management activities to enhance carbon stock in forests;
- Implementation of a system of estimating the amount of carbon in the ecosystem (CBM);
- Establishment of the forest carbon market;
- Creation of an on-line trade auctioning system (CO2 Portal);
- Development of a monitoring system for measuring the role of forests in storing carbon;
- Development of the Information Campaign.

### Results and impact

This project serves as a basis for the implementation of additional measures aimed at enhancing carbon stock in forests. It will help to quantify the consequences of different forest management practices and operations in order to promote and test forest management activities that contribute to the enhancement of mitigation efforts. These should serve equally as an 'adjustment' of forest ecosystems ahead of forthcoming climate change, as well as the growing need to treat forests as a natural reservoir of organic carbon. The ongoing research will improve the methods and procedures for estimating carbon dioxide absorption. The end result will be Carbon Budget Model to calculate carbon stocks changes and prognoses, scenarios assessing the impact of forest management activities so as to support operational planning. The State Forests will run a voluntary on-line auctioning system for CO2 credits, which allows individuals or entities to join in the efforts in favour of climate. The funding is to be spent on activities in support of nature and protected species conservation measures indicated by the donors.

### Challenges and lessons learned

The project is funded by the State Forests and requires long term planning and contributions of different partners, including the Forest Research Institute, the Bureau for Forest Management and Geodesy.



### **Potential for replication**

It is expected that the results of the Carbon Forest project can be eligible for wider dissemination at the national and international levels. The experiences of 26 forest districts can be assessed and transferred to an overall guidance for the State Forests managing principle. Poland takes this opportunity to promote the contribution of forests as one of the most cost-effective options to reduce the concentration of greenhouse gases in the atmosphere in line with the Paris Agreement, which encourages parties to initiate adequate actions to increase the greenhouse gas absorption capacity of forests.

### **Contact**

Name: Mr. Tomasz Zawiła-Niedźwiecki, Deputy Director General of the State Forests

Organisation: Directorate-General of the State Forests, Poland