

Natural Climate Buffers Study Tour

Report



From 18-20 April 2018, a group of 38 experts from Non-Governmental Organisations as well as Governmental Organisations from 11 different European countries gathered for the Natural Climate Buffer Study Tour through the north of the Netherlands to learn about five Dutch pioneer projects on nature-based solutions in adapting to climate change. The event was organised by Eurosite in cooperation with Natuurmonumenten and the Dutch Natural Climate Buffer Coalition. The participants expressed great interest in finding project partners, learning from good practices and networking. The aim of the tour was to inspire and to unite forces to work together against the effects of global warming. For this, The Netherlands can provide many good examples as it had to deal with water management in the past. The country's history with water management is not unrelated to its below sea level location. Additionally, there are some freshwater rivers coming from the east and south. Generally, about two third of the country is considered highly vulnerable to flooding.



The stops taken during the study tour gave participants insights on possible solutions for their own countries and ideas on how natural climate buffers could be mainstreamed. At each stop, the projects were introduced by a field expert. This gave excellent opportunities for questions and small discussions. Afterwards, guided walkabouts allowed the participants to experience these projects first hand. Time flew by with a tight schedule and many interesting activities to follow.

The first stop was the **Vreugderijkerwaard**, which was explored in two smaller groups after a small presentation of the project. The area gave an understanding of how societal needs can be integrated with biodiversity. The Vreugderijkerwaard is a riverscape which functions as a dike and protects the 125,806 citizens of Zwolle from floods. It is also home to many bird and plant species. For example, the group was able to spot two white tailed eagles during the tour. The dike was moved as



part of the project “Room for the river” to increase water safety. As a result, a site channel to the river IJssel was formed to create a natural climate buffer. The group realized that such projects are especially relevant on EU level when considering rivers do not stop at a country's border, which is also why Eurosite identifies these projects among its members and connects relevant partners through events like this study tour,

other networking opportunities and their international Twinning Programme. Participants mentioned they are fond of the idea of having an area that provides solutions to issues such as flooding, while it simultaneously creates room for nature. They seemed eager to implement such projects in their respective home countries. The Vreugderijkerwaard is a prime example of cooperation between the government and nature conservation organisations.

The following stop on the programme was **'het Waterloopbos'**: a unique area showing the history of how the Netherlands has learned to work with water. In the past, scale models helped to compute engineering results when computer modelling was not available. Engineers recreated entire river systems, harbours and even seas! Nowadays, the area is still home to about 30 former hydrological experiments, which can be visited. Het Waterloopbos



is symbolic for the transition of (solely) technical measures to nature-based solutions in that the once concrete based site is designated as a nature reserve. The participants themselves could experience the educational role of the area and identified the need for similar sites within their own country. Participants from Denmark and Poland pointed towards the important role of cultural heritage within nature conservation. What made the walk through the area particularly special was that one of the engineers who worked on the projects in the seventies led the tour of the area.

The final stop of the day was the **Dwingelderveld** – a national park in Drenthe. The area is mainly used to store water and prevent nearby towns from being flooded. It functions as a



natural bathtub with the ability to store up to 1.5 million cubic meters of water. It is Europe's largest wet moorland, home to many rare plant species and protected as a Natura 2000 site. Many of the participants saw the innovation of the area in the cooperation between the water board and conservation organisations. What also stood out was the nature-based solution of keeping flooding upstream through dams. The guide directed the group through the current dry area and explained how the emptying of the space is achieved

through weir works.

The second day started with a visit to the **Onlanden**, which the group got to explore the Dutch way – by bike. The area is a prime example of how disasters trigger change. The Onlanden are another natural water storage system – just like Dwingelderveld – with the difference that it can hold an astonishing 7 million cubic meters of water. Participants from the UK, France, Greece, Poland and Germany appreciated the concepts transferability to their own region. The visit began with a small introduction on the area, followed by a bike ride to the newly constructed lookout tower. What is interesting is that, by choice, not the whole area is part of Natura 2000, even though it potentially could be.





After another short bus ride, the **Noard-Fryslân Bûtendyks** were reached. This project was especially interesting to members from coastal areas – Denmark, Greece, Belgium and Germany. The Dutch coastal area is very unique in its build-up. A nine meters high dike protects the Netherlands from the Wadden Sea. Exceptional to this area is the zone between the dike and the ocean being 3km long and holding several summer dikes that additionally decrease the power of the ocean. A guide directed the group through the dike area and towards an old bunker which is nowadays used as a viewpoint. The area is a prime example of how biodiversity can contribute in flood protection, as vegetation is used to lessen the force of the ocean.





The final project that was visited was the **Afsluitdijk**. The group was welcomed in the newly opened, very impressive visitor center. During a presentation the project team's new project, a fish migration river, was introduced. The project will allow migratory fish to travel from the Wadden Sea to the IJsselmeer, which is currently facing the dangers of overfishing. The design will cost 70 million Euros and is a great example of how to interact with the public on important environmental issues. The scheme was

met with a lot of curiosity, as its outcome is still unknown. After the introduction, everyone got the chance to explore the visitor center on their own.

The last bus ride led to the tour's final destination: Egmond aan Zee. There, the tour was rounded off by a workshop during which the main goal was to 'think ahead together'. During the meeting participants discussed potential shared projects, how to add value through cross-border projects, and solutions to common problems related to such projects. To conclude, it became clear that all are working towards the same goal. Cooperation is therefore key.

