

# EU project helps protect Ukraine's forests from climate change

EU-funded experts supported the State Forest Resources Agency of Ukraine by modelling climate change impacts on forestry

## Abstract:

In 2016, the EU-funded Clima East Policy project commissioned a group of national and international experts including leading scientists in climatology and forestry to assess the vulnerability of Ukraine's flatland forests to climate change. The experts applied the results of the latest climate models to the forestry sector in order to project the impacts of climate change on Ukraine's forests.

It was demonstrated that climate change will lead to the overall deterioration of conditions for forest growing at the major part of Ukraine, resulting in a reduction in the forested area and a shift towards the North. Specific changes in key climate parameters and their impacts on forests were identified. These need to be taken into account in planning common forestry practices and operations. The Clima East experts proposed recommendations on the development of policies aimed at sustainable forest management. It was recommended to include specific forestry adaptation measures in the national climate change adaptation strategy and strategic documents related to forestry.

## Quote:

*'Research of vulnerability of forests is extremely relevant and important in Ukraine... We are already witnessing weakening of pine plantations due to lowering of groundwater levels in Polissiya area, which favours spread of plant pests and diseases and reduces the potential to resist to natural disasters' (Ms. Khrystyna Yushkevych, Acting Head of the State Forest Resources Agency of Ukraine)*

## Context:

Flatland forests make up approximately 80% of forested lands in Ukraine (the remaining 20% are mountain forests). Ukraine's forests are already being affected by climate change and the significance of these impacts is likely to increase in the course of the century. The 5<sup>th</sup> Intergovernmental Panel on Climate Change (IPCC) Assessment Report suggests that under the most likely climate change scenarios the conditions for growth of forest vegetation in Eastern Europe will significantly deteriorate in the next 20-30 years. However, the specific impact of climate change on Ukraine's forests had not been researched in detail until now.

Vulnerability assessments for forests are essential for the development of a policy aimed at sustainable forest management, which would take into account the impacts of climate change on forests and include a system of measures improve their resilience and enhance their adaptive capacity. Moreover, adaptation of the forestry sector is an important component of the National Adaptation Strategy, which is currently being developed in Ukraine.

The Clima East Policy project through its 'Expert Facility'<sup>1</sup> provided an opportunity to conduct a research on climate change impacts and a vulnerability assessment of Ukraine's flatland forests. The outcomes of this assignment support the State Forest Resources Agency of Ukraine in the development of relevant sectoral policies, and help the Ministry of Ecology and Natural Resources by providing input to the National Adaptation Strategy.

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<sup>1</sup> For more information on Clima East's Expert Facility please visit: [climaeast.eu/expert-facility](http://climaeast.eu/expert-facility)

## Objectives:

The main objective of this Clima East Expert Facility assignment was to conduct an assessment of vulnerability of Ukraine's flatland forests to climate change through transferring and applying EU experience, knowledge and advanced scientific research in the field.

The general purpose was to create a scientific basis for the development of credible climate change adaptation policies and response measures in the forestry sector, drawing attention to current and projected climate change impacts on forests and enabling informed decision-making.

In addition, the objective of the assignment was to build capacity in using tools for modelling climate change impacts and vulnerability assessment of the forestry sector among the experts, enabling continuation of the research and maintaining up-to-date scientific advice for sectoral adaptation policies and measures. It was also supposed to enhance collaboration of the national institutions involved in climate and forestry research, whereby climate data and projections are applied for modelling climate change impacts in the forestry sector.

## Impact:

The outcomes of the assignment provide a solid scientific basis for policy development in the forestry sector, identifying expected climate change impacts and vulnerabilities. This enables the preparation of relevant response measures aimed at preventing or minimising damage to forests. It also allows forest ecosystem services and benefits to be maintained.

The Clima East experts provided recommendations for policy development and further steps to enhance forest adaptation capacity. They also paid attention to the need of adjusting forest management practices and operations in line with changing climate conditions.

It was highlighted that the main precondition for successful adaptation in forestry is the transition to sustainable forest management. An effective forest monitoring system should be put in place in order to signal changes in forest functioning in the early stages. The national climate change adaptation strategy and strategic documents related forestry should specifically include adaptation measures for forestry. The outcomes of the assignment were presented at a workshop held at the State Forest Resources Agency in July 2016.

## Figures and Facts:

### Figures

- Clima East is an €8 million 4 and a half -year EU funded project.
- The Expert Facility is a €2.04 million component of the overall Clima East budget.
- This individual assignment was completed at a cost of €52,477 for the provision of one International Expert (forestry expert), and two National Experts (climate and forestry experts) plus other associated costs.

### Facts

- Assessment of climate change impacts and vulnerability of forests is essential for planning action for adaptation to climate change and development of sustainable forest management policy.
- Adaptation of forests to climate change is an important component of the National Adaptation Strategy.
- The assignment identifies expected climate change impacts and vulnerabilities of forests to climate change and provides a solid scientific basis for policy development in the forestry sector.