

Climategateway

Integrating science into planning policy



Strategic steps


Climate change became a public issue following the publication of Climate Change 2007, the Fourth IPCC Assessment Report, which contained evidence of global warming and the contribution of anthropogenic activities.

Projections suggest that the Alps are one of the most vulnerable areas in the world to climate change impacts, and the province of Trento has identified the greatest threats to be to the water resources management, tourism, energy, environment and ecosystems, and agricultural sectors. Measures contained in the province's general strategy are related to legislation and organisation, monitoring and research, mitigation, adaptation, information and awareness.

An important first step was the introduction in 2007 of the Climate Change Fund, followed in 2010 by the adoption of strategies and interventions for climate protection in the region. The province has a number of networks for measuring meteorological, hydrological and snow parameters and for monitoring glaciers and permafrost, terrestrial and aquatic ecosystems, and socioeconomic factors.

The Environmental Energy Plan 2013–2020 aims to improve policies to cut energy consumption and CO₂ emissions in the private sector and new buildings, and to increase the use of RES. Italy's National Strategy for Adaptation to Climate Change is awaiting approval, and research is currently being undertaken to better quantify the expected impacts on the water cycle, glaciers and rainfall patterns, as well as variations in extreme weather events.

The Trento pilot study will develop guidelines for water resources management, with a focus on hydroelectric use. The expected impacts of various climate change scenarios and potential conflicts in water use, such as hydropower, agriculture and drinking water supply, were analysed. Criteria will be proposed for policies related to the hydropower sector, and results will help define planning priorities and tackle conflicts between water users.

Effective action requires the participation of policy makers and citizens, acting together or as individuals. Information on initiatives in Trento in which the public can be involved can be found on www.climatrentino.it. 

Roberto Barbiero • Autonomous Province of Trento



Ljubljana set the stage for transnational talks

Photo: iStock

Focus on cooperation

National, regional and local authorities in SEE can benefit from transnational cooperation in addressing climate change challenges, for example through the development of monitoring methodologies, vulnerability assessments, exchanges of information on natural disasters etc.

The annual conference of the SEE Transnational Cooperation Programme, held on September 24–25 in Ljubljana, Slovenia, was an opportunity to present the results of the programme. The new programmes for the Adriatic-Ionian, Balkan-Mediterranean and Danube regions were also presented, and it was noted that they can play a significant role in strengthening adaptation to climate change in SEE during the 2014–2020 programming period.

There was also an opportunity to discuss the results of the SEE Thematic Capitalisation Strategy, possibilities for mutual learning and knowledge exchange, and new opportunities among projects addressing similar issues. The OrientGate project was presented during a session summarising the main achievements of the thematic poles involved in the SEE Capitalisation Strategy. 

Venelina Varbova • REC



Trento's alpine ecosystems are vulnerable to climate change

Photo: iStock

Exploring ideas at project events

Steering Committee meets in Athens

Hosted by Attica Region and chaired by Italian lead partner CMCC, the meeting was held on May 6–7, 2014. In her welcome, the deputy head of Attica Region, Anna Papadimitriou, expressed pride in her region's role in improving understanding and addressing climate change impacts in SEE.

Participants heard from CMCC about the directory structure for work packages that are producing content for the data platform, as well as file and dataset naming conventions and encoding rules. Preliminary tests have been carried out on some of the datasets. Partners were also brought up to date on the six pilot studies carried out under the project's thematic centres.

A presentation on communication activities was followed by a discussion about the structure of the project's final e-publication, which will be a guidebook for European regions and communities on integrating climate change knowledge into planning. ○

Nathan Johnson ● REC; Giulia Galluccio ● CMCC



Athens proudly hosted meetings of the project's Steering and Scientific Committees
Photo: Nathan Johnson

Indicators in focus

Organised by Basilicata Region, the seminar "Climate and Impact Indicators: Promoting Their Use through the Data Platform and Shared Tools" took place in Matera, Italy, on July 24, 2014. Partners shared experiences on the use of indicators, from selection and classification to calculation and final interpretation. The goal was to show how climate and impact indicators can support the formulation of adaptation policies.

The indicators census carried out by developers of the pilot studies was presented, with an explanation of the methods used for collecting and classifying the selected indicators.

The architecture and contents of the Data Platform, one of the project's main outputs were illustrated, and a practical demonstration was given on how it allows for the user-friendly organisation and easy access to a large volume of heterogeneous data.

At the end of the day, all participants were involved in a hands-on demonstration with two practical applications of how to calculate, classify and interpret indicators. ○

Filomena Pietrapertosa ●
CNR-IMAA

Climate indices

On June 4–5, 2014, a seminar was hosted in Belgrade by the Republic Hydrometeorological Service of Serbia on the topic of climate indices and their use in different sectors. Representatives of foreign and domestic research institutions were invited to share their opinions on climate change impacts in their fields of expertise. The first day of the seminar was dedicated to forest management, agriculture, the assessment of bio-climatic conditions, and public health. The second day began with a presentation on the protection of karstic drinking water resources, which was followed by an overview of the Water and Climate Adaptation Plan for the Sava River Basin and climate change impacts on hydrological regimes. Participants were also introduced to the OrientGate Data Platform and the basic climate modelling and down-scaling principles used in the project. It was concluded that many aspects of projected climate change, particularly increases in temperature and changes in precipitation, are likely to affect the public and private sectors. In order to produce high-quality climate change adaptation strategies and action plans, the focus should be not only on the negative but also on the positive aspects of climate change. In order to achieve this, it is essential to enhance cooperation between the research community and decision makers. ○

Ariel Milošević ● Republic Hydrometeorological Service (RHMS)

Pilot discussions

The Romanian National Meteorological Administration organised a technical working group meeting on April 1-2, 2014, to present the preliminary results of Pilot Study 2, "Climate Change Adaptation Measures in Romanian Agriculture".

Participants included representatives of the Forest Department of the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), coordinator of Thematic Centre 1; OrientGate partner the Environmental Protection Agency of Covasna; the Gheorghe Ionescu-Sisesti Academy of Agricultural and Forestry Sciences, Romania; the Ministry of Environment and Climate Change and the Ministry of Agriculture and Rural Development; the Caracal Agricultural Research Development Station; and specialists in agriculture, geography, water resources management, and environment and plant protection.

Eight scientific papers were presented, illustrating the fact that, without adaptation measures, it is not possible to mitigate the impacts of extreme phenomena on agriculture. Participants visited the experimental plots developed under Pilot Study 2.

The event provided an opportunity to exchange lessons learned among the scientific community, decision makers and practitioners in order to identify a common approach to research on climate change impacts in the agricultural sector as well as areas for future collaboration. ○

Elena Mateescu ● NMA



Forest health and water quality

The three-day international workshop "Forest for Water", organised in May by BMLFUW in Gmunden, Upper Austria, explored the impacts of climate change on water resources. The 50 participants included OrientGate partners as well as representatives of the BMLFUW-led CC-WARE project, forest and water-related research institutes, hydrometeorological services, universities and UN FAO.

The pilot study in Zöbelboden has contributed to an understanding of Austria's unique karst areas. It focused on nitrate leaching and related developments under different climate scenarios. The study used Landscape DNDC, a biogeochemical model for quantifying nitrate leaching in forest ecosystems. One conclusion is that intelligent forest management in the region will likely have greater positive impacts on forest health and water quality than short-term climate change impacts. Participants learned how samples from karst aquifers can help identify distinct processes in catchment areas and ecosystems, providing valuable insights into biosphere, soil and the effects of airborne pollutants. Valuable research has also been done on the microbial quality of water resources and current trends in diagnostics, focusing on Alpine karstic springs. ○

Elisabeth Gerhardt ● BFW; **Nathan Johnson** ● REC

Stakeholder consultations

The meetings in May and September in Veszprém and Budapest's District XIII aimed to raise awareness of the climate change adaptation challenges faced by urban areas and to encourage stakeholders and decision makers to initiate adaptation activities for better public health in urban areas.

Participants discussed the vulnerability assessments carried out as part of Pilot Study 6, which aims to encourage municipal decision makers to incorporate adaptation into spatial planning and undertake joint actions.

In Veszprém, discussions focused on sustainable agriculture and the role of local food in adaptation. Under the Mintamenza programme, kindergarten menus are monitored by the National Public Health Authority, which analyses their nutritional value and ensures that half the ingredients come from local producers.

Budapest's District XIII aims to involve local people in adaptation activities via local media, dissemination events, the construction of passive housing etc. Discussions involved the Red Cross, the local disaster management office, CSOs and businesses. ○

Reka Prokai ● REC



Protecting wetlands
in Attica Region,
Greece
Photo: EGBY archive

COVENANT OF MAYORS ADAPT INITIATIVE

The Mayors Adapt initiative was launched in the framework of the Covenant of Mayors to contribute to cities' adaptation efforts by providing resources such as visibility and communication tools; practical and technical support; guidance materials; and synergies with the Covenant of Mayors and other initiatives.

The EU has integrated adaptation requirements into all relevant funding streams, and local authorities are encouraged to mainstream adaptation into policy planning and implementation.

Local authorities that join the initiative commit to creating a more climate-resilient Europe by developing local adaptation strategies and integrating adaptation into existing plans. ●

Venelina Varbova ● REC



Good communication
leads to long-term
cooperation
Photo: iStock

ORIENTGATE COMING TO AN END

The project final conference "Integrating Climate Knowledge into Planning" will take place in Lecce, Italy, on December 2 and 3, 2014.

The event will provide an opportunity to review the activities and achievements of the various work packages. ●

Editors: Réka Prokai, Venelina Varbova

Contributors: Roberto Barbiero, Giulia Galluccio, Elena Mateescu, Elisabeth Gerhard, Filomena Pietrapertosa, Nathan Johnson, Ariel Milošević

Design and layout: Tricia Barna

Copyediting and proofreading: Rachel Hideg, Nathan Johnson

Publisher: The Regional Environmental Center for Central and Eastern Europe

OrientGate on the agenda

- OrientGate was presented at a forum in Bucharest on the science-policy interface in the context of adaptation in Romania, organised in May by the European Commission, Milieu Law and Policy Consulting, and the Ministry of Environment and Climate Change of Romania. The presentation focused on the results of Pilot Study 2 on climate change adaptation measures in Romanian agriculture.
- The results of Pilot Study 4 on the impacts of climate change on the wetland ecosystems of Attica Region, Greece, were presented at a meeting of the European Network of Environmental Authorities. The event was organised in May by the European Commission and the Ministry of Environment, Energy and Climate Change of Greece.
- The Adriatic Ionian Cooperation (AIO) Programme 2014–2020 draft strategy outlines the main findings of earlier analyses carried out in the framework of the Instrument for Pre-accession Assistance and by the EC's Directorate-General for Maritime Affairs and Fisheries (DG MARE) in relation to issues including environment, water, waste, integrated coastal zone management. In the field of environment, the strategy states that when elaborating terms of reference for future calls, the programme will take into account the scenarios for climate change impacts on the environment and on the availability of natural resources for growth developed by the OrientGate project. ●

Elena Mateescu ● NMA; **Venelina Varbova** ● REC; **Giulia Galluccio** ● CMCC

Contacts

Lead partner, project coordinator

Euro-Mediterranean Centre on Climate Change (CMCC)

Giulia Galluccio ● Email: giulia.galluccio@cmcc.it
orientgate-projectoffice@cmcc.it ● www.cmcc.it

Work Package: Communication activities

The Regional Environmental Center for Central and Eastern Europe (REC)

Venelina Varbova ● Email: vvarbova@rec.org ● www.rec.org

If you would like to subscribe to the project newsletter *Climate Gateway*, please write to Venelina Varbova.

In order to enhance the impact of the project, the OrientGate partners would be happy to get in touch with other similar initiatives, individual regions with good practice in the field, as well as companies and/or organisations carrying out research on the topic. If you have relevant experience to share, please write to Giulia Galluccio or Venelina Varbova.

www.orientgateproject.org

