







# **EU Adaptation Strategy**

**Policy Review** 





# **Authors**

With thanks to:

Gonzalo Delacámara, IMDEA (Review)

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# **EU Adaptation Strategy**

## **Policy Review**

## Name/Type of the Legal Act or Policy

EU Adaptation Strategy, Communication from the Commission to the European Parliament, the Council, the European Economics and Social Committee and the Committee of the Regions: An EU Strategy on adaptation to climate change, COM(2013) 216 final

No subsequent legal acts are adopted or planned to be adopted.

The EU Adaptation Strategy document was accompanied by further documents, including a green paper. Therefore, the set of documents is described at the official Commissionwebpage as EU Adaptation Strategy package. But this terminology is not used in practice.

The accompanying documents include the impact assessment to the strategy and these further documents:

- COM (2013) 213 Green paper on the insurance of natural and man-made disasters
- SWD (2013) 133 Climate change adaptation, coastal and marine issues
- SWD (2013) 136 Adaptation to climate change impacts on human, animal and plant health
- SWD (2013) 137 Adapting infrastructure to climate change
- SWD (2013) 138 Climate change, environmental degradation and migration
- SWD (2013) 135 Technical guidance on integrating climate change adaptation in programmes and investments of Cohesion Policy
- SWD (2013) 139 Principles and recommendations for integrating climate change adaptation considerations under the 2014-2020 rural development programmes
- SWD (2013) 134 Guidelines on developing adaptation strategies

#### Entry into force

16 April 2013

# Departments/Units in charge

DG Climate Action, Unit C.3 - Adaptation. Concrete Contacts can be found here.

#### Common Implementation strategy (CIS processes)

The Adaptation Steering Group (ASG) was created in September 2010 to assist the Commission. The ASG brings together member states, research institutions, business associations, NGOs and other organisations, and contributed to the preparatory work for the adaptation strategy. In addition, an inter-service group on adaptation has been set up and meets on a regular basis. It discusses progress towards mainstreaming adaptation into the



EU policies and how to ensure effective synergies between the EU Strategy on Adaptation to Climate Change and other relevant work being undertaken by the Commission. The Working Group on the Knowledge Base (WGKB), which consists of researchers, scientists, academics and other stakeholders, also feeds into the ASG. The WGKB shares knowledge, experiences, information and research on climate impacts, vulnerability and adaptation, and provides advice on research needs. The different working groups supported the design and establishment of the EU Adaptation Strategy. Their involvement in the implementation process is unclear.

#### Administrative body handling implementation in MS

Germany: German Environmental ministry (BMU) at national level - BMU developed the German National Adaptation Strategy (which was already adopted 2009 by the German government and therefore before 2013). The responsibility for climate adaptation policy is situated in the department for water management (WRI 1).,On regional (Länder) level the environmental ministries of the Länder are responsible. Several of them have already adopted an Adaptation Strategy. (Source: different Länder adaptation strategies)

Denmark: The Danish Ministry of Environment is responsible on national level. Denmark launched its first national climate adaptation strategy, Strategy for adapting to climate changes in Denmark, in 2008, in which climate adaptation was put on the agenda at national and local level. No specific obligations are attached. In 2012, this was followed up through an action plan, How We Manage Cloudbursts and Rains (Danish Government, 2012). The Action Plan requires each Municipality to map the territory of the municipality according to risk of flooding and develop a local plan by end 2013 that include actions to adapt to climate changes in a short and medium term perspective. In 2014, 59 of the 98 municipalities had a local adaptation plan.

Finland approved it first National Adaptation Strategy in 2005, which was prepared by the Finnish Ministry of Agriculture and Forestry. The work was coordinated by the Ministry of Agriculture and Forestry and representatives from the Ministry of Traffic and Communications, Ministry of Trade and Industry, Ministry of Social Affairs and Health, Ministry of the Environment, Ministry for Foreign Affairs, Finnish Meteorological Institute and Finnish Environment Institute took part in the preparation. Each Ministry was responsible for assessing the impacts and identifying adaptation measures in its own sector. Implementation in most of the natural resource and built environment related sectors covered by the NAS has been outlined in action plans prepared by the Ministry of Environment, Ministry of Agriculture and Forestry as well as the Ministry of Transport and Communications. In 2014, the Ministry of Agriculture and Forestry was responsible for the preparation of the "Finland's National Climate Change Adaptation Plan 2022". The practical work steered by a broadlybased coordination group appointed by the ministry. The adaptation plan also implements the EU Strategy on Adaptation to Climate Change within Finland.1

<sup>1</sup> Russel, D.; Anne Jensen, Eleni Karali, Helle Ørsted Nielsen, Muriel Bonjean, Benjamin Boteler, Alessio Capriolo, Sergio Castellari, Roos Den Uyl, Suraje Dessai, Francesca Giordano, Zuzana Harmáčková, Mikael Hilden, Maria João Coelho, Eliška Lorencová, Kirsi Mäkinen,



## Main Objective

The overall aim of the EU Adaptation Strategy is to contribute to a more climate-resilient Europe. This means enhancing the preparedness and capacity to respond to the impacts of climate change at local, regional, national and EU levels, developing a coherent approach and improving coordination.

#### Principles included in the legal text

Principles of subsidiarity and proportionality and the rights enshrined by the Charter of Fundamental Rights of the European Union.

# Other objectives/Key concepts/key elements of the legislation

The EU Adaptation Strategy focuses on three key objectives:

- Promoting action by Member States: The Commission will encourage all Member States to adopt comprehensive adaptation strategies (currently 18 have strategies) and will provide funding to help them build up their adaptation capacities and take action. It will also support adaptation in cities through the Mayors Adapt initiative, a voluntary commitment within the framework of the Covenant of Mayors.
- 'Climate-proofing' action at EU level by further promoting adaptation in key vulnerable sectors such as agriculture, fisheries and cohesion policy, ensuring that Europe's infrastructure is made more resilient, and promoting the use of insurance against natural and man-made disasters.
- Better informed decision-making by addressing gaps in knowledge about adaptation and further developing the European climate adaptation platform (Climate-ADAPT) as the 'one-stop shop' for adaptation information in Europe.

# Terminology

No key terms.

## **Derogations**

In the EU Adaptation Strategy outermost regions are mentioned as one of the regions which are particularly vulnerable. In the Commission Staff Working Document on "Adapting infrastructure to climate change" (SWD (2013) 137) outermost regions are described as one of the main regions in which infrastructure is impacted by climate change. As consequences is described that special effort should go into adaptation measures to increase the resilience of infrastructure in these regions.

Katriona McGlade, Gil Penha-Lopes, Paola Sakai, Luisa Schmidt, Jenny Troeltzsch, Sabine Weiland and Geoff Whitman (2014): D2.2 -Knowledge use, knowledge needs and policy integration in Member States. FP7-Project: BASE.



In the Commission Staff Working Document on "Climate change adaptation, coastal and marine issues" (SWD (2013) 133) adaptation activities in the outermost regions are summarised, e.g. developing of an Adaptation Strategy in the Canary Islands.

#### Types of management measures

Different Actions are mentioned in the strategy: Action 1: Encourage all Member States to adopt comprehensive adaptation strategies; Action 2: Provide LIFE funding to support capacity building and step up adaptation action in Europe. (2013-2020); Action 3: Introduce adaptation in the Covenant of Mayors framework (2013/2014); Action 4: Bridge the knowledge gap; Action 5: Further develop Climate-ADAPT as the 'one-stop shop' for adaptation information in Europe; Action 6: Facilitate the climate-proofing of the Common Agricultural Policy (CAP), the Cohesion Policy and the Common Fisheries Policy (CFP); Action 7: Ensuring more resilient infrastructure; Action 8: Promote insurance and other financial products for resilient investment and business decisions; Impact assessment for the strategy exists including the mentioned actions.

#### Spatial coverage

EU countries area

## Reporting units - what are the specific transposition requirements

Member state level - Not aware of discussions on reporting level, but reporting is planned via an "adaptation preparedness scoreboard" which includes information for each Member State.

#### Management unit

Not mentioned.

#### Key planning steps

No clear planning steps are mentioned.

#### Timelines

2017 - report of Commission to European Parliament and the Council and propose the strategy's review if needed.

#### Integration/coordination issues with other related pieces of legislation

One priority and responsibility for the Commission is to mainstream adaptation measures into EU policies and programmes, as the way to 'climate-proof' EU action. Adaptation has already been mainstreamed in legislation in such sectors as marine waters, forestry, and transport; and in important policy instruments such as inland water, biodiversity and migration and mobility. The Commission staff working document on climate change,



environmental degradation and migration companying this Communication provides further insight on the latter.

In addition, the Commission has tabled legislative proposals on integrating adaptation in agriculture and forestry, maritime spatial planning and integrated coastal management, energy, disaster risk prevention and management, transport, research, health, and the environment. These moves to mainstream climate change adaptation into EU policies will be pursued in priority fields such as energy and transport.

In health policy, most human, animal and plant health measures and systems are already in place, but they need to be adjusted to whatever new challenges climate change will bring. The three Commission staff working documents on health, marine and coastal areas, and infrastructure, accompanying this Communication set out what the Commission is currently doing in this area. Forthcoming policy initiatives, in areas such as invasive alien species (2013), green infrastructure (2013), land as a resource (2014–15), and a new Forest Strategy (2013) are also expected to consider adaptation. Guidelines on adaptation and coastal zone management are being formulated (2014), and guidelines on adaptation and the Natura 2000 network are shortly to be issued (2013). Infrastructure projects, which are characterized by a long life span and high costs, need to withstand the current and future impacts of climate change. Building on the recent mandate to assess the climate change implications for Eurocodes, our work with standardisation organisations, financial institutions and project managers needs to analyse to what extent standards, technical specifications, codes and safety provisions for physical infrastructure should be strengthened to cope with extreme events and other climate impacts.

Disaster insurance has a generally low market penetration rate at the moment in Member States. Discussions should take place with stakeholders on the basis of the Green Paper on the insurance against natural and man-made disasters.

Action 6: Facilitate the climate-proofing of the Common Agricultural Policy (CAP), the Cohesion Policy and the Common Fisheries Policy (CFP). Guidance is being provided as part of the Strategy on how to further integrate adaptation under the CAP and the Cohesion Policy. Similar guidance will be issued in 2013 for the CFP. It is aimed at managing authorities and other stakeholders involved in 2014–2020 programme design, development and implementation. Member States and regions can also draw on the 2014-2020 Cohesion Policy and CAP to address the knowledge gaps and invest in the needed analyses, risk assessments, tools and build up capacities for adaptation.

Action 7: Ensuring more resilient infrastructure In 2013 the Commission will launch a mandate for European standardisation organisations to start mapping industry-relevant standards in the area of energy, transport and buildings, identifying standards to be revised for better inclusion of adaptation considerations. It will also provide with the Strategy guidelines for project developers working on infrastructure and physical assets, with a view to climate-proofing vulnerable investments. Drawing on the results of its Communication on Green Infrastructure, the Commission will in 2013 explore the need for additional guidance for authorities and decision makers, civil society, private business and conservation practitioners to ensure the full mobilisation of ecosystem-based approaches to adaptation.

Action 8: Promote insurance and other financial products for resilient investment and business decisions. The Green Paper on the insurance of natural and man-made disasters,



adopted together with this Strategy, is a first step in encouraging insurers to improve the way they help to manage climate change risks. The Commission's aim is to improve the market penetration of natural disaster insurance and to unleash the full potential of insurance pricing and other financial products for risk-awareness prevention and mitigation and for long-term resilience in investment and business decisions (2014-2015).

The SWD (2013) 133 - Climate change adaptation, coastal and marine issues refers to several interlinkages between the EU Adaptation Strategy and further EU policies:

WFD: In the context of the implementation phase of this Directive, almost half of river-basin management plans specifically address specific climate change adaptation measures.

The Floods Directive: also provides attention to the impacts of coastal floods. In early 2012, Member States reported to the European Commission preliminary flood risk assessments of their river basins and associated coastal zones to identify areas where potential significant flood risk exists. The assessment of the reported data has started and should also draw attention to the extent to which climate change has already been considered.

In 2009, the Water Directors of the EU Member States issued a guidance document on adaptation to climate change in water management72. The guidance provides approaches on how to take climate change into account in the implementation of the Water Framework Directive, the Floods Directive and the Strategy on Water Scarcity and Droughts. Moreover, the Common Implementation Strategy activity on "Climate Change and the EU Water Policy" aims to, among other things, "identify what can and should be done in the different upcoming River Basin Management planning cycles" in relation to climate change impacts and adaptation.

MSFD: The Marine Strategy Framework Directive, the environmental pillar of the Integrated Maritime Policy (IMP) is aiming for the implementation of an integrated, adaptive and ecosystem-based approach to the management of human activities at sea and on the coast. The objective is to achieve, by 2020, the Good Environmental Status (GES) of all European marine and coastal waters.

Integrated Coastal Management: In March 2013 the Commission adopted a proposal for a Directive establishing a framework for maritime spatial planning and integrated coastal management. The proposal aims to ensure that the growth of increasing maritime activities at sea and the use of resources at sea and on coasts remain sustainable. The proposed action will require Member States to establish maritime spatial plans and integrated coastal management strategies by applying an ecosystem-based approach that, among others, should contribute to ensuring climate resilient coastal and marine areas.

Natura 2000, Habitats and Birds Directives: The Natura 2000 network of areas of high biodiversity value, established under the Habitats and Birds Directives protects a large share of coastal and marine regions. The priority to protect marine ecosystems and their aquatic species has been reinforced by the EU 2020 Biodiversity Strategy. The effective management and restoration of Natura 2000 sites reduces non-climate pressures and increases resilience to climate change. The Commission services will shortly issue guidelines on climate change and Natura 2000 targeted at site managers and policy makers. This will underline benefits from Natura 2000 sites in mitigating the impacts of climate change, reducing vulnerability and increasing resilience, and how adaptation of management for species and habitats



protected by Natura 2000 can be used to tackle the effects of climate change84. The establishment of green infrastructure and other ecosystem-based approaches to adaptation can be promoted by this framework, which can increase the resilience of coastal areas to climate change. The possible movement of species due to changing climate. There are also interlinkages with international processes, e.g. United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC reporting, for example, includes in the regular National Communications a section on climate impacts and adaptation.

## Coordination issues with the EU Biodiversity Strategy

EU Adaptation Strategy's Action 7: "Ensuring more resilient infrastructure" includes the use of ecosystem-based approaches and interlinks with the Commission's Communication on Green Infrastructure. Refers to Target 2 of Biodiversity Strategy. In the Commission SWD (2013) 133 ecosystem-based approaches are also mentioned especially for adaptation of coastal areas. Also in SWD (2013) 133 green infrastructure and ecosystem-based approaches are mentioned as important adaptation measures. Refers to Target 2 of Biodiversity Strategy.

EU Adaptation Strategy's Action 6: "Facilitate the climate-proofing of the Common Agricultural Policy (CAP), the Cohesion Policy and the Common Fisheries Policy (CFP)" refers to Target 3 of Biodiversity Strategy.

Also EU Adaptation Strategy's Action 2: "Provide LIFE funding to support capacity building and step up adaptation action in Europe. (2013-2020) "includes as one vulnerable area: "mountain and island area, with emphasis on sustainable and resilient agricultural, forestry and tourism sectors" which also refers to Target 3 of Biodiversity Strategy.

#### Relevance to ecosystems/habitats?

Action 2: Provide LIFE funding to support capacity building and step up adaptation action in Europe. (2013-2020). The Commission will promote adaptation particularly in the following vulnerable areas: cross-border management of floods, fostering collaborative agreements based on the EU Floods Directive; trans-boundary coastal management, with emphasis on densely populated deltas and coastal cities; mainstreaming adaptation into urban land use planning, building layouts and natural resources management; mountain and island areas, with emphasis on sustainable and resilient agricultural, forestry and tourism sectors; sustainable management of water; combating desertification and forest fires in droughtprone areas.

The Commission will support the establishment of vulnerability assessments and adaptation strategies, including those with a cross-border nature. The Commission will promote awareness-raising on adaptation, including indicators, risk communication and management. Page 2/3: However, some regions are more at risk than others. The Mediterranean basin, mountain areas, densely populated floodplains, coastal zones, outermost regions and the Arctic are particularly vulnerable. Ecosystems and the services they provide are suffering from the adverse impacts of climate change, which is accelerating the decline of biodiversity and reducing their ability to buffer natural extremes. Climatic changes will have consequences for the availability of basic natural resources (water, soil)



leading to significant changes in conditions for agriculture and industrial production in some areas.

In the SWD (2013) 133 - Climate change adaptation, coastal and marine issues the following concrete by climate change affected marine and coastal ecosystems are mentioned: coastal wetlands, coastal ecosystems as dunes and barrier beaches, salt marshes and mangroves, Marine fish populations (native species), non-native species to expand into regions where they previously could not survive with consequences on species composition of the different marine ecosystems.

Ecosystems affected/impacted by Adaption Strategy: All. Especially vulnerable areas: Alpine areas, coastal and marine ecosystem, rivers, forest in Southern Europe.

As mentioned above: rivers (especially in Southern Europe) and coastal and marine ecosystems are mentioned as affected ecosystems. But also the focus on agriculture, forestry, flood management will have an influence on aquatic biodiversity and ecosystem services (especially via mainstreaming in CAP).

#### **Drivers**

Drivers not especially defined in the strategy. Drivers which the legal act/policy address include activities which lead to increase of greenhouse gas emissions. No indicators.

#### **Pressures**

Pressures not especially defined in the strategy. Pressures which the legal act/policy address: Global climate Change -> increase of average global air temperature. No indicators.

#### **Assessment of Environmental State**

The following parameters are only mentioned very briefly in the strategy: Tropical nights (heat waves); Change in precipitation (droughts, flooding); Change in fire danger; Effects of floods; Coastal flooding. No indicators.

#### Data

A scorecard per Member State will be developed. The overall structure of the scoreboard is as follows: First, each Member State's policy framework will be recalled, indicating whether adaptation strategies and action plans have been adopted at national and sub-national level. Second, the scoreboard per se focuses on information to be collected for each of the "five steps" of adaptation policy making<sup>2</sup>: (i) preparing the ground for adaptation; (ii) assessing risks and vulnerabilities to climate change; (iii) identifying and assessing adaptation options; (iv) implementing adaptation action; (v) monitoring and evaluation of adaptation activities. Within each of the five steps, main performance areas are defined. They form the core of the scoreboard and correspond to necessary components generally considered for an effective adaptation policy-making process. Fourth, within each area, key domains of relevance are

<sup>&</sup>lt;sup>2</sup> See above for references to Adaptation Support tool on climate-ADAPT and to the guidelines on developing adaptation strategies. Please note however that for convenience, steps 3 and 4 of the "adaptation support tool" are here merged.



highlighted. They provide details on an array of issues to be considered to successfully deliver on each performance area. Source: Note to the Working Group 6 on adaptation under the Climate Change Committee and to the national contact points on adaptation, The adaptation preparedness scoreboard, Final version. The scoreboard is under development and the data is not publicly available yet. The ClimateAdapt-web platform collects and publishes information on climate adaptation in Europe. The platform includes project results from large EU research projects but also smaller local initiatives can integrate their experiences and approaches. ClimateAdapt contains individual pages for the adaptation process in the EEA Member States including policy & legal framework, information & assessment, sectors & actions, engaging stakeholders. Information on the "countries section" is submitted by EEA Member countries based on official reporting towards the European Commission under the MMR regulation<sup>3</sup> and voluntary updating.

#### Funding

No funds are directly associated with the strategy. But the strategy has the objective to mainstream adaptation in other policies and their funding streams. LIFE programme is mentioned very prominent as one area of Action in the Strategy. The LIFE Programme for the Environment and Climate Action is the EU's key dedicated funding tool to support innovative climate action projects. The programme will provide €864 million in co-financing between 2014 and 2020 for climate action projects, including adaptation issues such as cross-border management of floods, trans-boundary coastal management, mountain and island areas, urban adaptation and sustainable management of water. Part of the funding will be allocated through a new financial instrument, the Natural Capital Financing Facility, to support innovative financing approaches for projects promoting the preservation of natural capital that address adaptation aspects (EU Adaptation Factsheet).

Improved access to funding will be a critical factor in building a climate-resilient Europe. Based on a proposal put forward by the Commission, the European Council concluded on 7-8 February 2013 that 'Climate action objectives will represent at least 20% of EU spending in 2014-2020 Multi-annual Financial Framework (MFF). It is strategically important for such investment to be climate-resilient. Specifically, the Commission has included climate change adaptation in its proposals for all relevant EU finance programmes for 2014-2020. The European Structural and Investment funds as well as Horizon 2020 and the LIFE programme will provide significant support to Member States, regions and cities to invest in programmes and projects on adaptation, especially in the framework of the dedicated Investment Priorities on adaptation in the ERDF and Cohesion Fund. A particular effort is made to mainstream climate action into the European structural and investment funds. These funds constitute about 43% of the budget of the Union in the period 2014-2020. Climate-related expenditure is estimated to amount to more than €110 billion, close to one quarter of the funds (EU Adaptation Factsheet).

Investments via Cohesion Fund could include: Construction of blue and green infrastructure in urban areas, Retrofitting existing infrastructure (e.g. schools, hospitals), Flood and coastal defence risk management, Leakage reduction in water distribution network, Construction of

<sup>&</sup>lt;sup>3</sup> Monitoring Mechanism Regulation (Regulation (EU) No 525/2013)



rain overflow basins and new drainage systems, Upgrading or construction of climate resilient waste disposal facilities, Construction of climate resilient rail and roads infrastructure, Realignment of existing roads, and Enhancing institutional capacity and efficiency in program implementation (EU Climate Mainstreaming Factsheet 3). European Social Fund's investments can cover establishment of Community-led climate adaptation strategies, career guidance professionals/advisors, adapting educational training as well as tertiary education considering climate resilience in buildings, climate resilient urban environments and changes to climate resilient economy (EU Climate Mainstreaming Factsheet 5).

European Regional Development Fund's investments could go into Establishing and supporting adaptation-oriented clusters that combine research and business, Enhancing access to, use and quality of Information and Communication Technologies (ICT), Enhancing the competitiveness of SMEs, Supporting the shift towards the low-carbon economy, Supporting networks in coping with major incidents and disasters, Construction of green infrastructure in urban areas, Development and implementation of Adaptation strategies, Leakage reduction in water distribution networks, Construction of rain overflow basins, Upgrading or construction of waste disposal facilities, Construction of rail and road infrastructure, Realignment of existing roads, Development of business incubators and investment support for self-employment and business creation in new areas for growth, Investments in education and training Infrastructure, Enhancing institutional capacity and efficiency in programme implementation (EU Climate Mainstreaming Factsheet 2).

Investments via European Territorial Cooperation under the European Regional Development Fund (ERDF) could include Establishing and supporting adaptation-oriented clusters that combine research and business, Enhancing access to, use and quality of Information and Communication Technologies (ICT), Enhancing the competitiveness of SMEs, Supporting the shift towards the low-carbon economy, Supporting networks in coping with major incidents and disasters, Tackling cross-boundary adaptation challenges, Tackling transnational adaptation challenges, Tackling shared adaptation challenges, Adaptation planning tools for urban areas, Protecting biodiversity, soil protection and promoting ecosystem services including NATURA 2000 and green infrastructure, Ensuring transport infrastructure is climate-resilient, Development and implementation of macro-regional and sea-basin strategies (EU Climate Mainstreaming Factsheet 4).

European Agricultural Fund for Rural Development (EAFRD) could cover following adaptation investments: establishing Climate change sub-programmes, for example, developed on avoidance of damage from extreme events, avoidance of heat stress, improved water management and improved soil management, forest management and risk management. Sub-programmes may also refer to climate change hotspots, such as the condition of organic soil matter, the maintenance of wetlands and peat, lands, and the level of methane emissions. Furthermore, Knowledge transfer and information actions on new sowing cycles, climate change risks and adaptation tools. Advisory services, farm management and farm relief services could be adjusted to the mentioned topics. Investments in physical assets such as on-farm water storage installations for drought periods, highly efficient irrigation systems, investments in farm buildings and installations to cope with heat and water stress. Investments in hard and soft infrastructure to manage climate hazards (e.g. flood risk and volatility in water supply). Business plans including climate adaptation considerations and



cost estimations. Climate proofing of local development plans, measures to adapt small scale infrastructure (water supply, energy production etc.). Forest management actions to preserve and improve the ecosystem services provided by forests which help with climate resilience. Establishment of agroforestry systems. Prevention and restoration of damage to forests from forest fires and natural disasters and catastrophic events. Investments improving the resilience, and environmental value of forest ecosystems. Actions which reduce the impact of climate hazards, such as introduction of resilient crops, crop rotation, intercropping, undersowing and cover crops, terrace cultivation, hedges and buffer strips. Organic farming. Natura 2000 and Water Framework Directive payments for actions which reduce the impact of climate hazard. Development of risk analysis models and modus operandi for assessment and management of changing climate hazards; creation or modification of existing insurance and compensation funds and schemes according to changing hazards. Introduction of climate proofing and climate mainstreaming as an integral element of Local Development Strategies, promoting of "climate resilient regions" (EU Climate Mainstreaming Factsheet 6).

Moreover, several EU funds and international financing institutions, such as the European Investment Bank and the European Bank for Reconstruction and Development, also support adaptation measures. The Commission will explore further ways of accommodating some adaptation investment expenditure, such as expenditure co-financed by the EU in the assessment of Stability and Convergence Programmes. In addition, there are specific funds - including at national level - and public financial institutions that support adaptation action, e.g. on flood control and drought management. Climate-ADAPT will be providing more information on potential sources of funding. Member States can also use EU ETS auction revenues as a source of financial support for adaptation. To ensure successful implementation, authorities in the Member States are encouraged to develop synergies between the various funding streams, especially EU funding and support programmes in order to strengthen the impact of investments and avoid, where possible, funding gaps.



# **About AQUACROSS**

Knowledge, Assessment, and Management for AQUAtic Biodiversity and Ecosystem Services aCROSS EU policies (AQUACROSS) aims to support EU efforts to protect aquatic biodiversity and ensure the provision of aquatic ecosystem services. Funded by Europe's Horizon 2020 research programme, AQUACROSS seeks to advance knowledge and application of ecosystem-based management (EBM) for aquatic ecosystems to support the timely achievement of the EU 2020 Biodiversity Strategy targets.

Aquatic ecosystems are rich in biodiversity and home to a diverse array of species and habitats, providing numerous economic and societal benefits to Europe. Many of these valuable ecosystems are at risk of being irreversibly damaged by human activities and pressures, including pollution, contamination, invasive species, overfishing and climate change. These pressures threaten the sustainability of these ecosystems, their provision of ecosystem services and ultimately human well-being.

AQUACROSS responds to pressing societal and economic needs, tackling policy challenges from an integrated perspective and adding value to the use of available knowledge. Through advancing science and knowledge; connecting science, policy and business; and supporting the achievement of EU and international biodiversity targets, AQUACROSS aims to improve ecosystembased management of aquatic ecosystems across Europe.

The project consortium is made up of sixteen partners from across Europe and led by Ecologic Institute in Berlin, Germany.



#### **AQUACROSS PARTNERS**

**Ecologic Institute (ECOLOGIC) | Germany** 

Leibniz Institute of Freshwater Ecology and Inland

Fisheries (FVB-IGB) | Germany

**Intergovernmental Oceanographic Commission** 

of the United Nations Educational, Scientific and

**Cultural Organization (IOC-UNESCO) | France** 

Wageningen Marine Research (WMR) | Netherlands

University of Natural Resources & Life Sciences,

Institute of Hydrobiology and Aquatic Ecosystem Management

Austria

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**ACTeon – Innovation, Policy, Environment** 

(ACTeon) | France

**University of Liverpool (ULIV) | United Kingdom** 

**University College Cork, National University** 

of Ireland (UCC) | Ireland

**Royal Belgian Institute of Natural Sciences** 

(RBINS) | Belgium

Stockholm University, Stockholm Resilience

Centre (SU-SRC) | Sweden

Danube Delta National Institute for Research

& Development (INCDDD) | Romania

**Eawag - Swiss Federal Institute of Aquatic** 

Science and Technology (EAWAG) | Switzerland

International Union for Conservation of Nature

(IUCN) | Belgium

**BC3 Basque Centre for Climate Change** 

(BC3) | Spain

Contact Coordinator aquacross@ecologic.eu

Duration Dr. Manuel Lago, Ecologic Institute

1 June 2015 to 30 November 2018

Website

Twitter http://aguacross.eu

LinkedIn @AquaBiodiv

ResearchGate www.linkedin.com/groups/AQUACROSS-8355424/about

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