

Strengthening Europe's resilience to the impacts of climate change

The EU Strategy on adaptation to climate change, adopted by the European Commission in April 2013, sets out a framework and mechanisms for taking the EU's preparedness for current and future climate impacts to a new level.

To avoid the most serious risks of climate change, particularly large-scale irreversible impacts, the international community has agreed that global warming must be kept below 2°C compared to the pre-industrial temperature. International action to reduce greenhouse gas emissions will therefore be needed for decades to come. But however successful these mitigation efforts prove to be, the impact of climate change will increase in the coming decades due to the delayed impacts of past and current greenhouse gas emissions.

Europe and other parts of the world therefore have no choice but to take adaptation measures to deal with the unavoidable climate impacts and their economic, environmental and social costs. By prioritising coherent, flexible and participatory approaches, it will be much cheaper to take early, planned adaptation action than to pay the price of not adapting to climate change.

The EU Adaptation Strategy has three objectives.

1. Promoting action by Member States:

The Commission encourages all Member States to adopt comprehensive adaptation strategies (15 had strategies as of mid-2013) and will provide guidance and funding to help them build up their adaptation capacities and take action. The Commission will also support adaptation in cities by launching a voluntary commitment based on the Covenant of Mayors initiative.

2. Promoting 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.





3. Promoting adaptation in key vulnerable sectors through agriculture, fisheries and cohesion policy, ensuring that Europe's infrastructure is made more resilient, and encouraging the use of insurance against natural and man-made disasters.

Implementation of the EU Adaptation Strategy is based on eight actions

Action 1

Encourage all Member States to adopt comprehensive adaptation strategies

- As part of the Adaptation Strategy package the Commission has provided guidelines to help Member States formulate adaptation strategies.
- The Commission will develop an 'adaptation preparedness scoreboard', identifying key indicators for measuring Member States' level of readiness.
- In 2017, the Commission will assess whether action being taken in the Member States is sufficient. If it deems progress insufficient, the Commission will consider proposing a legally binding instrument.

Provide LIFE funding to support capacity building and step up adaptation action in Europe (2014-2020)

- A climate-action sub-programme will be created under the 2014-2020 LIFE funding programme for the environment. This will substantially increase the LIFE funds available to combat climate change.
- Priority vulnerable areas have been identified to steer discussions with Member States on the 2014-2020 LIFE work programme.

Introduce adaptation in the Covenant of Mayors framework (2013/2014)

- The Commission, will support adaptation in cities. It will do this in particular by launching an initiative, based on the model of the Covenant of Mayors, through which local authorities can make a voluntary commitment to adopt local adaptation strategies and awareness-raising activities.

Bridge the knowledge gap

- The Commission will work further with Member States and stakeholders to identify adaptation knowledge gaps and the relevant tools and methodologies to address them. The findings will be fed into the programming of Horizon 2020, the EU's 2014-2020 framework programme for research and innovation, and will address the need for better interfaces between science, policy making and business.
- The Commission will promote EU-wide vulnerability assessments, taking into account, inter alia, the cross-sectoral EU overview of natural and manmade risks that it will produce in 2013. It will in particular support the Joint Research Centre in its work on estimating the implications of climate change and undertake a comprehensive review of what global climate change will mean for the EU.

Further develop Climate-ADAPT as the 'one-stop shop' for adaptation information in Europe

- The Commission and the European Environment Agency will improve access to information and develop interaction between Climate-ADAPT and other relevant platforms, including national and local adaptation portals (2013/2014).
- Special attention will be given to cost-benefit assessments of different policy experiences and to innovative funding, through closer interaction with regional and local authorities and financial institutions.
- Work on the inclusion of the future Copernicus climate services (previously known as GMES Global Monitoring for Environment and Security) will start in 2014

Facilitate the climate-proofing of the Common Agricultural Policy (CAP), the Cohesion Policy and the Common Fisheries Policy (CFP)

- As part of the Adaptation Strategy package the Commission has provided guidance on how to further integrate adaptation into the CAP, the Cohesion Policy and the CFP. This guidance aims to help managing authorities and other stakeholders involved in programme design, development and implementation during the 2014-2020 budget period.
- Member States and regions can also use funding under the 2014-2020 Cohesion Policy and CAP to address knowledge gaps, to invest in the necessary analyses, risk assessments and tools, and to build up capacities for adaptation.

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 and to identify standards that need to be revised to achieve better inclusion of adaptation considerations.
- The Adaptation Strategy package provides guidelines to help project developers working on infrastructure and physical assets to climate-proof vulnerable investments.
- Drawing on the results of its Communication on Green Infrastructure, adopted in May 2013, the Commission will explore the need to provide 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. This will be done by the end of 2013.

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 as part of the Adaptation Strategy package, is a first step towards encouraging insurers to improve the way they help to manage climate change risks. A report on the results of the public consultation associated with the Green Paper will be published in the second half of 2013.
- 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). A process has been launched to increase involvement of the insurance and financial sector. The results of this exercise will be disseminated via Climate-ADAPT in particular.

Action 2

Action 3

Action 4

Action 5

Action 6

Action 7

Action 8

How will climate change impact on Europe?

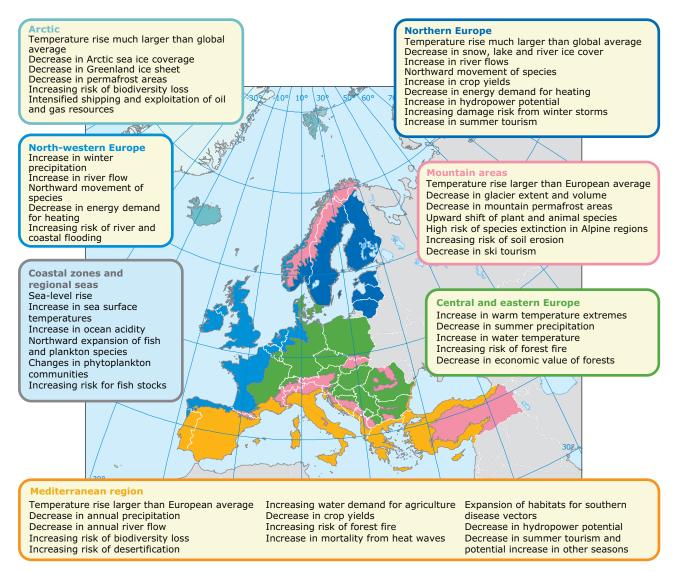
Europe is warming faster than many other parts of the world. The European land temperature over the past decade has been on average 1.3°C higher than in the pre-industrial era, compared with a global average rise of 0.8°C.

Impacts vary across the EU but all Member States are exposed to climate change. The Mediterranean basin, mountain areas, densely populated floodplains, coastal zones, outermost regions and the Arctic are particularly vulnerable to climate change impacts.

Some extreme weather events have increased, with southern and central Europe seeing more frequent heat waves, forest fires and droughts.

Heavier precipitation and flooding is projected in northern and north-eastern Europe, with a heightened risk of coastal flooding and erosion. An increase in such events is likely to enlarge the magnitude of disasters, leading to significant economic losses, public health problems and deaths.

Past and projected impacts of climate change in European regions



Source: European Environment Agency http://www.eea.europa.eu/data-and-maps/figures/key-past-and-projected-impacts-and-effects-on-sectors-for-the-main-biogeographic-regions-of-europe-3

Benefits outweigh costs

Every euro spent on flood protection could save €6 in damage costs, according to estimates. Between 1980 and 2011 floods in Europe killed more than 2,500 people, affected more than 5.5 million and caused direct economic losses of more than €90 billion. The minimum cost of not adapting to climate change is estimated at €100 billion a year in 2020 and €250 billion in 2050 for the whole EU.

Given uncertainty over the long-term impacts of climate change, the EU Adaptation Strategy recognises that it makes sense to begin with measures that are low-cost, flexible and good for both the economy and the climate. Adaptation can thus promote sustainable growth, stimulate climate-resilient investment and create new jobs, particularly in sectors such as construction,

water management, insurance, agricultural technologies and ecosystem management.

Increased EU climate funding for 2014-2020

The EU budget has an important role to play in promoting climate action in all sectors of the European economy and in catalysing the investment needed to meet greenhouse gas reduction targets and ensure climate resilience.

The EU institutions have agreed that at least 20 % of the €960 billion EU budget for 2014-2020 should be spent on climate mitigation and adaptation, some three times the previous level. The LIFE environment fund for the period will have a new €864 million climate sub-programme for mitigation and adaptation.



Where to find more information on adaptation in Europe?

The European Climate Adaptation Platform (Climate-ADAPT) http://climate-adapt.eea.europa.eu/ provides resources to support adaptation policy and decision making. These include a toolset for adaptation planning, a database of projects and case studies, and information on adaptation action at all administrative levels, from the local to the European. Climate-ADAPT's contents are regularly updated. Launched in March 2012, the website has already become a reference for adaptation knowledge platforms, both within the EU and abroad

The EU Adaptation Strategy comprises a set of documents

Communication: "An EU Strategy on Adaptation to Climate Change», COM (2013) 216

To present the main challenges and the suggested policy orientations to address them

Impact Assessment (vol. I and II), Commission Staff Working Documents, SWD (2013) 132 and SWD (2013) 133

To prepare evidence for political decision-makers on the advantages and disadvantages of possible policy options by assessing their potential economic, social and environmental impacts.

Green Paper on the prevention and insurance of disasters, COM (2013) 213

 To evaluate and report on the potential for the European Union to support increased coverage of appropriate disaster risk insurance and financial risk transfe markets, as well as regional insurance pooling, in terms of knowledge transfer, cooperation, or seed financing.

Climate change adaptation, marine and coastal issues, Commission Staff Working Document, SWD (2013) 133

- To provide further background material supportive of the Communication on adaptation challenges for marine and coastal issues. To present the outline of actions that the Commission is undertaking in the area of coastal zones, marine issues and climate change adaptation.

Guidelines on developing adaptation strategies, Commission Staff Working Document, SWD (2013) 134

 To help prepare or revise climate change adaptation strategies. To provide a first answer to identified barriers to the uptake of adaptation strategies at national level. To build on and make more operational the Adaptation Support tool available on Climate-ADAPT.

Technical guidance on integrating climate change adaptation in programmes and investments of Cohesion Policy,

Commission Staff Working Document, SWD (2013) 135

 To provide advice, methods, tips and examples to understand and integrate climate adaptation needs and priorities into Operational Programmes for the next programming period (2014-2020).

Adapting to climate change impacts on human, animal and plant health, Commission Staff Working Document, SWD (2013) 136

To emphasise the social and environmental implications of climate change and climate change adaptation on health issues, as well as highlighting mos
recent initiatives in the area

Adapting infrastructure to climate change, Commission Staff Working Document, SWD (2013) 137

- To provide further background material supportive of the Communication on adaptation challenges in three key economic sectors: energy, transport and

Climate change, environmental degradation and migration, Commission Staff Working Document, SWD(2013) 138

To provide an overview of the research and data currently available on the inter-linkages between migration, environmental degradation and climate change.
 To review the many initiatives of relevance for the topic which are already being taken by the EU in various policy fields. To analyse on-going debates on policy responses at EU and international level.

Principles and recommendations for integrating climate change adaptation considerations under the 2014-2020 rural development programmes, Commission Staff Working Document, SWD (2013) 139

 To provide advice, methods, tips and examples to understand and integrate climate adaptation needs and priorities into Member States' Rural Development Programmes (RDP) for the next programming period (2014-2020).

Guidelines for Project Managers: Making vulnerable investments climate resilient, non-paper

To provide support to developers of physical assets and infrastructure on the steps they can take to make investment projects resilient to climate variability
and change.

doi:10.2834/5599
ISBN 978-92-79-32975-3

The above documents are available at http://ec.europa.eu/clima/policies/adaptation/what/documentation_en.htm