

# Adaptation to Climate Change

## An EU approach

- # Financing – combining different policy measures to the best effect – Climate change is one of the priorities of the EU's current multi-annual financial framework (2007-2013). For climate change policy measures to have any effect it is important that available funds be used to reflect this priority. Due consideration should be given to the role of market based instruments, insurance and public-private partnerships. The use of revenues generated under the EU emissions trading system (EU ETS) should also be explored for adaptation purposes.
- # Supporting wider international efforts on adaptation - the EU is committed to working with non-EU countries to improve their resilience and capacity to adapt to climate change. Efforts will be stepped-up to mainstream adaptation into all of the EU's external policies.
- # The EU's framework adopts a phased approach. The first phase will cover the years 2009 to 2012 and will take forward the work identified under the four areas. This will then lead to the drawing up of a comprehensive EU adaptation strategy to be implemented during phase 2, starting in 2013.
- # Good cooperation between the EU, national, regional and local authorities will be a prerequisite for successfully carrying out phase 1. To promote cooperation on adaptation the Commission will set up a consultative forum known as the Impact and Adaptation Steering Group (IASG) where EU Member States will play a role in developing the four areas.



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### What is adaptation?

Adaptation along with mitigation<sup>1</sup> is an essential part of addressing the challenges associated with climate change. Adaptation involves taking action now so that we can be more resilient to our current climate, less susceptible to the impacts of future climate change and be in a position to take advantages of opportunities.

Adaptation measures can be taken at national, regional and local levels and include using scarce water resources more efficiently, adapting building codes to future climate conditions and extreme weather events, building flood defences and raising the levels of dykes, developing drought-tolerant crops, choosing tree species and forestry practices less vulnerable to storms and fires, and setting aside land corridors to help species migrate.



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For further information see:

[http://ec.europa.eu/environment/climat/adaptation/index\\_en.htm](http://ec.europa.eu/environment/climat/adaptation/index_en.htm)

## Climate change - impact on Europe

Irrespective of the success of mitigation efforts there will still be some degree of unavoidable climate change. This stems from our historic greenhouse gas emissions due to past human activity and the persistence of these gases in the atmosphere. Over the next 50 years climate change is likely to have profound effects on the lives of all Europeans.

Increasing temperatures, changing rainfall, rising sea level, more intense and frequent extreme weather events and melting glaciers, ice sheets and Arctic sea ice are some of the challenges for Europe already triggered by global climate change. These are predicted to intensify in the coming decades.

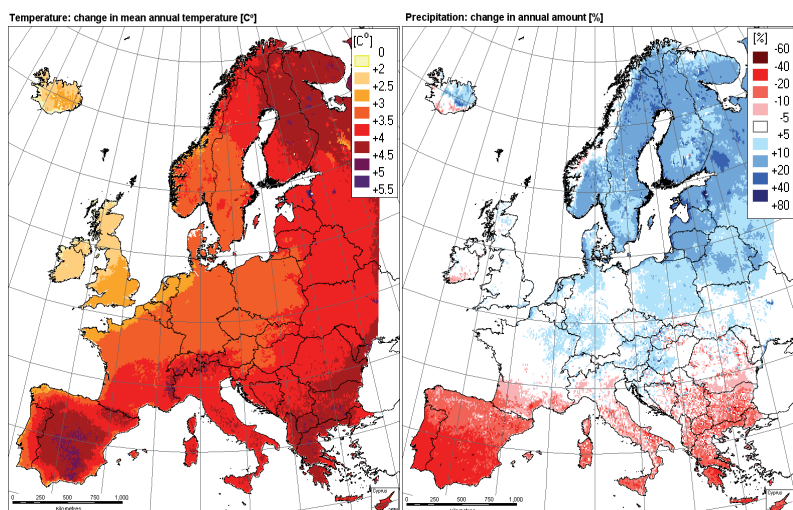
The vulnerability of regions and sectors to climate change varies widely across Europe. Certain regions such as southern Europe and the Mediterranean basin are particularly vulnerable where heat and droughts are expected to be especially pronounced. With the rapid melting of snow and ice the Alps will also be vulnerable, as will coastal zones, deltas and floodplains as sea levels are expected to rise, and rainfall, floods and storms to intensify. With global warming Europe's far north, the Arctic and outermost regions will also be at risk.

Climate change will affect a number of economic sectors, particularly those that depend heavily on temperature and rainfall, such as agriculture, forestry, fisheries, energy and tourism. Climate change is also expected to significantly change the quality and availability of water resources. Limited water availability already poses a problem in many parts of Europe and predictions demonstrate further deterioration due to climate change.

While many of Europe's citizens are expected to be affected by climate change, the most susceptible will be the elderly, disabled and low-income households.

### Why should the EU intervene?

Due to the varying severity and nature of climate impacts between regions in Europe most adaptation initiatives will be taken at national, regional or local level. Likewise, the ability to cope and adapt also differs across population, economic sectors and regions within Europe. By complementing the activities of its Member States, the European Union can support action by promoting greater coordination and information sharing between Member States, and by ensuring that adaptation considerations are addressed in all relevant EU policies. The EU's role will be particularly relevant when climate change impacts transcend borders of individual states – such as with river basins — and when impacts vary considerably across regions. The role of the EU can be especially useful to enhance solidarity among Member States and ensure that disadvantaged regions and those most affected by climate change are capable of taking the necessary measures to adapt.



Projected increases in temperature by 2100

Projected increases in rainfall by 2100

### The EU approach explained

In April 2009 the European Commission presented a policy paper (White Paper) establishing a framework to strengthen the European Union's resilience to cope with the impacts of a changing climate.

The framework focuses on four key areas:

- # Building a stronger knowledge base – Imperfect information is a barrier to adaptation. Sound data is vital in the development of climate policy. Although in recent years the availability of data and information on climate change impacts across Europe has improved, many weaknesses still remain. The availability of information differs considerably across regions and European-wide monitoring programmes are still insufficient. There is also a shortage of insight into the socio-economic aspects, the costs and benefits of different adaptation options and information on good practices. In an attempt to address these gaps, the White Paper proposes creating a Clearing House Mechanism by 2011. This IT tool and data base would enable the sharing of information on climate change risks, impacts and best practices between governments, agencies, and organisations working on adaptation policies.
- # Taking climate change impacts into consideration in key EU policies – adaptation must be embedded into policies at European level in order to reduce the long-term vulnerability of sectors such as agriculture, forests, biodiversity, energy, transport, water and health. Climate change for example will be one of the main drivers that shape European agriculture and the Common Agricultural Policy (CAP) is well placed to play a central role in contributing to adaptation.

<sup>1)</sup> Mitigation is the reduction of greenhouse gas emissions. The EU has been taking serious steps to address its own greenhouse gas emissions since the early 1990s, for further details see: [http://ec.europa.eu/environment/climat/home\\_en.htm](http://ec.europa.eu/environment/climat/home_en.htm)