

Instead of simply paying for losses, Europe should institute cost-effective adaptation measures to meet the challenges posed by climate change.

by Blog Admin

Climate change is no longer an abstract concept, but one that is costing Europe and the world in both human and economic terms. Writing that climate change could cost the world trillions every year within a few decades, [Annika Ahtonen](#) argues for more policies from Europe geared towards helping member states and regions adapt to climate change, rather than the current approach of simply paying for losses.



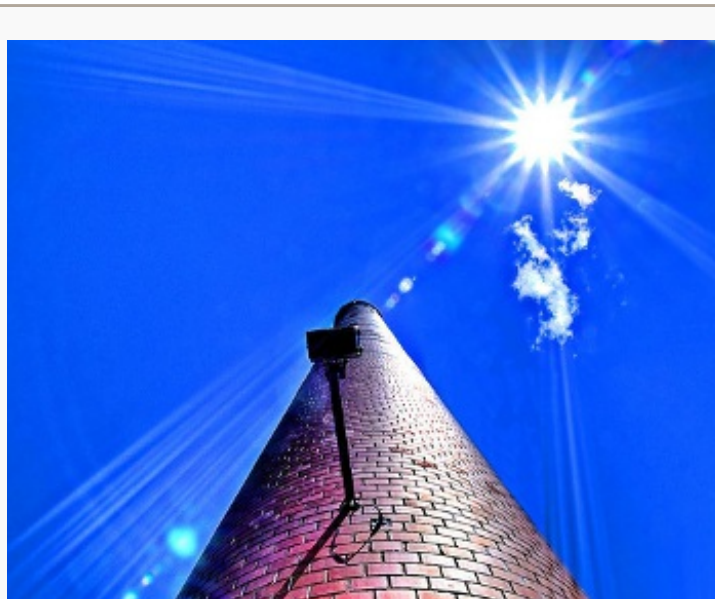
The climate is changing – and this is affecting Europe. The global average temperature has risen by 0.74 degrees Celsius since pre-industrial times and at an increasing speed in the last 50 years. The impacts of higher temperatures are felt in Europe in longer and more intense heat waves, melting of ice, rising sea levels, more drought, more frequent heavy precipitation events, rain or snow, and in some places longer growing seasons. Events such as floods, storms and forest fires in Europe cause significant problems that range from infrastructure damage to health problems.

Increased warming also means increased losses. Worldwide economic losses from weather and climate related disasters have increased from a few billion USD in 1980 to over 200 billion in 2005. It is [estimated](#) that by 2100, extreme weather conditions could cost the world 20 trillion USD every year. While developing countries lose more in terms of human lives and the economic costs are higher if expressed as a proportion of gross domestic product (GDP), economic losses caused by disasters are greater in developed countries. For example, in the United States, 14 extreme weather events in 2011 each caused losses in excess of one billion USD. At the same time it should be noted that these estimations provide just a part of the picture: while looking at direct damage to assets, they ignore impacts such as loss of human life, cultural heritage and ecosystem services, which are difficult to value.

While the EU recognises the importance of mitigating climate change and has worked to prevent future increases in global temperature by limiting CO2 emissions, the main cause of climate change, unfortunately this is no longer enough. Even the best mitigation efforts will not stop the extreme weather events that are already happening today. Also given the long time-lag between mitigation measures and their effect on the climate, it is becoming ever more obvious that efforts to reduce greenhouse-gas emissions must be coupled with adaptation to a warming world.

So far, Europe's approach has been to pay for the losses. However, this is expensive and shortsighted. These costs could be avoided by assessing and addressing climate risks and meeting these challenges with cost-effective

adaptation measures. There are a wide range of possible measures for both observed and anticipated risks: altering farming practices and crop varieties, avoiding building in risky areas, developing early-warning systems, building dykes against floods or building water reservoirs, enhancing water efficiency, and training



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professionals to operate in and manage changing circumstances.

The cost of adaptation will naturally depend on the country, region and sector, but also on the ability of public and private actors to evaluate the real needs and to promote innovative solutions that can bring benefits for society as a whole. While significant investments in infrastructure and technologies will be needed, it should not be forgotten that low-cost adaptation options also exist, for example related to behaviour, such as using water more efficiently, planning land use more effectively or improving one's physical well-being. The best adaptation measures are not just about adaptation but also create multiple benefits for society.

The estimations for adaptation costs have serious limitations. For example, according to one United Nations [study](#), the total funding required for adaptation by 2030 could amount to 49–171 billion USD per annum globally. This reflects the difficulty in providing exact figures. Also there is a tendency to focus only on costly structural measures, such as improving infrastructures, thus undermining less costly options such as those mentioned above. To understand the real costs and benefits related to adaptation measures, it is important that calculations value also the possible short, medium and long-term economic, social and environmental impacts of each adaptation measure.

While it is a responsibility of member states and regions to carry out necessary adaptation measures, the EU can play an important role in supporting their efforts. The EU has several policies, programmes and financial instruments at its disposal, which could provide an important basis for adaptation across Europe. These include the LIFE+ programme that provides a platform for exchange of best practice among member states and can also support climate-change adaptation financially, programmes for research and innovation, the EU's disaster prevention framework as well as the funds under the EU's cohesion policy. The EU budget for 2014-2020 could play an important role in addressing the climate challenge, and it should reflect the political priority given to climate action under the Europe 2020 Strategy – unfortunately, however, the current state of negotiations does not promise much.

It should be emphasised that the EU should not aim to spend 'X' amount of money on adaptation, but to encourage the development and implementation of smart and cost-effective adaptation strategies, products and services. While the EU can support member states' adaptation efforts financially, in accordance with the priorities set in the Europe 2020 Strategy, its action should also promote smart and sustainable growth. Direct investments in building roads, dykes and buildings will undoubtedly be needed. However, more should be done to use the financial instruments to support innovation and new approaches to adaptation, which hold the potential to develop into a source of welfare and growth, and into new products and services that could be deployed also outside the EU. Moreover, financing of adaptation projects must be accompanied by clear criteria. In order to avoid maladaptation and unnecessary investments, all projects should be supported by region or sector-specific assessments that evaluate the potential consequences of climate-change scenarios and necessary actions.

The European Commission is currently working on an EU Adaptation Strategy, expected to be adopted in the spring of 2013. It should build a framework for action, which includes strengthening the knowledge-base and capacities to act, helping to communicate and raise awareness about adaptation, mainstreaming mitigation and adaptation across EU policies, developing clear guidelines and criteria for financing adaptation projects, creating a market place for adaptation and encouraging innovation, sharing the burden and taking into account society's most vulnerable and setting a long-term vision for tackling climate challenge.

This article is based on the European Policy Centre Paper, [The climate is changing – is Europe ready? Building a common approach to adaptation](#).

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Note: This article gives the views of the author, and not the position of EUROPP – European Politics and Policy, nor of the London School of Economics.

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