ADAPTATION TO CLIMATE CHANGE

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KEY ISSUES

Objective of the Communication: The Commission presents guidelines to make it easier for the Member States to adapt to the consequences of climate change in the EU.

Affected parties: Virtually all areas of the economy.



Pro: (1) Promoting the build-up of knowledge about the likely consequences of climate change and the effectiveness and cost of the adaptation measures is necessary.

(2) Examining industrial standards to determine whether they take sufficient account of climate change is sensible.

Contra: (1) It is not always possible to determine whether the implementation of adaptation measures at this early stage is appropriate.

(2) Where no cross-border effects on other Member States are likely, making the harmonisation of adaptation strategies mandatory is ill-conceived.

CONTENT

Title

Communication COM(2013) 216 of 16 April 2013: An EU Strategy on adaptation to climate change

Brief Summary

In the absence of any indication to the contrary, references relate to the Communication COM(2013) 216.

- Context and objectives
 - The average annual temperature of the European mainland between 2002 and 2011 was 1.3°C above the pre-industrial level (p. 2). The rise in temperature leads to
 - melting of glaciers, rising sea levels and altered precipitation patterns in conjunction with heat waves, forest fires and droughts in southern Europe and flooding, storm surges and erosion in northern Europe;
 economic, ecological and social damage.
 - Climate change is mainly due to earlier emissions of greenhouse gases which have a delayed effect. Therefore – in addition to mitigating measures to reduce greenhouse gas emissions – adaptation measures to deal with the unavoidable impact of climate change are necessary.
 - With an EU-wide adaptation strategy, the Commission wants
 - to enhance the EU's preparedness and capacity to respond to the negative consequences of climate change ("climate resilience") (p. 5) and
 - improve the coordination of adaptation measures at local, national and EU level.

Economic and social consequences of climate change

- According to the Commission, the annual minimum cost in the EU of not adapting to climate change will
 increase from around € 100 billion a year in 2020 to around € 250 billion in 2050 (p. 3).
- The impact of climate change varies across the regions of the EU.
- The Mediterranean regions, flood plains, mountain areas and the Arctic are at particular risk.
- Northern Europe may even profit from higher crop yields and lower heating costs.
- Sectors of the economy at particular risk from climate change ("climate-vulnerable") include fishing, agriculture and forestry, beach and snow tourism and the health sector as well as "major utilities" (p. 3) such as energy and water providers.
- Also affected are ecosystems that are losing their ability to function as a "natural buffer" e.g. against flooding.
- New climate conditions increase the risk of investing in buildings and infrastructure [SWD(2013) 132, p. 8].
- The "social cost" of climate change results, in particular, from flooding and heat (p. 4).
- Floods resulted in more than 2 500 fatalities and affected more than 5.5 million people between 1980 and 2011.
- Without further adaptation measures, there could be 26 000 deaths per year from heat by the 2020s, rising to 89 000 by the 2050s.

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Support for the adaptation measures and strategies of Member States

- Adaptation strategies serve to coordinate adaptation measures at the various levels of planning and management (p. 5).
- Until now, only 15 Member States have developed adaptation strategies. These
 - are mainly still in the initial stages,
 - are, in some cases, limited to "sector-specific plans" in the event of e.g. heat wave or drought (p. 4),
 - often do not take account of cross-border effects [SWD(2013) 132, p. 13] and
 - are not assessed on the basis of their success.
- Action 1: Guidelines for the adaptation policies of the Member States
 - The Commission initially wants to adopt non-binding guidelines for developing, implementing and reviewing the adaptation policies of the Member States, which also cover cross-border issues.
 - By 2014, it wants to develop an "adaptation preparedness scoreboard" for measuring Member States' level of willingness to adopt an adaptation strategy.
 - In 2017, it wants to assess the adaptation strategies and if it deems these to be "insufficient" to propose a "legally binding instrument" rather than the non-binding guidelines (p. 6).
- Action 2: Funding of adaptation measures by the LIFE programme
 The Commission wants to promote adaptation measures for particularly climate-sensitive regions such as coastlines, densely populated deltas and coastal cities as well as mountain and island areas - with funds from the LIFE programme for environmental measures.
- Action 3: Supporting adaptation strategies in cities

The Commission wants to support the voluntary implementation of adaptation strategies in cities.

Extending and conveying knowledge about adaptation measures

- The "key knowledge gaps" [SWD(2013) 131, p. 3] about adaptation measures relate to
 - the risks of climate change at local and EU level,
 - the cost of damage caused by climate change and the costs and benefits of adaptation measures,
- the effectiveness of various adaptation measures.

- Action 4: Bridging the "key knowledge gaps" on adaptation measures

- The Commission wants to bridge the "key knowledge gaps" by 2020 by
- funding projects within the framework of the research programme "Horizon 2020" [COM(2011) 80],
- adopting a "comprehensive review" of the importance of climate change for the EU,
- supporting assessments of "climate vulnerability"; in this regard in view of existing procedures that are continually being improved – it intends to forego a new harmonised EU-wide review procedure [SWD(2013) 131, p. 5].
- Action 5: Linking internet platforms and portals

The internet platform "Climate-ADAPT" should be more effectively linked to other national climate portals and developed as the main source of information on adaptation in Europe.

Adaptation measures in other policy areas, particularly for key vulnerable sectors

- The Commission wants to incorporate adaptation measures into other EU policy areas in order to
 - make EU measures more "climate proof" and
 - to strengthen the resilience of particularly "vulnerable" key sectors.
- Action 6: Guidelines for agriculture and fisheries policy and the Cohesion Policy

In 2013, the Commission will issue guidelines for setting up and implementing adaptation measures in the Common Agricultural and Fisheries Policy and in the Cohesion Policy.

- Action 7: Adaptation measures for long-term investment projects

The Commission wants to mandate European standardisation organisations to examine whether industry standards in the areas of energy, transport and construction take sufficient account of adaptation to climate change.

- Action 8: Improving insurance protection

The Commission wants to extend insurance protection against damage caused by natural disasters. The Green Paper on the insurance of natural and man-made disasters [COM(2013) 213, see <u>cepPolicyBrief</u>] is a "first step" in this direction.

Coordination, financing and review

- The Member States should appoint national contact points. These are to improve the coordination of the adaptation strategies of the Member States with each other and with those of the Commission.
- The Commission wants investments which are co-financed from the EU budget to be "resilient" against the negative consequences of climate change (p. 12).
- To finance the adaptation measures, the Commission is planning:
- to devote 20% of the EU budget 2014–2020 to climate related expenditure [Multi-annual Financial Framework, COM(2011) 398, see <u>cepPolicyBrief</u>].
- EU programmes such as "Horizon 2020" and LIFE as well as the European Regional Development Fund (ERDF) are to provide financial support for adaptation measures.
- The Member States could use the income from the auctioning of emission rights to finance adaptation measures (Directive 2009/29/EC, Art. 10 (3); see <u>cepPolicyBrief</u>).



- The Commission wants to
 - develop indicators to help evaluate adaptation efforts and vulnerabilities in the EU using funds from the LIFE programme,
 - assess the EU adaptation strategy in 2017 and propose its review if needed (p. 10).

Statement on Subsidiarity by the Commission

The EU can supplement and coordinate local, national and EU-wide measures on adaptation to climate change. This is necessary, in particular, to take account of cross-border aspects – e.g. flood protection in cross-border flood plains. The additional EU support for the build-up and exchange of knowledge at all levels is more effective and cost-efficient than individual national measures due to the economies of scale. In addition, coordinating adaptation measures with the rest of its climate change policy and incorporating them into other policy areas, falls within the EU's area of responsibility. [SWD(2013) 132, p. 24 et seq.]

Policy Context

The content of this Communication is based on the White Paper entitled "Adapting to climate change: Towards a European framework for action" [COM(2009) 147, see <u>cepPolicyBrief</u>] which developed four pillars of action during a pilot phase (2009–2012). These cover (1) the build-up of knowledge, (2) adaptation measures in various policy areas, (3) financing mechanisms and (4) international cooperation. The next phase, beginning in 2013, is to develop a general adaptation strategy. In addition, adaptation issues have already been included in various pieces of legislation, e.g. the flooding Directive (2007/60/EC) and the Marine Strategy Framework Directive (2008/56/EC). Additional legislative proposals in which adaptation to climate change is included are the proposal for a Directive on the Environmental Impact Assessment [COM(2012) 628, see <u>cepPolicyBrief</u>] and the proposal for a Regulation on the Guidelines for the development of the Trans-European Transport Network [COM(2011) 650, see <u>cepPolicyBrief</u>]. The Commission also refers to the importance of adaptation to climate change in the Communications on safeguarding Europe's water resources [COM(2012) 673, see <u>cepPolicyBrief</u>] and on the Biodiversity Strategy [COM(2011) 244].

Options for Influencing the Political Process

Responsible Directorate General:	DG Climate Policy
Committees of the European Parliament:	Environment (leading), Transport, Agriculture, Industry
Federal Ministries:	Environment (leading)
Committees of the German Bundestag:	Environment (leading), Agriculture, Transport, Economy

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

In principle it is appropriate that, in addition to emission avoidance measures to tackle climate change itself, suitable adaptation measures should be brought in to limit the negative effects of climate change. This enables the avoidance of economic damage – e.g. production stoppages due to flooding.

At the present time, however, the appropriate individual adaptation strategies and measures cannot always be reliably determined because the effects of climate change and the effectiveness of adaptation measures are still very unclear. Thus a well-founded cost-benefit analysis of climate adaptation measures cannot yet be carried out.

In principle, every Member State has sufficient incentive to develop strategies for adapting to climate change and protecting its citizens from potential climate damage. The provision of guidelines may lead to greater coherence in the development of national adaptation strategies and thus increase the comparability of the strategies implemented. Where no cross-border effects on other Member States are likely, making the harmonisation of adaptation strategies mandatory is ill-conceived because the Member States should have the option of reacting in their own way to the likely effects of climate change. The Commission itself specifies that every country must adapt individually on the basis of physical, climatic and economic conditions [SWD(2013) 132, p. 16]. The application of guidelines in the development of adaptation strategies should therefore remain voluntary in this regard.

The build-up of knowledge, to which the Commission aspires, about the likely consequences for the climate and the effectiveness and cost of the adaptation measures is necessary and must take priority.

The lack of knowledge about the benefits and costs of climate adaptation measures requires government action because companies have no incentive to invest in basic research. For the same reason, a publicly funded expansion of the platforms available for the distribution of information is desirable.

Examining whether industrial standards take sufficient account of the effects of climate change would be sensible in view of the predicted climate changes and the long duration of infrastructure projects, particularly in the areas of energy, transport and construction.



The effects of climate change are apparent world wide and most notably in the developing countries of the tropics and subtropics, giving rise to economic, political and social feedback for the Member States. This concerns international trade, access to resources, combating poverty in developing countries and the protection of important eco-systems. The Commission should therefore also consider, as it intends to, the effects of climate change in countries outside the EU and the adaptation measures to be undertaken there.

Impact on Efficiency and Individual Freedom of Choice

Supporting various different methods of assessing the "climate vulnerability" of regions facilitates a broader long-term acquisition of knowledge about the effects of climate change. However, insofar as the results of a "vulnerability assessment" are relevant to providing support for adaptation strategies – e.g. by way of the LIFE Programme – the Member States must have standard vulnerability criteria. Basically, there is a danger, where EU funds are used, that the Member States will tend to adapt to the requirements necessary for receiving support rather than to climate change itself.

Impact on Growth and Employment

Not yet apparent.

Impact on Europe as a Business Location

Companies will avoid "climate-vulnerable" locations. Adaptation measures may therefore improve the quality of those locations by helping to prevent damage.

Legal Assessment

Legislative Competency

Unproblematic. The EU may take measures to protect the environment, combat climate change and protect public health (Art. 192, Art. 191 (1) TFEU). This also includes - in addition to measures to combat climate change itself by reducing greenhouse gas emissions - measures for adapting to the negative consequences which it has for people and the environment.

Subsidiarity

Only the EU is able to incorporate adaptation measures into its climate policy and other EU policy areas. In addition, it is appropriate to coordinate local and national adaptation measures at EU level, in particular so that cross-border aspects can be taken into account. Insofar as cross-border issues are not involved, EU measures should not be mandatory for the Member States. The Commission should bear that in mind in any proposal for legislation after 2017.

Other Areas of Compatibility with EU Law.

Unproblematic. The EU can coordinate adaptation measures with the rest of its climate policy and incorporate them into other areas of EU policy (Art. 11 TFEU).

Impact on German Law

Unproblematic. In December 2008, the Federal Government passed the "German Adaptation Strategy on Climate Change" which aims, step by step, to identify the risks of climate change, specify the need for action, define objectives and develop and implement adaptation measures. The adaptation strategy was reinforced in August 2011 by way of an Action Plan.

Conclusion

In principle, it is appropriate to limit the negative effects of climate change. At the present time, however, the appropriate individual adaptation strategies cannot always be reliably determined. Where no cross-border effects are likely, making the harmonisation of adaptation strategies mandatory is ill-conceived. The build-up of knowledge about the likely consequences for the climate and the effectiveness and cost of the adaptation measures is necessary. Examining whether industrial standards take sufficient account of climate change is sensible.