

#### **European Commission Green Paper 2007**

#### **Response to Consultation Questions by HEAL**

### 1) What will be the most severe impacts on Europe's natural environment, economy and society?

The major and most sever impacts will be suffered by those human and natural systems that are most interwoven: - agriculture and food provision; water resources, especially drinking water; human health; coastal zones, human settlement; various industry branches; insurance; financial services. Climate variability and change have impacts on a broad spectrum of health determinants and, consequently, far-reaching impacts on society. For this reason, public health professionals and health care providers will need to be alert to the indirect and the direct impacts of climate change.

Attention must be paid to the more subtle and long-term health effects and related ramifications of the various climatic phenomena. In the case of drought, for instance, drinking water supplies may be threatened. Crop failure and loss of farmland from soil salinity may have significant economic implications for rural communities in particular, but repercussions will be felt on overall nutrition, child health, the exacerbation and increasing incidence of chronic diseases, and possibly even mental health conditions.

### 2) Which of the adverse effects of climate change identified in the Green Paper and its Annex concern you most?

Health (human health, in particular) and its societal implications are of the greatest concern to us. Direct stress from temperature extremes, impacts of deteriorated air quality on people already suffering from chronic respiratory conditions or triggering such conditions, more favourable conditions for water-borne and vector-borne diseases are some of the anticipated direct health impacts. However, there will be indirect and unanticipated societal impacts that will reveal themselves with greater clarity and strength as the synergistic impact of climatic changes become apparent.

#### 3) Should further important impacts be added?

We believe that the Green Paper satisfactorily encompasses the major impacts. However, it may be worthwhile emphasizing that all the impacts are interlinked and therefore, inter-dependent. Unforeseen impacts will also emerge. It is vital to give centrality to "vulnerability" in the adaptation discourse – vulnerability to stress on the economic, social, political and environmental systems. The degree to which societal systems are vulnerable to a changing climate will be influenced by whether they will or can adapt. Different social groups will be affected in a different way by the changes in climate, and they will manifest different vulnerabilities. Responding to these would depend not only on undertaking appropriate adaptation measures but on enhancing their "adaptive capacity" – living conditions, infrastructure, awareness, access to resources and information, sound governance, etc.

### 4) Does the green paper place the right urgency and emphasis on the matter of adaptation in Europe?

Yes, it does though it is already a much needed and belated step. The time is more than ripe as commitments to undertake adaptation policy action have been lacking. Initiatives so far have primarily represented responses to situations of crises. Adaptation that is anticipated will probably be more effective and less costly than one that is undertaken post-factum. Also, it is important to consider adaptation measures to the "worst case scenarios" such as the compounding effects of a sequence of extreme weather events rather than those of only a single event. So the policies and measures should be tailored and put into place for the long-term as climate change will be continuous and continuously changing over the coming decades.

### 5) What should be the different roles of EU, national, regional, local authorities and the private sector?

As a European-level NGO, we believe that the EU authorities are uniquely positioned to play a coordinating role and ensure the coherence between the European and the national levels. From that point on, subsidiarity kicks in, and it would be up to the national authorities to make sure that this coherence remains intact down across all the other levels of the state –regional, local, community.

National governments should facilitate, resource, fund the development and remove obstacles to the implementation of adaptation and mitigation measures (whether separate or synergistic) as integral and indelible parts of the entire spectrum of sectoral policies.

An equally significant aspect of undertaking adaptation measures is reinforcing or building adaptive capacity. This capacity is often determined by the available resources, infrastructure and institutions (governance) at the regional and local levels. For example, improving the living conditions and access to resources and information of those impacted contributes to enhancing this capacity. Such measures can reduce their vulnerability and strengthen their adaptive capacity. That would be the role for the authorities at regional and local level, as well as ensure that their actions are coherent with the national and EU policies.

The private sector is generally perceived to be more flexible and open to fast-paced change, as well as one that would quickly act to defend its best interests. It is probable that the private sector will follow the market forces and trends that develop and manifest themselves after the impacts. However, its responsiveness to climate variability and extremes would also be determined by national mentality (i.e. attitudes to risk), knowledge, access to resources and technology, connections to social networks. Certain groups may manifest a precautionary approach and adapt in anticipation of the impacts while others might be forced to react to them once they have already occurred.

### 6) Which economic, social and environmental impacts of climate change should be addressed at EU level as a matter of priority?

Agriculture (food provision), fresh water resources and human health.

### 7) Apart from the main priority areas identified in the four-action approach, are there other areas that have been missed out?

Greater focus on the inter-connectedness of the impacts and their compounding effects should be made explicit particularly in respect of human health. Timely, accurate and reliable health surveillance data is crucial to detecting changes in disease patterns over time and between different populations (especially vulnerable groups such as children and the elderly), including changes that may result from the combined ecological and societal impacts of climate change. A key public health challenge is to understand the causes of these disease patterns and then to implement programs that reduce the burden of illness.

## 8) Does section 5.1 correctly and comprehensively identify the needs and policy priorities for early adaptation actions that should either be taken or coordinated at the EU level?

Yes, it does with an addition: - the section should include policy initiatives on creating incentives and motivation for adaptation.

#### 9.a) How do policy priorities need to change for different sectors?

The different sectors will experience different impacts and to a different extent from one another. Changes in policy priorities should be based on well-analysed sectoral vulnerabilities.

### 9.b) Which policy approaches should be taken at national, regional or local level?

Policy approaches are dependent on the role that the authorities at the different levels play. See answer to question 5.

#### 9.c) Where is European action needed?

European action would be needed in:

- Determining the balanced mix between adaptation and mitigation (together with member state governments);
- Protecting the vulnerable, and reducing inequalities resulting from the fact that the better-resources and financially advantaged will adapt quicker and better;
- Encouraging innovation;
- Remove regulatory obstacles to adaptation;
- Funding research on analysing vulnerabilities and adaptive capacities, and disseminating the information to the groups that would need to adapt.

### 10.a) How can EU agriculture and fisheries policy be adapted to help these sectors adjust to the impacts of climate change?

- 10.b) What will be the likely consequences of climate change for trade in agricultural products?
- 11) How should the EU express its solidarity with regions suffering most heavily from the consequences of climate change?
- 12) How could a collective European response help coastal Europe to tackle the effects of rising sea levels?

### 13) How should EU policy on public health take the impact of climate change into account?

Climate change poses complex short- and long-term public health challenges. It requires that health professionals across all disciplines take a broader, more systemic view of the possible linkages and trends between health determinants and health outcomes, as well as the linkages between human health and the "health" of our natural and built environments. The diverse pathways through which climate change affects health underscores how human health and well-being are intricately linked to the health of the ecosystems in which we live.

It is important to move mere disease surveillance from the traditional work of recording past events to a more active, anticipatory activity in order to be able to identify health threats as early as possible. To be effective, such an approach requires a collaborative effort among health professionals and their allies at all levels of government, as well as internationally. Partnerships with all sectors and at all levels must be forged to determine the impacts of climate change on the broader determinants of health and to better identify the risks posed by climate change.

However, as a conceptual framework for policy development, it is vital NOT to set up a separate policy on climate change adaptation. Climate change adaptation is multi-dimensional, multi-sectoral and cross-cutting. With the notable exception of certain domains (e.g. disaster relief), it would be counter-productive and impractical to view it as a distinct policy field. Logically, it should be built into any existing policy analysis, policy development, implementation and evaluation framework, including into sectors where the link to climate change is marginal or indirect.

### 14) What will be the consequences of climate change for Member States' potential energy mix and for European energy policy?

15) Please rank the listed options under each of the areas of the fouraction approach for EU adaptation into the following three categories:

### 15.a) Which actions are most urgent and to be implemented by the Commission as a matter of priority?

- 1. The most urgent and challenging priority is the integration of any adaptation policy in the implementation and modification of existing and forthcoming legislation and policies as well as the remaining two actions under the same section (5.1.).
- 2. Fourth pillar (5.4.) Involving European society, business and the public sector in the preparation of coordinated and comprehensive adaptation strategies.

### 15.b) Which actions have a low priority for Commission implementation?

All the actions suggested merit to be prioritised in one context or another.

- 15.c) Which actions are irrelevant for Commission implementation? All the actions suggested are relevant.
- 16) What are the possible synergies between adaptation and mitigation measures? How can these synergies be strengthened?

In the development of climate policy so far, adaptation has not attracted as much attention as mitigation has, both in the EU and at international level. Adaptation is not an appendage to mitigation, and both adaptation and mitigation need to find a place in a well-balanced climate policy by relating their essential objectives. It is evident that the two are linked, and potential synergies have been considered between adaptation and mitigation. There have also been warnings that the practical implementation of adaptation may in some cases curb or even conflict the goals pursued by mitigation. On the other hand, the costs of adaptation risk being extremely severe without a very tough mitigation programme. Therefore, both adaptation and mitigation represent the necessary parts of a coordinated and coherent approach to the problem of climate change. However, as issues they differ substantially from one another. Broadly speaking, adaptation is localised because efforts are undertaken within the local micro-climate, and entails benefits that can be experienced over a shorter time span. Mitigation, on the other hand, is more linked to the global level, and its benefits will be felt over a longer period of time.

Given these divergences, it may be wiser to focus on embedding the climate change adaptation policy into ALL sectoral policies instead of seeking ways to integrate it with mitigation. Adaptation measures that conflict with the aims of mitigation must be minimised, though in certain cases (e.g. cooling of vital hospital premises), this may be unavoidable.

Too strong a focus on seeking out the synergies between adaptation and mitigation does not go without risks. With the myriad of actors that are involved in adaptation and mitigation, decision-making on synergetic measures may involve an enormous institutional complexity (ultimately limiting the efficacy of the measures). Would the impact of adaptation/mitigation synergies be sufficient to achieve the levels of adaptation and mitigation that are required?

Obviously, synergistic adaptation/mitigation options exist and should be used where practically possible. However, the greater challenge for policy-makers would be to integrate climate change adaptation policy into sectors across the board: - health, transport, agriculture, trade,

Given their widely differing economic, societal and environmental givens at certain moments in time, varying vulnerability, interests, resources, knowledge etc., it is probable that each member state will determine its own specific formula of integrating certain measures of adaptation with those of mitigation.

### 17) In the context of EU policy, how can companies and citizens be encouraged to participate in adaptation actions?

Adaptation is a feature of life. The crucial problem for both social and natural systems is to change in response to the changing climate with the least perturbations, costs and losses. So far, climate change has not been as marked as to bring about concentrated efforts of adaptation. However, climate variability will become more and more marked, and this is what will drive people's behaviour in adapting (whether in an anticipatory manner or a reactionary manner to an extreme weather event, for instance).

The availability of information packaged in clear messages would be key. For example, attitudes towards risk and preventive action may vary from country to country, and from region to region, but adaptation that is carried out in an anticipatory/precautionary manner would most probably be more effective and less

costly than adaptation after the event has occurred. This argument would need to be tailored towards the specific contexts of the different groups.

- 18) How will climate change affect the policy priorities of the EU's external policies?
- 19) Which priorities should the EU set for its co-operation programmes in the different parts of the World with respect to adaptation to climate change?
- 20) Which are the main opportunities and obstacles for adaptation in different parts of the World?
- 21) What are the best options to make the EU's external action more resilient to climate change?
- 22) What could be the value added for EU action compared to other international initiatives including, for instance, the UNFCCC and multilateral funding instruments?
- 23) Do the listed research areas address the most important knowledge gaps?

Yes, they do.

- 24) Which are the five most important research areas that need to be addressed as a matter of priority?
  - 1. Develop comprehensive and integrated methodologies for the assessment of impacts, vulnerabilities and cost effective adaptation. Develop indicators to measure the success of responses. Improve European-wide risk, impact and cost/benefit assessment for adaptation responses, as compared with "no/AFTER DAMAGE action". Compare integrated EU-wide responses with sectoral approaches including analysis of socio-economic costs and benefits. Improved integrated assessment and the development and use of tools for demonstrating economic, environmental and social benefits of adaptation for European regions crossing national boundaries.
  - 2. The use of existing Community-supported information systems, e.g. European Flood Alert System, European Forest Fires Information System, and the Monitoring and Information Centre (MIC) for civil protection, the EC Crop Yield Forecasting System must be encouraged and brought to full potential, e.g. by linking them to a suitable European Meteorological data infrastructure and dedicated monitoring programmes. Improve policy-relevant information by the European Data Centres on air quality, natural resources, human health, products and waste, taking a life-cycle perspective.
  - 3. Improve the basic understanding and prediction of impacts in Europe, including in the North Atlantic, the Arctic, the Mediterranean and the Black Sea. Downscale climate models and improve predictions of impacts on a regional and local scale, including potential impacts on the water sector, the energy sector (reduced cooling capacity for power plants, impacts on hydropower,

- increased demand for cooling of buildings), on transport infrastructure, industries and businesses, land-use planning, agriculture and human health.
- 4. Provide every 4-5 years up-to-date synthesis reports on climate impacts, adaptation and vulnerabilities to be produced by the European Environment Agency and the Joint Research Centre, based inter alia on the results from the EU Research Framework Programmes and national research.
- 5. Provide support to practitioners through guidance on existing scientific knowledge and adaptation measures, options and cost-benefit analysis of these options. Promote Europe-wide networks for the exchange and consolidation of knowledge, experience and adaptation in Europe. Facilitate transmission of knowledge from the research community to practitioners.

# 25) How should research results be communicated and made available to decision makers and a broader public at local, national, EU-level and internationally?

By tailoring it in a way to make it relevant to the target audience and their natural and socio-economic context. Non-governmental organisations and community groups for example, are close to the grass-roots level as bodies that have but the public interest at heart. As such, they have the excellent capability for outreach to the public by disseminating information through targeted publications, raising awareness through innovative campaigns, organising creative events.

The media should also be employed to deliver the messages to the wider public.

## 26) Does the Green Paper foresee sufficient participation of the different stakeholders in identifying and implementing EU adaptation actions?

Yes, it does.

### 27) Should stakeholders from the EU's neighbours and other regions be involved?

Yes, with climate change being a multi-faceted issue that will be experienced very differently by different groups and agents from and within other countries/regions, they could add interesting perspectives and solutions.

# 28) Would the establishment of a European Advisory Group on Adaptation be helpful in further exploring an EU response to the effects of climate change?

Yes, provided that there is proper representation of all civil society groups, especially non-governmental organisations and community groups.