

EU Climate Adaptation Strategy: More ambition and tools are needed

Annex to the public consultation on the new EU Adaptation Strategy, submitted on 20 August 2020

The European Environmental Bureau (EEB), Europe's largest network of environmental citizens' organisations bringing together over 160 civil society organisations from more than 35 European countries, welcomes the commitment from the European Commission made in the European Green Deal to develop a more ambitious EU Climate Adaptation Strategy with a focus on Nature-based Solutions (NbS) given the significant vulnerabilities and impacts the climate crisis is already having upon our health, wellbeing, ecosystems and economy that are projected to increase in severity and frequency. As the Covid-19 pandemic has demonstrated the interlinkages between healthy ecosystems and healthy communities, it becomes even more important to understand how NbS can be fostered, replicated and scaled up in cases where they provide a physically effective and cost-efficient alternative or complement to grey infrastructure.

The update of the strategy provides an important opportunity to develop solutions that address a range of hazards and vulnerabilities while also offering opportunities for win-win or at least no-regret solutions in addition to climate adaptation such as climate mitigation, biodiversity, air, water and soil quality as well as human health and wellbeing. A focus on such synergistic approaches is demanded not only by the urgency of the planetary crises, but also by the need to contribute to the protection of human health and to enhance the resilience of ecological and social systems. It is also a simple question of cost-effectiveness.

After reiterating the necessity and urgency of climate adaptation and the need for an increase in ambition and implementation, this short annex outlines some crucial elements that we believe should be included in the new EU Adaptation Strategy.

The necessity and urgency of adaptation action

The need for climate adaptation is closely connected to the past and ongoing failure to adequately mitigate the effects of the climate crisis. Put simply, the more we mitigate and limit the extent of global warming, the less we will need to adapt to the consequences, the lower the costs. Yet, given past failures to mitigate adequately, some human-made global warming is already inevitable and with that adaptation measures are inevitable. Adaptation is not a plan B, nor is it an add-on but a clear necessity to protect human life, vital ecosystems we depend upon and to minimise financial losses. The recent JRC PESETA IV study confirmed this necessity by analysing the effects of some (but not all, thus the real impacts are likely to be even more severe) climate change impact categories in a warming scenario of 3°C or more above pre-industrial levels, without adaptation action.¹ Deaths from extreme heat in the EU and UK would rise at least 30-fold to 90,000 annual deaths. Ecosystems will also be severely affected with e.g. the alpine tundra practically disappearing in the Pyrenees and being reduced by 84% overall. Financial losses from coastal flooding alone would constitute €250 billion/year in 2100. These examples demonstrate that there are clear human,

¹ L Feyen et al (eds), 'Climate change impacts and adaptation in Europe' (2020) JRC PESETA IV final report, <https://ec.europa.eu/jrc/en/peseta-iv>.

environmental and economic imperatives to act,² both to significantly step up mitigation efforts and to rapidly enhance and improve adaptation measures.

With so much to lose by not acting, there is also a significant opportunity for the updated EU Adaptation Strategy to truly act upon this imperative and to create a step-change for adaptation with multiple benefits and synergies. An ambitious Adaptation Strategy can significantly contribute to saving numerous lives and livelihoods by protecting vulnerable people from heat deaths and coastal communities from losing their homes and livelihoods. It can further contribute to significant ecosystem restoration and protection to enable nature to provide us with nature-based solutions to the climate crisis that provide both adaptation and mitigation benefit. And thirdly, it can provide significant economic benefits, not just by avoiding immense financial losses but also by reducing climate risks and by providing significant social and environmental benefits in the forms of sustainable jobs, health benefits and recreation opportunities.

Lastly, the immense costs of adaptation are just another reminder from a pure cost-effectiveness point of view that we must take mitigation seriously. The more we mitigate now, the less we have to spend on adaptation now, tomorrow and in generations to come.

Key elements of the Strategy

For the new Adaptation Strategy to make the most of this opportunity, we consider an increase in political awareness, clear and binding targets, a focus on Nature-based Solutions, the mainstreaming of adaptation and an increase in funding to be crucial. These five elements will now be outlined in turn.

1. Increase awareness, political support and enable knowledge exchange

There continues to be a lack of awareness about the need and opportunities for adaptation. Adaptation is not accorded adequate political priority and knowledge gaps remain.³ Yet, despite a continued need for research to further understand the impacts of climate change, also at local scales, significant progress has been made in research and knowledge on adaptation that now needs to reach stakeholders and practitioners. The new Adaptation Strategy is a major opportunity to make adaptation to the climate crisis a higher political priority and to raise awareness about the need and tools for adaptation. It should therefore significantly raise the profile of climate adaptation through an ambitious approach with clear targets and commitments and accompanying guidance and support to implement them. Collaborations between Member States, economic sectors, stakeholders and academia should be facilitated to step up and speed up the implementation of urgently needed adaptation measures. In addition, adaptation must also be mainstreamed in other policy instruments such as the Common Agricultural Policy and the new nature restoration legislation to enable a holistic approach.

² Cf. Global Commission on Adaptation, 'Adapt Now: A Global Call For Leadership On Climate Resilience', 2019, <https://gca.org/global-commission-on-adaptation/report>.

³ European Commission, 'Report from the commission to the European Parliament and the Council on the implementation of the EU Strategy on adaptation to climate change' COM(2018) 738 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:738:FIN>.

2. Measurable and legally binding targets

One of the eight actions of the initial EU Adaptation Strategy adopted in 2013 was to “encourage all Member States to adopt comprehensive adaptation strategies” with the performance indicator of “Number of NASs [National Adaptation Strategies] and action plans and national climate change risk assessments” alongside an adaptation preparedness scoreboard.⁴ Neither the action, nor the performance indicator provide a way of assessing the implementation of adaptation strategies or the quality thereof.

The 2013 strategy further included a commitment that where progress is insufficient “by reference to the coverage and quality of the national strategies, the Commission will consider without delay proposing a legally binding instrument”. While almost all Member States have adopted national adaptation strategies, at least 7 Member States have not translated these strategies into national adaptation plans.⁵

The 2018 assessment of the strategy by the European Commission also concludes that “there appear to be significant gaps in the effectiveness of Member States implementation of their strategies, with resources for the follow-through of commitments in some cases being reduced or withdrawn, or in other cases not identified”.⁶

National adaptation strategies and plans still lack ambition and concrete actions and are hardly implemented. There are weaknesses in the carrying out and monitoring of national adaptation plans and the coverage and quality of the national strategies appear insufficient. Consequently, in line with the commitment made in 2013, in the updated EU Adaptation Strategy, the Commission should commit to proposing new legislation on adaptation to ensure the coverage and quality of national strategies, plans and their implementation. The shortcomings of the 2013 Strategy must be addressed in the new Adaptation Strategy that must go beyond merely encouraging the existence of national strategies and should therefore set clear and measurable targets, proper implementation mechanisms and indicators for adaptation measures and establish a monitoring mechanism. Especially for Nature-based solutions, measurable targets are needed to translate growing theoretical acceptance into practice.⁷

3. Focus on Nature-based Solutions including for water related climate risks

The new Adaptation Strategy should require national adaptation strategies and plans to prioritise Nature-based Solutions (NbS) as the primary mechanisms to adapt to the effects of the climate crisis as a cost-

⁴ European Commission, ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: An EU Strategy on adaptation to climate change’ COM/2013/0216 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013DC0216>.

⁵ <https://climate-adapt.eea.europa.eu/countries-regions/countries>

⁶ European Commission, ‘Commission staff working document: Evaluation of the EU Strategy on adaptation to climate change’ SWD(2018) 461 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=SWD:2018:461:FIN>.

⁷ N Seddon (IEED), ‘Briefing: Nature-based solutions: delivering national-level adaptation and global goals’ (November 2018), <https://pubs.iied.org/17484IIED/>.

effective and multi-benefit solution that can protect us against multiple hazards with significant societal and environmental synergies and returns.⁸

NbS can be considered as an ‘umbrella concept’ for other approaches such as ecosystem-based adaptation (EbA), eco-disaster risk reduction (eco-DRR), green infrastructure (GI) and natural climate solutions (NCS). NbS are defined by IUCN as “Actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.”⁹ Ecosystem-based adaptation as a group of NbS can significantly enhance ecological resilience by, *inter alia*, conserving and sustainably managing ecosystems, prioritising green infrastructure and restoring degraded ecosystems with significant improvements in e.g. flood prevention, drought resistance or protection from erosions and landslides as well as contributions to climate mitigation.

As NbS include a large array of measures, such as sand dune stabilization and planting, agroforestry or urban green spaces, they are very context specific and require robust and effective design and implementation to suit the ecosystem and local circumstances. IUCN’s new global standard for NbS¹⁰ provides a useful overview of crucial elements to consider and could be integrated into the Adaptation Strategy and in legislation requiring and defining criteria for adaptation and NbS to ensure adequate regard to the specific circumstances, threats and possible effects of adaptation measures of each area and system.

NbS have significant potential to reduce water-related risks, with increasing evidence that NbS are a “no-regrets” adaptation measure that can generate multiple significant benefits in addition to those related to climate change, making them a very effective way to cope with climate variability and change.¹¹ Furthermore, NbS can assist in managing uncertainty related to climate change by avoiding or delaying lock-in to capital-intensive grey infrastructure, allowing for flexibility to adapt to changing circumstances.¹²

The Adaptation Strategy should prioritise NbS and establish a requirement to always consider and analyse the feasibility and benefits of NbS when developing adaptation measures. It should further recognize the need to enhance ecological resilience for all adaptation actions to ensure ecosystem stability and the continued provision of ecosystem services that grey adaptation technologies and infrastructure also rely upon, thus recognising the importance of nature and intact ecosystems for all adaptation measures, whether ecosystem-based or not. In doing so, a systemic approach should be taken to allow for a broader

⁸ Cf. V Kapos et al, ‘The Role of the Natural Environment in Adaptation, Background Paper for the Global Commission on Adaptation’ (2019), https://cdn.gca.org/assets/2019-12/RoleofNaturalEnvironmentinAdaptation_V2.pdf.

⁹ E Cohen-Shacham et al (eds), ‘Nature-based Solutions to address global societal challenges’ IUCN (2016), <https://portals.iucn.org/library/node/46191>.

¹⁰ IUCN, ‘Global Standard for Nature-based Solutions: A user-friendly framework for the verification, design and scaling up of NbS’ (2020), <https://portals.iucn.org/library/node/49070>.

¹¹ OECD, ‘Nature-based solutions for adapting to water-related climate risks’ (2020) OECD Environmental Policy Paper No.21, https://www.oecd-ilibrary.org/environment/nature-based-solutions-for-adapting-to-water-related-climate-risks_2257873d-en

¹² Ibid.

perspective that includes an assessment of the whole ecosystem as well as positive and negative knock-on effects of a potential adaptation measure. The new Strategy should further make links with the recently adopted EU Biodiversity Strategy for 2030 and the restoration commitments therein as well as with the need to properly integrate adaptation in the implementation of EU environmental legislation such as the Water Framework Directive, Floods Directive or the Nature Directives.

In addition, the new Adaptation Strategy should also take the need for adaptation measures to achieve conservation objectives into account. Climate change is one of the main drivers of biodiversity loss,¹³ thus in addition to mitigation, additional efforts to protect crucial ecosystems from the effects of the climate crisis are needed. This will not only be hugely beneficial for the protection of biodiversity and with it a vast range of ecosystem services we depend upon but will also in itself contribute significantly to climate mitigation and adaptation. Furthermore, ecosystems and their interaction must also be considered when planning any adaptation measure to prevent negative impacts of grey adaptation measures on ecosystems with potentially significant knock-on effects.

Lastly, ecosystem-based adaptation or NbS must also be enabled and promoted through other legislation and policy instruments such as the Common Agricultural Policy or the new nature restoration legislation. Mainstreaming of adaptation and synergistic approaches will be crucial to address the multiple environmental crises that are already, and will be even more in the future, multiplied through the effects of global warming.

4. Integrate and mainstream adaptation

As the climate crisis does not exist in a vacuum and will have significant effects across all sectors, with many sectors being primary drivers of the crisis, adaptation must be mainstreamed and integrated into all policy areas and sectors. The Adaptation Strategy should ensure policy coherence by improving the integration of climate adaptation in interlinked policy areas such as agriculture, infrastructure, transport, fisheries, energy, water and marine and terrestrial biodiversity. This should be reflected in planning, funding and monitoring instruments as well as across governance structures.

All planning processes should include climate vulnerability assessments and adaptation opportunities, particularly opportunities for NbS that consider whole ecosystems. Especially for new infrastructure developments, climate-stability, adaptation potential and alternatives with multiple benefits (e.g. green infrastructure) must be analysed prior to the start of the project and monitored throughout. Further, funding should be contingent on adaptation considerations being taken into account and should provide additional incentives for NbS.

¹³ Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), Eduardo S Brondizio and others (eds) 'Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science- Policy Platform on Biodiversity and Ecosystem Services' (IPBES Secretariat 2019).

Spatial planning is a very useful tool for increasing resilience and preventing negative impacts of climate change. For instance, the obligation to apply a “*Green Area Factor (GAF)*” as proposed in the iWater project provides an opportunity to improve a city’s urban planning practices.¹⁴

5. Enable adaptation through funding and governance structures

Significant funding gaps remain for climate adaptation alongside the continuation of subsidies that are contradictory to tackling biodiversity loss, climate mitigation and climate adaptation. Additional funding is required from national, EU and private sources for the implementation of ambitious adaptation targets. The polluter-pays principle should play a central role, making those contributing most to the climate crisis also pay most of the cost for adaptation measures.

Subsidies, like the Common Agricultural Policy, must be fundamentally reformed to enable and require the much-needed transition to more ecological and climate-friendly farming practices as well as to adapt to changing climates.

Along with legally binding adaptation targets and standards, governance structures that support and enable collaboration, exchange, knowledge-sharing and the consultation and involvement of civil society and stakeholders throughout the process of drafting and implementing national adaptation strategies, plans and measures should be set up. Monitoring requirements should be integrated into new legislation to keep track of the implementation of adaptation plans and should include regular progress updates. In line with the need to mainstream adaptation across all sectors, engagement on adaptation should happen in all related fora.

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¹⁴ Cf. <http://www.integratedstormwater.eu/content/green-area-factor-and-other-tools>.