

Memorandum of understanding

Nature based climate action

I. Statement of Purpose

- A.** In presenting worldwide challenges and risks to economic, social and environmental sustainability, climate change also underlines the fundamental interdependence between them. To tackle the impacts of climate change that stem from global emissions of greenhouse gases therefore requires strategies to both mitigate and adapt in a way that addresses environmental as well as economic and social aspects. Healthy and resilient ecosystems play a vital role in achieving a global carbon balance and climate stabilisation but face many risks to their effective functioning as highlighted by declining biological diversity, desertification and deforestation. Actions such as reforestation, together with the maintenance of existing carbon stores, are an important part of the mitigation action needed to complement the implementation of technological solutions and innovation. Similarly, careful management of ecosystems can play a crucial role in adaptation by reducing vulnerability - both to extreme climatic events and natural disasters – and ensure the continued provision of key services – such as water, food, timber and clean air – on which human livelihoods and well-being depend. To successfully tackle the challenge of climate change, a key component is therefore ecosystem based or nature based action which can simultaneously deliver multiple benefits and contribute to the wider achievement of the UN Sustainable Development Goals.
- B.** Governments at all levels, in acting to reduce emissions and climate risks, recognise, as highlighted by UNEP¹, the World Bank², IUCN and others, the:
- fundamental role that healthy ecosystems play in climate stabilisation;
 - role of biodiversity in driving the functioning and resilience of ecosystems;
 - wider benefits of sustainable ecosystem and nature based management to the provision of the services that healthy ecosystems provide, which support both climate regulation and human well-being;
 - interdependence between tackling climate change, sustainable natural resource management and biodiversity;
 - ability of people to adapt to climate change is inextricably linked not only to their access to basic human rights, but also to the health of the ecosystems on which they depend for their livelihoods and wellbeing; and,
 - damage to biodiversity and ecosystems disproportionately impacts on the poor and vulnerable in society.
- C.** In thereby ensuring that ecosystem based action and efforts to sustain and restore ecosystem functions are an integral part of climate change mitigation and adaptation strategies, Governments must act to:
- increase the resilience of ecosystems;
 - safeguard existing carbon sinks;

¹ UNEP Copenhagen Discussion Series, 2009, UNEP Ecosystem Approach papers to support COP 15

² World Bank - Ecosystem-based approaches to mitigation and adaptation report
http://siteresources.worldbank.org/ENVIRONMENT/Resources/ESW_EcosystemBasedApp.pdf

- promote the sustainable management of natural resources; and,
 - implement nature based solutions that the improved management of ecosystems can provide as a cost effective and complementary action to technological solutions to mitigation and adaptation.
- D.** The signatories to this MOU (hereinafter referred to as “the Parties”) acknowledge and affirm support for international activities and declarations to respond to the integrated challenges of climate change and biodiversity loss (including the Rio Declaration on Environment and Development (1992) the UN Framework Convention on Climate Change (1992), the Convention on Biological Diversity (1992), the UN Convention to Combat Desertification (1992), New York Declaration on Forests (2014) and the UN Sustainable Development Goals (2015)). Against this platform of international agreements, there is however a significant opportunity to strengthen delivery through the role of subnational governments. Given their responsibilities for areas such as land use planning, agriculture and forestry, state and regional governments have the ability to integrate and work with partners at the city and local government level in order to accelerate and upscale action. Through innovative policies, legislation and delivery programmes, state and regional governments are already demonstrating leadership, and have provided models that can inform global action.
- E.** By working together and building on agreements since the *Gauteng Declaration* 2002, in which state and regional governments came together at the World Summit on Sustainable Development in Johannesburg, subnational governments can accelerate and support the global response to the challenges of climate change and biodiversity loss. In doing so, they can also provide an important source of global innovation and delivery capability for the post 2015 agenda and provide a model for integrated implementation within and international cooperation between nations.

II. Building resilience through nature based action and collaboration

- A.** Within the overarching commitment to the reduction in greenhouse gas emissions³ and action on adaptation set out in the *Subnational Global Climate Leadership Memorandum of Understanding* the Parties agree the need for general commitments to:
- promote investments in enhancing ecosystem resilience as part of the response to the need for mitigation and adaptation;
 - look to natural or “green” infrastructure solutions to reduce climate risk and provide wider ecosystem services whilst safeguarding biological diversity and ecosystem health;
 - the use of tools and assessments that promote the understanding of the wider value of biodiversity and healthy ecosystems in addressing climate change and providing wider multiple benefits;
 - the development of tools to measure the benefits of integrated approaches to climate change (including ecosystem services, safeguarding biological diversity, carbon sequestration, and wider co-benefits that support increased resilience);

³ trajectory of 80–95% below 1990 levels by 2050 and/or achieving a per capita annual emission goal of less than 2 metric tons by 2050

- the need for enhanced technical and scientific cooperation and measurement in relation to implementation; and,
 - foster closer links between ecosystem management, climate-change adaptation and sustainable development.
- B.** Recognizing that each party has unique challenges and opportunities, this Memorandum of Understanding does not prescribe a specific approach. Rather, in taking nature based action, Parties intend to undertake their own unique set of actions and plans set out in Appendix A.
- C.** The Parties agree that for actions related to this MOU, coordination and cooperation in relation to specific areas of action will be beneficial and will strengthen the efforts of participating states in support of international action. In doing so, the Parties aim to work together on solutions that build the resilience of ecosystems to provide both near-term and long-term environmental, economic and social benefits by:
- sharing ideas and best practice;
 - working collaboratively to build international momentum;
 - raising awareness and working to ensure the value of ecosystem services and biodiversity becomes more visible in society; and,
 - collaborating where ecosystems cross regional boundaries, as appropriate.

The following is a non-exhaustive list of issues of interest for cooperation and co-ordination among the Parties, which the Parties may expand on from time to time:

- 1. Natural carbon stocks and sinks:** The Parties will share information and experience on measures to safeguard existing carbon stocks and mitigate emissions through maintaining and enhancing carbon sinks and sequestration processes; recognising the important role of forests, soils and oceans in contributing to the carbon cycle.
- 2. Forests:** The Parties will cooperate in order to accelerate progress on reforestation, afforestation and the safeguarding of forests, recognising the importance of the forest sector in reducing emissions and the connection to the New York Declaration on Forests.
- 3. Sustainable Land Management:** The Parties will share information and approaches to reverse land degradation through the restoration of degraded soils and adoption of soil conservation practices; and in doing so, providing multiple benefits through for example enhanced crop yields, the enhancement of biodiversity, food and water security; and supporting implementation of the Sustainable Development Goals.
- 4. Oceans:** The Parties will collaborate to accelerate progress towards achieving healthy marine ecosystems, recognising the importance of oceans in providing carbon sequestration, their role in providing a range of benefits for human well-being and prosperity including food production, employment creation, temperature moderation, nutrient cycling, habitats and biodiversity, tourism, and as a renewable energy source.

5. **Ecosystem based adaptation:** Parties will share information and approaches to build resilience into ecosystems to enhance their capacity to provide adaptation solutions to climate change, and to promote the integration of ecosystem based adaptation measures and nature based solutions into climate change strategies and related plans. Opportunities include nature based solutions for enhanced flood alleviation and improved water quality through actions such as the restoration of watersheds, wetlands, woodlands, riverbanks and floodplains; coastal protection that allow natural processes to combat sea level rise and storm risk; and in building the resilience of urban communities to the effects of climate change through the provision of green infrastructure.

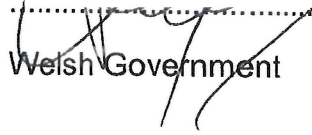
III. Means of Implementation

- This Memorandum is designed to complement the *Subnational Global Climate Leadership Memorandum of Understanding* and support the delivery of the relevant commitments within it. As such, consistent with that MOU:
- It is acknowledged that the Parties each have their own strategies to implement and achieve their goals and targets. While some strategies will be unique to particular Parties, others can be shared and/or modified by other Parties.
- Parties will collaborate and coordinate to advance respective climate actions at the annual Conference of Parties and other international climate events.
- Parties will share and promote effective financing mechanisms domestically and internationally to the extent feasible.
- Parties will share technology to the extent feasible, such as through open source information.
- Parties will help build capacity for action and technology adaptation through technology transfer and expertise to the extent feasible.


This MOU is neither a contract or a treaty.

Signatories

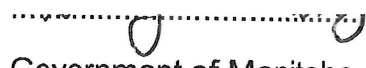
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Welsh Government

Original signed by


Le gouvernement du Québec

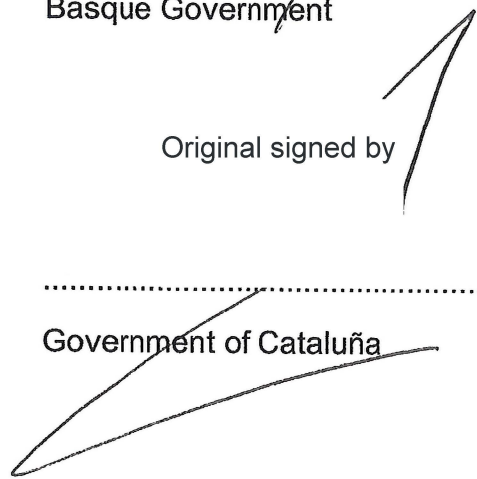
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