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T7 Task Force Climate and Environment

POLICY BRIEF

NATURE-BASED SOLUTIONS FOR CLIMATE CHANGE

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Abstract

The world is facing an unprecedented series of clashing crises and threats, from democratic decline to health to digital disruption. Climate change exacerbates all of these threats and creates new ones. It also does not stop threatening human survival when other crises rear their heads. In the face of the current critical security challenge in Ukraine, it is imperative that strong climate governance does not become sidelined again, as it did in 2020 during the height of the global COVID-19 pandemic. At the G7's Elmau Summit, the G7 needs to prioritize nature-based solutions for climate change, which can provide up to 37% of climate mitigation benefits and many other ones.[1] It needs to raise its ambition in protecting and restoring forests and peatlands, enhancing green infrastructure in cities, ensuring climate justice by empowering Indigenous Peoples and local communities, avoiding endorsing carbon capture technology and geoengineering, and creating a G7 nature-climate working group to help implement these proposals.

Challenge

The world is facing an unprecedented series of clashing crises and threats, from democratic decline to health to digital disruption. Climate change exacerbates all these threats and creates new ones. It also does not stop threatening human survival when other crises rear their heads. In the face of the current critical security challenge in Ukraine, it is imperative that the G7 does not sideline strong climate governance, as it did in 2020 during the height of the global COVID-19 pandemic.

Among the many challenges the 2022 Intergovernmental Panel on Climate Change (IPCC) report outlines, are two notable contrasts. In one instance, it says with high confidence that the degradation and destruction of forests and nature increases vulnerability and reduces everyone's capacity to adapt to climate change.[2] In the other instance, it says, also with high confidence, that technologies like carbon capture and storage and geoengineering, can compound climate-related risks, especially if implemented at large scales.[3]

The Achilles heel of technical solutions for climate change is that they typically focus on a single technical fix, and ignore equity-related and other social and environmental side-effects and trade-offs. Nature, on the other hand, has billions of years of experience working within cooperative systems, whose efficient functioning was and is a pre-requisite for human life to exist. The major challenge for the G7 is to stop undervaluing experienced natural technologies for the allure of human-made ones in their infant stages at best. We need to act more like nature and less like robots.

Proposals

At Elmau the G7 should commit to:

1. **Leave old growth forests alone**. It takes decades to centuries for trees to grow and be able to provide the carbon sequestration and other ecosystem services, such as water and air quality, at the scale that benefits humans. It is safest not to cut them down in the first place.

2. **Grow 1 trillion trees** to restore lost forests. G7 members should strive to do this before 2030. This needs to be done responsibly, in ways that avoid greenwashing and mismanagement.

3. **Preserve peatlands**. Like forests, once gone, it is nearly impossible to restore the complex ecosystems of peatlands, and the biodiversity they support, within our or the next generations' lifetime.

4. **Enhance green urban infrastructure**. Adding more nature in cities and reducing heat-trapping materials like concrete reduces disaster risk and raises the quality of life by creating clean air and isolation-reducing civic spaces.

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5. **Respect Indigenous Peoples' inherent land rights**. Sovereign Indigenous nations have been the keepers of the land for millennia, and do a better job than state governments at protecting and managing the forests and the biodiversity within them.[4]

6. **Avoid endorsing unproven technologies**, such as carbon, capture, storage and utilization, and geoengineering.

7. **Create a G7 "nature for climate" working group**. Its task is to catalyze implementation with the G7's nature-climate commitments that it makes at the G7 Elmau Summit.

8. **Empower local communities and subnational governments**. Climate change is a global problem felt locally and there is a need to localize the Paris Agreement. At all levels of government, the G7 needs to remove financial, institutional and technical barriers to NbS implementation.

Implementation

If the G7 starts implementing these proposals this year, then by 2050, according to the Project Drawdown study, it can make a significant climate impact, as follows:[5]

1. Forest protection can reduce CO2e by ~5-8 gigatons. Restoring tropical and temperate forests together can reduce CO2e by ~73-112 gigatons.

2. Peatland preservation can reduce CO2e by ~26-41 gigatons.

3. Planting trees on degraded land can reduce CO2e by ~19-27 gigatons.

4. In cities, switching concrete for alternative materials can reduce CO2e by ~7-16 gigatons, and building green and smart buildings and walkable cities by ~26-54 gigatons.

5. Indigenous Peoples' forest stewardship can reduce CO2e by ~8-12 gigatons.

On the climate, what the G7 does not do can be just as important as what it does do.

6. De-prioritizing carbon, capture, storage and utilization technology and geoengineering avoids creating new problems, that existing and proven solutions, i.e. old growth forests for carbon storage, do not create.[6]

Lastly:

7. The creation of a G7 climate-related official level body could increase members compliance with their relevant Elmau Summit commitments by 33%, according to the G7 Research Group.[7] It will be important that this nature-climate working group identify and remove barriers to NbS implementation, for federal governments, sub-federal governments, Indigenous governments, and local communities.

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8. Empowering local communities and subnational governments is needed to ensure the long-term success of nature-based solutions to climate change.[8]

At Elmau the G7 should identify these proposals as public commitments in its in its final declaration.

The G7 countries have the experience, expertise and wealth to make and implement these proposals, to have a significant impact. These proposals already have foundational buy in — the G7 leaders have already committed to protect forests and nature, at their 2021 Cornwall Summit, and to plant 1 trillion trees through a commitment at the G20's 2021 Rome Summit. They thus need to raise their ambition, as the above proposals recommend.

Further, G7 members have within their borders much of the world's nature. They have 17.82% of the world's forest area in their care.[9] Canada ranks first in the G7 with 8.55% and the United States second with 7.63%. For peatlands, Canada ranks second in the world (after Russia) with 27%.[10] Regionally, North America also ranks second (after Asia) with 32%. Within the G7, Canada and the US, both led by relatively climate-committed leaders, even if still committed to fossil fuels, are well-positioned to champion nature-based solutions for climate change at the G7 Elmau Summit.

Throughout 2020 to 2021, all G7 countries experienced devastating floods, heatwaves, wildfires, drought, or other extreme weather events. All of this happened as pandemic-related deaths rose and authoritarianism grew. The G7 needs to act fast against its own status-quo systems of technological fantasies, desire for infinite growth and fossil fuel dependence. It needs to act now to protect that which cannot be replaced overnight — or ever — nature.

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Endnotes

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[10] Peat and Peatlands. (n.d.). *Peatland Distribution — In the World.* Peat and Peatlands. https://peatmoss.com/peatland-distribution-in-the-world/.

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