

Accelerating global climate action by 2030

Assessment and proposals to strengthen multilateral initiatives of G20 member states in four policy fields – *energy transition, synthetic e-fuels, sustainable food systems and forest protection*

The analysis and recommendations presented here are part of the research project “Accelerating global climate action by 2030” (FKZ 3719 41 109 0). The project is financed by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, supervised by the German Environment Agency and carried out by the Ecologic Institute, Oeko-Institut and Climate Analytics. The proposals do not necessarily reflect the view of the German Environment Agency.

1 Background

Staying within the limit of the Paris Agreement of 1.5 °C global warming requires closing the global 2030 ambition and action gap between emissions levels consistent with the Paris Agreement and emissions levels projected with current targets and policies.

Bi- and multilateral cooperation and agreements can be effective means to promote and accelerate this process. Not only do they facilitate international knowledge transfer about existing and effective mechanisms, but they also drive the development of new strategies and solutions and can help addressing the uneven distribution of emission sources, climate change impacts and mitigation costs.

Member states of the G20 have a crucial role to play in realizing increased climate policy ambitions, given their strong economic and political influence as well as their high share in global greenhouse gas emissions.

This factsheet provides an overview of recommendations for multilateral initiatives that could help accelerate global climate action in four policy fields. The proposals provide inputs for scientific policy advice and climate diplomacy, for example among the G20 countries. For further information on the publications underlying this summary, please see section 3.

2 Initiatives

The transformation of the energy system and emission reductions in the land use sector are crucial to close the global ambition and action gap. To this end, recommendations for increasing

Accelerating global climate action by 2030

Energy transition



Synthetic e-fuels



Sustainable food systems



Forest protection



multilateral cooperation in the four policy fields *energy transition*, *synthetic e-fuels*, *sustainable food systems* and *forest protection* are presented in the following:

2.1 Policy field: Energy transition



- ▶ **Global initiative for a Green Recovery:** The stimulus and recovery packages that countries have adopted in response to the COVID-19 pandemic need to be aligned with the goals of the energy transition. This proposed initiative would foster exchange on recovery efforts across different countries, and possibly also provide coordination on some aspects.
- ▶ **Supply-side initiatives:** Virtually all existing initiatives aim to reduce the consumption of fossil fuels, or increase the supply of non-fossil fuels. This initiative would provide for engagement and exchange on strategies to reduce the supply of fossil fuels and to manage their consequences, including finance, just transition and re-aligning fossil value chains.
- ▶ **Government-level initiative for 100% renewables:** Similar to the existing club of private companies that have committed to a fully renewable electricity supply, this initiative would bring together states and sub-national entities that commit to such targets, as a knowledge forum for the challenges of transitioning to a fully renewable energy supply.
- ▶ **Dedicated institution for Energy Efficiency:** Compared to the promotion of renewables, energy efficiency and energy conservation continue to receive less political attention. Important international initiatives in this field have discontinued or await an uncertain fate. This could be resolved through a renewed and reinforced initiative, possibly as an institution dedicated solely to promoting energy efficiency – an international energy efficiency agency.
- ▶ **Alliance targeting the non-usual suspects:** The existing initiatives that are active in the field tend to convene the same set of “usual suspects” of ambitious and like-minded countries. This initiative would specifically target the countries that are less well represented in existing initiatives, by offering a framing and focus that is more commensurate with their political priorities and national circumstances.

Recommendations

Based on the assessment, three initiatives in particular hold promise and should be pursued with high priority: First, a Global Initiative for Green Recovery would represent a unique opportunity with potentially high impact, yet would need to be enacted soon. Second, the formation of a club of countries aiming for a fully renewable energy supply could send a strong signal as a group that has accepted the challenge of transforming their energy systems. And third, a dedicated institution focusing on energy efficiency could help to fill the current void in the multilateral landscape, raise the political profile of energy efficiency and provide for the needed continuity in addressing it.

2.2 Policy field: Synthetic e-fuels



- ▶ **Global supply-demand-partnership (GSDP):** As future demand for e-fuels cannot be met within Europe and production may be cheaper elsewhere, this initiative would establish a partnership with the view to facilitate the development of global supply chains for e-fuels. The main aim of a Global supply-demand-partnership would be to internationally coordinate the development of regulation and market structures, which allows the involved countries to make use of their comparative advantage. The initiatives could include an e-fuel generation potential atlas, sustainability criteria and a system of guarantee of origin.
- ▶ **Sustainable e-Kerosene Alliance (SeKA):** The aim of this initiative is to establish a continuously increasing global e-fuel mandate. As new technologies are increasingly deployed, knowledge about them is gathered, and technological learning increases. This can be achieved through a combination and staged introduction of policies that create increasing demand for e-fuels. Such policies could include pilot projects, public procurement, a blending mandate or drop-in quota and subsidies which would make e-kerosene compatible with fossil kerosene. To ensure efficient use of these subsidies, they could be auctioned through so-called Carbon Contracts for Difference, which avoid free-riding by potential suppliers.
- ▶ **Sustainable e-fuel Alliance for Maritime Shipping (SeAMS):** To promote the uptake of synthetic e-fuels in international shipping a Sustainable e-fuel Alliance for Maritime Shipping could be initiated. Its focus would be to spur and accelerate the identification of the dominant fuel-propulsion-system combination(s) with the view to coordinate the timely development of the required global fuel supply infrastructure. The alliance could also establish a greenhouse gas reduction certificate system with continuously increasing reduction requirements.
- ▶ **Hard-to-Abate Sector Partnership (H2ASP):** This initiative could leverage the efforts of existing initiatives in hard-to-abate sectors such as steel, cement and chemicals industries that focus on technology development through learning networks, as well as exchange between governments and industry. It would bring on board some other actors such as civil society and trade unions and aim at more targeted and specific commitments and action plans in relation to emission reductions targets or investments shifts.

Recommendations

The Global supply-demand-partnership should be pursued with high priority as a new initiative under the G20 and the other three options should be integrated into the GSDP. Both, the Sustainable e-Kerosene Alliance and the Sustainable e-fuels Alliance for Maritime Shipping could spur and accelerate existing discussions on the increased uptake of synthetic e-fuels in aviation and maritime transport under the International Civil Aviation Organisation and International Maritime Organisation, respectively. The Hard-to-Abate Sector Partnership could build on and increase the momentum of existing initiatives with the view to enhance the uptake of synthetic e-fuels and/or hydrogen in industrial sectors such as steel, cement and certain chemicals, particularly in developing countries.

2.3 Policy field: Sustainable food systems



- ▶ **“Biting back better”**: The setting up of an international institution including a secretariat that assists in building appropriate national frameworks or national strategies with a food system approach. It organizes exchange among countries and is assisted by a scientific advisory body akin to the Intergovernmental Panel on Climate Change.
- ▶ **“ClimEat-Change”**: An initiative to strengthen a food system approach in international climate policy and to make international climate policy a driver for food system transformation. To do this it works through existing processes of the United Nations Framework Convention on Climate Change (UNFCCC), such as the Nationally Determined Contributions (NDCs) of countries, the NDC Partnership, the Koronivia Joint Work on agriculture and could use the UNFCCC Conference of the Parties 26 in Glasgow and the “Glasgow Food and Climate Declaration” that was launched in 2020.
- ▶ **“Nutrition Guidelines for Future”**: A multilateral collaboration and exchange mechanism on how to implement and locally adapt the Planetary Health Diet Requirements into National Dietary Guidelines.
- ▶ **“Ensure 12.3”**: An initiative to set up an international food loss and waste accreditation scheme that helps to measure and manage food loss and waste all along the value chain and allows policymakers to make better-informed decisions.

Recommendations

By shifting diets and reducing food loss and waste, the global demand for food and the related greenhouse gas emissions can drop significantly. To address these issues, a coherent policy framework for sustainable food systems is needed at all levels (local, national, international). All initiatives can be set up in combination or in parts. For an effective implementation of the initiatives a critical mass of pioneering countries that showcase the benefits of a food system approach is needed. Europe could play a leading role here, considering the EU “Farm to Fork Strategy” adopted in 2020, which provides an ambitious strategic framework. In addition, there are already some frontrunner countries in Europe that work on integrated strategies for sustainable food systems. The implementation of initiatives also depends on the process in which they will be brought forward and the mechanisms that are available within these political processes. In this regard, 2021 provides multiple windows of opportunity for international action and multilateral collaboration, e. g. the UN Food Systems Summit.

2.4 Policy field: Forest protection



- ▶ **Increasing stakeholder participation and ownership:** Inclusive participation, advanced technical skills of stakeholders' staff members and easy access to information are essential for building ownership of initiatives at local, provincial and national level. Areas where stakeholder engagement and access to information could be improved through international cooperation are: mobilization and engagement of specific groups of stakeholders, capacity building, land titles, environmental crime, multi-agency coordination and multi-donor activities.
- ▶ **A facility for transparent monitoring:** This initiative would establish a facility for providing a consistent global reference data set of land use emissions for reconciling national data and supporting the development of transparent national monitoring systems. This would improve data quality, availability, sharing and learning.
- ▶ **Increasing private sector engagement:** Convening and convincing private sector actors to work toward complementary goals seem promising, but there are no centralized institutions that would bring together all parties in a given supply chain. This initiative, therefore, pilots jurisdictional approaches for results-based financing aligned with certification and supply chain management for more private sector engagement and supports longer-term commitments.
- ▶ **Increasing consistency of national targets:** There is a need to support and encourage countries to improve representation of the land use sector, in particular forests, in their NDCs. This initiative aims to increase coherence between forest protection and landscape restoration pledges and improve representation of land use in NDCs.
- ▶ **Green COVID-19 Recovery:** Recovery policies should build on already achieved agreements and contracts and thus create investment conditions for long-term forest protection, sustainable forest management and forest restoration. "Building back better" should thus also be a principle for the land use sector. Especially "no-regret" options that deliver on multiple objectives with high probability and show very limited trade-offs, should be promoted. This initiative could be combined with the proposal for a Global initiative for a Green Recovery in the policy field energy transition.

Recommendations

All of the options presented above are closely linked: to make transformational change happen interdependencies between the proposals need to be considered and they should be implemented in an integrated manner. Rather than introducing entirely new approaches, innovative elements of existing initiatives should be scaled up. Therefore, it is necessary to extend their scope of application, support the integration into national policies and involve further parties and stakeholders.

3 Further reading

For further details and reading please see the background papers on technical mitigation options and criteria and methodology, and the policy papers on the four policy fields.

[Fuentes et al. \(2020\)](#): Background Paper: Key mitigation options to close the global 2030 ambition and action gap. On behalf of the German Environment Agency. Climate Change 27/2020. Dessau-Roßlau.

[Böttcher and Cames \(2021\)](#): Background Paper: Key mitigation options to close the global 2030 ambition and action gap. On behalf of the German Environment Agency. Climate Change 12/2021. Dessau-Roßlau.

[Görlach and Fuentes \(2021\)](#): Options for multilateral initiatives to close the global 2030 climate ambition and action gap - Policy field energy transition. Climate Change 01/2021. Dessau-Roßlau.

[Cames et al. \(2021\)](#): Options for multilateral initiatives to close the global 2030 climate ambition and action gap - Policy field synthetic e-fuels. Climate Change 02/2021. Dessau-Roßlau.

[Wunder and Wiegmann \(2021\)](#): Options for multilateral initiatives to close the global 2030 climate ambition and action gap - Policy field sustainable food systems. Climate Change 13/2021. Dessau-Roßlau.

[Böttcher et al. \(2021\)](#): Options for multilateral initiatives to close the global 2030 climate ambition and action gap - Policy field forest protection. Climate Change 14/2021. Dessau-Roßlau.

Imprint

Publisher

German Environment Agency
Wörlitzer Platz 1
06844 Dessau-Roßlau
Tel: +49 340-2103-0
Fax: +49 340-2103-2285
buergerservice@uba.de
Internet: www.umweltbundesamt.de
[!\[\]\(d5d7044e5caf6907399af2dced8d6ff8_img.jpg\)/umweltbundesamt.de](#)
[!\[\]\(0718ece108875f096be32ef1aea65831_img.jpg\)/umweltbundesamt](#)

Contact

German Environment Agency
Section V 1.1 Climate Protection
Hannah Auerochs

Completion: May/2021