

EIG Submission ahead of the second Global Dialogue of the Mitigation Work Programme

The Environmental Integrity Group (EIG)¹ welcomes the theme of this year's Mitigation Work Programme an accelerating just energy transition.

The EIG also looks forward to the second global dialogue, which will address the theme of **accelerating just energy transition in transport systems**:

- a) Deploying and shifting to collective and non-motorized modes of transport (rail, urban public transit, cycling, etc.);
- b) Energy and resource efficiency in the transport sector (design improvements, circular economy and material changes, vehicle vintage, carpooling, etc.);
- c) Electrification of vehicles (infrastructure, batteries and minerals);
- d) Shifting to low- or zero-carbon fuels (hydrogen, biofuels, biogas, compressed natural gas).

EIG inputs towards the Second Global Dialogue

Global Dialogues that contribute to the political momentum

The EIG foresees four key global objectives to be adopted at COP28, spearheaded by the COP28 Incoming Presidency:

- 1) A commitment to expand renewables capacity;
- 2) A commitment to strengthen energy efficiency;
- 3) A commitment to decarbonize towards low-emission energy systems;
- 4) A commitment to considering social and environmental aspects as well as the protection of human rights in a just transition, especially for energy transition.

The EIG expects these broad collective commitments to be part of the collective outcome at COP28, namely as part of the Global Stocktake outcome. The MWP has a key role to place in showcasing how the global energy transition can take place in a way that benefits all Parties.

Therefore, the EIG supports framing the second Global Dialogue around specific actions and measures that Parties may want to take to achieve those four broad collective commitments, including how Parties can give themselves the means to do so. The investment-focused events that take place in conjunction with the Global Dialogues may also prove to be quite instrumental in this regard. In this way, the MWP can contribute to a successful COP28 under the Incoming Presidency.

Continuity and follow-up in our discussions

The EIG foresees the two Global Dialogues as building on each other. At the second Global Dialogue Parties will have had time to reflect on the summary report of the first Global Dialogue, and may wish to share their lessons learnt of the first exchange, proposing ideas for further work, and discussing follow-up activities, in order to give a real value to the discussions under the Global Dialogue. Therefore, **before moving to the topic of transport systems, Parties would benefit from coming back to the topics of the first Global Dialogue during a half-day session.**

Global Dialogues rooted in practical solutions

Parties would benefit from seeing case studies on successful energy transitions in transport systems: what are good examples of countries who successfully moved away from fossil fuels towards renewables in transport systems? The second Global Dialogue could dedicate a special session to this issue, looking at what works to ensure a just transition, including, what kind of investments and funding schemes can function practically in this regard. It can also showcase successful examples of Parties who have successfully managed a modal shift from cars to public transport or bikes. It also can showcase functioning solutions to increase energy and resource efficiency in transport systems. And, it should incorporate examples of how energy transition projects have supported communities to have a just transition, including those practices that have affected society, in particular the most vulnerable, with the aim of improving the solutions.

¹ Comprised of Georgia, Liechtenstein, Monaco, Mexico, the Republic of Korea, and Switzerland

Global Dialogues rooted in science

According to the IPCC, the transport sector is a major focus for mitigation efforts due to its large and growing greenhouse gas (GHG) emissions. The sector's emissions, especially in aviation and shipping, are increasing faster than those of other sectors. Without mitigation actions, transport emissions could grow by up to 65% by 2050. In 2019, direct greenhouse gas (GHG) emissions from the transport sector were 8.7 GtCO₂-eq (up from 5.0 GtCO₂-eq in 1990) and accounted for 23% of global energy-related CO₂ emissions. 70% of direct transport emissions came from road vehicles, while 1%, 11%, and 12% came from rail, shipping, and aviation, respectively. Emissions from shipping and aviation continue to grow rapidly.

However, successful deployment of mitigation strategies could reduce sectoral emissions by 68%, aligning with the goal of limiting temperature change to 1.5°C above preindustrial levels. The IPCC emphasizes three crucial components for decarbonizing the transport sector (IPCC AR6 WGIII Chapter10, p. 63):

- **1. Demand and efficiency strategies:** These strategies focus on reducing travel activity, increasing the use of lower-carbon modes of transportation, and improving energy efficiency in the transport sector. By reducing travel demand and improving efficiency, it is possible to reduce greenhouse gas emissions from transport. Changes in urban form, behaviour programmes, the circular economy, the shared economy, and digitalisation trends can support systemic changes that lead to reductions in demand for transport services or expand the use of more efficient transport modes. Cities can reduce their transport-related fuel consumption by around 25% through combinations of more compact land use and the provision of less car-dependent transport infrastructure. Appropriate infrastructure, including protected pedestrian and bike pathways, can also support much greater localised active travel. Transport demand management incentives are expected to be necessary to support these systemic changes (IPCC AR6 WGIII Chapter10).
- **2. Electromobility:** Electromobility refers to the use of electric vehicles (EVs) in the transport sector. The IPCC highlights the importance of electrifying passenger transport and light-duty freight as a key strategy for deep CO₂ mitigation. However, electrifying heavy-duty road transport, aviation, and shipping is more challenging and requires further research and development. (IPCC AR6 WGIII Chapter04)
- **3. Alternative fuels for shipping and aviation:** The IPCC recognizes the need for alternative fuels to decarbonize the shipping and aviation sectors. In the short-to-medium term, efficiency improvements are essential for decarbonizing trucks, aviation, and shipping. In the long term, fuel switching to advanced biofuels is suggested to achieve decarbonization in the freight sector. (IPCC AR6 WGIII Chapter10)

These three components, demand and efficiency strategies, electromobility, and alternative fuels, are crucial for achieving the decarbonization goals of the transport sector. (IPCC AR6 WG III Chapter10)

Furthermore, the IPCC highlights three illustrative mitigation pathways (IMPs) for the transport sector. These pathways focus on deep renewable energy penetration and electrification, low demand, and alignment with Sustainable Development Goals and climate policies. The variants of these scenarios limit warming to 1.5°C with no or limited overshoot (IPCC AR6 WGIII Chapter10). Overall, the IPCC emphasizes the need for a transformative decarbonization of the global transport system, which includes technological changes and a paradigm shift towards prioritizing high-accessibility transport solutions that minimize the amount of mobility required and favor transit and active transport modes (IPCC AR6 WGIII Chapter10).

In addition to these recommendations by science, the EIG would like to share the following observations:

- Accelerating the energy transition in the transport sector is an urgent priority, as well as a challenge for governments, since higher income and living standards correlate with increased mobility by road, rail and air. Curbing emissions therefore touches on social issues such as equality, lifestyle, and self-image of an affluent society. Therefore, successful energy transitions in the transport sector will take into account socio-economic, as well as environmental factors.
- **Market based instruments** such as carbon tax or mobility pricing offer interesting ways to set incentives. A clever use of revenues (eg. to offset negative impacts on lower income groups) can increase political acceptance.

- **Engage with the private sector and the academia:** Car producers can be called to develop alternative drive systems away from the combustion technology. Given their limited potential biofuels and synthetic fuels are to be reserved for sectors where no alternatives are available such as aviation or high temperature industrial production.
- **It's important to adopt a comprehensive view of environmental aspects when considering innovations in mobility:** The potential of electric vehicles for climate policies depends on energy consumption over the life cycle (particularly in battery production in case of battery vehicles), the carbon emissions implied in electricity input, and expected technological progress. Life cycle considerations and recycling of batteries will be key in the future. The potential of alternative engines is promising. However, it is key to not only focus on its impact on carbon emissions but to embrace a comprehensive view of environmental and sustainable aspects. Emission reduction at the cost of, for instance, biodiversity or soil contamination should be avoided.
- **It's also important to highlight that limiting policy action to replacing fossil fuels by electricity or alternative fuels (biogenic or synthetic) in transport will not be enough to achieve climate objectives and limit environmental pollution.** There are strong growth prospects in both road and rail transport and particularly in air traffic (expected growth in km higher than in population). The expansion in transport infrastructure implies increasing space and energy consumption. It also bears an environmental cost. Given the limited potential for biofuels or synthetic fuels, their production should use only excess renewable energies. Their allocation should go to sectors where no alternative available, such as aviation.

Recommendations for the conduct of upcoming Global Dialogues and Investment-Focused Events

The EIG welcomes the first Global Dialogue under the Mitigation Work Programme that took place in conjunction with the UNFCCC SBs, in June 2023. In particular, the EIG welcomes this year's focus on energy transition, noting the relevance of this topic both for global, regional, and domestic mitigation efforts.

The EIG looks forward to continuing its engagement as part of the second Global Dialogue, later in autumn 2023, and would like to share the following views and ideas on how to improve the format and usefulness of the second Global Dialogue:

- In general, provide a clearer sense of direction: what is it that we want to achieve with the Global Dialogues? Where there is clearly interest for further exchanges, what happens after the Global Dialogues? Many participants were left with a sense of “what now”. The MWP Co-Chairs can help build such a vision.
- Share the program and agenda at least a month or three weeks in advance of the MWP.
- Publish the issue note in advance of each Global Dialogue, so that Parties can start engaging with the substance in advance.
- Shift focus from what to how. The guiding questions for the second Global Dialogue should be framed as ‘how’ questions rather than ‘what’ questions. For each of the major goals and challenges identified at the first Global Dialogue, a solution-oriented “how” question should be formulated and made available as part of an annotated agenda well in advance of the start of the second Global Dialogue.
- The scene-setting presenters should directly address the how questions with the depth and a total perspective that the presenters are better positioned to provide than Parties who are limited in perspective by national circumstances.
- Improve transparency and engagement in the process, by providing Parties with a possibility to react to the issue note after it is published, through informal consultations
- Expand the number of people who can participate in the Global Dialogues, especially through virtual participation. The current limit to two participants in person, and one virtual, seems insufficient.
- In particular, expand the possibility for virtual participation. It would be particularly helpful to clarify whether virtual participation also allows for active participation.
- Expand outreach towards non-party stakeholders, in particular representatives of the private sector, academia and financing institutions. Participation of non-party stakeholders is essential for the investment-focused events. The High-Level Champions can play a meaningful role in bolstering engagement.
- Ensure that the investment focused events integrate both the persons with the capacity to finance the transition, and the ones who have projects to fund. Additionally, these discussions will need project brokers, meaning people that can link up the two.
- Look at creative options to foster engagement during, but also between the Global Dialogues: many participants support the idea of webinars, where parties can exchange with experts and practitioners. The MWP Co-Chairs have a key opportunity to build and evolve the profile of the MWP.

Finally, the EIG welcomes the holding of MWP regional dialogues in conjunction with the Regional Climate Weeks. While some Parties expressed concerns about representation at these meetings, the EIG is of the view that ensuring virtual participation and providing an informal summary of the exchanges should help alleviate those concerns.