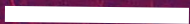




T20
INDONESIA
2022 THINK

T20 TASK FORCE NOTES

**GOVERNING CLIMATE TARGET,
ENERGY TRANSITION AND
ENVIRONMENTAL PROTECTION**



Background

Climate change has become a critical issue for a couple of decades. The fact that the phenomenon has already happened and has imposed many complex challenges needs a global effort to address it. Tackling the cause of climate change is imperative. At the same time, many nations around the world are in needs for development, to improve the welfare of the people. Therefore, the pursuit of sustainable livelihood is now evolving between countries across the globe. Many agendas and commitments are taken to address the potential risks of losing future living space. Accelerating actions across mitigation, adaptation, and finance, acknowledging the key relevance of achieving global net zero greenhouse gas emissions by around mid-century was among the conclusions reached in 2021 G20 Rome Leaders' Declaration.

With the fact that the impacts of climate change are becoming increasingly real and affecting the development, climate actions are needed to address it, including through energy transition as well as nature-based solution. The 2022 G20 Indonesia Presidency has placed energy transition as one of its priority issues. The Sustainable Energy Transition pillar aims at addressing energy security and the urgent need to accelerate the transition towards cleaner energy sources with new approaches and dimensions, ensuring a cleaner and brighter future for the global community. However, this energy transition requires a very large investment. G20 member countries share a big responsibility in ensuring energy sustainability can run optimally and providing a platform for investment.

This task force focuses on governing climate targets, energy transition and environmental protection with series of discussion and policy brief covering issue dealing with various elements:

- related to climate issues, including on how to address climate challenges through mitigation and resilience by governing marine and coastal ecosystem as well as on terrestrial nature-based solution, on promoting circular carbon economy, on de-risking investment to support energy transition and climate actions, and also to address the virtuous nexus of climate, water, and energy. Other area related to climate are on how to address issues related to climate commitments and target in the form of nationally determined contribution (NDC) and long-term strategy (LTS) as well as on how to empower cities to achieve net zero emission and also on how to improve climate finance institutions;
- related to energy transition, including and on how to address regional cooperation to support renewable energy development as a means to reach net zero emission and also on how innovative financing can play a significant role in energy transition;

- related to environmental protection, especially on improving global health by reducing transboundary pollution, on circular economy and on managing marine pollution.

Policy Recommendations

Addressing Climate Change

1. **Establishing appropriate circular carbon economy approach.** G20 to institute fiscal and policy incentives to reflect and enhance the value of avoided carbon in maritime transport using Circular Carbon Economy (CCE) frameworks and support to technological innovations in petroleum-fuel upgrading at refineries. To achieve net zero emission, electrification in the transport sector will play significant role, this will lead to increasing demand of battery usage around the globe. G20 should establish a battery initiative to set circular economy targets for batteries (addressing also waste battery treatment/battery recycling and battery material recovery/hazardous waste) and develop a respective framework. G20 needs to spur innovation on the circular low carbon economy on a larger scale focusing on renewable energy, CCUS, hydrogen, and ammonia
2. **Accelerating global actions on methane mitigation.** G20 should clarify the rationale for selecting policy toolkits and improve implementation of methane mitigation. G20 should reinforce the co-benefits of methane mitigation and demonstrate higher ambition through more climate change-oriented methane policies. In addition, the improvement of techno-economic information quality, including inventory and mitigation potential should also be strengthened. G20 could develop market mechanisms or innovative business models for economically unviable mitigation actions and technologies such as ventilation air methane (VAM), livestock enteric fermentation and rice cultivation. Strengthen supporting infrastructures, such as transmission facilities and carbon markets. G20 has to focus on “super emitters” and small but high-emitting sites to help better root-cause identification and improve abatement. On the governance side, G20 can tackle institutional barriers including natural resource ownership, regional inequality, and stakeholder interests, incorporate local contexts and encourage policy experiments and enhance global methane collaborations on policy learning, measuring, reporting and verification (MRV) framework.
3. **Strengthening carbon pricing mechanism, particularly in developing countries.** Pricing carbon and greenhouse gas emissions, following the classic “polluter pays” principle, is considered as most efficient and market-friendly way to reach the emission reduction targets. G20 could assist in establishing carbon pricing framework and developing monitoring indicators, notably for developing countries.
4. **Empowering cities to accelerate climate actions.** To fully unlock the capacity of cities to reach net-zero by 2050, cities require more governance, technical and financial support from

national governments and international organizations. Legal reforms and pioneering legislation are emerging as a further area where multilevel government cooperation is needed. Cities require enabling and empowering multilevel partnerships. The proposed G20 agenda on urban climate governance could, over time, establish a problem-solving partnership by opening space for the G20 to work with cities on advancing shared climate goals and to match the needs of cities: climate finance. The G20 could, thereby, become a motor for accelerating the local implementation of globally agreed climate targets.

5. **Supporting the Long-Term Strategies (LTS).** The G20 has the political weight, the institutional capacity and opportunity to address challenges in developing LTS and implementing it. G20 can offer support in various ways: increase the visibility of the strategies, direct financial or technical support for strategy development as well as implementation and facilitating dialogue and cooperation. Well-made LTSs could support policy planning within and across countries and inform cooperation on specific topics, as pathways and investment needs are laid out for the specific sectors. G20 Leaders' Declaration could include such support to be followed-up by creation of a dedicated working group or side event to exchange experiences and support each other in developing or revising the strategies. G20 could also discuss related initiatives (close to long-term climate policy) in working groups, such as Sustainable Finance Working Group (SFWG) on ways to mobilize sustainable finance. In their function as a forum on financial cooperation, the G20 could make financing available, not only for the development of the LTS, but their subsequent implementation through a corresponding declaration.
6. **Establishing climate investment treaty for carbon-critical countries.** Most of the carbon-critical countries are members of the G20 and the rest are hosts to investments coming from G20 countries. As the global economic leadership, G20 is a suitable forum to pursue a modification of an investment-protection mechanism to help attract the much-needed additional investments for energy transition in a holistic manner across the supply chain, including nature-based solutions as complementary measures to mitigate GHG emissions. The proposed treaty in a sense "leapfrogs" investment treaty reform, by focusing upon investment which recognizably contributes to climate-change mitigation. It provides an incentive for investment on terms which cannot be objected to by those advocating measures against carbon-intensive investment; it offers a carrot without detracting from or getting caught up in the case for a stick. This proposal could serve as one of the instruments to de-risk investments and build an enabling environment.
7. **Mainstreaming climate change into the water-energy-food nexus.** G20 could take of actions to strengthen the integration between the WEF nexus challenges and climate change issues, such as including the knowledge dimension as a fundamental tool in providing the necessary scientific support for promoting rational and inclusive dialogue and decision-making processes; building capacity for policy-makers and designing mechanisms to ensure proper

coordination, complementarities and harmonization among different sectoral strategies, policies and plans to turn the “nexus thinking” into “nexus doing”. This includes decouple WEF from fossil fuels, recognize the role of forests in WEF security through their ecosystem services, and develop sustainable WEF intra-regional and inter-regional cooperation/integration models based on the principle of comparative advantages.

8. **Supporting National Development Banks (NDBs) and National Climate Funds (NCFs) to promote country-driven climate actions.** G20 donor countries should redirect climate finance to help build the credibility of NDBs and NCFs by providing them with robust capacity-building programs. More investment should also flow into building their capacity to measure the multiplier effects of climate finance (i.e., social benefits, private finance leveraged, etc.). With that, NDBs and NCFs should be able to increase their ambition and ability to mobilize climate finance for the right recipients in the country.

Accelerating Energy Transition

1. **Accelerate coal phasedown while ensuring stable supply to meet increasing electricity demand and minimizing the socioeconomic impacts.** Coal phasedown leading to coal phaseout is one of the big agenda that need to be imposed to ensure net zero emission in mid of this century. On the other hand, it also incurs inevitable economic and financial implications. G20 should develop analysis for a detailed plant-by-plant phasedown plan and develop policy strategies to incentivize the deployment of renewable energy and facilitate private finance. Identifying infrastructure constraints and needs for development are also profound. G20 could initiate the development of integrated strategies to best allocate resources among coal plants retirement, renewable energy deployment, energy efficiency improvement, and infrastructure development and management. Lastly, regional analysis to identify regions-specific opportunities and challenges (i.e. local resources, infrastructure, etc.) will be an advantage in executing the agenda.
2. **Aiming an equitable just energy transition by addressing broader socioeconomic impacts along the coal-based electricity supply chain.** People and communities are central in the development. The transition from dirty to clean energy cannot be rolled out by neglecting social justice. Therefore, G20 countries should identify specific communities, groups, and local economies that are impacted the most under accelerated coal phasedown and develop an integrated policy and finance package to address the broader social and economic impacts to ensure a just transition. Ultimately, it is also beneficial to develop analysis to better understand and maximize the broader benefits of the transition, i.e. air quality and public health, green jobs, diversity development opportunities, etc.
3. **Develop a common platform as an investment hub to escalate capital inflow for renewable energy financing in Southeast Asia.** The investment hub can be in form of investment bank establishment (e.g. ASEAN Renewable Energy Investment Bank). G20 member countries,

represented by Indonesia, could deliver assistance in formulating the framework. The initiative can be implemented in cooperation with ASEAN Energy Centre (ACE) as a knowledge partner that has the experience and capacity as a catalyst in providing knowledge and guidance for energy policies among ASEAN nations for the past decades. The initiative could also be extended into regional and international multilateral cooperation or treaty establishment. Against the background of each country's full decision-making power regarding their national energy mixes, regional cooperation may help bridge gaps in the region which has different endowment and starting point in RE development.

4. **Establishing a Forum for Best Practices on Energy Transition.** G20, through the Energy Transition Working Group (ETWG), could establish a dedicated facility for an ongoing exchange of experiences with energy transition. Such exchange could include those related to policy and regulatory design, finance, industry standard, infrastructure and economic diversification, as well as orderly and just energy transition. This is important to address the urgent need for global energy transition.
5. **Reorient Electricity Markets to Encourage Competition and Affordability in Absorbing Low Carbon Transformative Solutions for Emerging and Developing Countries.** Building an intergovernmental alliance that includes nations with liberalized electricity markets and a high penetration of renewables, especially from G20 members as well as nations in ASEAN and the Gulf Cooperation Council (GCC) that are aiming at increasing their renewable energy share in power generation. The alliance should be a platform for capacity building in progressing towards the liberalization of electricity markets, developing strategies to stimulate penetration of renewables, reducing market distortions, monitoring, and evaluating energy market functioning.
6. **Policy support to enable a sustainable energy transition in marine fuels.** G20 to introduce fiscal incentives that reflect and enhance the value of avoided carbon in maritime transport using a Circular Carbon Economy (CCE) framework, which factoring in, incentivizing, and monetizing the avoided carbon as a tradeable commodity for markets where carbon is accounted for and taxed. Decarbonizing marine fuels will require a substantial investment in port infrastructure, featuring new shore facilities, fuel loading and unloading systems, transport system, and bunkering facilities for alternative fuels. National regulation and investment would be effective in ensuring such investments, possibly supplemented by global green funds. Therefore, policy incentives needed to give operational and regulatory priority to operations using green marine fuels as well as policy support of technological innovations.

Fostering Environmental Protection

- 1. Embracing the One Health approach to combat transboundary pollution issue. The G20 should identify the source of the pollution problem and prevent the pollution.** G20 should commit to concrete goals, such as the reduction of fine particulate matter concentration, mitigate exposure to lead and mercury and promote sustainable agricultural practices to provide safe, toxics-free foods for all which are explicitly indicated in in the G20 2022 Communique and in the G20 Health Ministers Commitments. Moreover, it is paramount that countries should implement project that prevent and reduce pollution at the source for a significant impact of pollution abatement. G20 countries could also initiate a new international treaty which overarch relevant international treaties and initiatives with common but differentiated responsibilities and establish robust international reporting mechanisms.
- 2. Reinforce restrictive Blue Carbon Ecosystem (BCE) and coastal ecosystems governance. This also include management on marine plastic pollution which has become a global issue.** G20 should urge a strong national leadership and political will to encourage the protection of coastal ecosystems; followed by rejuvenation of legal and policy frameworks to conserve and restore marine biodiversity. Few strategic actions that can be taken include promoting effective community engagement, increasing cooperation and collaboration, delivering on SDGs and Paris agreement targets and funding science in blue carbon ecosystem.
- 3. Imposing nature-based solutions for combating climate change.** Climate change and its unusually frequent and intense extreme weather events, exacerbates all existing problems, makes it much more difficult to deal with the increasing threats to global security, and creates new threats to life. Nature-based solutions for climate change offer the lowest-cost solutions with wide ranging benefits, from disaster risk resilience and health to food security and jobs. At its Bali Summit, G20 leaders should: 1) Foster forests on land and in the sea; 2) Protect peatlands; 3) Restore agricultural mono-forests; 4) Protect Indigenous nations' land rights and intellectual property rights. 5) Green all infrastructure; 6) Work with local communities to sustainably use forests; and 7) Close the \$US20 billion climate finance gap. As nature-based solutions tackles most countries' top priority to strengthen global health systems, of which forests and nature should be seen as a keystone pillar.
- 4. Establishing circular material transition targets.** The G20 should establish respective targets and KPIs that drive the circular design of products and establish supportive financing conditions. The forum should foster actions and collaboration to make trade and trade policy supportive of circular supply chains and circular business models. G20 should create a platform for experience sharing on respective policy designs, implementation and monitoring.
- 5. Establishing international treaty to address marine plastic pollution.** G20 countries could initiate a new international treaty that covers overarching relevant international treaties and initiatives with common but differentiated responsibilities, national reporting mechanisms to

compile global efforts and data and to evaluate progress to harmonize leakage estimations around the world, scientific panels to harmonize monitoring methods and conduct periodic reviews of plastic impacts on ecosystems and human health and other relevant topic, capacity building for developing countries, and mandatory requirements, including a ban on primary microplastics (e.g. microbeads of plastics), except biodegradable plastics.

About T20 Indonesia Task Force 3

The T20 Task Force 3 (TF3) on Governing Climate Target, Energy Transition and Environmental Protection aims to formulate pertinent recommendations to the G20 leaders on the issue of global climate change, energy and environmental sustainability. To produce such recommendations, TF3 engages in various activities, including public discussion and forums, policy briefs development, and expert pooling as TF co-chairs. TF3 consists of some policy areas that are tailored to the priority agendas of G20 Indonesia. Those policy areas include climate resilience, energy transition and environmental preservation. TF3 along with the T20 Indonesia to deliver robust, independent, and inclusive research-based policy platform for experts and impactful policy options for the G20 policy-making process.

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