

ALLIANCE OF SMALL ISLAND STATES

AOSIS SUBMISSION

Submission by Samoa on behalf of the Alliance of Small Island States (AOSIS) on suggested topics in line with the scope of the mitigation work programme¹ to be discussed under the dialogues

Mandate: Matters relating to the work programme for urgently scaling up mitigation ambition and implementation referred to in paragraph 27 of decision 1/CMA.3, para 12.

1 February 2023

Suggested Topic:

While recognizing that limiting warming to 1.5°C requires rapid and deep and, in most cases, immediate greenhouse gas (GHG) emission reductions in all sectors, it is important for the Mitigation Work Programme to prioritize the sectors that have the highest mitigation potential, especially in the longer term, and those where cooperative approaches could add value. In this context, the IPCC AR6 WG3 Report has identified energy as the sector with the greatest abatement potential within the 2020 – 2023 period.

The topic of the global dialogues this year should therefore be **transforming energy systems and enhancing energy resilience**, with the objective of identifying and implementing immediate actions, including mobilization of funding and resources that will deliver longer-term transition objectives aligned with 1.5°C. This includes electricity and heat, cooling and refrigeration, energy efficiency, as well as oil and gas fugitive emissions, and a strengthened focus on renewable energy and sustainable mobility technologies with the highest cost benefit ratios.

Given the vast scope of the topic, there is a need for the two mandated dialogues to be supplemented by additional dialogues that facilitate hybrid participation. The UNFCCC Secretariat should also organize, under the

^{1 1} Further decides that the scope of the work programme should be based on broad thematic areas relevant to urgently scaling up mitigation ambition and implementation in this critical decade and include all sectors covered in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories of the Intergovernmental Panel on Climate Change, thematic areas in the contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, and relevant enabling conditions, technologies, just transitions and cross-cutting issues

guidance of the co-chairs of the work programme and with the support of the high-level champions on the margins of the dialogues, investment-focused events as called for in paragraph 10 of the CMA decisions on the work programme.

Reducing GHG emissions across the full energy sector requires major transitions, including **decarbonizing energy systems**, the **deployment of renewable energy sources** and **energy efficiency and conservation**. The *enabling conditions, technologies* and *just transition* aspects should be considered in each of these contexts.

TOPIC: Transforming Energy Systems

Focus Areas	Actions for Implementation
1. Progress in decarbonizing energy systems	 Enabling Conditions
2. Accelerating Deployment of Renewables	 Technologies
3. Enhancing energy efficiency measures	 Just Transition
and adoption of low-carbon technologies in	Crosscutting
the energy sector	

Focus Areas:

1. Progress in decarbonizing energy systems:

- a. Getting on a 1.5°C pathway with no overshoot requires global greenhouse gas emissions to peak before 2025 and be reduced by 43% by 2030 compared to 2019 levels.
- b. This requires a rapid decline in global fossil fuel use and phasing out unabated fossil fuels. This includes accountability to the call in the Glasgow Climate Pact to phase down unabated coal power and phase out of inefficient fossil fuel subsidies, as well as the global pledge to cut methane emissions by 30% from 2020 levels by 2030.
 - ⇒ To achieve a net zero emissions global economy and follow a pathway consistent with the 1.5°C limit, critical transformations need to be kicked off and, in some cases, fully realized this decade.
 - ⇒ Fugitive methane emissions from fossil fuel production need to be rapidly reduced, with no new oil and gas production coming into operation, and existing production being rapidly decreased.

In this context, it is critical for the dialogues to assess:

• How far have current NDCs and Long-Term Strategies been realigned with these goals to deliver on 1.5°C?

- Where are the needle-moving opportunities for acceleration of decarbonization?
- Progress in adoption of fossil fuel free (F3) policies and plans.
- How future NDCs will address accountability from the fossil fuel industry in achieving their long-term and short-term targets.
- How can Parties and the private sector best ensure this decline happens?

2. Accelerating Deployment of Renewables:

- a. Wind and Solar have been identified in the IPCC AR6 WG3 Report as the renewable sources that have the highest potential to contribute to net emissions reduction, with minimum cost or even with cost savings
- b. Locally produced and utilized biomass energy also has high potential in remote and isolated communities such as SIDS.

While there is vast potential for expanding energy generation through these sources in many Small Island Developing States (SIDS), lack of finance, technical support, technological capacity and appropriate space continues to inhibit deployment. Further to that, many still face challenges with acquisition of scalable and qualitative technology. In this regard, the dialogues could address:

- What are the feasible avenues for urgent energy transition in SIDS, based on accessible technology and national circumstances?
- How can the international community assist SIDS overcome their financial, technical and capacity constraints?
- Where are the best practices and successful experiences that can be replicated?
- What are the financial models that are appropriate and accessible for SIDS?
- Are existing partnerships, instruments and tools adequately delivering on renewable energy targets in SIDS? How can they be enhanced to better address the specific needs of SIDS?
- 3. Enhancing energy efficiency and adoption of technologies that facilitate decarbonizing the energy sector:

Under this focus area, the dialogues can address the following topics:

a. Advancing electricity systems that emit no net CO2 through deployment of solar energy, wind energy, smart grids, lithium-ion batteries and other energy storage.

- b. Advancing demand side measures and energy efficiency improvements to facilitate the transition to zero carbon electricity generation while benefiting energy security and access.
- c. Widespread electrification of the energy and transport systems including end uses;
- d. Develop low-carbon alternatives such as green hydrogen and ammonia, and for applications less amenable to electrification;
- e. Strengthening regional energy connectivity and integration, including remote off-grid systems

The dialogues can be utilized to showcase examples of replicable good practices in these area, and avenues of access to means of implementation

Actions for Implementation:

Enabling Conditions

Enhancing access to finance:

There are high landed costs of needed technology for SIDS to implement energy transition plans, and limited fiscal capacity. Development aid for SIDS in this area has mainly been focused in energy policy and administrative management, while more funding is required for the empowerment of the private sector to invest more on renewable energy generation. This can be addressed through:

• Financial packages tailored to national contexts including technological and capacity needs, with a view to accelerating long-term transition of energy sector in SIDS.

Lack of access to climate financing for SIDS' private sector and NGOs when compared to their counterparts in more developed countries and therefore these stakeholders cannot adequately compete in the energy market. Therefore, there is need for the following:

- Enhancing efforts to mobilize domestic capital with international support and leveraging.
- Creating enabling environments that can mobilize private funding and to manage the distributional costs and benefits of future energy investments.

These issues related to financing and investments should also be considered in the investment-focused events on the margins of the relevant dialogues.

<u>Capacity Building</u>

There are enormous challenges with generating and retaining capacity for renewable energy generation, and transitioning away from fossil fuels. There are a limited number of qualified staff that work in this sector, and an overreliance on consultants and volunteers, which have high turnover and no capacity retention. Thus, there is need for:

- Strengthening human capacity and retention through targeted detailed short and long-term training and capacity building.
- Institutional strengthening to increase and diversify the capacity of institutions.
- Strengthening networking and coordination in the research arena at local and regional levels.
- Improved data generation and analysis.
- Developing critical infrastructure and communications.
- Increasing capacity to execute socio-economic assessments of impacts of response measures.
- Strengthening capacities for creating strategies and mechanisms to access, store and disseminate relevant information on climate change.

Technologies

Halting the exploration and development of new fossil fuel production and the installation of fossil fuel infrastructure that 'locks-in' GHG emissions

We must ensure that phasing out of existing fossil fuel production and infrastructure is in line with the trajectories for the decline in the global use of coal, oil and gas that would limit warming to 1.5°C. Thus, there is need for:

- Measures to curb the exploration and development of fossil fuels in line with 1.5 pathways.
- Measures to stop the expansion or installation of fossil fuel infrastructure especially for supply.

The dumping of old and soon to be obsolete technologies by larger countries onto SIDS that are moving ahead with their transition targets in NDCs results in an increased number of stranded assets and obsolete technology that are deemed maladaptive or high emission technologies (. It locks SIDS into a pathway that widens the inequity with developed countries and emerging economies. In this regard, there is need for:

- Measures to prevent such dumping
- Measures to facilitate easier access to low-carbon technologies

Removing barriers in advancing digital technologies for energy transition

Particularly in renewable energy deployment, energy management and enhancing efficiency, there is need for actions that:

- Enhance infrastructure development and human capacity.
- Overcome barriers in facilitating development and transfer of technology to SIDS.
- Address limited data and information on deployment of renewables and efficiency gains.
- Overcome barriers to optimizing technologies such as maintenance costs, deterioration and upgrading, which are seldom considered or accepted in project proposals.
- Address the lack of access to renewable energy options due to geography.
- Remove barriers to development policies and regulations that accelerate deployment of renewable energy and energy efficiency systems and technologies.
- Address the lack of established international frameworks, standards, and best practices to facilitate: (i) cross-border electricity trading, including those pertaining to laying, repair and maintenance of overland and subsea electricity cables and (ii) trading of clean energy fuels, including green hydrogen and its carriers

Just transitions

Ensuring that the rapid deployment of low-carbon technologies and systemic shifts towards decarbonization are inclusive and integrated with development priorities at all levels of governance is key for the success of the work program. There is therefore the need for:

- Understanding and addressing the potential economic, social and environmental implications that may arise from transition, particularly in the short-term.
- Exploring global and regional synergies in education systems and how they will support a just workforce transitions.
- Utilizing effective carbon markets as a short term-to-medium-term solution for accelerating just transition.

Cross cutting Issues

There are numerous synergies between sustainable development and energy efficiency, renewable energy and moving to low-emission long term development strategies. With the deadlines for the achievement of Sustainable Development Goals (SDGs) set at 2030, there is an opportunity to harness the synergies between the MWP and the decade of action for implementing the SDGs. In this regard, there is need for:

- Identification of specific linkages between SDG7 and SDG 13.
- Identifying synergies with other interlinked goals and targets for maximizing co-benefits.
- Identifying potential tradeoffs.

In addition to this, there are areas which could benefit from further guidance in the dialogues, including:

- The role of institutional co-ordination at all levels with stakeholders who play a role in ramping up mitigation actions
- The cost of energy transitions, including environmental, social and economic impacts, while noting the urgency to action remains priority.
- The role of global communication and outreach in all sectors involved in accelerating their mitigation actions, to increase visibility and ensure alignment with the 1.5°C target