ALLIANCE OF SMALL ISLAND STATES

AOSIS SUBMISSION

Submission on Opportunities, Best Practices, Actionable Solutions, Challenges and Barriers Relevant to the Eighth Global Dialogue under the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme

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I. Introduction

The Alliance of Small Island States (AOSIS) welcomes the opportunity to submit views on opportunities, best practices, actionable solutions, challenges and barriers relevant to the eighth Global Dialogue under the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme (MWP).

AOSIS recalls that the mandate of the MWP is to urgently scale up mitigation ambition and implementation in this critical decade in a manner that complements the Global Stocktake (GST). The first GST confirmed the significant gap between current mitigation efforts and pathways consistent with limiting global temperature increase to 1.5°C. Achieving the goals of the Paris Agreement therefore requires accelerated implementation of agreed mitigation actions, supported by strengthened means of implementation and international cooperation.

AOSIS notes that the eighth Global Dialogue will focus on: (i) experiences of best practices and actionable solutions in addressing challenges and barriers, including the enablers of ambition and implementation of mitigation action in industries; and (ii) cross-cutting issues, synergies, trade-offs and co-benefits associated with mitigation action, drawing on national and regional experiences.

For Small Island Developing States (SIDS), accelerating mitigation ambition and implementation is both a climate imperative and a development necessity. While SIDS contribute negligibly to global emissions, they continue to demonstrate leadership by adopting ambitious renewable energy targets including through scaled- up targets in their NDCs, developing investment-ready mitigation pipelines, and pursuing whole-of-economy energy transitions despite structural constraints, limited domestic markets, and high climate vulnerability. Their experiences provide practical lessons on how mitigation ambition can be translated into implementation when supported by enabling policies, appropriate technologies, regional cooperation, targeted finance, technology development and transfer, and capacity-building.

Energy access, sustainability, and security needs in SIDS are interlinked and deeply interwoven with development needs including with water and food security. SIDS continue to require support to

accelerate renewable energy deployment to support energy security and harden grid infrastructure to withstand increasing climate change impacts and intensified disaster events.

Further, AOSIS reiterates its views with a profound sense of urgency and increasing concern regarding the outputs of the MWP to date. In light of its mandate, the MWP has not yet delivered meaningful outcomes capable of narrowing the gap. There is an urgent need to pivot from repeatedly identifying barriers to dismantling them, and to deliver deep and rapid global emissions reductions, particularly from developed countries and other major emitting countries.

As the eighth Global Dialogue will be the final dialogue under the current MWP, it provides an important opportunity to advance practical solutions under the topics selected for discussion, while also consolidating lessons from the work programme that can inform consideration of any future iteration of the MWP.

Against this backdrop, the final dialogue should remain firmly focused on implementation and on translating the mitigation outcomes of the first GST into accelerated action in this critical decade, while recognising differing national circumstances and the particular implementation challenges faced by developing countries, including SIDS.

II. Area of Discussion 1: Experiences of Best Practices and Actionable Solutions in Addressing Challenges and Barriers, including the Enablers of Ambition and Implementation of Mitigation Action in Industries

Rapid decarbonisation of major emitting industrial sectors particularly in developed countries and other major emitters is necessary to close the global mitigation gap and keep the 1.5°C temperature limit within reach. The eighth Global Dialogue should therefore focus on practical approaches capable of accelerating emissions reductions from industries with significant mitigation potential, building on the discussions already undertaken under the MWP, including the seventh Global Dialogue.

The dialogue should explore technology pathways relevant to major industrial sectors, including proven mature technologies capable of delivering deep and rapid near-term emissions reductions as well as discussion of emerging solutions for harder-to-abate processes in order to understand their feasibility. Particular attention should be given to the conditions required to move viable technologies from demonstration to deployment and commercial scale, including appropriate policy, regulatory, financial and institutional frameworks.

Innovation ecosystems can play an important role in accelerating industrial mitigation. Discussions should consider how governments, industry, research institutions, financial institutions and other relevant actors can support technology development, demonstration, deployment and diffusion, and how international cooperation can accelerate access to and uptake of effective mitigation solutions.

Policy and investment signals must also be aligned with the transition towards low- and zero-emission industrial production. In this context, inefficient fossil fuel subsidies can reduce the cost of

fossil fuel use and weaken incentives for investment in alternative energy sources, energy efficiency and lower-emission production processes.

Opportunities and Best Practices from SIDS

Strong political commitment and long-term planning

A key lesson from SIDS is that ambitious mitigation implementation begins with clear political commitment supported by national planning frameworks. Thirty SIDS have submitted new NDCs with strengthened targets mainly in the energy sector. For example, 12 Pacific Island Countries have submitted NDC 3.0s with strengthened energy-sector actions, while eight countries have established targets to achieve 100 per cent renewable electricity generation. Samoa and Tonga have adopted targets of at least 70 per cent renewable electricity generation. In the Caribbean countries like the Dominican Republic demonstrate that even developing economies with growing industrial and urban sectors can raise climate ambition such as through the submission of its enhanced NDC 3.0 committing to a 28% national emissions reduction by 2030 and 32% by 2035 relative to the BAU scenario, utilizing domestic resources for unconditioned targets while bridging international climate finance for structural transformations in energy, transport, and waste management.

Under the CARICOM Sustainable Energy Roadmap and Strategy (C-SERMS), Caribbean SIDS have committed to collective renewable energy power targets, with individual member states like Barbados aiming for 100% renewable energy and carbon neutrality by 2030. Jamaica also updated its NDCs targeting significant reductions in energy-sector emissions and included other sectors such as forestry, industry and transport as key to decarbonization efforts going forward.

These targets are integrated into national energy strategies and NDCs, providing long-term policy certainty for investors and development partners. This demonstrates that even highly vulnerable and resource-constrained economies can establish ambitious pathways consistent with the goals of the Paris Agreement.

Renewable energy and storage technologies are proven solutions

SIDS have demonstrated that renewable energy technologies, particularly solar photovoltaic systems combined with battery energy storage systems (BESS), can provide reliable, affordable and scalable mitigation solutions. These technologies reduce dependence on imported fossil fuels, improve energy security, lower electricity costs and strengthen resilience to external shocks. They are particularly well suited to dispersed island geographies where conventional energy infrastructure is costly and vulnerable. The deployment of solar-plus-storage systems provides an example of how technologies can move from demonstration to implementation when supported by enabling policies and partnerships.

For example, Caribbean SIDS are demonstrating the diversification of island renewable energy solutions through base-load geothermal energy development in the Eastern Caribbean and innovative floating solar photovoltaic deployments on sea and inland reservoirs in the wider Caribbean, overcoming extreme land-scarcity constraints.

Another example is from Mauritius, which is developing a floating photovoltaic project of

approximately 17.5–20 MW, with an associated 12 MW of Battery storage, under government-to-government cooperation with India. This is an example of a proven solution from a SIDS.

Lesson for the MWP 1:

Floating solar is a transferable model for land-constrained islands; South–South partnerships can provide both the technical expertise and the concessional or grant-based support needed to move such projects from concept to bankability, without the commercial premiums often associated with such first-of-a-kind infrastructure.

Investment-ready project pipelines

A significant opportunity exists to accelerate implementation through existing project pipelines. Many SIDS have project pipelines which are ready for investment but remain underfunded. The Regional Pacific NDC Hub has identified 77 renewable energy and electrification projects with a combined estimated value exceeding US$1.58 billion. These projects cover renewable generation, battery storage, grid modernisation, energy efficiency, public infrastructure and transport electrification. In the Caribbean region, the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) Project Preparation Facility (PPF) and Integrated Resource and Resilience Plans (IRRPs) have established project pipelines spanning utility-scale renewables, energy efficiency retrofits, and microgrid development across CARICOM Member States.

This experience highlights an important lesson for the MWP: many developing countries already possess viable mitigation opportunities. The challenge is not a shortage of projects or ambition, but ensuring access to finance and implementation support, including through grant based project preparation and implementation resources.

Energy efficiency as a scalable mitigation measure

Energy efficiency measures continue to provide some of the most cost-effective mitigation opportunities in SIDS. For example, the Federated States of Micronesia's solar-powered air-conditioning retrofit programme demonstrated approximately 90 per cent reductions in electricity consumption, operating costs and emissions associated with cooling public buildings, while achieving a payback period of approximately two years. This experience demonstrates that small-scale, practical solutions can deliver immediate mitigation benefits while simultaneously reducing operating costs and enhancing public service delivery.

For example, Mauritius is participating in the global GEF/UNEP Net-Zero Nature-Positive Accelerator Integrated Programme, implemented nationally as “Accelerating the Transition to a Net-Zero Nature-Positive Economy in Mauritius” aimed at decarbonising the manufacturing sector while improving productivity and competitiveness, and integrating NBS solutions.

Lesson for the MWP 2:

Small manufacturing sectors in SIDS are rarely prioritised in global industrial decarbonisation discussions, yet they represent a meaningful share of national emissions and employment. Framing industrial mitigation as a competitiveness and nature-positive opportunity, supported by

dedicated international finance and institutional strengthening, offers a pathway for SIDS' industrial sectors to engage with the MWP's focus on enablers of ambition and implementation in industry.

Challenges and Barriers

Persistent financing gaps

The most significant challenge facing SIDS remains access to finance. The Pacific region is estimated to require approximately US$650 million annually to achieve renewable energy targets. However, renewable energy finance flows reached only around US$67 million in 2023, highlighting a substantial implementation gap. Many projects remain stalled at concept, feasibility or proposal stages due to insufficient support for project preparation, transaction costs and investment structuring.

Ageing infrastructure, grid stability, technology and capacity constraints

SIDS frequently face challenges associated with ageing electricity networks, limited grid capacity and the technical requirements associated with integrating high levels of renewable energy generation. The 6th Pacific Regional Energy and Transport Ministers Meeting identified grid readiness, system integration and project preparation as priority areas requiring additional support. Without adequate investment in enabling infrastructure, countries may struggle to fully realise their renewable energy ambitions. Small and dispersed markets also face higher implementation costs, limited technical expertise and difficulties attracting private-sector investment. These barriers can delay project implementation even where technologies are available and economically viable.

Relevance, accessibility and participation for SIDS

The relevance and accessibility of Global Dialogues also matter for SIDS. Some previous topics, including a strong focus on heavy-industry decarbonisation and large-scale solutions, have had limited applicability to economies dominated by sectors such as tourism, fisheries and imported fossil fuels. More attention should be given to mitigation solutions relevant to SIDS circumstances, including areas such as marine transport, cooling efficiency and appropriate ocean-based mitigation approaches. Cognizant that developed countries and other major emitting economies have very developed industrial sectors which have significant potential for decarbonization which is necessary to stay aligned with the 1.5°C limit.

Participation is also an equity issue. Constrained travel resources, small delegations and virtual sessions scheduled during middle-of-the-night hours for Pacific and Caribbean SIDS can materially limit effective engagement. The MWP should ensure adequate space for SIDS experiences and solutions while retaining focus on sectors with the greatest global mitigation potential.

Actionable Solutions in SIDS

AOSIS recommends that the MWP support the following actions in SIDS:

- Expand support for project preparation, feasibility studies and investment-readiness activities.

- Promote battery storage deployment and grid modernisation For example, in Jamaica, geothermal development, floating solar and regional project preparation facilities are identified as critical enabling technologies. Critical enabling elements also need to be in place for SIDS to make progress.
- Strengthen technical cooperation and peer-learning through existing regional platforms and institutions.
- Facilitate direct engagement between governments, project developers, multilateral development banks and private investors.
- Scale up concessional finance, guarantees and blended finance instruments tailored to SIDS circumstances.
- Strengthen regional implementation mechanisms, including support through existing regional entities such as the Regional Pacific NDC Hub the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE), the Caribbean Community Climate Change Centre (CCCCC)] and others.
- Address short-lived climate pollutants (SLCPs) and methane reduction: Practical regional experiences show that ambitious mitigation must target high-impact sectors beyond traditional heavy industry. For instance, implementing robust frameworks for methane abatement in agriculture (such as climate-smart livestock management) and solid waste valorization (transitioning from open dumpsites to circular economy systems and landfill gas capture) can achieve deep emissions reductions, potentially cutting methane by up to 42% by 2030 and 75% by 2050 under ambitious pathways. Furthermore, regulatory measures addressing HFCs and cooling efficiency in the refrigeration and air conditioning (RAC) sector represent immediate, scalable industrial mitigation opportunities for island and coastal economies.

Discussions could also usefully consider technology pathways and emerging solutions for reducing emissions from major industrial sectors; approaches for accelerating deployment of mature technologies while supporting innovation for harder-to-abate processes; the institutional, financial and governance frameworks required to move viable technologies from demonstration to commercial scale; policy and investment signals, including approaches to phasing out inefficient fossil fuel subsidies that do not address energy poverty or just transitions; energy and resource efficiency, circularity, materials standards and sustainable procurement; measurable mitigation outcomes, including emissions reductions and avoided carbon lock-in; and the international cooperation, finance, technology development and transfer and capacity-building required to enable implementation in developing countries.

While industrial structures and emissions profiles differ significantly among Parties, accelerated action in major emitting industrial sectors is essential to the collective effort to keep 1.5°C within reach. Discussions should therefore reflect where the greatest mitigation potential lies, while ensuring that approaches take account of national circumstances and that developing countries, particularly SIDS and LDCs have access to the means of implementation required to participate in the transition.

III. Area of Discussion 2: Experiences of other cross-cutting issues as mandated in decision 4/CMA.4, paragraph 4

AOSIS welcomes consideration of cross-cutting issues, including synergies, trade-offs and co-benefits associated with mitigation action. This area provides an important opportunity to consider how mitigation can be accelerated across sectors and systems while supporting sustainable development and poverty eradication and taking account of equity and differing national circumstances.

Greater coherence across energy, industry, transport, buildings, waste and other relevant systems is required in the context of a just transition and progressing energy transition governance to help maximise emissions reductions, improve efficiency and avoid infrastructure and technology lock-in.

The phase-out of inefficient fossil fuel subsidies is particularly relevant as a cross-cutting enabling condition. Such subsidies can influence investment and consumption decisions across sectors and weaken incentives for renewable energy, energy efficiency and other low- and zero-emission solutions. Reform should be undertaken in a manner that addresses energy poverty and just transition considerations and avoids disproportionate impacts on vulnerable households and communities.

Opportunities and Co-benefits

Energy Security, Economic Resilience and Sustainable Development

For SIDS, mitigation actions deliver benefits that extend well beyond emissions reductions. Renewable energy deployment reduces dependence on imported fossil fuels, strengthens energy security and reduces exposure to global fuel-price volatility. Transitioning from diesel-based generation to renewable energy systems improves macroeconomic resilience while supporting sustainable development objectives. Furthermore, renewable energy investments can improve access to affordable energy services, including for remote communities and outer islands. Such investments support economic development, health services, education outcomes and opportunities for local enterprises and producers.

Electrification as a Cross-cutting Opportunity

Several SIDS are advancing transport electrification alongside renewable energy deployment. Projects under development include electric vehicle transitions, electric ferries, shore-side power infrastructure and public transport electrification. Collectively, electrification initiatives account for a substantial share of the regional mitigation project pipeline. These initiatives demonstrate how mitigation strategies can generate synergies across energy, transport, infrastructure and development sectors. Electrification efforts must be supported to ensure practical sequencing of interventions, affordability, demand-side efficiency, and grid reliability.

In the Caribbean, where maritime transport and road transport account for a major share of national fossil fuel import bills and consumption, initiatives focusing on electric vehicle and e-bus fleets, green port infrastructure, and low-carbon inter-island maritime vessel retrofits showcase critical cross-cutting mitigation and economic co-benefits.

Regional Cooperation

Regional institutions have played an important role in supporting NDC implementation, project preparation, technical assistance and knowledge sharing. Institutions such as the Secretariat of the Pacific Regional Environment Programme (SPREP), Pacific Community (SPC), the Regional Pacific NDC Hub, Pacific Centre for Renewable Energy and Energy Efficiency PCREEE, the Pacific Islands Forum Secretariat (PIFS), the Caribbean Community Climate Change Centre (CCCCC) and the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) provide practical examples of how regional cooperation can strengthen national implementation efforts and improve efficiency for capacity-constrained states. Regional and subregional cooperation can also help overcome constraints associated with small markets and limited economies of scale through shared access to technical expertise, procurement frameworks, project preparation support, knowledge exchange and other cooperative approaches.

Trade-offs and Remaining Challenges

Although renewable energy technologies are increasingly cost competitive, many SIDS face significant upfront capital requirements. Limited fiscal space and high borrowing costs can delay investments despite strong long-term economic benefits.

Many international financing frameworks continue to assess projects based primarily on emissions-reduction volumes. This can disadvantage SIDS projects whose value extends beyond mitigation to include resilience, energy security and sustainable development benefits. Greater recognition of these broader benefits is required in climate finance and investment decision-making processes.

More broadly, the ability of SIDS to implement mitigation action can be constrained by capacity and expertise gaps, small markets, limited economies of scale, geographic remoteness, high costs of capital and dependence on imported fuels, technologies and goods. Mitigation approaches should recognise these circumstances and support nationally determined, locally appropriate and fit-for-purpose solutions.

Discussions could usefully consider opportunities to:

- align fiscal, energy, industrial and investment policies with 1.5°C-consistent pathways and the mitigation outcomes of the first GST;
- strengthen coordination between mitigation action across sectors and systems to maximise emissions reductions and avoid carbon lock-in;
- maximise co-benefits between mitigation and sustainable development, including energy security, health, employment and economic resilience;
- identify and manage trade-offs and distributional impacts associated with mitigation policies, taking account of equity and national circumstances;
- support meaningful participation of relevant stakeholders in the design and implementation of mitigation action;
- strengthen international and regional cooperation and knowledge-sharing; and

- strengthen access to finance, technology development and transfer and capacity-building for developing countries.
- strengthen institutional governance is a key enabler for cross-cutting coherence. Strengthening national frameworks such as the evolution of dedicated climate councils (e.g., the National Council for Climate Change and Carbon Market), the integration of climate variables into territorial planning, and the establishment of robust domestic transparency frameworks (such as Biennial Transparency Reports), allows SIDS and developing countries to track mitigation progress accurately. However, unlocking the full potential of cross-cutting co-benefits like air quality, green jobs, and macroeconomic resilience requires international financial architecture to adequately value adaptation-mitigation synergies and provide direct support for project preparation and technology transfer.

Actionable Solutions in SIDS

AOSIS recommends that Parties:

- Recognise energy security and access, resilience and sustainable development as critical co-benefits of mitigation action.
- Operationalise the special circumstances of SIDS within climate finance and investment frameworks including through dedicated project preparation support mechanisms, finance and risk guarantees for small markets, and dedicated financing windows.
- Increase support for renewable energy, energy efficiency and electrification projects that deliver multiple development benefits.
- Promote regional approaches to project preparation, procurement, technical assistance and capacity-building.
- Strengthen international cooperation to facilitate technology development and transfer, investment mobilisation and implementation support.
- Use the MWP and Investment-Focused Events to showcase investment-ready SIDS project pipelines and facilitate matchmaking between project proponents and financiers.

The experience of SIDS demonstrates that ambitious mitigation action is already underway and that practical, scalable and investment-ready solutions exist today. Across SIDS regions, countries have established ambitious renewable energy targets, developed substantial project pipelines and demonstrated the effectiveness of renewable energy, storage, energy efficiency and electrification measures. These are primarily in the energy sector as that is a key sector in many NDCs of SIDS. The principal barriers are not simply technological; they relate significantly to access to finance, project preparation support, infrastructure readiness and implementation capacity. The MWP should therefore focus on translating ambition into delivery by strengthening investment mobilisation, international cooperation and implementation support.

IV. Conclusion

As the final Global Dialogue under the current MWP, the eighth Global Dialogue provides an opportunity to consolidate lessons from implementation of the work programme and consider how the opportunities, solutions and barriers identified through the Global Dialogues can better contribute to accelerated mitigation action.

Experience to date suggests that the Global Dialogues have contributed most strongly to knowledge-sharing and strategic discussion, while there is limited evidence that they have translated into national implementation, informed NDCs or Long-Term Strategies, or delivered tangible mitigation outcomes. The final dialogue should therefore place particular emphasis on moving from the exchange of experiences towards implementation and on strengthening continuity between dialogue, investment and delivery.

As the final dialogue under the current MWP, GD8 should also provide an opportunity to capture lessons from the work programme and consider how its outcomes can more effectively translate into implementation. This should include strengthening the connection between Global Dialogues and Investment-Focused Events, improving coherence and complementarity with relevant UNFCCC workstreams and other mitigation initiatives while avoiding duplication and disproportionate burdens on capacity-constrained delegations, and identifying the elements of the current MWP that should be retained or strengthened in any future iteration.

Looking beyond the eighth Global Dialogue, AOSIS considers that any future iteration of the MWP should deliver on the mitigation outcomes of the first GST and remain focused on urgently scaling up mitigation ambition and implementation in this critical decade.

Any future iteration should strengthen the connection between dialogue and implementation, improve follow-up mechanisms after events, enhance accessibility and inclusiveness for SIDS, and support Parties in translating discussions into nationally determined action and implementation-ready mitigation pathways consistent with 1.5°C.

The experiences of SIDS demonstrate that ambitious mitigation action is already underway and that practical, scalable and investment-ready solutions exist. The principal barriers relate to access to finance, project preparation support, enabling infrastructure, technology and implementation capacity. For SIDS, the effectiveness of the MWP cannot be measured by the number of dialogues held or stakeholders convened, but by whether it contributes to tangible, real-world mitigation action and the preservation of lives, livelihoods and statehood. The MWP must therefore pivot decisively from dialogue to delivery by strengthening investment mobilisation, international cooperation and implementation support.

AOSIS remains committed to engaging constructively in the MWP and looks forward to continued collaboration to strengthen the Programme so that it can fulfil its mandate and support enhanced mitigation ambition and implementation, consistent with science, equity and the objectives of the Convention.