Implementation of the SAMOA Pathway and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States

1. What specific activities or programmes, if any, has your government, organisation or agency implemented or introduced, specifically targeting the vulnerabilities of SIDS? Please cite examples of solutions seeking vulnerability reduction.

SIDS are showing increasing ambition in the transformation of their energy systems, with some aiming for a complete transition to renewables in the immediate future. To support this transformation, and the goals enshrined in the Samoa Pathway, IRENA is providing knowledge, tools, services and a platform for cooperation —**the Lighthouses Initiative**—to facilitate the planning for, and implementation of renewable energy solutions.

The SIDS Lighthouses Initiative, launched in September 2014 during the UNSG Climate summit, has 36 Small Island Developing States (SIDS) as members ¹, as well as 19 development partners and other entities ². Through the Lighthouses Initiative, IRENA is carrying out resource assessments, grid integration studies, energy transition plans and capacity building activities within the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS), Caribbean and Pacific regions. This partnership was registered on the SIDS Platform and information about its activities and achievements is regularly updated (SIDS Action 7963).

Examples of solutions specifically targeting vulnerabilities of SIDS:

- Quickscans: An integral part of the SIDS Lighthouses Initiative, IRENA and SIDS developed the Quickscan, a simple but robust methodology to assess the readiness of SIDS to deploy renewables within the power sector. The Quickscan is completed by SIDS governments with assistance from IRENA or other Lighthouses partners. In this way, it increases local awareness regarding the need for a comprehensive approach to renewables deployment and highlights areas where support would be most effective. For example, by undertaking the Quickscan process, Palau and the Federated States of Micronesia (FSM) identified the need for comprehensive roadmaps to support the deployment of renewables. Palau and FSM are now working with IRENA to develop these roadmaps. Results of the Quickscan are shared with SIDS and Lighthouses

¹ Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cabo Verde, Cuba, Comoros, Cook Islands, Dominican Republic, Federated States of Micronesia, Fiji, Grenada, Guyana, Kiribati, Republic of Maldives, Republic of the Marshall Islands, Mauritius, Montserrat, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, St. Lucia, St. Vincent and the Grenadines, Samoa, Sao Tome and Principe, Seychelles, Solomon Islands, Tonga, Trinidad and Tobago, Turks and Caicos, Tuvalu, and Vanuatu.

² European Union, France, Germany, Italy, Japan, New Zealand, Norway, United Arab Emirates, United States of America, Indian Ocean Commission, IRENA, Association of the Overseas Countries and Territories of the European Union, UNDP, World Bank, ENEL, Clean Energy Solutions Center, Clinton Climate Initiative, Rocky Mountain Institute - Carbon War Room, and SE4ALL.

partners to increase awareness of the challenges faced by SIDS and to support the coordination of development efforts to target areas critical to a successful transition to renewables. A total of 39 Quickscans have been completed to date, helping to uncover areas where specific support is needed.

- Guidelines on grid-related issues: An important part of islands work relates to the integration of variable renewables into the grid. Building upon previous work on islands, IRENA has refined its methodology for the assessment of grid stability for isolated power systems and is completing three sets of technical guidelines on 1) variable renewable energy grid integration issues, 2) operational and investment planning, and 3) island specific issues.
- 3. To what extent has your Organisation, integrated the Samoa Pathway and or the SDGs into co-operation frameworks, programmes and activities, to ensure effective follow-up and implementation at regional and national level?

IRENA's 2016-17 Work Programme is, as a whole, aligned with SDG7 and the 2030 Agenda. One of the six established thematic areas of IRENA's Work Programme, titled "Islands: Lighthouses for Renewable Energy Deployment" is, in itself, fully aligned with the mandates emanating from the Samoa Pathway. As a result, activities under this thematic area are regularly reported to and followed up by IRENA governing bodies. Implementation is facilitated by IRENA's Secretariat with a system of focal points.

4. Indicate the extent to which the issues and concerns of SIDS are given due consideration in conferences and processes organized or supported by your organization.

See #3.

Considering the global leadership of SIDS on the climate and sustainable energy agenda, and the centrality of the Lighthouses Initiative in the context of IRENA's Work Programme, ministerial level meetings are organized on an annual basis during the IRENA Assembly, in addition to numerous expert level meetings throughout the year.

- 5. In relation to the implementation of the commitments and partnerships announced at the Samoa Conference: http://www.sids2014.org/partnerships/
 - (i) indicate actions undertaken to date and their outcome(s);
 - (ii) indicate what partnerships have been contemplated or have been initiated; and,

See #1.

A wide range of activities in all SIDS regions were undertaken within the framework of the Lighthouses Initiative during the period covered by the report. A few significant examples are:

Targeted advisory services, such as through roadmaps and grid studies, have been key for islands to integrate larger share of renewables into energy mix.

- Studies on renewable energy desalination opportunities for Kiribati and Cabo Verde have been completed.
- Roadmaps have been completed for Kiribati and Barbados.
- Following IRENA's recommendations, Samoa is implementing the necessary infrastructure upgrades to allow for reliable grid operation with planned solar photovoltaics (PV) projects.
- A grid study for the Cook Islands has supported the development of renewable energy plans for the island of Aitutaki.
- A grid integration study in Antigua has given policy makers and the public utility insights on the amount of variable renewable energy that can be implemented on the island without major infrastructure upgrades.
- Within the AIMS region, IRENA's Global Atlas team has piloted a new wind and solar site assessment service.
- Tourism-focused case studies for the Caribbean and the Pacific have been completed.

IRENA's advisory services also include implementation pathways, facilitating the achievement of targets set in national policies and in the National Determined Contributions (NDCs). This is being facilitated by a study quantifying additional renewable energy generation capacity required and investment needs based on the NDCs of islands.

Capacity building and training: An important part of transferring knowledge is the tackling of information gaps and the building of capacity. IRENA has continued to provide training in collaboration with a range of SIDS Lighthouses partners.

- In this context, the Government of Japan and IRENA coordinated training workshops for Pacific SIDS and the Maldives to further explore the enabling environments in support of the wide scale deployment of renewable energy.
- In recognition of the importance of the integration of variable renewables, IRENA held three technical workshops in Saint Maarten, Tonga, and Cuba.
- Another workshop on financing renewable energy in SIDS was held in Nadi, Fiji in December 2016, in collaboration with the U.S. Department of State and Department of Energy, the Ministry of the Environment of Japan and the Pacific Community (SPC), with the support of the Asian Development Bank (ADB) and the World Bank.