

The Launch of the Global Ocean Energy Alliance (GLOEA) at the 2022 UN Ocean Conference in Lisbon, Portugal, will mark the beginning of a global effort to direct significant investments in developing Small Island Developing States (SIDS) and Coastal Cities' largest global renewable energy resource endowment. For islands and coastal cities, they see the development and deployment of the first Pilot 1.5 MW Floating Ocean Thermal Energy Conversion (OTEC) Platform, called "Dominique", as the first step toward a more resilient future and implementation of a truly SIDS-appropriate ocean energy technology.

SIDS DOCK Secretariat

c/o Ministry of Public Utilities,
Energy, Logistics and E-governance
Government of Belize
NEMO Building, Melhado Parade
Belmopan, Cayo District, BELIZE

Tel: (301) 873-4522

Fax: (501) 822-2206

secretariat@sidsdock.org
www.sidsdock.org/gloea



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Launch of the Global Ocean Energy Alliance: Ocean Energy For Climate Resilient Economies

Lisbon
PORTUGAL

Organized by the Secretariat of SIDS DOCK, the United Nations Industrial Development Organization (UNIDO) and the Stimson Center Alliance for a Climate Resilient Earth (ACRE), in partnership with the Governments of the Kingdom of Tonga, Belize, the Republic of Seychelles, and the Democratic Republic of Sao Tome and Principe

BACKGROUND

The SIDS DOCK Side Event on the Launch of the Global Ocean Energy Alliance (GLOEA) is in follow up to two high-level events where Heads of State and Government from Small Island Developing States (SIDS) and Least Developing Countries (LDCs) made two appeals for a Call To Action! for the Establishment of the Global Ocean Energy Alliance (GLOEA), at the sixth session of the Assembly of SIDS DOCK, held on the margins of the 76th session of the United Nations General Assembly (UNGA), on 28 September 2021, and on the margins of the United Nations Convention on Climate Change (UNFCCC) Conference of Parties (COP26), on 11 November 2021, in Glasgow, Scotland. These two events culminated in support for the Alliance, meeting its objective to launch the GLOEA at the UN Ocean Conference, on 29 June 2022, in Lisbon, Portugal.

The Launch of the GLOEA at the UN Ocean Conference, will mark the beginning of a global effort to direct significant investments in developing SIDS' largest global renewable energy resource endowment. Until now, it has not been the subject of any serious global effort despite the desperate need to reduce greenhouse gases from the energy sector. The introduction of ocean energy technologies in the marketplace faces manifold barriers related to policy and regulation, technology availability, knowledge management and awareness, capacity building, as well as finance and entrepreneurship.

The state of readiness of ocean energy technologies varies, in general, the kinetic are more advanced in deployment, and with each successful implementation, momentum builds. The thermal systems have not yet attracted commercial project financing, despite good assessments from the development banks on the state of technology readiness. However, deployment of these systems is at the pilot stages, with two operating plants in Hawaii. U.S., and Kumejima,

Japan. Seawater cooling technologies are also attracting financing for projects in the French Polynesia islands.

A highly, potentially lucrative market for ocean energy technologies exists in a group of countries with vast resources, and ready to facilitate the development and deployment of viable projects due to an enabling environment. This enabling environment was created with the support of various development agencies and partners interested in helping to develop strategic, policy and regulatory frameworks to help drive private sector competitiveness. More attractive for project and technology developers is the size of the collective market, which removes a major barrier to economies of scale. Thus, the collective can be eligible for a greater pool of concessionary financing and development grants to facilitate first-of-a-kind projects and demonstrations with the view to scaling up technologies amongst all other SIDS and LDCs. The application of these technologies will extend to coastal cities, who are currently on track to experience a similar fate as the world's small islands and will require innovative ocean-based technologies to cope with the challenges of a warming climate ahead.

Recognizing the Ocean as the most important renewable energy resource for SIDS, coastal LDCs and cities around the world, it is imperative that the world responds to the Call To Action! and to join the GLOEA to avoid being left out of the next energy revolution that is coming to small islands and coastal cities, as our fortunes lie in the Oceans, not elsewhere.

The COVID-19 crisis has re-emphasized the urgent need for SIDS and LDCs to diversify their economies, reactivate or strengthen traditional sectors and tap into the value chains of emerging ones. Increasingly, SIDS and coastal LDCs are embracing the expanding Blue Economy as a mechanism for realizing sustainable growth and mitigating local pollution and climate change, simultaneously. Endowed with vast ocean territories and exclusive economic zones (EEZs), these countries and territories have the opportunity to create new income streams and to diversify their economies.

As part of their blue economy aspirations, SIDS and coastal LDCs are demonstrating increased interest to harness the opportunities of ocean energy technologies in the near future. Ocean energy is the largest renewable energy resource endowment for SIDS and does not require conversion of limited land area to install grid connected PV or wind farms. SIDS are blessed with many renewable energy resources, and most of them are already competitive with fossil fuel-based generation (e.g., diesel, heavy fuel oil [HFO]). The decreasing technology costs for some ocean energy technologies is expanding their sustainable energy supply options.

If, with the help of friends and "genuine and durable partners," as set out in the 2014, Small Island Developing States Accelerated Modalities of Action (SAMOA Pathway), the action plan for sustainable development in SIDS, the small islands were able over the next decade, replace 5,000 MW of the retiring diesel with ocean energy systems and operating at the same level of availability as the diesel units, the SIDS would reduce the need for diesel imports by more than seven

(7) million barrels of diesel fuel, per year, at \$120 per barrel, there would be an improvement in SIDS trade balance of more than \$840 million per year.

Achieving significant increase in ocean energy investments is critical to SIDS building climate and economic resilience. The war in Ukraine, overlapping with the ongoing COVID 19 Pandemic, has disrupted supply chains for imports of essential goods, and caused significant increases in energy costs, which brings the prospects of economic recession in the SIDS, the longer the conflict lasts. SIDS need to replace some ten thousand (10,000) megawatts (MW) of fossil fuel-powered electricity generating plants, over the coming decades, plants which consume more than \$5 billion dollars' worth of fuel, annually. Ten thousand megawatts represent the vast majority of existing generating capacity in the SIDS. However, because the majority of these plants have reached or exceeded their economic life and are no longer efficient users of fuel, we in SIDS must ensure that we take collective action to replace these generators with Ocean Energy Systems.

With the kind and generous support of the Governments of Austria and Norway, SIDS DOCK, UNIDO, Stimson-ACRE and our new partners will cooperate to establish the Global Ocean Energy Alliance (GLOEA), mobilize resources, facilitate partnerships with the private sector aimed at the effective transfer of ocean energy knowledge, technology and investments, and to put the appropriate institutional framework in place for an Ocean Energy Industry. The GLOEA is an initiative focused on accelerating the development of ocean energy projects through partnerships that mobilize technical, human and financial resources and aims to establish a global community of vested interest with the capacity to develop a pipeline of bankable ocean energy projects to serve islands, cities and coastal nations. The partners will also update the event participants on progress on the development of the "Ocean Energy For Blue Economies Platform," powered by SustainChain™, to facilitate science and technology exchanges necessary for advancing ocean energy technologies and in particular, the commercial-scale deployment of ocean-based energy technologies that are appropriate to the demands in Small Island Developing States (SIDS). The Platform was introduced at the UNFCCC COP26, in Glasgow, Scotland, on 4th November 2021, and based on feedback, the revised Platform will be showcased.

OBJECTIVES OF THE SIDE EVENT

The overarching thematic focus of this Side Event is to demonstrate the potential of Ocean Energy and its high relevance to SIDS, LDCs and coastal cities, through visual presentations, centering on the "ABCs of Ocean Energy" and the commercial-scale deployment of ocean-based energy technologies that are appropriate to the SIDS for the development of a Blue Economy. Collectively, SIDS Oceans (EEZ and extended continental shelves) make them 15 times the physical size of the

European Union (EU) – SIDS are Large Ocean States. In this system, the tropical ocean acts as a giant solar energy collector for the estimated 25,000 to 35,000 barrels of oil equivalent per hectare of ocean surface. The launch will include presentations on various ocean energy technologies (thermal, wave, tidal) - Island Energy For Island Life (video); SIDS Children Call for Climate Action! "Save Our Oceans, Protect Our Future, Don't Leave Us Behind (video); introduction of the Ocean Energy Platform for Blue Economies Powered by SustainChain™; with a main presentation on the stage of development of the world's first Pilot 1.5 MW Floating OTEC Platform in Sao Tome and Principe, by the private sector company, Global OTEC. Other than energy and food security, we will also show other co-benefits derived from the ocean energy model.

During the SIDS DOCK COP26 Side Event in Glasgow, in November 2021, the Government of Sao Tome and Principe and Global OTEC, supported by the partners, announced that they are in discussions for the development and deployment of the world's first Floating Ocean Thermal Energy Conversion (OTEC) Platform, called "Dominique" in Sao Tome and Principe. The Government and Global OTEC will be signing an agreement during the GLOEA Launch Event, for the development and deployment of a 1.5 MW Floating OTEC Platform, off the coast of Sao Tome. OTEC is the best suited ocean energy technology for SIDS and coastal cities, and the combination of the two Call To Action! appeals helped catalyse the new SIDS DOCK, UNIDO, Stimson-ACRE partnership to facilitate additional private sector support for Global OTEC and the Sao Tome and Principe Ocean Energy Project. It is anticipated that the Side Event will generate additional support for start-up and operational phases of the GLOEA.

Specific Objectives include:

- (a) Announcement of Grant from UNIDO for the SIDS Ocean Energy Programme;
- (b) Announcement of Grant from Climate Institute for Start-up Phase of the Global Ocean Energy Alliance and Establishment and Hosting of the GLOEA Secretariat;
- (c) Identification of new Development Partners to join the Global Ocean Energy Alliance;
- (d) Identification of new Private Sector Partners in the Global Ocean Energy Alliance;

PARTICIPANTS

The side event will gather country representatives, government officials, policymakers, experts, and stakeholders who are attending the SIDS DOCK Side Event on the Launch of the Global Ocean Energy Alliance, at the Eurostars Universal Lisboa, Avenida do D. João II (13), Lote 1.12.01, 1990-050 Lisbon, Portugal, on the margins of the UN Ocean Conference in Lisbon, Portugal. The event will also be live streamed online to engage more participants in a hybrid format.

29 JUNE 2022

EUROSTARS UNIVERSAL HOTEL

WEDNESDAY

12:00 – 1:00

**Registration &
Security Checkpoint**

1:00 – 1:10

Video Presentation: Children of SIDS Call For Climate Action! Save Our Oceans, Protect Our Future, Don't Leave Us Behind! Featuring the Children of SIDS from Seychelles and Sao Tome and Principe

- Ms. Jeanette Larue, Director-General, Public Education and Community Outreach, Ministry of Agriculture, Environment and Climate Change, Government of the Republic of Seychelles, Vice Chair, SIDS DOCK Island Women Open Network (IWON)

Opening Remarks

Chair

- H.E. Mr. Ronald Jumeau, Ambassador and former Permanent Representative of the Republic of Seychelles to the United Nations, former Chair of the Executive Council of SIDS DOCK & SIDS DOCK Roving Ambassador for Climate Change and the Ocean

1:10 – 1:25

Launch of the Global Ocean Energy Alliance (GLOEA)

1:10 – 1:25 (contd.)

Keynote Address

- Hon. Mr. Siaosi 'Ofakivahafolau Sovaleni (Hon. Hu 'akavameiliku), Prime Minister of the Kingdom of Tonga, President of the sixth session of the Assembly of SIDS DOCK

Speaker (Pre-recorded Video)

- Rt. Hon. Dr. Keith Mitchell, Prime Minister of Grenada, former President of the fifth session of the Assembly of SIDS DOCK

Speaker

- H.E. Mr. António Guterres, Secretary-General, United Nations (UN) (TBC)



1:25 – 1:30

Speaker

- Hon. Mr. John Briceño, Prime Minister of Belize, Vice-President of the sixth session of the Assembly of SIDS DOCK

Speaker

- H.E. Mr. Peter Thomson, Ambassador and United Nations Secretary-General's Special Envoy for the Ocean (Mode of participation TBC)

1:30 – 1:45

Video Presentation: “Island Energy For Island Life”

Speaker

- Hon. Mr. Flavien Joubert, Minister for Agriculture, Climate Change and Environment, Republic of Seychelles, on behalf of Hon. Mr. Wavel Ramkalawan, President of the Republic of Seychelles, Vice-President (AIS Region) of the sixth session of the Assembly of SIDS DOCK

Speaker (Pre-recorded Video)

- Hon. Ms. Afioga Fiame Naomi Mata'afa, Prime Minister of the Independent State of Samoa

Speaker (Pre-recorded Video)

- Dr. Gerd Müller, Director General of the United Nations Industrial Development Organization (UNIDO)

1:45 – 1:55

Presentation: Ocean Energy for Climate Resilient Economies: Thermal, Wave, Tidal, Current, Floating PV and Wind

Presenter

The “ABCs” of Ocean Energy Conversion Technologies and Potential Contribution to the Sustainable Development Goals (SDGs) [Videoconference]

- Dr. Andrea E. Copping, Senior Researcher in Marine Renewable Energy and Offshore Wind Development, Pacific Northwest National Laboratory's Marine Sciences Laboratory Sequim, U.S. Department of Energy

Speakers

An International Vision for Ocean Energy

- Dr. Ana Brito Melo, WavEC - Offshore Renewables, Executive Committee Secretary, Ocean Energy Systems (OES) Secretariat. OES, also known as the Technology Collaboration Programme on Ocean Energy Systems, functions within a framework created by the International Energy Agency (IEA)

An International Vision for Ocean Energy

- **The Kumejima OTEC Model:** Mr. Benjamin Martin, Secretary General, Ocean Thermal Energy Association (OTEA), Kumejima, Japan [Videoconference]
- **Thermal Energy:** Professor Yasuyuki Ikegami, Professor and Director, Institute of Ocean Energy, Division of Ocean Thermal Energy Conversion, Saga University Japan [Videoconference]
- **Wave Energy:** Dr. Laurent Albert, Chief Executive Officer, Seabased Group, Ireland

1:55 – 2:10

Main Presentation: Introducing “Dominique” – The World’s First Floating OTEC Platform to be Developed and Deployed in Sao Tome and Principe

Speaker (Pre-recorded Video)

- Hon. Dr. Jorge Lopes Bom Jesus, Prime Minister of the Democratic Republic of São Tomé and Príncipe

Presenter

- Mr. Daniel Grech, Chief Executive Officer, Global OTEC: Presentation & Project Update on “Dominique” – 1.5MW Floating Ocean Thermal Energy Conversion Platform to be developed and deployed in Sao Tome and Principe

Ocean Energy For Climate Resilient Economies: The People’s Energy Vision for Sao Tome and Principe

Presenters

- Hon. Mr. Osvaldo C.V. Abreu, Minister for Public Works Infrastructure Natural Resources and Environment, Democratic Republic of São Tomé and Príncipe
- Mr. Luiselio Pinto, SIDS DOCK Executive Council Member from Sao Tome and Principe, SIDS DOCK National Coordinator for Sao Tome and Principe

2:10 – 2:20

2:10 – 2:20

The Ocean Energy For Blue Economies Platform, Powered by SustainChain™

Speakers

- Hon. Mr. Siaosi ‘Ofakivahafolau Sovaleni (Hon. Hu ‘akavameiliku), Prime Minister of the Kingdom of Tonga, President sixth session of the Assembly of SIDS DOCK

Presenter (Videoconference)

- Ms. Joanna Hall, Executive Director and Head of Product, U.S. Coalition on Sustainability

2:20 – 2:50

Signing Ceremony

Speaker: Looking Back, Moving Forward: The 2015 SIDS DOCK Treaty Signing Ceremony & The SIDS Blue Guardians

- Hon. Saboto Caesar, Minister of Agriculture, Forestry and Fisheries, on behalf of the Hon. Dr. Ralph Gonsalves, Prime Minister of St. Vincent and the Grenadines, former Vice-President (Caribbean Region) of the third session of the Assembly of SIDS DOCK

2:20 – 2:50 (contd.)

Signing Ceremony

- SIDS DOCK and Climate Institute: Memorandum of Understanding to Cooperate on Ocean Energy and Hosting of the Interim Secretariat of the Global Ocean Energy Alliance (GLOEA)

Remarks

- Member States and Observers

2:50 – 3:00

Closing of Event

3:00 – 4:00

Reception

Aperitif Served

ORGANIZERS

This event is organized by the Secretariat of SIDS DOCK, the United Nations Industrial Development Organization (UNIDO) and the Stimson Center Alliance for a Climate Resilient Earth (ACRE), in partnership with the Governments of the Kingdom of Tonga, Belize, the Republic of Seychelles, and the Democratic Republic of Sao Tome and Principe, and support from the Governments of Austria and Norway.

FORMALITY

The Side Event is an Invite Only event, and is being held in-person, at the Eurostars Universal Lisboa, Avenida do D. João II (13), Lote 1.12.01, 1990-050 Lisbon, Portugal. Observers wishing to participate in-person, must contact the Secretariat at: secretariat@sidsdock.org, to gain access to the venue. The side event will be held in a hybrid format. Invited participants can attend via Zoom. The Secretariat of SIDS DOCK will provide information to access the Zoom platform.

CONTACTS

Christine Neves Duncan

Chief of Staff &
Project Director

Secretariat of SIDS DOCK
secretariat@sidsdock.org
cduncan@sidsdock.org

Jan Hartke

Senior Fellow

*Henry L. Stimson Center
Alliance for a Climate
Resilient Earth (ACRE)*
jahartke@gmail.com

Martin Lugmayr

Sustainable Energy Expert

*United Nations Industrial
Development Organization
(UNIDO)*

mlugmayr@unido.org