

## Concept Note SIDS4 On-Site Side Event:

**The Barbados BLOOM Cleantech Cluster – A collaborative model to unlock green entrepreneurship and innovation in SIDS,  
on 30 May 2024, 08:00 to 09:30,  
Room 7, American University of Antigua, SIDS4 Conference Venue**

## Introduction

Small Island Developing States (SIDS) are striving towards economic diversification and higher added value manufacturing and servicing, leapfrogging to industry 4.0 and clean energy and resource efficient technologies. A just transition requires the participation of the private sector in SIDS in the expanding value chains of modern green product manufacturing and servicing, creating domestic jobs, revenues and opportunities for the island youth – men and women.

Cleantech includes a broad range of technologies, which are key enablers for the transition of SIDS towards climate resilient and diversified green and blue economies. In this context, Barbados - a small island within the Caribbean, has ambitious plans, including the *Declaration of Mission Barbados*, which foresees by 2030, to become a clean large-ocean state, championing sustainable development locally and globally – with the goal of all domestic activities becoming 100% sustainable by 2035.

Therefore, under a Global Environment Facility (GEF) funded project, the United Nations Industrial Development Organization (UNIDO) in partnership with the Government of Barbados, the Ministry of Industry, Innovation, Science and Technology (MIST) and Export Barbados (BIDC) joined hands to establish the BLOOM Cleantech Cluster, which provides shared resources and services and connects the main players of the eco-system, including government, entrepreneurs, science and financiers to work jointly on the commercialization of innovative adapted island solutions.

Over the past years, the cluster has operated an in-house incubation program and has established close ties with regional accelerator programs, such as the IDB Circular Economy Accelerator for Latin America and the Caribbean, venture capitalists and investors. Moreover, the cluster hub facilitated public-private dialogues, designed enabling policies and quality standards and published the Barbados Cleantech Industry Report. It also developed the national cleantech label “Greening paradise together” under which Barbadian exports can be promoted in future. BLOOM has supported more than twenty entrepreneurs and has provided successful matchmaking services to investors and financiers.

BLOOM has become an important partner of the Export Barbados “Life is Barbados” strategy, which aims at economic diversification and leapfrogging to higher added value sectors and eco-industrial parks, focusing on industry 4.0, digitalization, biotechnology, pharmaceuticals, agri-business, cleantech and blue economy. Moreover, the Government and UNIDO are partnering on replicating the BLOOM model through a regional approach under the Global Network of Regional Sustainable Energy Centers (GN-SEC) covering 35 of 39 SIDS in Africa, Caribbean, Indian Ocean and the Pacific. The latter network was created under a SAMOA Pathway Partnership, which was nominated for the 2023 United Nations SIDS Partnership Award.

## Objectives and outcomes of the side event

This session will inform on the Barbados BLOOM Cleantech Cluster model namely its origin, successes and challenges. Moreover, supported entrepreneurs – men and women - will present their developed sustainable energy and circular economy solutions directed towards accelerating the shift of Barbados

and the Caribbean to diversified green, blue and digital economies. There is focus on innovative, digitalized solutions aiming at the diversion of waste from the landfill by utilizing these waste streams found in the Caribbean to create value-added products. Moreover, the envisaged replication of the of BLOOM model in other SIDS and lower-income countries will be discussed also in the view of the intended establishment of a climate technology and innovation mechanism promoting SIDS entrepreneurship globally as outcome of the SIDS4.

### Guiding questions for the discussions

- How the BLOOM cluster helps Barbados to promote cleantech market uptake, entrepreneurship, innovation and exports?
- Which lessons learned we can draw from the Barbadian example? What has worked?
- How we can empower SIDS private sector to participate in the emerging value chains of cleantech manufacturing and servicing, generating jobs and revenues?
- How can we replicate the Bloom model regionally and internationally in other SIDS in the context of the envisaged SIDS4 climate technology and innovation mechanism?

## Agenda

<b>Introduction by the moderator</b>	<b>Timing</b>
Introduction by Mr. Matthew Redd, Senior Private Sector Specialist, Global Environment Facility (5 min)	08:00-08:05
<b>High-level Opening</b>	<b>Timing</b>
Remarks by Hon. Miss Mia Amor Mottley, Prime Minister of Barbados, Minister of Finance, Economic Affairs, Culture, Security, Public Service (5 min) (tbc)	08:05-08:15
Remarks by Mr. Gerd Müller, Director General of UNIDO (5 min) (tbc)	
Remarks by H.E. Mr. Nikolaus Marschik, Secretary-General, Austrian Ministry of European and International Affairs	
<b>BLOOM Barbados presentation and pitches of entrepreneurs</b>	<b>Timing</b>
Presentation on the Bloom Cluster model and its vision by Mr. Terrell Thompson, Cluster Manager, Bloom Cleantech Cluster Barbados (10 min)	08:15-08:25
Solution Pitch by Ms. Legena Henry, CEO, Rum & Sargassum Inc. (5 min)	08:25-08:30
Solution Pitch by Ms. Nadaline Malikca Cummings, CEO, Caribbean E-waste Management Inc. (5 min)	08:30-08:35
Solution Pitch by Ms. Simera Crawford, CEO, Caribbean Environmental Management Bureau Inc. (5 min)	08:35-08:40
Solution Pitch by Mr. Joshua Forte. CEO, Red Diamond Compost Inc. (5 min)	08:45-08:50
<b>BLOOM replication and discussion</b>	<b>Timing</b>
Global BLOOM replication efforts in lower-income countries and SIDS, Mr. Martin Lugmayr, Industrial Development Expert, GN-SEC Coordinator, UNIDO (5 min)	08:50-08:55
BLOOM replication within the Caribbean, Mr. Devon Gardner, Head of Programs, Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) (5 min)	08:50-09:00
Moderated discussion and closing	09:00-09:30

## Key note speakers and moderator

### Hon. Miss Mia Amor Mottley



#### **Prime Minister of Barbados, Minister of Finance, Economic Affairs, Culture, Security, Public Service**

Mia Amor Mottley, S.C., M.P., serves as the 8th Prime Minister of Barbados and leader of the Barbados Labour Party (BLP). A distinguished Attorney-at-Law and Queen's Counsel, she has made significant contributions to Barbadian politics for over three decades. Notably, she holds the distinction of being Barbados' youngest Queen's Counsel, first female Attorney General, and first female Prime Minister. Internationally recognized for her service, she has received numerous honors, including being named one of TIME's 100 most influential people of 2022. Prime Minister Mottley currently holds leadership roles in various global initiatives, such as Co-Chair of the Sustainable Development Goals Advocates group and Lead Head of Government within CARICOM. With a passion for people, culture, and the environment, she champions the interests of Barbados and the Caribbean.

Social Media: [Mia Amor Mottley \(@mamottley\)](#) • [Instagram photos and videos](#) | [Mia Amor Mottley \(@miaamormottley\)](#) / [X \(twitter.com\)](#)

### Mr. Gerd Müller



#### **Director General of the United Nations Industrial Development Organization (UNIDO)**

Mr. Müller has had various leadership positions from an early stage in his career. He served as a Member of the European Parliament, during which time he was a member of the ACP-EU Joint Parliamentary Assembly. In 2005, he was appointed Deputy Minister at the Federal Ministry of Food, Agriculture and Consumer Protection, in charge of international relations, development projects and world food affairs. In 2013, he was appointed Federal Minister for Economic Cooperation and Development, a position he held until 2021. Gerd Müller has many years of experience in the fields of multilateral cooperation, sustainability and innovative agriculture.

Social Media: [Gerd Müller \(@DGgerdmueller\)](#) / [X \(twitter.com\)](#) | [Gerd Müller \(@mdbgerdmueller\)](#) • [Instagram photos and videos](#)

### H.E. Mr. Nikolaus Marschik



#### **Secretary-General, Austrian Ministry of European and International Affairs**

- Permanent Representative of Austria to the European Union (Brussels)
- Austrian Ambassador to Germany (Berlin)
- Director of Cabinet of the Foreign Minister
- Director-General for Administrative Affairs (Chief Operating Officer) at the Federal Ministry for European and International Affairs.
- Director of Cabinet of the Foreign Minister
- Office of the Secretary General for Foreign Affairs
- Attaché at the Permanent Mission to the United Nations in Geneva

**Mr. Matthew Reddy, Moderator****Senior Private Sector Specialist, Global Environment Facility (GEF)**

Matthew began his career working in Australia, responsible for private investment in land restoration and reforestation. He became MD for environmental markets, trading in carbon, water and ecosystems where he developed forest carbon methodologies and business models to support farmers under compliance and voluntary markets in the Asia Pacific. He was appointed as the CEO of the International River Foundation (IRF) working to support collaboration in river basin management. He was the Director for Climate Smart Agriculture and the Forest Solutions Group at the World Business Council.

Social media: <https://www.linkedin.com/in/matthew-reddy-965b4213/>

## Other speakers

### Dr. Terrell Thompson



#### **Bloom Cluster Manager / Bloom Cleantech Cluster Barbados c/o Export Barbados (BIDC)**

Dr. Terrell Thompson is the Cluster Manager for the Barbados Bloom Cleantech Cluster a GEF funded initiative established in Barbados to promote sustainable energy and climate technology through industrial development and entrepreneurship. With various publications on the biochemical possibilities of sargassum, he holds a PhD in Chemical and Material Engineering from the University of Auckland.

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Social Media: [Home](#) | [Bloom Cluster](#) | [www.linkedin.com/in/bloom-barbados](http://www.linkedin.com/in/bloom-barbados)

### Dr. Legena Henry



#### **CEO & Founder / Rum & Sargassum Inc. /Bloom Cleantech Cluster Barbados**

Dr. Legena Henry, PhD, is an MIT graduate, and a Mechanical Engineer, who has been the CEO of Rum and Sargassum Inc since 2021, where her team is commercializing an indigenous renewable transportation solution in Barbados. She is also the Lecturer for Renewable Energy at the University of the West Indies, Cave Hill, specializing in Renewable Energy and Mechanical Engineering. She researches sustainable energy sources in the Caribbean, such as bio-fuel from Sargassum seaweed, Ocean Thermal Energy Conversion, and wave energy.

Social media: [Rum and Sargassum](#) | [Facebook](#) | [Rum and Sargassum](#) | [LinkedIn](#)

### Mr. Joshua Forte



#### **CEO & Founder / Red Diamond Compost Inc. /Bloom Cleantech Cluster Barbados**

Mr. Joshua Forte, founder of Red Diamond Compost Inc., is an award-winning biotech social entrepreneur who creates the world's cleanest green agrochemical solutions from organic waste and invasive plants. He focuses on environmental management, regenerative organic agriculture, and climate-smart environmental management, collaborating with organizations globally.

Social Media: <https://www.linkedin.com/company/reddiamondcompost/> and <https://www.facebook.com/reddiamondcompost/>



### Ms. Simera Crawford



#### **CEO & Founder / Caribbean Environmental Management Bureau /Bloom Cleantech Cluster Barbados**

Simera Crawford is the founder of the Caribbean Environmental Management Bureau (CEMBI), an organization dedicated to promoting sustainable development goals through innovative solutions, and the executive founder of BitEgreen Market Inc., a tech start-up aimed at incentivizing sustainable actions through a web platform and app. With expertise spanning sustainable solution design in areas such as humanitarianism, tourism, disaster risk reduction, health, and education, Simera's life's purpose is to "Preserve the Well-being of Nature" for present and future generations.

Social Media: <https://www.linkedin.com/company/cembiorg/about/>

### Ms. Nadaline Malikka Cummings



#### **CEO & Founder / Caribbean E-waste Management Inc. /Bloom Cleantech Cluster Barbados**

Ms. Nadaline Cummings, is the founder of Caribbean E-waste Management Inc. (CEWMI) an e-waste recycling company which focuses on the provision of E-waste collection, recycling and education services to a diverse clientele including banks, corporations, and households. As a business that specializes in the sustainable disposal of the Caribbean's electronic waste through securely dismantling e-waste and salvaging useful components for recycling and reuse, CEWMI aims to be a key contributor to the efforts to decrease electronic waste in the Caribbean, safeguard our environment, reduce carbon emissions and assist in the development of a circular economy.

Social Media: <https://www.facebook.com/Caribbean.Ewaste.Management/>

### Mr. Martin Lugmayr



#### **Industrial Development Expert, Coordinator of the Global Network of Regional Sustainable Energy Centres, UNIDO**

Inspired by multilateralism and regional cooperation, Martin is spearheading the GN-SEC program and is managing a portfolio of sustainable energy and climate technology projects in SIDS and LDCs in Africa, Caribbean and Pacific. Before joining UNIDO in 2010, he was responsible for the energy program at the Austrian Development Agency (ADA) and worked at the development cooperation department of the Austrian Federal Ministry of European and International Affairs. Martin obtains Master degrees on renewable energy technologies and political science, as well as training certifications regarding project cycle management, climate change and innovation clusters.

Social Media: <https://www.linkedin.com/in/martin-lugmayr-5b5029176> and [www.gn-sec.net](http://www.gn-sec.net)

## Mr. Devon Garder



### **Head of Technical Programs, Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE)**

Devon, a chemical physics doctorate holder, has served as the Caribbean Community (CARICOM) Secretariat's Programme Manager (Energy) and Head of the Energy Unit for seven years. He also served the region in prior roles at the University of the West Indies, St Augustine Campus and the Caribbean Community Climate Change Centre (CCCCC), among others. He acts as focal point for the Global Network of Regional Sustainable Energy Centres (GN-SEC).

Social media: <https://www.ccreee.org/news/ccreee-appoints-hot/>

## Contacts

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