As a young person
On behalf of young people everywhere,
I want to say that we’ve heard the promises before.
I want to say that the sound of change sung sometimes sounds like a song on repeat.
I feel like in some places
After people have heard the song sung one hundred times
The words start to mean nothing at all
Or as my mother used to say, begins to fall on deaf ears.

We have to find new and creative ways to make a change
To be a strong enough force to fix all that is critical to our survival on this planet.
What if we consider the current state of affairs where the climate is concerned, a flood?
Think of how all floods start as a trickle.
How there is a forecast beforehand warning that bad weather is imminent.
That we, in all the ways that we can, are advised to prepare for the worst.
that at best, there will be little to no casualties or damages after the storms have passed.
and eventually, the sun will come out of hiding and let its light shine.

Otherwise, what happens to the persons at risk?
To low-income communities that are forced to evacuate their homes
To the indigenous who have their lands snatched from beneath their feet
To women and girls
To people of color
What happens to the forgotten and left behind in terms of what it feels like to drown?
To not have life raft nor evacuation plan
To sink slowly
To have water break and enter into places where it does not belong
To scream your waterlogged lungs sore
To hold your breath for as long as you can until you can’t anymore
To give in, to give up hope

What about the conversation we seem to be having forever
Like how to protect the most vulnerable from harm in the midst of all this chaos
To create just sustainable solutions so that the disproportionate has a fighting chance
That hold ourselves accountable
To not point fingers
Because it does not solve anything,
What about all the other issues that keep coming up
Accumulating around us like dirty water
Making everyone uncomfortable
much like how if it rains,
the rivers stomachs will burst open like ugly confetti
Spilling all its contents into the street
Much like how inequalities stretch themselves into surrounding villages without permission
Scattering homes
Scattering boundaries
Scattering bodies
You can’t come after the fact and expect there to be a quick fix to the aftermath.
It takes work
And if you’ve ever experienced a flood firsthand you know
The hardest thing about them is that they come in a flash and leave a mess that is always so damn hard to clean.
Aren’t we fed up of always being in a state of clean-up?
Won’t our biggest jobs be convincing the people who lost everything in the process
that there are still things worth fighting for
Isn’t there a lot of building to be done still
Are we not just scratching the surface?

Some floods so deep we need a good ark to get through them
How can we breathe new life into all of our shortcomings?
Protect our natural assets?
Mop up the excess ocean?
Teach our populations how to do more than just stay afloat
Teach them every stroke ever invented
Because in terms of having the resources to survive this
So many of us do not know how to swim

Know that the flood reference here is just a metaphor
That the figurative tsunami we’re all standing in is a shifting tide
That there is an urgent need to act

This is how we overcome
Through collaboration
Through alternative energy sources
Through correction
Through embracing the storms like the fearless assembly of change-makers, we are
Through sticking to the commitments made
To be more than just talk

to get our hands dirty
to be even more present than before
to check the tolls and see where we need to pick up the slack
See what areas need reinforcements
To repair the damages
To put new coats of paints over the mud-stained walls
because this is how we save our planet.
CONTRACT INFORMATION
This program is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of its requisition number REQLAC-19-000022 (Latin America and the Caribbean Environment Support Contract (LAC ESSC) implemented by prime recipient Environmental Incentives, LLC (EI) with partner ICF Macro, Inc. LAC ESSC has been issued under contract number GS-00F-193DA and supports the same program objectives as described in RFQ number 7200AA19M00008. LAC ESSC is funded and managed by the USAID Bureau for Latin America and the Caribbean, Office of Regional Sustainable Development and Environmental Activities.

PREPARED BY
Regina Harlig for Environmental Incentives, LLC

CONTRIBUTORS
Lissett Medrano, Ximena Gomez Lavi, Alicia Natalia Zamudio, Environmental Incentives, LLC

SUBMITTED BY
Juan Carlos Martínez-Sánchez Environmental Incentives, LLC

SUBMITTED TO
Ben Schapiro, Contracting Officer’s Representative
USAID Bureau for Latin America and the Caribbean
Office of Regional Sustainable Development

FOR MORE INFORMATION
Environmental Incentives, LLC
725 15th Street NW, Floor 10
Washington, D.C. 20005
www.enviroincentives.com

DISCLAIMER
This publication is made possible by the support of the American people through USAID. The contents of this publication are the sole responsibility of Environmental Incentives, LLC, and do not necessarily reflect the views of USAID or the United States Government.

ACKNOWLEDGMENTS
This document summarizes the proceedings of the USAID Eastern and Southern Caribbean Regional Climate Symposium, which was envisioned by Nikki Hassell and Mansfield Blackwood USAID’s Eastern and Southern Caribbean Regional Mission. Thank you to all of the speakers at the Regional Climate Symposium for sharing their experience and insights throughout the event and whose presentations are referenced in this document. Thanks also to the symposium moderators, Janice Cumberbatch, Leisa Perch, and Nikki Hassell for guiding the speakers and audience members in thoughtful conversation throughout the symposium.

Cover Photo: Heavy erosion on the eastern side of Grenada, near Grenville. Photo by Kadir van Lohuizen/NOOR.
# TABLE OF CONTENTS

**FIGURES**

- [5]

**ACRONYMS**

- [6]

**FOREWORD**

- [7]

**MESSAGE FROM THE CARICOM SECRETARY GENERAL**

- [8]

**EXECUTIVE SUMMARY**

- [10]

**SYMPOSIUM SESSIONS**

- **OPENING CEREMONY: RENEW, REFRESH, AND RE-PIVOT FOR CLIMATE ACTION**
  - [12]

- **CLIMATE CHANGE: CURRENT IMPACTS AND FUTURE PROJECTIONS**
  - [15]

- **SOCIAL, HEALTH, AND ECONOMIC IMPACTS OF CLIMATE CHANGE**
  - [18]

- **LISTENING TO THE FIELD: SECTORAL IMPACTS OF CLIMATE CHANGE**
  - [22]

- **NATIONAL RESPONSES TO CLIMATE CHANGE**
  - [25]

- **YOUTH IMPACT AND ENGAGEMENT ON CLIMATE CHANGE**
  - [30]

- **FINANCING FOR ADAPTATION AND RISK REDUCTION**
  - [32]

- **USAID APPROACHES TO CLIMATE CHANGE**
  - [36]

- **CONCLUSION**
  - [40]

## FIGURES

- **Figure 1. ESC Regional Climate Symposium participation from June 16 to June 30, 2021**
  - [7]

- **Figure 2. The Caribbean Regional Climate Centre provides information on long-term norms and trends to support adaptation to climate risk**
  - [16]

- **Figure 3. Relative exposure of Caribbean countries to natural disasters**
  - [19]

- **Figure 4. Recent and future heat impact potential in the leeward and windward islands in the OECS Region, as measured by the percentage of hot days during the annual heat season (May to October)**
  - [28]

- **Figure 5. Pan-tropical climate mitigation potential of three types of natural climate solution pathways, and 12 individual pathways, across three tropical regions**
  - [38]
**ACRONYMS**

5Cs  Caribbean Community Climate Change Centre  
BMC  Borrowing Member Country  
CARICOM  Caribbean Community  
CARPHA  Caribbean Public Health Agency  
CCAP  Climate Change Adaptation Program  
CCREEE  Caribbean Centre for Renewable Energy and Energy Efficiency  
CDB  Caribbean Development Bank  
CDEMA  Caribbean Disaster Emergency Management Agency  
CGIAR  Consultative Group on International Agricultural Research  
CIMH  Caribbean Institute for Meteorology and Hydrology  
COP26  26th UN Climate Change Conference of the Parties  
CYEN  Caribbean Youth Environment Network  
DDI  USAID Bureau for Development, Democracy, and Innovation  
ECCB  Eastern Caribbean Central Bank  
ESC  Eastern and Southern Caribbean  
FAO  Food and Agriculture Organization of the United Nations  
GCF  Green Climate Fund  
GDP  Gross Domestic Product  
IMF  International Monetary Fund  
LAC  Latin America and the Caribbean  
LiDAR  Light Detection and Ranging  
MOU  Memorandum of Understanding  
NAP  National Adaptation Plan  
NDCs  Nationally Determined Contributions  
NOAA  National Oceanic and Atmospheric Administration  
OECS  Organisation of Eastern Caribbean States  
PAHO  Pan American Health Organization  
RFS  USAID Bureau for Resilience and Food Security  
SIDS  Small Island Developing States  
SWAMP  Sustainable Wetlands Adaptation and Mitigation Program  
UNFCCC  United Nations Framework Convention on Climate Change  
UNICEF  United Nations Children’s Fund  
USAID  United States Agency for International Development  
UWI  University of the West Indies  
WHO  World Health Organization
FOREWORD

Countries in the Eastern and Southern Caribbean (ESC) Region have experienced some of the most severe impacts of climate change, ranging from prolonged periods of drought to increasingly strong tropical storms and hurricanes. These impacts have taken a toll on the region’s economic growth, health outcomes, and in some cases, gender equality, particularly when compounded by the effects of the COVID-19 pandemic.

These challenges have put countries in the region on the front lines of the climate crisis. With the United States (U.S.) re-entering the Paris Agreement, the U.S. Government has put the spotlight on the climate crisis. As part of this commitment to renewing regional partnerships for climate action, the United States Agency for International Development’s (USAID) ESC Mission hosted a virtual symposium in June 2021, convening regional stakeholders to share their experiences and identify climate action priorities.

Over the course of three weeks and eight sessions, the USAID ESC Regional Climate Symposium brought together more than 1,000 participants to hear from climate scientists, youth activists, funders, United Nations Framework Convention on Climate Change (UNFCCC) negotiators, public health experts, USAID staff, and many others. To demonstrate the renewed U.S. commitment to climate action, several ambassadors and embassy staff participated in the symposium, speaking about United States-supported efforts to combat climate change in their respective countries and regions. The audience included representatives of U.S. embassies and government agencies, CARICOM, the Organisation of Eastern Caribbean States (OECS) Commission, regional climate organizations, academia, ESC national governments, and youth organizations from 31 countries, including 10 ESC countries and 7 other Caribbean countries (Figure 1).

Figure 1. ESC Regional Climate Symposium participation from June 16 to June 30, 2021. More than 1,000 participants joined the symposium via BlueJeans, Zoom, and University of the West Indies TV (UWI-TV). Percentages are based only on BlueJeans participation.
MESSAGE FROM THE CARICOM SECRETARY GENERAL

Excerpt from remarks delivered by Ambassador Irwin LaRocque, Secretary General of the Caribbean Community (CARICOM) at the opening session of the USAID ESC Regional Climate Symposium on June 16, 2021.

As the climate and COVID-19 crises have demonstrated, we are operating in times where the existential threats to our people and economies require multilateral and multi-sectoral approaches and cooperation. [We] are well-seized of the fact that climate change and the pandemic, as separate occurrences, are devastating for CARICOM small island and low-lying coastal developing states (SIDS). That double threat—compounded by the [April 2021] eruption of La Soufrière Volcano in Saint Vincent and the Grenadines—has stretched our limited human and financial resources. This has been further exacerbated by the extensive and destructive flooding in Guyana and Suriname. We also have to contend with a regular influx of sargassum seaweed to our coastlines.

Our regional disaster-response mechanism has been called into action all year round, with little or no respite before what is expected to be another very active hurricane season. It underlines the need for us to strengthen our resolve to advance a green, resilient recovery post-COVID-19, [with] a climate-resilient, low-emission, regional economy that generates sustainable jobs for our people.

As you will recall, CARICOM was at the front line of the negotiations of the Paris Agreement—an Agreement with which I am pleased to see the United States has re-engaged. This is a most welcome occurrence, for we need all hands on deck in combating climate change.

We have continued to lead by example, despite our low levels of greenhouse gas emissions. We have assessed and prioritized sectors for targeted intervention, not only to mitigate our emissions but, more importantly, to scale up adaptation strategies. These are necessary to confront the impacts of climate change that are already affecting us. This has been done at the regional level, based on the ambition of [CARICOM] member states as they revised and submitted their nationally determined contributions (NDCs).

Adaptation and resilience remain a priority for us, given the levels of impact during the past 10 years. Disasters cost the region at least two percent of its gross domestic product (GDP) every year. In addition, several of our economic sectors continue to remain under threat from slow-onset climate impacts.

Declining rainfall and saltwater intrusion due to sea level rise compromise the region’s water resources, requiring significant investments to ensure a safe water supply. This—together with higher temperatures, pests, and more extreme events—are reducing agriculture yields in the Caribbean and causing more crop loss, impacting the region’s food security. Sea level rise also causes many of our member states to experience beach erosion, flooding, intense coral bleaching episodes, and increased impacts of ocean and coastal acidification. Mangroves and seagrass meadows are also being degraded. The overall impact on coastal ecosystems results in damage to the fishing and tourism industries, key drivers of Caribbean economies and food security.

While the region’s use of renewable energy has more than doubled in the past 10 years, it is far from optimal. Continued and accelerated transition to renewable energy for both economic and environmental reasons remains a priority for us. Added to this, the development of policies to make transport systems more energy efficient, including improving access to e-mobility options, will require scaling up in the short- to medium-term.

Our goal is to make the region climate resilient. But building resilience is very costly. There is an urgent need for small, vulnerable states like ours, whether low-, middle-, or upper-income, to have access to
concessional development financing in order to achieve resilience prior to a disaster and not wait until after it strikes. It is crucial that vulnerability be the main criterion in determining access to concessional development financing, which we urgently need in our quest for resilience.

The region requires financing to address short-, medium-, and long-term responses to tackle climate change and recover from the global COVID-19 pandemic while continuing to build our resilience. This would help SIDS through increased liquidity, reduced debt levels, greater fiscal space, access to new financial instruments, and recovery packages that are compliant with the Paris Agreement. We also recognize that the generation of timely and accurate data remains a challenge for the development of environmental strategies and policies at [all] levels.

I wish to highlight the fact that this region has benefited from a number of partnerships to confront [these] challenges. In this regard, USAID has been a committed and dedicated partner.

We have but to look at the recent Climate Change Adaptation Program (CCAP) partnership between USAID and the Caribbean Community Climate Change Centre (5Cs). The partnership was pivotal to enhancing the data capture architecture and network in the ESC. The acquisition alone of the region’s first owned light detection and ranging (LiDAR) instrument1 was unprecedented. This opened avenues for enhancing access to seascape and topographic data at a cost much lower than previously possible. Further, CCAP’s emphasis on capacity support within the 5Cs for developing project proposals for submission to the Green Climate Fund (GCF) produced levels of funding that greatly exceeded expectations.

USAID is also a committed partner in the production of cutting-edge information on climate phenomena for the region via the Programme for Building Regional Climate Capacity in the Caribbean.2 This is a three-year project executed by the World Meteorological Organization and implemented by the Caribbean Institute for Meteorology and Hydrology (CIMH). That program allowed the CIMH to meet the rigorous requirements to be recognized as a World Meteorological Organization Regional Climate Centre. CIMH is now able to generate regional climate services and products, including long-range forecasts, early warning systems, and improved weather modeling capacity. This will help to influence decision-making [for] climate change and fortify disaster risk management.

“I am pleased to see the United States has re-engaged [with the Paris Agreement]. This is a most welcome occurrence, for we need all hands on deck in combating climate change.”

I expect that the key messages and action points from these symposia [will serve] as points of departure for confronting the challenge of climate change. I look forward to follow-up discussions and recommendations that would ensure coherence and synergies in this battle.

---

1 As part of CCAP, USAID/ESC delivered a LiDAR System to the 5Cs for use throughout the Eastern and Southern Caribbean. In 2020, the system was upgraded to the RIEGL VQ-880-G LiDAR System.

2 USAID funded Building Regional Climate Capacity in the Caribbean, implemented by CIMH, to strengthen climate capacity in Caribbean.
The USAID ESC Regional Climate Symposium, held June 16–30, 2021, brought together regional and global climate experts to discuss the state of climate change in the region and to strengthen partnerships for climate action. Over the course of eight sessions, presenters shared current and planned climate initiatives, funding and insurance mechanisms, and provided recommendations for future climate action.

1. Symposium Opening
   The opening session featured remarks from U.S. Government representatives and regional organizations on the challenges ESC countries are experiencing in the face of climate change and examples of successful collaboration to tackle these challenges. USAID and regional organizations signed a memorandum of understanding (MOU), committing to continued collaboration for climate action.

2. Climate Change: Current Impacts and Future Projections
   In the second session, regional climate scientists discussed how the Caribbean climate is changing and the social and economic impacts of these changes. They offered climate projections for the coming years and effective tools for predicting and addressing climate hazards, such as climate data and early warning systems that allow governments and people to make more informed decisions. Speakers warned that the Caribbean is already experiencing a “worst-case scenario” for climate change, but emphasized that the region has the capacity to address the climate crisis.
3. Social, Health, and Economic Impacts of Climate Change
The second week of the Regional Climate Symposium opened with a panel on the social, health, and economic impacts of climate change. Experts from these fields noted the devastating impacts of climate change and the COVID-19 pandemic on the tourism industry and called for diversification of the economy. They also noted that these crises have disproportionately impacted women, children, and other vulnerable groups, and encouraged efforts to engage these groups in climate action planning.

4. Sectoral Impacts of Climate Change
The fourth session of the Regional Climate Symposium continued the earlier panel’s discussion on the social, health, and economic impacts of climate change, looking at the ways climate change impacts the fisheries, water, energy, and agricultural sectors. Speakers noted the need for collaboration within and across sectors and called for climate action and regulations underpinned by science.

5. National Responses to Climate Change
Representatives of the Governments of Suriname, Guyana, Barbados, and Saint Lucia shared their countries’ responses to climate change, including NDCs, national adaptation plans (NAPs), and other programs and strategies underway or in development. Additionally, the OECS Commission provided a regional perspective on climate resilience. Speakers stressed the need to use both “hard” and “soft” climate adaptation approaches.

6. Youth Impact and Engagement on Climate Change
Youth activists from Jamaica, Trinidad and Tobago, and Saint Lucia discussed youth participation in national, regional, and global climate discussions. For example, Saint Lucia youth provided input on the children and youth component of the country’s updated NDC, and Caribbean youth will participate in the upcoming UN Climate Change Conference of Youth. Speakers shared successes and made recommendations to increase youth engagement in climate activism.

7. Financing for Adaptation and Risk Reduction
This session focused on the resources regional institutions provide to help governments, communities, and individuals access funding for climate action. Panelists emphasized the need for a mixture of funding sources—such as concessional financing, market loans, small and large grants, and parametric insurance—to reach vulnerable populations and help countries build climate resilience.

8. USAID Approaches for Responding to Climate Change
Because climate change impacts all of USAID’s programming, the Agency is addressing the climate crisis across its geographies and initiatives. USAID staff shared the Agency’s commitments coming out of the recent Leaders Summit on Climate and presented their work in the fields of climate finance, natural climate solutions, clean energy, and food security. The speakers highlighted programs and research with relevance to the ESC region, including USAID’s forthcoming Caribbean Energy Initiative.

Symposium Closing
To close out the symposium, the USAID/ESC Regional Representative recapped the event’s eight sessions, sharing the following key takeaways: 1) Climate change disproportionately impacts the most vulnerable members of society, which has been exacerbated by the COVID-19 pandemic; 2) the Caribbean has the necessary information and expertise to strengthen climate resilience; 3) people must be at the center of climate strategies; 4) public private partnerships can help enhance resilience; and 5) the time for action is now!
RENEW, REFRESH, AND RE-PIVOT FOR CLIMATE ACTION

The USAID ESC Regional Climate Symposium opened on June 16, 2021, with remarks from U.S. Government representatives and regional partners, who spoke about the many threats and challenges countries in the region have faced due to climate change and extreme weather events. Speakers celebrated the re-entry of the United States to the Paris Agreement and highlighted the importance of strong partnerships for climate action, setting the tone for the symposium. The opening session featured the signing of an MOU to reaffirm the long-standing partnership between USAID and regional partners to address the climate change crisis. It concluded with spoken word poet Deneka Thomas performing “After the Flood” (see pages 2–3).
Barbara Feinstein, Acting Senior Deputy Assistant Administrator for USAID’s LAC Bureau, recalled Maria and Irma, the record-breaking hurricanes that devastated homes, infrastructure, and ecosystems in Dominica, Puerto Rico, and Antigua and Barbuda in 2017. “The [United States] and the Caribbean are neighbors that share similar risks and impacts from climate-induced disasters,” she said. She referenced increasing water shortages in the region, explaining that more intense storms caused by climate change damage the infrastructure necessary to distribute water and maintain its quality. “The climate crisis is also a water crisis,” Feinstein said. Urging cooperation, she said, “We cannot address pressing climate change issues alone. We must marshal our collective wisdom, resources, and efforts together [to] ensure the most vulnerable, including farmers, fisherfolk, and marginalized groups, are protected [by] and benefit from our action.”

Dr. Colin Young, Executive Director of the 5Cs, described the ESC region as being “in the figurative and literal eye of the storm,” noting that countries in the region are painfully aware of the need to limit global temperatures to 1.5 degrees Celsius above pre-industrial levels. He called on the United States and other donors to increase climate finance for Caribbean nations ahead of 26th UN Climate Change Conference of the Parties (COP26). Dr. Young praised the historically strong partnership between USAID and CARICOM and its regional institutions, including 5Cs, CIMH, and the Caribbean Disaster Emergency Management Agency (CDEMA), and reiterated the need for continued USAID support to strengthen the region’s climate change defenses.

Ambassador Irwin LaRocque, Secretary General of the CARICOM Secretariat, described the challenges currently facing CARICOM member states and the strain on the region’s human and economic resources caused by climate change, the COVID-19 pandemic, and the 2021 eruption of La Soufrière Volcano in Saint Vincent and the Grenadines. Emphasizing that adaptation and resilience remain priorities for the region, he said ambitious finance is needed. He noted that spending money on building resilience now saves money, compared to paying for repairs and reconstruction following a disaster. Ambassador LaRocque also highlighted the success of past partnerships between USAID and regional organizations in building climate capacity in the region, including CCAP.

Ambassador Sarah-Ann Lynch, U.S. Ambassador to Guyana and CARICOM, shared some of the climate impacts affecting Guyana and emphasized the U.S. Administration’s commitment to global climate action. As part of this commitment, USAID is developing a new climate strategy and plans to share it at COP26 in November 2021. She also discussed USAID ESC participation in the advisory group providing input into this strategy, saying the symposium proceedings will directly inform the ESC Mission’s input to the strategy. “Our efforts over the coming years will support your vision for a climate resilient Caribbean,” she said.
MOU ON REGIONAL CLIMATE ACTION
USAID and leading regional climate change entities reaffirmed their long-standing partnership by signing an MOU. This agreement recognized the urgent need for further climate action in the ESC region. Signatories included Clinton White, Regional Representative, USAID/ESC; Dr. Colin Young, 5Cs; Dr. David Farrell, CIMH; and Elizabeth Riley, CDEMA. CARICOM Secretary General Ambassador Irwin LaRocque and Ambassador Sarah-Ann Lynch served as witnesses.

Signatories and witnesses hold copies of the signed MOU during the symposium opening on June 16, 2021 (from top, right to left: Clinton White, Ambassador Irwin LaRocque, Elizabeth Riley, Ambassador Sarah-Ann Lynch, Dr. David Farrell, Dr. Colin Young).

“This MOU will] strengthen the current institutional ties between them, as a basis for collaborating in the delivery of services to [CARICOM member states] located in the ESC, as the region seeks to protect its human and natural assets and build resilience to the impact of climate change. It’s these kinds of agreements that will bring us all closer to achieving our climate goals,” said Ambassador Lynch.

KEY TAKEAWAYS AND RECOMMENDATIONS
• USAID remains committed to working hand-in-hand with partners in the region to implement climate solutions on the ground.
• Regional actors recognize the role USAID funding has played in capacity building and generating evidence to effectively address climate change. There is an expectation the United States will provide strong leadership in scaling-up climate finance for developing countries.
• The revised Regional Framework for Achieving Development Resilient to Climate Change3 will provide guidance for USAID’s initiatives on climate finance, capacity building, and technology transfer in the region.
• The U.S. can build on the Caribbean Centre for Renewable Energy and Energy Efficiency’s (CCREEE) Project Preparation Facility to promote public and private financing to accelerate the ESC region’s transition to low-carbon and climate-resilient development.
• Small, vulnerable states need access to concessional development financing to achieve resilience before disasters and not after they strike.

3 The original Regional Framework is available here.
Climate change is causing more frequent and intense weather events, leading to less defined wet and dry seasons, periods of heavy rainfall and drought, increased ambient atmospheric and sea surface temperatures, rising sea levels, coastal erosion, and coral reef loss. Caribbean nations are highly sensitive to these changes due to their small geographic size, low coastal elevations, fragile landscapes, and tourism-reliant economies. Recent cases of extreme hurricanes in the region, including Maria, Irma, and Dorian, bear testimony to the changes taking place.

The second session of the Regional Climate Symposium took place on June 16, following the symposium opening. Speakers discussed how to use science and technology to understand the human costs of climate change (e.g., loss of life and illness, displacement, and GDP loss). Speakers highlighted how innovative tools can help people better prepare for, recover from, and adapt to climate impacts. The speakers also emphasized the significant climate action already underway in the Caribbean region through partnerships with private, public, and academic sectors.
SPEAKERS
- Professor Michael Taylor, Lecturer, Department of Physics, Faculty of Pure and Applied Sciences, the University of the West Indies (UWI)
- Dr. Cedric Van Meerbeeck, Climatologist, CIMH
- Dr. Mark Bynoe, Assistant Executive Director, 5Cs

Moderator: Dr. Janice Cumberbatch, Lecturer, Centre for Resource Management and Environmental Studies, UWI

Wise Up, Heads Up, Wake Up: Climate Change in the Caribbean
Professor Michael Taylor from UWI kicked off the virtual session by delivering three key messages: “Wise up! The climate is changing and this is creating new challenges. Heads up! The climate will continue to change. Wake up! The time to act is now.” Professor Taylor emphasized the Caribbean region is already experiencing a worst-case scenario for climate change and can no longer afford the cost of catastrophic climate impacts. He pointed to the 2017, 2019, and 2020 hurricane seasons as evidence the region is already experiencing “unprecedented” climate change. Emphasizing the need for education and collaboration, he outlined the necessity of a strong mitigation and adaptation agenda that is evidence-based and contextualized to the challenges of the region.

Climate-Related Hazards in the OECS Region: Trends, Projections, and Early Warning
Dr. Cedric Van Meerbeeck, a climatologist at CIMH, spoke about the Caribbean Regional Climate Centre (CRCC) housed at CIMH, which provides capacity building and data for better decision-making. He described what can happen if action is not taken, providing illustrative climate risk examples at the household level (Figure 2). He explained how the early warning systems that CIMH is implementing can provide people with information to prepare for and adapt to extreme weather. He recognized USAID’s partnership in supporting regional capacity building efforts over the last 10 years.

Climate Change and Small Island States in the ESC: Impacts, Adaptation, and Innovation
Dr. Mark Bynoe, assistant executive director of the 5Cs, spoke about regional responses to climate change, highlighting the economic and social implications of climate impacts. He noted how extreme events have impacted the long-term nutmeg market in Grenada, a crop that takes a decade to mature. He pointed out that
the effects of natural disasters have left many financially vulnerable but said there are also social impacts. “Social impacts are not as easily captured in reports [as economic impacts] and need to be incorporated,” he said. He cited examples in Dominica, which has seen an increased demand for housing loans because many residents can no longer rely on rental income from medical students who transferred to other universities because of hurricanes. He also pointed to reports of increased alcohol consumption and domestic abuse in Guyana. Dr. Bynoe stressed how important it is to involve youth and women in implementing climate efforts and nature-based solutions, highlighting the way the Guyana Mangrove Restoration Project delivered livelihood strategies for women in coastal communities.4

KEY TAKEAWAYS AND RECOMMENDATIONS

• Development strategies must incorporate climate change issues, place people at the core of these strategies, and include social scientists in climate change discussions.

• Capacity building efforts should tackle current problems. Systems need to be built to provide solutions for the future.

• Solutions must be tailored to the region, not simply imported from other parts of the world.

• The Caribbean region has enough information, capacity, expertise, and examples to strengthen climate resilience. The time for action is now, and the youth need to be involved as they have the enthusiasm and energy to support these efforts.

RESOURCES

The following resources provide more information on climate science in the region:

• The State of the Caribbean Climate

• Climate Trends and Projections for the OECS Region

• Caribbean Regional Climate Centre

• Programme for Building Regional Climate Capacity in the Caribbean

• Regional Framework for Achieving Development Resilient to Climate Change

• Delivering Transformative Change 2011–2021: Implementing the CARICOM ‘Regional Framework for Achieving Development Resilient to Climate Change’

• Guyana Mangrove Restoration Project and Guyana Mangrove Restoration and Management Department

4 The Guyana Mangrove Restoration Project was a European Union and Government of Guyana-funded project, implemented by the National Agricultural Research Extension Institute from 2010 to 2013, after which time it became the Mangrove Restoration and Management Department within the Institute.
Throughout 2020 and 2021, the overlapping crises of climate change and the COVID-19 pandemic have had grave consequences for the social and economic well-being of residents in the ESC region, particularly for those in vulnerable groups. At the same time, these challenges present opportunities to build resilience, change the way people live and work, and give rise to new sources of income generation. In the third session of the Regional Climate Symposium, panelists discussed the social, health, and economic impacts of climate change across sectors in the region, including the ways COVID-19 intersects with climate impacts. Panelists also discussed how climate action and efforts to promote gender equality and social inclusion can complement each other to strengthen the resilience of vulnerable groups, such as women and children.

In his opening remarks, Deputy Chief of Mission Joaquin Monserrate of the U.S. Embassy for Barbados and the Eastern Caribbean described climate change as “our shared challenge,” emphasizing the need for collaboration. He cited the damage caused by Hurricanes Maria and Irma, and stressed the Biden-Harris Administration’s commitment to climate leadership in the United States and abroad, including a commitment to reduce greenhouse gas emissions by 52 percent by 2030 and double funding for climate resilience.5

5 President Biden announced this commitment during the Leaders Summit on Climate.
HIGHLIGHTS

The Reality Post COVID-19: Economic Challenges Facing the Caribbean

Dindial Ramrattan, a statistician at the CDB, highlighted the economic impacts the global financial crisis, COVID-19 and climate impacts have had on the Caribbean region, sharing that natural disasters have cost the CDB’s borrowing member countries (BMCs) more than $27 billion in recent years. He illustrated the higher exposure of Caribbean SIDS to natural disasters, relative to other SIDS and other countries (Figure 3). He also showed the dramatic drop in tourist arrivals due to the pandemic. Given the significant impact of both COVID-19 and climate change on tourism, Ramrattan called for increased investment and diversification of the economy to make the region less vulnerable.

Climate Change and the Health Sector

Dr. Jonathan Drewry, PAHO’s Climate Change and Health Advisor, discussed the health impacts of climate change and approaches the organization has taken to address these impacts. He emphasized the importance of ensuring that the health sector is engaged in climate discussions and the development of specific health adaptation plans as well as being included in countries’ NDCs. According to Dr. Drewry, health will be a significant focus of discussions at the upcoming COP26 in November 2021, where the World Health Organization (WHO), PAHO’s parent organization, is planning a number of activities.

COVID-19, Climate Change, and Non-Communicable Diseases

Dr. Laura-Lee Boodram, Head of Vector-borne Diseases at CARPHA, shared key points from the Agency’s recent Annual Research Conference focused on the COVID-19 pandemic, climate change, and non-communicable diseases. CARPHA
USAID is working to address the impacts of COVID-19 and climate change on those who suffer from chronic diseases. Dr. Boodram highlighted the multi-dimensional strategy to address health, economic, education, social, and security issues that OECS developed in response to outbreaks and disasters.

Gender and Labor: Impacts of Climate Change and COVID-19

Isiuwa Iyahen, a programme specialist at UN Women, spoke of the disproportionate ways women have been impacted by the pandemic, including greater job loss and exposure to COVID-19 than men due to their employment in the health sector. Isiuwa also cited that women performed nearly three times as much unpaid care and domestic work than men globally prior to COVID-19—a figure she said has certainly increased since the start of the pandemic. She pointed out the many ways in which such an increased care burden created specific challenges for Caribbean women (while emphasizing the need for more data collection on unpaid work). She called for strengthening of social protection systems to be more gender-responsive and addressing structural barriers to women’s economic security.

Climate Impacts on Children and Vulnerable Populations

David Knaute discussed the intersecting impacts that the climate crisis and the pandemic have had on children, citing that 32 percent of children lived in poverty prior to the pandemic (compared with 20 percent of the adult population). According to him, more than 80 percent of climate-related illnesses, injuries and deaths are found in children. He called for rights-based approaches to ensure frameworks are designed to account for vulnerable groups and young people, also stressing the critical role of education for resilience and recovery.

Knaute also highlighted the collective priority of UN agencies to ensure that all countries’ NDCs address the needs of children and young people.

KEY TAKEAWAYS AND RECOMMENDATIONS

- The intensive and extensive risks created by the pandemic disproportionately affect the most vulnerable groups, including women, children, youth, migrants, non-binary people, and people with disabilities and chronic diseases.
- There is a need to develop multi-hazard response plans and to build resilience in the health sector to mitigate potential climate impacts.
- It is important to diversify investments into new sectors, including improving social indicators to reduce unemployment and reignite the economy.
- Women’s and men’s progress are not mutually exclusive; a cultural shift in support of gender equality is needed for greater resilience in the face of climate, health, and economic challenges.
- Within a social resilience framework, guidelines and strategies should encourage health sector and disaster management organizations to involve vulnerable populations.

---

9 OECS Commission and UNICEF. Child Poverty in the Eastern Caribbean Area, Final Report, 2017. Poverty rate is defined as the poor population/total population, and child poverty rate as the number of poor children/all children.
RESOURCES

The following resources provide more information on the social, health, and economic impacts of climate change:

Climate Change and Caribbean Economies
- **CDB Economic Reviews**
- **A Policy Blueprint for Caribbean Economies**
- **Measuring the Blue Economy: The System of National Accounts and Use of Blue Economy Satellite Accounts**
- **Financing the Blue Economy: A Caribbean Development Opportunity by CDB**

Climate Change and Health
- **Climate Change and Health (PAHO)**
- **Delivering a Net Zero National Health Service**
- **COP26 Health Programme (WHO)**
- **CARPHA Annual Conference: Pandemic, Non-Communicable Diseases, and Climate Change – The Caribbean’s Triple Threat**

Gender and Labor
- **Making Social Protection Gender-Responsive: Lessons from UN Women’s Work in the Eastern Caribbean**
- **COVID-19 and Considerations for Inclusive Economic Empowerment in CARICOM**
- **Summary Report - Status of Women and Men Report: Productive Employment and Decent Work for All**
- **Gender and Labour in Saint Lucia: Evidence From Household Surveys: A Policy Brief, Gender Aware Beneficiary Analysis of Saint Lucia’s Public Assistance Programme, Case Study on the Saint Lucia National Eligibility Test**
- **Conditional Cash Transfers: Learning From the Literature: A Policy Brief**
- **Considerations in Using Proxy Means Tests in Eastern Caribbean States: A Policy Brief**
- **Financial Support For Single Parents in Caring for Their Children: Private Child Support and Social Assistance**

Climate Change and Children
- **Caribbean Children Facing Climate Crisis**
- **Children and Climate Change: Education in Emergencies**
LISTENING TO THE FIELD: SECTORAL IMPACTS OF CLIMATE CHANGE

As discussed in the previous session, climate change impacts on national economies and individual livelihoods in the ESC region are significant. Adapting to these challenges requires sector-specific planning as well as coordination across sectors.

The fourth session of the Regional Climate Symposium focused on identifying and prioritizing the climate impacts that require support at the sectoral level and considering them in the context of COVID-19. Panelists representing the water, energy, agriculture, and fisheries sectors discussed how to strengthen resilience, highlighting cutting-edge innovations to help these sectors over the next decade. The panel also included the perspectives of a youth representative.
SPEAKERS
• Milton Haughton, Executive Director, Caribbean Regional Fisheries Mechanism
• Ignatius Jean, Executive Director, Caribbean Water and Sewerage Association
• Cherri-Ann Farquharson, Knowledge Management and Capacity Development Expert, CCREEE
• Kistian Flemming, Climate Research Assistant, Caribbean Agricultural Research and Development Institute
• Jhannel Tomlinson, PhD candidate at UWI and member of the Caribbean Youth Environment Network (CYEN)-Jamaica

Moderator: Leisa Perch, Practice Manager, SAEDI Consulting

HIGHLIGHTS

Fisheries
Milton Haughton, Executive Director of the Caribbean Regional Fisheries Mechanism, emphasized that Caribbean lives and culture “center around the sea and depend on coastal and marine sources” and noted that fishing communities are among the most isolated and vulnerable in the region. He explored the ways climate impacts, such as storms, droughts, coral bleaching, and changes in current patterns, salinity, and fish distribution, have disproportionately affected the fishing sector, damaging both the natural systems and fishing equipment that fisherfolk rely on.

Water
Ignatius Jean, Executive Director of the Caribbean Water and Sewerage Association—an association of water utilities in the Caribbean—shared the challenges extreme weather events have brought to the water sector, including changes to the hydrological cycle and impacts on freshwater supply. He also recognized the support the CDB and the Inter-American Development Bank provide for building resilience in the water sector, and highlighted the Regional Strategic Action Plan for Building Governance and Resilience in the Water Sector. This plan calls for increased energy efficiency in water systems, the need for more capacity building, and greater public awareness.

Energy
Cherri-Ann Farquharson, Knowledge Management and Capacity Development Expert from CCREEE, described how climate change affects the energy sector, primarily by driving an increase in demand. She also noted that the sector is the largest contributor to climate change.10 Giving an overview of CCREEE’s strategy to facilitate an energy transition through the “five Ps” (plan, projects, policy, partnerships, and people), she said, “people are at the center of everything we are doing,” and noted that it is essential to get input and buy-in from stakeholders. She also described the organization’s project preparation facility, which provides support to CARICOM member states to access funding for energy-related projects.

Agriculture
Discussing the agriculture sector, Kistian Flemming, Climate Research Assistant at the Caribbean Agricultural Research and Development Institute, highlighted the negative impacts climate change has had on this agricultural sector and individual farming communities. These range from diminished crop yields as a result of droughts to lost or damaged land caused by intense hurricanes. He noted the need for efficient water management, sustainable production practices that do not harm the environment, and adding value to agricultural products in the processing stage, including simple solutions for storage, freezing, and drying.

10 According to World Resources Institute data, the energy sector is the largest source of human-caused CO₂ emissions, accounting for more than two-thirds of global emissions.
Youth Perspective

Jhannel Tomlinson, a PhD candidate at UWI, provided a youth perspective on climate change. She noted the significant impacts of climate change and COVID-19 on young people, including reduced access to schooling, lower incomes earned by their caregivers, and limited employment opportunities.

Calling for more inclusive processes, she urged the inclusion of individuals suffering from climate impacts in their daily lives—such as women, youth, persons with disabilities, and other vulnerable groups—in the consultation and decision-making processes, in addition to climate experts.

KEY TAKEAWAYS AND RECOMMENDATIONS

- There is often a disconnect between the research produced and what is practiced on the ground. Regulatory frameworks for all sectors need to be underpinned by science.
- Vulnerable and marginalized populations are among the most affected by both climate and COVID-19 impacts. It is crucial to actively engage these groups in the process of building resilience, including through policy development and implementation.
- Research is one area that can help transform various sectors, including opportunities within the blue economy. Other key factors include: ensuring solutions are contextually relevant to the region and driven by science, evidence, and innovation.
- Strong public-private sector partnerships can help to enhance resilience by creating business opportunities and encouraging innovation.
- There are opportunities for innovation in renewable energy use across sectors; other areas where innovation is possible include ocean thermal energy, ocean desalination, aquaculture, fishing vessel and gear design, the blue economy, and early warning systems on phones.
- Sectors don’t operate in isolation; the climate impacts experienced in one sector are felt in others. No matter the sector, it is critical to create a safe space to bring in different perspectives from all sectors and to adopt a multi-disciplinary, inclusive, and integrated approach to strengthening climate resilience.

RESOURCES

The following resources provide more information on the sectoral impacts of climate change:

Fisheries
- Commonwealth Marine Economies (CME) Programme: Caribbean Marine Climate Change Report Card Scientific Reviews

Water
- Regional Strategic Action Plan for Governance and Building Climate Resilience in the Water Sector in the Caribbean

Energy
- CCREEE’s Strategic Programs for the CARICOM Region
- CCREEE Project Preparation Facility
- CARICOM Energy Knowledge Hub

Agriculture
- Caribbean Agro-Climatic Bulletin of the CariSAM
CARIBBEAN COUNTRIES HAVE MADE GREAT STRIDES IN DEVELOPING STRATEGIES AND PLANS TO ADAPT TO CLIMATE CHANGE TO SUPPORT THEIR ECONOMIES AND COMMUNITIES. DESPITE THEIR SMALL CONTRIBUTION TO GLOBAL GREENHOUSE GAS EMISSIONS, THE REGION’S COUNTRIES ARE ALREADY EXPERIENCING SEVERE CLIMATE EVENTS THAT DISRUPT ECONOMIC ACTIVITY AND LIVELIHOODS—FROM SLOW ONSET DROUGHTS AND FLOODS TO SUDDEN-ONSET DISASTERS. IN RESPONSE, THE REGION’S COUNTRIES ARE LEADING EFFORTS TO MAKE THE VISION OF CLIMATE-SMART DEVELOPMENT A REALITY. THEY ARE MOVING WITH INCREASING URGENCY TO DEVELOP MORE SUSTAINABLE ENERGY AND TRANSPORT SYSTEMS; STRENGTHENING THE RESILIENCE OF THEIR CITIES; ENHANCING NATURAL CLIMATE SOLUTIONS IN FORESTS, OCEANS, AND AGRICULTURE; AND PREPARING PEOPLE, PUBLIC SERVICES, AND INFRASTRUCTURE FOR THE CLIMATE SHOCKS TO COME.

In the fifth session of the Regional Climate Symposium, national government representatives and the OECS Commission shared national responses to climate change best practices and highlighted differences and similarities in approaches, including in technology and innovation. The speakers discussed gaps and opportunities for further support, including financing needs for adaptation.
Suriname’s Adaptation and Mitigation Plans to Counter the Effects of Climate Change

Ambassador Karen Lynn Williams, the U.S. Ambassador to Suriname, opened the session by recognizing the impacts the climate crisis has had on Suriname, particularly on vulnerable groups such as Indigenous Peoples. She emphasized USAID’s priorities to elevate human rights and strengthen legal and social systems within the context of climate action, and highlighted recent USAID-funded initiatives in Suriname, including CCAP, which provided 16 weather stations and computer equipment to monitor weather patterns.

Permanent Secretary Ritesh Sardjoe elaborated on the climate impacts Suriname is experiencing, including saltwater intrusion and more frequent flooding and drought, which have affected drinking water and hydropower supply. Because 80 percent of the country’s population lives along the coast,11 he stressed that coastal retreat is a high priority. He described the national plans Suriname has developed to address the effects of climate change, including its NAP, which outlines a cost-effective pathway to sustainable development that minimizes ecological impacts. The plan’s strategies include engineering measures to increase sedimentation and mangrove restoration to address coastal retreat.

Low Carbon Development in Guyana

Suriname’s neighbor, Guyana, is facing many of the same challenges due to its coastal location and low-lying elevation. Andrew Bishop, Guyana’s lead climate negotiator, reflected on the country’s success in maintaining one of the lowest deforestation rates in the world through policy measures, including a National Forest Policy promoting sustainable forest management. He discussed Guyana’s Low Carbon Development Strategy, the first of its kind. Created in 2009, the strategy recognizes the services nature provides and puts monetary incentives in place to keep the country’s vast forests standing while funding low-carbon economic development. It is currently being revised to incorporate biodiversity, water, and the marine economy. Bishop called for more research on localized weather forecasting and stressed the need for increased funding for implementation.

Roofs to Reefs: Climate Adaptation in Barbados

Dr. Hugh Sealy, the Barbados Special Envoy for Climate Change, focused on the country’s adaptation response to climate change, noting most climate impacts are hydrological, including less rainfall, higher air temperatures, and more intense hurricanes. Barbados is also impacted by sea level rise, warming ocean temperatures, ocean acidification, coral reef loss, and the

---

11 As of 2012, Suriname had a population of 541,638, 80 percent of whom lived in coastal areas. Source: PAHO. Health in the Americas+, 2017 Edition. Summary: Regional Outlook and Country Profiles. PAHO, 2017. (Current estimates are higher.)
increased presence of sargassum. Dr. Sealy highlighted Barbados’ flagship Roofs to Reefs Programme, which mainstreams resilience across all sectors, including shelter, energy, water, waste, land use and marine spatial planning, and ecosystem conservation. He estimated that Roofs to Reefs will cost $1 billion over 10 years. The initiative has received a readiness grant from the GCF\(^2\) and will continue to seek funding through grants, loans, and direct government intervention, among other sources.

**Saint Lucia’s Climate Action Response**

**Dawn Pierre-Nathoniel**, Saint Lucia’s Deputy Chief of Sustainable Development, also focused on her country’s response under the Climate Change Adaptation Policy, highlighting outputs from its NAP process, including communications strategies, research, capacity building, private sector engagement, financing, and monitoring and evaluation. She said lessons learned from Saint Lucia’s processes could be used and adapted by other countries, including the [Guidelines for the Development of Sectoral Adaptation Strategies](#).

---

\(^2\) The approved Roofs to Reefs readiness proposal can be found [here](#).

---

**CLIMATE CHANGE COMMUNICATIONS IN SAINT LUCIA**

Communication has been a central component of Saint Lucia’s climate action plans. The Department of Sustainable Development has worked with soca and calypso musicians, poets, and youth actors to develop messages in both English and Kweyol to reach residents and garner support for national climate efforts.

The country has developed a series of communications tools, including:

- [NDC Youth D.R.A.M.A video](#)
- [Saint Lucia and Climate Change Adaptation Calypso](#)
- [Climate Change Adaptation Kweyol PSA / Climate Change Adaptation English PSA](#)
- [1.5 to Stay Alive Spoken Word](#)
- [1.5 to Stay Alive Soca - Arthur and Mongstar](#)

Dr. Desmond “Mighty Pep” Long and other calypso singers appeared in a video about climate adaptation in Saint Lucia.
Regional Perspective on Climate Resilience

Chamberlain Emmanuel, Head of the Environmental Sustainability Cluster at the OECS Commission, provided a regional perspective on responding to climate change, speaking about the OECS roadmap to sustainability known as St. George’s Declaration of Principles for Environmental Sustainability. He shared data from a CIMH-OECS study, which projected temperatures in the region will rise as much as 5 degrees Celsius by the end of the century. During the May to October heat season and as soon as this decade, 50–80 percent of days will be considered hot days (Figure 4). He recognized USAID’s work to support the ESC region in its first regional climate program, Rallying the Region to Action Against Climate Change. This program set the foundation for both hard and soft adaptation approaches and emphasized the need to continue to combine these approaches. He shared other climate and sustainability initiatives, including the Eastern Caribbean Solar Challenge, which supported OECS member states to transition to solar energy. Emmanuel identified the need to build capacity, increase access to funding, including for scaling up demonstration projects, and incorporate project learning into future climate action.

KEY TAKEAWAYS AND RECOMMENDATIONS

- Collaboration is essential; COVID-19 reinforces that threats have no border and can harm anyone.
- There is a need to integrate hard and soft approaches to ensure long-term sustainability. While physical structures need to be retrofitted or designed in ways to adapt to a changing climate without further contributing to it, so do policies and decision-making.
- Areas requiring further research include human mobility, energy and transport sectors, risk transfer mechanisms, slow onset events (such as sea level rise), effective evidence-based water treatment systems, and nature-based solutions like coral reef restoration.
- It is critical to involve artists, both visual and performing, to help communicate messages and draw in a variety of audiences.

• Caribbean states are among the most impacted by climate change, yet affordable financing has not been sufficiently considered. Traditional climate financing models are not fully addressing countries’ challenges. There is a need for:
  • Grant financing (over non-concessionary loans)
  • Less cumbersome institutional arrangements for receiving funds
  • An appreciation of the limitations of the private sector in the context of ESC countries

RESOURCES
The following resources provide more information on climate planning at the country and regional levels:

NDCs
• Suriname (2020)
• Guyana (2016)
• Barbados (2016)
• Saint Lucia (Updated 2021)

NAPs
• Suriname (2019)
• Saint Lucia (2018)

Other Documents and Projects:
• Guyana National Forest Plan (2018)
• Roofs to Reefs (Barbados)
• Saint Lucia Adaptation Policies, Strategies, and Plans
• Saint Lucia’s Climate Change Research Strategy (2020-2030)
• St. George’s Declaration of Principles for Environmental Sustainability
• OECS Toolkit: Building Resilience with Nature and Gender in the Eastern Caribbean
Today’s youth may face the worst effects of climate change. However, far from being victims, youth are raising their voices to fight climate change on a scale never seen before. Youth are playing a vital role by creating movements and organizations to catalyze action, safeguard the environment, and promote sustainable development in the Caribbean region.

The sixth session of the Regional Climate Symposium featured the voices of youth activists engaged in climate change and other environmental issues at the national, regional, and global levels. From a youth lens, they discussed the challenges and gaps that need to be addressed to strengthen climate resilience. Panelists shared their personal journeys to climate activism and success stories from the youth climate movement. They also discussed priority areas for action and ways to increase youth involvement in climate action.
SPEAKERS

- Jhannel Tomlinson, PhD candidate at UWI and member of the CYEN (Jamaica)
- Jevanic Henry, Special Envoy on Climate Change for the CYEN (Saint Lucia)
- Vaughn-Xavier Jameer, Community Associate at Student Energy (Trinidad and Tobago)

Moderator: Leisa Perch, Practice Manager, SAEDI Consulting

HIGHLIGHTS

Jhannel Tomlinson, representing CYEN-Jamaica, opened the discussion. She pointed out that while climate change discussions have traditionally focused on how it impacts adults, youth have an increasing presence in climate activism and are being recognized as change agents. Tomlinson highlighted several successful youth-led initiatives in Jamaica and in Caribbean, including the Jamaica Climate Change Youth Council and the Young Women’s Climate Change Mentorship Program (through the Frida Fund), which brought mentorship opportunities to young women in the region.

Vaughn-Xavier Jameer, representing Student Energy, highlighted the ways the organization is engaging its network of 50,000 youth, empowering them to play a role in accelerating the transition to low-carbon energy in the region. For the first time, he said, Caribbean youth are involved in the UN Climate Change Conference of Youth, a global conference for youth climate activists occurring ahead of COP26 in Glasgow, Scotland, this year.

Jevanic Henry, representing CYEN-Saint Lucia, discussed how youth in the region have grown their capacity through diverse engagement in the climate space and highlighted the 2015 1.5 to Stay Alive Campaign that galvanized climate action in the Caribbean. To youth, he posed the question, “How do you measure success and what are key milestones within the youth engagement space?” He also shared a success story about youth playing a critical role in the revision process around the children and youth component of Saint Lucia’s NDC.

KEY TAKEAWAYS:

- It is important to relate climate change back to things that matter to youth. In particular, that means making connections to the future, such as job prospects and why youth should want to have a say in climate issues.
- Youth have shown a deep commitment to addressing the climate crisis and there are many movements happening in the Caribbean for them to join.
- Jevanic mentioned the “Three Bs” in taking climate action forward:
  - Breaking down language to get more people involved
  - Bringing forth positive outcomes from climate action
  - Bridging the gap between all stakeholders involved
- Jhannel described the “Three Cs:”
  - Communication on climate change
  - Collaboration between public sector, private sector, and youth-led organizations
  - Cohesion: Use individual strength and whatever assets are available to advocate for vulnerable groups

RESOURCES

The following resources provide more information about youth and climate change in the Caribbean:

- CYEN
- Student Energy Theory of Change
- 16th UN Climate Change Conference of Youth
- Stay Alive and Thrive campaign
- Jamaica Climate Change Youth Council
- Next Generation Climate Board
FINANCING FOR ADAPTATION AND RISK REDUCTION

Financial instruments and insurance mechanisms play an important role in promoting climate resilience and disaster recovery. They can support interventions in the many areas threatened by climate change, including health, livelihoods, food and water security, energy systems, the built environment, and ecosystem conservation.

The seventh session of the Regional Climate Symposium highlighted regional examples of how financial instruments, including insurance mechanisms, are helping countries avert, minimize, and address the impacts of climate change. Panelists discussed how using these tools can enhance access to existing sources of finance for vulnerable groups, build the capacity of regional stakeholders to respond to climate change, and promote the engagement of women, youth, and other groups. Panelists considered how to leverage public-private partnerships for climate action and how to identify needs related to climate finance, including how to increase the involvement of social financial institutions such as credit unions and cooperatives.

Chargé d’Affaires Shante Moore, representing the U.S. Embassy in Trinidad and Tobago, reminded the audience that June is the start of the Atlantic hurricane season. The year 2020
broke the record for the most named storms in Caribbean history, and the National Oceanic and Atmospheric Administration (NOAA) predicts 13 to 20 named storms—including three to five major hurricanes—in 2021. Moore highlighted USAID’s work in the region, including CCAP, the new Caribbean Energy Initiative, and the establishment of finance mechanisms to support the long-term and effective management of marine protected areas. Through CCAP, Trinidad and Tobago and other countries benefited from capacity-building support to develop proposals to the GCF. This brought more than $54 million in GCF resources to the region to support readiness grants and adaptation projects, according to Moore. “When we invest in climate work around the world, it is an opportunity for economic transformation and ultimately an investment in the U.S. and global security,” the Chargé d’Affaires said.

**SPEAKERS**

- Chargé d’Affaires Shante Moore, U.S. Embassy in Trinidad and Tobago
- Dr. Orville Grey, Regional Manager for the Caribbean, GCF
- Donneil Cain, Project Development Specialist, 5Cs
- Hopeton Peterson, Environmental Specialist, CDB
- Crispin d’Auvergne, Climate Change and Disaster Risk Management Coordinator, OECS Commission
- Isaac Anthony, CEO, CCRIF SPC (formerly the Caribbean Catastrophe Risk Insurance Facility)
- Kieran St Omer, Research Officer, Strategic Planning and Projects, Eastern Caribbean Central Bank

**Moderator:** Dr. Janice Cumberbatch, Lecturer, Centre for Resource Management and Environmental Studies, UWI

**HIGHLIGHTS**

**GCF: Financing Resilience, Building, and Low-Carbon Development**

Dr. Orville Grey is the Regional Manager for the Caribbean for GCF, the world’s largest climate finance institution; the GCF serves as the financial mechanism of the UNFCCC and the Paris Agreement and supports climate action in Caribbean countries through loans, equities, and grants. Dr. Grey said the GCF has an appetite for climate-smart investments and highlighted several opportunities, including the Readiness Programme, which provides grants and technical assistance for countries to efficiently engage with GCF. The Readiness Programme supports up to $3 million per country for NAPs and other adaptation planning processes. He said GCF is seeking to reach vulnerable groups through its direct access modality and simplified approval process, which make financing more accessible to local organizations.

**5Cs: Supporting CARICOM Member States to Access GCF Funding**

Donneil Cain, a Project Development Specialist at the CDB, outlined how the 5Cs is actively training sector-specific experts, fostering partnerships, and developing projects for submission to the GCF and other donors, in an effort to fulfill its mandate to coordinate the region’s response to climate change. As a regional implementing entity, the 5Cs can submit GCF funding proposals for climate change mitigation and adaptation valued at up to $50 million each. To help CARICOM member states access climate financing, the 5Cs has set up a project preparation facility within its Project Development and Management Unit to aid countries in developing project proposals for submission to the GCF and bilateral donors. Mr. Cain said the 5Cs is well-positioned to assist countries, as it offers a unique combination of fiduciary capacity, knowledge of the Caribbean region, and ability to mobilize technical skills to shape the region’s climate change agenda.

---

15 NOAA, 2021. NOAA predicts another active Atlantic hurricane season.
CDB and the Climate Change Finance Challenge
The CDB is a regional implementing entity for both GCF and the Adaptation Fund. Hopeton Peterson, CBD Environmental Specialist, spoke about the Bank’s experience supporting BMCs to access financing through these funds. Their successes include developing multilateral partnerships to scale-up climate action at the national, sectoral, and community levels in BMCs and securing approximately $423.5 million for climate financing between 2012 and 2020, according to Peterson. He added that the Bank channeled this funding to BMCs through grants ($102.6 million), concessional loans and technical assistance ($235.9 million), and loans ($85 million). However, major challenges also exist, including limited concessional resources, high BMC indebtedness, insufficient data to plan interventions, limited BMC capacity for project proposal preparation, and inadequate understanding of funding requirements. Despite these challenges, Mr. Peterson stressed that the CDB “remains committed to championing climate change finance in the region,” and the Bank has allocated 25 to 30 percent of its budget to managing climate change risks in BMCs.

OECS: Ambitious Climate Action Requires Ambitious Funding
OECS has 11 member countries, all on the front line of climate change. Speaking on behalf of the OECS Commission, Climate Change and Disaster Risk Management Coordinator Crispin d’Auvergne said OECS countries’ ambitious NDCs will require significant funding. According to d’Auvergne, financial flows to address climate change are lower in the Caribbean than in many other regions, despite it being home to many of the countries most vulnerable to climate change impacts. Speaking about the recent Council of Ministers on Environmental Sustainability meeting, he focused on the launch of the Eastern Caribbean Solar Challenge. This initiative aims to engage governments, the private sector, development partners, and households to increase solar electricity and heating access across the region by the end of 2023. D’Auvergne emphasized the need for small-scale funding and capacity building for climate interventions at the household and community levels and said the OECS is partnering with CCRIF to build disaster resilience in at-risk communities.

Parametric Insurance to Provide Relief from Climate Events
Isaac Anthony, CEO of CCRIF, discussed the facility’s work in disaster risk financing as the world’s first multi-country risk pool based on parametric insurance. Whereas traditional insurance typically provides payments for damages incurred, parametric insurance allows members to receive a payment when a qualifying event (such as a hurricane) occurs, regardless of the amount of damage. CCRIF has already made 50 payouts

---

16 Between June 2007 and July 2021, CCRIF made payouts totaling $202,455,054. For a description of these payouts, visit the CCRIF website.
17 CCRIF offers five parametric insurance products to its 23 members, including 19 Caribbean governments, three Central American governments, and one electric utility.
totaling more than $200 million to its members. Anthony highlighted CCRIF’s insurance products, which provide coverage for tropical cyclones, excessive rainfall, earthquakes, and the electric utilities and fisheries sectors. These products include the Caribbean Ocean and Aquaculture Sustainability Facility, an insurance product that governments can purchase to provide payouts to fisherfolk who are negatively impacted by bad weather; the Livelihood Protection Policy, which provides protection against financial losses that result from extreme weather events such as heavy rainfall and strong winds; and index-based insurance for the agricultural sector.

Financing Energy Transition and Promoting Investment in Resilience and Sustainable Recovery in Eastern Caribbean

Kieran St Omer gave an overview of the Eastern Caribbean Central Bank’s (ECCB) work on climate change and sustainability, noting that “the ECCB can help facilitate lucrative investment mechanisms that are more responsive to the financing needs and prevailing investment risks in the region.” She said renewable energy is critical to all sectors and industries and estimated that 70 percent of climate flows will be directed at renewable energy by 2022. Accelerating the transition to renewable energy will require legislative reforms, political will, and a mix of government, concessional, donor, and market-based funding, she said. She also noted that the ECCB is planning to establish a renewable energy infrastructure fund facility to enable the Bank to leverage limited public finance, which will impact many key sectors—including health and tourism—and will support adaptation of new technology.

**KEY TAKEAWAYS AND RECOMMENDATIONS**

- Existing challenges for countries to access finance include limited availability of concessional resources, high debts, limited data and information to plan interventions, and a lack of understanding of funding requirements.
- A mix of top-down and bottom-up funding and capacity building approaches are needed to support community-level climate interventions.
- Disaster risk insurance represents a cost-effective way to begin recovery after a catastrophic event, as it fills the gaps between immediate responses, aid, and long-term development.
- Micro-insurance mechanisms, which target individual and low-income people with limited access to mainstream insurances, are needed to truly reach vulnerable communities.

**RESOURCES**

The following resources provide more information about climate finance and insurance mechanisms:

**GCF:**
- GCF in Brief: Direct Access
- Enhanced Direct Access Pilot
- Simplified Approval Process

**OECS:**
- Unlocking a Green, Resilient and Inclusive Future for Eastern Caribbean SIDS: OECS 8th Council of Ministers on Environmental Sustainability
- Eastern Caribbean Solar Challenge
- OECS and CCRIF SPC Strengthen Disaster Resilience in At-Risk Communities

**CCRIF:**
- Livelihood Protection Policy
- Caribbean Ocean Aquaculture Sustainability

**ECCB:**
- ECCB Strategic Plan 2017-2021
- Assessment and Overview of Climate Finance Flows: Antigua and Barbuda 2014–2017

---

18 Through Renewable Energy for Latin America and the Caribbean, 10 countries in the region committed to increasing renewable energy capacity to at least 70 percent by 2030.
USAID APPROACHES TO CLIMATE CHANGE

Addressing climate change is an integral part of USAID’s work across programs and geographies. In the final session of the USAID/ESC Regional Climate Symposium, USAID staff highlighted best practices and approaches for responding to climate change in the Caribbean and around the world. Speakers from the Agency’s Bureau for Development, Democracy, and Innovation (DDI) and the Bureau for Resilience and Food Security (RFS) also identified potential areas and opportunities for USAID to contribute to regional climate resilience.

HIGHLIGHTS

USAID’s Climate Leadership
Ann Vaughan, Senior Advisor for Climate Change in RFS, provided background on the bureau’s work before presenting on USAID’s participation at the Leaders Summit on Climate, a virtual gathering of world leaders convened by President Biden. Of relevance to the Caribbean region are the climate finance commitments, which include a USAID
investment of $50 million to attract $3.5 billion in private sector financing by 2025 and to support 20 climate-vulnerable countries in doubling private sector funds for adaptation and resilience goals by 2025. In addition to the Agency’s membership in the Global Facility for Disaster Reduction and Recovery, USAID also joined the InsuResilience Global Partnership and the Risk-Informed Early Action Partnership.

**Scaling Up Financing for Clean Energy, Sustainable Landscapes, and Climate Adaptation**

Dr. Eric Hyman, an environmental economist at the Center for Economics and Market Development, provided examples of USAID and partners’ work in climate finance, including green bonds, payments for ecosystem services, reducing emissions from deforestation and forest degradation (REDD+), carbon markets, the Althelia Climate Fund, and the Development Finance Corporation. Among the measures he mentioned, the weather index insurance is particularly relevant to the ESC region. Under the project, USAID partners with domestic insurance and international reinsurance companies to provide weather-indexed insurance for farmers and renewable energy generation facilities. Dr. Hyman also spoke about USAID’s efforts to develop bank capacity to increase clean energy lending, including providing technical assistance and developing toolkits to help banks assess market and profitability of clean energy lending through Climate Economic Analysis for Development, Investment and Resilience, and other initiatives.

**Natural Climate Solutions**

Dr. Noel Gurwick presented on USAID’s natural climate solutions, focusing on pathways to mitigate greenhouse gas emissions caused by land use change and to increase carbon storage in the tropics by protecting, managing, and restoring land (Figure 5). He highlighted the Sustainable Wetlands Adaptation and Mitigation Program (SWAMP), which is especially relevant to the Caribbean region, where there are vast tracts of mangroves that both buffer coastal systems from the impacts of storms and store carbon. SWAMP supports countries to improve capacity for protecting and accurately measuring carbon stored within their mangroves. Dr. Gurwick also shared USAID-

---

19 FAO. *Case study on the cassava value chain in the Republic of Guyana*, 2018.
20 FAO. *Case study on the cassava supply chain in the Republic of Trinidad and Tobago*, 2018.
21 FAO. *Case study on the cassava farine, tomato and mango value chains in Saint Lucia*, 2018.
22 FAO. *Case study on the tomato value chain in the Republic of Trinidad and Tobago*, 2018.
supported research by the Consultative Group on International Agricultural Research (CGIAR) Program on Climate Change, Agriculture, and Food Security. CGIAR has explored the “alternate wetting and drying” irrigation technique to reduce methane emissions from rice production, which may be relevant for the rice industries in Guyana and Suriname.

**Energy and Climate Change**

**Jamila Amodeo** provided an overview of USAID’s energy programs and partnerships and shared a series of tools being used to implement global energy programs. Among the challenges the Caribbean energy sector faces, Amodeo noted a shortage of funding, older regulatory frameworks, high dependence on non-renewable resources, and the high cost and unreliable service for end users. The region’s vulnerability to climate change and market impacts is also a challenge for energy systems. Through Strengthening Utilities and Promoting Energy Reform, USAID supported Saint Lucia’s national energy regulator and other stakeholders in drafting and leading discussions on the national electric grid code. Strengthening Utilities and Promoting Energy Reform also supported the Barbados energy regulator to develop and implement a public outreach campaign to promote the national goal of reaching 100 percent renewable energy by 2030. The Caribbean Energy Initiative is a new regional effort to bolster the resilience and performance of energy systems across the region through regional cooperation, improved utility performance, and accelerated private sector investment in modern power systems.

---

KEY TAKEAWAYS AND RECOMMENDATIONS

• Adaptation funding is still very small compared to mitigation funding.

• USAID is committed to developing an ambitious climate change strategy to ramp up mitigation and adaptation efforts and to increase climate change mainstreaming in development and humanitarian programing.

• Private sector financing is increasingly important and exceeds public sector financing in renewable energy. Development assistance organizations like USAID can help increase private sector financing and blended financing from other sources.

• Ecosystems can increase resilience against climate impacts, however, they have their limits, and science has provided a clear focus on these vulnerabilities and challenges. Through land protection, management, and restoration of degraded land, nature has the potential to help mitigate climate impacts.

RESOURCES

The following resources provide more information on USAID-supported climate work:

USAID Climate Leadership

• Fact Sheet: President Biden’s Leaders Summit on Climate

• Leaders Summit on Climate: USAID Announcements

• InsuResilience Global Partnership

• Risk-Informed Early Action Partnership

• Global Facility for Disaster Reduction and Recovery

Climate Resilient Food Systems

• Agricultural Innovation Mission for Climate

Climate Finance

• Development Finance Corporation: Climate

• Climate Finance Assessment: Opportunities for Scaling Up Financing for Clean Energy, Sustainable Landscapes, and Adaptation

• Climate Economic Analysis for Development, Investment and Resilience

• Clean Energy Lending Toolkit: The Aileg Project

Natural Climate Solutions

• SWAMP

• Alternate Wetting and Drying in Rice Production blog (full paper here)

• Steps Toward Blue Carbon Mitigation Under NDCs in LAC

Climate and Energy

• USAID Energy Programs

• Caribbean Energy Initiative
CROSS-CUTTING THEMES AND RECOMMENDATIONS

Several common themes emerged across the eight sessions:

• Collaboration across sectors, country borders, and institutions is necessary to build a resilient ESC region.

• Climate change and COVID-19 disproportionately impact the most vulnerable populations, including women and children, indigenous peoples, non-binary people, people with disabilities, and fisherfolk. Social resilience must be built into all planning for health systems, disaster management, and climate change, and vulnerable groups must be fully engaged in climate planning processes.

• Ambitious funding is needed for ambitious climate action. The Caribbean needs greater access to climate financing overall and needs access to different funding types. To reach the most vulnerable residents, it is essential that funding is granted to community organizations, not only governments and large institutions.

• Decision-making must be informed by science, and climate measures must be tailored to the regional context.

• Climate adaptation requires a mix of “hard” and “soft” measures, e.g., engineered approaches and ecosystem-based approaches such as mangrove or coral reef restoration.

• Youth have the energy and enthusiasm to confront the climate challenge; it is important to engage them in climate planning at various levels and to invest in building their capacity.

• The region expects strong U.S. leadership on climate change, particularly on climate financing commitments.

• Well-planned, early adaptation action saves money and lives.
“The information presented [at the Symposium] will benefit all of us, citizens, governments, the private sector, and donors across the Caribbean, as we grapple to find ways to address the impact of climate change. Let’s make use of it!”

SYMPOSIUM CLOSING
Clinton White, Regional Representative for the USAID ESC Mission led the symposium closing, recapping the eight sessions that took place over a span of three weeks. Mr. White shared key takeaways, including: Climate change disproportionately impacts the most vulnerable members of society, which has been exacerbated by the COVID-19 pandemic; people must be at the center of climate strategies; public-private partnerships can help enhance resilience; the Caribbean has the necessary information and expertise to strengthen climate resilience; and finally, the time for action is now. “The information presented will benefit all of us, citizens, governments, the private sector, and donors across the Caribbean, as we grapple to find ways to address the impact of climate change,” he said. “Let’s make use of it!”

The ceremony also included a live performance from Barbadian musician Jabari Browne, during which he called on people “to pay attention to climate change” (see lyrics on inside back cover pages).

USAID RESOURCES ON REGIONAL RESILIENCE
• Resilience Assessment: ESC
• Resilience Assessment Infographic
• Antigua and Barbuda Resilience Profile
• Barbados Resilience Profile
• Grenada Resilience Profile
• Guyana Resilience Profile
• Saint Lucia Resilience Profile
• Trinidad and Tobago Resilience Profile

The need for climate action underpinned by science and centered on people. The calls for U.S. leadership in climate finance and policy are heard. As Ambassador Lynch mentioned in the symposium opening, USAID is currently developing its new climate change strategy, which will be a key tool to support ambitious climate action in the region going forward, including the recommendations raised in this symposium.

USAID VISION FOR REGIONAL CLIMATE ACTION AND PARTNERSHIP
USAID has a long history of partnership in the ESC region, which many speakers emphasized. The MOU signed at the symposium is a symbol of USAID/ESC’s commitment to continued collaboration with regional partners in the effort to build a more sustainable, resilient, prosperous, and inclusive ESC region. As emphasized throughout the symposium, USAID recognizes
Pay Attention to Climate Change
By Jabari Browne

Performed on June 30, 2021, at the closing session of the USAID ESC Regional Climate Symposium. A video of the performance is available here.

In the past few decades our surface temperature has risen...
Sooner or later becomes a heat prison
Strap in, hold on tight, please listen
While we be digging up oil and just vibing, striving, put gas in the car and planes gliding, styling, this beautiful planet is just dying, warming up the globe and yes it’s still rising
But what does it have to do with you
We be living love-LY without a clue
Future generations gonna be in big trouble
No time to squabble let's work on the double.
Save it before it's a heat bubble (yes)
Ice starts to melt we’re flooded (mess)
Eventual worldwide starvation (stress)
But we can unite and do something (bless)
So before the heat compress
And we have nothing left
Come together and do our best
Tell your family, friends and the rest (yes)
And before things get strange
And out of our range
Let us start to arrange
Pay attention to climate change

Ohhhhhh
The sea is rising now
Feels like the sky is falling down around
But we can change now
Ohhhhhh
Come and make a stand with me
A better future it would be
Would be
Renewable energy

Let us start to arrange pay attention to climate change
Before things get strange pay attention to climate change
Avoid incoming pain and study the climate change
Let us start to arrange pay attention to climate change
I know the world’s evolving, the more problems we’re solving, surface temperature keeps rising could be put us in a coffin, more reflection and pausing on the problems we’re causing
Looking for solutions no more living in fear
Walk or ride a bike instead of driving everywhere
It starts with you we could add another layer
Unplug devices and turn off lights when not using them

No need to abuse them
So look out below
Let us start show
And fix nature’s flow
If you know we know
It’s a big team effort
No more flying solo
So protect and hope
Everyone should know
Better play your role
Too much warmth in the globe
The less we do something
The more we become a stove

Ohhhhhh
The sea is rising now
Feels like the sky is falling down around
But we can change now
Ohhh ohh ohhh
Come and make a stand with me
A better future it would be
Would be
Renewable energy
Let us start to arrange (pay attention to climate change)
Before things get strange (pay attention to climate change)
Avoid incoming pain and study the climate change
Let us start to arrange (pay attention to climate change)
Let us start to arrange pay attention to climate change
Before things get strange pay attention to climate change
Avoid incoming pain and study the climate change
Let us start to arrange pay attention to climate change
ABOUT THE USAID ESC REGIONAL CLIMATE SYMPOSIUM

The USAID ESC Mission hosted an eight-session climate change symposium from June 16 to June 30. This virtual symposium focused on renewing and strengthening existing regional partnerships by encouraging dialogue about climate change as well as the sharing of information and opportunities.

Throughout the symposium, high-level speakers from USAID/ESC and its partners discussed the ecological and human dimensions of climate change, contextualized the ESC region’s response, and sought solutions to address climate impacts. For more information about the symposium, visit: https://www.climatelinks.org/ESC-Regional-Climate-Symposium.