

USAID/JAMAICA CLIMATE STRATEGY CONTRIBUTIONS (2022-2030)

Summary of conclusions from Mission Dialogue

Jamaica is a small Caribbean island with economically valuable tourism, fisheries, industry, and agriculture assets. As a small-island developing state, Jamaica is acutely aware of the risks posed by climate change to the country's development and the wellbeing and economic security of its people. Roughly 90 percent of the country's gross domestic product is produced within the coastal zone, making its key industries and over half of the population vulnerable to hurricanes, tropical storms, sea level rise, and land loss. Rising temperatures and intense rainfall events increase incidence of mosquito-borne and waterborne diseases already endemic to the country. Scarce water supplies are also threatened by warming temperatures, increasing water stress vulnerabilities for households and the agriculture sector. Jamaica's greenhouse gas emissions are driven primarily by manufacturing, construction, and electricity and heat generation.

In order to support the implementation of USAID's 2022-2030 [Climate Change Strategy](#) and to support Jamaica's efforts to respond to climate change, USAID/Jamaica ("USAID/Jamaica" or "the Mission") has reviewed climate change risks across its development portfolio and identified entry points to address climate change impacts. These findings are summarized in this document which will be added to the Country Development Cooperation Strategy (CDCS).

Mission Dialogue

The Jamaica Mission held the CDCS Mid-course Stocktaking (MCST) from January to April 2023. During these meetings the technical and program staff discussed the future direction of Mission programming including a planned orientation toward adaptation and Global Health Security to complement the clean energy, citizen security, and PEPFAR work already taking place. During the MCST, Mission staff, along with support from LAC/SPO, discussed ways that climate change considerations could be integrated into future programming with LAC/RSD/ENVE providing support in conceptualizing integration potential. The conclusions from those discussions and follow-on work are summarized herein.

Mission CDCS Programming Alignment with USAID Climate Priorities

DEVELOPMENT OBJECTIVE 1: JAMAICA'S RESILIENCE TO DISASTERS INCREASED

Development Objective 1 of the USAID/Jamaica CDCS will increase the island's resilience through mitigation and adaptation efforts that strengthen its ability to prevent and respond to natural and man-made disasters while decreasing the probability that a series of catastrophic events will derail

development gains and hinder future potential. USAID/Jamaica’s work under this Development Objective contributes to Intermediate Results under both of the Agency Climate Strategy’s Strategic Objectives including reducing emissions (1.1), building adaptive capacity (1.2), mobilizing finance (1.3), transforming key systems (2.1), shifting market signals (2.2), and improving governance (2.3).

For example, the Mission’s clean energy programming will support both mitigation and adaptation. Investments will advance reductions in greenhouse gas emissions, and encourage greater use of renewable energy. Investments will also strengthen resilience by improving Jamaica’s ability to withstand more frequent and more intense extreme weather events. This programming also leverages private sector financing for clean energy investments in the manufacturing sector and small and medium enterprises. Current and future technical assistance under this DO will assist in the transformation of energy generation, distribution, and transmission systems in Jamaica while also improving governance.

DEVELOPMENT OBJECTIVE 2: YOUTH CRIME AND VIOLENCE PREVENTED IN TARGETED COMMUNITIES

USAID/Jamaica activities under Development Objective 2 align with the Caribbean Basin Security Initiative (CBSI) strategic framework, reflecting a shift from crime and violence reduction to crime and violence prevention. The Mission is pursuing greater partnership with the GoJ and other donor programs that address youth crime and violence. Compounding crises of marginalization and socioeconomic barriers make it difficult for target youth in Jamaica to make the transition from the formal education systems to meaningful economic activities. Partnerships with the private sector can provide support for the alternative livelihood components of our activities in the form of apprenticeships and jobs for at-risk youth. The end result will be a more sustainable response to youth crime and violence prevention through increased local leadership.

The Mission’s work as a CBSI implementer can address these vulnerabilities while playing a role in Jamaica’s efforts to respond to climate change, including where feasible supporting clean energy transition as a means of mitigating and adapting to climate change. Activities under DO2 can integrate climate objectives into citizen security and violence prevention activities by providing at-risk youth with technical and vocational training in areas that aid in climate adaptation such as the installation of warning signs, the retrofitting of buildings and other infrastructure to make them safer and more climate resilient and the construction and erection of innovative low-technology protective infrastructure such as gabion baskets and retaining walls from stones or old tyres. The youth can also be exposed to emergency response and management including preparedness and response to disaster related emergencies such as flooding, fires or storms.

Increasing renewable energy as a proportion of the country’s overall energy mix requires a well-trained workforce to construct and service distributed energy resources like wind turbines and solar photovoltaic panels. While the majority of the youth involved in the Mission’s activities may lack the background and skills needed as a prerequisite to attend more specialized training, a few youth may be able to do so. Supporting these youth to acquire more specialized skills in construction and maintenance of renewable energy equipment would create the opportunity for this work to contribute to both Strategic

Objectives in the Climate Strategy by enabling youth to lead climate action (IR 1.5) and working across assistance types (2.4).

DEVELOPMENT OBJECTIVE 3: EPIDEMIC PREPAREDNESS AND RESPONSE IMPROVED

Development Objective 3 focuses on improving Jamaica’s ability to manage infectious diseases, including HIV. The COVID-19 pandemic further demonstrated the dramatic impact that emerging infectious diseases can have on the physical, emotional, and economic health of countries around the world. Jamaica was announced as a target country for the U.S. Government’s expanding Global Health Security initiative in 2022. The Mission will undertake initial analyses and risk mapping to understand the current epidemiological context in the country as well as challenges and opportunities with the human, animal, and environmental health sectors to inform priority intervention areas.

Climate change is breaking down the natural systems that have kept animals and humans apart for much of human history. Climate change is increasing and changing the ways animals and people interact in new and risky ways, creating new opportunities for more viral spillover events and potentially future outbreaks and pandemics. Climate-sensitive diseases, such as malaria, dengue, and many food and water-borne diseases are rising at an alarming rate and expanding geographic range, seasonality, and increasing incidence due to changes in precipitation and temperature. Better understanding the intrinsic link between climate and health impacts is essential to improve efforts to strengthen health systems and ensure they remain resilient. As such, the Mission will incorporate climate change as a potential threat multiplier and intensifier in the initial assessment stages to identify the appropriate alignment between Global Health Security programming and the Agency Climate Strategy in Jamaica.

MISSION AND EMBASSY ENGAGEMENT & OTHER STAKEHOLDERS

Embassy Kingston has a Climate & Energy working group which meets monthly. Embassy leadership is committed to reducing the impact of Embassy operations on the environment, including reducing emissions. “Car free Friday” has been established, and use of home-work-home shuttles is free and designed to reduce the use of individual vehicles. Embassy management is exploring opportunities to purchase commercial EV trucks as well as the establishment of EV charging stations on USG owned properties.

On the technical side, State & USAID coordinate closely at Post on all aspects of climate change programming and use a “whole of government” approach to engagement with both host country government and private sector counterparts. At the most recent bilateral strategic dialogue (November 2022), climate change was included on the agenda. And under the global Taskforce on Access to Climate Finance that was established at COP26, the USG/USAID was named an “anchor partner” to support Jamaica’s (one of five pioneer countries) goals to accelerate the shift to greater use of renewable energy.

Alignment with country NDC targets

The Government of Jamaica has also prioritized climate change in its Vision 2030 development strategy¹ and is working towards developing or updating its sectoral policies to fully integrate climate risk considerations. Moreover, the government has committed to developing fiscal instruments and regulations that support the implementation of these sectoral policies, in an effort to streamline climate considerations across all sectors. As part of its updated Nationally Determined Contribution submitted in June of 2020, the Government of Jamaica aims to reduce emissions by 2030 in both the energy and the forest/land use sectors. The expected reduction will be between 25.4 percent (unconditional) and 28.5 percent (conditional on receiving international aid) relative to a business-as-usual scenario based on a 2005 baseline. The majority of the emissions reductions will come from increased use of renewable energy, including wind and solar, in the power generation sector, however the country also envisions emissions reductions from improved waste management procedures and integrated landscape and watershed management in the agricultural sector.

The government's National Energy Policy 2009-2030 set a goal of 50 percent renewable energy generation by 2030. The upcoming Integrated Resource Plan will set the roadmap to achieve the 2030 target that is expected to consider wind, hydro, and solar energy storage systems as the most viable options to achieve its renewable energy targets. No new fossil fuel plants are expected to be contemplated, though the Government of Jamaica cautions that the clean energy transition must be gradual to maintain a stable national energy grid. USAID will continue to support the government's goal of increasing the deployment of renewable energy to meet this ambitious goal through the Strengthening Energy Sector Resilience activity as well as future programming to facilitate the flow of climate finance.

As co-chair of the Nationally Determined Contribution (NDC) Partnership with the United Kingdom, Jamaica launched a Global Finance Strategy to mobilize funding for urgent climate needs. Jamaica has accessed climate financing through various sources, including \$764 million approved by the IMF under the Resilience and Sustainability Facility (RSF), in addition to \$68 million for projects already underway. The French Government has also provided technical assistance to strengthen Jamaica's financial sector in the face of climate change. USAID was instrumental in financing Jamaica's \$185 million catastrophe bond which will continue to protect the island from the financial shocks caused by extreme climatic events through December 2023. The Jamaica Social Investment Fund (JSIF) has been designated as an accredited entity with the Green Climate Fund which will strengthen support for climate projects at the community level.

Jamaica was designated as one of five 'pioneer countries' under the global Taskforce on Access to Climate Finance to improve climate finance approaches following the Climate and Development Ministerial at UNFCCC COP26. As one of Jamaica's anchor countries, the U.S. Government, through USAID, agreed to support Jamaica given the Mission and government's interest in climate finance as well as ongoing and previous engagement with the government on national adaptation planning, climate

¹ [Government of Jamaica, Vision 2030 Jamaica](#)

finance, and other relevant activities. The Jamaican government also has an interest in increasing funding for climate and playing a pivotal role in influencing other Small Island Developing States. USAID will continue to support efforts under the Climate Finance Taskforce in a variety of ways including: coordinating with other climate finance providers and climate initiatives; playing a role in organizing discussions on key findings and sharing recommendations with key stakeholders; and supporting a coherent portfolio or pipeline of climate projects in support of climate-related priorities and plans identified by Jamaica in partnership with other climate finance providers. Where possible, USAID will align any future investment with country plans and actively encourage other governments to do so.

Expected contributions to Climate Strategy targets and opportunities through FY 2024

USAID/Jamaica's current and potential contributions to the Climate Strategy's targets are detailed below. Existing activities will require additional support to help implementing partners update their work plans, Activity Monitoring, Evaluation, and Learning Plans (AMELPs), or assign new indicators.

In FY 2023, USAID/Jamaica has one bilateral disaster risk reduction activity with total funding of approximately USD \$4 million that contributes to Climate Strategy targets. New adaptation and mitigation activities are being designed with current and prior year Disaster Readiness, GCC Adaptation and Clean Energy funding and have the potential to contribute to many of the targets in the Climate Strategy. Alignment with both USAID's Climate Strategy and Jamaica's climate priorities creates space for new approaches and innovation. Programming teams will exercise creativity to integrate climate change into all activities. The Agency's focus on climate may mean new funding is available in the near future, not limited to traditional environment and energy sectors.

OFFICE OF ENVIRONMENT AND HEALTH CONTRIBUTIONS

- a. Current Contributions:
 - i. **Financed mobilized:**
 1. The Strengthening Energy Sector Resilience in Jamaica (SESR) activity seeks to mobilize up to \$1.48 million in FY 2023 from greater direct investments through its private sector partners in the Global Development Alliance (GDA).
 2. Under a Public International Organization grant, USAID used \$5 million to catalyze other donors to provide \$14.85 million to support the issuance of a catastrophe bond for natural disasters, with the Government of Jamaica providing \$350,000. The World Bank brought the catastrophe bond to market and secured \$185 million from investors that will be available to Jamaica for three years in the event of a qualifying natural disaster.
 - ii. **Adaptation:** USAID/Jamaica's development objective of strengthening Jamaica's resilience to natural disasters by promoting energy resilience and diversification of the energy market. It tracks the number of energy professionals, including installers and

inspectors who attended North American Board of Certified Energy Practitioners (NABCEP) Photovoltaic (PV) and Photovoltaic + (PV+) trainings, which bolster the skills of existing Jamaican energy professionals and expands the workforce of personnel who are knowledgeable and qualified in PV and PV+ solar technologies. These professionals are needed to adequately serve a growing market in Jamaica for clean and renewable energy solutions. USAID trained 25 persons in solar photovoltaic installation, through the NABCEP PV Installer Profession (PVIP) training course. Trainees came from the Jamaica Public Service, the Meteorological Service of Jamaica, the University of the West Indies, and several energy-related private sector firms. The activity also provided scholarships to those who demonstrated financial need, which encouraged the participation of many students.

b. Potential contributions from future activities:

- i. USAID has developed a number of financing vehicles under the Climate Finance for Development Accelerator that could help the Jamaica Mission program adaptation funding in Jamaica in the coming years to potentially cover a range of issues including adaptation financing, the water/energy nexus, and more. Future activities could build on Goal 4 of USAID’s Caribbean Vision for Climate and Disaster Resilience to “secure effective climate financing to build climate and disaster resilience capacity” by utilizing donor coordination efforts under the Climate Finance Taskforce to bolster the technical capacity of GoJ officials and channel mitigation and adaptation financing to the island.
- ii. Future programming focused on disaster reduction and resilience will build on the findings from the National Renewable Energy Laboratory (NREL) assessment of Jamaica’s critical facilities to identify vulnerabilities in the event of a natural disaster. The assessment and recommendations will support the design and implementation of a distributed network of energy-resilient facilities that ensures continuity of critical community services and protects vulnerable populations. Adaptive capacity could be further bolstered by deploying renewable energy to increase access to water in remote communities and utilizing nature-based solutions to sink carbon, protect biodiversity, and increase the resilience of coastal ecosystems.

Further advancements in mainstreaming climate change adaptations strategies could include: a) Increase integration of climate change considerations into national financing mechanisms, public infrastructure, security plans, as well as sectoral enabling frameworks (policy and legislative frameworks and programs); b) Sufficient socio-economic and environmental forecast based on climate projects or modeling scenarios (crop yields, coastal inundation, energy demand, freshwater availability, forest productivity etc.)

Water is critical to every other sector; therefore the vulnerability of the sector to climate risks has far reaching implications. Several adaptation initiatives are underway, including promoting household-level storage and conservation; and building construction developers installing water saving devices. Several rainwater harvesting systems have

been installed across communities, schools and agriculture networks. Supporting these activities are improvements in the collection, storage and analysis of hydrometeorological data that informs the drought forecasting tool for the agricultural sector. Efforts to make relevant sectors resilient and the pursuit of new and innovative options for adaptation is ongoing. Selected additional activities could include: a) Technical support to implement innovative technologies such as early warning systems to protect downstream assets from flooding; b) Scaling up activities such as ODPEM’s “Building Disaster Resilient Communities (BDRC)”; c) Financial and technical support for community-based capacity development training, and planning; d) Enhance capacity of municipal councils to monitor and assess community-level adaptation interventions and their impacts; e) Funding to support the use of nature-based solutions to adapt to climate change; f) Financing to retrofit health facilities to meet climate change standards, including protection against wind, and floods, as well as increase water storage capacity during dry spells; g) Technical support to expand capacity-building efforts in CCA/DRR across institutions.

Global Health Security: As Global Health Security is a new technical area for the Mission, the Mission will be conducting initial assessments and risk mapping to understand current epidemiological context, as well as challenges and opportunities within the human, animal, and environmental health sectors. Expected funds will be used to strengthen capacity and increase multi-sectoral partnerships to prevent, detect, and respond to emerging disease threats. The Mission will consider the impacts of climate change while performing these assessments to identify opportunities to adapt and transform the health system accordingly.

OFFICE OF CITIZEN SECURITY CONTRIBUTIONS

Highlights and contributions

- c. CBSI Positive Pathways: USAID’s community violence prevention activity, Positive Pathways, focuses on services for at-risk youth and violence prevention and integrated Positive Youth Development (PYD) in all phases of its activities. The activities supported at-risk youth by providing them with vocational skills training, life skills training, mentorship and counseling. The program also places some youth in apprenticeship programs and jobs. By continuing to work with the private sector and building on the job-training work already taking place under the SESR activity, the activities under this program could broaden the focus to include vocational training, certification, and job placement in climate resilient construction, disaster risk reduction and disaster response and management. Where a qualified cohort of eligible youth are available, similar work can be done with respect to solar PV and PV+ installers on the island. Targeting at-risk youth for training and placement in these areas can simultaneously achieve the goals of the Positive Pathways program while bolstering the adaptive capacity of communities, empowering youth as change agents, and contributing to the just energy transition in Jamaica.

- d. Youth Empowerment Activity: In similar ways to the above example, the Youth Empowerment Activity through its civic participation/engagement and skills training interventions could strengthen the capacity of the target youth to build Disaster Resilient Communities including being trained as first responders in the event of natural disasters. There may also be other opportunities for suitably qualified medium and high risk youth to pursue disaster risk reduction and climate mitigation activities that are further up on the economic value chain, therefore providing them with economic opportunities while increasing the deployment of renewable energy technologies across the island.

Constraints and Support Needs

USAID/Jamaica has curtailed bilateral programming in recent years because of a reduction in funding and previous discussions of transitioning USAID presence in the country that significantly reduced the size of technical staff for the bilateral program in the Mission. While this has been alleviated somewhat, greater confidence/security regarding on-going financial and policy support is needed for more robust engagement with the Government of Jamaica and the private sector. The corollary constraint in implementing the Climate Strategy is the need for more staff to manage its existing and planned programs effectively. Staff across all offices have limited time to focus on or align with climate issues, especially for activities that do not already include climate. The Mission faces structural and administrative constraints with implementing USAID's climate strategy. Staff across offices have limited time to focus on or align with climate issues, especially for activities that do not already include climate. Other activities, such as PEPFAR, the CBSI and Global Health Security work, are bound by strict reporting requirements, independent reporting platforms, and funding earmarks that will not easily integrate to the Strategy. In the short term, staff may require additional technical support during the preparation of the Mission's Performance Plan and Report to ensure that all activities are reflected in the key issue narratives.

The Agency could support USAID/Jamaica in more fully implementing the Climate Strategy by providing training, guidance, and information sharing on climate integration across sectors to all Operating Units. Funding to support Implementing Partners to understand and implement changes to better align with the Strategy would also help speed up the implementation of the Strategy on the ground. Funding and staffing support will also play a vital role in ensuring that the Jamaica Mission can robustly implement the Climate Strategy for years to come.

Climate Risk Screening and Management Tool for Strategy Design
STRATEGY CRM TOOL OUTPUT MATRIX, PART 1: CLIMATE RISK

* = A required element, according to the Mandatory Reference

1.1: Defined or Anticipated DOs, IRs, or sectors*	1.2: Timeframe*	1.3: Geography	2: Climate Risks*	3: Adaptive Capacity*	4: Climate Risk Rating of DO or IR	5: Opportunities	6.1: Climate Risk Management Options	6.2: How Climate Risks Are Addressed in the Strategy*	7: Next Steps for Project and/or Activity Design*	8: Accepted Climate Risks*
Disaster Readiness	0-25 years	Country-wide	Climate change will continue to make extreme events more intense, and thus more costly to prepare for and recover from. The gap in public finance expected after a disaster may grow larger over time, rendering USAID's disaster risk finance activities insufficient. Equipment installed to provide energy resilience to critical facilities, including those with cybersecurity infrastructure, may have their functional capacity exceeded.	Jamaica's Office of Disaster Preparedness and Emergency Management (ODPEM) has good technical and human capacity to coordinate and execute. Financial capacity is low because Jamaica has experienced decades of poor economic growth. The GOJ has recently undertaken several policy reforms to strengthen the national framework for disaster preparedness, emergency management, and public financial management.	High	Disaster risk finance initiatives are an opportunity to incorporate climate risks into public financial management into GOJ planning across all sectors. Securing the energy supply for facilities that are critical to disaster response and cybersecurity is an opportunity to achieve objectives that align with Jamaican and US energy policy, including the deployment of modern energy technologies, the reduction of emissions, improvement in the regulatory framework for the energy sector, achievement of operational cost savings through energy efficiency, and stimulation of the private sector.	Enhance the cost-effectiveness of coverage provided by disaster risk finance instruments by encouraging a larger participant pool to spread the risk Enhance the overall level of coverage provided by disaster risk finance instruments by catalysing increased investments by other parties. Design energy installations to accommodate future expansion / augmentation.	Enhance the cost-effectiveness of coverage provided by disaster risk finance instruments by encouraging a larger participant pool to spread the risk Enhance the overall level of coverage provided by disaster risk finance instruments by catalysing increased investments by other parties. Design energy installations to accommodate future expansion / augmentation.	Engage World Bank and Ministry of Finance and the Public Service to coordinate action Engage donor community to catalyse increased investment Conduct engineering/energy analysis of facilities	Not required
Governance and Peace and Security	0-10 years	Country-wide	Climate change will threaten livelihoods, particularly those dependent on ecosystems services or with exposure to weather (e.g. fishers, farmers, outdoor labourers). Communities in areas with inadequate infrastructure will see increased disruptions, whether episodic (e.g. storms) or continual (e.g. water services). These effects may increase the economic and physical vulnerability of citizens. In addition, there is the likelihood of looting during and in the immediate aftermath of a natural disaster.	The GOJ's Climate Change Division continues to build a range of capacities (information, social, human and institutional) by engaging with and training stakeholders in the public sector, private sector, and civil society. Coordination is achieved through a network of climate change focal points across governments and institutions. Financial capacity to provide governance and security services is improving due to economic reforms, fiscal reforms, policy reforms, and GOJ investments in police facilities. Public and private sector entities are able to install storm shutters and grilles to secure their buildings.	Low	Activities that enhance citizen security by building human and institutional capacity are an opportunity to build resilience	Not required.	Not required	Identify the climate risks for communities in which USAID will be active.	Not required
Health	0-5 years	Country-wide	USAID health programming focuses on infectious disease prevention, detection and response. Health ministry budgets and priorities are strongly influenced by non-communicable diseases (e.g. chronic conditions and vector-borne diseases that are linked to climate change). Access to health services may be affected if facilities are not resilient.	The Government of Jamaica has limited capacity to address emerging infectious disease outbreaks -- as evidenced by the COVID response.	Low	USAID has the opportunity to partner with the GOJ and other stakeholders to address the gaps identified across the health system.	USAID will strengthen climate-sensitive disease surveillance and response.	Not required	USAID will conduct a Voluntary External Evaluation to identify disease outbreak risks and assess the level of preparedness to address outbreaks. This evaluation will inform activity designs and provide a baseline to monitor improvements in the GOJ's response.	Not required
Infrastructure, Construction and Energy	0-50 years	Country-wide	Where USAID is doing construction / equipment installation, climate change will change the design parameters that these facilities have to meet (e.g. increasing energy demands for cooling, increasing the length of energy disruption that energy resilience equipment will have to mitigate).	Jamaica has good capacity in energy-efficient design, and has been designing hurricane resilient buildings as a matter of course. Building codes are inadequate and poorly enforced, but voluntary adoption of good standards is an option.	High	New construction / renovation is an opportunity to introduce energy efficiency and disaster resilience measures	Building designs should be optimised to maximise energy efficiency Buildings should be designed / sited to mitigate disaster risks	Design for energy efficiency and disaster resilience. Energy efficiency consideration has the benefit of reducing the operational / ownership cost of facilities, and is a "no regrets" option.	An engineer of record will be assigned to address climate risk management	Not required
Education, Social Services, and Marginalised Populations	0-10 years	Country-wide	Disruptions to essential services and threats to livelihood will increase the vulnerability of marginalised populations. Communities with inadequate infrastructure will experience further challenges in their built environment due to storms and floods.	The institutional and human capacity of Jamaican civil society is strong. The financial capacity of the state is improving due to economic and fiscal reforms that have resulted in budget surpluses and increase. Surveys indicate good public knowledge of climate change.	Low	Capacity building for the beneficiaries can include education about and screening for climate risks that the target populations and communities will face.	Not required.	Evaluate available data on public knowledge, attitudes and practices on climate change to determine whether marginalised populations have significantly different status. Encourage authorities to be inclusive or marginalised populations in their public communications / outreach.	Not required	Not required
Next step: Timeframe	Next step: Geog.	Next step: Climate Risks	Next step: Adaptive Capacity	Next step: Risk Rating	Next step: Opps.	Next step: Risk Mgmt. Options	Next step: Selected Options	Next step: Next Steps	Next step: Accepted Risks	Finished!

Go on to OUTPUT MATRIX. PART 2 on Sheet 2 of this Spreadsheet

Climate Risk Screening and Management Tool for Strategy Design
STRATEGY CRM TOOL OUTPUT MATRIX, PART 2 - GREENHOUSE GAS MITIGATION

* = A required element, according to the Mandatory Reference

5.2a	<ul style="list-style-type: none"> What are the major sources of greenhouse gas (GHG) emissions? How has the distribution and composition of the GHG emissions profile changed over time historically, and how is the profile expected to change in the future considering the major emitting sectors and/or sources? How are the sectors and sources that contribute to GHG emissions contributing to the growth and development of the economy and to meeting development objectives? What climate change mitigation or low-emission development plans, targets, commitments and priorities has the government (national, state, and local) articulated? 	<p>The major source of greenhouse gas emissions in Jamaica is the energy sector, which contributes close to 90% of emissions. The remainder of emissions (~10%) results from agriculture (nitrogen oxides and methane) and land use changes. There have been some reductions in emissions since the mid-2000s (due mostly to large changes in output of the mining sector), but the proportional dominance of energy emissions remains relatively constant. Forestry provides a significant emissions sink (approximately equal to ~24% of GHG emissions in 2012).</p> <p>As Jamaica's economy develops, energy use is expected to increase, and emissions with it. An increase of 37% by 2030 is expected in the business-as-usual case. Jamaica has committed to an energy policy that is expected to result in reduced growth in emissions - approximately 8% lower than the business-as-usual case by 2030.</p> <p>Energy is an important sector for Jamaica's economic growth. Like many small islands, Jamaica's electricity generation mix has been dominated by expensive diesel and heavy fuel oil (HFO), with energy costs that peaked at ~\$0.40 per kilowatt-hour in the 2000s. This has impacted the competitiveness of Jamaica's economy - notably, the bauxite mining sector closed down after a peak in oil prices in 2008. Jamaica has therefore prioritized reducing energy costs as a policy goal. By diversifying generation sources - in particular, introducing of natural gas and renewables - Jamaica aims to achieve "A modern, efficient, diversified and environmentally sustainable energy sector providing affordable and accessible energy supplies with long-term energy security and supported by informed public behaviour on energy issues and an appropriate policy, regulatory and institutional framework." (National Energy Policy 2009-2030). This policy goal is integrated in Jamaica's long-term development planning, and was a key part of Jamaica's recent standby arrangement with the International Monetary Fund.</p> <p>Jamaica's policy aims for 20% renewables and 42% natural gas by 2030, coming from a 2009 baseline of 95% petroleum-fired generation. This target is being revised upwards: the energy minister has stated publicly that she aims for more than 50% renewables by 2037. Jamaica's energy policy is the core of its emission reduction commitments, as expressed in its Nationally Determined Contribution to the Paris Agreement.</p>
5.2b	<ul style="list-style-type: none"> Which of these sectors is USAID planning to program in? What opportunities exist to reduce emissions in each DO, IR, or sector? What opportunities exist to reduce emissions associated with USAID activities? 	<p>USAID is not planning activities in the agricultural or land use sectors. Some activities in disaster risk reduction may have energy components, particularly the deployment of equipment to ensure energy resilience at sites that are critical to disaster response (e.g. hospitals, shelters). These activities may provide a modest emissions reduction benefit.</p>
5.2c	<ul style="list-style-type: none"> Does the strategy incorporate ways to reduce GHGs? Reference the page number in the strategy. Note in particular if the Goal, a DO, an IR, or sub-IR specifically incorporates mitigation. 	<p>The strategy focuses more on disaster risk reduction (which may be considered climate adaptation) than emissions reduction.</p>
5.2d	<ul style="list-style-type: none"> What are the next steps in project and/or activity design to reduce GHGs? 	<p>Any new designs under the development objectives (to be developed) will take into consideration results of the climate risk screening, and opportunities for energy efficiency in construction.</p>