

**Presentation of the Fast Technical Assistance** The Fast Technical Assistance (FTA) is the Climate Technology Centre & Network (CTCN) short time response to requests referring to technology prioritisation, endogenous technologies assessment, policies and measures that are immediate priorities for the requesting country. FTA has duration **up to 2 months** and a total value typically **up to USD 15,000** (it may include a scoping mission, only if strictly necessary). The FTA is implemented by means of an international expert.

**Guidelines:**

- This Request Submission Form should be completed by the organisation requesting technical assistance from the Climate Technology Centre & Network (CTCN) in collaboration with the National Designated Entity (NDE) of the country in question
- The Form must be signed by the NDE. Please see updated contact list of NDEs here: <http://unfccc.int/ttclear/support/national-designated-entity.html>
- The Form can be submitted as a Word file containing a digital signature or as a signed and scanned PDF file in combination with an un-signed Word file

<b>Requesting country:</b>	Antigua and Barbuda
<b>Fast Request title:</b>	Building a Circular Economy and Reducing Emissions in the Waste Sector.
<b>NDE</b>	Diann Black-Layne Director, Department of the Environment Ministry of Health and the Environment
<b>Request Applicant:</b>	Diann Black-Layne Director, Department of the Environment Ministry of Health and the Environment Botanical Gardens, Factory Road, St. John’s, Antigua Office: +1.268.462.4625 or +1.268.562.2568 Mobile: +1.268.464.6410 <a href="mailto:DOE@ab.gov.ag">DOE@ab.gov.ag</a>  <a href="mailto:Diann.Black-Layne@ab.gov.ag">Diann.Black-Layne@ab.gov.ag</a> ; <a href="mailto:dcblack11@gmail.com">dcblack11@gmail.com</a>

**Climate objective:**

Adaptation to climate change

Mitigation of climate change

Combination of adaptation and mitigation of climate change

**Geographical scope:**

- Community level
- Sub-national
- National

If the request is at a sub-national level, please describe specific geographical areas (provinces, states, countries, regions, etc.).

**Sectors:**

Please indicate the main sectors related to the request:

- |   |   |                                       |  |
|---|---|---------------------------------------|--|
| <input checked="" type="checkbox"/> Coastal zones | <input type="checkbox"/> Early Warning and Environmental Assessment | <input type="checkbox"/> Human Health | <input type="checkbox"/> Infrastructure and Urban planning |
| <input type="checkbox"/> Marine and Fisheries     | <input type="checkbox"/> Water                                      | <input type="checkbox"/> Agriculture  | <input type="checkbox"/> Carbon fixation                   |
| <input type="checkbox"/> Energy Efficiency        | <input type="checkbox"/> Forestry                                   | <input type="checkbox"/> Industry     | <input type="checkbox"/> Renewable energy                  |
| <input type="checkbox"/> Transport                | <input checked="" type="checkbox"/> Waste management                |                                       |  |

**CONTEXT OF THE ASSIGNMENT** (up to half page):

*This section should present the climate problem and the national context within which it takes places (i.e. efforts to tackle it, climate policies and priorities etc). It should end with an explanation of the specific questions and issue the CTCN expert would have to address.*

*Please list or attach relevant documents that will help the CTCN analyse the context of this request.*

Antigua and Barbuda is amongst the largest per capita generators of waste in the world and is reliant on a single, ageing landfill that has exceeded its design capacity and requires urgent action. The objective of this Technical Assistance is to initiate a transition to the circular economy by working with waste industry stakeholders to repurpose waste as a valuable resource and subsequently, drive emissions out of the sector. The nation is dependent on imports of finished products that are typically shipped in generous packaging, which creates a very significant waste management challenge. The National Solid Waste Management Authority (NSWMA) is a statutory body that was established by the National Solid Waste Management Authority Act of 1995 (although it did not come into existence until 2005) to manage the storage, collection, transportation, treatment and disposal of all solid waste generated and disposed of within the state of Antigua and Barbuda. This mandate also covers waste that is generated outside of the territory but disposed of locally such as Aircraft and Cruise Ship waste.

Prior to the establishment of the NSWMA, waste from across the island was dumped at a site in the Cooks area of Antigua and periodically burnt. Once established, the NSWMA began work on a sanitary landfill at the disposal site

that included an impermeable synthetic bottom liner designed to isolate waste from the environment until physically, biologically and chemically degraded. The Cooks Sanitary Landfill and Civic Amenities Facility was commissioned in 2006 and serves as the primary disposal site for co-mingled solid waste on the island. The facility sits on 49 acres and is split between the old dumpsite occupying approximately 21 acres and the sanitary landfill and civic amenities facility occupying approximately 28 acres. The old dumpsite, although in existence for over 40 years, is still active and receiving all types of waste despite not having any environmental safeguards in place. The sanitary landfill has a single cell that has exceeded its design capacity and should have been capped 2 to 3 years ago. A new cell is currently under consideration at an estimated cost of 4.5 million USD and an expected life of 18 years at current disposal rates. The delay in implementation is believed to be the result of severe budget constraints that show no sign of abatement and even if implemented it is widely accepted that the practice of landfilling waste is unsustainable in the long term.

At present, there are a number of waste streams that pose specific and significant environmental and public health challenges in the country including sewage, vinasse, sargassum seaweed and construction waste, as well as biproducts of landfilling including leachate and methane gas. Sewage is collected from the septic tanks of residential and commercial properties across the island and is transported to the old disposal site where it is discharged into deep pits. The Antigua Distillery Limited discharges nutrient rich vinasse (wastewater from the distillation process) directly into the harbour at St John's. An additional challenge is that large amounts of sargassum seaweed is ending up at the landfill during well documented periods of extraordinary inundations, as a result of the collection and disposal of seaweed from public beaches and resorts along the Eastern coastline. Disposal of construction waste at the landfill is also of serious concern because it is without any systematic recovery and reuse, which creates additional pressures on the limited space available at the facility. This is further exacerbated during extreme weather events when buildings are damaged and loose building materials are disposed of at the facility. Leachate, the liquid that leaches out of the organic fraction of waste as it decomposes in the landfill is collected in leachate ponds that overflow at times into the neighbouring mangrove ecosystem and ultimately ends up in the sea. Methane gas deposits that have formed underground in the landfill contribute massively to greenhouse gas emissions from the site and are responsible for regular subterranean fires at the landfill. It is not uncommon to see smoke billowing from the landfill as far away as the main harbor in St John's, which has a tremendous impact on downwind communities and the nearby tourism sector.

In order for an adequate Funding Proposal to be prepared for submission to the GCF, a Project Preparation Facility application to the GCF will be required. The concept note and PPF should address the following:

- Technical input on better waste disposal methods and practices
- Technical input on the redesign needs for the landfill
- Climate and economic rationale for transitioning to the circular economy
- Policies or enabling environment that the government can create to lead to a shift in a circular economy
- Barriers and risks in the Antiguan and Barbudan context
- Impact of transition on stakeholders, the government and and likely new role going forward including that of the private sector

**Alignment with national priorities :**

*Please describe how the technical assistance is consistent with national climate priorities such as: Nationally Determined Contribution, national development plans, poverty reduction plans, technology needs assessments, Low Emission Development Strategies, Nationally Appropriate Mitigation Actions, Technology Action Plans, National Adaptation Plans, sectorial strategies and plans, etc.*

Reference document (please include date of document)	Extract (please include chapter, page number, etc.).
Nationally Determined Contribution (NDC)	<p>Direct alignment and contribution to NDC implementation is required for all CTCN technical assistances. Please include a direct reference to the INDC/NDC document (chapter, page number, etc.).</p> <p>Conditional Adaptation Targets:</p> <ol style="list-style-type: none"> <li>1. By 2025, increase seawater desalination capacity by 50% above 2015 levels.</li> <li>2. By 2030, all buildings are improved and prepared for extreme climate events, including drought, flooding and hurricanes.</li> <li>3. By 2030, 100% of electricity demand in the water sector and other essential services (including health, food storage and emergency services) will be met through off-grid renewable sources.</li> <li>4. By 2030, all waterways are protected to reduce the risks of flooding and health impacts.</li> <li>5. By 2030, an affordable insurance scheme is available for farmers, fishers, and residential and business owners to cope with losses resulting from climate variability.</li> </ol> <p>Conditional Mitigation Targets:</p> <ol style="list-style-type: none"> <li>1. By 2020, establish efficiency standards for the importation of all vehicles and appliances.</li> <li>2. By 2020, finalize the technical studies with the intention to construct and operationalize a waste to energy (WTE) plant by 2025.</li> <li>3. By 2030, achieve an energy matrix with 50 MW of electricity from renewable sources both on and off grid in the public and private sectors.</li> <li>4. By 2030, all remaining wetlands and watershed areas with carbon sequestration potential are protected as carbon sinks.</li> </ol> <p>Unconditional Targets:</p> <ol style="list-style-type: none"> <li>1. Enhance the established enabling legal, policy and institutional environment for a low carbon emission development pathway to achieve poverty reduction and sustainable development.</li> <li>2. By 2020, update the Building Code to meet projected impacts of climate change.</li> </ol> <p>The waste management project has the full backing and support of the National Solid Waste Management Authority, which has the legal mandate to store, transport, treat and dispose of solid waste in Antigua and Barbuda. The NSWMA has been instrumental in the development of this request.</p>

Technology Needs Assessment	
National Adaptation Plans	
Nationally Appropriate Mitigation Actions	
Add others here as relevant	

**OBJECTIVE OF THE FTA** (up to 5,000 characters): *This section should present the overall objective of the assignment, including the result expected by the end of the Fast Technical Assistance*

A draft GCF Simplified Approval Process concept note *Building a Circular Economy and Reducing Emissions in the Waste Sector* was prepared in 2018. The objective of this FTA is the finalization of the concept note for submission to the GCF and the preparation of a Project Preparation Facility (PPF) application which will be submitted by the NDA simultaneously with the concept note.

The FTA will include a revision and improvement of the existing draft. These updates will take into consideration changes in the local context since the concept note was initially drafted a year ago in addition to planned changes in national policies including expected updates to the NDCs in 2020. The 2020 NDCs will likely refer to a 90% phase out of fossil fuel.

The FTA will include consultations as needed to review the planning, implementation, and outcomes of the assistance activities as well as identification of opportunities and follow-up activities not previously identified.

**SCOPE AND ACTIVITIES OF THE PROPOSED FTA** (up to one page):

*The FTA should clearly contribute to mitigation or adaptation to climate change as described in the context of the assignment.*

*Within a clearly defined scope, the description of the FTA should be structured into the following:*

- *Expected activities*
- *Expected deliverables (following the structure of the activities)*
- *Expected use of the deliverables by the requesting organisation*

*Please note that the CTCN facilitates technical assistance and is not a project financing mechanism. All FTA has one mandatory activity, "Evaluation and communication".*

**Activity 1: Evaluation of draft CN**

*Evaluation of existing draft concept note by the international expert*

**Deliverable:**

1. *Brief on existing draft CN outlining areas for improvement and recommendations.*
2. *Preliminary list of recommended PPF support activities/deliverables.*

3. FTA work plan

**Activity 2: Completion of CN**

Revision and improvement of existing draft concept note and updates to include changes in local context and strengthened climate rationale.

**Deliverable:**

1. Completed concept note ready for submission to the GCF, including strengthened climate rationale, theory of change and monitoring plan

**Activity 3: Preparation and completion of PPF**

Preparation of a PPF for submission to the GCF with the concept note completed in Activity 2.

**Deliverable:**

1. Completed PPF ready to be submitted with the concept note

**Activity 4: Evaluation and communication**

The CTCN FTA Closure report will be completed at the end of the FTA (a template will be provided).

**Deliverable:**

1. FTA Closure report

**GENERAL TIME SCHEDULE OF EXPERT AND ACTIVITY/DELIVERY PLAN:**

The activities under this contract must be completed within a period of X months. Please note that the maximum time for the assignment is 2 months.

Activity 1: week 1

Activity 2: week 2 - 3

Activity 3: week 4 - 6

Activity 4: week 7

**Monitoring and impact of the assistance:**

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the technical assistance provided by the CTCN. I understand that these processes will be explicitly identified in the CTCN Response Plan and that they will be used in the country to monitor the implementation of the technical assistance following standard CTCN procedures.

**Signature:**

NDE name:

Diann Black-Layne, Director

Date:

8 November, 2019

Signature:



THE COMPLETED FORM SHALL BE SENT TO THE [CTCN@UN.ORG](mailto:CTCN@UN.ORG)