

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
- For requests submitted by multiple countries, all the NDEs of the respective countries shall sign identical Forms before official submission to the CTCN
- NDEs have the opportunity to submit CTCN requests in collaboration with National Designated Authorities (NDAs) for the Green Climate Fund (GCF) if targeting the GCF Readiness Programme.

Requesting country or countries:	Republic of Mauritius
Request title:	Enabling Waste Management (Circular Economy) for Aviation Stakeholders: A Pathway to Achieve National and Global Climate Targets
NDE	Mrs Sarita Meeheelaul Director, Department of Climate Change Ministry of Environment Solid Waste Management & Climate Change Email: smeeheelaul@govmu.org
Request Applicant:	Mr Vishal Babajee Senior Manager – Customer Experience and Sustainability Air Mauritius Centre, 4th Floor, President John Kennedy Street, Port Louis, Mauritius Email: vbabajee@airmauritius.com

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
- ☐ Multi-country

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

Problem statement related to climate change (up to one page):

Mauritius, a small island nation heavily dependent on tourism and international travel, faces growing environmental pressures from increasing aviation activity, particularly at Sir Seewoosagur Ramgoolam International Airport and Airport Rodrigues Limited in the Rodrigues Island of Mauritius. The rapid growth in air traffic has led to a sharp rise in aircraft and airport-generated waste, including plastics, food waste and hazardous materials such as chemicals and oils. Existing waste management infrastructure is inadequate to handle these complex waste streams, with much of the waste being landfilled or incinerated, contributing to greenhouse gas emissions and environmental pollution. The absence of advanced waste segregation systems, recycling capacity, and real-time data monitoring further limits the ability to implement effective waste reduction and resource recovery measures. These challenges are intensified by Mauritius's coastal geography, where plastic and chemical pollution threatens sensitive marine and terrestrial ecosystems, fisheries and community livelihoods. Poor waste management also poses reputational risks to Mauritius as a sustainable tourist destination, as environmentally conscious travellers increasingly expect green airport operations. At the same time, tightening international environmental regulations, including those of the International Civil Aviation Organization (ICAO), place additional compliance pressure on the country. Without urgent improvements in waste management systems, aviation-related waste will continue to undermine national climate resilience, biodiversity protection and global climate commitments.

Past and on-going efforts to address the problem (up to half a page):

Mauritius has introduced progressive waste management and sustainability initiatives, including:

- National solid waste segregation frameworks and recycling promotion
- Development of regional waste processing facilities supported by the National Budget 2025–2026
- National ban on non-biodegradable plastic bags and establishment of plastic waste management funds

Mauritius has demonstrated a strong commitment to climate change mitigation, notably through the submission of its updated Nationally Determined Contribution (NDC 3.0), which sets ambitious targets for GHG reduction across key sectors, including transport. The country's climate strategy explicitly recognizes the importance of decarbonising the aviation sector to achieve national climate goals and enhance resilience against the impacts of climate change.

Air Mauritius is progressively strengthening its Environmental, Social and Governance (ESG) approach through the implementation of its Sustainability Roadmap 2025–2026, while developing a longer-term Sustainability Master Plan 2026–2030. These efforts are being shaped in alignment with national priorities, including the Government Programme 2025–2029, the forthcoming revised Nationally Determined Contributions (NDC 3.0) and the

Sustainable Development Goals (SDGs), alongside evolving sustainability frameworks within the aviation industry.

In this context, Air Mauritius is committed to being a credible and compliant national airline by aligning local priorities with international standards, embracing realistic sustainability actions that leverage innovative climate finance, strengthen stakeholder trust and deliver long-term value.

The Air Mauritius Sustainability Roadmap (2025–2026), approved by the Board in August 2025, focuses on the following priority actions:

- Feasibility assessments for Sustainable Aviation Fuel (SAF) deployment and waste recycling initiatives supporting the circular economy
- Operational efficiency measures, including onboard weight optimisation
- Reduction of single-use plastics onboard
- Transition to electric energy, improved energy efficiency and renewable energy solutions
- Development of a voluntary customer contribution platform supporting nationally endorsed environmental and climate projects.

Air Mauritius will further consolidate these efforts through the Sustainability Master Plan (2026–2030), which will be finalised in 2026 based on the forthcoming NDC 3.0, aligned with the SDGs, and adapted to the airline's operational context and access to climate finance.

Specific technology¹ barriers (up to one page):

Mauritius has made significant strides in addressing climate change and waste management challenges, as highlighted by its Nationally Determined Contributions (NDC) and ongoing efforts in waste reduction and recycling. However, several technology barriers hinder the effective implementation of these initiatives, particularly in the aviation sector, which is critical for both the country's economy and its sustainability goals.

Key technology gaps include:

- Lack of automated waste segregation and advanced recycling systems
- Limited waste-to-energy processing capacity
- Absence of real-time waste data monitoring tools
- Insufficient infrastructure for electric ground operations and technical services
- Inadequate technologies for hazardous aviation waste treatment.

Sectors:

Please indicate the main sectors related to the request:

¹ "any equipment, techniques, practical knowledge and skills needed for reducing greenhouse gas emissions and adapting to climate change" (Special Report on Technology Transfer, IPCC, 2000)

- | | | | |
|---|---|---------------------------------------|--|
| ☐ Coastal zones | ☐ Early Warning and Environmental Assessment | ☐ Human Health | ☐ Infrastructure and Urban planning |
| ☐ Marine and Fisheries | ☐ Water | ☐ Agriculture | ☐ Carbon fixation |
| ☐ Energy Efficiency | ☐ Forestry | ☐ Industry | ☐ Renewable energy |
| ☒ Transport | ☒ Waste management | | |

Please add other relevant sectors:

Cross-sectoral enablers and approaches:

Please indicate the main cross-sectoral enablers and approaches

- | | | | |
|--|--|---|--|
| ☐ Communication and awareness | ☐ Economics and financial decision-making | ☒ Governance and planning | ☐ Community based |
| ☐ Disaster risk reduction | ☐ Ecosystems and biodiversity | ☐ Gender | |

Technical assistance requested (up to one page):

Overall Objective: The overall objective of the requested technical assistance is to enhance the capacity of Mauritius to effectively manage waste generated by the aviation sector. This technical assistance will focus on implementing advanced waste management technologies and optimizing waste-to-energy systems, addressing critical climate change mitigation barriers, and contributing to the country's Nationally Determined Contributions (NDCs), specifically targeting GHG reduction in line with Mauritius' commitment to reduce emissions by 40% by 2035.

Anticipated groups of activities to be performed by the technical assistance

1. Assessment of Current Waste Management Systems:

- Conduct a comprehensive audit of existing waste management systems at the airport and surrounding aviation facilities.
- Identify waste streams generated by aircraft, airport operations, and related activities.
- Collect baseline data on waste volumes, types, and disposal methods.

2. Design and Implementation of Advanced Waste Sorting and Recycling Systems:

- Develop a technology roadmap for integrating automated waste sorting and recycling technologies tailored to aviation waste.
- Implement solutions for segregation of hazardous and non-hazardous materials, including food packaging, plastics, and chemicals.
- Explore the deployment of on-site recycling technologies such as compactors, shredders, and specialized sorting machines.

3. Integration of Waste-to-Energy (WtE) Solutions:

- Design a waste-to-energy system suitable for handling non-recyclable aviation waste.
- Identify and recommend appropriate technologies such as pyrolysis, gasification, or anaerobic digestion to convert waste into energy.
- Conduct feasibility studies on the integration of WtE systems within the airport infrastructure to generate renewable energy.

4. Implementation of Real-Time Waste Monitoring and Data Collection Systems:

- Deploy smart waste monitoring systems (e.g., IoT-based waste tracking sensors) to collect real-time data on waste generation at key airport points.
- Develop a central waste management dashboard to visualize data, track waste volumes, and monitor recycling and diversion rates.
- Provide training on data interpretation and optimization strategies based on the collected data.

5. Capacity Building and Stakeholder Engagement:

- Conduct workshops and training programs for airport management, ground services, and waste management teams to build capacity in the use of advanced waste management technologies.
- Engage stakeholders from the aviation industry to promote the adoption of circular economy practices and waste reduction strategies.
- Promote community awareness and education programs around waste reduction in aviation.

Anticipated products to be delivered by the technical assistance.

1. Detailed Waste Management Assessment Report:

- A comprehensive report outlining current waste management practices, challenges, and gaps.
- Baseline data on waste volumes and types, including specific data on aviation-related waste.

2. Technology Roadmap for Waste Management and Recycling:

- A strategic roadmap for the integration of advanced waste sorting and recycling technologies, including a timeline for implementation.
- Recommendations for on-site recycling systems and waste diversion techniques tailored to aviation needs.

3. Feasibility Study and Design for Waste-to-Energy Systems:

- A feasibility study that evaluates the technical, economic, and environmental aspects of implementing a waste-to-energy system.
- A detailed design for a WtE system that aligns with airport waste characteristics and local energy needs.

4. Smart Waste Monitoring System Implementation:

- Deployment of IoT-based waste monitoring technologies, including sensors and data analytics platforms.
- A dashboard interface for tracking waste generation and management in real time, enabling more efficient waste diversion.

Expected timeframe:

Please indicate the expected duration period for the requested technical assistance. Please note CTCN technical assistance is limited to a maximum duration of 12 months.

The requested technical assistance is expected to span a period of **12 months**, with the following breakdown of activities:

Months 1–3: Baseline assessments and technology feasibility

Months 4–6: System design and pilot planning

Months 7–9: Pilot deployment and capacity building

Months 10–12: Evaluation, reporting and knowledge transfer

Anticipated gender and other co-benefits from the technical assistance:

For more information you can find guidelines on the CTCN's website here:

<https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development>

Throughout the implementation of the CTCN technical assistance, gender and youth aspects will be integrated across all activities

The technical assistance will promote:

- Increased participation of women in green technical and operational roles
- New green job creation in recycling, electric mobility and waste treatment
- Improved public health through reduced pollution
- Biodiversity protection through reduced marine and landfill waste
- Advancement of a national circular economy culture

Key stakeholders:

Please list the stakeholders who will be involved in the implementation of the requested CTCN technical assistance and describe their role during the implementation (for example, government agencies and ministries, academic institutions and universities, private sector, community organizations, civil society, etc.).

Stakeholders	Role to support the implementation of the technical assistance
National Designated Entity (NDE) – Ministry of Environment, Solid Waste Management & Climate Change, Government of Mauritius	Provide strategic oversight to ensure the technical assistance supports national and global climate targets; approve workplans; coordinate with CTCN and monitor implementation progress.
Air Mauritius	Provide technical expertise on aircraft-related waste streams; support operational improvements aligned with climate targets; participate in training and capacity-building activities.
Airport of Mauritius Limited (AML) (Request Applicant)	Coordinate the execution of project on waste management activities at Mauritius' airport for airlines operating into Mauritius; provide access to facilities and operational data; support the implementation

	of pilot waste management solutions; and facilitate field-level coordination of project activities.
Airport Rodrigues Limited	Support adopted version for activities at Rodrigues airport; facilitate data collection; host pilot demonstrations; contribute to island-specific waste solutions under the project.
Hotels and Catering Services for airlines	Provide operational insights on food preparation, packaging and catering waste streams; support the identification of waste reduction and recycling opportunities; participate in pilot initiatives aimed at improving waste segregation and circular economy practices within airport and hospitality operations.
Ministry of Tourism	Ensure project alignment with sustainable tourism and national climate positioning; promote environmentally responsible airport practices as part of Mauritius' global sustainability image.

Alignment with national priorities (up to 2000 characters including spaces):

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)	The project directly supports implementation of Mauritius' Nationally Determined Contribution (NDC) by reducing greenhouse gas emissions from waste treatment through improved segregation, recycling, waste-to-energy feasibility, and the transition to electric ground operations and technical services. <i>Reference Mauritius NDC 3.0- Section-3.2 Decarbonisation of sectors contributing to GHG emission reduction in the energy sector. 3.2.2 Decarbonisation of the Aviation sector. Page Number 11-12</i>
Technology Needs Assessment	Chapter 3, Priority Technologies – Waste Management and Energy, pp. 32–35
National Adaptation Plans	The project also supports Mauritius' National Adaptation Plan (NAP) by strengthening institutional and technical capacity to manage climate-related risks, improving resilience of critical airport infrastructure and reducing pollution pressures on vulnerable coastal ecosystems.
National Waste Management Strategy, 2020	The proposed waste-to-energy solutions and advanced waste sorting technologies will help achieve these objectives and support the government's long-term vision of a circular economy. Chapter 2, Waste Reduction, Recycling and Circular Economy, pp. 14–17
Government Programme 2025–2029	Section on Circular Economy and Source Segregation, Budget Speech Extract
National Budget 2025–2026	Paragraph 180 – Waste to Wealth Strategy

Development of the request (up to 2000 characters including spaces):

The request was developed by the National Designated Entity (NDE) housed in the Ministry of Environment, Solid Waste Management and Climate Change (MoESWMC). The initiative was triggered by the increasing climate and environmental impacts linked to aviation-related waste generation and the need to align airport operations with Mauritius' Nationally Determined Contribution (NDC) and national circular economy priorities.

The process was initiated by Air Mauritius Ltd as the request applicant. Technical inputs were provided relating to aircraft waste streams and operational sustainability practices.

Background documents and other information relevant for the request:

Below is a list of documents and sources that provide essential context and support for the request, along with their relevance to the proposed technical assistance for waste management in the aviation sector in Mauritius:

1. Mauritius Nationally Determined Contributions (NDCs)

- **Relevance:** This document outlines Mauritius' climate commitments and provides context for the country's targets for GHG reduction, including the aviation sector's role in reducing emissions and waste. It aligns with the need for improved waste management to meet national climate goals.
- **Link:** <https://unfccc.int/sites/default/files/2025-09/NDC%203.0%20%20Mauritius.pdf>

2. Government Programme 2025–2029

- **Relevance:** The Government Programme 2025–2029 outlines the national priorities and policy directions of Mauritius
- **Link:** <https://pmo.govmu.org/Communique/Government%20Programme%202025-2029.pdf>
- Paragraphs 12, 17, 24, 29, 36, 59, 60 and 61.

3. National Budget 2025–2026

- **Relevance:** The National Budget 2025–2026 outlines the Government's strategic priorities for economic development, climate action and sustainable growth
- **Link:** <https://nationalbudget2025.govmu.org/index.html>

4. Air Mauritius Sustainability Strategy

- **Relevance:** The enclosed Presentation was made by Air Mauritius at Regional Forum for Practitioners in Small Island Developing States on Advancing NDC Implementation Readiness, organised from 24 to 26 February 2026 by the Ministry of Environment, Solid Waste Management and Climate Change, with the support of Deutsche Gesellschaft für Internationale Zusammenarbeit, the NDC Partnership and the Center for Access to Climate Finance, the Commonwealth Secretariat and other international partners. It covers the Sustainability Strategy of Air Mauritius and insights towards a Just Transition in SIDS.
- Document: Enclosed

5: ICAO – Circular Economy in Aviation (Environmental Protection)

o **Relevance:** ICAO promotes circular economy approaches within the aviation sector, including waste reduction, resource efficiency and improved waste management practices across airline operations and airports. These approaches support the reduction of environmental impacts associated with aviation activities.

o **Link:** <https://www.icao.int/environmental-protection/circular-economy>

6. IATA – Cabin Waste Management Guidance

o **Relevance:** IATA provides industry guidance and best practices for airlines to reduce, segregate and recycle cabin waste, supporting the transition towards circular economy practices in airline operations and improving environmental performance across the aviation sector.

o **Link:** <https://www.iata.org/en/programs/sustainability/cabin-waste/>

7. ICAO – Airport Waste Management and Recycling Practices

o **Relevance:** ICAO highlights best practices for airport waste management systems, including recycling, waste segregation and circular resource management to support environmental sustainability across airport infrastructure and airline ground operations.

o **Link:** https://www.icao.int/sites/default/files/sp-files/environmental-protection/Documents/EnvironmentReport-2010/2025/Envreport2025_117.pdf

OPTIONAL: Linkages to Green Climate Fund Readiness and Preparatory Support

The CTCN is collaborating with the GCF in order to facilitate access to environmentally sound technologies that address climate change and its effects, including through the provision of readiness and preparatory support delivered directly to countries through their GCF NDA. These actions are in line with the guidance of the GCF Board (Decision B.14/02) and the UNFCCC, particularly paragraphs 4 and 7 of 14/CP.22 that addresses Linkages between the Technology and the Financial Mechanisms².

The CTCN is therefore implementing some of its technical assistance using GCF readiness funds accessed via the country's NDA. Any application for GCF support, including the amount of support provided, is subject to the terms and conditions of the GCF and should be developed in conjunction with the NDA.

Please indicate whether this request has been identified as preliminarily eligible by the NDA to be considered for readiness support from the GCF.

☐ **Initial engagement:** The GCF NDA of the requesting country has been engaged in the design of this request and the NDA will be involved in the further process leading to an official agreement for accessing GCF readiness support.

² Please see:

https://unfccc.int/files/meetings/marrakech_nov_2016/application/pdf/auv_cop22_i8b_tm_fm.pdf

☐ **Advanced engagement (preferred):** The GCF NDA of the requesting country has been directly involved in the design of this request and is a co-signer of this request, the signature indicating provisional agreement to use readiness national funds to support the implementation of the technical assistance.

NDA name:

Date:

Signature:

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.

I understand that, after the completion of the requested assistance, I shall support CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

Signature:

NDE name:

Mrs Sarita Meheelaul, Ministry of Environment Solid Waste Management & Climate Change

Date:

27/04/2026

Signature:

Sarita Meheelaul

THE COMPLETED FORM SHALL BE SENT TO THE CTCN@UNEP.ORG

The CTCN is available to answer all questions and provide guidance on the application process.