Project Progress Report on the Kigali HFC Implementation Plan (KIP)- 2025

Project Background

Trinidad and Tobago was the first Caribbean nation to ratify the Kigali Amendment to the Montreal Protocol on November 17, 2017. The Kigali HFC Implementation Plan (KIP) aims to phase down hydrofluorocarbons (HFCs) by establishing and managing a comprehensive quota and licensing system for HFC imports, exports, and consumption, including equipment containing these substances. KIP Stage I is being implemented concurrently with the HPMP until 2029, with the objective of achieving a 10% reduction from the HFC baseline consumption by January 1, 2029. The established HFC baseline for Trinidad and Tobago is 5,681,787 CO2-eq tonnes. The first tranche of KIP Stage I, with a total amount of US $543,249 plus agency support costs, is slated for implementation from January 2024 to December 2026. The activities detailed for 2026 fall within this first tranche period.

Purpose of Each Output

Strengthening Institutions for Compliance:

To enhance the capacity of national institutions to formulate, adapt, or update the policy and regulatory framework for HFC control, prevent illegal trade, and improve HFC monitoring and reporting.

Capacity Building for New Alternatives:

To create and strengthen technical skills among RAC and Mobile Air Conditioning (MAC) technicians for the sustainable and safe implementation of new HFC alternatives, including low-GWP refrigerants and good service practices.

Reduction of Installed HFC Capacity:

To assess different HFC alternatives, promote their adoption, and facilitate projects for the early retirement of inefficient HFC-based RAC systems.

Awareness Raising on HFC-Free Technology:

To inform and educate the general public and end-users about alternative refrigerants, HFC-free technologies, and the importance of energy efficiency in cooling, thereby promoting the adoption of low-GWP solutions.

Gender Mainstreaming:

To promote gender equality and maximize the participation of women in KIP activities, vocational training, and the RAC sector, in line with national and Multilateral Fund gender policies.

Project Coordination & Monitoring:

To ensure the effective overall management, supervision, and reporting of KIP activities, ensuring compliance with targets and efficient use of resources.

Key Achievements and Status for Each Output (Planned for 2025) Activities listed for 2025 from the tracking document contribute to the ongoing KIP Stage I implementation and objectives:

Strengthening Institutions for Compliance:

◦ Training of Border Control Agency staff from the Ministry of Health (Pesticide and Toxic Chemicals), involving 5 officers (3 females) [Jan].

◦ Training of Border Control Agency staff from Plant Quarantine, with 26 Border Officers (18 females) participating [Jan].

◦ Training with Government procurement regulators on refrigerants and cooling equipment, for 33 senior officers (28 females) [Feb].

◦ Customs Training with a new practical component using refrigerant analysers for 26 Customs Officers (18 females) [June].

◦ Border control training for TTBS on energy efficiency, LRM, and funding opportunities, involving 27 officers (18 females) [Aug].

◦ A meeting with the Fire Prevention Unit with 12 officers (1 female) [Aug].

◦ The issuance of letters for HFC controls for import and export (and HCFC controls for HPMP) is scheduled for December [Dec].

◦ One Stakeholder Forum Session with importers to inform of HCFC quota reduction, also relevant for KIP.

◦ Five sessions with Customs Brokers are scheduled for completion.

◦ Review and update of legal measures and regulatory impact assessment.

◦ Training sessions for customs, stakeholders, brokers, and importers on HFC import/trade control and data reporting.

◦ Update and implementation of the Customs Registry System and Harmonized Codes, including development of a border control handbook and updating the customs application.

◦ Development and printing of a good practice booklet for HFC-based fire extinguishers (500 copies).

◦ An awareness workshop on best practices in the fire extinguisher sector.

Capacity Building for New Alternatives:

◦ Multiple Curriculum Development meetings with NEC and other stakeholders (ARIA, SORAC, NOU, UWI, NTA) are planned throughout the year (February 14, April 4, May 9, October 17, November 28) to update the RAC Curriculum [Feb, Apr, May, Oct, Nov].

◦ Hydrocarbon Training at MIC Tobago for 12 participants (2 females) [June].

◦ UTT Training on Hydrocarbon as a refrigerant [Aug].

◦ 5 training courses for at least 100 RAC technicians.

◦ Update of the electronic registry system for certified technicians.

Reduction of Installed HFC Capacity:

◦ Site Visits for Digital Cooling Project exploring sustainable cold chain solutions [Jan].

◦ A meeting with TTBS on the Collection mechanism LRM is scheduled for September [Sep].

Awareness Raising on HFC-Free Technology:

◦ Public awareness activities at Atmosphere LATAM 2025 Trinidad and Tobago Awareness on National Standards and Policies [Feb].

◦ Sensitization efforts at the Trinidad and Tobago Energy Conference (covering GEF/HPMP/KIP projects) [Feb].

Gender Mainstreaming:

◦ Explicit female participation is noted in several planned activities: Border Control Agency training (3 females, 18 females) [Jan], Government procurement regulators (28 females) [Feb], Customs Training (18 females) [June], Hydrocarbon Training (2 females) [June], Border control training for TTBS (18 females) [Aug], and a meeting with the Fire Prevention Unit (1 female) [Aug].

Project Coordination & Monitoring:

◦ Participation in general awareness events where the KIP is presented [Feb, Mar, Apr].

◦ The issuance of letters for HFC controls for import and export is scheduled for December, serving as a key monitoring activity [Dec].

Risks/Issues for the KIP

• Exceeding Consumption Limits: Projections indicate a significant risk that Trinidad and Tobago could exceed Montreal Protocol HFC consumption limits in 2029 and 2030 if no proactive actions are taken. With current HFC consumption at 80.9% of the baseline, the urgency for early intervention is high.

• Market Barriers to Alternatives: The continued market demand for HFC-based equipment (often used as replacements for HCFCs) and the current limited availability of low-GWP equipment across all applications pose substantial challenges to phase-down efforts.

• High Costs of Alternatives: The high upfront costs associated with adopting low-GWP alternative technologies can be a significant barrier, particularly for small businesses and in developing regions.

• Stakeholder Resistance: There is potential for resistance to new regulations or a lack of buy-in from key stakeholders, such as importers and retailers, which could impede the widespread adoption of low-GWP refrigerants.

• Implementation Challenges: Delays in activities requiring regional coordination are a potential risk, though the KIP aims to mitigate this through facilitating dialogue among National Ozone Units (NOUs).

• Lack of Specific Regulations: Currently, specific regulations prohibiting the import of HFC-based equipment are not yet in place, which could slow down the transition.

Lessons Learned

• Growth Drivers for HFCs: HFC consumption has been increasing at a rate significantly higher than both population and economic growth, primarily driven by the replacement of HCFCs and the wide availability of HFC-based technologies. This trend underscores the necessity for proactive control measures.

• Regulatory Importance: A robust licensing and quota system for HFCs is crucial for effective supply control and ensuring compliance, building on the country's extensive experience with CFCs and HCFCs.

• Continuous Stakeholder Engagement: Ongoing consultations with national stakeholders, including importers and distributors, are essential to address market barriers, promote low-GWP alternatives, and facilitate access to new technologies.

• Integrated Approach: A combination of comprehensive policies, technician training, awareness campaigns, and promoting energy efficiency is needed for a sustainable HFC phase-

down, rather than relying on a single intervention. This approach also includes the need for continuous monitoring of technology evolution and market assessment.

• Targeted Strategy: While HFC consumption is concentrated in a few key substances (R-404A, HFC-134a, R-410A), which could simplify strategy formulation, the lack of defined, available, and accessible alternatives for direct conversions remains a challenge, necessitating a carefully developed strategy.