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Thailand HCFC Phase-Out Stage II (P165235)

EAST ASIA AND PACIFIC | Thailand | Environment, Natural Resources & the Blue Economy Global Practice |
Montreal Protocol | Investment Project Financing | FY 2020 | Seq No: 1 | ARCHIVED on 27-Mar-2020 | ISR40943 |

Implementing Agencies: Department of Industrial Works, Kingdom of Thailand

Key Dates

Key Project Dates

Bank Approval Date: 10-Jan-2020
Effectiveness Date: --
Planned Mid Term Review Date: 31-Jan-2022
Actual Mid-Term Review Date:
Original Closing Date:
Revised Closing Date: --

Project Development Objective (PDO)

Project Development Objective (from Project Appraisal Document)

The project development objective is to contribute to reducing HCFC consumption in Thailand.

In doing so, the project will contribute to Thailand's efforts to meet and sustain the 2020 HCFC consumption phase-out obligations of the Montreal Protocol and its Multilateral Fund, as well as the initial requirements of the Kigali Amendment.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components

Name
Component 1: Investment in HCFC Consumption Reductions:(Cost $2.55 M)
Component 2: Technical Assistance:(Cost $1.97 M)
Component 3: Project Management:(Cost $0.31 M)
Component 4: Strengthening of the National Ozone Unit:(Cost $1.11 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	--	Satisfactory
Overall Implementation Progress (IP)	--	Satisfactory
Overall Risk Rating	--	Moderate

Implementation Status and Key Decisions

The PIM has been finalized and considered satisfactory by the Bank. GSB's PMU will be fully staffed in April and DIW's PMU and NOU will be fully staffed by end of April. In the meantime, DIW has already issued 2020 Import quotas in accordance with the target agreed with the Executive Committee.

Multiphase Programmatic Approach (MPA) Status

Risks

Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	Low	--	Low
Macroeconomic	Low	--	Low
Sector Strategies and Policies	Low	--	Low
Technical Design of Project or Program	Moderate	--	Moderate
Institutional Capacity for Implementation and Sustainability	Moderate	--	Moderate
Fiduciary	Moderate	--	Moderate
Environment and Social	Moderate	--	Moderate
Stakeholders	Low	--	Low
Other	--	--	--
Overall	Moderate	--	Moderate

Results

PDO Indicators by Objectives / Outcomes

To contribute to reducing HCFC consumption in Thailand

►HCFC Consumption (ODP tons) (Number) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	410.00	--	410.00	354.70
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	ODP of each chemical multiplied by total import minus export in MT. The current HCFC consumption for 2020 is based on the import quotas issued by DIW at the beginning of 2020. The actual consumption level will be confirmed via an independent verification to be conducted during the first half of 2021.			

Overall Comments

The 2020 HCFC import quotas of slightly lower than 410 ODP tons have already been issued by DIW. The actual import will be confirmed in early 2021 by an independent consultant team.

Intermediate Results Indicators by Components

Component 1: Investment in HCFC Consumption Reductions

►Cumulative HCFC-141b consumption reduction in spray foam sub-sector (ODP ton) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	31.53
Date	17-Mar-2020	--	17-Mar-2020	29-Dec-2023
Comments:	DIW's PMU and GSB are appointing technical consultants and expect to start preparing a pipeline of spray foam subprojects in May.			

►Cumulative GHG emission reductions from replacement of baseline spray foam blowing agent with low/lower GWP alternative (tCO2 eq per year) (Metric tons/year, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	22,830.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Reduction of GHG emissions from replacement with low/lower GWP alternative			

►Cumulative GHG emission reductions from replacement of baseline refrigerants with low/lower GWP alternative in commerical refrigeration sector (tCO2eq per year) (Metric tons/year, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	12,500.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Reduction of GHG emission from replacement with low/lower GWP alternative.			

►Cumulative number of enterprised covered by the signed sub-grant agreements (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	40.00
Date	24-Sep-2019	--	17-Mar-2020	28-Dec-2023
Comments:	Sub-grant agreements signed between GSB and beneficiary enterprises			

Component 2: Technical Assistance

►Cumulative HCFC-22 consumption reduction in air conditioning servicing sector (ODP ton) (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	20.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	This indicator will reflect the effectiveness of technical assistance towards HCFC consumption reduction in the service sector.			

►Number of training centers provided with training equipment to support service technician training (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target

Value	0.00	--	0.00	12.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Number of training centers which receive six sets of training equipment. List of training equipment agreed will be included in the PIM.			

►Cumulative number of service technicians trained on the proper installation and maintenance of HFC-32 residential A/C and on minimizing leakage of HCFC-22 from existing HCFC-22 based residential A/C (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	5,500.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Cumulative number of service technicians that are offered training from DSD and vocational technical schools (supported by this project) on the proper installation and maintenance of HFC-32 residential air-conditioners to enhance market penetration of this technology, and training to minimize leakage of HCFC-22 from existing HCFC-22 based residential A/C equipment			

►Regulation and/or standard supporting HCFC phase-out in spray-foam sub-sector (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	--	No	Yes
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Effective dates of regulatory instrument on HCFC-141b consumption in spray foam occurs in target year			

►Mechanism in place to collect data on the number of female service technicians trained by the project (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	--	No	Yes
Date	03-Oct-2019	--	17-Mar-2020	29-Dec-2023
Comments:	End-of-training surveys will enable the tracking of female service technicians.			

Component 3: Project Management

►Biennial Work Programs for Submission to the ExCom (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	2.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Work program and implementation reports on all activities financed by the Project. The work program would follow the format adopted by the Executive Committee.			

►Verification Reports on Annual HCFC Consumption (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	5.00
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Cumulative number of verification reports prepared during 2019 to 2023. Verification of HCFC consumption for 2019 and 2020 will be conducted after the Grant Agreement becomes effective.			

Component 4: Strengthening of the National Ozone Unit (NOU)

►Timely issuance and enforcement of annual HCFC import quotas (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Yes	--	Yes	Yes
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Component 4 is to support operations of the NOU. Since timely issuance and enforcement of annual HCFC import quotas are measures to ensure its compliance with the consumption targets of the Montreal Protocol. Since through the support provided by the previous project, Thailand was able to achieve this target throughout the project implementation period. The baseline value is, therefore set as “Yes”. This proposed project is expected to maintain the Government’s capacity to meet this critical requirement of the Montreal Protocol;			

►Timely Article 7 data submission (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Yes	--	Yes	Yes
Date	31-Dec-2018	--	17-Mar-2020	29-Dec-2023
Comments:	Component 4 is to support operations of the NOU. Timely Article 7 Data Submission is one of the key obligations of the Parties to the Montreal Protocol. Since through the support provided by the previous project, Thailand was able to achieve this target throughout the project implementation period. The baseline value is, therefore set as “Yes”. This proposed project is expected to maintain the Government’s capacity to meet this critical requirement of the Montreal Protocol;			

►Licensing and Customs system for tracking HFCs put in place (Yes/No, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	--	No	Yes
Date	19-Sep-2019	--	17-Mar-2020	01-Dec-2023
Comments:	Policy or regulation that adjusts the licensing and customs system to enable robust tracking of HFC imports and exports			

►Beneficiaries reporting satisfaction with key aspects of the Ozone Day public awareness activities (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	50.00
Date	19-Sep-2019	--	17-Mar-2020	25-Dec-2023
Comments:	“Beneficiaries reporting satisfaction with key aspects of the Ozone Day public awareness activities” is a new indictor for conforming with the citizen engagement requirement. This indicator was not used prior to this project. Since this project will replace the old outdated and inefficient technologies with more environmental friendly products, this could result in higher initial costs of new products and possibly higher maintenance costs. However, due to improvement in energy efficiency or better insulation of new products the costs of using these products could be lower. However, it is not possible to foresee how the consumers’ reaction would be. The Government of Thailand agrees with the team that it will try to convey the message to its public and to maintain at least 50% support from the public throughout the project implementation period.			

Data on Financial Performance

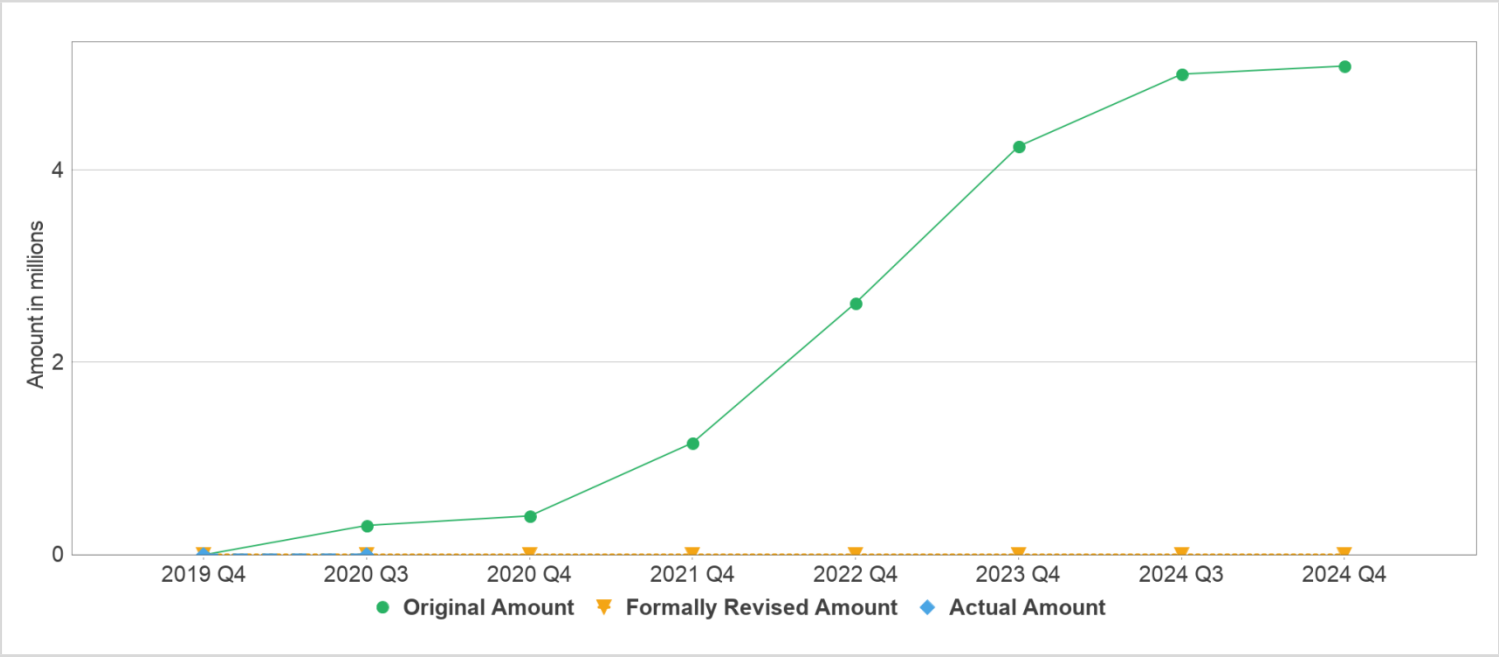
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date

Cumulative Disbursements



Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.