

Philippines Food Cold Chain Virtual Pilot

Executive Summary

The Philippines Food Cold Chain virtual pilot considers how investments in internationally transferred mitigation outcomes (ITMOs) can pay for reduced emissions of highly potent greenhouse gases—hydrofluorocarbons, or HFCs—many years before these reductions would be required by the Philippines government. Further, the proposed virtual pilot addresses a sector of critical and growing importance under a warming climate: the ability to keep food cold from the point of production to the consumer. Focusing initially on reducing HFC pollution in the cold storage and refrigerated transportation parts of the food cold chain, the proposed cooperation aims to substantially reduce emissions and prove the viability of alternative refrigerants that have substantially lower global warming potentials (GWP). In building knowledge and capacity domestically, future growth in the food cold chain may be more likely to use alternative refrigerants from the beginning.

Under the Kigali Amendment to the Montreal Protocol, developing countries like the Philippines are asked to commit to freezing HFC production and consumption starting in 2024 as compared to baseline levels (2020-2022), and from there, to begin a slow phase out of these harmful gases. The proposed cooperation would increase awareness of these international expectations and begin significant reductions in HFC pollution much earlier than would be required if the Philippines ratifies the Kigali Amendment.

Under the proposed cooperation, funds from Sweden would pay for (1) an audit program for the food cold chain aimed at identifying options to reduce refrigerant emissions and improve energy efficiency when possible, (2) a grant and incentive program to fund the incremental cost of mitigation measures identified in the audit program, and (3) a program to train staff on proper use and maintenance of new equipment and refrigerants. Expected mitigation measures include the replacement of high GWP refrigerants with low GWP alternatives (such as ammonia), changes in refrigeration systems, and improved maintenance to reduce leakage.

While some facilities and activities within the Philippines food cold chain already use climate-friendly alternatives, many operations rely on high GWP refrigerants (HFCs). For operations already using high GWP refrigerants, there is currently no incentive and little awareness of the climate imperative to swap out refrigerants. Operators do not have the motive or capacity to evaluate the pros and cons of lower GWP alternatives and make the switch. As a result, mitigation options such as shifting from one refrigerant to another are highly unlikely without outside financial support from the proposed cooperation.

The virtual pilot design ensures additionality by only crediting emission reductions that would be in excess of what would be committed under the Kigali Amendment. Further, if any other international financial support for emission reductions in the food cold chain is approved, efforts would be needed to ensure the initiatives are complementary, addressing different sub-sectors or geographies, or distributing reduction credits in proportion to the emissions reductions achieved.