



THE PILOT AUCTION FACILITY FOR METHANE AND CLIMATE CHANGE MITIGATION

The Pilot Auction Facility for Methane and Climate Change Mitigation (PAF) is an innovative mechanism that pioneers the use of auctions to allocate public finance for climate action efficiently.

The PAF plans to demonstrate a new, cost-effective climate finance mechanism that incentivizes private sector investment and action in climate change in developing countries by providing a guaranteed floor price on carbon credits.

The PAF was created as a result of a report from the Methane Finance Study Group,¹ an international group of experts convened in 2012 at the request of the G8 to review innovative financing approaches to methane abatement. Through its work, the Study Group identified 1,200 methane projects that were at risk of being decommissioned due to the low price of carbon credits. Yet the additional revenue required to unlock these investments, and/or to allow them to continue their operation was found to be small. The Study Group estimated that, across all developing countries, methane-reducing opportunities could entail a reduction of as much as 8,200 million tCO₂e at less than \$10 per ton in incremental cost financing. In its design and development phase, the facility benefited from the support of Partners in the Climate and Clean Air Coalition.



INITIAL FOCUS ON METHANE

Reducing methane emissions is attractive because methane, a byproduct of a range of industrial and agricultural processes, is a highly potent GHG with

a global warming potential about 25 times that of CO₂. Thus, the reduction of one ton of methane is equivalent to the reduction of 25 tons of CO₂.

Methane reduction actions alone could lead to approximately 0.3°C in avoided global warming by 2050. Implementation of technically feasible and cost-effective methane reduction measures would not only slow down the rate of climate change over the next decades, but also contribute to improvements in local air quality and food security. Additionally, captured methane can be burned for cooking or electricity generation, contributing to increased access to clean energy.

Over the next 20 years, methane emissions are expected to grow by 19 percent, accounting for nearly half of all warming over this period. In its Global non-CO₂ GHG Emissions 1990–2030 report, the U.S. Environmental Protection Agency estimates that about 7,000 million tCO₂e of methane was emitted globally in 2010. In the absence of concerted action, this figure is expected to grow to close to 8,000 million tons by 2020 and more than 8,500 million tons by 2030.



PRICE GUARANTEE ON CARBON AND AUCTION

To respond to this opportunity, the PAF will take advantage of existing tools and experience from the CDM and related carbon markets to deliver financing,

¹ Methane Finance Study Group Report: Using Pay-for-Performance Mechanisms to Finance Methane Abatement, April 2013.



in the form of a price guarantee, to projects that mitigate climate change. The guaranteed floor price will be delivered through a put option supported by donor funding. The competitive nature of the auction used to allocate the price guarantee will reveal the minimum price required by the private sector to invest in climate change mitigation projects, thereby maximizing the impact of public funds and achieving the highest possible volume of climate benefits per dollar. The very nature of the put option means that the facility's resources will only be disbursed after the ERs have been independently verified, making the PAF a pay-for-performance facility.

The WBG will issue a special type of bond that will have the same properties as a put option. The institution's obligation under the bonds will be backed by the PAF. Under the terms of the bond, the bondholders will have the right, but not the obligation, to sell the ERs generated by the underlying projects to the PAF at a pre-agreed price, the put option strike price.

Looking Ahead

The PAF's first auction is targeted to be completed in the first half of 2015 after bidders have been trained on how to use an online auction platform. It will focus on methane reduction projects such as landfill gas, animal waste, and wastewater. The PAF is backed by several government donors (Germany, Sweden, Switzerland, and the United States) and has a capitalization target of \$100 million. The facility has a strong potential for replication and quick scaling up in methane or other sectors.

This optionality allows put option owners to benefit if carbon prices in international markets rise above the strike price. In such a case, the PAF will have achieved its objective (to stimulate private sector investment in mitigation) at no cost to it. If carbon prices fall, however, the put option owner has the right to sell the carbon credits to the PAF at the strike price. Either way, the price guarantee has provided the private investors with the financial incentive to fund projects.

Additionally, the PAF will disburse its resources only against independently verified ERs, using existing carbon auditing standards such as the CDM or voluntary standards such as the Verified Carbon Standard or Climate Action Reserve. This pay-for-performance feature is attractive for governments facing expanding funding needs and scrutiny on achievements. The combination of an auction process and payments based on performance maximizes value for public money.

