



WORLD BANK GROUP
Climate Change

Application of RBF in the PAF and Cooking Stoves

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When is RBCF an appropriate policy choice?

- First choice is whether it is necessary to incentivize “good” low carbon behavior/activities or penalize “bad” carbon intensive behavior/activities. E.g. RBCF or Carbon Tax or legislation.
- RBCF provides incentives and can be effective to address:
 - Market imperfections (Externalities, information asymmetry, market power, co-ordination failures, public goods etc.) by delivering subsidies; and
 - Improving the efficiency of procurement.

When is RBCF an appropriate policy choice? Cont.



Objectives must be clearly defined

A program design must be defined according to clear policy objectives and specific circumstances of the country and sector is key.

Selecting suitable indicators to measure progress towards the objectives is a key prerequisite for a results-based financing program to deliver the intended outcomes.

As RBF foresees recipient discretion as to how results are achieved, the ability of recipients to respond to incentives from RBF is another important condition for effective programs (access to capital for upfront finance, reasonable control on how to achieve results, and capacity to assume risk).

RBF schemes require a monitoring system that allows for transparent third-party verification of results.

(Delivering RBF Through Crediting Mechanisms, Öko-Institut e.V 2015)



Objectives must convert into indicators



Recipient must have capacity



Results can be measured

The Pilot Auction Facility for Methane and Climate Change Mitigation (PAF)



Objectives - prevent climate change through mitigation



Indicator is the delivery of 1tCO₂eq.



Capacity - The PAF currently utilises CDM pipeline – “stranded assets”



Results can be measured using existing CDM/VCS/GS standards

How the PAF works and the RBCF component within it

PAF delivers payments for CERs (the result) via put options which are sold in an auction.

- **Put options** are a price guarantee and are purchased by the private sector who have the right but not the obligation to redeem them. Put options may be sold to other eligible companies if an activity underperforms.
- **Auctions** can be used to resolve uncertainties in markets – identifying projects most likely to succeed and giving value to goods or services that are hard to price i.e. tCO₂eq. The Pilot Auction Facility auctions have been used to set the „strike price“ the amount paid for each guarantee and for the „premium“ the price charged to participate in the auction.
- **RBCF component** - PAF only disburses funds once tCO₂eq. results have been verified by a third party.

RBCF for cooking stoves



Objectives - prevent climate change through mitigation – energy efficiency and prevention of black carbon AND contribute to sustainable development – gender and health



Poss. Indicator - Percentage of households primarily using clean and efficient cooking fuels and technologies.



Capacity – Utilise remote monitoring options for surveys. Purchasers administrator must use methodologies to convert indicators into CO₂eq, Gender equality, health.



Results can be measured

RBF for Efficient Clean Cooking and Heating (ECCH)

- Why ECCH?
 - Three billion people rely on solid fuels, such as wood or coal, for cooking and heating, causing severe health, environmental and climate impacts
 - US\$4.4 billion of annual investment needs to increase access to ECCH solutions at scale

- Positive track record of carbon finance to attract private agents and financing
 - ~340+ registered Gold Standard and CDM projects and PoAs on efficient clean cooking. A total of \$162 million from sale of carbon offsets was mobilized for the efficient cooking sector in the voluntary carbon markets from 2007 to 2014

- Lessons learned from carbon finance application on clean cooking
 - Carbon finance projects have been effective in increasing technology penetration, but less effective in introducing behavior change and market transformation.
 - Requires quality, reliable, verifiable data on targeted benefits. Data collection can be costly, sometimes resulting in misreporting and requiring surveys to be repeated

Moving forward in RBCF application on ECCH

- Why consider RBCF approach now?
 - Recent methodological and field work to measure and quantify the impacts of ECCH interventions on climate, health, and gender;
 - Technological improvements in cook stove design and remote monitoring.
- What would a new RBF approach for ECCH involve?
 - Development of widely agreed methodologies to measure health, gender and additional climate benefits (from black carbon emission reduction);
 - A robust process for independent, third party verification of the impact-level results;
 - RBCF can establish market price signal even without functioning carbon markets
 - Providing adequate technical assistance to create the enabling policy and regulatory environment for market transformation.

THANK YOU FOR YOUR ATTENTION

How it works: Step-by-step

1. Select and contract for emission reductions:



Publicize auctions



Execute auction to determine the winning bids



Sign put option contracts with the winning bidders

2. Achieve emission reductions:



Put option contract in hard currency helps implementer overcome financial and other barriers

3. Verify & pay-for-performance:



Monitor and verify emission reductions using established GHG accounting standards



Should the market price be below the put option strike price, contract holders exercise options and the PAF purchases the carbon credits