PILOT
AUCTION
FACILITY
for Methane and Climate Change Mitigation

World Bank Group
Experience from the First Auction -- Brown Bag Lunch (BBL)
September 15, 2015
THE FOLLOWING IS A SUMMARY OF THE WORLD BANK’S PROPOSED PLAN TO ISSUE PILOT AUCTION FACILITY EMISSION REDUCTIONS NOTES (“PAFERNS”). IT IS NOT AN OFFER TO SELL PAFERNS OR AN INVITATION TO OFFER TO BUY PAFERNS. THIS SUMMARY IS SEPARATE FROM, AND SHOULD NOT BE READ IN COMBINATION WITH, ANY FUTURE OFFER OR SALE OF PAFERNS, WHICH WILL BE MADE IN COMPLIANCE WITH APPLICABLE LAWS AND UNDER ENTIRELY SEPARATE LEGAL DOCUMENTATION AND OFFERING MATERIALS. THIS SUMMARY IS VERY HIGH LEVEL FOR SIMPLICITY AND LEAVES OUT MATERIAL INFORMATION AND THE LEGAL DOCUMENTATION THAT IS EXPECTED TO GOVERN THE PAFERNS. FURTHER, IT IS CURRENT ONLY AS OF THE DATE OF POSTING TO THIS WEBSITE AND IS LIKELY TO BECOME OUTDATED AS THE PAFERNS LEGAL DOCUMENTATION IS DEVELOPED. THE STRUCTURE, TIMING AND MECHANICS OF THE ACTUAL PAFERNS, IF AND WHEN THEY ARE ISSUED, ARE SUBJECT TO CHANGE. POTENTIAL INVESTORS MUST OBTAIN A COPY OF THE COMPLETE LEGAL DOCUMENTATION PURSUANT TO WHICH THE PAFERNS WILL BE ISSUED, INCLUDING THE WORLD BANK’S MAY 2008 PROSPECTUS RELATING TO ITS GLOBAL DEBT ISSUANCE FACILITY AND THE FINAL TERMS FOR ANY ISSUANCE OF PAFERNS. POTENTIAL INVESTORS SHOULD NOT RELY ON THIS SUMMARY. BEFORE MAKING ANY INVESTMENT DECISION, POTENTIAL INVESTORS MUST REVIEW THE COMPLETE LEGAL DOCUMENTATION (ONCE AVAILABLE).
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Introduction video

Play Video
Video recap -- The PAF’s objectives and scope

• Pilots an innovative climate finance mechanism that uses auctions to maximize impact of funds

• Provides incentive for private sector investment in projects that reduce greenhouse gas emissions

• Disburses resources against independently verified emission reductions

• $100m target capitalization – learning a key objective for scaling-up or replication for use with other pollutants or other results
Supporting methane mitigation

Sample Sectors

- Household biogas
- Landfill gas
- Animal waste capture
- Coal mine methane
- Landfill gas to energy
- Oil & gas

Why Methane

- Methane is a highly potent greenhouse gas, 25 times that of carbon dioxide (CO$_2$)
- Concerted action in methane sectors alone could lessen warming by 0.3 °C by 2050
- Methane aids in the formation of urban "smog" that is toxic to plants and crops and damaging to lungs, causing asthma and even heart attacks
- Captured methane can be burned for cooking or electricity generation
- ~1,200 projects, capable of reducing ~850 Mt CO$_2$e until 2020, were identified as stranded – the initial target of the PAF
Structuring IBRD bonds as a stream of put options

- PAF uses a zero coupon IBRD puttable bond that will have the same properties as a put option
  - The Issue Price = financial equivalent of premium of the put option
  - Final Redemption Amount = financial equivalent of strike price
  - Bonds called Pilot Auction Facility Emission Reductions Note (PAFERN)

- PAFERNs subdivided into CER Lots: One Lot = 2,000 CERs with an Issue Price of $600 (i.e., $0.30 per CER)

- Winners purchase a complete series of 5 PAFERNs, redeemable annually for 5 years
Including eligibility criteria in the IBRD puttable bonds

- Per Bond Terms all eligibility criteria stays fixed over the life of PAFERNs
- Future auctions will have modified terms to allow for alternative eligibility criteria

A. Eligible Emission Reductions

- All emission reductions must be Certified Emission Reductions (CERs)
- CERs must not be subject to purchase agreement contract with a third-party (unencumbered)

B. Eligible Methodologies

- Provided as an Annex in the Final Bond Terms
- List of methodologies corresponds to those in the waste, waster water and agricultural waste sectors

C. Eligible Countries

- The list of eligible countries is provided as Annex to the Final Terms
- For multi-country PoAs, all countries must be on the eligible list

Role of 3rd Party Verification Agent

- To avoid conflict of interest in determining eligibility of CERs brought forward by bond holders at redemption, IBRD has hired a third-party verification agent to complete a desk review of the emission reductions in order to confirm eligibility prior to IBRD’s payment of the Bond redemption amount
Risk management: Environmental and social performance

The PAF established environmental and social performance criteria to be applied against the underlying projects. Put option owners are required to meet these criteria and be independently audited. These criteria were derived from the IFC Performance Standards, national laws or other relevant standards.

Summary of Environmental, Heath & Safety and Social Criteria for First Auction

• The EHS criteria for the first auction is found on the PAF Website

• Emission reductions must originate from a CDM project or Program of Activities that has received a positive environmental, health & safety and social (EHS) report from an accredited Designated Operational Entity (DOE) at the time of the report which is to be dated no more than 547 days prior to the redemption date

• The EHS criteria is designed as a checklist to enable the DOE to provide a binary (positive / negative) result

• The inspection report will incorporate input from the host site and project staff as well as representatives of nearby/affected communities and responsible local government agencies, as appropriate

• The cost of the EHS inspection is to be borne by the option owner
Screening auction applicants – designing and implementing an integrity framework

**Integrity Due Diligence**

- An integrity due diligence process was designed in order to screen applicants prior to the auction.

- Applicants were required to complete an Integrity Due Diligence questionnaire as part of the application process. Applicants had to report about:
  
  - Their corporate ownership, structure & management
  - Any criminal conviction, civil liability, or settlement related to integrity issue
  - Any investigations for criminal activities, serious civil infractions
  - Responsibility for any environmental, social, or health incident
  - Their inclusion on the U.N. Security Council sanctions list or World Bank Group’s debarment or temporary suspension list

- Twenty-eight applicants were qualified to participate in the auction.

- The questionnaire can be found on the PAF website.
First auction parameters and rules

• Bidder application deadline was June 25, 2015

• Bidders bid in 10,000 CERs blocks called a Bid Unit (i.e., 2,000 CERs x 5 Maturity Dates)

• The minimum bid was for 100,000 CERs

• The maximum bid was for 2,000,000 CERs

• The deposit was 20% of the $0.30 Issue Price, or $0.06 per CER

• Starting price in the auction $8/CER

• Auction rules were developed specifically for the first auction, but are adaptable for future auctions
  — Future auctions will test different auctioning techniques.

• Bidding proceeds in multiple rounds
  — Auction Manager announces strike price
  — Bidders select how many PAFERNs (put options) they want to purchase at that price
  — If Bidders select more PAFERNs than there are available, the price “ticks” down

• As the price ticks down, Bidders reduce the number of PAFERNs that they are willing to purchase

• Auction ends when the number of PAFERNs that Bidders are willing to purchase equals or falls short of the number of PAFERNs available

• As bidders exited they were required to provide an “exit price” as their final offer.
First auction result

Auction Clearing Price

$2.40 per tCO2e

Put option strike price

Volume of put options sold

8.7 million tCO2e

Put option premium

$0.30/CER

Number of auction rounds

11

28 Bidders

17 Countries

12 Winners

- ABLY CARBON
- AMSTERDAM CAPITAL TRADING
- BATTRE BAHIA
- BENG ENGENHARIA
- BIOGÁS RIOGRANDENSE
- BP ENERGY ASIA
- CARBON2020
- ECOBURIS AMBIENTAL
- ISCCP INVESTMENT PLATFORM
- RELLÉNOS SANITARIOS
- S.P.M. FEED MILL
- TIMARPUR OKHLA

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Climate Change

September 15, 2015
First auction results – Analysis

• Very positive results confirm the strong potential of the PAF’s model as an efficient tool to deliver climate finance and to leverage private sector investment

• The final price indicates that there are significant climate opportunities that can be tapped in developing countries by the private sector for only a few dollars per ton of incentive

• Building from this success, the World Bank will work with its partners to identify and explore concrete opportunities for replication and scale-up
Next Steps: Fundraising, Replication and Scale-up

• PAF raising resources to reach its $100m capitalization target
  — New donors will contribute to shaping future auction rounds

• Subsequent PAF auctions expected in 2015/2016
  — May focus on non-methane sectors
  — May focus on a specific geographic area and/or low income countries
  — Will test different auction techniques

• Potential replication
  — PAF-like approach of using put options and auctions may be used by countries to achieve domestic mitigation or support other goals (air pollution, energy access, etc.). These easy gains could be exploited by countries in achieving their INDCs.

• Potential scale-up
  — The PAF mechanism has the potential to be significantly scaled-up, with resources from the GCF or other public funders, to support mitigation projects in various sectors
Thank you

Contributors

- Germany
- Sweden
- Switzerland
- United States

Vendors / Agents

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www.pilotauctionfacility.org