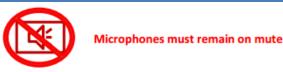


for Methane and Climate Change Mitigation

Third Auction Briefing
Webinar – November 10, 2016







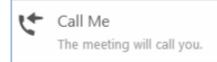
Instructions for webex webinar



In order to connect to the webinar audio login with the link provided by email and then click on the three dots below the **connect to audio** button in the left lower corner of your screen

Then select one of the three options:

- Have the meeting call your phone (Call me)
- Call the meeting from your phone (I will Call In)
- Connect with your computer microphone (Call Using Computer)









To ask questions, please use the chat panel by clicking on the chat icon in the upper right corner of your screen



Microphones must stay on mute at all times

Questions can only be asked via the chat panel





Disclaimer

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 FURTHER, IT IS CURRENT ONLY AS OF THE DATE OF POSTING TO THIS WEBSITE AND IS LIKELY TO BECOME OUTDATED AS THE PAFERNS LEGAL DOCUMENTATION IS DEVELOPED.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).







Origins of the PAF

- The Pilot Auction Facility (PAF) is an innovative climate finance model hosted by the World Bank to stimulate private investment in projects that reduce greenhouse gas emissions
- Carbon credit prices collapsed, stranding projects with no incentive to reduce emissions
- The PAF was developed after the Methane Finance Study Group, an international group of experts convened at the request of the G8, recommended the creation of a methane abatement facility that would auction put options to guarantee a price floor for independently verified carbon credits
- The PAF is backed by Contributors (United States, Germany, Sweden, Switzerland) which have contributed **\$53 million** in total resources
- To date, the PAF has hosted two auctions (July 2015 and May 2016) allocating over \$40 million in climate finance for methane emission reductions

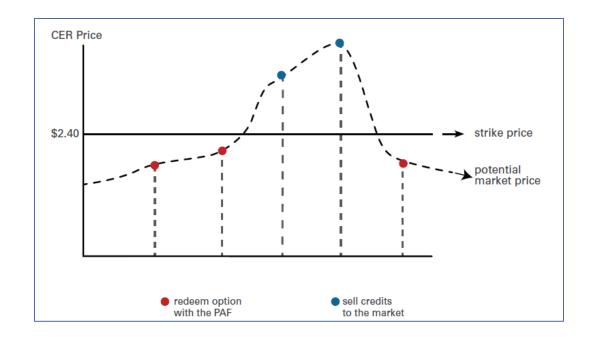






The PAF Offers a Price Guarantee for Carbon Credits

- The PAF sells "put options" that guarantee a price for carbon credits
- The put options give the owner the right, but not the obligation, to sell their carbon credits to the PAF at a predetermined price in the future (the "strike price")









The PAF Uses Auctions to Sell Put Options

- The PAF holds auctions in which bidders compete to purchase put options
- The third auction will determine the "strike price," which is the price offered to option owners in the future for eligible carbon credits

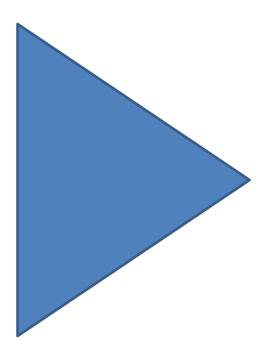


- Auction winners will purchase put options by paying an "option premium" price
- The PAF will only pay option owners for independently verified carbon credits
- Auctioning ensures that least-cost climate mitigation activities are selected



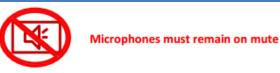


Video: Introduction to PAF Mechanism



Watch Videos







Third Auction Overview

- The third auction will focus on mitigation of nitrous oxide, produced by industrial nitric acid and caprolactam plants (not adipic acid)
- N2O is a highly potent greenhouse gas with a global warming potential approximately 300 times that of CO2
- To be eligible for payment the carbon credits must meet a set of eligibility criteria:
- 1. Certification standards
- 2. Mitigation activities (methodologies)
- 3. Countries

- 4. Generation and issuance period
- 5. Environmental, Health and Safety Criteria







Third Auction Parameters

- Auction Format: Reverse Descending Clock in Two Segments
 - "New Segment": New Abatement Projects
 - "Open Segment": Open to All Abatement Projects
- Auction Budget:
 - New Segment: \$6m
 - New Segment + Open Segment: \$12m
- Fixed Premium Price: \$0.30/ton
- Auction Total Supply (budget ÷ strike):
 - New Segment: 1,000,000 tons
 - Open Segment: 1,200,000 tons to 2,400,000 tons (depending on result of New Segment)
- Strike Starting Price:
 - New Segment: \$6.00/tonOpen Segment: \$5.00/ton
- Refundable Deposit: \$0.06/ton
- Minimum Bid: 100,000 tons
- Maximum Bid: 2,000,000 tons across both Segments







Third Auction: Eligibility Criteria (1 of 4)

- All eligibility criteria will stay fixed over the life of put options issued from the third auction
- Future PAF auctions may have different criteria

1. Certification standards

- All carbon credits must be Clean Development Mechanism (CDM) Certified Emission Reductions (CERs) or Verified Carbon Standard (VCS) Verified Carbon Unit (VCUs)
- Carbon credits must not be subject to purchase agreement contract with a third-party

2. Methodologies

- The list of eligible methodologies is found on the PAF website, most methodologies that correspond to the abatement of N2O from nitric acid are eligible
- Methodologies related to adipic acid are excluded
- If a project uses more than one methodology to account for carbon credits, all need to be on the eligible list





Third Auction: Eligibility Criteria (2 of 4)

3. Eligible Countries

The list of eligible countries is found on the PAF website

Eligible Countries SIGN Vag Parago Inst. Naturation 27th The ray pass produced by the following the country of the country of

4. Generation and issuance period

- Winners will receive a Bermuda-style put option, which must be exercised by the final maturity date, but may be exercised at any of three earlier optional redemption dates
- No restrictions on the quantity of ERs that may be redeemed at each redemption date
- After the final maturity date, all of the put options expire

Optional redemption dates			Maturity
Nov. 29,	Nov. 29,	Nov. 27,	Nov. 30,
2017	2018	2019	2020

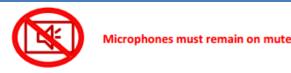




Third Auction: Eligibility Criteria (3 of 4)

5. Environmental, Heath & Safety and Social Criteria

- The EHS criteria for the third auction is found on the PAF website
- Carbon credits must originate from a CDM or VCS project that has received a positive environmental, health & safety and social (EHS) report from a CDM-accredited Designated Operational Entity (DOE)
- 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 put option owner





Third Auction: Eligibility Criteria (4 of 4)

- The PAF will issue put options specific to two auction segments
- Bidders will be able to bid in both segments

New Segment

- Price guarantee allocated can only be redeemed with emission reductions from new abatement projects that purchase abatement equipment for the first time after the auction date.
- Emission reductions must be sourced from a new abatement project that has not purchased abatement technology before the auction date, meaning that the date on which the project first purchases a secondary or tertiary catalyst or abatement equipment ("abatement technology") at the existing host site must be at the earliest on the auction date.

Open Segment

 Put options may be redeemed with any eligible emission reductions. N2O abatement projects can be existing at the time of the auction or result from investments post-auction.







Announcement of Other Elements for Third Auction

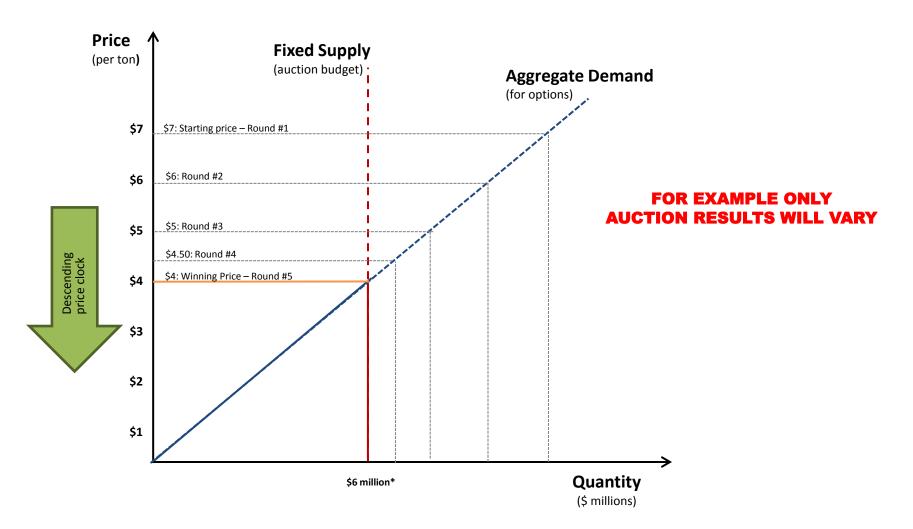
Other Elements

- The auction budget is a total of \$12m across both Segments
 - The budget for New Segment is \$6m. Any unspent budget from New Segment will be added to the budget of the Open Segment. The Segments are scheduled to run consecutively on the same day, although upon the conclusion of the New Segment, the Open Segment may be rescheduled to another day by the Secretariat for lack of time or other reasons
- Each option will require 2,500 eligible homogeneous ERs (from same project, vintage or monitoring period) at redemption, and will be sold to auction winners for \$750 (i.e., \$0.30 per ER).
 - 1 Bid Unit = 10,000 ERs; divided into 4 x 2,500 Lots
- Bidders must post a refundable deposit of \$0.06 per ER that they wish to redeem (i.e., for each 2,500 ER Lot \$150 must be deposited
- A DOE will have to certify, in a separate schedule, that an ER is eligible for payment with PAFERNs won in the New Segment was a result of an abatement project that purchased abatement technology after the auction date.
- To become qualified to bid, firms will undergo an integrity due diligence screening
- The auction clearing prices and the winners will be made public on the PAF website





Both segments will be descending clock auctions









Delivering the put option through a World Bank bond

Key Terms of puttable bond

Process Steps

- Pilot Auction Facility Emission Reductions Notes: PAFERNs
- Zero Coupon Bond
- Bond Final Redemption Amount: determined by auction
- Bond Issue Price (Premium): \$0.30 per ton
- Bond holder receives payment of strike price for eligible carbon credits at the point of redemption
- Maturity of the Bond corresponds to final put option redemption date

- Auction winners will purchase bonds via World Bank's Global Agent – Citi
- Bonds will be delivered in the form of Definitive Registered Certificates by Citi
- Citi will keep a registry of the Noteholders
- Winners will not be required to open a custodian account
- The World Bank will hold a specific webinar to answer questions about the PAFERNs, after the application package has been made public







How to Participate: Next Steps & Dates

Eligibility criteria announced September 21, 2016

Application package released October 26, 2016

Bidder application due Monday, November 28, 2016

Bid deposits due January 3, 2017

Username/passwords distributed; trainings First week of January

Mock auction First week of January

AUCTION DATE Tuesday, January 10, 2017







I am interested. What should I do now to prepare?

- Request Application Package by following this link and following instructions
 - https://www.pilotauctionfacility.org/content/request-bidder-application-package-and-draft-final-terms
- Determine to participate in New or Open Segment -- or both
- Identify source of ERs to be generated after auction date and decide on bidding strategy (e.g., number of put options desired, lowest acceptable price)
- Review specific eligibility criteria posted on PAF website
- Prepare to pay refundable bid deposit
- If auction winner, prepare to pay premium to purchase put options
- Projects owners might be contacted by carbon aggregators and consultants interested in participating in PAF auctions







More Resources

- Third auction eligibility criteria including specific methodologies and countries –
 <u>Link</u>
- Third auction EHS criteria <u>Link</u>
- Questions and answers <u>Link</u>
- First auction results <u>Link</u> / Second auction results <u>Link</u>
- Lessons learned from the first auction Link
- World Bank puttable bonds: First auction <u>Link</u> / Second auction <u>Link</u>
- Summary of the day's bidding in the 1st auction <u>Link</u>







Thank you

For more information visit: www.pilotauctionfacility.org

Contributors









PAF Vendors / Agents / Partners















