



PILOT AUCTION FACILITY

for Methane and Climate Change Mitigation

Third Auction Briefing
October 14, 2016
London, UK

Disclaimer

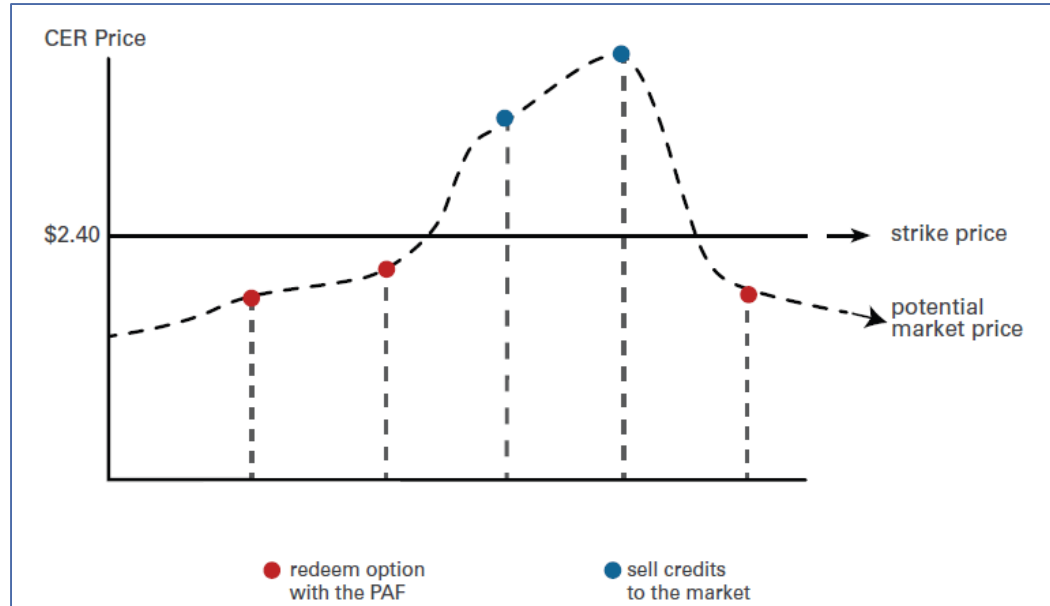
THE FOLLOWING IS A SUMMARY OF THE WORLD BANK'S PROPOSED PLAN TO ISSUE PILOT AUCTION FACILITY EMISSION REDUCTIONS NOTES ("PAFERNS"). IT IS NOT AN OFFER TO SELL PAFERNS OR AN INVITATION TO OFFER TO BUY PAFERNS. THIS SUMMARY IS SEPARATE FROM, AND SHOULD NOT BE READ IN COMBINATION WITH, ANY FUTURE OFFER 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 FURTHER, IT IS CURRENT ONLY AS OF THE DATE OF POSTING TO THIS WEBSITE AND IS LIKELY TO BECOME OUTDATED AS THE PAFERNS LEGAL DOCUMENTATION IS DEVELOPED.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 on independently verified emission reductions
- 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”)

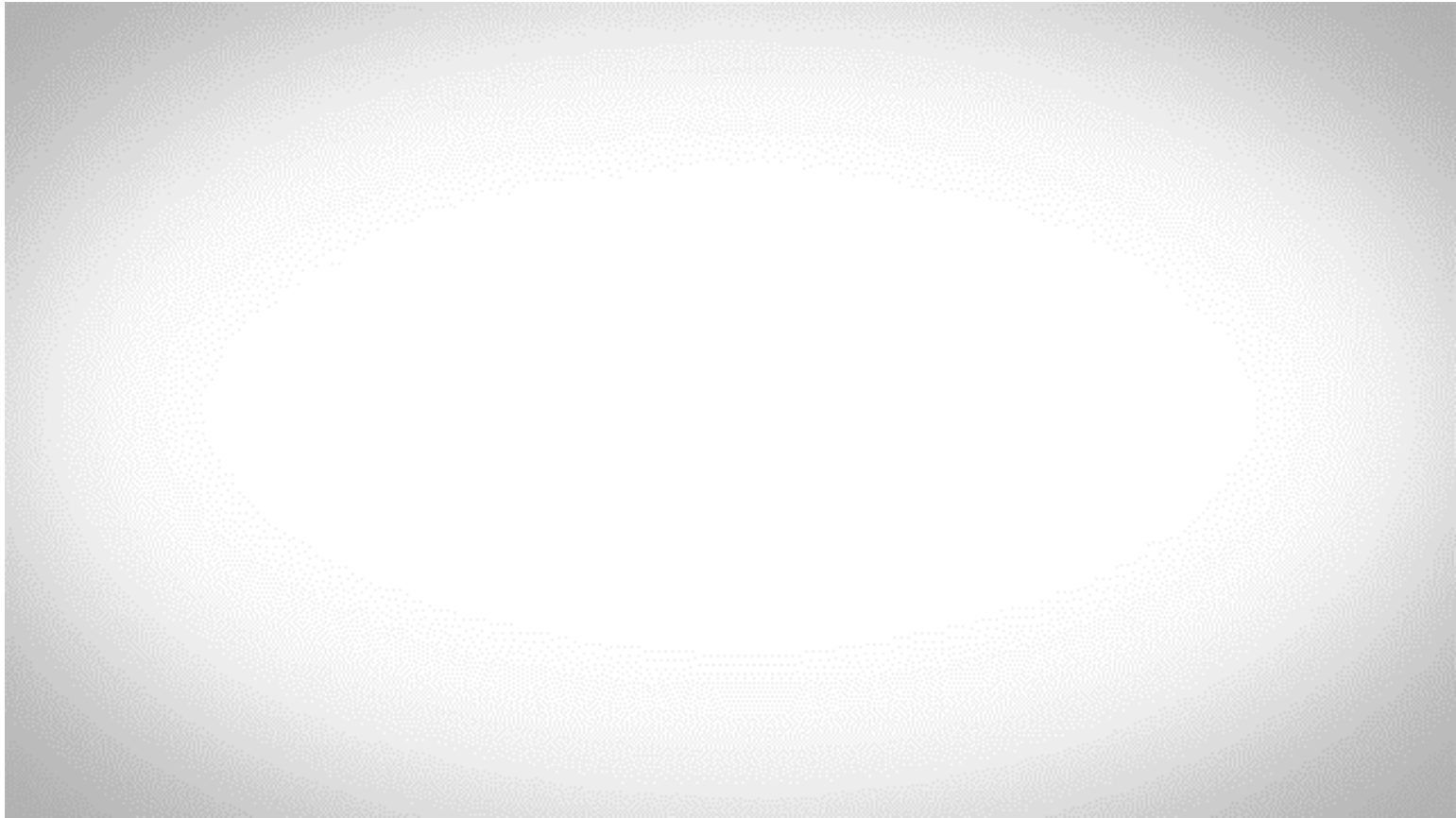


The PAF Uses Auctions to Sell Put Options

- 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



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

**TO BE CONFIRMED IN AUCTION
RULES (PUBLISHED SEPARATELY)**

- **Auction Format:** Reverse Descending Clock in Two Segments
 - Segment New Abatement Projects (aka “New Segment”)
 - Segment Open to All Abatement Projects (aka “Open Segment”)
- **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/ton
 - Open Segment: \$5.00/ton
- **Refundable Deposit:** \$0.06/ton
- **Minimum Bid:** 100,000 tons
- **Maximum Bid:** 2,000,000 tons

Third Auction: Eligibility Criteria (1 of 4)

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

1. Certification standards

- All emission reductions must be Certified Emission Reductions (CERs) or a Verified Carbon Standard (VCS) Verified Carbon Unit (VCU)
- Emission reductions must not be subject to purchase agreement contract with a third-party

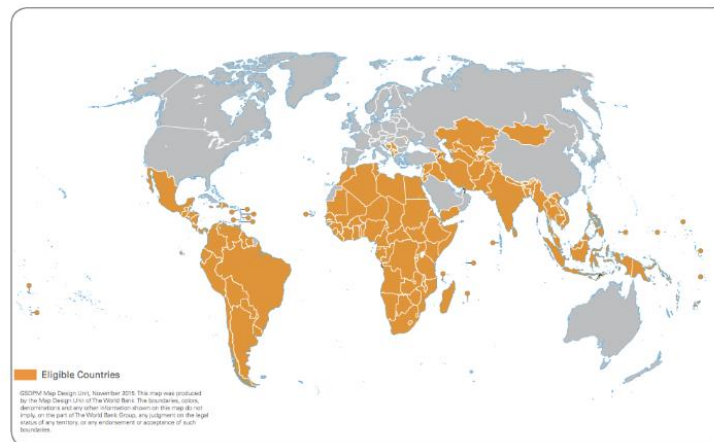
2. Methodologies

- 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 emission reductions, 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



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 maturity date, all of the put options expire

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

Third Auction: Eligibility Criteria (3 of 4)

5. Environmental, Health & Safety and Social Criteria

- The EHS criteria for the third auction is found on the PAF website
- Emission reductions 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 option owner

Third Auction: Eligibility Criteria (4 of 4)

- The PAF will issue PAFERNs 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 projects that begin to operate after the auction date.
- The project owner will represent to a DOE the date on which for the first time its nitrous oxide abatement project became operational (e.g., that a secondary or tertiary catalyst was installed at an existing host site).

Open Segment

- Price guarantees 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.

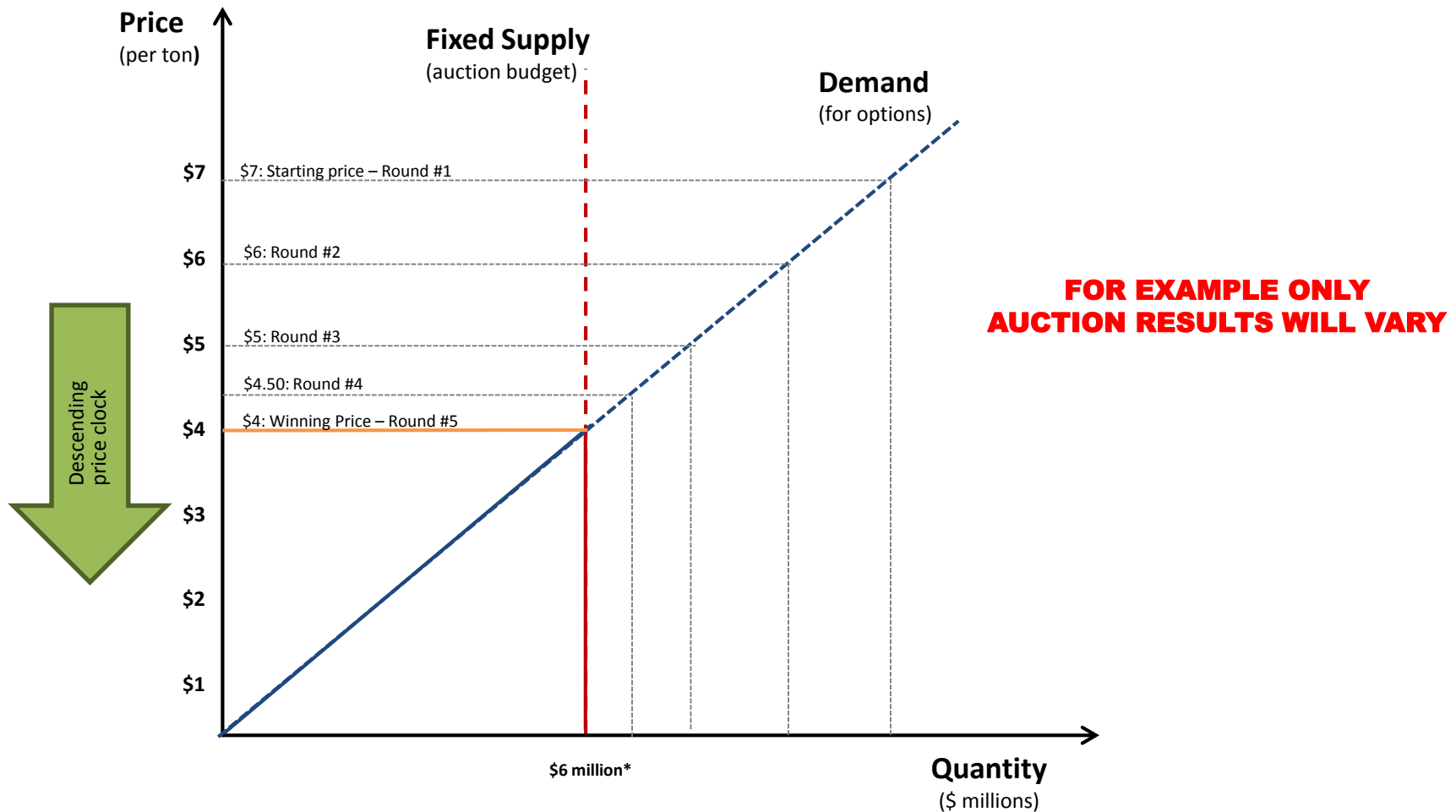
Announcement of Other Elements for Third Auction

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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 PAFERs won in New Segment was a result of an abatement project that was operational 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 sub-auctions will be descending clock auctions



Delivering the put option through a World Bank bond

Key Terms of puttable bond

- 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 emission reductions at the point of redemption

Process Steps

- 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/auction date announced	Week of October 10, 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 – [Link](#)
- Third auction EHS criteria – [Link](#)
- Questions and answers – [Link](#)
- First auction results – [Link](#) / Second auction results – [Link](#)
- Lessons learned from the first auction – [Link](#)
- World Bank puttable bonds: First auction – [Link](#) / Second auction – [Link](#)
- Summary of the day's bidding in the 1st auction – [Link](#)

Thank you

For more information visit: www.pilotauctionfacility.org

Contributors



Germany



Sweden



Switzerland



United States

PAF Vendors / Agents / Partners



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