



Pilot Auction Facility for Methane and Climate Change Mitigation



**PILOT
AUCTION
FACILITY**

**Fourth Auction Briefing
November 20, 2019**

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**PILOT
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FACILITY**

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 FURTHER, IT IS CURRENT ONLY AS OF THE DATE OF POSTING TO THIS WEBSITE AND IS LIKELY TO BECOME OUTDATED AS THE PAFERNS LEGAL DOCUMENTATION IS DEVELOPED.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

Overview of the Pilot Auction Facility

Pilot Auction Facility

Challenge:

- Carbon credit prices collapsed, stranding methane abatement projects

Opportunity:

Methane Finance Study Group:

- 1,200 new methane mitigation projects were initiated, but not implemented, under carbon offset standards in developing countries, representing at least 850 Mt of CO₂e in emission reductions over the period 2013 – 2020
- Abatement possible at < \$10/tCO₂e

Goal:

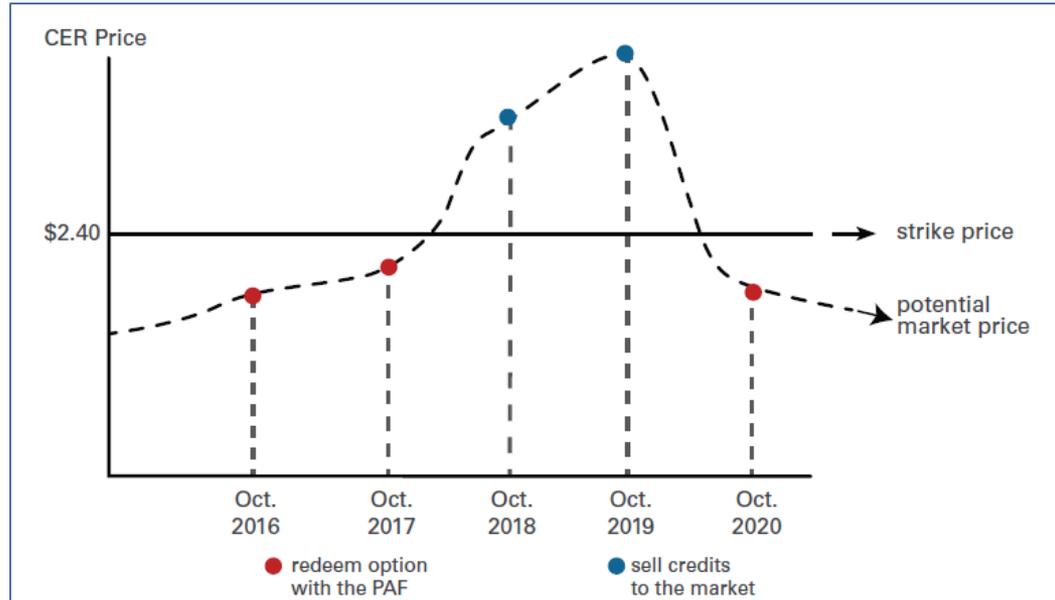
- Incentivize cost-effective private sector action to achieve methane abatement through a result-based finance mechanism

PAF formation:

- Germany, Sweden, Switzerland, and the United States, contributed \$53 million in total resources to pilot climate auctions

What does the PAF Sell?

- The PAF offers “put options” to guarantee a price floor for future climate results
- The options give the owner the right, but not the obligation, to deliver climate results to the facility at a guaranteed future price



The PAF Uses Auctions to Sell Put Options

- The PAF holds auctions in which bidders compete to purchase put options
- Bidders compete on the price at which they are willing to deliver eligible results to the facility in the future. This is the “strike price” of the option.
- Auction winners will purchase the put options by paying an “option premium”
- The bidders that offer to deliver eligible results at the lowest cost win the auction

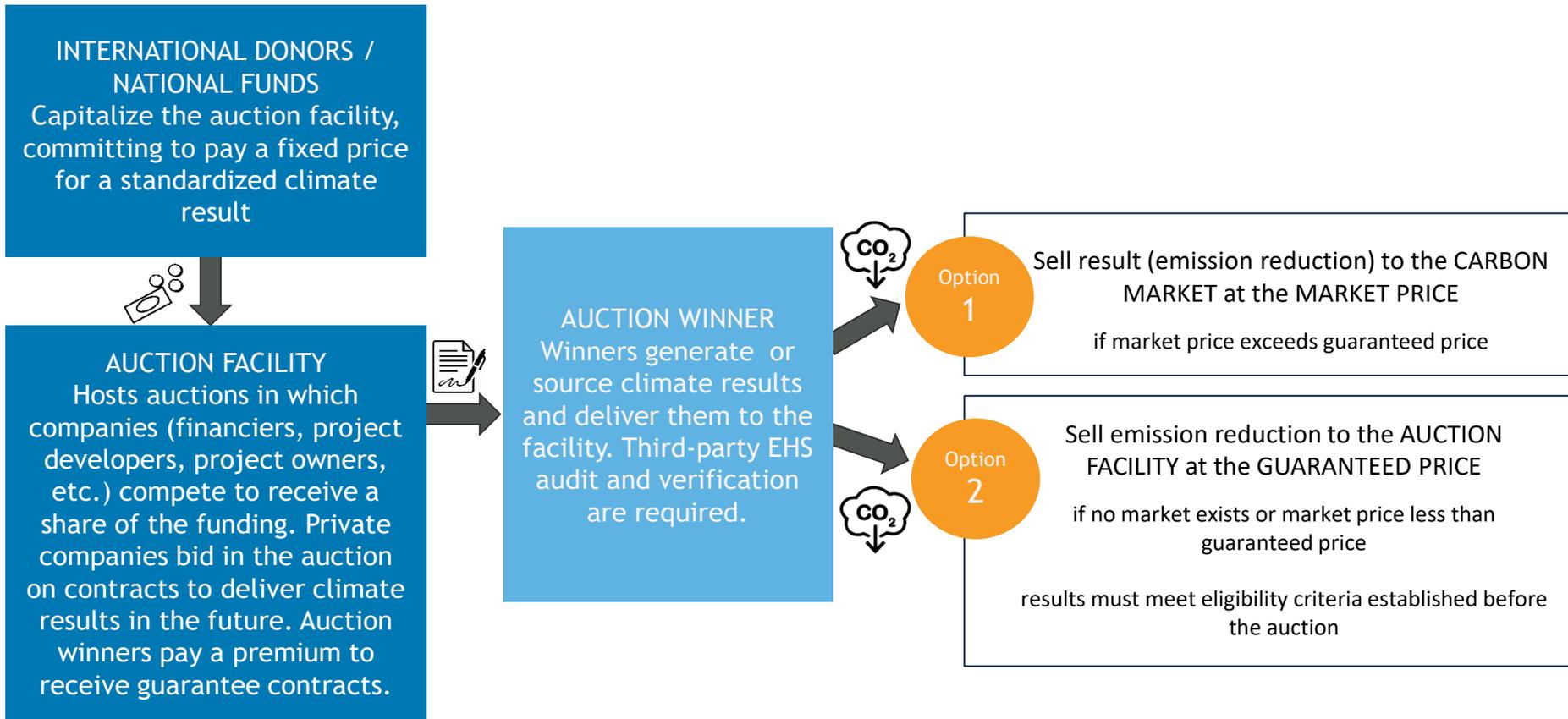


How are companies paid for results?

- Option owners are only paid for independently verified results according to eligibility criteria established before the auction
- Auction winners purchase put options by paying an “option premium” price
- The options are tradable; if an option owner cannot deliver eligible results, it can sell its options to another person/company



How do the PAF's auctions work?



Step-by-Step Process

Pre-Auction



**Contributors
Fund Facility**



**Set
Criteria**



**Publicize
Auction**

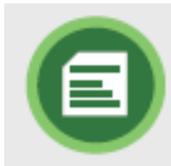


Example: Bidder Perspective

Apply



**Qualify for
Auction**



Auction



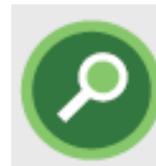
**Purchase
PAFERNs**



**Source
ERs**



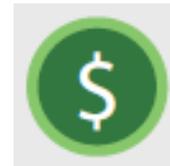
**Verification
& EHS Audit**



**Deliver
Credits**



Payout



PAF Auction Results (Auctions 1 - 3)

	Auction 1 July 2015	Auction 2 May 2016	Auction 3 January 2017	Totals	
Strike Price (\$/tCO ₂ e)	\$2.40	\$3.50	\$2.10		
Premium Price (\$/tCO ₂ e)	\$0.30	\$1.41	\$0.30		
Net Benefit (\$/tCO ₂ e)	\$2.10	\$2.09	\$1.80		
Reductions (million tCO ₂ e)	8.7	5.7	6.2	20.6	
Climate Finance Allocated (USD million)	\$20.9	\$20.0	\$13.0	\$53.9	
Premium Funds Raised (USD million)	\$2.6	\$8.0	\$1.9	\$12.5	
Budget (USD million)	\$25.0	\$20.0	\$13.0		

Pilot Auction Facility: Fourth Auction Plans

Pilot Auction Facility: Fourth Auction Overview

■ Focus

- Methane emissions from landfill, wastewater treatment, and animal waste

■ Eligibility Criteria

- Carbon credits will be generated under the Clean Development Mechanism, Gold Standard, or Verified Carbon Standard
- Methodologies are listed on the PAF website
- Eligible countries for host projects are listed on the PAF website
- Emission reductions will be generated in 2020, between the time of the auction and December 31, 2020
- Credits must originate from a project with a passing Environmental, Health, Safety & Social audit report

■ Auction Timeline

- Auction date: Q1 calendar year 2020
- Payment in 2021

■ Auction Budget

- At least USD \$6 million

Fourth Auction Parameters

- **Auction Format**
 - Reverse descending clock
- **Auction Budget**
 - At least \$6 million, will be announced before auction
- **Fixed premium price**
 - \$0.30/ton
- **Strike price at auction start**
 - To be announced
- **Refundable deposit**
 - \$0.30/ton
- **Minimum and maximum bids (in tons)**
 - To be announced

Eligibility 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

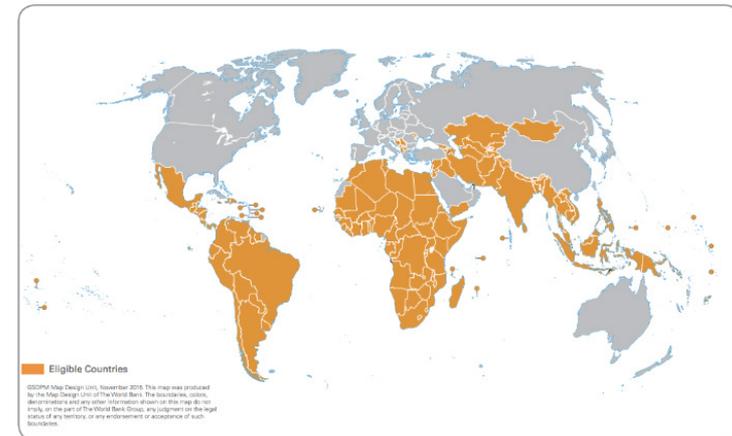
- The list of eligible methodologies is available on the PAF website
- If a project uses more than one methodology to account for carbon credits, all need to be on the eligible list

■ 3. Eligible Countries

- The list of eligible countries is available on the PAF website

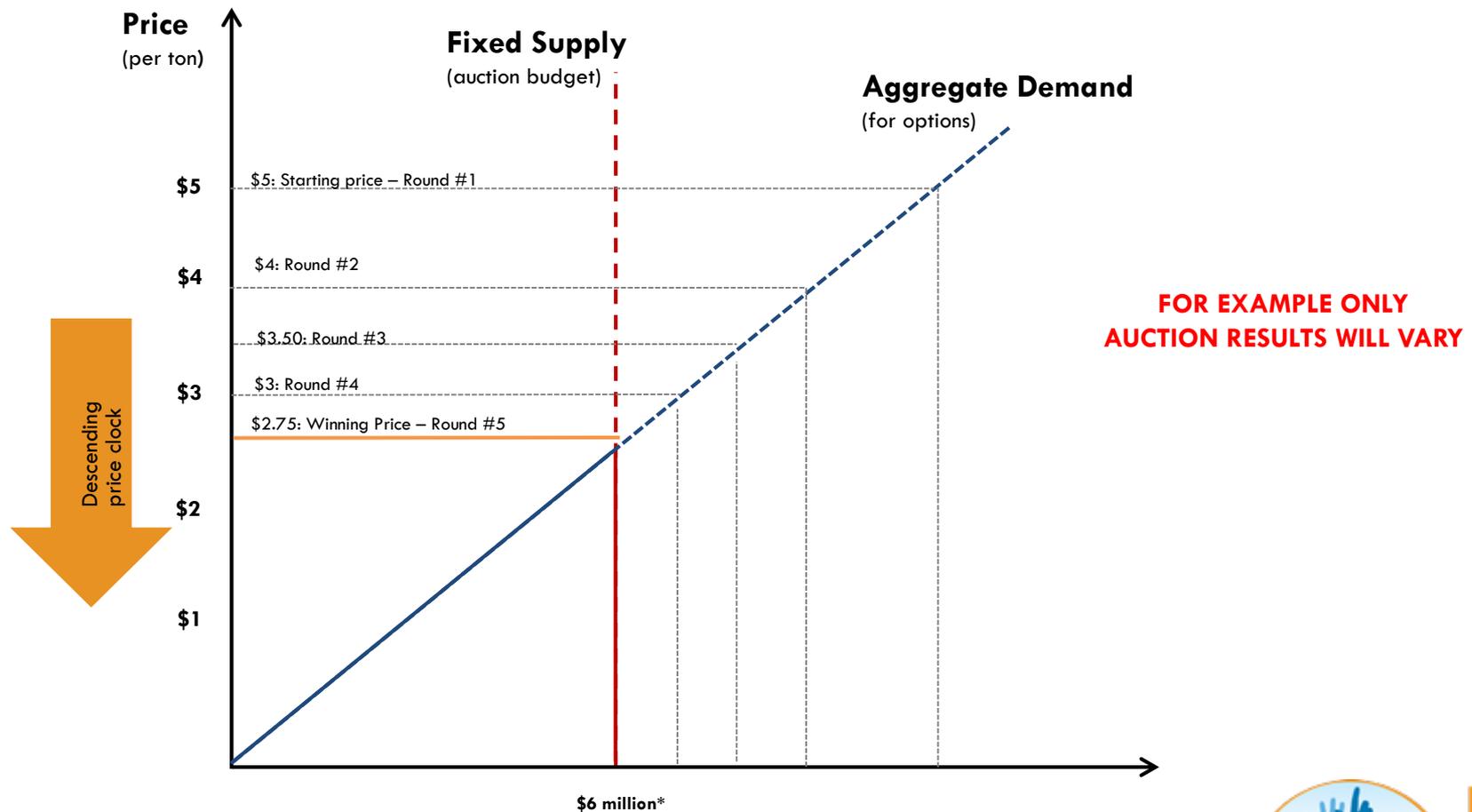
■ 4. Generation and Issuance period

- Carbon credits must be generated after the auction date and no later than December 31, 2020. Carbon credits must be issued after July 1, 2020 and before September 30, 2021



Auction Format

- Auction participants will bid on the option's "Strike Price," which is the payment (i.e., reward) bidders receive in exchange for ERs on a future date. The PAF will use a reverse **descending** clock auction where the option's premium (i.e., upfront cost) is fixed and bidders bid **down** the strike price.



Options are Delivered as World Bank Bonds

■ Key terms of the 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 carbon credits at the point of redemption
- Maturity of the Bond corresponds to final put option redemption date

■ Process to purchase bonds

- Auction winners will purchase bonds via World Bank's Global Agent – Citigroup
- Bonds will be delivered in the form of Definitive Registered Certificates by Citigroup
- Citigroup 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

- **Request bidder application package**
 - Expected December 2019
 - www.pilotauctionfacility.org
- **Identify source of carbon credits to be generated after the auction date and decide on bidding strategy**
 - Number of options desired
 - Lowest acceptable price
- **Review Updates on PAF Website**
 - Eligibility criteria
 - Auction parameters
- **Prepare to pay refundable bid deposit**
- **Project owners might be contacted by carbon aggregators and consultants interested in participating in PAF auctions**

Upcoming Events & Contact Information

Upcoming Events

- Paris: November 19, 2019
- London: November 20, 2019
- Webinars: November 19, 26 (English & Spanish); December 10

Contacts

- PAF_Secretariat@worldbank.org
- Stephanie Rogers
- Tanguy de Bienassis

Acknowledgements



Germany



Sweden



Switzerland



United States



BNP PARIBAS



Linklaters



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Thank you for attending!

We are happy to answer your questions:

PAF_Secretariat@worldbank.org

