PILOT AUCTION FACILITY

for Methane and Climate Change Mitigation

Consultation meeting
March 19, 2015
Bogota, Colombia

WORLD BANK GROUP
Climate Change

Agenda

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

Initial target: Methane mitigation projects

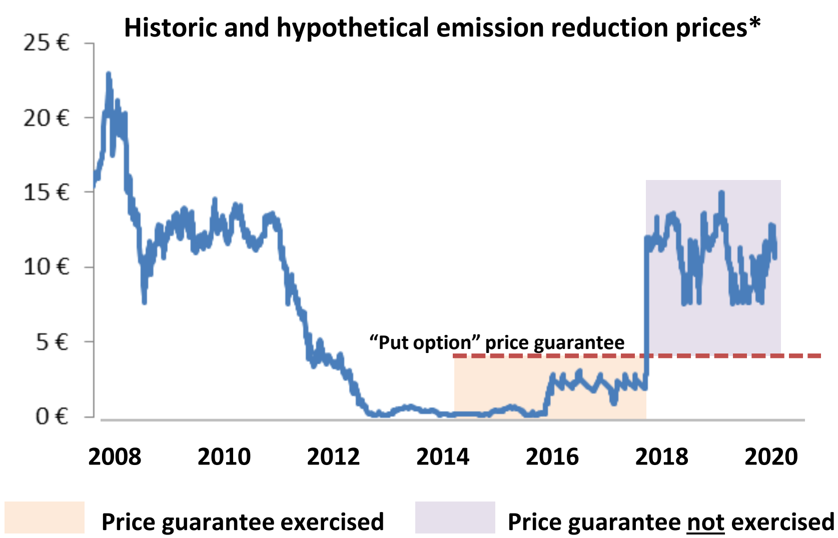
Sample Supported Projects

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_2e until 2020, were identified as stranded – the initial target of the PAF

The PAF will offer a price guarantee by using the financial equivalent of a put option

- Market prices collapsed, stranding projects with no incentive to reduce emissions
- The PAF will pilot using “put options” to guarantee a floor price
- Put options give the right, but not the obligation to sell at the guarantee price



- The auction result sets the guarantee price level
- Auctioning ensures that the least-cost climate mitigation activities are selected
- Auction winners purchase the price guarantee (pay put premium)

*Prices after 2014 are hypothetical and for explanatory purposes only.

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

Project selection criteria

The PAF will publish a list of transparent eligibility criteria for emission reductions

Sectors

- The first auction will target methane
- Final list of sectors announced soon
- Waste, waste water and agricultural waste likely eligible
- Other (including non-methane) sectors in future auctions

Countries

- Most countries will be eligible in the 1st auction
- Country-specific future auctions possible

Emission reductions

- First auction will likely accept only CDM credits – thus projects will have to be CDM registered
- Credits must be "fresh", issued post auction
- Future auctions may be open to other standards

Environmental, Health & Safety

- To review environmental, health and safety risks of the project an audit against key performance criteria will be required just prior to put option redemption
- Audit to be performed by a CDM DOE (could be the same that performs CDM verification)
- The cost of the EHS inspection is to be borne by the option owner
- The EHS audit will be required with each put option redemption (i.e., annually)
- The EHS criteria are being worded so as to be readily answered, in order to achieve a pass or fail result.

How the auction will work (1 of 3): pre-auction steps

1. PAF engages in global marketing campaign to ensure that a diverse set of firms are made aware

2. PAF announces transparent and objective criteria for eligible emission reductions.

3. The reverse auction fixes the option premium for all put options (e.g., $0.50 per ton) – this is the amount winners will need to pay up-front to purchase the option; losers owe nothing

4. Bidders announce their intention to participate, place a fully refundable deposit in order to indicate the maximum [value/volume] they are willing to purchase in the auction (e.g., 20%).

5. Bidders undergo World Bank Integrity Due Diligence screening

6. Training for bidders on the auction rules and online platform

7. The PAF sets a reserve price which is the auction starting price

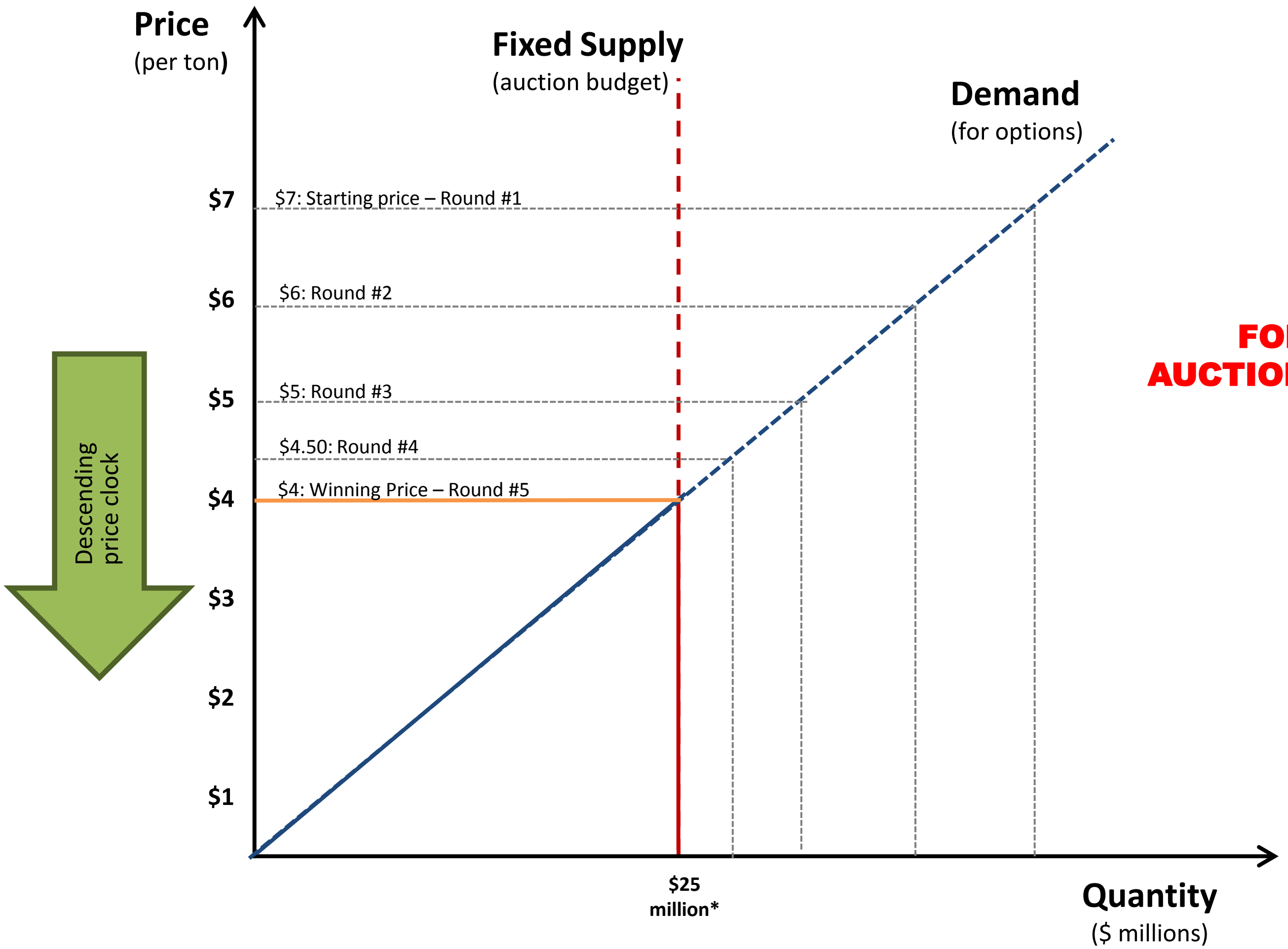
How the auction will work (2 of 3): descending clock auction

1. Bidders identify the quantity of put options they are willing to buy at the starting price; if the aggregate demand for put options is greater than the supply (the auction budget) than there is a new round with a lower price; if a participant is unwilling to buy at the new round's announced price they drop out of the auction completely

2. A second round starts and the PAF sets a lower price and bidders identify the quantity of put options they are willing to buy at that price; if aggregate demand is greater than supply than a new round is declared with a lower price

3. Auction rounds continue with additional bidders dropping out until a round where aggregate demand is less than or equal to supply – this becomes the clearing price and all bidders left standing; this is the uniform put option strike price

How the auction will work (3 of 3): descending clock auction



FOR EXAMPLE ONLY
AUCTION RESULTS WILL VARY

** Auction budget will actually increase as bid decrements tick lower (b/c more options get sold). In this example the initial $25m budget will generate ~$3.5m in premium back into the auction. The use of premiums to increase the size of the auction will happen in real time in the online platform.*

Delivering the put option through a World Bank bond

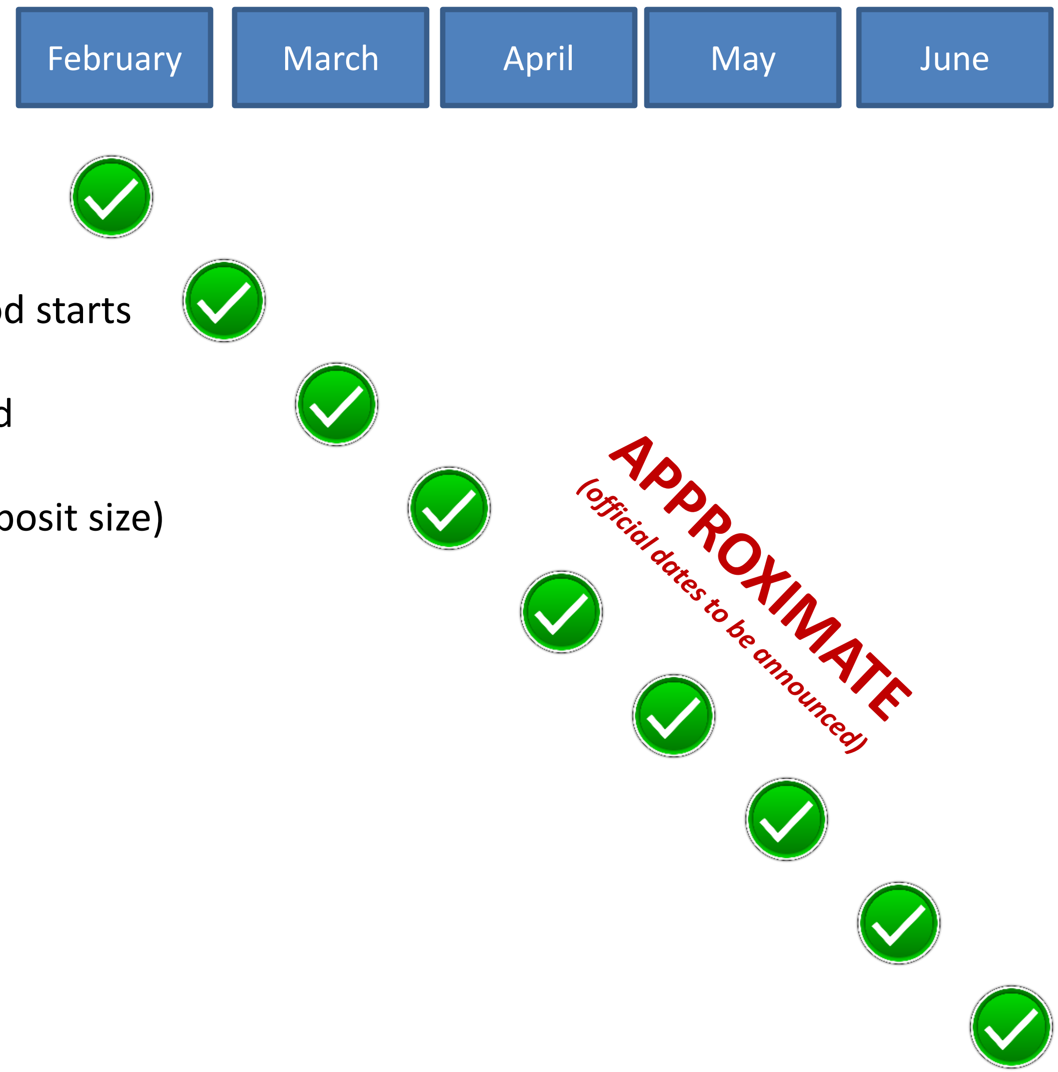
Advantages

- A putable bond provides the financial equivalent of a put option
- Speed to market
- Ease of use by private sector
- Enhanced tradability

Key Terms of the Putable Bond

- Zero Coupon
- Bond Issue Price – is the equivalent of the premium
- Bond holder receives payment of strike price if redeems eligible ERs
- Maturities correspond to the redemption dates

How to participate: Next steps in calendar view



Consultations /outreach to bidders

Eligibility criteria announced / comment period starts

Comment period ends / eligibility criteria fixed

Auction rules announced (e.g., min., max., deposit size)

Notice of intent to bid due

Bid deposits due

Username/passwords distributed; trainings

Mock auction

AUCTION DATE

I am interested, what should I do now to prepare?

- Identify source of CERs to be issued after auction date in likely methane sectors (waste, waste water and agricultural waste) and decide on bidding strategy (e.g. number of put options desired, lowest acceptable price)
- Prepare to review specific eligibility criteria when announced
- Prepare to pay refundable bid deposit
- If auction winner, prepare to pay premium to purchase put options
- CDM projects owners might be contacted by carbon aggregators and consultants interested in participating in PAF auctions
- Look for emails from PAF Secretariat and check the PAF website for deadlines – www.pilotauctionfacility.org

Thank you

For more information visit: www.pilotauctionfacility.org