



WORLD BANK CARBON FINANCE UNIT CARBON PARTNERSHIP FACILITY 2012 ANNUAL MEETING

REVISED CPF PRICING APPROACH/IMPLEMENTATION

- ◆ Objectives of Revised CPF Pricing Approach:
 - Provide financial viability/sufficient incentive for Sellers to sign and deliver on a long term agreement
 - Acceptable to CPF Buyers
 - Fair to both Buyers and Sellers
 - Preserve the balanced role of the Trustee
 - Enable the programs to achieve their objectives
 - Enable the CPF to continue playing a leading role in defining and piloting new market mechanisms

◆ CPF Buyers:

- Expressed support for the objectives of the CPF
- Are open to a program by program solution
- Support the option of variable pricing
- Have varying preferences on pricing levels

◆ CPF Sellers:

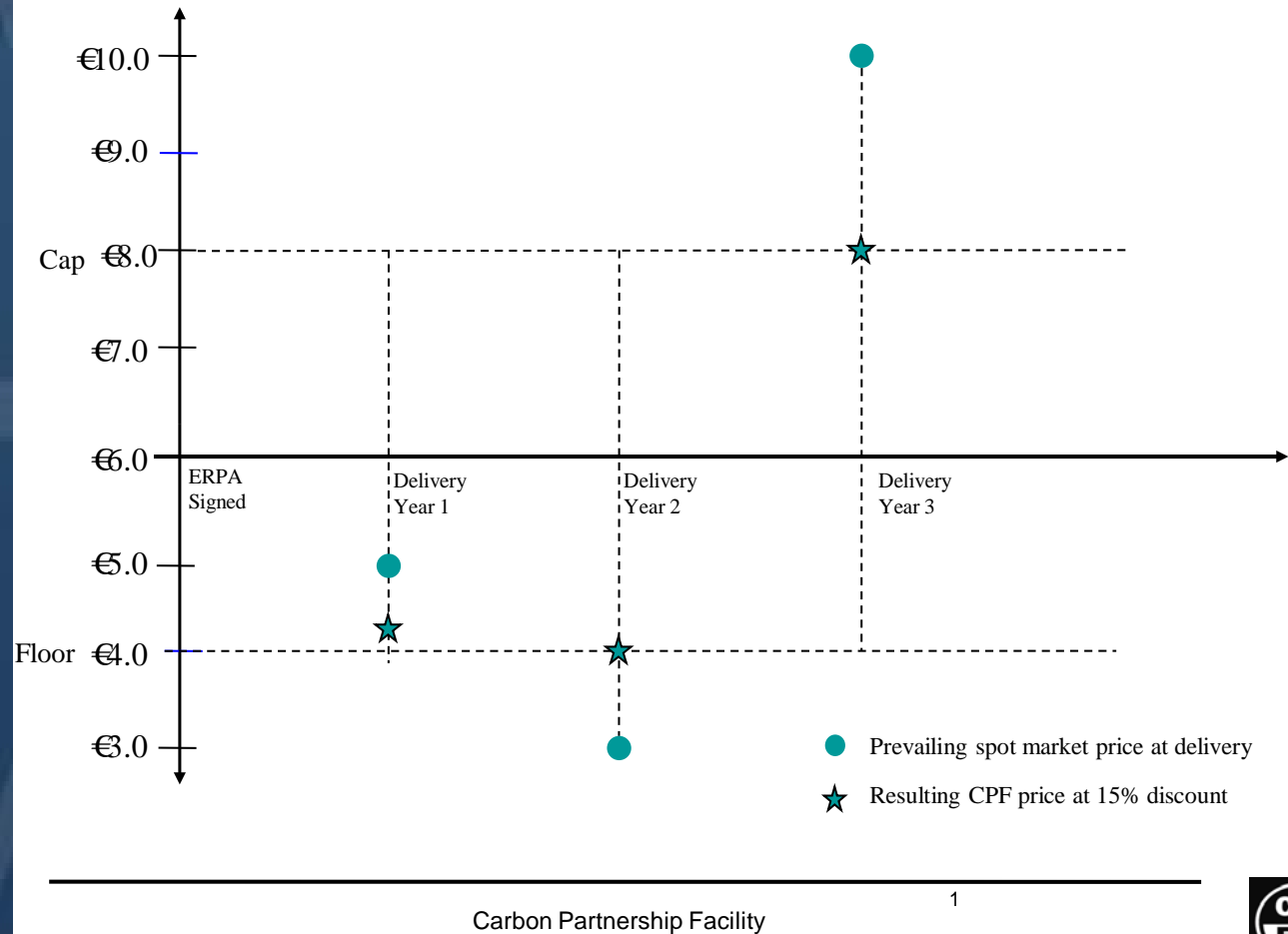
- Started work on programs when price expectations were higher
- Pricing should take into account that current prices are at an historical low
- Support pricing that ensures the financial viability of projects
- Pricing should take into account program co-benefits
- Understand the constraints faced by Buyers in current environment

Proposed Revision to Pricing Approach

- ◆ Use of a benchmark price will be suspended during the period from June 2012 to May 2013.
- ◆ ERs can be transacted at a pre-determined, negotiated fixed price determined by agreement of the Buyers and the Seller, based on a proposal from the Trustee.
- ◆ ERs can also be transacted at a *variable price*, with the following parameters.
 - A discount to the CER spot market price at the time of delivery (15% or as otherwise agreed).
 - Floor and a ceiling in ER prices to limit the down or upside market risk to the Seller and the Buyer Participants, respectively (and to enable Sellers to benefit from possibility of higher prices).
 - Floor and ceiling will be set by agreement of the Buyers and the Seller, based on a proposal from the Trustee.
- ◆ A combination of fixed and variable pricing is possible.
- ◆ The ERPA contract will include minimum volume and maximum value terms.
- ◆ Pricing terms will be effective for a specified time period for ERPA signature.

Variable pricing - example

Floating price proposal with ceiling and floor – illustrative scenarios



Implementation of Variable Pricing Approach

- ◆ Financial viability of project activities defined through minimum revenue requirement of project developer to go forward with investment.
- ◆ Setting the floor price:
 - Minimum revenue = minimum volume x floor price.
 - Minimum volume set at high but achievable percentage of PDD volume.
 - Minimum revenue/minimum volume = required floor price.
- ◆ Setting the ceiling price:
 - Sufficient incentive for Seller and limit of upside risk to Buyers.
- ◆ Setting the maximum volume:
 - Maximum credible level of delivery from the program.
- ◆ Setting the maximum value:
 - Management of the Carbon Fund resources for Participants.
- ◆ With variable pricing, there is the potential to expand the volume delivered by CPAs to increase their revenue.
 - If prices remain below the ceiling, CPAs could sell additional volumes before the maximum value of the ERPA is reached.

Variable Pricing – Worked Example

- ◆ Setting the contract volume and floor price:
 - PDD volume = 3 million MtCO₂e
 - Minimum revenue requirement = €8.0 million
 - Contract volume should be ambitious but achievable

- ◆ Floor price scenarios:
 - 50 % of PDD volume = 1.5 MtCO₂e
 - Floor price: €8.0 million divided by 1.5 MtCO₂e = €5.33/ton

 - 60% of PDD volume = 1.8 MtCO₂e
 - Floor price: €8.0 million divided by 1.8 MtCO₂e = €4.44/ton

 - 70% of PDD volume = 2.1 MtCO₂e
 - Floor price: €8.0 million divided by 2.1 MtCO₂e = €3.81/ton

Additional idea – guarantee for floor price

- ◆ The level for financial viability of a program could be higher than some Buyers are willing to pay
- ◆ In order to keep all Buyers in the ERPAs, the Trustee is looking into a way to provide a guarantee of the floor price
- ◆ The Trustee has begun to explore a floor price guarantee structure in response to Norway's request
- ◆ One model for how it could work:
 - The guarantor would provide a floor price for the contract
 - If the spot market price rises above the floor, the guarantor would pay less than the contractual discount to the spot price
 - The Buyers would compensate the difference to the Seller