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Rowing in the Same Boat: How Carbon Markets and Climate Finance Work Together to Deliver Net Zero

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Climate Markets & Investment Association
Rowing in the Same Boat: How Carbon Markets and Climate Finance Work Together to Deliver Net Zero

Welcome Remarks & Opening Address

Dirk Forrister  
President & CEO  
IETA

Molly Peters-Stanley  
Negotiator, International Carbon Markets  
US Department of State
Part 1: What has been the role of carbon pricing and markets in de-carbonising the highest emitting sectors? What other forms of climate finance have contributed thus far and what else is needed to get to net zero?

Moderator:

Brett Orlando
Founder & Director
Net Zero Capital Advisory

Speakers:

Paul Dawson
Head of Regulatory Affairs
RWE Supply & Trading

Mark Lewis
Chief Sustainability Strategist
BNP Paribas Asset Management

Michael Schneider
Assistant Director
International Air Transport Association
DEEP DECARBONIZATION
NET ZERO AND CARBON PRICING: CASE STUDY OF THE EU-ETS

MARK LEWIS
IETA SEMINAR, 21 APRIL 2021

The asset manager for a changing world
We postulate that the pricing paradigm of the European carbon market should in theory be a function of three variables:

1. market participants' understanding of the purpose for which the EU-ETS has been established (i.e. the policy objective it is intended to achieve);

2. market participant’s perception of the effectiveness of design of the EU-ETS, and hence of its technical ability to achieve the policy objective;

3. market participants’ assessment of the political priority attached to achieving this objective, and hence of policymakers’ commitment to ensuring that the supply of European carbon allowances (EUAs) is engineered to deliver this outcome.
Three reasons for thinking green hydrogen holds the key

• First, given that the EU’s target of net-zero emissions by 2050 is soon to be EU law, there is now a clear endgame for the EU-ETS. That endgame consists in ensuring that EUA prices reach the level required to achieve net-zero emissions by 2050, and in a significant step towards this goal the enhanced interim target to cut EU emissions by 55% by 2030 recently proposed by the European Commission will now require a tighter EU-ETS cap in 2030.

• Second, according to the European Commission’s recently launched strategic vision for green hydrogen, net-zero emissions by 2050 cannot be achieved without green hydrogen contributing a significant part of the solution. At some point, therefore, EUAs will have to reach the price level that incentivizes the use of green hydrogen over alternative fossil-fuel energy sources in buildings, transportation, and power generation.

• Third, the pre-requisite for making green hydrogen commercially viable as an energy source is to make it commercially viable as an industrial feedstock by 2030.
The shape of the EU-ETS forward curve in theory

Implied shape of EUA forward curve with varying 2030 costs of green hydrogen from €2/kg-€2.25/kg, and with grey hydrogen gas-input costs of €15/MWh

- Here we take the middle of our 2030 theoretical fair-value range for EUAs – €2/kg-€2.25/kg – to derive the resulting implied theoretical forward curves. This shows that at our mid-range scenario for 2030 EU gas of €15/MWh, and at a 2030 cost of production for green hydrogen of €2.213/kg, the implied fair value for EUAs would be €91/t.

- In turn discounting back at 6% would give us a theoretical implied 2020 fair value of €49/t.

Source: BNP Paribas AM Research estimates
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Part 2: How do financial institutions price carbon and incorporate this into investment decision making?

Moderator:

Brett Orlando
Founder & Director
Net Zero Capital Advisory

Speakers:

Abyd Karmali OBE
Managing Director, Climate Finance
Bank of America

Jan-Willem van de Ven
Head of Climate Finance & Carbon Markets
EBRD

Allison Parent
Executive Director
Global Financial Markets Association
SUPPORTING THE GROWTH OF CARBON PRICING & MARKETS IN THE EBRD REGION

21 April 2021
Jan-Willem van de Ven
Head of Climate Finance and Carbon Markets
CARBON MARKETS A KEY DRIVER IN EBRD’s GREEN ECONOMIC TRANSITION 2021-2025

Climate Markets
• Meet emission reduction targets cost efficiently
• Enabling risk management to foster uptake of ambitious NDCs
• Encourage international co-operation
• Facilitate robust MRV and accounting
• Sustainable mobilisation of private sector investments by carbon revenues

Policy Engagement
• Support countries integrating carbon markets in NDCs and LTSs
• Capacity building for GHG accounting, Digitalised-MRV
• Engaging in policy dialogue– UNFCCC, J-MDB WG, IETA, ICAP
• Support recycling of auctioning proceeds for the green and just transition

Together with the MDBs, EBRD is developing a Paris Alignment approach based on 6 building blocks:
1. Alignment with mitigation goals
2. Adaptation and climate resilient operations:
3. Accelerated contribution to the transition through climate finance
4. Engagement and policy development support
5. Reporting
6. Align internal activities

Thematic Areas
• Green Financial Systems
• Industrial Decarbonisation
• Sustainable Food Systems
• Energy Systems Integration
• Cities and Environmental Infrastructure
• Sustainable Connectivity
• Green Buildings
• Natural Capital
EBRD’S ROLES IN CARBON MARKET DEVELOPMENT
INTEGRATING CLIMATE FINANCE AND CARBON MARKETS

Policy Dialogue

Advise countries on carbon market developments e.g. Kazakhstan, Turkey
Uzbekistan

Provide expertise on climate markets in policy dialogues on long-term
strategies, sector-based roadmaps and NDCs.

Co-operation with international stakeholders, such as the J-MDB WG on Article 6,
TSVCM*

Development of Tools, Guidance and Standards

EBRD Member J-MDB
Secretariat Climate Markets
Club

Co-operate on the design of assessment tools like MAAP

Focus on Digitalized MRV to reduce costs

Supporting Transactions systemic change through policy
dialogue and investment programmes at scale

GCF co-funded EBRD RE facility in Kazakhstan policy support for Kazakh Emissions
Trading Scheme

MIDSEFF in Turkey, which incl. policy support for CORSIA in relation to domestic carbon
projects

GCF High Impact Programme for Industry which integrates carbon market elements in the
climate governance support

*Task Force for Scaling Voluntary Carbon Markets
ALIGNING THE FINANCIAL SECTOR WITH CARBON MARKET DEVELOPMENTS

Further alignment is needed, standards for climate finance and carbon markets need to be developed in closer consideration of each other.

USD 100 Billion p.a. Paris Goal
THANK YOU!
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Executive Director
Global Financial Markets Association
GFMA and BCG Report: Climate Finance and the Real Economy, Sizing the Global Need and Defining the Market Structure to Mobilize Capital
### Market failure: carbon pricing
- Carbon not priced in markets as an externality
- Unclear link between climate & value / risk; economics not providing motivation for change
- Limited incentives, lack of long-term policy frameworks
- Risk frameworks short-term and don’t account for climate risks

### Ambiguity, lack of clarity
- No common standards, taxonomies for climate / sustainable finance
- Limited data - available mostly for large corporates
- Unclear understanding of products & solutions
- Unclear understanding of transition pathways in industry
- Lack clear labelling, certification of climate finance solutions

### Market sub-scale, costly to serve
- Demand-supply mismatch on capital and risk-profile
- Niche financing solutions, lack integration into ‘core’ financing activity
- High transaction costs and effort for climate finance products
- Lack of capabilities to understand and build products, solutions, integrate into risk

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**Underdeveloped climate finance market structure**
**Capital Markets Vision: Evolution of Climate Finance Market Structure (CFMS)**

1. **Nascent**
   - Opportunistic innovation
   - Carbon not priced in most markets; pockets of innovation to internalize; economic rationale incomplete
   - Unclear taxonomies; data limited and not congruent, inconsistent standards
   - Sub-scale climate finance
   - Mismatch between supply and demand of capital
   - Innovative financial products but still niche; high transaction cost and admin burden

2. **Growing**
   - Market mechanisms building out
   - National policies and industry-level standards emerging globally; economic rationale incomplete
   - Sector transition paths align
   - Well-aligned definitions and taxonomies; dataset standards established across companies
   - Instruments to bridge demand-supply mismatch of capital
   - Standard contracts to reduce transaction costs
   - Fin products emerging at scale
   - Climate integration into risk/products in some regions

3. **Mature**
   - Well-established market mechanisms; climate finance at scale
   - Key regions have long-term policy frameworks align on climate, reinforce adoption and common standards
   - Ubiquitous climate data disclosure (supply and demand)
   - Clear labelling of products
   - At-scale cross-sectoral partnerships with large-scale capital flow
   - Transaction cost parity for climate-aligned products
   - Climate integrated into core financial products, including derivatives and structured products

4. **Long-term sustainable**
   - Climate fully integrated into regular finance
   - Carbon fully priced into all economic markets, within a coherent policy framework, providing economic motivation
   - All market mechanisms aligned with climate outcomes (e.g., taxonomies, data, standards ubiquitously aligned)
   - Climate data integrated across asset classes and platforms (e.g., on exchanges, OTC, etc.)
   - All relevant financial products and services take into account climate factors (incl. credit risk assessment, pricing, investment decision making, product development, etc.)

- **Today**
- **2021–23**
- **2025**
- **2025–30+**
Investment need by region and by financing instrument

Investment Need by Financing Instrument

<table>
<thead>
<tr>
<th>Region</th>
<th>Loan</th>
<th>Bond</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>34%</td>
<td>36%</td>
<td>30%</td>
</tr>
<tr>
<td>Europe</td>
<td>45%</td>
<td>23%</td>
<td>32%</td>
</tr>
<tr>
<td>Asia</td>
<td>47%</td>
<td>16%</td>
<td>37%</td>
</tr>
</tbody>
</table>

Source: BCG Analysis

Note: Loans includes different types of loan financing structures including bilateral lending, project finance, syndicated lending, etc.
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Closing Remarks

Dirk Forrister
President & CEO
IETA
We would like to thank our Partner Sponsors:

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
Carbon Finance Labs
CF Partners
Vivid Economics