Understanding carbon markets
The EU ETS from a Trader perspective
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We Are ACT

ACT Group provides tailor-made, end-to-end decarbonization solutions that have helped thousands of organizations hit compliance targets, achieve their environmental goals, and navigate environmental markets, products, and policies globally for the last 14 years.

ACT Commodities Team

5,000+ Clients  80+ Sustainability products  €4b+ Turnover  450+ Sustainability Professionals

Our Key Markets

→ Renewable Energy  → Emissions
→ Energy efficiency  → Renewable fuels and feedstock

Offices in Amsterdam, New York, Paris, Shanghai, and Singapore

Over 35 languages spoken

In-house expertise and global reach

Active in more than 50 countries
ACT’s role in an Emissions Trading Systems (ETS)

- Regulators
- Compliance Companies
- Associations (IETA)
- General Public (such as Universities)
- Exchanges
- Intermediaries
## Trading Over the Counter (OTC) vs. an Exchange

<table>
<thead>
<tr>
<th></th>
<th><strong>Over the Counter</strong></th>
<th><strong>Exchanges</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
<td>• No Exchange access needed (important for SME’s)</td>
<td>• Access to large volumes (through auctions)</td>
</tr>
<tr>
<td></td>
<td>• Easy ordering process (no screen trading knowledge needed)</td>
<td>• Access to derivatives (such as futures)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Management of counterparty risk</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>• Counterparty risk</td>
<td><strong>Disadvantages</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cost of exchange membership</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Knowledge needed of how to trade</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Minimum volume requirements</td>
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</tbody>
</table>

They can and should exist next to each other
A normal day at the office...

Daily questions that we get from our clients:

Where do you expect that the allowance price will be end of the year?

When do we need to hand in our monitoring report?

What is the current allowance price?

How can we shape our purchase strategy?

Are there any regulatory changes that will influence our company?

Do you have any recommendations for verification companies?

Our subsidiary in Asia will be part of an ETS soon, can you help?

We expect some surplus allowances end of this year: can you help sell these?
A normal day at the office...

Exchanges

Buying and Selling of allowances

ACT

Buying and Selling of allowances

Developing procurement strategy
Providing regulatory and policy updates
Providing market insights

Compliance companies
Trading strategies among market actors

**Power companies**
- Daily trading activities
- Allowances are part of their core business
- Dedicated teams
- Access to the Exchange
- Existing market and product knowledge
- Sophisticated trading strategies

**Industrial compliance companies**
- Typically purchase allowances 1-3 times a year
- Allowances trading not part of the core business
- Need of easy market access
- Providing market knowledge
- Sending updates on regulatory changes

**Financial/trading intermediaries**
- Providing liquidity (!)
- Enabling easy market access
- Sharing market and product knowledge
- Offering financial solutions

However:
- As markets mature, their capabilities grow
  - Higher price -> bigger effect on costs
  - Growing need for specialized department
The role of derivatives in an ETS: Futures

Futures
Managing cashflow risk

**Approaches**
- Futures purchasing manages future budgetary risk and reduces upfront cash outlays
- Easier to commit further into the future
- Delivery and payment for the Allowances occur at expiry of the future
- In the meantime, you may be subject to margin payments to maintain the position

**Advantages**
- Payment and delivery only when you need the Allowances
- Cashflow management

**Disadvantages**
- Margining conditions may require payments to maintain your position
- Forwards are derivatives and require an IETA/ISDA to be signed (complex contracts)
# The role of derivatives in an ETS: Options

**Options**

*Hedging against market risks with Calls and Puts*

## Approaches

- Effective way to hedge against market risk is through purchasing an option
- **Call option**: right to buy at certain price
- **Put option**: right to sell at a certain price

## Key Considerations

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Call option</strong>: set a price ceiling (when buying)</td>
<td>You pay a premium upfront (cash out)</td>
</tr>
<tr>
<td>-&gt; If the price falls, you simply buy at a lower price</td>
<td>Options are derivatives and require an IETA/ISDA to be signed (complex contracts)</td>
</tr>
<tr>
<td><strong>Put option</strong>: set a price floor (when selling)</td>
<td></td>
</tr>
<tr>
<td>-&gt; If the price rises, you simply sell at a higher price</td>
<td></td>
</tr>
<tr>
<td>No margining requirements, as the premium is paid upfront</td>
<td></td>
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</table>
# The influence of policy on the functioning of an ETS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusion of different sectors</td>
<td>Which sectors will fall under the ETS</td>
</tr>
<tr>
<td>Banking of allowances</td>
<td>Whether Participants are allowed to carry over allowances from one phase to the next phase.</td>
</tr>
<tr>
<td>Allocation of allowances</td>
<td>How will allowances be distributed over the different sectors</td>
</tr>
<tr>
<td>Linear Reduction Factor</td>
<td>What will be the annual decrease of the allowances cap</td>
</tr>
<tr>
<td>Market Stability Reserve (MSR)</td>
<td>How the EU Commission steers the supply of allowances in the market</td>
</tr>
<tr>
<td>Changes in auction schedule</td>
<td>This can result in a smaller or larger number of allowances supplied in a certain period</td>
</tr>
</tbody>
</table>
The influence of policy on the functioning of an ETS

- Commodity prices decrease
- EUA auctions start again
- End-of-year take profit
- Big sellers
- Short sellers

EU Supports Backloading
EU Parliament votes against Backloading

Emission data published
Proposal for strong post 2020 reform
Brexit
Thank you

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