

# EEX Emissions Market

# Contents

1. EEX Group
2. EEX emissions market
3. EEX Primary Auctions
4. Auction Process
5. Clearing & Settlement
6. Market Surveillance and Legal Framework
7. Q & A

# EEX Group at a glance

- The European Energy Exchange (EEX) is the leading energy exchange in Europe.
- It develops, operates and connects secure, liquid and transparent markets for energy and commodity products.
- At EEX, contracts on Power, Emission Allowances, Freight and Agricultural Products are traded or registered for clearing.
- EPEX SPOT, Powernext, Cleartrade Exchange (CLTX), Gaspoint Nordic, Power Exchange Central Europe (PXE), IncubEx and Nodal Exchange are also part of EEX Group.
- EEX has a Partnership with Incubex to further develop trading in international carbon markets.
- Clearing and settlement is conducted by the clearing house ECC and by Nodal Clear in the United States.
- EEX is part of Group Deutsche Börse.



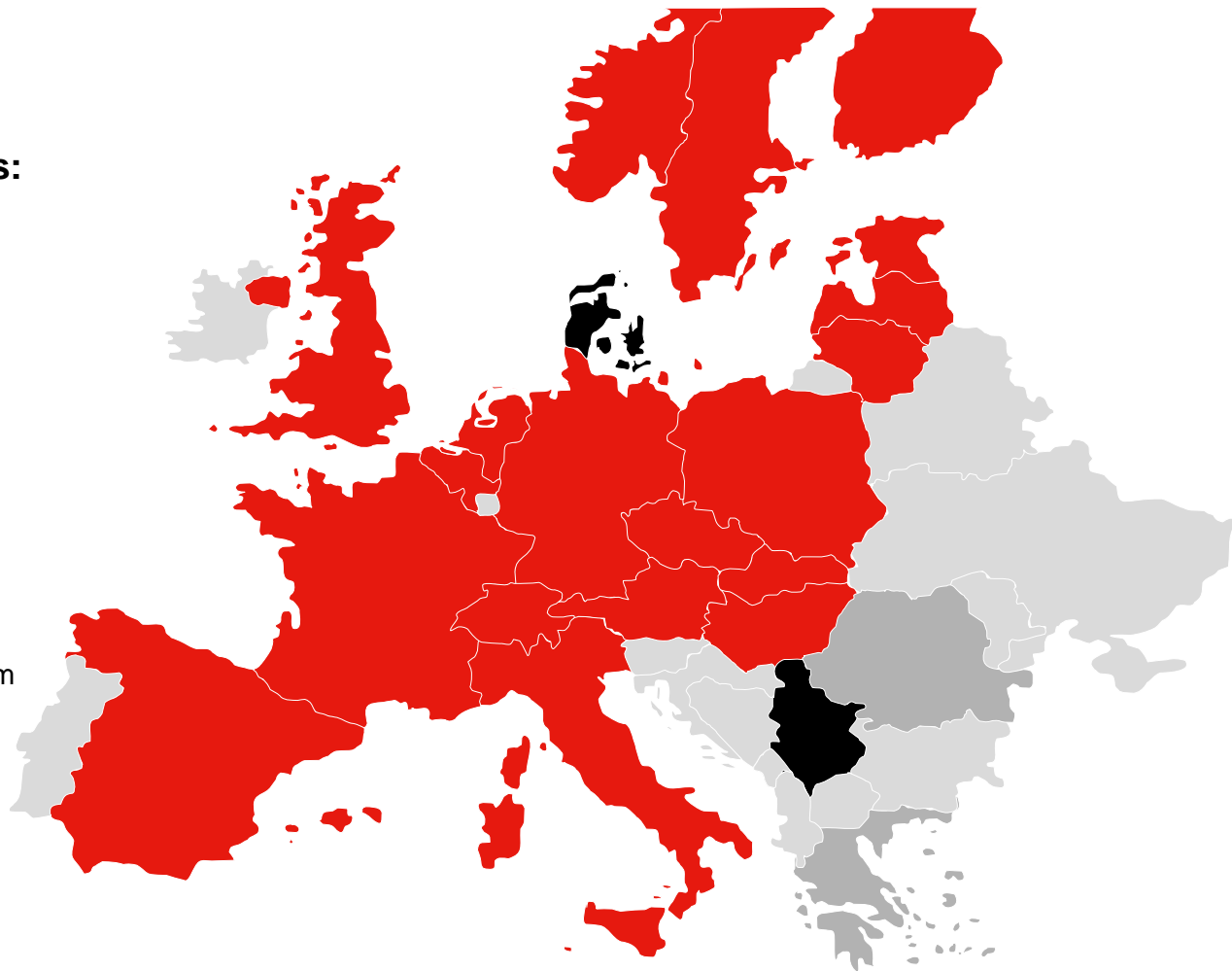
› eex	› ecc	› epexspot	› powernext	› pegas	› gaspoint nordic
› px	› cltx	› nodalclear	› nodal		

# Trading participants of EEX

**EEX connects 264 trading participants from 28 countries:**

- |                   |                   |
|-------------------|-------------------|
| 8 Austria         | 1 Luxembourg      |
| 1 Belgium         | 10 Netherlands    |
| 1 Bulgaria        | 6 Norway          |
| 1 Croatia         | 10 Poland         |
| 20 Czech Republic | 1 Portugal        |
| 7 Denmark         | 3 Romania         |
| 2 Finland         | 4 Slovakia        |
| 13 France         | 4 Slovenia        |
| 57 Germany        | 14 Spain          |
| 2 Greece          | 3 Sweden          |
| 3 Hungary         | 20 Switzerland    |
| 1 Ireland         | 33 United Kingdom |
| 34 Italy          |                   |

**5 non-European participants**  
Canada, Cayman Islands, USA



\* As of 31 May 2018

# Markets of EEX-Group



**Power**



**Global Commodities**

Freight, Oil, Coal, Metals, Biomass - Woodpellets



**Natural Gas**



**Agricultural Markets**

Potatoes, Dairy Products



**Environmental Markets**

Emission Allowances,  
Guarantees of Origin



**Registry Services**

Guarantees of Origin

# Product Overview Emissions

## Spot

## Derivatives

### Primary Market

*Spot auctions with T+1 delivery*

EU Allowances (EUA)

EU Aviation Allowances (EUAA)

### Secondary Market

*Spot trading with T+1 delivery*

EU Allowances (EUA)

EU Aviation Allowances (EUAA)

Green Certified Emission Reductions (CER)

*Futures trading with T+2 delivery after expiry*

EU Allowances (EUA) up to 2026

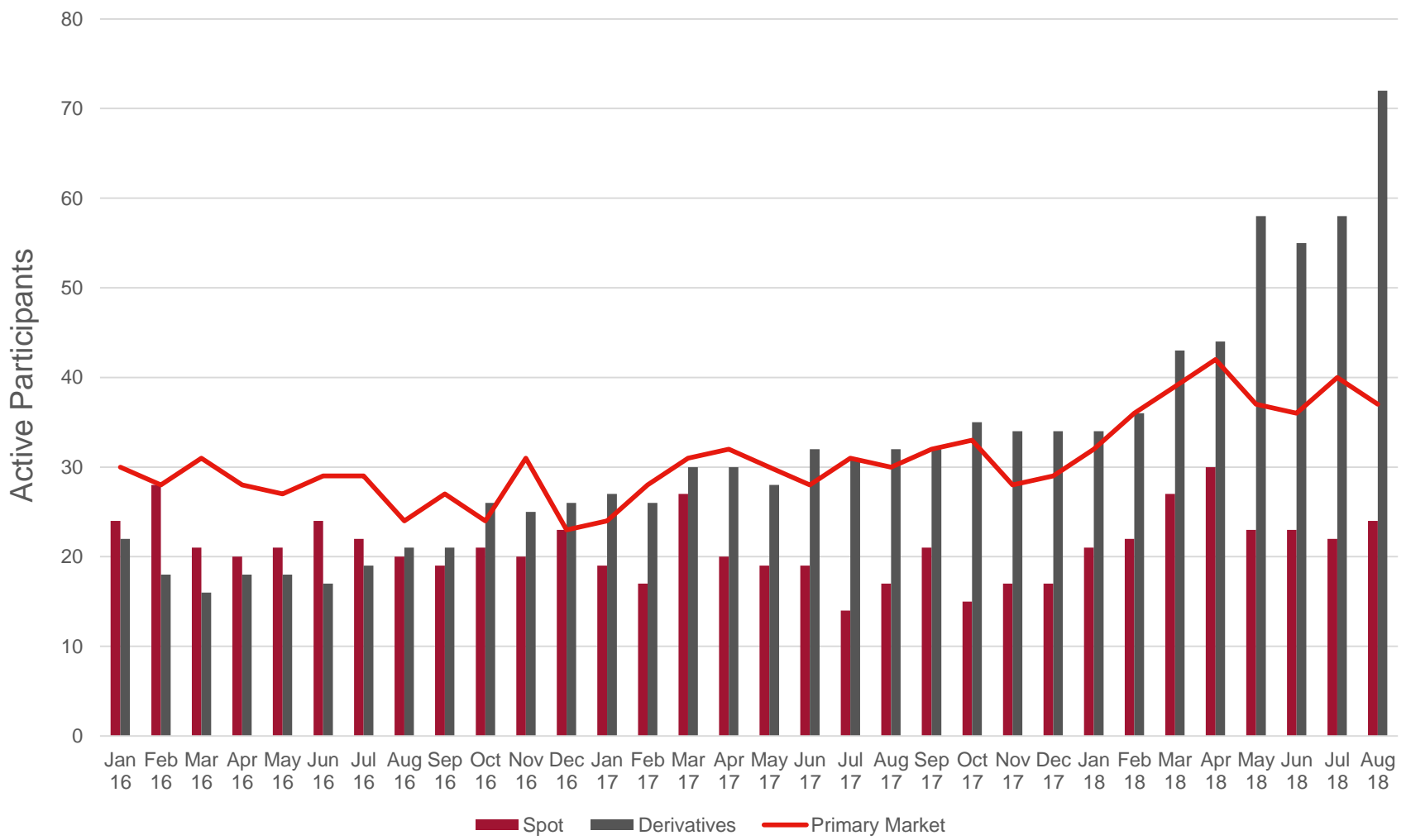
EU Aviation Allowances (EUAA)

Green Certified Emission Reductions (CER)

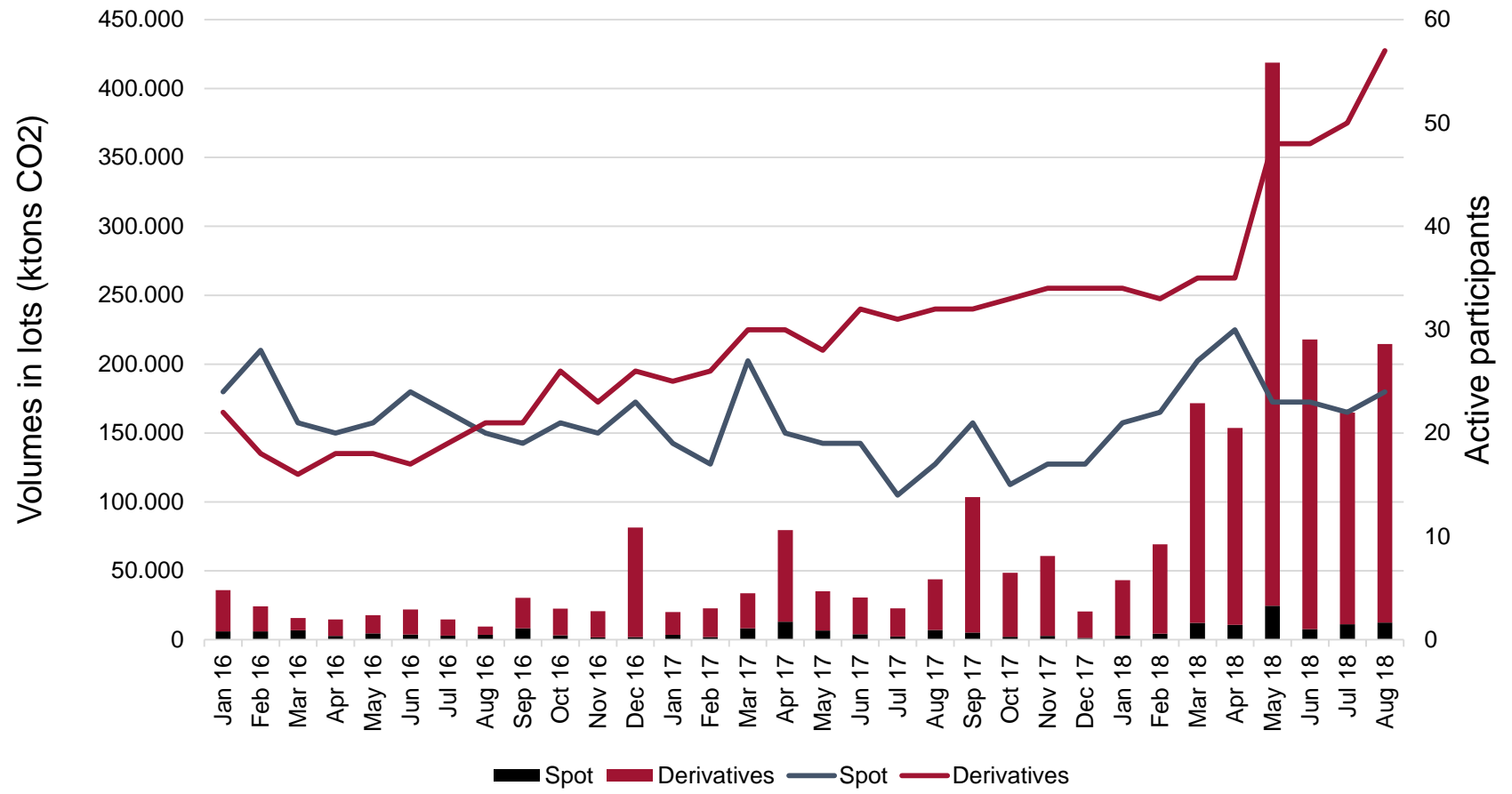
*Options trading on Futures*

EU Allowance (EUA) Dec. Futures

# Active Participants EEX



# Trading Volumes and Active Participants in EEX's Secondary Market





# Price quality in EEX's emissions order-book

Contract	BidQty	ImpBidQty	Bid	Ask	ImpAskQty	AskQty	Last	LastQty	Vol	Time	Settle
EUA Spot	3		17.41	17.45	1	1	17.41	3	41	15:28:30	17.48
EUA Dec18	25		17.46	17.49		1	17.47	152	1038	15:32:32	17.53
EUA Mar19	10		17.54	17.60		10		0	0	0	17.62
EUA Dec19	30		17.69	17.73	1	26	17.71	38	719	15:32:32	17.75
EUA Dec20	50		18.16	18.20	1	26	18.17	100	470	15:30:37	18.23
EUA Dec21	10	10	18.68	18.83	1	1		0	0	0	18.81
EUA Dec22	10	10	19.08	19.57	1	1		0	0	0	19.37
EUA Dec23	10	10	19.11	20.21	1	1		0	0	0	20.01
EUA Dec24	10	10	19.46	20.56	1	1		0	0	0	20.75
EUA Spot-EUA Dec18	460		-0.06	-0.04		266	-0.06	27	37	15:28:30	
EUA Spot-EUA Dec19	3	3	-0.32	-0.26		100		0	0	0	
EUA Spot-EUA Dec20	3	3	-0.79	-0.70	3	3		0	0	0	
EUA Dec18-Dec19 Cal	101		-0.24	-0.22		293	-0.24	29	490	15:32:32	
EUA Dec18-Dec20 Cal	10		-0.71	-0.67	1	11	-0.70	100	180	15:29:44	
EUA Dec19-Dec20 Cal	100		-0.50	-0.45		100	-0.46	200	200	15:28:30	

Source: EEX TT Screen, 09 Aug 2018 – 3:38pm CET

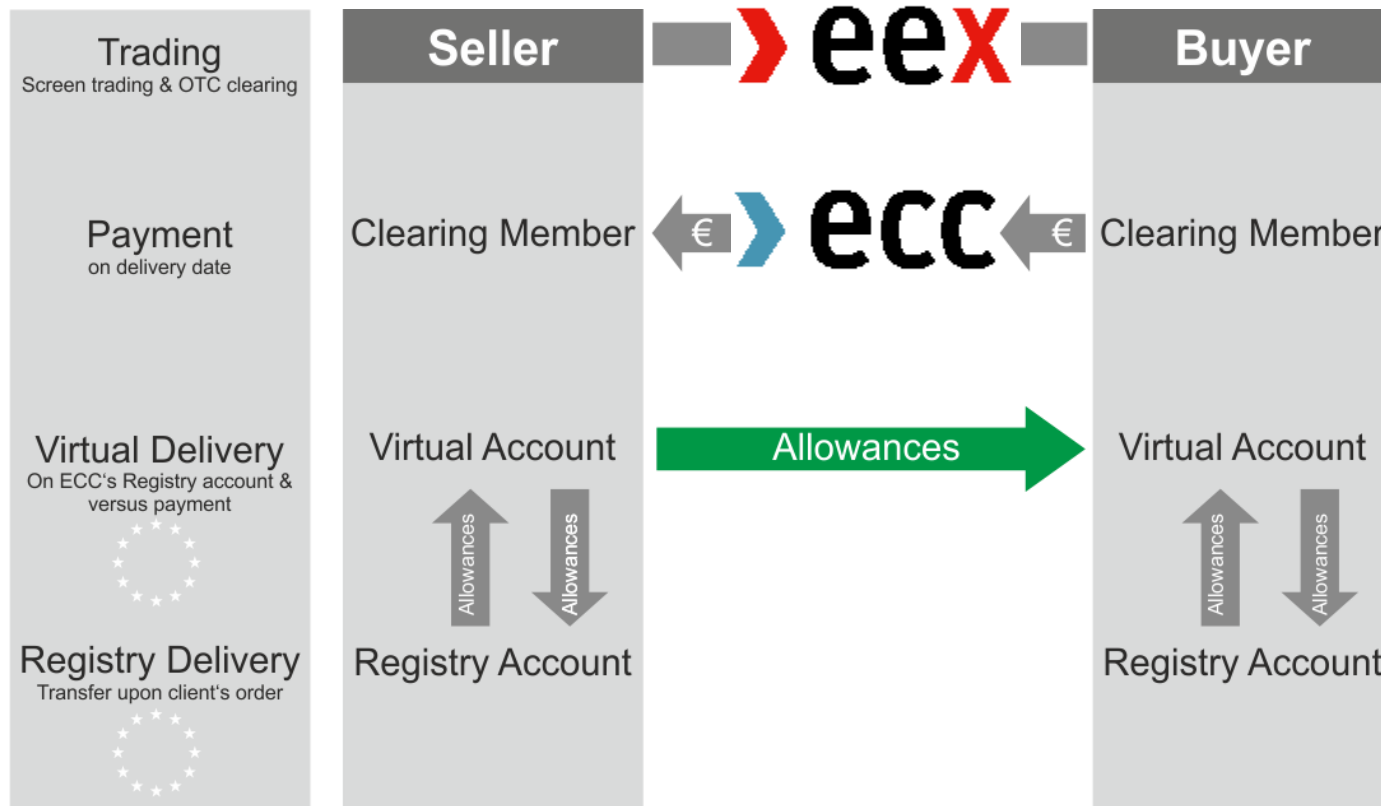


Source: TT mobile, 09 Aug 2018 – 3:39pm CET

- **Competitive price spreads** across broad range of contracts
- **Several market makers** actively quoting Spot and Time Spreads, further market makers for outright derivatives are currently under negotiation

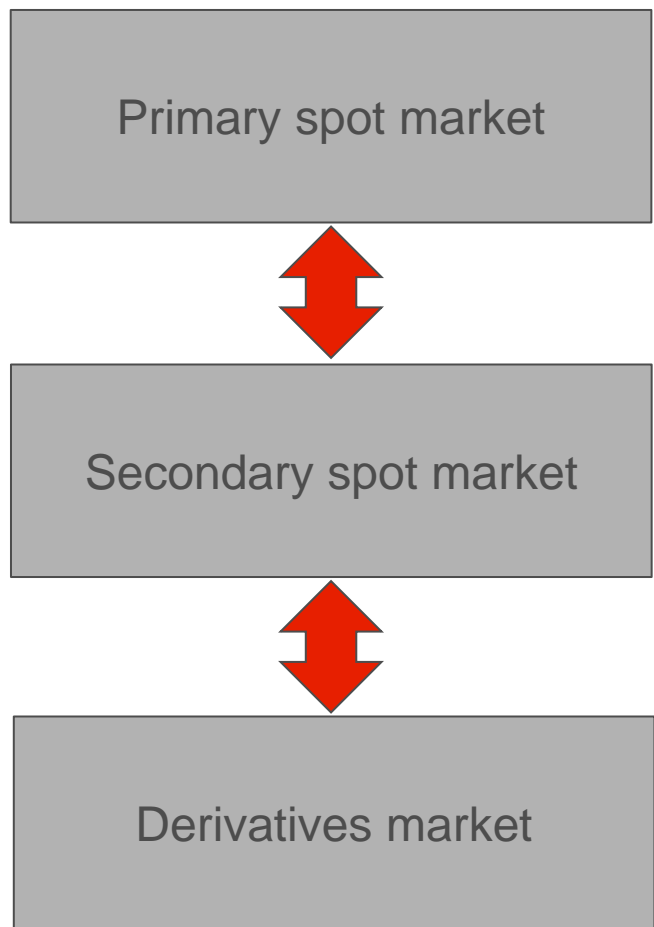
# Seamless Trading & Settlement

The setup of EEX's Emissions market ensures **seamless trading for clients at all times** – even at downtimes of the Union Registry clients can actively trade



# EEX's emissions markets

## Interaction between market segments



- **Allocation** of allowances to installations
- Fair and transparent price building for **origination**
- Highly secure settlement and money transfer
- Surveillance and reporting to authorities
- Creation of liquidity pool between various market participants to establish a **fair market price level**
- **Fast settlement** to facilitate (physical) demand and supply of allowances
- High surveillance standards to prevent misconduct
- Additional instruments to handle volatility of spot contracts which is influenced by fundamentals
- Futures and Options **eliminate spot price risk**
- Clearing **eliminates counterparty credit risk**
- **Fixing** of commodity price to compliance date
- untie money until compliance date

# EU ETS Phase-III-Auctions

## EU auctions (EEX)

- auctions for 25 EU Member States plus EEA/EFTA countries (Norway, Iceland, Liechtenstein)
- represents 59% of overall auction volume
- auctions on Mon, Tue, Thu, at 11 am CET

## 1 DE auctions (EEX)

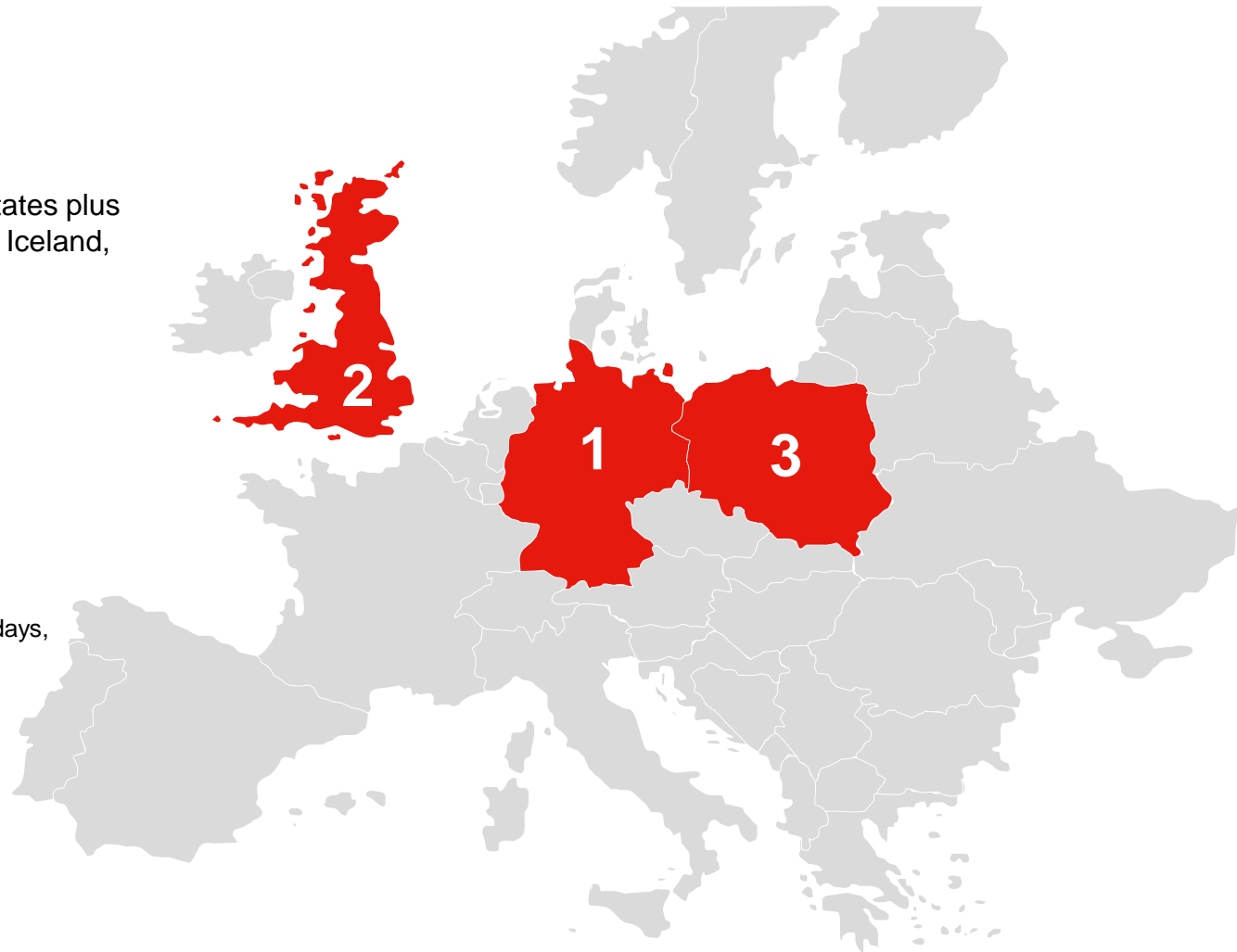
- represents 21% of overall auction volume
- weekly auctions on several Fridays, 11 am CET

## 2 UK auctions (ICE)

- represents 11% of overall auction volume

## 3 PL auctions (EEX)

- represents 9% of overall auction volume
- Auctions on several Wednesdays at 11 am CET



EEX covers approx. 90% of the total volume to be auctioned in Europe.

# EEX Primary Auctions – Admission Rules for Bidders

According to EU-Regulations: Auctioning Regulation, Art. 18 (1)

- Eligible Participants (Compliance buyers, Investment Firms or other Intermediaries) bid on their own account or on behalf of their members or clients
- Admission requirements next to general exchange requirements: established in the EU, a nominated bank or holding account
- EEX specific requirements for admission include the prove of liability
- Conclusion of an arrangement with a clearing member of ECC





# EEX primary auctions

## Track record in primary auctions

- **2010** Start of primary auctions for Germany
- **2011-2013** Auctions of NER-volumes for different EU Member States
- **2012** Cooperation with the European Investment Bank in NER300 Program
- **2012** EEX received contract for the transitional common auctions of the EU and Germany
- **2013** EEX was selected as definitive German auction platform
- **2016** EU Commission re-appoints EEX as common auction platform
- **2018** German Re-appoints EEX as common auction platform

# Auction Process

- M7 Auction system used for the auctions
- Only approved traders are allowed to bid
- The minimum volume is 500 allowances
  
- Auction format:
  - Single round: Bids will be submitted during one given bidding window
  - Sealed bid: Bids will be submitted without seeing other participant's bids
  - Uniform price: All successful bidders will pay the same auction clearing price
  
- Auctioned Products are currently Spot EU Allowances for the 3rd trading period of the EU ETS (2013 to 2020) with next-day delivery (T+1)
  
- The Auction Calendar is accessible on the Website: <http://www.eex.com/en/trading/calendar>

Week 42	Call Trading Period	Product Code	Trading Period	Volume		Auction Name
Monday 15-Oct-18	09.00 am - 11.00 am	T3PA	3rd Period	4.213.000		Spot Market - EU Primary Auction CAP2 - EUA
Tuesday 16-Oct-18	09.00 am - 11.00 am	T3PA	3rd Period	4.213.000		Spot Market - EU Primary Auction CAP2 - EUA
Wednesday 17-Oct-18						
Thursday 18-Oct-18	09.00 am - 11.00 am	T3PA	3rd Period	4.213.000		Spot Market - EU Primary Auction CAP2 - EUA
Friday 19-Oct-18	09.00 am - 11.00 am	T3PA	3rd Period	5.450.000		Spot Market - German Primary Auction - EUA

# Auction process

## EEX Auction System

List of Auctions    Auction: Auction 3. Period CAP2-EU

### Auction Details

**Name:** Auction 3. Period CAP2-EU      **Quantity:** 4,250,000

**Phase:** ■ Running      **Opening Time [CET]:** 12.10.2018 12:45

**Product:** T3PA      **Closure Time [CET]:** 12.10.2018 13:00

**Zone:** EU ■      **Ends in:** 00:12:15

**Auctioneer:** AUCT1 [View Data](#)

### Auction Configuration

**Auction Algorithm:** Price/Random

**Smallest Unit:** 500

**Settlement Start:** T + 1

**Maximum Bid Size:**

### Bids

Filter: <all members>      With selected bids: [- Quantity](#) [+ Quantity](#) [- Price](#) [+ Price](#)

ID	Member	User	Last Modified	Reference	Quantity	Price
229361764	ABCEX	BID088	12.10.2018 12:46:53.809		- 500 +	- 20.30 +
1694325223	ABCEX	BID088	12.10.2018 12:46:44.982		- 35,000 +	- 20.29 +
1745281505	ABCEX	BID088	12.10.2018 12:47:08.445		- 1,000,000 +	- 20.25 +

[Reset Modifications](#)    [Modify Bids](#)      [Cancel Bids](#)

### Input Parameter Configuration

**Quantity steps:** - 500 +

**Price steps:** - 0.01 +

### Submit New Bid

**Member:** ABCEX

**Quantity:** - 1,000,000 +

**Price (EUR):** - 20.25 +

[Upload Bids](#)    [Reset](#)    [Apply](#)

### Bid Overview

**Maximum Price:** 20.30 €

**Minimum Price:** 20.25 €

**Average Price:** 20.28 €

**Number of Bids:** 3

**Quantity Total:** 1,035,500

**Allocated:** -

**Value of Executed Bids:** -



# Auction process

## Auction clearing price determination

**Example:** Auction for 1 million EUA's

Bidder	Price	Volume
A	7,22 €	100.000
B	7,24 €	25.000
C	7,18 €	300.000
D	6,00 €	1.000.000
E	7,10 €	500.000
F	7,23 €	75.000
G	7,25 €	1.000
H	7,24 €	5.000
I	6,90 €	150.000
J	7,20 €	300.000
Total		2.456.000



Bidder	Price	Volume
G	7,25 €	1.000
B	7,24 €	25.000
H	7,24 €	5.000
F	7,23 €	75.000
A	7,22 €	100.000
J	7,20 €	300.000
C	7,18 €	300.000
E	7,10 €	500.000
I	6,90 €	150.000
D	6,00 €	1.000.000
Total		2.456.000

Allocation
1.000
25.000
5.000
75.000
100.000
300.000
300.000
* 194.000
0
0
1.000.000

- The total volume is allocated at an auction clearing price of 7,10€ per allowance
- Bidder “E” sets the price for all bidders, being the last successful buyer
- More than one bidder on clearing price: random distribution of rest volume to one bidder

# Auction process

## Reserve price

### Phase III Auction Reserve Price

- The reserve price methodology is closely coordinated between the auction platform, the European Commission and the Member States and operationalizes Article 6 of the Auctioning Regulation:

***“significantly under the price on the secondary market prevailing during and immediately before the bidding window when taking into account the short term volatility”***

- However, the reserve price as well as its underlying definitions are handled confidentially. This is in order to prevent any kind of manipulation or misconduct in the auctions, which could arise from the knowledge of this Methodology.

# Auction process

## Cancellation of an auction

- An auction will be cancelled under certain **conditions**:
  - Total volume of bids falls short of the volume of auctioned allowances
  - If the auction clearing price is significantly under the secondary market price
  - Technical problems occur or are likely to occur
- If such a decision is taken, the following **procedures** will apply:
  - Immediate information of market participants by EEX
  - Re-adjustment of the auction calendar
- Auction volume will be evenly distributed over the next four (in case of EUAAs: two) scheduled auctions

# Clearing & Settlement



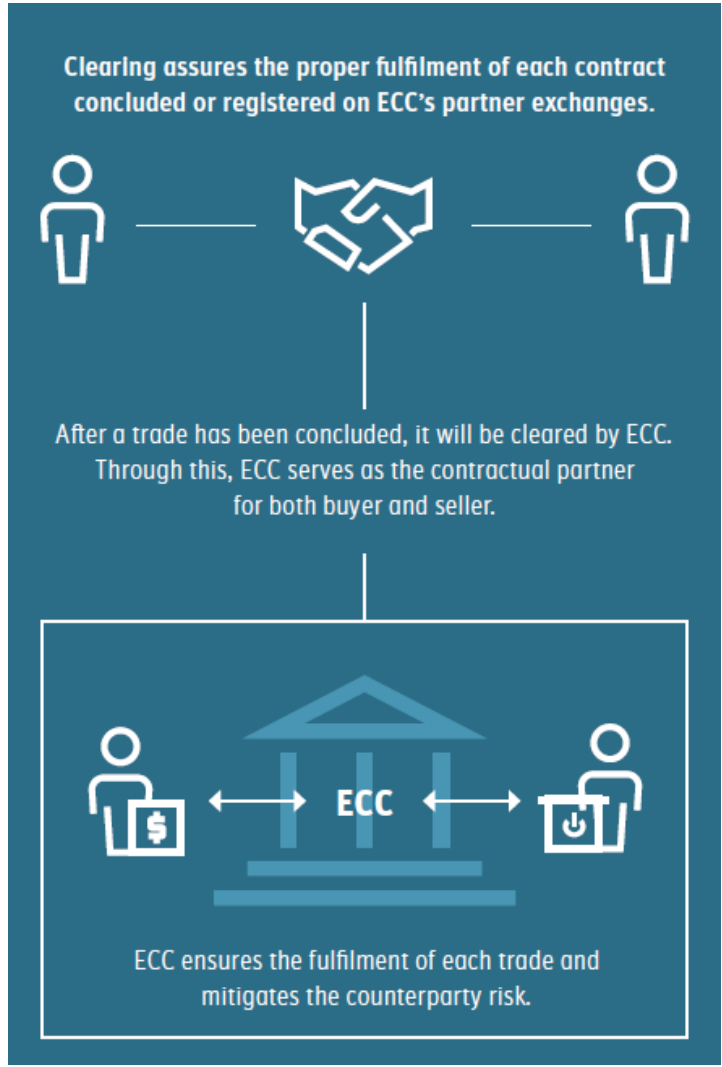
Physical settlement (delivery)

Financial settlement (payment)

Risk management services

Straight-Through Processing (STP)

Reporting Services



# Market Surveillance and legal framework

## Tasks of the Market Surveillance:

- Ensures that trading processes and pricing are carried out on a fair and manipulation-free basis.
- Records all data regarding exchange trading and the settlement of exchange transactions on a daily basis for analyses and required investigation activities. Can be requested to carry out special investigations by the Management Board of the exchange.
- Carries out special investigations on its own initiative or upon an instruction to this end by the exchange supervisory authority.
- Reports to the exchange supervisory authority and the Management Board of the exchange on a regular basis or for specific reasons
- Informs the Exchange Council of its activities at the Exchange Council meetings
- Supports various national, European and international authorities, in particular, in the fields of exchange and financial market supervision, energy regulation and competition supervision

Thank you for your attention!

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