Intra-day trading of electricity

and

other environmental friendly trading instruments
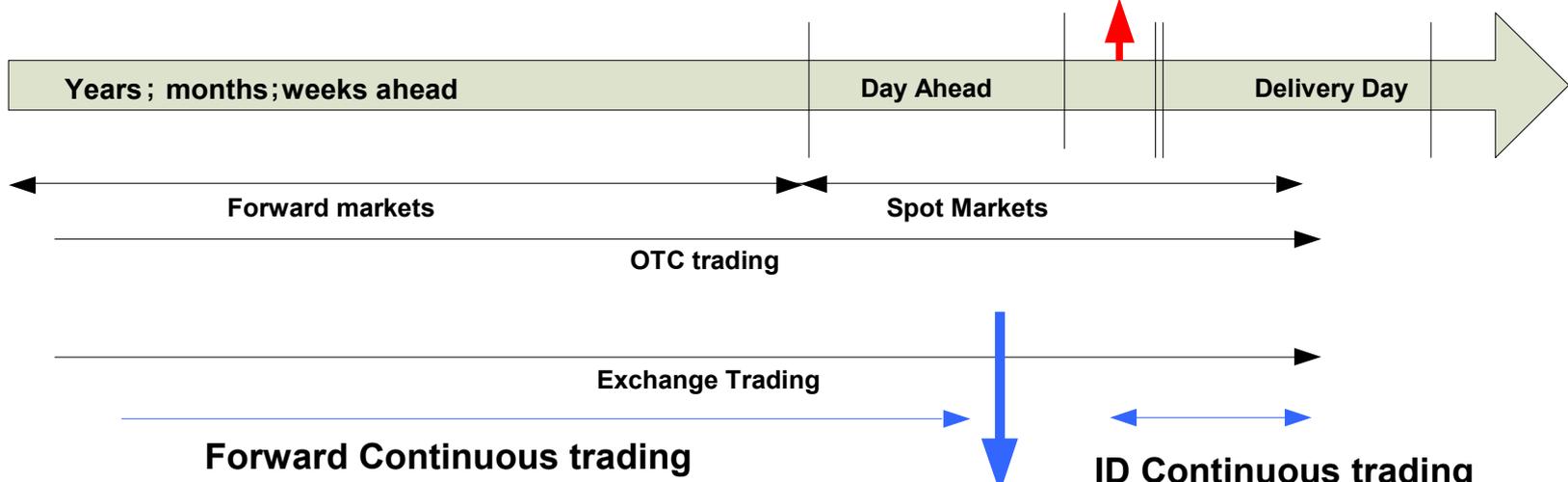# Emissions certificates

Green Energy Forum 2011 – Renewable Energy Opportunities in Romania

29th of March 2011

Wholesale Market Segments

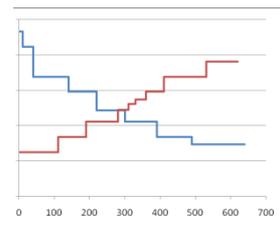**Deadline for submitting Balanced Programs to TSO**

Years; months;weeks ahead	Day Ahead	Delivery Day

Forward markets

Spot Markets

OTC trading

Exchange Trading

Forward Continuous trading

**DA auction
Closed
auction
mechanism**

ID Continuous trading

Trading Environment

OPCOM platform for the electronic trading with continuous negotiation

Continuous negotiation

⚒ Participants can enter orders which may modify, suspend or cancel;

⚒ It always know the best 10 selling offers and the best 10 buying offers, sorted by price and time stamp;

⚒ Trades are concluded <u>only once</u>, at the closing trading session.

OPCOM trading platform is based on the CONDICO application supplied by Nasdaq OMX

Performing daily sessions

Auction sessions will be held daily, after sending final notices for DAM and will end considering the time limit accepted by TSO for submitting notices.

Submission of offers Ranking of offers submitted for each hour depending on price and time stamp and validation of buying offers, in order of their introduction, depending on guaranties

(1)

Matching buying offers with selling offers and providing Trades Confirmations to IDM Participants

(2)

Appeals on the trade confirmations and solving the appeals

(3)

Sending final notices.

(4)

✓ **Each instrument defined in the Intra-day Market represents a hour interval.**

✓ **Offers accepted are hourly type.**

Hourly offer for electricity – **offer for one hour interval with price and quantity of electricity firmly established. The amount indicated in the offer can be partially traded according to market conditions and proposed conditions.**

✓ **An offer submitted by a participant may be canceled/modified at any moment during the submission of offers period. Trading system will provide the time stamp and will take into account the latest change made during the submission of offers.**

✓ **Offers submitted are automatically ordered by the Trading System, according to the price, ascending for selling offers and descending for buying offers, and according to the time stamp for offers of the same type with the same price.**

Phase I of the trading day

Ranking of offers and validation of buying offers submitted for each hour depending on price and time stamp

✓**Trading System validates the buying offers of each Participant in order of their introduction, considering the amount of bank guarantee posted by each Participant and free of payment obligations (validation guarantee).**

✓**If offers are not covered by validation guarantee, immediately after their introduction into the Trading System, IDM Participants will receive an alert message on the invalidation of the offer.**

Error
Operational limit exceeded
Ok
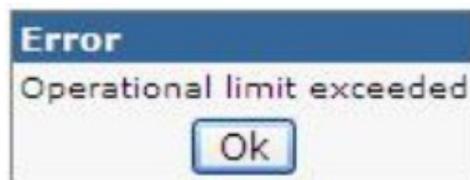
✓**Through out this phase IDM Participants may decide to modify, suspend or cancel offers entered in the Trading System.**

Matching buying offers with selling offers

✓ When this phase is opened if in the Trading System there are hourly buying offers with price equal or greater than the price of the hourly selling offers, Trading System will match them automatically.

✓The prices at which transactions are concluded are the buying offers prices.

✓After the trading session, SC OPCOM SA provide IDM Participants Trades Confirmations through the Trading System.

	Markets	My Watchlist	Order Book	Trades	News	Settings

Trades — Time between updates: 6

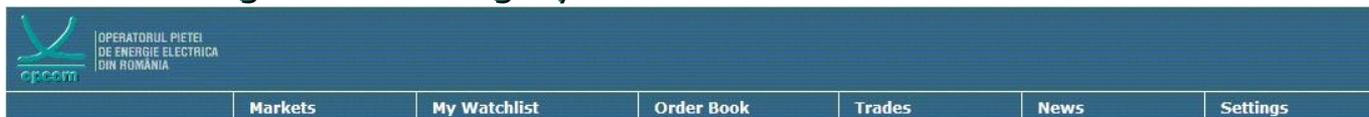|	Id	Trader	Instrument	Price	Volume	Comment	Time	Account	Company
		*	*				*		
B	106295	IOANA1	TEST-IN-20-28Jan11	292.00	1.650	Released by:ADMIN1	14:40	IOANA	IOANA
B	106285	IOANA1	TEST-IN-20-28Jan11	292.00	1.000	Released by:ADMIN1	14:40	IOANA	IOANA
B	106275	IOANA1	TEST-IN-20-28Jan11	292.00	1.500	Released by:ADMIN1	14:40	IOANA	IOANA
B	1062519	IOANA1	TEST-IN-16-28Jan11	211.00	0.700	Released by:ADMIN	14:40	IOANA	IOANA
B	106248	IOANA1	TEST-IN-15-28Jan11	229.00	2.800	Released by:ADMIN1	14:40	IOANA	IOANA
A	106222	IOANA1	TEST-IN-04-28Jan11	171.26	2.140	Released by:ADMIN1	14:40	IOANA	IOANA
A	106212	IOANA1	TEST-IN-04-28Jan11	172.00	1.000	Released by:ADMIN1	14:40	IOANA	IOANA

Own buying trade concluded at 2:40 p.m. for the instrument TEST-IN-04-28Jan11, so for the period January, the day of 01/27/2011 for a quantity of 1 MW at a price of 172 lei/MWh.

Phase III
Appeals on the trade confirmations and solving the appeals

✓Market Participants may have appeals against the results of the transaction confirmed by in Trades Report published by the Trading System, available through their own interface for IDM Participants.

✓Appeals submitted are reviewed and solved in terms of deals acceptance or rejection.

Phase IV
Sending final notices

✓After the closing of trading session, through the Trading System, SC OPCOM SA provides to BRPs IDM Participants, Physical Notifications of own trades and for trades concluded by each member which is IDM Participant.

Trades Settlement

✓ Invoices are issued monthly and their contents will be in accordance with the legislation in force.

✓ IDM Participant that recorded selling trades in a month, issue and forward to SC OPCOM SA the invoice that includes quantity and total value of electricity sold, plus VAT.

✓ SC OPCOM SA issue and forward to IDM Participant which recorded buying trades, invoice containing quantity and total value of electricity purchased by IDM Participant, value of payment obligations for services provided by SC OPCOM SA, at regulated tariffs, plus VAT.

✓ OPCOM to issue and forward to IDM Participant which recorded selling trades, invoice containing the value of payment obligations for services provided by SC OPCOM SA, the regulated tariffs, plus VAT.

✓ If IDM Participant not honor its payment obligations, SC OPCOM SA proceeds to execution the bank guarantee of payment.

OPCOM's Trading Platform for Emission Certificates

ROMANIAN
power
market
operator
opcom

"earning every Day-Ahead your trust"

OPCOM's Trading Platform for Emission Certificates (TPEC)

Romania's allocations 2008-2012
(CO2 tons)

1.618.308   2.449.411
28.818.122   1.753.842
61.654.319   45.535.198
207.842.393

- Paper
- Ceramics
- Cement and lime
- Energy
- Cast iron and bauxite
- Refineries
- Glass
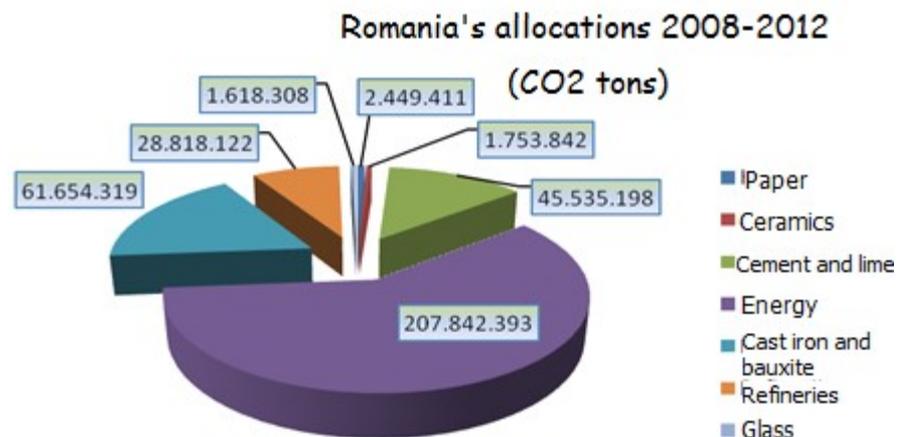
The **Trading Platform for Emission Certificates (TPEC)** creates a centralized market framework for the transactions with emission certificates and for the determination of a fair reference price, in terms of competition, transparency and non-discrimination.

The underlying asset for the contracts traded on the TPEC is the **emission certificate** and is issued for each ton of carbon dioxide equivalent.

The Order of the Ministry of Economy, Commerce and Business Environment of Romania **no. 941/19.05.2010** approved the **Regulation concerning the organisation and functioning of the Trading Platform for Emission Certificates**.

Under this Regulation, OPCOM will implement two mechanisms for **trading emission certificates bilateral contracts**.

Participation on the Trading Platform for Emission Certificates (TPEC)

The following participants can request the registration to TPEC:

The following legal entities that submit **a proof of holding an account in a European Registry of greenhouse gas emissions certificates:**

• operators of the installations that are subject to the provisions of the Government Decision no. 780/2006,

• foreign legal entities that, under their license and/or functioning autorisation, can deploy activities regarding the trading of emission certificates (commercial banks, investement companies autorised by the National Securities Commission).

The mandatory condition for participating in the trading sessions:

The participants registred to the TPEC have to submit a letter of guarantee for participating in the trading sessions. This guarantee is meant to secure the signing of the contract.

On the Trading Platform for Emission Certificates (TPEC), bilateral contracts may be concluded through one of the following mechanisms:

Through public auctions organised following the offers published by OPCOM, at the initiating TPEC participants' request. For each auction session, the initiators propose: the content of the sell-buy contract that will be concluded after the winner of the auction is declared, the volume of certificates offered for sell/buy and the minimum selling price/maximum buying price, according to the type of the published offer (mechanism already implemented).

Through electronic auctions based on standard instruments listed by OPCOM for the sell/buy of emission certificates, as defined in the TPEC. Each instrument is characterised by a standard delivery period and the initiating TPEC participant proposes the volume of certificates offered for sell/buy, as well as the opening price (mechanism that shall be defined together with the members of the Technical Working Group).

Chart of the functioning process for the Trading Platform for Emission Certificates through public auctions

OPCOM receives the registration request sent by the Registry account holder.

OPCOM verifies the submitted documents and corrects the invalidated information.

OPCOM registers the account holders as TPEC participants.

TPEC participants send the sell/buy offers for emission certificates and the related contracts to OPCOM.

TPEC Market participants submit to OPCOM the proof of constituting the required letters of guarantee.

OPCOM publishes the initiating offers and their related contracts.

TPEC participants send their responding offers.

Auction date

The auction commission opens, announces and validates the responding offers.

The auction commission declares the winner.

OPCOM gives back the letters of guarantee to the non-winning participants.

OPCOM sends the trading confirmations.

TPEC participants conclud the bilateral contracts for the sell/buy of emission certificates , according to the trading confirmations.

1) OPCOM gives back the letters of guarantee to the winners of the auctions after having submitted the signed contracts.
2) If one party refuses to sign the contract, its guarantee is beeing executed.

Thank you for your attention!

www.opcom.ro