

ENERGY SAVING CERTIFICATES [ESCerts]

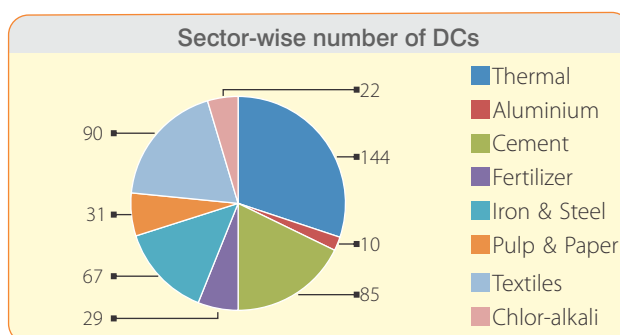
Perform, Achieve & Trade Scheme [PAT]

The 'Perform, Achieve & Trade (PAT)' mechanism is one of the most important initiatives under the National Mission on Enhanced Energy Efficiency (NMEEE). PAT was launched by Bureau of Energy Efficiency (BEE) under Ministry of Power on 4th July, 2012 at New Delhi.

PAT is a market-based mechanism to improve and incentivize energy efficiency in large energy-intensive industries. The scheme covers 478 Designated Consumers (DCs) from eight energy-intensive sectors—thermal power, aluminium, cement, fertilizer, iron and steel, pulp and paper, textiles and chlor-alkali. These sectors together account for 25% of India's GDP and about 45% of India's primary energy consumption.

It facilitates the DCs to achieve their legal obligations under the

Energy Conservation Act, 2001, and motivates them with necessary market-based incentives to over-achieve the targets set for them. The scheme was notified on 30th March, 2012 and became effective from 1st April, 2012.



Moving Towards Energy Savings

PERFORM

- Specific energy reduction targets specified for each DC.
- Energy Efficiency measures to be adopted by all DCs.
- Every DC to submit an implementation plan for achieving energy efficiency measures to BEE & State Designated Agency (SDA).

ACHIEVE

- DCs to appoint BEE empanelled accredited energy auditor.
- Energy audit by accredited energy auditor.
- Verification of Specific Energy Consumption Reduction Target achieved by DC.
- Submission of verification report.
- Check-verification by BEE & SDA.

TRADE

- Issuance of ESCerts by Central Govt. on recommendation from BEE.
- DCs over-achieving targets to be issued ESCerts.
- DCs under-achieving targets to purchase ESCerts from IEX for compliance.
- Energy Savings Certificates trading @ IEX.

Procedure

PERFORM

Target-setting phase

- Set Specific Energy Consumption (SEC) targets for 478 identified Designated Consumers (DCs) from baseline year in percentage terms.
- Target for each DC specified by BEE through notification.
- Target to be achieved over a period of three years commencing 1st April, 2012.

ACHIEVE

Target-achieve phase

- First target cycle from 1st April, 2012 to 31st March, 2015.
- DCs to undertake measures to reduce their specific energy consumption.

Monitoring & Verification (M&V) phase

- Would commence from April 2013 and beyond.
- DCs to submit Performance Assessment Document to State Designated Agency (SDA), with a copy to BEE within three months of the end of first year of target cycle.
- Verification report to be submitted by accredited energy auditor to BEE.

- In case of any discrepancy, BEE in consultation with SDA to appoint a fresh accredited energy auditor for check-verification.
- Cross-verification report to be submitted by accredited energy auditor to BEE and SDA in proposed format.

TRADE

Issuance of ESCerts & trading

- Based on cross-verification report, BEE would recommend to the Central Government for issuance of Energy Saving Certificates (ESCerts) for DC.
- DCs who achieve reduction in baseline specific energy consumption (SEC) in excess of targets will be entitled to sell ESCerts.
- DCs who under-achieve their targets can comply by purchasing ESCerts from Electricity Exchanges or paying a penalty.
- ESCerts to be traded only on Electricity Exchanges such as IEX.
- Penalty for non-compliance in accordance with the Energy Conservation Act, 2001. Also, amount of unmet target to be paid at prevailing oil price.

PAT Key Statistics

- 8 sectors
- 478 Designated Consumers
- 165 MToE annual consumption by DCS
- 19,000 MW capacity addition avoided
- 2012-15 First PAT Cycle
- 6.686 MToE Energy Saving Targets under first PAT cycle

Trading at IEX

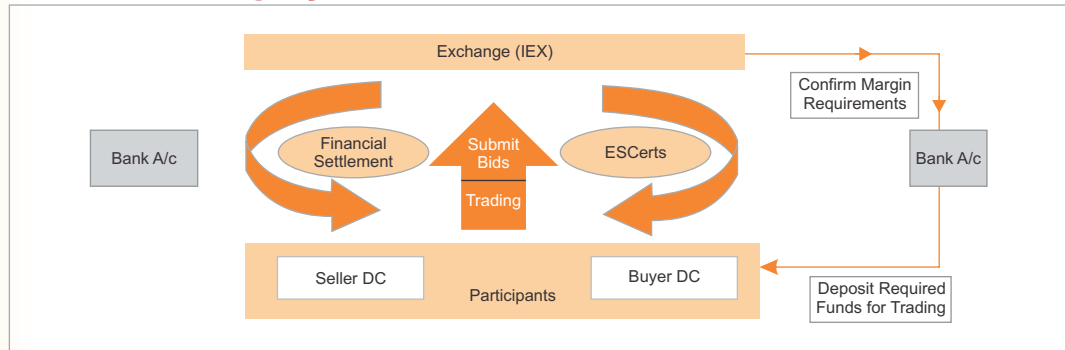
- DCs to get registered at IEX as a Member/Client.
- Pre-trade margin confirmation by IEX with DC.
- Bids to be placed by DCs.
- Determination of Market Clearing Price (MCP)

* To be approved

and Market Clearing Volume (MCV) through Uniform Price Auction*.

- Financial settlement at IEX.
- Delivery of ESCerts online.

ESCert Trading Cycle



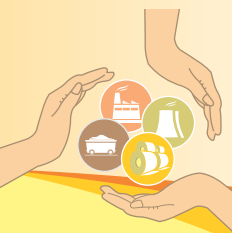
Salient features of ESCerts trading

Issuing Agency	Gol on Recommendation of BEE
ESCerts denomination	1 ESCert = 1 MTOE (Metric Tonne of Oil Equivalent)
Trading Platform	Electricity Exchange only
*Trading Frequency	Once a month
*Price Determination	Closed Double sided Auction (Uniform Price)
Penalty	As per the provision of EC act. (Linked with market value of oil equivalent)
Banking	Allowed for two consecutive cycles
Compliance Period	3 Years for DCs
Registry	PAT NET

* To be approved

Why IEX for ESCerts trading?

- Competitive Markets
 - High volumes and large number of participants
 - Diverse participation
 - Transparent & efficient platform.
- Already an established spot market for electricity & REC trading.
- Majority of DCs already a part of IEX.
- Pan India presence.
- Clearing & Settlement (C&S) already being done for about 750 entities on a daily basis.
- Prompt dissemination of trade details and obligations to all the participating DCs, Central Registry and State Designated Agencies.



For further details, please contact:

Indian Energy Exchange Limited

100A/1 Ground Floor, Capital Court, Olof Palme Marg, Munirka, New Delhi-110067

Phone: +91-11-43004000 | Fax: +91-11-43004015 | Email: iex-bd@iexindia.com | www.iexindia.com