Brief on Trading of ESCerts (Energy Saving Certificates)

The NAPCC has launched eight missions to promote and enable sustainable development of all citizens, while promoting low carbon and high resilience development path. The National Mission on Enhanced Energy Efficiency (NMEEE) is one of the Missions under NAPCC. The objective of NMEEE is to promote innovative policy measures, regulatory regimes, financing mechanism and business models which will create and sustain markets for energy efficiency in a transparent manner. The Perform Achieve and Trade Scheme is one of the initiatives under NMEEE.

2. Perform Achieve and Trade (PAT) is a market based mechanism to reduce the specific energy consumption (SEC) in energy intensive large industries. The PAT scheme is designed to reduce the specific energy consumption i.e. energy used per unit of production of industrial units of energy intensive large industries. Those which consume more energy are given higher targets as compared to those industries which are more energy efficient. An energy audit is done to verify the baseline data (current level of efficiency) and thereafter targets are given. Hence the units do not compete with each other but with themselves.

3. This mechanism is facilitated through the trading of ESCerts which are issued to those plants who have overachieved their targets. Those plants which under achieve their targets are entitled to purchase ESCerts. PAT Cycle I covered 478 industrial units in 8 sectors viz aluminum, cement, chlor alkali, fertilizer, iron and steel, pulp and paper, thermal power plants and textiles. The overall reduction target in eight sectors was 4.05% with an energy saving of 6.686 million tonnes of oil equivalent. The first cycle of PAT was completed in March, 2015. Thereafter verification of the performance of the DCs with regard to Energy Savings and based on recommendations made by BEE to the Ministry Of Power issued 38.25 lakhs (approx) ESCerts to 306 DCs. 110 DCs have been entitled to purchase 14.25 lakhs (approx) ESCerts. The DCs have contributed to the success of PAT Cycle I and this cycle has witnessed an energy saving of 8.67 million tonnes of oil equivalent (Mtoe) against the target energy saving of 6.886 Mtoe which is about 30% more than the target. This has also resulted in an emission reduction of 31 million tonnes of Co2. In monetary terms Rs 9,500 crores have been saved due to reduction in energy consumption.

4. PAT Cycle II was notified with effect from 1.4.2016 for a period of 3 years i.e. upto 2018-19. The overall energy consumption reduction target under PAT II given to 621 units is 8.869 Mtoe in which 11 sectors are covered. This includes the 8 sectors of PAT I and 3 new sectors viz railways, DISCOMS and petroleum refineries. PAT III has been notified with effect from 1.4.17 for a period of 3 years. 116 units have been given a reduction target of 1.06 Mtoe. The PAT Scheme is now being implemented as a rolling cycle i.e. every year new units will be notified for a period of 3 years cycle. There will not be a gap in notifying new units as was the case between PAT I and PAT II. Earlier PAT II was notified only on the completion of PAT I.

5. For the trading of ESCerts, Central Electricity Regulatory Commission (CERC) is the Market Regulator and Bureau of Energy Efficiency is the Administrator. POSOCO (Power System Operation Corporation limited) has been appointed as Registry for making DCs as
eligible entities for trading of ESCerts and book-keeping of ESCerts. There are two Power Exchanges i.e. IEX and PXIL where trading of ESCerts shall take place. CERC has already approved the Procedure for Transaction of Energy Savings Certificates (ESCerts).

6. Trading is to take place every Tuesday as per the Regulations. The Flow Chart for ESCerts trading may be seen below.

**ESCerts Trading Flow:**

![ESCerts Trading Flow Chart](image)