

## **Note on steps to be taken for implementation of Perform, Achieve and Trade (PAT) Scheme**

In pursuance of the guidelines provided in the National Action Plan on Climate Change, a framework document for National Mission on Enhanced Energy Efficiency was prepared. In the said document, it was suggested to have a scheme which would be a market based mechanism to enhance energy efficiency of large energy intensive industries through certification of energy savings that could be traded. The scheme is primarily known as “Perform, Achieve and Trade Scheme”. The main issues relevant to PAT Mechanism are as given below:-

- i) Methodology for setting Specific Energy Consumption (SEC) norm for each designated consumer in the baseline year and in the target year;
- ii) Verification process for SEC of each designated consumer in the baseline year and in the target year by an accredited verification agency;
- iii) Issuance process for Energy Savings Certificates (ESCerts) to those designated consumers who exceed their target SEC reduction;
- iv) Trading Process for ESCerts;
- v) Compliance and reconciliation process for ESCerts;
- vi) Cross sectoral use of ESCerts and their synergy with Renewable Energy Certificates.

In order to make the PAT Scheme functional, the steps as given below are proposed. These steps can be broadly clubbed into 5 different Module and each of the Module would have a selected focus involving the following:-

- i) Module-I - Data Collection and target setting
- ii) Module-II - Monitoring & Verification
- iii) Module-III - Certifications

- iv) Module-IV - Trading
- v) Module-V - Resolution and Cross Sectoral Use of ESCerts Conflict.

The activities to be covered under the Module-I are:-

- a) Data collection with respect to defining bandwidths and ranges in each of the sectors and sub-sectors;
- b) Setting up system boundaries for the different ranges in the sectors and sub-sectors of the designated consumers;
- c) Setting of targets for the industries in the defined range by various methods like decreasing trends of energy consumption, cost benefits, modeling studies etc.;
- d) Creating baseline data for the respective industries which fall under the Preview of PAT Scheme.

The activities under the Module-II would comprise of:-

- a) Establishing mechanism to ensure regular flow of data;
- b) Accreditation of agencies who would be eligible to undertake the various activities such as auditing, reporting, collection of baselines, etc. This would include defining the pre-requisite qualifications and the method for selection of such agencies;
- c) Framing of verification protocols and making templates for the same for each of the range defined in Module-I in all the sectors and sub-sectors;
- d) Defining the legal liabilities of the accredited agencies (for example framing of protocol for wrong or erroneous reporting of data in connivance with the designated consumers).

The various activities under the Module-III on Certifications would be:-

- a) Defining certificates as denominations in which they would be issued;
- b) Developing protocols for issuance of certificates;
- c) Developing protocols for registry of escerts along with their reconciliation and updating of records.

The Module-IV would consist of the following steps:-

- a) Protocol for development of trading platform;
- b) Developing protocol for registry (through Beenet);
- c) Protocols for verifying the authenticity of ESCerts;
- d) Establishing protocols for settlement / reconciliation of the ESCerts issued.

The Module-V is on dispute resolutions and could be a regulatory framework under the Bureau of Energy Efficiency. It could also include cross sectoral use of escerts and their synergy with the renewable energy certificates. The framework of regulatory interventions and protocols for cross sectoral use of escerts with renewable energy services would need to be developed.

The activities under Module-I are underway and the bandwidths and range for cement, textile, fertilizer, pulp & paper, aluminium, chlor-alkali sectors have been drawn.. Study for steel sector is ongoing. For thermal power staion, CERC/CEA may be requested to undertake similar study. Based on this, study for defining the system boundary and the targets for the Aluminium sector have been given to an agency. Similarly, studies for rest of the sectors and establishing baselines needs to be taken up on an immediate basis.

For the Module-II, it is suggested that RFP may be made and since the industry and volume of the job would involve presence of the large manpower and sufficient experience in the subject, a reputed agency must be identified to

undertake the work. It is, therefore, proposed that the competent authority may kindly approve invitations of quotations for the same on a limited tender basis.

Similarly, for the Module-III & Module-IV, RFP may be prepared and quotations be invited on a limited tender basis.