GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Energy Department – Andhra Pradesh State Energy Conservation Mission (APSECM) – Andhra Pradesh Energy Efficiency and Energy Conservation Policy 2023-2028 - Energy Efficiency measures covering various demand sectors of the State in further enhancing Energy Efficiency & Energy Conservation in the State Adoption of EE & EC policy to attain State and National goals for sustainability of the environment – Orders – Issued.

ENERGY (POWER.II) DEPARTMENT

G.O.Ms.No.24 Dated:06/03/2024.
Read the following:

O R D E R:

As part of sustained efforts towards climate change goals of the country to reduce carbon emissions by one billion tonnes by 2030, achieve “Net Zero” by 2070 and enhance energy efficiency in the State by tapping estimated energy saving potential of around 20 per cent out of the total annual electricity demand with the involvement of all key sectors and stakeholders, the Government of Andhra Pradesh hereby notifies “Andhra Pradesh Energy Efficiency and Energy Conservation Policy 2023-2028” for promotion of energy Efficiency initiatives and to ensure energy security in the State.

2. The policy presents Andhra Pradesh’s ambitious objective to lead as India’s most energy-efficient economy by 2028. It focuses on lowering energy use through cost-effective and potential saving approaches for sectors like Domestic, Industry & Commercial, Agriculture, Municipality and Transport during the policy period of five years. The policy suggests adoptable energy efficiency measures, implementable financing mechanisms and strengthening of institutional capacity.

3. The Andhra Pradesh Energy Efficiency & Energy Conservation Policy 2023-28 intends to put in place framework for identification, development, implementation, monitoring and verification of Energy Efficiency programmes to be undertaken in the State to tap substantial energy savings potential and to act as an enabler for adoption of Energy Efficiency and Energy Conservation measures through increased public participation & involvement by creating necessary awareness. This effort positions the State as a front runner in executing large-scale Energy Efficiency initiatives.

4. This Policy shall come into force from the date of its Publication in the Official Gazette.

Andhra Pradesh Energy Efficiency and Energy Conservation Policy 2023-2028

1.PREAMBLE

How sustainable an economy is, depends to a large extent on how efficiently it uses energy. Energy Conservation and Energy Efficiency improve the State's competitiveness, strengthen consumers' purchasing power, reduce dependence on energy imports, and are the key to achieving climate targets.

The Andhra Pradesh State Government has a potential to save around 20% of total annual energy demand, viz.13547 million units equivalent to Rs. 9835 Crores, and it has set itself the goal of making the State the most energy-efficient economy in the country by 2028. The guiding principle underlying AP's energy conservation policy towards this goal is 'save before generate'. This implies that the priority is on reducing energy consumption wherever it makes economic sense and has huge savings potential. Once these approaches have been pursued as far as possible, the energy mix is to be optimized in sector coupling to meet the energy needs of the Domestic, Commercial, Transport, Agriculture, Industry, Power sectors. The State can also improve its ranking in the annual State Energy Efficiency Index (SEEI) released by the Minister of Power, GoI.

Energy conservation means saving energy and conserving even as value-added increases. The benefits of energy conservation and energy efficiency are manifold—lower energy requirements, improved air quality, reduced greenhouse gases, energy security, and deferred infrastructure costs. This reduces energy costs and gives State, public & private organizations and other stake holders a valuable cost advantage. Investments in energy conservation and efficiency measures strengthen domestic value creation, secure jobs, and increase the security of supply. In addition, focusing on energy efficiency opens up new export and growth in markets. Numerous studies document the prevalence of economically attractive opportunities for energy savings. The failure to implement these opportunities indicates shrugged market and other barriers to efficiency. Government policies are designed to target these barriers and enable the benefits of energy efficiency to be realized.

At the State level, one of the strengths of energy-efficiency Policy is its ability to offer broad-impact yet more finely tailored mandates and incentives.

To provide for efficient use of energy and its conservation and matters connected therewith or incidental thereto, the Energy Conservation Act (EC Act), 2001 (and subsequent amendments in 2010 and 2017) was enacted in Parliament with an overall objective of providing the necessary legal framework for promoting the efficient use of energy and its conservation. The Government of India established the Bureau of Energy Efficiency (BEE) on 1st March 2002 under the EC Act, 2001, to implement strategies and programmes that reduce the energy intensity of the Indian economy.

As part of this Act, all States were directed to establish a State Designated Agency to oversee and lead the implementation of energy conservation activities at the State level. The State has designated the Andhra Pradesh State Energy Conservation Mission as the "State Designated Agency (SDA)" to the Bureau of Energy Efficiency (BEE), Ministry of Power, GoI, to initiate, coordinate, regulate and enforce all necessary actions contained in the Energy Conservation Act, 2001 within the State for effective implementation of the Energy Conservation (EC) and Energy Efficiency (EE) activities.

Initially, NREDCAP was the nodal agency in Andhra Pradesh to implement the EC Act, including the PAT and MTEE schemes. Subsequently, the Government of Andhra Pradesh, by the (G.O.Ms.No.38), Dated 26-09-2012, ordered the constitution of a State Energy Conservation Mission for effective monitoring of Energy Conservation & Efficiency activities.

The energy-saving potential of the country is estimated to be 86.9 Mtoe by 2031 (in the moderate savings scenario). India's target energy emissions in 2030 in absolute terms should be less than or equal to 6807 MtCO2e. The achievement in emission-intensity (energy and non-energy) reduction by 2030 is estimated to be 36%. The BEE, in its communication vide meeting chaired by Hon'ble Minister for Power with Senior Officers of the States / UTs for discussing the actions required from the States to achieve the Energy Transition goals of India dated 9th February 2022 has indicated targets of 6.68 Mtoe of energy savings by 2030 for the State of Andhra Pradesh, in line with the Government of India's roadmap of reducing the total projected carbon emissions by 1 billion tons till 2030 and achieving the net zero emissions by 2070 along with reducing Carbon intensity to less than 45% by 2030.

Considering this, it is necessary to promote the use of new and latest technologies for energy conservation. Hence, institutions and citizens should be encouraged to adopt a culture of energy conservation and use energy efficiently in all spheres of activity. All government/ semi-government departments and institutions should take the lead in their area of operation to conserve energy and initiate programmes to create opportunities for EC and EE.

The State has also improved its performance in energy efficiency and energy conservation over the years. With implementation of LED bulbs under UJALA scheme and LED Street lighting in ULBs and Gram Panchayats, the State achieved estimated energy savings of around 2033 Million units. By implementation of Perform, Achieve & Trade (PAT) scheme in Industrial sector, the State has saved around 1.16 Million ton of oil equivalent (Mtoe) till PAT Cycle-5. The recently published State energy efficiency index by Alliance for Energy Efficient Economy (AEEE), AP is ranked 1st under the "**Group II**" category. Andhra Pradesh, through the SDA, i.e., the APSECM, shall ensure the implementation of all BEE schemes specified from time to time, such as:

1. Standards and Labeling program for energy equipment (S & L Program)
2. National Mission for Enhanced Energy Efficiency, PAT scheme for 13 types of large-scale industries.
3. Energy Conservation Building Code for Commercial & Residential Buildings
4. Demand Side Management for Agriculture, Municipal, SME and Discoms
5. E-Mobility
6. Other Programmes currently being implemented by BEE

Nationally Determined Contribution (NDC) under the Paris Agreement includes targets to reduce the emissions intensity of GDP by 33–35% by 2030 from 2005 levels. An international treaty on climate change held in Paris, adopted in 2015, pledged the sink 2.5-3 GTons of CO_2 by 2030. During the recently concluded COPs viz. COP26 COP27 and COP28, the union government have pledged to fight climate change and rising temperature levels and specifically also pledged to reduce 1 billion tonnes of projected emissions from now till 2030, achieving a carbon intensity reduction of 45% over 2005 levels by 2030 and achieving net-zero by 2070 as part of enhanced commitment to NDC. These new pledges go significantly beyond its current nationally determined contribution (NDC) under the Paris Agreement. Andhra Pradesh is committed to increasing green cover to 33% of its area from the current level of 23%.

The APSECM shall support BEE, New Delhi, in implementing the central government programs in Andhra Pradesh. In addition, there is still significant

scope for the design and implementation of EC and EE activities in the areas currently not covered by the BEE programmes. The framing of the Andhra Pradesh EC & EE policy would facilitate EC and EE activities across the State for a targeted improvement in conserving energy and improving the efficient use of energy for sustainable development. The practical implementation of EC and EE activities would help save on energy consumption and reduce the expenditure on energy on the State exchequer. To accelerate the effective implementation of EC and EE initiatives, the Government of Andhra Pradesh has supported and approved the dedicated "**Andhra Pradesh Energy Conservation Policy 2023-2028**". The Action Plan as suggested in the Energy Efficiency Action Plan for Andhra Pradesh shall be adopted under the policy implementation.

2. POLICY

The "Energy Conservation and Energy Efficiency Policy 2023-2028" is a policy for the State of Andhra Pradesh to encourage and promote the large-scale deployment of energy conservation and efficiency measures in the State. This policy ensures efficient energy usage directly catering to the local and national economy and addresses the requirement energy deficient sectors in the region by amplifying energy availability in the deficient areas. This also helps boost the local economy and strengthen energy security in the State through various Central and State Government initiatives. The energy-saving strategy will optimize per capita power consumption with modern policy directives.

The policy aims to bring a unified platform and recommend having an integrated approach to address energy efficiency and energy conservation to all the stakeholders. The policy addresses the sectors like Domestic, Industry & Commercial, Agriculture, Municipality and Transport to implement and enforce EE and EC measures effectively in the State.

The policy also intends formation of a steering committee headed by the Chief Secretary and a technical committee headed by the HODs of the relevant sector, defining roles and responsibilities of the steering committee and technical committee, providing additional powers and duties to the stakeholders, promoting awareness and organise training programmes, attract investments, devising innovative financing and market transformational strategies are a few steps taken to enhance EE & EC activities in the State.

2.1. VISION

1. To harness the potential of energy efficiency and energy conservation in Andhra Pradesh to benefit the energy stakeholders and the environment.

2. Establish Andhra Pradesh as a pioneering State in large scale deployment of Energy Efficiency measures across sectors like Domestic, Industry & Commercial, Agriculture, Municipality and Transport for ensuring energy security and promoting Energy Conservation for sustainable growth.

3. Ensuring Sustainability through the profitable and efficient use of resources to provide sustainable energy supply to consumer sectors like Domestic, Industry & Commercial, Agriculture, Municipality and Transport.

4. Create an effective eco-system for consumer sectors like Domestic, Industry & Commercial, Agriculture, Municipality and Transport to normalize organic adoption of EE and EC practices towards a better sustainable society.

5. Develop Andhra Pradesh as the most energy-efficient and less energy-intensive State.

2.2. OBJECTIVE

The objectives of the policy are as follows:

1. To effectively implement Energy Conservation Act 2001 in word and spirit tailored to the applicability of the State.

2. To put in place an overarching framework for identification, development, implementation, monitoring and verification of energy efficiency programmes to be undertaken in the State to tap substantial energy savings potential;

3. To supplement national level efforts for implementation of various energy efficiency and energy conservation programmes at the State level, initiated by the Ministry of Power, Government of India and in meeting climate targets;

4. To lay down the framework for policy implementation and define the roles and responsibilities of various stakeholders;

5. To promote research and development in the field of energy conservation & energy efficiency

6. To act as an enabler for the adoption of Energy Efficiency and Energy Conservation measures through increased public participation & involvement by creating necessary awareness.

2.3. SCOPE

This policy proposes to focus on consumer sectors like Domestic, Industry & Commercial, Agriculture, Municipality and Transport for improving the energy efficiency during the policy period for the following sectors:

1. Energy Intensive Sectors;
2. Electricity consumer segments that offer lower revenue realization as compared to the average cost of supply;
3. Sectors with higher government subsidy exposure;
4. Sector-specific technology interventions measures and commercialization aspects;
5. Sectors are expected to grow at a higher rate during the policy period.
6. Sectors operating at lower EE/more enormous scope of EC is there.

In line with the broader scope mentioned above, the policy covers the following scope:

1. Adoption of EE measures: