



# ಕರ್ನಾಟಕ ರಾಜ್ಯಪತ್ರ

ಅಧಿಕೃತವಾಗಿ ಪ್ರಕಟಿಸಲಾದುದು  
ವಿಶೇಷ ಪತ್ರಿಕೆ

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## ENERGY SECRETARIAT

### PROCEEDINGS OF THE GOVERNMENT OF KARNATAKA

**Sub:** Karnataka Renewable Energy Policy 2009-14-reg.

#### **PREAMBLE:**

Building on its current strengths and a capacity of 2400 Megawatts, Karnataka intends to establish a dynamic renewable sector with emphasis on different forms of generation-wind, mini hydro, bio mass, cogeneration and solar. There is need to have a clear policy framework to provide and sustain efforts in this direction.

The energy consumption in the State is anticipated to be around 64,000 MU per annum by 2015. At present, renewable energy sources contribute to about 4600 MU of energy per annum (11.5%) out of the total 40,000 MU available from various installed capacities. To achieve a 20% share, the renewable energy sources are required to contribute 12,800 MU by 2014. This necessitates a renewable energy capacity addition of 6600 MW by 2014. A clear-cut policy is, therefore, essential to regulate and ensure speedy development of renewable energy.

Till now, the State did not have a clearly spelt out policy for development of Renewable Energy. Karnataka Renewable Energy Development Limited [KREDL] is promoting RE Projects through participation of the private sector in wind, mini hydro, biomass and cogen respectively. Despite significant achievements, developers have complained of many impediments in the quick resolution of the projects. Assessed against our potential in Renewable Energy, the State can accomplish more substantial achievement to make it the number one Renewable Energy State in the country. The Renewable Energy Policy aims at systematic and faster development of Renewable Energy sources to achieve a capacity of 6600 MWs by 2014.

On its part, KREDL, has attempted to promote Renewable Energy in the State in a number of ways. These include:

- a. Encouraging the private sector to identify and develop small capacity projects in wind, mini-hydel, biomass and cogen respectively.
- b. Create an information network for advancing RE understanding through communication, education and publicity.
- c. Promote emphasis on green energy, harmful effects of global warming and ozone layer depletion.
- d. Start demonstration projects to establish cost effectiveness, economic viability and the reliability of various technologies (eg. Wind Projects at Sogi and Mavinahunda).
- e. Frequent interactions with developers to ensure capacity additions expeditiously.
- f. Promote greater awareness and compliance with energy conservation and energy efficiency issues.

The new Renewable Energy Policy attempts to stimulate addition to capacity generation by a minimum of 1000 MW each year. It has the following substantial objectives:

- a. Additional capacity of 4200 MW by 2014.
- b. Emphasis on Energy conservation and Energy efficiency by a saving of 1500 MU per year (900 MW by 2014).

The policy proposed contains some key measures to address the constraints and ensure substantial capacity additions in the next 5 years:

- Renewable Energy development is to be classified as an "industry". Land is, therefore, to be made available to the developers by the Government through allotment by the Commerce and Industries Department Single Window System. This will obviate the extensive time delays currently taking place with the developers having to obtain permission for purchasing land from the Deputy Commissioner of the districts or other modes of purchase.
- A Green Energy cess at Rs. 0.05 per unit on commercial and industrial consumers to generate Rs. 55 crores annually. Out of Rs. 55 crores to be collected as cess, a part will be set aside for Energy Conservation Fund, part for Renewable Energy Project Financing and strengthening the evacuation system and the remainder for an integrated information and communication programme in the State. (Provision for the same has been made in the tariff proposals filed by the Distribution Companies).
- Constitution of a State Level Empowered Committee headed by the Chief Secretary to co-ordinate departmental issues and clearances in Renewable Energy Projects.
- Enforcement of time frame for completion of projects i.e. 3 years from the date of clearances.

In keeping with contemporary requirements and to utilise various environmental credits available, it is proposed that the KREDL be transformed into a dynamic result oriented entity. With substantial skill and capacity addition KREDL will actively take up implementation of the RE-Policy including Energy Efficiency, Conservation, Demand Side Management and CDM activities.

Several consultations were held with stakeholder Associations. The draft RE Policy has been discussed at various official levels, including the Chief Secretary on 22.10.2009. The draft Policy was circulated among technical experts, financial consultants, renewable energy developers and Government Departments. The opinions and suggestions offered by various Departments have been taken care of and they have been incorporated suitably in the policy.

In light of the above, a decision has been taken by the Government to formulate and adopt a Renewable Energy Policy for the period 2009-2014.

Hence the following Order :-

**GOVERNMENT ORDER No: EN 354 NCE 2008, BANGALORE, DATED: 19<sup>th</sup> January 2010.**

In the circumstances explained in the preamble, Government is pleased to announce the **Karnataka Renewable Energy Policy 2009-14** as detailed in the Annexure.

The Karnataka Renewable Energy Policy 2009-14 shall come into effect from the date of its publication in the Official Gazette and will remain in force till 2014 or until further Orders.

This Order issues in consultation with Finance Department, Forest, Environment & Ecology Department and Commerce & Industries Department, etc and with the approval of the Cabinet vide No: C.606/2009 dated: 23.12.2009.

BY ORDER AND IN THE NAME OF  
GOVERNOR OF KARNATAKA,

**K. JAIRAJ**  
ADDITIONAL CHIEF SECRETARY TO GOVERNMENT  
ENERGY DEPARTMENT

**Annexure to Government Order No: EN 354 NCE 2008 dated: 19.01.2010.**

**Karnataka Renewable Energy Policy-2009-14**

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## KARNATAKA RENEWABLE ENERGY POLICY 2009-14.

### 1. Vision

To harness Green and clean Renewable Energy Sources in the state for environment benefits and Energy Security. To initiate energy efficiency measures in all sectors for sustainable growth.

### 2. Mission:

1. To enhance the contribution of environment friendly Renewable Energy sources, to the socio-economic development and supplement rural energy needs through speedy and expeditious commissioning of sustainable Renewable Energy projects.
2. To create conditions conducive to private/ public/community participation and investment in Renewable Energy power projects.
3. To achieve commercial viability and expeditiously operationalize the Renewable Energy Projects
4. To enhance the contribution of Renewable Energy in the total installed capacity of the state from **2400 MW** to about **6600 MW** by **2014**.
5. To conserve **7901 MU** (900 MW) by **2014** through the Energy Efficiency & Energy Conservation measures in all sectors.

### 3. Objectives:

1. Development, propagation and promotion of Renewable Energy sources and Technologies.
2. Development of Eco-friendly Projects and Harnessing of Natural Resources to avail Green Power.
3. Acceleration of identification, development and implementation of new Renewable Energy projects.
4. Encourage the industries, in addition to sugar industry, with cogeneration potential to set up co-gen plants expeditiously.
5. Provision of "single window" service for technical consultation, sources of finance and project clearance.
6. Decentralized and micro level power generation through renewable energy sources to provide energy supply to agriculture, industry, commercial and household sector.
7. Creation of suitable environment for private sector participation in Renewable Energy Power Generation.
8. R&D, Publicity and Popularization of Renewable Energy.
9. To establish linkages with national and international institutions for active collaboration in development, demonstration and commercialization of new and emerging Renewable Energy technologies.
10. To Take Concrete steps for Energy Conservation and Energy Efficiency and Clean Development Mechanism (CDM).

**4. Scope of the Policy:** The policy will be applicable for the development of all sectors of Renewable energy Sources including Energy Conservation and Energy Efficiency. The policy is valid for a 5 year period up to 2014. This policy supersedes all the policy guidelines/instructions issued in this behalf from time to time. The provisions contained in this Renewable Energy Policy will be applicable to all

the Renewable Energy Projects. This policy will be applicable to all the Renewable Energy projects sanctioned prior to the commencement of the policy and those Renewable Energy projects in the process of development including already commissioned Renewable Energy projects. Under the policy, Government has the right to approve capacity allotment Government Order essential to become eligible for availing the benefits for the renewable energy projects. Under this policy, it is obligatory to sell the electricity generated from the Renewable Energy Projects commissioned to the respective geographical ESCOMs in which the projects located, at the Tariff determined by KERC, under a long term Power purchase agreement. The policy covers the Energy Efficiency and Energy Conservation along with Demand Side Management (DSM) and Clean Development Mechanism (CDM) implementation. Once the target fixed under this policy is achieved, a new policy shall be launched. For Cogeneration in Sugar industries a separate policy will be brought out by the Cooperation department and the Industries and Commerce department for comprehensive development of the sector. Similarly for Bio-Fuels the Bio-Fuel Board will come out with a separate policy.

**5. Goals:** The policy sets twin goals of (i) Renewable Energy power Generation and (ii) Energy Conservation & Energy efficiency.

**5. (i) Renewable Energy power Generation:** Presently Renewable Energy Sources contribute about 4600 MU of energy per annum (11.5 %) of the total 40000 MU available from various installed capacities (8600 MW including share from CGS) in the state. The energy demand is projected to attain 10 % growth. Committed to the green energy the state has mandated, vide GO No EN 216 NCE 2006 dated 2.3.2007, to enhance the upper limit share of Renewable Energy mix to 20% in the total quantum of energy. Over the next five years the energy consumption is anticipated to be around 64000 MU per annum. To attain 20 % Renewable Energy mix the Renewable Energy sources required to contribute 12800 MU by 2014. This sets the tone for doubling the installed capacity of the various RE sources combined together. Considering the average plant load factor of various Renewable Energy sources (25 %) this necessitates the cumulative Renewable Energy capacity addition of about 5850 MW by 2014. However, the policy has a goal of commissioning 4200 MW additional capacity with accumulative Renewable Energy capacity addition of **6600 MW by 2014**.

In the above background the Green Power option for Karnataka are as follows.

1. Wind power projects.
2. Mini, Micro and Small Hydropower projects (up to 25 MW).
3. Co-generation in sugar and other Industries.
4. Biomass and Biogas projects.
5. Solar photovoltaic and Solar Thermal Power Generation. Solar Hybrid Systems and Solar applications in Domestic and Industrial Sector.
6. Municipal Solid waste, Industrial Liquid/Solid Waste Power Projects including Bio-fuels & Bio Diesel Projects.
7. Tidal Wave Energy/Geo-Thermal Energy.
8. Other Renewable Energy Sources not spelt above, viz: synthetic Fuels, Heat recovery Systems in various Industries.

For the various above Renewable Energy sources there are proven technologies. The targets for significant Renewable Energy sectors are set as below.

