

**Government of Karnataka
Energy Department
Karnataka Renewable Energy Development Limited, Bengaluru**

Draft Karnataka Renewable Energy Policy 2016-2022

(Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal)

Preamble

Karnataka (hereinafter shall be referred as the “State”) is blessed with abundant renewable energy resources of all forms of energy including Solar, Wind, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal. The State has an installed renewable energy capacity of 7,909.788 MW as on 30th December 2017.

In the previous years, the cost of renewable energy was high as compared to the cost of conventional power. The conventional power increases the pollution level thereby having a detrimental impact to our environment. Progressively, there has been further development of the renewable energy sector. Based on the study for renewable energy potential, there is a huge untapped renewable energy potential in the state which is yet to be developed. In the recent times, we have seen an overall decline in the capital cost for renewable energy projects. Also, the renewable energy sector has seen the recent changes in market dynamics, advancement in technology, interventions in research and development, commercial viability of the projects with innovative business models/ financing arrangement and decreasing trend of renewable energy tariff.

The Paris Climate Change Conference was held between 29th November and 13th December 2015. It was the 21st meeting of the Conference of Parties (COP 21) of United Nations Framework Convention for Climate Change (UNFCCC). This conference marks a significant milestone in global efforts to combat climate change. The conference delivered a new universal climate change agreement aimed at putting the World firmly on track to a low-carbon sustainable future that keeps a global temperature rise under 2 degrees Celsius of what it was in pre-industrial era. Further, India is committed to achieve the ambitious goal of implementing 175 GW of renewable energy by 2022.

Previously, the non-solar RPO compliance requirement was minimal as notified by the regulator and it indicates the minimum energy to be procured through renewable energy sources. Government of Karnataka (hereinafter shall be referred as “GoK”) is committed to provide 24x7 power supply to all by 2020, and subsequently planning for energy security in the long run. In view of this vision, the State has been promoting renewable energy generation through its nodal agency Karnataka Renewable Energy Development Limited (hereinafter shall be referred as “KREDL”) and is willing to purchase renewable energy beyond the minimum RPO limit set by KERC. Considering the current economic condition of the market, the procurement through renewable energy sources are encouraged considering the lower capital cost, falling tariffs discovered through competitive bidding which will help the distribution utilities to optimize their power purchase cost ultimately benefiting the end consumers. The procurement of power from renewable energy sources shall be made

through transparent competitive bidding process with a ceiling tariff as determined by KERC from time to time. Recently, KERC notified the feed-in-tariff as 3.74 INR per kWh vide order no. S/01/17 dated 4 Sep 2017. The state is targeting to procure wind power through competitive bidding process with the above ceiling tariff of 3.74 INR per kWh as amended from time to time considering the recent changes in the market conditions. The state intends to purchase more power from renewable energy projects and maintain a must-run status even it comes to backing down the thermal power during peak season. Such renewable power will be procured by the distribution utilities of Karnataka.

The state is confident that this policy will be useful in creating a conducive environment for investors, developers and contractors to participate and help the state in achieving the targets set in the policy harnessing the potential of renewable energy. This will also help the ESCOMs to optimize their increasing power purchase cost and meet their RPO requirement. Also, this will ultimately result in reduction of the retail tariff benefiting the end consumers.

Initially, GoK issued "The Karnataka Renewable Energy Policy 2009-14" to promote and harness the renewable energy potential in the State. The policy initiatives have enabled capacity addition of 1,970 MW during the five (5) years of the policy period.

Ministry of Power (MoP) in consultation with Ministry of New and Renewable Energy (MNRE) has suggested an upward revision of RPO targets vide notification no. 23/3/2016-R&R dated 22 July 2016. However, the state has decided to enhance the renewable energy RPO target to a significant extent of 20% by FY2021-22.

Considering the significant renewable energy potential, the state can accomplish more substantial achievement to make it the leading Renewable Energy state in the Country. The state wishes to put due emphasis on accelerating the growth of renewable energy sector in future.

RESOLUTION:

1. Title:

This policy shall be known as the "Karnataka Renewable Energy Policy 2016-22".
(Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal)

2. Nodal Agency:

KREDL shall be the nodal agency for implementation of "Karnataka Renewable Energy Policy 2016-22".

3. Operative Period:

This policy shall come into force with effect from the date of issue of Government Order and shall remain in operation for a period of Six (6) years, which shall be the Operative Period of the policy.

However, in order to bring in course corrections based on the load growth study and also evaluate the impact of policy, GoK will undertake an evaluation of this Policy in the year 2020. The evaluation will assess the impact of this Policy on the sector and the achievements against the growth targets and in case of a requirement, issue amendments to the Policy with the suggested changes.

4. Objectives

The objectives of Karnataka Renewable Energy Policy 2016-22 are mentioned as below:

- Achieve a minimum capacity addition of 6,000 MW by 2022 in a phased manner.
- Translate Karnataka into an investor friendly State in implementing projects for all forms of renewable energy viz. Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal.
- Promote intra-state open access based business models viz. captive models and third party models through wheeling and banking facilities as per KERC guidelines.
- Introduce inter-state open access based business models viz. captive models and third party models through wheeling and banking facilities as per KERC guidelines.
- Promote new programs for development of Renewable Energy:
 - Repowering of old wind power plants,
 - Introducing hybrid renewable energy projects with a combination of wind and solar,
 - Encouraging the farmers for setting up wind power projects on their land, and
 - Introducing gross metering for various category of consumers.

- Optimize the cost and space of electrical infrastructure by introducing mechanism for creating common infrastructure for multiple projects related to evacuate of renewable energy.
- Set up a dedicated “Project Monitoring Cell” enabling improved project planning, coordination and monitoring.
- Establish a “Renewable energy center of excellence and incubation center” at State level for promoting innovation in technology, skill development, and Research & Development.

5. Capacity addition targets for Renewable Energy

Karnataka will remain a pioneer in the area of renewable energy development in the country. As a part of its endeavor to be on par with the renewable energy obligations set by the National Action Plan for Climate Change and the notification issued by Ministry of Power to maximize the potential from the renewable energy sources. GoK intends to realize a minimum capacity addition of 6,000 MW during the policy period in a phased manner from various technologies.

The proposed year-wise capacity addition targets are as given below:

RE Source	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Total
Wind Power	600	650	700	750	800	900	4,400
Small Hydro	150	150	150	175	175	200	1,000
Biomass, Cogeneration, and Waste-to-Energy	100	100	100	100	100	100	600
Total	850	900	950	1,025	1,075	1,200	6,000

GoK, in order to meet the target capacity additions during the Operative Period would encourage setting up of projects under any of the following categories:

- Feed-in-Tariff based and Competitive Bidding based projects
- Projects under Captive/Group Captive and Independent Power Producer mechanism
- Projects under REC mechanism

6. Eligibility

All Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, Tidal projects established in the State of Karnataka during the Operative period shall be eligible for benefits under this policy.

7. Exclusion

Solar energy except Wind-Solar hybrid shall not be covered under this policy, as it is already cover under "Solar policy 2014-2021", as amended from time to time.

8. Regulatory Frame Work.

The Electricity Act 2003 mandates Karnataka Electricity Regulatory Commission (hereinafter shall be referred as "KEREC") to determine tariffs for renewable energy, to issue regulations regarding percentage of renewable purchase obligation to ESCOMs and determine charges with respect to wheeling, banking, and cross subsidy charges etc. Conditions for getting accreditation to avail Renewable Energy Certificates (RECs) shall be governed by CERC and KEREC regulations.

The Ministry of Power in consultation with the MNRE has set the following non-solar RPO target vide notification no. 23/3/2016-R&R dated 22 July 2016, It is pertinent to mention that the target set in this policy is higher than the target set by MNRE in order to encourage green energy in the State.

The Non-solar RPO set for this policy is mentioned below:

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Non-solar (%)	15%	16%	17%	18%	19%	20%

Orders / regulations or any other dispensation issued by KEREC from time to time shall be applicable to the provisions of this policy including the Acts passed by GoI. In case of any discrepancy between the provisions of this policy, orders/ regulations issued by KEREC will prevail.

9. Governance and Institutional Structure for implementation of Renewable Energy projects

KREDL, State Nodal Agency

KREDL as a State Nodal Agency shall carry out the following functions:

- Preparation of guidelines for allocation and implementation of Renewable Energy Projects.
- Act upon the guidelines of Energy Department, GoK and in accordance with this policy provisions.
- Verification and Recommendation of proposal to Energy Department, GoK.
- Act as a facilitator to obtain all statutory clearances.
- Resolution of policy level issues for accelerating deployment of various Renewable Energy technologies.
- Monitoring the progress of project implementation.
- Recommendation to Energy Department, GoK for cancellation of Renewable Energy projects upon non-implementation within the stipulated period.

- h) Recommendation for re-allocation of cancelled projects.
- i) KREDL shall be strengthened suitably with necessary manpower and resources for successful implementation within six (6) months from notification of this policy.
- j) KREDL shall submit a report to the Energy Department, GoK seven (7) days in advance to the meeting for its review and deliberations. The said report shall cover Note on project clearance issues to be resolved during inter-departmental meeting.
- k) The implementation of the Renewable Energy projects will be monitored by "Project Monitoring Cell" under the supervision of Energy Department, GoK to ensure timely commissioning of the projects.
- l) In addition to above, depending upon the need KREDL could invite Renewable Energy technology (Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal) specific representation through Renewable Energy Associations/Developers and academic experts to discuss specific issues.

10. Procedure for Application and Allotment:

Common for all Renewable Energy Projects

- a) The Applicant shall furnish the details as per the prescribed application form along with required documents by paying application fee as prescribed by GoK from time to time. Also, the applicant shall pay the processing fee, transfer fee, time extension fee, security deposit, and any other fee, as applicable and as prescribed by GoK from time to time.
- b) The net worth of the company shall be at least 30% of the total project cost and the format shall be as per **Government order No: EN 240 NCE 2011 dated 30-05-2011** or as amended by the GoK from time to time.
- c) The capital cost per MW considered by KERC and revised from time to time in the respective tariff orders for Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal can be used as reference for estimating the net worth requirements.

However, in case of Cogeneration Projects Sugar factory cost to be excluded and only Cogeneration Power Project cost to be considered.
- d) The Developer shall identify the site area.

11. Specific policy for Wind, Wind-Solar Hybrid, Small Hydro, Biomass, Cogeneration, Waste-to-Energy, and Tidal:

Wind

Procedure for Application and Allotment

- a) Application containing the proposal along with preliminary details required for the implementation of the project shall be furnished. The application fee and processing fee shall be as notified by GoK from time to time.
- b) If the Energy Department approves the proposal, a facilitation letter valid for a period of two (2) years will be issued by GoK to the Developer to study the wind potential, preparation and submission of the Detailed Project Report.
- c) Government Order for allotment will be issued only after submission of Detailed Project Report in all respect and payment of prescribed processing fee as notified by GoK from time to time. If the Developer fails to submit Detailed Project Report by the end of two (2) years, the allotment is deemed to be rejected.
- d) The Allottees shall execute an Agreement within forty five (45) days from the date of issuance of Government Order.
- e) One time Capacity enhancement is allowed on the first proposal.

Timelines for Implementation:

Total time period required for implementation of the project is six (6) years from the date of issue of Government Order.

Stage 1: Two (2) years for data collection and submission of DPR with enhancement if any.

Stage 2: Three (3) months for technical clearance for the project by KREDL from the date of receipt of DPR.

Stage 3: Six (6) months for obtaining all statutory clearances from the date of obtaining the technical clearance for the project by KREDL. KREDL shall facilitate for obtaining required statutory clearances from the concerned department.

Stage 4: Two (2) years and six (6) months for completion and commissioning of the project with an automatic extension of additional nine (9) months for State 3 and Stage 4.

Only one time extension of one (1) years can be given @ INR 1 lakhs per MW as extension fee.

Wind-Solar Hybrid

Procedure for Application and Allotment

For existing wind projects,

- a) Such new solar projects shall be implemented as per the guidelines provided in the Solar Policy 2014-21 as amended from time to time in the existing wind sites.

For new wind projects,

- b) Application containing the proposal along with preliminary details required for the implementation of the project shall be furnished. The application fee and processing fee shall be as notified by GoK from time to time.
- c) If the Energy Department approves the proposal, a facilitation letter valid for a period of two (2) years will be issued by GoK to the Developer to study the wind potential, preparation and submission of the Detailed Project Report applicable for new projects. However, such new solar projects shall be implemented as per the guidelines provided in the Solar Policy 2014-21 as amended from time to time in the existing wind sites.
- d) Government Order for allotment will be issued only after submission of Detailed Project Report in all respect and payment of prescribed processing fee as notified by GoK from time to time. If the Developer fails to submit Detailed Project Report by the end of two (2) years, the allotment is deemed to be rejected.
- e) The Allottees shall execute an Agreement within forty five (45) days from the date of issuance of Government Order.
- f) One time Capacity enhancement is allowed on the first proposal.
- g) It is pertinent to mention that there will be separate metering and tariff applicable for wind and solar projects based on their energy generation as per KERC guidelines.

Timelines for Implementation:

Total time period required for implementation of the wind project is six (6) years from the date of issue of Government Order.

Stage 1: Two (2) years for data collection and submission of DPR with enhancement if any.

Stage 2: Three (3) months for technical clearance for the project by KREDL from the date of receipt of DPR.

Stage 3: Six (6) months for obtaining all statutory clearances from the date of obtaining the technical clearance for the project by KREDL. KREDL shall facilitate for obtaining required statutory clearances from the concerned department.

Stage 4: Two (2) years and six (6) months for completion and commissioning of the project with an automatic extension of additional nine (9) months for State 3 and Stage 4.

Total time period required for implementation of the solar project is as per the Solar

Policy 2014-21 as amended from time to time.

Only one time extension of one (1) years can be given @ INR 1 lakhs per MW as extension fee.

Small Hydro

Procedure for Application and Allotment

- a) A Pre-Feasibility Report/Detailed Project Report as applicable containing the preliminary details required for the implementation of the project shall be furnished along with the Application.
- b) The Developer shall take the following into consideration before applying:
 - Water Discharge, levels, Head, location of Weir, Power House details shall be provided in the PFR/DPR.
 - The PFR/DPR shall be prepared considering the fact that the release of water shall be strictly as per irrigation/domestic demands and the generation will have to be synchronized with these releases.
 - Irrigation Department reserves the right to decide the water release schedule and modify it from time to time as per the requirements. Irrigation Department shall make efforts to release maximum volume of water in such a manner that it can be used for generation of electricity at desired time. However, the decision of Irrigation/Small Irrigation Department in this regard shall be final and binding.
 - The Developer is required to submit a No Objection Certificate from KPCL and Forest Department.
- c) In case of submission of PFR, if the Energy Department, GoK approves the proposal, a facilitation letter valid for one (1) year will be issued to the Developer to prepare the DPR. After submission of the Detailed Project Report along with the prescribed DPR processing fees to KREDL, Allotment Government Order will be issued.
- d) The allottees shall execute an Agreement within forty five (45) days from the date of Government Order.

Timelines for Implementation:

Total time period required for implementation of the project is five (5) years from the date of issue of Allotment Government Order.

Stage 1: One (1) year for preparation and submission of DPR with enhancement if any.

Stage 2: One (1) year for obtaining all statutory clearances.

Stage 3: Three (3) months for technical clearance.

Stage 4: Two (2) years nine (9) months for completion and commissioning of the project.

Only one time extension of one (1) years can be given @ INR 1 lakhs per MW as extension fee.

Biomass

Procedure for Application and Allotment

- a) The Developer shall submit Detailed Project Report along with prescribed application and processing fee.
- b) The Developer shall provide the technology proposed, Fuel availability and catchment area for fuel of the proposed project. The raw materials available in the radius of 40 km surroundings will be taken in to consideration for the allotment of the Biomass Power Projects to avoid the overlapping of the other projects.
- c) After verifying the proposal, KREDL will recommend to GoK for issuing NOC.
- d) The availability of Biomass in each village in each season with its type, quantity and calorific values will also be published / uploaded in KREDL website after the detailed study with authenticated input from the local governing bodies / authorities including the Agriculture Department to ensure decentralized energy generation and to increase the economic activities / GDP of Rural Karnataka while creating lot of rural job opportunities.

Timelines for Implementation:

After issuance of NOC total time period for implementation of the project is twenty four (24) months. Also, GoK may provide further time extension (if required) considering the progress and quantum of investment into account as per the para 2 of clause 20 (Time Extension).

Cogeneration

Procedure for Application and Allotment

- a) Processing fee is not applicable for Cogen Power Projects as per the prevailing Government Order.
- b) Applications in respect of Cogeneration will be considered only after Sugar Cane allotment from the Department of Industries and Commerce, GoK.
- c) After verifying the proposal, KREDL will recommend to GoK for issuing NOC.

Timelines for Implementation:

After issuance of NOC total time period for implementation of the project is twenty four (24) months. Also, GoK may provide further time extension (if required) considering the progress and quantum of investment into account as per the para 2 of clause 20 (Time Extension).

Waste-to-Energy

Procedure for Application and Allotment

- a) The Developer shall submit Detailed Project Report along with prescribed application and processing fee.
- b) Applications in respect of Waste-to-Energy Projects will be considered only after allotment of Municipal Solid Waste from the concerned local bodies, details of waste storage shall be furnished along with the initial consent from Pollution Control Board.
- c) After verifying the proposal, KREDL will recommend to GoK for issuing NOC.
- d) Apart from this, the details of the availability of Municipal Solid Waste in each Taluk will be published / uploaded in KREDL web site after the detailed study and with authenticated input from the local governing bodies/authorities including the Municipal Authorities to ensure decentralized energy generation in each Taluk place. This will also help in minimizing municipality solid waste transportation and the eradication of the Epidemics.

Timelines for Implementation:

After issuance of NOC total time period for implementation of the project is twenty four (24) months. Also, GoK may provide further time extension (if required) considering the progress and quantum of investment into account as per the para 2 of clause 20 (Time Extension).

Tidal

Procedure for Application and Allotment

- a) Applications in respect of Tidal will be considered only after beach allotment from the Department of Tourism, GoK.
- b) After verifying the proposal, KREDL will recommend to GoK for issuing NOC.

Timelines for Implementation:

After issuance of NOC total time period for implementation of the project is twenty four (24) months. Also, GoK may provide further time extension (if required) considering the progress and quantum of investment into account as per the para 2 of clause 20 (Time Extension).

12. Security Deposit:

The Developer shall provide Security Deposit in the form of Bank Guarantee @ INR 1 Lakh per MW or as per the prevailing notification by GoK. The Bank Guarantee is payable to KREDL based on the allotted capacity within forty five (45) days from the date of allotment of Government Order or on the date of signing of the Agreement, whichever is earlier.

In order to encourage the Developer, the Security Deposit clause is waived-off for the projects related to Biomass, Waste-to-Energy, Cogeneration, Tidal and western ghat MHS projects until further notification by GoK.

13. Progress Reports:

The Developer shall submit quarterly progress reports of the Project to KREDL covering the status of various approvals from concerned departments, Power Purchase Agreement details, financial closure details and construction details from the date of issuance of Government Order.

14. Power Purchase Agreement

GoK will assign the PPA to the jurisdictional ESCOM at the time of allotment. If the concerned ESCOM has achieved the RPO, then the PPA will be assigned to the ESCOM which is in deficit of meeting the RPO.

IPPs can sign their own PPAs with the respective parties with captive/ group captive/ third party arrangement through open access framework.

15. Wheeling & Banking Agreement

The wheeling of electricity generated from the renewable sources mentioned in this policy, to the desired location(s) within the State and banking of such energy, shall be allowed on such terms and on payment of relevant charges as determined by KERC from time to time.

16. Land

- a) The land required for setting up of projects shall be acquired by the Developer.
- b) If the required land is private land, the Developer shall acquire the same directly from land owners by any mode of transfer. If it is on lease, the minimum period of lease shall be thirty (30) years.
- c) If the required land belongs to Government, the Developer shall approach concerned Department, i.e., Revenue/Forest or irrigation Department, as the case may be for obtaining the land on lease basis in favor of the company, as per the circular No: **RD 78 LPG 2009 dated 4.1.2011** and subsequent orders of Revenue Department. Revenue Department will directly lease the land to the company for a period of thirty (30) years. At the end of thirty (30) years the lease shall be extended for five (5) years at a time, subject to condition stipulated by Government.
- d) In case, the land belongs to Forest Department, Forest Department should issue facilitation letter as per the standard draft approved by MOEF, GoI, New Delhi vide letter No: **F. No: 11-113/2008 FC dated 30.12.2008** and subsequent orders.

- e) No projects will be entertained in the regions categorized as ecologically sensitive by the State.
- f) Shifting/ Change of locations for allotted Wind/ Wind-Solar Hybrid/ Small Hydro/ Biomass/ Cogeneration/ Waste-to-Energy/. Tidal Projects is not permitted. The Developer shall apply afresh for seeking allotment in the new location.
- g) The Municipal Bodies will identify and reserve the land for Waste-to-Energy projects. On feasibility check by KREDL or any third party authorized agency; the identified land will be acquired through the Karnataka Industrial Area Development Board (KIADB), under the provisions of the Karnataka Industrial Policy 2014-19, as amended from time to time and the same is made available to the Developer. Alternatively, the Developer can purchase the land through the various provisions mentioned in the Karnataka Land Reforms act, 1961 as amended from time to time after taking due approval from the Municipal Bodies, and KREDL or any third party authorized agency.

17. Metering of Electricity:

The metering will be done as per Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and amendments issued from time to time. The Project Developers shall install Remote Transmitting Unit (RTU) for transferring real time data to SLDC for its monitoring purpose. The electricity generated from the projects, shall be metered and readings taken jointly by Power Project Developer with KPTCL/ESCOMs at the metering point, on a monthly basis.

18. Reactive Power Charges:

The drawl of reactive power shall be charged as per the KERC order, as amended from time to time.

19. Government of India incentives:

MNRE, Government of India (GoI) provides a package of fiscal and financial incentives which include concessions such as Central Financial Assistance, concessional custom duty on specified items, excise duty exemption, sales tax exemption, tax holidays etc. The same shall be extended to the project Developers.

20. Time Extension

Time extension may be recommended by KREDL to GoK if and only if the delays are due to reasons beyond the control of the Developer. The Developer must approach KREDL at least six (6) months before the scheduled CoD with the application for seeking extension with valid justification by furnishing adequate proof for the delay being beyond the control of the Developer. In such cases, KREDL may recommend GoK to allow a one-time extension along with the payment of prescribed fee, as notified by GoK from time to time.

In addition to the above, GoK may provide further time extension (if required) considering the progress and quantum of investment into account. Such a time extension shall be made on submission of INR 1 lakhs per MW as an extension fee per annum on a pro-rata basis, as to be notified by GoK from time to time. Also, the Developer shall deposit additional Bank Guarantee at the rate of INR 10 lakhs per MW for the un-commissioned capacity and the validity of such Bank Guarantee shall be as notified by GoK.

In case the Developer fails to commission the Project or approach KREDL seeking an additional time extension within the stipulated extended time period, such Projects shall be considered as deemed cancelled, and KREDL shall duly forfeit the Security Deposit submitted by the Developer.

21. Additional focus areas for the Government include:

Encouraging repowering of wind projects:

- In order to maximize the tapping of energy from the existing projects, Government encourages repowering of wind projects at the discretion of the project Developers.
- Wind projects installed at wind rich sites prior to 2002-03 shall be taken up in the first phase (2016-18) of the repowering program. In the second phase (beyond 2018), projects developed after 2002-03 shall be considered for repowering.
- It is pertinent to mention that the energy shall be settled as per the existing PPA arrangement with the respective ESCOMs for the balance period of PPA, and the Developer is free to sell any additional energy generated due to repowering of old wind mills through a separate PPA arrangement with ESCOMs, and/or captive/ group captive/ third party arrangement through open access mechanism.
- In future, a separate enabling framework, with specific programs for encouraging repowering, shall be formulated. Such framework would cover eligibility conditions, conditions for augmentation of wind farm capacity ratio, turbine ratio, conditions for micro-citing, conducive measures for multiple users/owners, modifications to offtake arrangements, concessional banking/wheeling facilities, and repowering incentives (if necessary).

Encouraging the land owners to develop wind power projects:

- GoK will encourage the land owners to develop wind power projects in their own land.
- In this regard, the land owners may explore the options of forming an SPV with the Developer and can be an equity partner for the project.

Biomass, Bagasse based cogeneration Projects:

- GoK shall address the issues of non-availability of biomass fuel for power generation.
- GoK considers setting up “Biomass Parks” in rural areas of the State, dedicated for supply of biomass fuel to designated biomass power projects.
- GoK shall encourage plantation of biomass fuel in the dedicated zones identified by the Gram Panchayats of villages (or cluster of villages) where such potential exists.

Grid management

- GoK intends to set up pumped storage based hydro power plant projects in Karnataka to be implemented by the concerned departments for grid management considering the extent of renewable energy penetration in the grid.

Potential Assessment

- GoK intends to study the potential for zone based tariff and to carry out this study by private players are encouraged & to set up met masts in different regions in the State and collect the necessary data. KREDL will seek support from reputed agencies and undertake wind and solar mapping using Geospatial mapping.
- A separate dedicated cell with staff drawn from KREDL, KPCL, Revenue department and Irrigation department will take steps to identify the potential sites watershed basin wise including canal based projects and offer the identified sites for development of Small hydro projects on Public Private Partnership/Build Operate Own Transfer mode.
- GoK intends to study the potential for Waste-to-Energy projects within BBMP/local body limits. Also GoK will work in consultation with Stakeholders/ESCOMs to seek viable tariff for such projects from KERC.
- GoK is contemplating through KREDL to study the availability of any raw material in the region and assess the potential and allot capacities on that basis.

22. Policy initiatives under consideration of GoK to promote renewable power projects.

Akshaya Shakthi Nidhi (Green Energy Fund)

- In order to facilitate Renewable Energy project financing and Energy Conservation and Efficiency measures Green Energy Fund “Akshaya Shakthi Nidhi” was announced in the last policy which will be taken up in this policy period.
- “Green Energy Cess” of INR 0.05 (five paise) per unit would be levied on the electricity supplied to commercial and industrial consumers. 10 % of this fund will be set apart as contribution to Energy Conservation Fund for Energy Conservation activities. The balance will be set apart for Renewable Energy project financing.

- The Akshaya Shakthi Nidhi will be administered by KREDL for promotion of Renewable Energy particularly in Public Private Participation (PPP) mode, decentralized generation and distribution Renewable Energy projects for the benefit of rural sector.

The funds may also be utilized for land acquisition and land development activity for Renewable Energy projects including compensatory afforestation, soil moisture conservation etc. for forest land clearance. A detailed framework for its implementation will be announced separately.

Allotments and Clearances

- Time bound clearance for evacuation approval from KPTCL. Reduction of supervision charges by KPTCL /ESCOMs to five percent (5%).
- Time bound clearance for wheeling and banking arrangement from nodal agency based on payment of suitable fees as per KERC guidelines.
- Allotment of cancelled sites: For among the sites for which allotment has been cancelled, KREDL will shortlist sites which can be re-allotted.
- Cancellation of allotments beyond seven (7) years: Any allotments which failed to show any progress or intent in developing the projects within seven (7) years from the date of announcement of the policy shall deemed to be cancelled. Government reserves the right to extend time period for projects awaiting forest clearances.
- All projects allotted ten (10) years before the announcement of this policy and have failed to show any satisfactory progress, their allotments shall be deemed as cancelled.

Promotion of Wind-Solar Hybrid projects and Distributed Generation projects

- GoK encourages large scale grid connected projects that can benefit from existing project infrastructure.
- In order to optimally utilize the land resources and evacuation infrastructure, the GoK will encourage the development of Wind-Solar Hybrid projects in the State.
- GoK also intends to promote small scale hybrids particularly in remote villages in the State where the grid is inaccessible.
- GoK recognizes supporting setting up of capacities up to 2 MW biomass or Waste-to-Energy project, as smaller plant capacities face no difficulties in sourcing (including transportation, storage and fuel security) and would be ideal for decentralized power production. Such plants are encouraged to be connected to the 11 kV distribution line and improve, stabilize the power supply at the local level. In this context;
 - ESCOMs shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act in line with the new Tariff Policy dated 28.01.2015.
 - ESCOMs shall facilitate grid connectivity for such small power producers at 11 kV and work for grid availability, especially in rural areas.

- ESCOMs shall evaluate options to reduce power supply to rural areas and irrigation users through use of Biomass and Waste-to-Energy power projects.

Biomass resource specific

- GoK contemplates licensing/registration of biomass material trading/trader to bring in consolidation of biomass trading as well as help organize the process effectively.
- GoK will draw plans for investment to set up, manage and use of biomass resources available in the State for power generation projects. Appropriate rates and payment mechanism for the fuel sold to the biomass power producers shall be worked out.
- GoK is contemplating to project capacity that can be allocated in the region based on raw material available.
- The State government would also ensure viability of biomass prices and would register all the biomass planters and traders.

Renewable energy center of excellence and incubation center

- GoK shall facilitate indigenous R&D for new and emerging renewable technologies and improvement of available technologies. GoK, in consultation with Renewable Energy technology experts and experts from academic / R&D institutions, shall identify the priority areas for R&D. Time bound specific tasks for identified R&D activities shall be assigned to recognized / identified institutions and industry with clear understanding on the achievement of results.
- Biomass, Waste to Energy and Storage: The Centre for Sustainable Technologies (CST), Indian Institute of Science (IISc) has been working in the area of R&D for biomass, waste to energy and storage of energy. GoK shall strengthen the capacity of CST, IISc to facilitate research in this field.
- Other RE Sources: Advances in basic science will be the foundation for progress on RE technologies. Creating linkages between basic research and applied technology development will be crucial to ensuring the needed technology breakthroughs. Therefore, GoK shall facilitate creation of a R&D center for renewable energy at a suitable Institution.
- Private Sector Participation in R&D Activities: Initiatives from the private sector in research and development activities for advancement of renewable energy shall be encouraged by GoK.

23. Fiscal Incentives from GoK to promote Renewable projects.

- Projects implemented under this policy shall receive the status of industry and shall be eligible for all the incentives provided under “Karnataka Industrial Policy 2014” of State government as amended from time to time. If there is any contradiction between the provisions of this policy and the Industrial Policy then the provision of this policy shall prevail.
- Tax concessions in respect of entry tax, stamp duty and registration charges shall be as per Karnataka Industrial Policy as amended by GoK from time to time.

24. General Conditions:

- a) Developers' history in implementation of projects will also be given a consideration to decide on further allotments.
- b) For the projects having PPAs signed with ESCOMs, the capacity allotted to the Developer shall be permitted to transfer the capacity to a new Developer only after one (1) year of successful operation from the date of CoD, duly paying the necessary transfer fees in force at the time for such Projects to KREDL.
- c) For the projects having PPAs signed with parties other than ESCOMs, the capacity can be allotted to the Developer shall be permitted to transfer the capacity to a new Developer at any point of time of the Project, duly paying the necessary transfer fees in force at the time for such Projects to KREDL.
- d) Any capacity surrendered or cancelled shall be re-allotted on a first cum first serve basis.
- e) Notwithstanding anything contained in this resolution, the provisions of the Electricity Act-2003 and KERC order as issued from time to time, shall prevail, for the purpose of the implementation of this policy.

25. Power to amend & interpret the policy.

Government of Karnataka will have power to amend/ Review/ Relax/ interpret any of the provisions under this policy as and when required.

Note-

Documents to be submitted for Facilitation Letter:

1. Application in the prescribed format
2. Detailed Proposal/DPR/PFR
3. Area/Location marked in the topo sheet 1:50,000 scale
4. Net worth certificate duly signed by registered Chartered Accountant in the Government approved format.
5. ROC certificate/MOA/AOA
6. Land details like Survey Nos., RTC with extent of land etc.