

THE RENEWABLE ENERGY POLICY 2025



POWER DIVISION

**MINISTRY OF POWER, ENERGY AND MINERAL
RESOURCES**

THE PEOPLE'S REPUBLIC OF BANGLADESH

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GLOSSARY OF ABBREVIATIONS/ACRONYMS/ TERMS

BAB	Bangladesh Accreditation Board
BADC	Bangladesh Agricultural Development Corporation
BB	Bangladesh Bank
BEPRC	Bangladesh Energy and Power Research Council
BEPZA	Bangladesh Export Processing Zones Authority
BERC	Bangladesh Energy Regulatory Commission
BESS	Battery Energy Storage System
BEZA	Bangladesh Economic Zones Authority
BIDA	Bangladesh Investment Development Authority
BIPV	Building-integrated Photovoltaics
BIWTA	Bangladesh Inland Water Transport Authority
BMDA	Barind Multipurpose Development Authority
BNBC	Bangladesh National Building Code
BOO	Built-Own-Operate
BPC	Bangladesh Petroleum Corporation
BPDB	Bangladesh Power Development Board
BPMI	Bangladesh Power Management Institute
BREB	Bangladesh Rural Electrification Board
BSCIC	Bangladesh Small and Cottage Industries Corporation
BWDB	Bangladesh Water Development Board
BTS	Base Transceiver Station
CDM	Clean Development Mechanism
CSP	Concentrated Solar Power
DoE	Department of Environment
EPZ	Export Processing Zone
EV	Electric Vehicle
EZ	Economic Zone
GoB	Government of the People's Republic of Bangladesh
GST	Goods and Services Tax
G2G	Government to Government
IDCOL	Infrastructure Development Company Limited
IEPMP	Integrated Power and Energy Master Plan
IPO	Import Policy Order
IPP	Independent Power Producer
ILAC	International Laboratory Accreditation Cooperation
IRD	Internal Resources Division
LGED	Local Government Engineering Department
LT	Low Tension
MoEFCC	Ministry of Environment, Forest and Climate Change
MoF	Ministry of Finance
MPEMR	Ministry of Power, Energy and Mineral Resources
MRA	Mutual Recognition Arrangement
NBR	National Board of Revenue
NDC	Nationally Determined Contributions
NEP	National Energy Policy
NGO	Non-Governmental Organization

NOC	No-objection Certificate
OPEX	Operational Expenditure
P2P	Peer-to-Peer
PV	Photo Voltaic
PLF	Plant Load factor
PPA	Power Purchase Agreement
PPP	Public Private Partnership
PSPP	Pumped Storage Power Plants
PGB	Power Grid Bangladesh PLC
RE	Renewable Energy
REC	Renewable Energy Certificate
RETs	Renewable Energy Technologies
RPO	Renewable Purchase Obligation
R&D	Research and Development
SHS	Solar Home System
SREDA	Sustainable and Renewable Energy Development Authority
UNFCCC	United Nations Framework Convention on Climate Change
VAT	Value Added Tax
WTE	Waste to Energy

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1.0 INTRODUCTION

1.1 Preamble

The Government of Bangladesh (GoB) initiated the development of the Renewable Energy (RE) Sector with the evolutionary approach by enacting “The Renewable Energy Policy of Bangladesh 2008”, to increase the deployment and use of RE technologies. The GoB’s strategic objectives of energy security, reliability and availability of modern electricity, environmental protection, sustainable development, social equity, mitigation of effects due to climate changes, and other related issues necessitate a new RE policy.

In the context of global warming, efforts are to be made to initiate the gradual replacement of existing conventional power generation capacities through renewables for securing a stable and economically viable energy supply. Renewable Energies, especially solar and wind, have experienced significant growth, in different parts of the world during the last decade in terms of deployment, technological advancements, and cost competitiveness.

The focus of “The Renewable Energy Policy 2025” is to accelerate the adoption of renewable energy resources and advance the RE market development in the country through resources, technologies, and capacity development, thus facilitating GoB in meeting the RE target specified in its “Integrated Energy and Power Master Plan (IEPMP)”, “Delta Plan 2100”, and any other Climate-related plans set-forth thereafter. This policy outlines the pathway to decarbonize the energy system highlighting RE technology adoption, low-carbon investment and the framework needed to combat the challenges of this transition, with the aim of securing a sustainable future for the country.

1.2 Definition

(a) Unless the context otherwise requires:

“**Agri-Voltaics**” refers to a dual-use system where agricultural activities, such as crop cultivation, livestock grazing, or aquaculture, coexist with photovoltaic (PV) energy generation on the same parcel of land, ensuring optimal utilization of resources while maintaining or enhancing land productivity.

“**Battery Energy Storage System**” or “**BESS**” means a system that stores electrical energy in batteries for later use, helping to ensure balance between the supply and demand of power in the grid.

“**Carbon Footprint**” means the total amount of greenhouse gases (expressed as CO₂ equivalents) emitted directly or indirectly by an individual, organization, event, or product.

“**Energy Storage**” or “**Energy Storage System**” or “**ESS**” means the capture and storage of energy produced at one time for use at a later time, including technologies like batteries, pumped hydro, and thermal storage.

“**Floating Solar**” refers to a photovoltaic (PV) power generation system that is installed on the surface of water bodies such as reservoirs, lakes, ponds,, or other non-navigable water areas, wherein solar panels are mounted on specially designed floating platforms or structures, ensuring compliance with environmental, safety, and regulatory requirements.

“**Grid Code**” means a set of technical specifications and operating procedures published by BERC that govern the operation, maintenance, and development of an electrical grid.

“**Green Energy**” means energy produced from renewable sources that do not emit or emit close to zero greenhouse gases, such as solar, wind, and hydroelectric power, etc.

“**Green Hydrogen**” means hydrogen produced using renewable energy, with applications in energy storage, transport and industry.

“**Nationally Determined Contributions**” or “**NDCs**” or “**NDC**” means commitments made by countries under the Paris Agreement to reduce greenhouse gas emissions and adapt efforts to mitigate climate change.

“**Open Access**” refers to the non-discriminatory right granted to eligible consumers, developers, or entities to use existing transmission and distribution networks to access electricity from any generator of their choice, including renewable energy sources, at a prescribed fee and subject to regulatory guidelines.

“Peer-to-peer trading” or **“P2P”** means a decentralized system that enables electricity consumers with solar panels or renewable systems to directly trade the excess electricity they generate with other consumers within the country using distribution and transmission utility networks subject to the availability of free corridors.

“Power Utilities” means companies or organizations that are in the businesses of generation or transmission or distribution of electricity to consumers.

“Renewable Energy” means energy generated from natural resources that are constantly replenished, such as sunlight, wind, rain, tides, waves, geothermal heat, and other similar sources.

“Renewable Energy Certificate” or **“REC”** means a tradable certificate that represents the environmental attributes of one megawatt-hour (MWh) of electricity generated from a renewable energy source.

“Renewable Purchase Obligation” or **“RPO”** means a regulatory mandate requiring Power Utilities or other selected entities/consumers under this policy to purchase a certain percentage of their electricity generated from renewable energy sources.

“RE Hub” means a centralized facility or system that integrates various renewable energy projects under the same or multiple technologies.

“Solar Mini, Micro, Nano, and Pico Grids” refer to decentralized solar-powered energy systems of varying capacities that supply electricity to communities or individual users, particularly in off-grid or remote areas.

“Smart Grid” refers to an advanced electricity network that integrates digital technology, communication systems, and automation to efficiently monitor, control, and optimize the generation, transmission, distribution, and consumption of electricity, ensuring reliability, sustainability, and security while complying with applicable regulatory, safety, and environmental standards.

“Sustainable Energy Development Fund” or **“SEDF”** refers to a fund, developed under this policy, is designed to support activities related to Research and Development (R&D) and Human Resource Development (HRD) for renewable energy technologies and projects, fostering innovation, capacity building, and the sustainable adoption of renewable energy solutions across Bangladesh.

(b) Whenever the terms are used in uppercase or capital letters in this policy, whether in the singular or plural, in the future or past, they shall have the meaning ascribed to each of them.

1.3 Scope of the Policy

This policy covers all aspects of RE either for captive use and/or for selling electricity to the public utility or third-party sale, including the Renewable Energy Certificate (REC) mechanism. It encompasses all RE programs/projects developed in Public Sector, Private Sector, or through Public Private Partnership.

The scope of this policy extends to all available RE resources comprising Solar, Onshore/Offshore Wind, Geothermal, Biomass, Biogas, Green Bio-fuels, Waste to Energy (WTE), Hydro, Ocean/Tidal Waves, Green Hydrogen and all kinds of Hybrids thereof as well as those determined by GoB from time to time. Energy Storage Systems and any existing or new technology to be developed during the applicability of this policy will also fall under its ambit.

1.4 Background

In the present context, the energy sector of Bangladesh is mainly dependent on natural gas and other fossil fuels. In light of the impending fuel shortage, as national supply is presently insufficient to meet the demand and fuels are increasingly being imported to meet demands, the government developed a strategy to diversify the fuel mix for power generation and enhance the energy security of the country. In 2008, Bangladesh adopted the RE policy with the mandate, among others, to increase the RE share in the total energy demand of the nation. This policy is also an important step to comply with Paris Agreement and Nationally Determined Contribution (NDC) of Bangladesh.

2.0 POLICY OVERVIEW

2.1 Vision

To adapt and develop RE technologies and promote local manufacturing capabilities to ensure an affordable, scalable, reliable, environment-friendly and sustainable energy supply in the country.

2.2 Objectives

- To reduce electricity tariff and reduce government subsidy.
- To harness the potential of RE resources and dissemination of RE technologies in the country.
- To promote local manufacturing capacities of RE equipment.
- To scale up RE capacity for ensuring energy security, contributing to the RE targets, and reducing the dependence on fossil fuels in the country.
- To attract investment with proper institutionalization, product standardization, and cost competitiveness in the RE sector.
- To safeguard the environment by increasing the share of “Green Energy” in the overall energy mix.
- To promote sustainable energy projects across the country and effectively utilize Battery Energy Storage Systems (BESS) to enhance integration of renewable energy into the grid and to ensure grid stability effectively.

3.0 RENEWABLE ENERGY RESOURCES, TECHNOLOGIES AND POTENTIALS

The following renewable energy resources come under the purview of this policy and will also include new resources as identified by SREDA in future:

3.1 Solar Energy

Bangladesh is naturally bestowed with solar energy. This policy will focus on the promotion and development of the following solar energy-based facilities in the country:

- | | |
|--|---|
| a. Grid-connected MW scale solar plants | g. Solar street light |
| b. Solar home system | h. Solar drinking water system |
| c. Rooftop solar (with and without Net Metering) | i. Floating solar |
| d. Solar mini/micro/nano/pico grid | j. Solar powered aquaculture |
| e. Solar irrigation | k. Solar powered Base Transceiver Station (BTS) |
| f. Solar EV charging station | l. Solar thermal power/Concentrated Solar Power (CSP) |
| | m. PV based pumped-hydro storage |

3.2 Wind Energy: Next to solar energy resources, the most prospective renewable energy resource is wind energy in the country. Newly developed wind turbine can generate power from low velocity wind resources to make the project commercially viable. Existing wind energy technologies can be deployed for both onshore and offshore wind projects. This policy shall focus on the adaptation, promotion and development of all forms of commercially available wind energy harnessing technologies across the country.

3.3 Biomass Energy: Biomass is contemplated as a well-known, reliable and sustainable energy source. A large share of individuals, immediately or discursively, depends on biomass energy in Bangladesh for purposes, such as heating or cooking. Mainly the technologies in national and global practice are: a) Biomass b) Biogas, and c) Biofuel.

3.4 Waste to Energy: Cities are suffering for a long time from environmental pollution caused by municipal solid waste, medical waste, and various industrial wastes. To save the cities from environmental pollution, several programs are being taken by the Government for waste management as well as energy generation from the solid wastes. Incineration, Gasification, Pyrolysis and bio-fermentation are some of the widely-used technologies in such Waste to Energy generation programs. Use of environmental-friendly sustainable technologies will be encouraged while implementing these programs.

3.5 Hydro Energy: Hydro-electricity produced by turbine-driven generators converts the potential energy of falling water or kinetic energy of fast-flowing water into mechanical energy. Hydropower plants have two basic configurations: i) dams with reservoirs and ii) run-of-river plants.

3.6 Other Renewable Energy Sources: Other significant RE sources include Geothermal, Tidal energy, River current, Wave energy, Green Hydrogen energy and Green Bio-fuel. The potentialities of these sources will also be explored in Bangladesh.

4.0 LEGAL AND INSTITUTIONAL FRAMEWORKS

4.1 Generally, the Power Division of the Ministry of Power, Energy, and Mineral Resources (MPEMR) has the overall responsibility for the formulation and execution of government policies in the power sector, coordinating with relevant agencies/authorities/utilities in achieving national policy objectives.

4.2 SREDA has been established under the SREDA Act 2012, as a nodal agency for the development and promotion of sustainable energy comprising renewable energy and energy efficiency. Considering the level of activities of this policy, the institutional framework of SREDA should be expanded and strengthened including preparing the technical workforce. The Power Division is responsible for policy formulation, execution, and development functions of RE through SREDA.

4.3 BERC performs regulatory functions like licensing, tariff fixation, dispute settlement, etc.

4.4 Power Generation Utilities and Private Power Generators generate electricity.

4.5 Power Distribution utilities provide electricity distribution services.

4.6 PGB is the sole public sector transmission system operator in the country till date.

4.7 Bangladesh Petroleum Corporation (BPC) blends bio-fuel with petroleum fuels.

4.8 Bangladesh Bank, IDCOL, other banks and non-banking financing institutions, BSEC, and development partners are for bridging the financing gap in developing infrastructure and RE projects in Bangladesh.

4.9 The Bangladesh Energy and Power Research Council under MPEMR will also be a part of the institutional framework in respect of R&D activities.

4.10 BPML will be an integral part of this policy with the responsibility of skilled human resources development.

4.11 BADC and BMDA are working in the irrigation sector to promote RE.

4.12 A 'Sustainable Energy Development Fund' will be established under this policy following the existing financial rules and regulations, which will be administered by SREDA. This fund will play a vital role in financing the R&D and HRD activities of RE.

5.0 PROGRAMME & PROJECT DEVELOPMENT

5.1 General Policy Measures & Supporting Arrangements

5.1.1 SREDA, in coordination with the Power Division, shall be responsible to determine the priorities for renewable energy technology deployment and program implementation. SREDA will provide all the institutional support as a nodal agency for the development of the RE program and project implementation as per the SREDA Act 2012.

5.1.2 SREDA shall develop the RE Roadmap/Implementation plan within a time frame based on this policy.

5.1.3 As per BNBC and proposed RE portfolio standards, all power utilities and other government departments, private agencies, and NGOs will develop and implement their own RE programs throughout the country in consultation with SREDA. The developers shall regularly provide updated program implementation information to SREDA.

5.1.4 Electricity generated from RE projects, both in public and private sectors, will be purchased by power utilities or any private consumer under respective program guidelines in this policy or separate government-approved latest policy or guidelines, like 'Net Metering Guidelines-2018'. Other than government-approved policy, Power Utilities and government organizations can buy electricity from renewable energy projects according to the Public Procurement Rules, 2008. RE Project developers are required to inform SREDA and relevant utilities about their projects and generation records.

5.1.5 Government may take initiatives to facilitate the cross-border trading of renewable and clean energy with the neighboring countries through mutually agreed terms and conditions or as a part of regional cooperation.

5.1.6 SREDA shall encourage and promote human resource development and local production of renewable energy equipment, facilitate and monitor the quality of renewable energy equipment, and initiate the establishment of a national quality control and research laboratory for renewable energy equipment and infrastructures. In addition, Renewable energy equipment can also be tested in any accredited laboratory (accredited by ILAC MRA, preferably by BAB) and local laboratories enlisted by SREDA.

5.1.7 RPO & REC shall be set as regulatory obligations to the Power Utilities and consumers. SREDA will develop a mechanism to introduce RPO & REC.

5.1.8 The project developers will have to make connectivity with the distribution/transmission network (if needed) maintaining its standard subject to obtaining consent from the related transmission utility, distribution utilities, and concerned authorities.

5.2 Promotion of Utility Scale Renewable Energy Project

5.2.1 This Policy aims to promote the development of RE Projects with or without storage facilities in the country.

5.2.2 The Government will develop RE Hub in suitable locations of the country.

5.2.3 In general, the Government shall select the private developer through transparent competitive bidding for developing the RE projects. In this case, in consultation with the BPDB and PGB; SREDA shall routinely announce new capacity requirements, after confirming the interconnection commitments from the relevant entities.

5.2.4 The Government may develop a guideline to implement projects under Government-to-Government (G2G) frameworks, Public Private Partnership (PPP) modality, Merchant Power Plant mechanism, and Government-owned companies.

5.3 Projects for Residential/Commercial/Industrial Consumer

5.3.1 RE Projects can be set up by any consumer (residential/commercial/industrial/others) on their rooftop/premises.

5.3.2 The government will create enabling environment to scale-up Rooftop Solar PV projects as per the Net Metering Guideline or through any other approved arrangements. The government will also promote grid-connected rooftop solar PV projects in public residential buildings, commercial and industrial establishments, and others.

5.3.3 The Government will also promote Peer-to-Peer (P2P) trading of Rooftop Solar PV energy between two or more grid-connected parties. The implementation of the P2P model shall be as per the guidelines developed by SREDA.

5.3.4 RE projects can also be set up by a developer on the rooftop/premises of a consumer (residential/commercial/industrial/others) for the generation and sale of power to the consumer or other consumers in the same premises for which developer and the consumer shall enter into a lease agreement and /or power sale agreement under net metering guidelines or similar upcoming guidelines.

5.3.5 Implementation of grid-connected rooftop solar PV projects shall be administered by respective Distribution Utilities (including application evaluation, approval, metering protocols, safety protocols, and standards) as mentioned in the related program guidelines.

5.3.6 Solar projects installed on the consumers' rooftops for their captive use, isolated from the grid with or without an energy storage system, shall be termed standalone and off-grid projects. The Government will promote an off-grid rooftop Solar PV Plant with the provision of this policy following safety protocol. Standalone and off-grid Solar PV project developers will do online registration of their projects with SREDA through suitable agencies.

5.3.7 The project developer shall adhere to the safety codes, waste disposal/management standards, and standards for the safe operation of both off-grid and on-grid systems as per provisions of applicable laws, policies, and guidelines.

5.3.8 The government may introduce open access power transmission from remote RE projects to industry/commercial establishments subject to the availability of grid/distribution network capacity. Power Division or nominated authority by the Power Division will develop the necessary guidelines (including network study procedure) and maintain the open access application to clearance procedure.

5.4 Promotion of Solar Irrigation

5.4.1 The Government is keen to promote solarization of existing grid-connected and diesel irrigation pumps.

5.4.2 SREDA will develop a business model for operating solar irrigation pumps to utilize their capacity beyond the irrigation seasons.

5.5 Promotion of Renewable Energy for Charging Electric Vehicles and Battery Swapping Stations

5.5.1 The Government will promote the use of RE in the transport sector.

5.5.2 The charging station service providers may establish RE plants within their premises to operate their private or public charging infrastructure/stations.

5.5.3 RE plants for charging the EVs/Batteries can be with or without energy storage.

5.6 Promotion of Floating Solar Projects

5.6.1 The Government will promote the development of floating solar on reservoirs, lakes or any other water bodies without hampering the ecosystem and primary activities.

5.6.2 The Government will allocate the water body on a long-term lease/rental basis for the development of Floating Solar projects and for the sale of energy to utilities or urban local bodies without compromising the growth and potentiality of the aquaculture, capture fisheries, and navigation. The non-leasable areas like Rivers, Canals, Ocean, Haour-Baor, etc. could be reviewed from time to time by the National River Conservation Commission for development of Floating Solar projects considering national interests and all aspects involving such development.

5.6.3 Floating solar projects can be developed with or without an energy storage system.

5.6.4 The guidelines for the implementation of floating solar projects shall be developed by SREDA, incorporating the protection of water bodies, fish feeding habits, reproduction, bio-diversity, navigation, etc.

5.7 Solar Mini, Micro, Nano, Pico Grid

5.7.1 Electricity distribution utilities will cover their commanding areas for electrification by Solar Mini, Micro, Nano, and Pico grids or hybrid systems incorporating other renewable energy sources and/or BESS/ESS where electrification by national grid network is not feasible.

5.7.2 Private sector may install and operate solar or RE-based mini/micro/nano/pico grids on a competitive market basis wherever applicable. The electricity distribution tariff of such mini/micro/nano/pico grids will be determined by BERC. To encourage competitive market, no area demarcation will be done.

5.7.3 The capacity and technical conditions of Solar Mini, Micro, Nano, and Pico grids may be revised and published by SREDA as deemed necessary.

5.8 Other Solar Technologies

5.8.1 The Government will promote the development of other solar technologies such as Solar Street Lights, Solar Drinking Water Systems, Solar Water Heating, Agri-PV, Building-Integrated Photovoltaics (BIPV), BTS charging stations, and any new technologies identified as RE, within the scope of this policy.

5.9 Promotion of Wind Energy

5.9.1 Proper wind mapping shall be published by SREDA by identifying the potential locations. SREDA will arrange to conduct wind resource assessment as early as possible to fulfill the wind energy target.

5.9.2 Offshore or Onshore Wind Projects, with or without energy storage systems, can be developed following the provisions of clause 5.2 of this policy having prior consultation with relevant authorities.

5.10 Promotion of Biomass Projects

5.10.1 Biomass being a major source of energy in rural areas, a comprehensive plan for the development of biomass energy shall be developed by SREDA based on biomass resource mapping.

5.10.2 The Government will promote the generation of energy through Biomass to enable the development of bio-energy-based projects in the country.

5.10.3 Developer of the biomass project shall be allowed to use the power for captive consumption and/or third-party sales within the country.

5.10.4 Biogas plants may be developed for cooking or bottling or bagging of Biogas.

5.10.5 For large biomass electricity projects (i.e., greater than 1 MW) the project developer must demonstrate that the biomass is being sustainably harvested avoiding deforestation and no adverse impact will result from that development of the project.

5.10.6 Production and use of bio-fuels may be encouraged without compromising crop production and food security.

5.10.7 For promoting biomass projects, a guideline will be developed by SREDA.

5.11 Promotion of Waste to Energy Projects

5.11.1 The Government will promote the generation of energy from waste to enable the development of waste-to-energy projects in the Country. Procurement of energy from Waste-to-Energy Projects by Utilities shall be as per the tariff determined according to the government process. The developer of waste-to-energy projects is allowed to use the power for captive consumption or third-party sales within the country.

5.12 Battery Energy Storage System (BESS) and Other Renewable Energy Storage Systems

The government will facilitate the development of BESS or other ESS in the country to integrate more RE into the grid which can offer grid services such as grid optimization, peak reduction/shaving, line congestion, curtailment management, contribution to reliability needs, managing intraday variation and seasonal variations and others, and also to meet the increasing power demand of the country through RE within the provisions of this policy.

5.12.1 BESS/ESS service providers can tie-up with RE developers or can utilize any energy sources for storing the energy and the stored energy can be sold to power purchasers (BPDB/Distribution Utilities) or Open Access consumers within the country.

5.12.2 BESS/ESS can be either co-located with RE projects or it can be located near the load centers for optimal utilization of existing transmission capacity within the country.

5.12.3 Existing and new RE projects can use energy storage systems to manage variations in generation and offer necessary grid support services/ancillary services to Transmission /Distribution utilities as per their requirements.

5.12.4 RE projects developed under captive/ third-party sale may use energy storage systems. The guidelines for the use of energy storage systems in RE captive/ third-party sale projects will be issued by SREDA with the approval of the Power Division.

5.13 Other RE Sources

5.13.1. Government will take initiatives for potential assessment of solar thermal, geothermal, mini and small hydro, tidal, wave, river current, green hydrogen, etc., and R&D activities of these RE sources observing the global trend and development.

5.14 Innovation/Pilot Projects

5.14.1 The Government shall promote new and emerging technologies in the country.

5.14.2 The Government shall endeavor to conduct Research and Development activities for the sustainable advancement of RE in the country.

6.0 LAND

6.1 Maximum utilization of the land shall be ensured considering food security and the environment.

6.2 It is the primary responsibility of the RE project developer to acquire/lease/purchase the land required for the project development. The developer shall be permitted to set up renewable energy project on private non-agriculture land without the requirement of land conversion under the provisions of the GoB Act, and the rules made thereunder. Co-existence of agriculture with RE project (i.e. agri-voltaic) will be encouraged to ensure food security in parallel with energy security.

6.3 Government may also allocate land such as fallow, government khas land, char, riversides, seashores, hilly terrain, etc. for RE Project Development as per the provisions of GoB Acts, rules and policies. Land having no agricultural value or other co-benefits will be encouraged in the land allotment process.

6.4 Government land can also be identified for potential hubs of medium and higher capacity solar and Wind Projects, based on feasibility study. The infrastructure for the hubs can be developed in advance by the Government/ Private entity on its own or with financial/technical assistance from relevant national/international organizations.

6.5 Different organizations/departments like Bangladesh Railway, Roads & Highways Department, Bangladesh Bridge Authority, BWDB, BIWTA, EPZ, EZ, BSCIC, etc. own many unutilized land or open spaces that can be effectively utilized for the development of RE Projects. The Government can issue a directive or a policy guideline so that these lands can be used for RE projects, subject to mutually agreed upon terms and conditions for such use.

6.6 Land availability for RE projects is very limited in Bangladesh. The government may consider conducting a land use study to identify suitable sites for utility-scale renewable energy projects. The study may include the benefits of utilizing public land, as well as identify land that has no agricultural value and could be suitable for designating zones of RE projects.

7.0 LICENSING / REGISTRATION

7.1 Renewable energy project(s) with the plant capacity of 5MW or more, to sell electricity from plants, shall be required to get a power generation license from BERC as per its license regulation. If BERC updates the license regulation periodically, it will apply to this section of the policy.

7.2 All RE projects installed in the country must be enrolled with SREDA to update and maintain the national renewable energy database through agencies assigned by SREDA.

7.3 RE Projects connected to a low-tension (LT) distribution network will enroll through distribution utility.

7.4 No prior enrollment with SREDA will be required for participation in bidding for RE projects. Only successful bidders will be required to enroll their projects with SREDA.

8.0 INVESTMENT AND FINANCING FACILITIES

8.1 Investment Facilitations

8.1.1 Prevailing RE financing facility shall be expanded for accessing public, private, development partners, and carbon markets funds for more investments in bankable RE projects.

8.1.2 In addition to commercial lending, the network of micro-credit support shall be extended in rural and remote areas to provide financial support for purchasing renewable energy equipment by the RE developers.

8.1.3 The Government shall facilitate investment in RE and energy efficiency projects. Parties may raise local and foreign finance under applicable legal frameworks.

8.1.4 Private sector participation, including joint venture initiatives in RE development, shall be encouraged and promoted.

8.1.5 SREDA shall develop a guideline for providing incentives for the installation of solar, wind, biomass, or any other RE projects in the country.

8.1.6 Government provisions could be organized for extending appropriate financing for prospective sponsors for implementing RE projects.

8.1.7 The RE developers may also set up projects under the RE Certificate mechanism.

8.1.8 The renewable energy-use obligated entities are allowed to set up RE projects to fulfill their Renewable Purchase Obligation (RPO) requirements.

8.1.9 The Government of Bangladesh will promote the manufacture of solar energy equipment including solar cells, solar panels, inverters, mounting structures, cables, storage batteries or energy storage systems, etc. The Government may also provide RET production-linked incentive.

8.1.10 A suitable incentive scheme will be designed to promote the co-utilization of land for solar energy projects, crop cultivation, and water preservation. To promote solar energy generation in the agriculture, fisheries and livestock sectors, necessary incentives to the farmers may be provided.

8.1.11 Use of grid electricity and gas for water heating will be discouraged to promote RETs.

8.2 Financial Incentives

8.2.1 To facilitate RE in the total generation mix, all RE components/spare parts and related raw materials in producing RE equipment may be exempted from import duty and charging VAT from the date of notification of this policy in the official gazette and it will be extended periodically upon impact assessment from time to time.

8.2.2 To promote RE in the power sector, RE technology development industries and project developers, both in the public and private sectors, will be fully exempted from corporate income tax for 10 years and partially exempted for the next 5 years (3 years at 50% and the next 2 years at 25%) where the projects will be commissioned between 1st July 2025 and 30th June 2030.

8.2.3 Foreign investors investing in renewable energy sectors will also receive the benefits applicable to institutions investing through BIDA, BEZA, or BEPZA.

8.2.4 All RE equipment/machinery and related raw materials in producing renewable energy, not manufactured locally, could be free of customs duty and VAT if imported with a test report from an accredited laboratory. However, to avail the same, an undertaking shall be provided to SREDA that it shall only import items, without customs duty, that are to be installed in its plant and shall not sell any such items in the local market or use for any other purposes than that was specified.

8.2.5 Power Division will develop an acceptable mechanism to yield the benefits of tax exemption to end-users in consultation with NBR.

8.2.6 Incentives in terms of customs duty on specified RE items shall be extended to the project developer under this policy.

8.2.7 Government may consider the waiver of wheeling charges for RE Projects dedicated for setting-up Electric Vehicle (EV) charging stations using the distribution utility network under open access facility.

8.2.8 Stamp duty to the investors for registration of RE projects lands may be exempted subject to the approval from Internal Resources Division (IRD).

8.2.9 An incentive mechanism may be introduced for carbon trading. Revenue from the carbon trading may be exempted from the income tax.

9.0 CARBON MARKETS

Carbon trading is a mechanism to promote a low-carbon economy. It is recognized under UNFCCC. Bangladesh is a signatory to Paris Agreement that allows accessing global carbon markets and other global financing options for projects under climate change mitigation. These financing options can be accessed by public and private sector entities. GoB encourages the RE project developers to make projects/programmes through various market mechanisms under Paris Agreement and Carbon markets subject to the prior approval from the Power Division.

9.1 SREDA will maintain an inventory of the RE projects that will participate and trade in carbon markets.

9.2 The establishment of a carbon trading platform will be considered.

10.0 GRID INTEGRATION

10.1 System Requirements

To integrate the intermittent nature of RE sources into the grid by ensuring grid stability and power quality, the following requirements need to be addressed-

10.1.1 Standardize the equipment and material of renewable sources of energy as per BSTI or relevant agencies standard and its amendments issued from time to time.

10.1.2 Grid-connected renewable systems, those are connected or to be connected directly to the national grid, must comply with the Grid Code.

10.1.3 Develop flexible and efficient Transmission and Distribution networks for the integration of renewable sources.

10.1.4 Ensure adequate protection mechanism at both plant level and network level for grid stability and safety.

10.1.5 Facilitate regional mixed power generation by sharing renewable and conventional sources of energy.

10.1.6 Implement effective energy storage technologies for grid stability at strategic locations over the grid network.

10.1.7 Facilitate appropriate ancillary systems and technology for better system operation.

10.1.8 Facilitate sufficient spinning reserve to maintain frequency stability for system operation.

10.1.9 Introduce smart grid, microgrid, tie-line, etc. technologies for strong as well as flexible power networks.

10.1.10 Facilitate a well-equipped central monitoring system of RE generation forecasting and generation scheduling aid to system operation.

10.1.11 Strengthening transmission technology for interconnection/tie-line to facilitate generation vs demand balancing through regional electricity imports and exports.

10.1.12 The Grid Code will need to be upgraded from time to time by a comprehensive study for the high penetration of RE set by the government policy.

10.2 Connectivity

10.2.1 RE project developer is allowed to connect the RE generation to the 33kV or above voltage level grid network subject to conducting a feasibility study and grid impact study (as per standards of the relevant utility).

10.2.2 Utilities shall assess the study (mentioned in 10.2.1). If satisfied, then they will provide a time-bound clearance for power evacuation approval for the particular RE developer for potential connection point.

10.2.3 The transmission charges and losses shall be applicable for the RE developer due to the use of the transmission system as determined by BERC in its tariff orders issued and amendments issued from time to time.

10.2.4 A group of RE project developers may facilitate a common evacuation power line for sharing multiple RE plants in a common area for minimizing the project implementation/operation/maintenance cost.

10.2.5 Wheeling, Cross Subsidy Surcharge, and any other applicable open access charges shall be determined by BERC for RE developer.

10.2.6 Regarding the exchange of reactive power from or to the grid system, the RE power producer should follow the grid code. In addition, Reactive power compensation and maintaining power factor shall be as per PPA or contract between developer and purchaser following program guidelines under this policy.

10.2.7 The RE power producer shall comply with all existing Codes (Grid Code, Distribution Code, Metering Code, Safety Code etc.) and other relevant regulations/guidelines/orders of the GoB/BERC as applicable from time to time.

10.2.8 The RE power producer shall provide unit commitment and day-ahead schedule to the system operator.

10.2.9 The RE power producer shall get the priority dispatch order (must run except in unavoidable situation) maintaining a close collaboration and cooperation between RE power producer and system operator.

10.2.10 The energy generated by the RE sources shall be metered by prescribed/applicable single/three-phase unidirectional/ bidirectional meter at a common point for billing according to respective program guidelines.

11.0 REGULATORY POLICY

11.1 Renewable Purchase Obligation (RPO) and Renewable Energy Certificates (REC) shall be introduced to the generation utilities, distribution utilities, and at the consumer levels. SREDA will formulate the mechanism or guideline for introducing RPO & REC.

11.2 The tariff of the energy from the RE projects purchased by Government utilities will be determined through Govt. procurement process as mentioned in section 5.

11.3 The project developers shall comply with the BERC Regulations/codes on Forecasting, Scheduling, and Deviation Settlement, as applicable, and are responsible for all liabilities related to Access and connectivity.

11.4 For interconnection with the grid and metering, the project developer shall abide by applicable Grid Code, Grid Connectivity Standards, and Regulations on Communication Systems for transmission of electricity and other Regulations issued by the BERC from time to time.

11.5 SREDA will develop regulations to maintain the nationwide renewable energy project designer, installer, maintenance engineers/professionals, supplier, importer, manufacturer, OPEX investors, EPC companies; separately for solar, wind, and other energy programs.

11.6 SREDA will follow up the implementation of 'Net Metering Guidelines-2018', 'Guidelines for the Grid Integration of Solar Irrigation Pumps-2020', and similar upcoming program implementation guidelines to expedite the activities and capacity development of key stakeholders of each program. Project developers will follow the respective program guidelines to implement their project. SREDA will take the initiative to amend these guidelines as required.

12.0 RESEARCH, DEVELOPMENT AND CAPACITY BUILD-UP

12.1 Renewable energy technologies being alternatives to fossil fuel technologies need support through research and development (R&D) considering the national and international perspectives of the food, water, and environmental protection of Bangladesh. Efficient disposal of waste generated by RE related activities shall also be the part of research, development and capacity build-up.

12.2 SREDA shall be the nodal agency for the promotion of new initiatives/pilot projects in the country. Therefore, SREDA shall promote and strengthen conducting training and R&D activities on different Renewable Energy Technologies and RE waste management.

12.3 SREDA will make linkage with Public & Private Universities to initiate specific courses and research on RE technologies.

12.4 BPMI and BEPRC shall also be equipped for conducting training and R&D activities on different RETs, respectively.

12.5 SREDA shall facilitate R&D initiatives on RE equipment and emerging RE technologies suitable for the country.

12.6 Power Division/SREDA/BEPRC can take initiatives to seek funds from Development Partners/Bilateral/Multilateral Financial Institutions in addition to GoB funds for R&D in Power and Energy sectors. The Sustainable Energy Development Fund may also be one of the sources for funding the activities.

12.7 GoB shall encourage the initiatives from the private sector in R&D activities for the advancement of RE.

13.0 AWARENESS & EDUCATION

13.1 Initiatives shall be taken by regulatory bodies to raise awareness about RE among the general public, students, media and other stakeholders.

13.2 Inclusion of RE-related curriculum shall be encouraged in academic institutions, from primary level to universities.

13.3 The objectives of awareness creation on RE from the educational perspective shall be to: (a) improve knowledge and understanding of RE, fostering a favorable environment for the achievement of goals of RE policy (b) identify renewable and non-renewable sources of energy (c) enhance motivation for developing strategies to overcome challenges, (d) support the Government's vision of transitioning towards RE in the power sector, and more importantly (e) develop human resources for RE Technologies.

14.0 ENVIRONMENTAL ISSUES

Current national policies, Acts, rules, and regulations related to the environment shall apply to RE projects. In addition to the existing policies, the following issues need to be incorporated:

14.1 All types of RE projects need to be included in the proper position of the DoE Categorization list;

14.2 Easiness of Environmental Clearance Procedure for RE Projects;

14.3 Disposal and/or recycling of battery and PV panels will be included in E-waste rules by the MoEFCC;

14.4 SREDA should formulate a specific guideline for the management of bio-slurry, in consultation with Ministry of Agriculture, Ministry of Fisheries and Livestock, and MoEFCC.

15.0 QUALITY ASSURANCE

15.1 National Standards and Specifications for RE equipment shall be set by BSTI based on the requirement of SREDA. SREDA will develop the requirement in consultation with relevant agencies including utilities.

15.2 BSTI will take necessary steps to incorporate SREDA-recommended renewable energy items into the mandatory test category of import policy order (IPO).

15.3 SREDA shall maintain a list of accredited laboratories and other conformity assessment bodies as well as local laboratories in association with the Bangladesh Accreditation Board (BAB) where the RE equipment can be tested.

15.4 Government will facilitate the establishment of accredited laboratories to maintain the standards and be fully equipped with the requirements for testing of RE equipment, locally manufactured or imported.

15.5 No RE equipment will be manufactured or to be imported unless it satisfies the National Standard & Specifications and passes the testing procedure by a recognized laboratory.

15.6 All utilities or developers related to RE generation, manufacturers, and importers of RE products shall be bound to abide by the above policy issues.

16.0 OPERATION & MAINTENANCE

16.1 SREDA will prepare guidelines for the maintenance of Solar Panels, Inverters, and associated equipment of solar energy plants. Similarly, the guidelines for the maintenance of wind energy plants and biogas plants will be prepared by SREDA.

16.2 The project developer will be responsible for the maintenance of their own RE Plants. Utilities may enlist a few maintenance groups from the registered list of SREDA with proper training for carrying out scheduled maintenance of the systems.

17.0 TARGET

Following RE Policy 2008, concerning relevant existing policy documents, Acts, and rules with potential RE resources and best-practicing technology; this Policy focuses on future opportunities. Techno-economic impact, alignment of policy with national and international plans, global technological development and trends led to illustrating the upcoming RE scenario in Bangladesh. R&D, infrastructures and institutions, incentives, grid integration and sustainability issues are significant to cope with the RE target. Challenges and barriers can be overcome through proper programs and plans. Moreover, Bangladesh is a signatory to Paris agreement. As a signatory country, the upholding of strong commitment by the GoB to its responsibilities and pledges, along with the undertaking of appropriate actions and plans, will be a boost to RE growth.

Considering all the progress, potentials, possibilities, capacities, and commitments; the RE target of power sector is as follows:

Phase	Years limit	Target (% of Power Demand)
1 st phase	Up to 2030	20
2 nd phase	Up to 2040	30

To achieve this target, SREDA shall develop a time-bound roadmap/implementation plan according to article 5.1.2 of this policy.

18.0 REGIONAL COOPERATION OF RENEWABLE ENERGY

The cross-border trade of RE based electricity generation will contribute to a more dynamic, efficient, and integrated regional energy market by providing a level playing field among neighboring countries.

With a growing energy demand and increasing emphasis on sustainable energy, enhanced regional cooperation is critical for boosting energy security and overall climate resilience in South Asia. Collaboration with inter-country transmission connectivity, supporting energy markets, and better aligning legislative and regulatory frameworks can enable greater electricity trade among the nearest countries. Such cross-border connectivity with reasonable RE trade on win-win basis will enrich the development of RE in the region.

19.0 RIGHT TO INTERPRETATION

19.1 Section headings are for convenience of reading only and shall not affect the interpretation of any section.

19.2 In case of ambiguity about the interpretation of any provision of this Policy, Government's interpretation shall prevail.

20.0 REPEAL AND REVIEW OF POLICY

20.1 'The Renewable Energy Policy of Bangladesh 2008' shall stand repealed from the date of notification of 'the Renewable Energy Policy 2025' in the official gazette. However, any activities or measures carried out under the said policy immediately prior to its repeal shall be deemed to have been lawfully carried out or adopted.

20.2 The government shall review the Renewable Energy Policy every three (3) to five (5) years and amend it as needed to address emerging challenges, technological advancements, and policy requirements.