THE RENEWABLE ENERGY POLICY, 2025



POWER DIVISION

MINISTRY OF POWER, ENERGY AND MINERAL RESOURCES

PEOPLES REPUBLIC OF BANGLADESH

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GLOSSARY OF ABBREVIATIONS/ ACRONYMS/ TERMS

Bangladesh Accreditation Board BAB

BADC Bangladesh Agricultural Development Corporation

BB Bangladesh Bank

BEPRC Bangladesh Energy and Power Research Council Bangladesh Export Processing Zone Authority **BEPZA** BERC Bangladesh Energy Regulatory Commission

BESS Battery Energy Storage System BEZA Bangladesh Economic Zones Authority

BIDA Bangladesh Investment Development Authority

BIPV Building-integrated Photovoltaics

Bangladesh Inland Water Transport Authority **BIWTA** Barind Multipurpose Development Authority **BMDA**

BNBC Bangladesh National Building Code

B00 Built-Own-Operate

Bangladesh Petroleum Corporation **BPC BPDB** Bangladesh Power Development Board **BPMI** Bangladesh Power Management Institute Bangladesh Rural Electrification Board **BREB**

Bangladesh Small and Cottage Industries Corporation **BSCIC**

BWDB Bangladesh Water Development Board

BTS Base Transceiver Station CDM Clean Development Mechanism Concentrated Solar Power CSP Department of Environment DoE **EPZ Export Processing Zone**

EV Electric Vehicle ΕZ Economic Zone

GoB Government of the People's Republic of Bangladesh

GST Goods and Services Tax Government to Government G2G

Infrastructure Development Company Limited IDCOL **IEPMP** Integrated Power and Energy Master Plan

IPO Import Policy Order

IPP Independent Power Producer

International Laboratory Accreditation Cooperation ILAC

IRD Internal Resources Division

LGED Local Government Engineering Department

Low Tension LT

Ministry of Environment, Forest and Climate Change MoEFCC

MoF Ministry of Finance

MPEMR Ministry of Power, Energy and Mineral Resources

Mutual Recognition Arrangement MRA National Board of Revenue **NBR**

NDC **Nationally Determined Contributions**

NEP National Energy Policy

NGO Non-Government Organization

CS CamScanner

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 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 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 have had significant growth, especially in solar and wind energy, 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, advance the RE market development in the country through resources, technologies, and capacity development, thus facilitating GoB in meeting the RE target specified in Integrated Energy and Power Master Plan (IEPMP), Delta Plan 2100, and any other Climate-related plans or milestones set thereafter. This policy shows the path to decarbonizing the energy system highlighting RE technology adoption, low-carbon investment & framework needed for combating the transition and challenges, aiming for a sustainable future of 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 using batteries for later use, helping to balance supply and demand on 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 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, dams, 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 the electrical grid.
- "Green Energy" means energy produced from renewable sources that do not emit or close to zero emit greenhouse gases, such as solar, wind, and hydroelectric power.
- "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.

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- "Power Utilities" means companies or organizations that generate and/or transmit and/or distribute 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 electricity distribution utilities or other selected entities/consumers under this policy to purchase a certain percentage of their electricity from renewable energy sources.
- "RE Hub" means a centralized facility or system that integrates various renewable energy projects under the same or multiple technologies.
- "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 the program developed in Public Sector, Private Sector, or 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. Energy Storage Systems are also included. In addition, any existing or new technology to be developed during the applicability of this policy would 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 to increase the RE share in the total energy demand of the nation. This policy is also a step for Bangladesh 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 supply of energy in the country.

2.2 Objectives

- To reduce tariff of electricity.
- To harness the potential of RE resources and dissemination of RE technologies in the country.

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- To scale up RE capacity for ensuring energy security, contributing to the RE targets, and reducing the dependency 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 in the country and to utilize Battery Energy Storage Systems (BESS) to integrate more RE into the grid and offer proper grid management.

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 they will develop in future:

3.1 Solar Energy

Bangladesh is naturally bestowed with significant 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

b. Solar home system

c. Rooftop solar (with and without Net Metering)

d. Solar mini/micro/nano/pico grid

e. Solar irrigation

f. Solar EV charging station

g. Solar street light

h. Solar drinking water system

i. Floating solar

j. Solar powered aquaculture

k. Base Transceiver Station (BTS) charging stations

I. Solar thermal power/Concentrated Solar Power (CSP)

m. PV pumping based pumped-hydro storage

- **3.2 Wind Energy:** Next to solar energy resources, the most prospective renewable energy resource is wind in the country. Newly developed wind turbine can generate power from low velocity wind resources to make project commercially viable. Present wind energy technology can be deployed both for a) Onshore wind and b) Offshore wind projects. This policy shall focus on the adaptation, promotion and development of all forms of commercially available wind energy harnessing technology across the country.
- **3.3 Biomass Energy:** Biomass is contemplated as an outstanding, 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, waste management as well as energy generation from the solid wastes, several programs are being taken by the Government; mainly the Incineration, Gasification, Pyrolysis and bio-fermentation are the widely used technologies for Waste to Energy production.
- **3.5 Hydro Energy:** Hydro-electricity produced by turbines driven generators that convert the potential energy of falling or 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 are yet to be explored.

4.0 LEGAL AND INSTITUTIONAL FRAMEWORKS

- **4.1** 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 & promotion of sustainable energy comprising renewable energy & energy efficiency. The Power Division of the MPEMR is responsible for overall policy formulation, execution, and development functions of RE through SREDA.
- 4.3 BERC performs regulatory functions like licensing, tariff, dispute settlement, etc.
- 4.4 Power generation utilities and private power generators for electricity generation

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4.5 Power distribution utilities to provide electricity distribution services.

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

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

- 4.8 Bangladesh Bank, IDCOL, and other financing institutions 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 BPMI 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** Sustainable Energy Development Fund may be established under this policy. 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 for determining 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 their own RE development programs in consultation with SREDA for implementation throughout the country. Those Developers shall regularly provide updated 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 policy or guidelines, like 'Net Metering Guidelines-2018'. Other than government-approved policy, public utilities can buy electricity from renewable energy projects according to the Public Procurement Act. RE Project developers are required to inform SREDA and relevant utilities about their projects and their generation records.
- 5.1.5 Government shall facilitate the cross-border trading of renewable and clean energy with the neighboring countries.
- **5.1.6** SREDA shall encourage human resource development and local production of renewable energy equipment, facilitate and monitor the quality of renewable energy equipment, and will initiate in setting up 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 a regulatory obligation to the generation & distribution utilities and consumers. SREDA will develop a mechanism to introduce RPO & REC.
- **5.1.8** The project developer will have to make connectivity with the distribution/transmission network (if needed) maintaining its standard subject to 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 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, 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 scaleup 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.
- **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.
- **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/nominated Authority 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 will promote the solarization of existing grid-connected Irrigation pumps and diesel 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 set up RE plants within their premises as private charging infrastructure/stations 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, dams of hydro stations, 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 as per national interest considering all aspects.
- **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.



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5.7 Other Solar Technologies

5.7.1 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 technology identified as RE, within the scope of this policy.

5.8 Promotion of Wind Energy

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

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

5.9 Promotion of Biomass Projects

5.9.1 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.

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

5.9.3 Developer of the biomass project shall be allowed to use/sell the power for captive as well as third party sale.

5.9.4 Biogas plants may be developed for cooking or bottling or bagging.

- 5.9.5 For large biomass electricity projects (i.e., greater than 1 MW), the project developer must demonstrate that the biomass is being sustainably harvested and that no adverse impact will result from that development of the project.
- 5.9.6 Production and use of bio-fuels may be encouraged without compromising crop production and food security.
- 5.9.7 For promoting biomass projects, a guideline will be developed by SREDA.

5.10 Promotion of Waste to Energy Projects

5.10.1 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 or third-party sales within the country.

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

The government will facilitate the development of Battery Energy Storage Systems (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.

- **5.11.1** 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.
- **5.11.2** 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.
- **5.11.3** 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.
- **5.11.4** 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.

5.12 Other RE Sources

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



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5.13 Innovation/Pilot Projects

5.13.1 The Government shall promote new and emerging technologies in the Country.

5.13.2 The Government shall endeavor Research and Development activities for the sustained 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 there under. Co-existence of RE project with agriculture (i.e. agri-voltaic) is 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. Land having no agricultural value and 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 Solar Projects. The Government can issue a directive order or a policy guideline so that these lands can be used for RE projects.

6.6 Land availability for RE projects is very limited in Bangladesh. The government needs to consider the idea of doing a land study that identifies options for land use for utility-scale renewable energy. The study should include the benefits of using public land, identifying land that might have no agricultural value, and understanding the advantages of designating zones for renewable energy 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 it's 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.
- 7.3 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 as per Private Power Generation Policy. 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 that is bankable for accessing public, private, development partners, and carbon markets for more investments.
- **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 of renewable energy equipment.
- **8.1.3** The Government shall facilitate investment in RE and energy efficiency projects. Parties may raise local and foreign finance under the applicable legal framework.
- 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.



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- **8.1.6** Government provisions for extending appropriate financing could be organized to 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 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 components including solar cells, Solar panels, Inverters, Mounting structures, cables, Batteries, etc. The government may also provide a 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, incentives to the farmers may be provided.
- 8.1.11 Use of grid electricity and gas for water heating will be discouraged to promote RE.

8. 2 Financial Incentives

- 8.2.1 To facilitate RE in the total generation mix, all RE components 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 the renewable energy sector will also receive the benefits applicable to all 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 bring in, without customs duty, items 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 specified.
- 8.2.5 Power division will fix up the acceptable mechanism to reach 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 set up Electric Vehicle (EV) charging stations using the distribution utility network under open access facility.
- 8.2.8 Stamp duty to the investor 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 of govt. duty.

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 Power Division.

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 and its amendments issued from time to time.
- **10.1.2** Grid-interconnected renewable sources must comply with the Grid Code.



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- 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 & 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/tle-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 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 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/orders/practices of the BERC/utilities 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 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 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. It could be 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 should follow the respective program guidelines to implement their project. SREDA will take the initiative to amend these guidelines as needed.

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 technology.
- 12.4 BEPRC and BPMI shall also be equipped for conducting training and R&D activities on different RETs.
- 12.5 SREDA shall facilitate R&D initiatives on RE components 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 the Power and Energy sector. 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 Research and Development (R&D) activities for the advancement of RE.

13.0 AWARENESS & EDUCATION

- 13.1 Initiatives shall be taken by regulatory bodies to raise awareness among the public, students, and stakeholders.
- 13.2 Inclusion of Renewable energy-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 (a) to improve knowledge and understanding of RE, fostering a favorable environment for the achievement of goals of RE policy, (b) to identify renewable and non-renewable sources of energy, (c) to enhance motivation for developing strategies to overcome challenges and, (d) to support the Government's vision of transitioning towards RE in the power sector and more importantly, (e) to develop Human resources for RE Technologies.

14.0 ENVIRONMENTAL ISSUES

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

- 14.1 All RE projects need to be included in 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 should 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 components 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** In collaboration with SREDA, a manual for quality assurance for Solar Panels' and RE components shall be developed and published by BSTI. In addition, 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 components can be tested.



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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 components, 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 have the bindings for abiding 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 and components of solar energy plants including its after-life disposal. 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 an RE Plant. 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 focused its future opportunities. Techno-economic impact, alignment of policy with national & international plans, global technological development, and trends led to illustrating the upcoming RE scenario. R&D, Infrastructures & Institutions, Incentives, Grid integration & sustainability issues are significant to cope with the target. Challenges and barriers can be overcome through proper programs and plans. Moreover, Bangladesh is a signatory of Paris agreements. Countries containing capacity, Governments upholding strong commitment, and undertaking action and plan will be a boost to RE growth.

Considering all the progress, potentials, possibilities, capacities, and commitments; the RE target may be set as follows:

		Target	
Phase	Years limit	MW (cumulative)	%
1st phase	Up to 2030	6,145	20
2 nd phase	Up to 2041	17,470	30

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 a win-win basis will enrich the development of RE in the region.

19.0 RIGHT TO INTERPRETATION

19.1 Section headings are for convenience 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 2008 shall stand repealed from the date of notification of the Renewable Energy Policy, 2025 in the official gazette.



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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. Page 17 of 17

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