

Bangladesh: Legal Framework & current solar pv development

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Country Profile: Bangladesh

* Latitude: 20°34′ & 26°38′N

Longitude: 88°01′ & 92°41′E

❖ Total Area: **147,570** km²

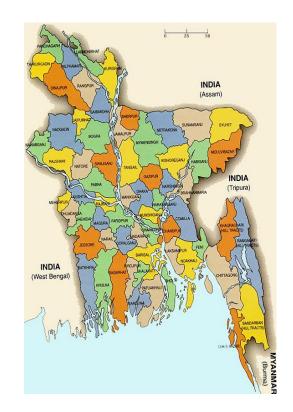
❖ Population :163.7 Million

Per Capita National Income:

\$ 1909 (FY 2018-19)

SOLUTION * GDP Growth Rate:

8.13 % (FY **2018-19**)





Source: Bangladesh Economic Review 2019

Power Sector : At a Glance

	Generation Growth	: 10 % (Av.)
	Installed Capacity (Inc. Capti	ve): 22,143 MW
	Power Import	: 1,160 MW
	Consumers	: 34.8 Million
3	Transmission Line	: 11,650 Ckt. km
	Distribution Line	: 5,37,000 km
	Distribution Systems Loss (FY 17-18)	: 9.35 %
炸	Per Capita Generation	: 510 kWh
X	Access to Electricity	:95%

Share of Renewable Electricity

Fuel/Resource	Installed Capacity (MW)	Share
Coal	524	2.37%
Gas	10628	48%
HFO	5208	23.52%
HSD	1795	8.11%
Import	1160	5.44%
Renewable	627.91	02.84%
Captive	2200	9.94%
Total	22143	

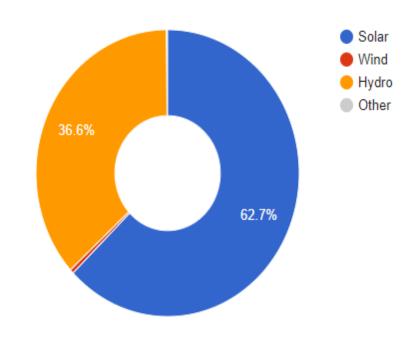
Source: www.renewableenergy.gov.bd, accessed on 26-01-2020

Electricity Generation from RE

Table: Electricity Generation from Renewables

Technology	Off-grid (MW)	On-grid (MW)	Total (MW)
Solar	313.55	80.43	393.98
Wind	2	0.9	2.9
Hydro		230	230
Biogas to Electricity	0.63	0	0.63
Biomass to Electricity	0.40	0	0.4
Total	316.58	311.33	627.91

Table: Share of Renewables



Source: www.renewableenergy.gov.bd, accessed on 25-01-20

Legal framework

Article 18A, The Constitution of the People's Republic of Bangladesh Electricity Act 2018 (Act No. VII of 2018) Sustainable & Renewable Energy Development Authority Act 2012 (Act No. 48 of 2012) **Quick Enhancement of Electricity & Energy Supply (Special Provisions**) Act 2010 (Act No. 54 of 2010) Bangladesh Energy Regulatory Commission Act 2003 (Act No. of 2003)

Legal framework

Renewable Energy Policy of Bangladesh 2008 Bangladesh Climate Change Strategy & Action Plan [BCCSAP] 2009 **Bangladesh National Building Code**[BNBC] **Net Metering Guidelines 2018** Private Sector Power Generation Policy (PSPGP) 1996 (Revised in November 2004) **Statutory Regulatory Orders (SROs)**

Dedicated Agency for RE Promotion



Dedicated Financing for RE

- **❖** BB's revolving fund of Taka 2(Two billion)
- **❖** Bangladesh Climate Change Trust Fund (BCCTF). Tk.3500 Core has been allocated during FY10-FY 19.
- **❖ Bangladesh Climate Change Resilience Fund (BCCRF)**
- **❖** Infrastructure Development Company Limited (IDCOL)
- **❖** Bangladesh Infrastructure Finance Fund Limited (BIFFL)
- **❖** 50% allocation of Taka for Work (KABITA) and Test Relief (TR) has been allocated each year for solar system installation(in FY 2018-19 a total of tk. 1179 crore was allocated).

Incentives for RE

- ❖ Exemption from payment of corporate **income tax** for **15** years from commencement of commercial operation.
- **Foreigners** employed in those companies are exempted from income tax for 3 years.
- * Tax exemption on interest on foreign loans.
- * Tax exemption on Royalties, Technical know-how & Technical Assistance Fees.
- ❖ Tax exemption on **capital gains** from **transfer** of **shares**.

Source: SRO NO.211-Law/Income-tax/2013, the Bangladesh Gazette Extraordinary, (July 1, 2013). (Amended vide SRO No. 254/Law/2013 dated November 18, 2013 & SRO No. 246/Law/2016 dated July 26, 2016)

Incentives for RE

- ❖ Private power companies are allowed to import plant & equipment imported on a permanent basis & erection materials, machinery and equipment on a temporary basis without payment of custom duties, VAT & supplementary duties¹.
- ❖ Spare parts up to 10% of the original value of total plant and equipment within 12 years of commercial operation without payment of customs duties, VAT, supplementary duties & any other surcharges.²
- **Exemption of import tax, VAT & supplementary duties (if any) on 16 items** (mentioning HS Code) of solar panel.³

Current Solar PV Development

- ❖ Solar home system (5.8 million)
- ❖ Solar mini-grid (26)
- ❖ Solar irrigation {(1514) 40 MW}
- **❖** Solar charging station {(12)0.253 MW}
- ❖ Solar drinking water systems (152)

- ❖ Solar street light (20,000)
- ❖ Rooftop solar under NEM (12MW)
- ❖ Floating solar (10kW)
- **❖** Solar park {(4) 38 MW}
- ❖ Solar telecom towers (1,933)

Unsolicited Offers for Setting up Solar Parks

SL#	Status	Number of Projects	Capacity (MW)
1	PPA signed	11	685
2	LoI issued	13	810.77
3	Tariff Negotiation Stage	02	75
4	Total	26	1570.77
5	Cancelled	03	350
6	Implemented	3	35.4
7	Total under construction	20	1185.37

Current Solar PV Development

- ❖ Currently 95% of Bangladesh's population has access to electricity with 12% contribution SHSs & solar mini-grid;
- ❖ As of now, 4 solar parks with aggregated capacity of 38MW are feeding electricity to the grid;
- **❖** Thirteen solar parks with aggregated capacity of 950MW is under tendering process;
- ❖ Feasibility study for 50 MW floating solar is going on and setting up of 10 MW floating solar is underway.

Current Solar PV Development

- ❖ Per kWh. electricity generated from rooftop solar in Bangladesh has now come down to the range of Tk. 5 to 6 (5 US Cents) depending on solar insolation, equipment used & mode of investment.
- ❖ Price of grid electricity for industrial consumers is now in the range of Tk 7.25 to 10.19 (6.5 -12.5 US Cents) per unit (kWh) depending on voltage level & time of use.
- ❖ Thus, it makes sense for industrial consumers to set up rooftop solar and that too without further incentive.

Thank you
I am now open
to
Questions