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SOUTH ASIA SUBREGIONAL WORKSHOP

INCLUSIVE CLEAN ENERGY TRANSITIONS IN BANGLADESH, MALDIVES AND SRI LANKA

26-27 May 2025 • Dhaka, Bangladesh



Bangladesh

Innovative Governance Solutions to Increase Access and Improve Affordability



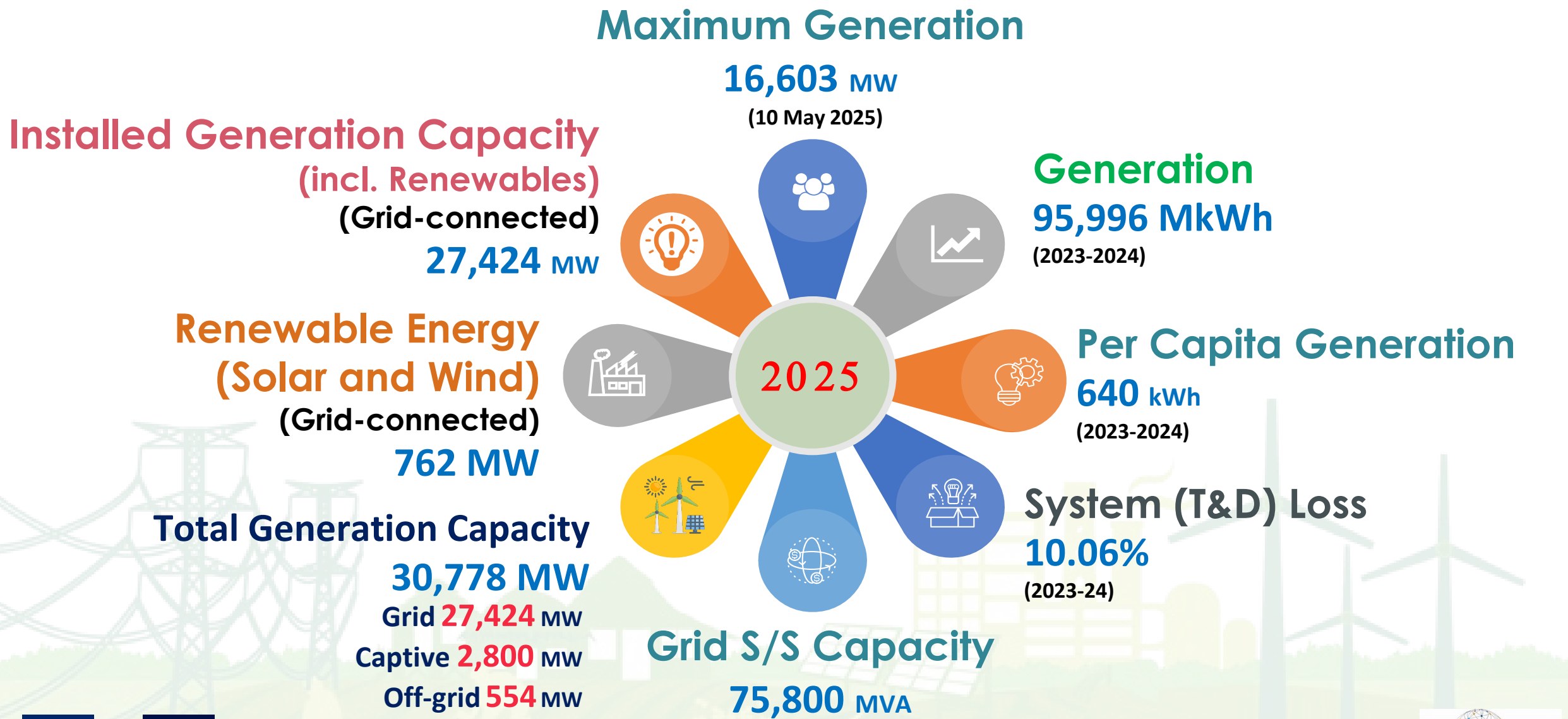
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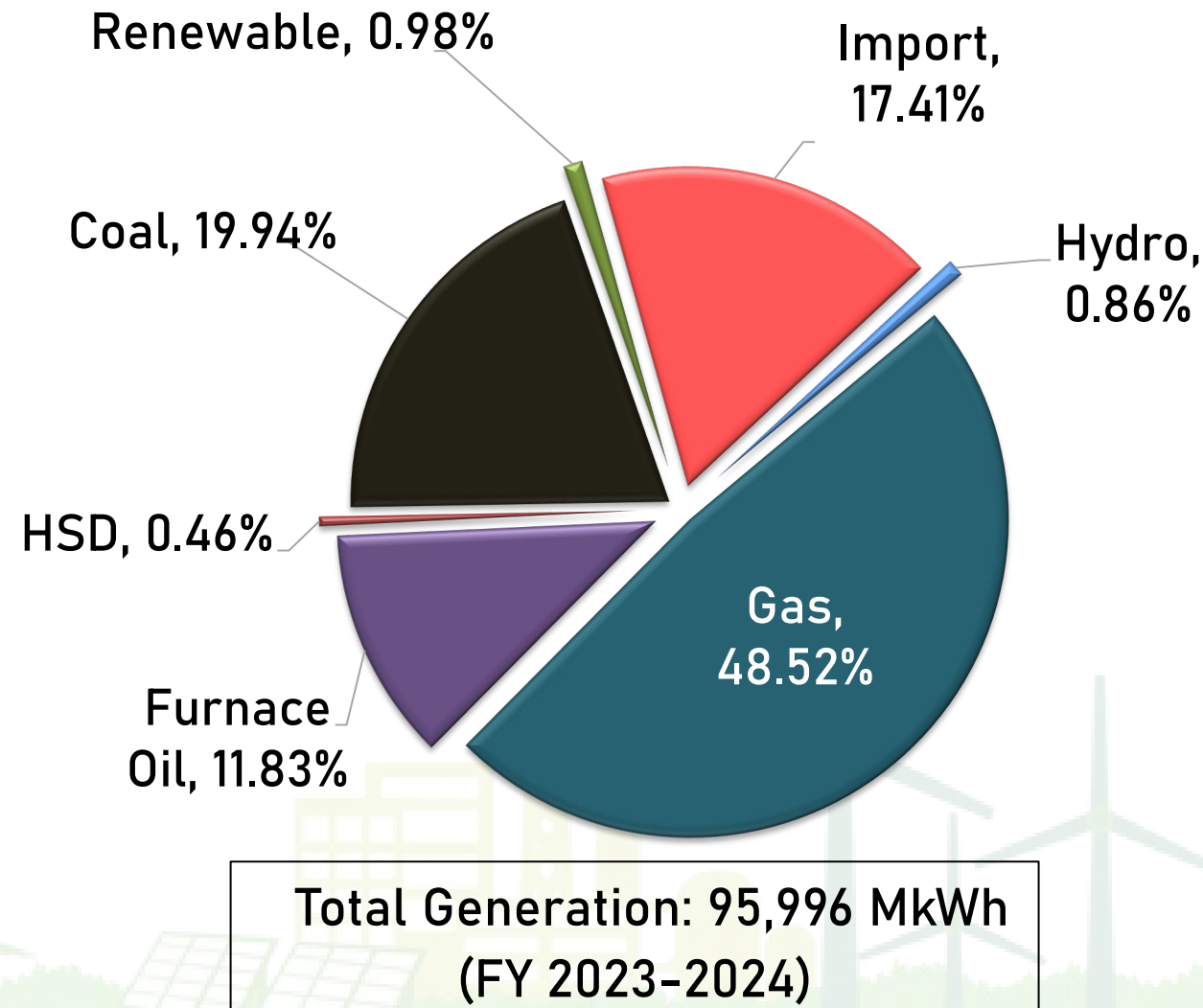
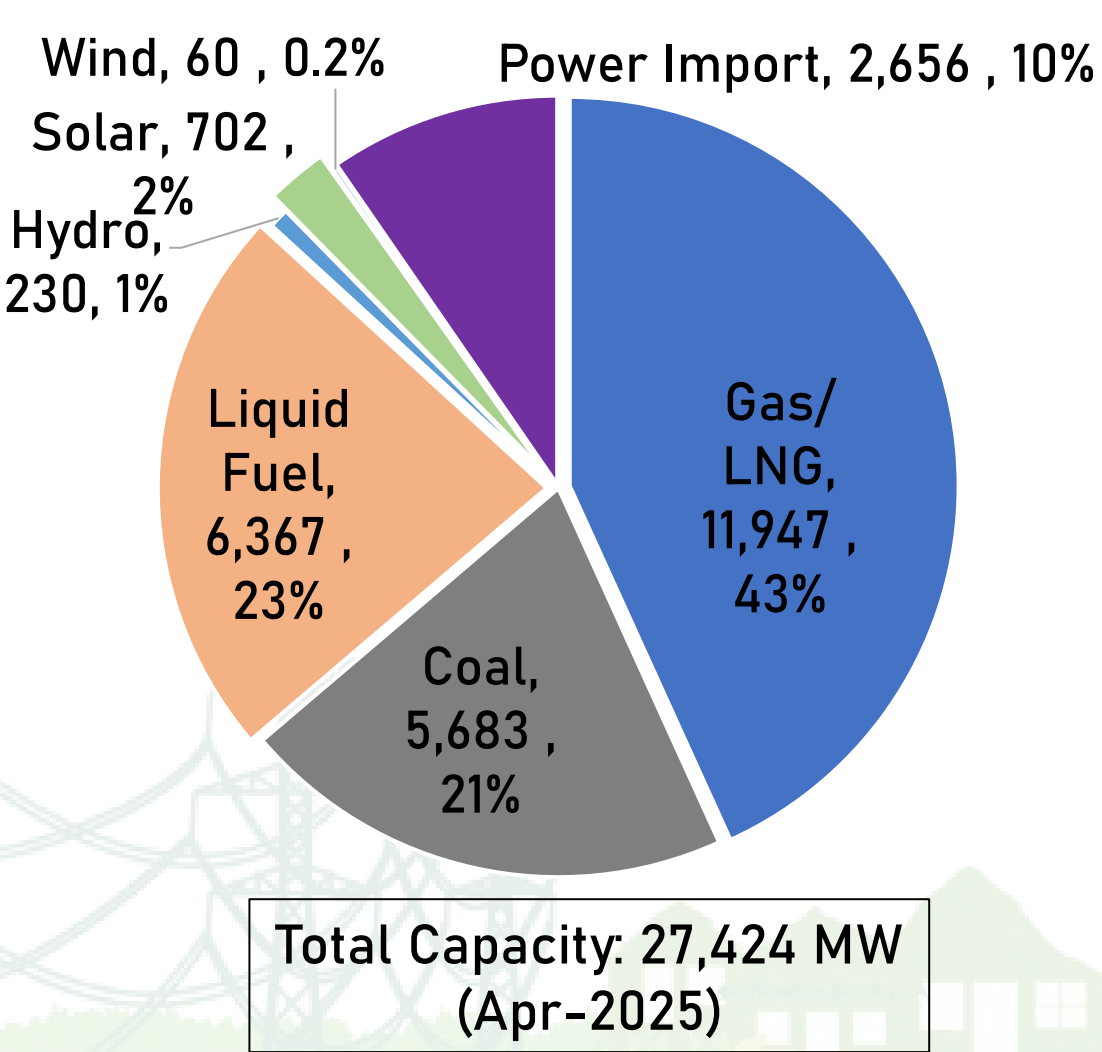
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Current State of Bangladesh Power System



Fuel Mix [Capacity and Electricity Generation]



Bangladesh targets Transition towards Clean Energy

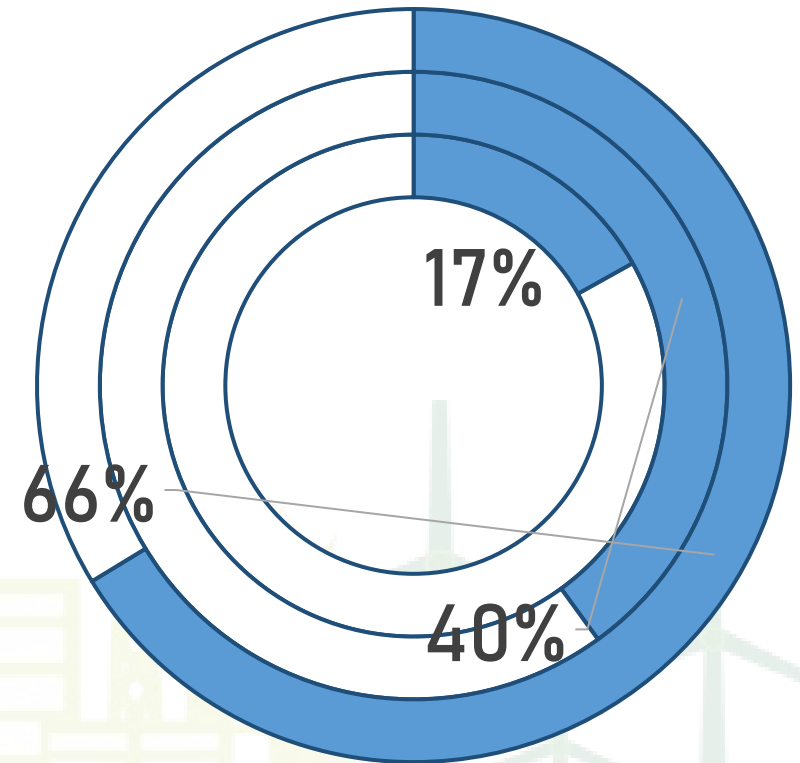
Integrated Energy and Power Master Plan (IEPMP)-2023 Targets:

17% Clean Generation by 2030

40% Clean Generation by 2041

66% Clean Generation by 2050

IEPMP-2023



**Increase in Clean
Energy Share**

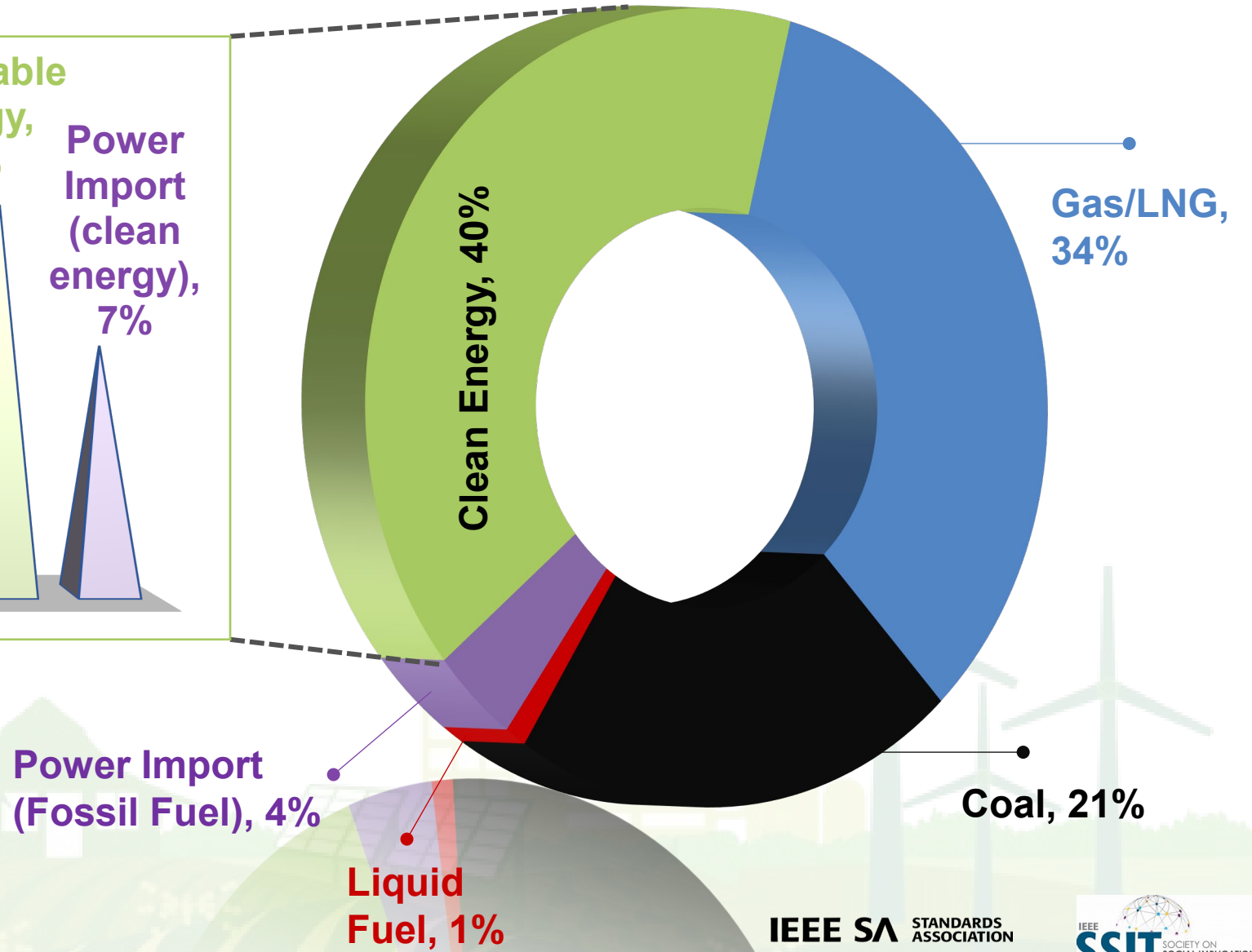
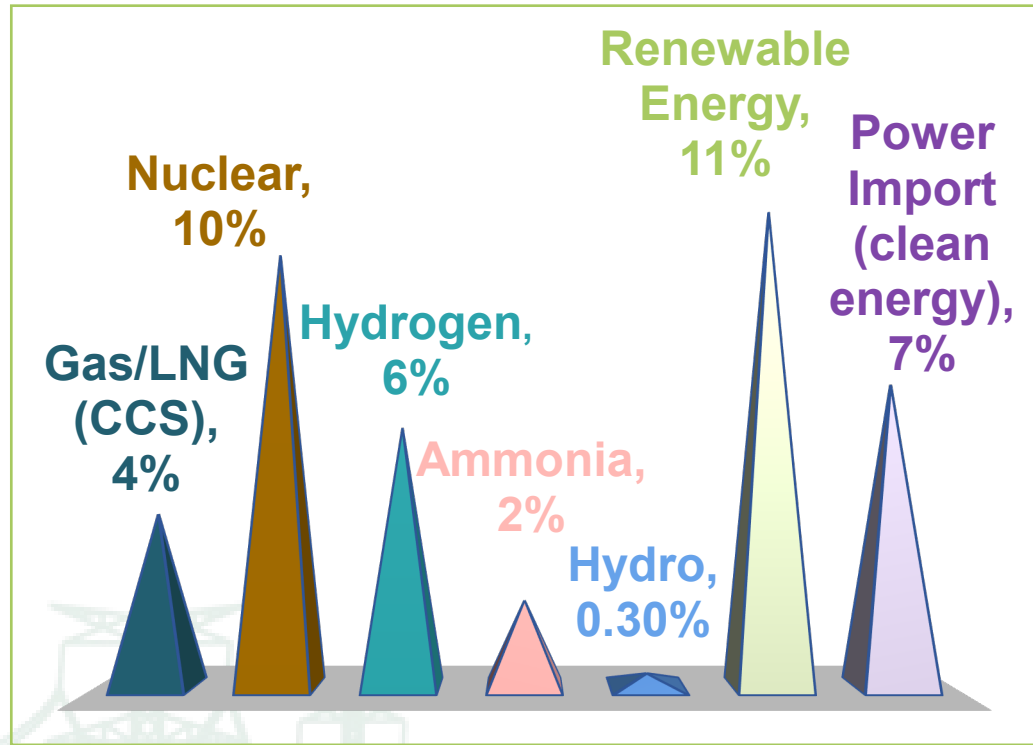


**Decrease in
Carbon Emission**

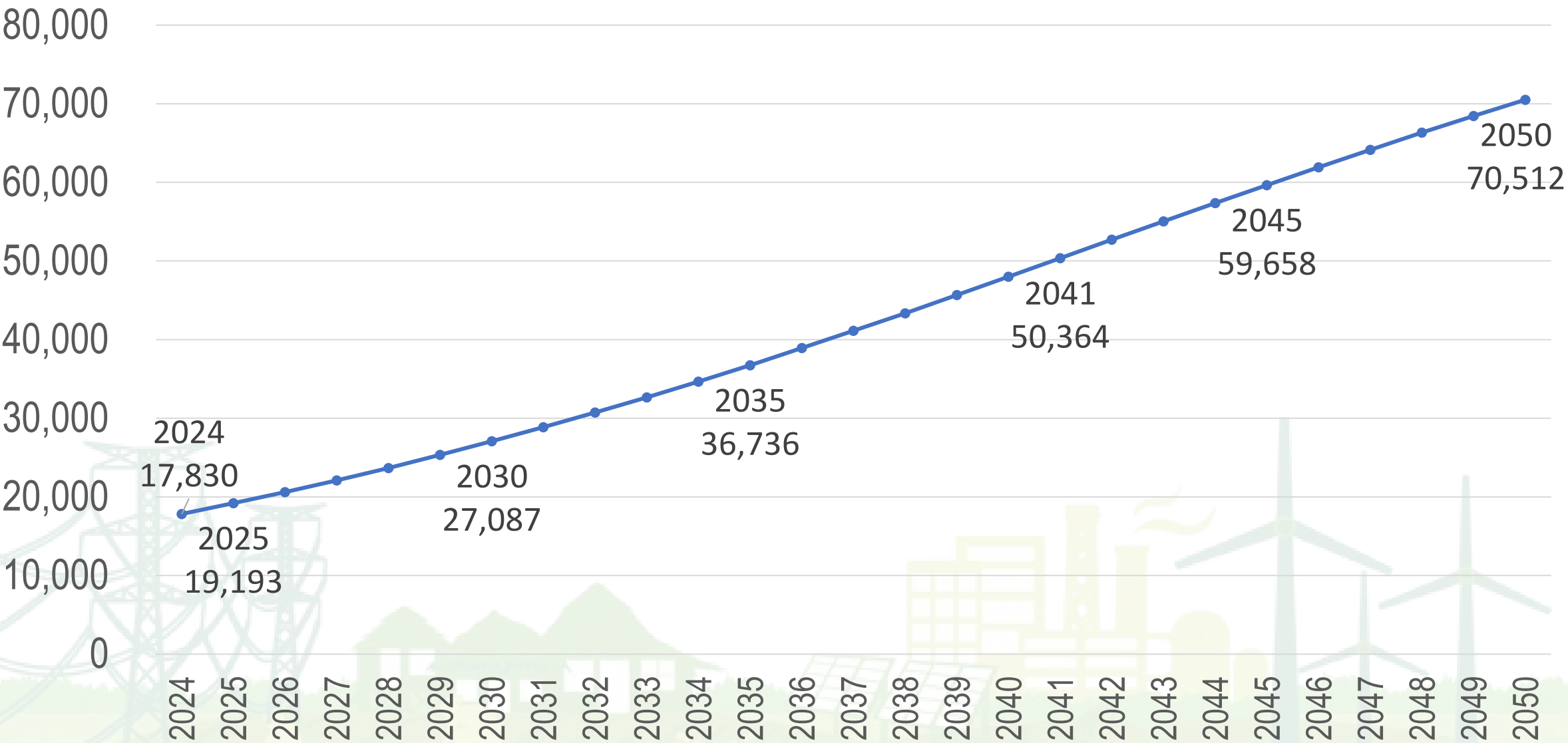
Reach Net Zero Emissions by 2070+

(Considering economy development stage and difficulties)

Clean Energy Target 2041 [IEPMP-2023]



Future Demand Forecast [IEPMP-2023]



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Future Generation Capacity Target [IEPMP-2023]

2030

Total*: 39,324 MW

Renewables: 3,912 MW

Power Import: 3,156 MW

2041

Total*: 74,253 MW

Renewables: 11,185 MW

Power Import: 7,656 MW

2035

Total*: 54,109 MW

Renewables: 7,013 MW

Power Import: 5,656 MW

2050

Total*: 1,11,139 MW

Renewables: 26,231 MW

Power Import: 15,656 MW

** Including Renewables and Power Import*

Renewable Energy Capacity Target [IEPMP-2023]

	2030	2041	2050
Solar PV	5,061	9,500	18,000
Solar Park	3,061	3,500	6,000
Rooftop	2,000	6,000	12,000
Wind	750	7,575	20,000
On-shore	750	1,575	5,000
Off-shore	0	6,000	15,000
Waste-to-Energy	94	150	230

Existing & Ongoing Plan: Renewable Energy based Power Plants

Type	No. of PPs	Capacity (MW)
Existing		
Solar	14	702
Wind	1	60
Total	15	762
Under Construction		
Solar	10	321
Wind	2	57
Waste-to-Energy	1	43
Total	13	421
Under Tendering Process		
Solar	60	5,481
Total	60	5,481
Under Planning		
Solar	32	2,436
Total	32	2,436

About 9,000
MW grid-
based
renewable
capacity by
2030

Challenges

- Scarcity of available land for solar power plant
- Less wind speed, Lack of comprehensive wind mapping and detailed feasibility study
- Introduction of New clean fuels such as Hydrogen and Ammonia
- Implementing carbon capture technologies like CCS / CCUS
- Policy and Regulatory supports
- Transmission and Distribution Infrastructure constraints
- High investment requirement

Measures taken by GoB and Way forward

- Ensuring hundred percent quality and affordable power to all
- Emphasizing Rooftop solar and Net Metering, targeting 12 GW by 2050
- Utilizing spare unused lands, Multipurpose use of lands, Floating Solar technology
- Comprehensive wind mapping and detailed feasibility study
- Effectively Executing Energy efficiency and conservation, as per 'Energy Efficiency and Conservation Master Plan (EECMP)-2016'

Measures taken by GoB and Way forward (contd.)

- Capacity building for the novel fuels and technologies like Hydrogen, Ammonia, CCS / CCUS
- Regular Research on state-of-the-art technologies
- Implementation of Smart grid: Smart pre-paid meters, SCADA, EMS, BESS, etc.
- Transmission and Distribution Infrastructure development
- Timely Revision/Upgradation of Renewable Energy Policy-2008, Net Metering Guidelines-2018

Thank You



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