# COGEN WORLD COALITION (CWC) Webinar 'INDIA in FOCUS"

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## Cogeneration Association of India



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### About Cogen India:

- Cogeneration Association of India established in 2002.
- Primary objective: To represent and assist stakeholder interest of Bagasse based Cogeneration and Bio-mass based cogeneration.

### The All India Energy Sector

- Energy /Power is included in the 'Concurrent List' of the Constitution of India.
- ➤ Policy framework decided both by the Central Government and respective State Governments
- Private participation allowed.
- ➤ Governed by the Electricity Act 2003:

#### Features:

- Consolidation of laws relating to generation, transmission, distribution, trading and use of electricity.
- Development of electricity industry and competition therein.
- Protection of consumer interest.
- Rationalization of electricity tariff etc.
- ➤ Independent Ministry of Power and Ministry of New & Renewable Energy headed by a common Minister at the Central Government.
- Each State Government has its independent Department of Power & Energy too

### Sectoral contribution of installed capacity (as on 30<sup>th</sup> June 2023)

Central Sector	99005 MW	-	25%
State Sector	104969 MW	-	26%
Private Sector	199785 MW	-	49%
Tota	al 403.769 GW	7	

#### Power Mix:

Type	Installed	Capacity	Percentage Share
	(MW)	(GW)	
Fossil Fuel	2,36,065	236	59%
Renewable	1,67,694	168	41%

### Renewable Power Mix:

Type	<b>Installed Capacity</b>		Percentage share	
	(MW)	(GW)	Potential	
Solar	57,706	58	34%	
Wind	40,788	41	24%	
Cogeneration	10,206	10	6%	
Hydro	46,850	47	28%	
Small Hydro	4,888	5	3%	
Waste to Energy	477	0.5	0.5%	
Nuclear	6,780	7	4%	

#### Indian Balance as on 2021-22:

Requirement	13,79	9,812	Million units	1,379.812 GW
Available	13,7	74,024	Million units	1,374.024 GW
Shor	tfall -:	5,787	Million units	-5.787 GW

#### Peak Energy Scenario:

Peak Demand	2,03,014	Million units	203.04 GW
Fulfilment	2,00,539	Million units	200.539 GW
Short	tfall -2475	Million units	- 2.475 GW

### Cogeneration at a Glance:

➤ India is committed to achieve 500 GW of renewable energy by 2030 as announced at the UN Climate Change Conference in Glasgow in Conference of Parties (COP26)

≥ 332 GW Renewables to be added by 2023.

> Huge potential

### Significance of Cogeneration in the Indian context

- Relevant to the farmers of India for incremental income generation
- Ensuring Circular Economy
- Bagasse based cogeneration serves dual purposes of Generation as well as Consumption.
- 60% Energy supplied to National Grid.
- 40% Captive Consumption by Sugar Industry itself.
- Absolutely minimization/No transmission Losses at all.
- Revenue Generation of Rs. 12,000 Cr (\$ 1488 Million)
- 18,000 MWs Potential available for Capex
- Significant reduction in Carbon footprint about 19500 MT

#### Cogen India Activities in Brief

#### **Policy promotion:**

- Striving with Centre & State Governments for ensuring conducive policy framework for Cogeneration
- ▶ 'One-Stop Destination' for all CHP Stakeholders to serve Technical, Financial and Legal issues

#### Organization of workshops/training programs:

- Bringing together stakeholders for technology development and improvement
- 60 Business Meets conducted
- Over 250 operators trained

#### Cogen India Activities in Brief (Contd...)

#### **Information dissemination:**

- Sugar Cogeneration Handbook 2021: First of its kind compendium of articles on CHP
- ▶ <u>Industrial Cogeneration India Newsletter</u>: Sixty Nine issues of the newsletter published. Reaches to over more than 1500 stakeholders
- Nisarg Urja: A Bi-monthly newsletter in regional language catering local stakeholders

### National Cogeneration Awards (NCA)

► Launched in 2022 for the first time in India dedicated to CHP

- Recognition of Talent, Efficiency and Productivity
- Fully digitalized system based on quantitative and qualitative parameters

## Thank You

