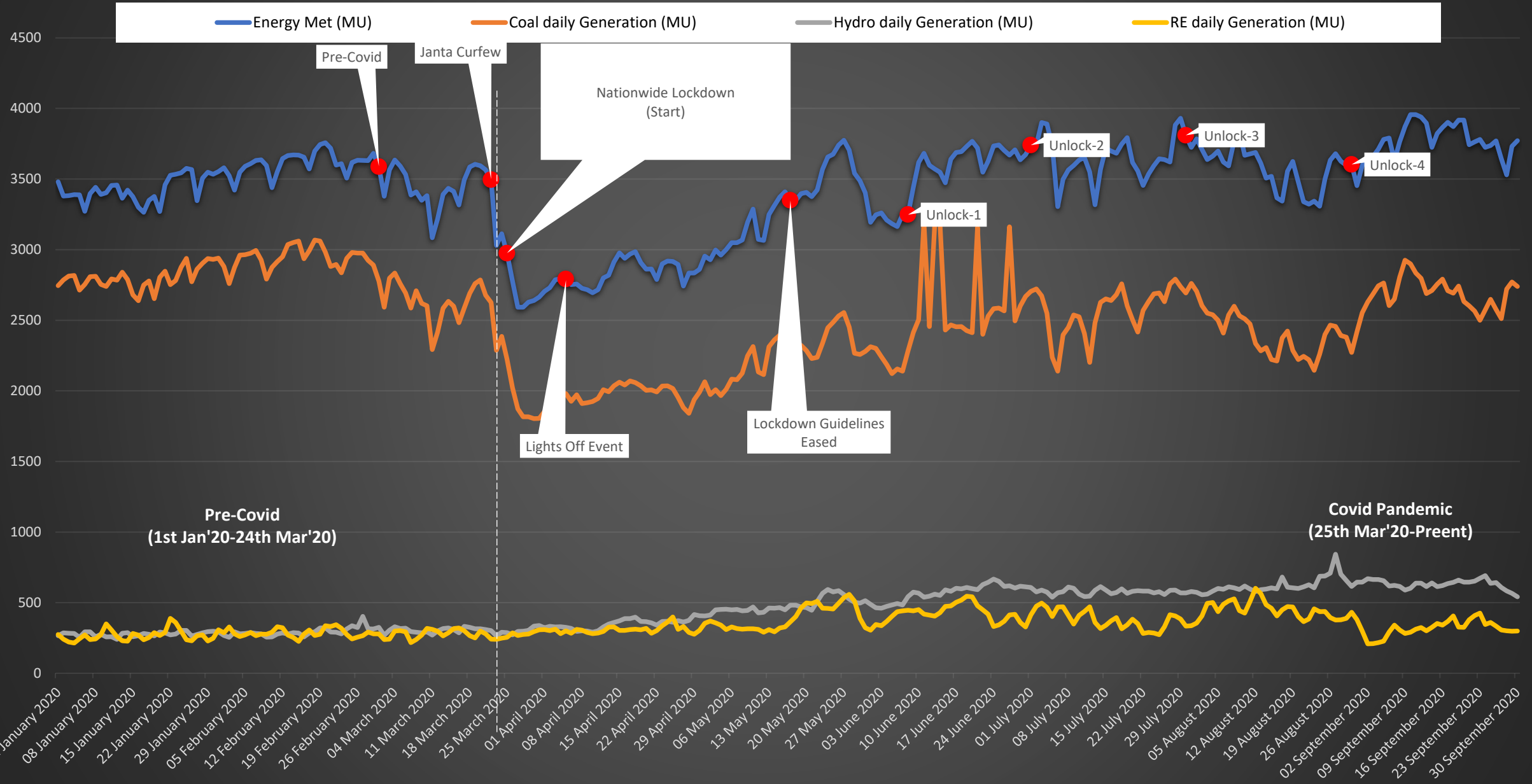


COVID-19 IMPACT ON INDIA'S ELECTRICITY SECTOR



TEAM VASUDHA

Change in Daily Generation and Electricity Consumption during Pandemic



IMPACT OF COVID-19 ON POWER SECTOR VALUE CHAIN – A SNAP SHOT

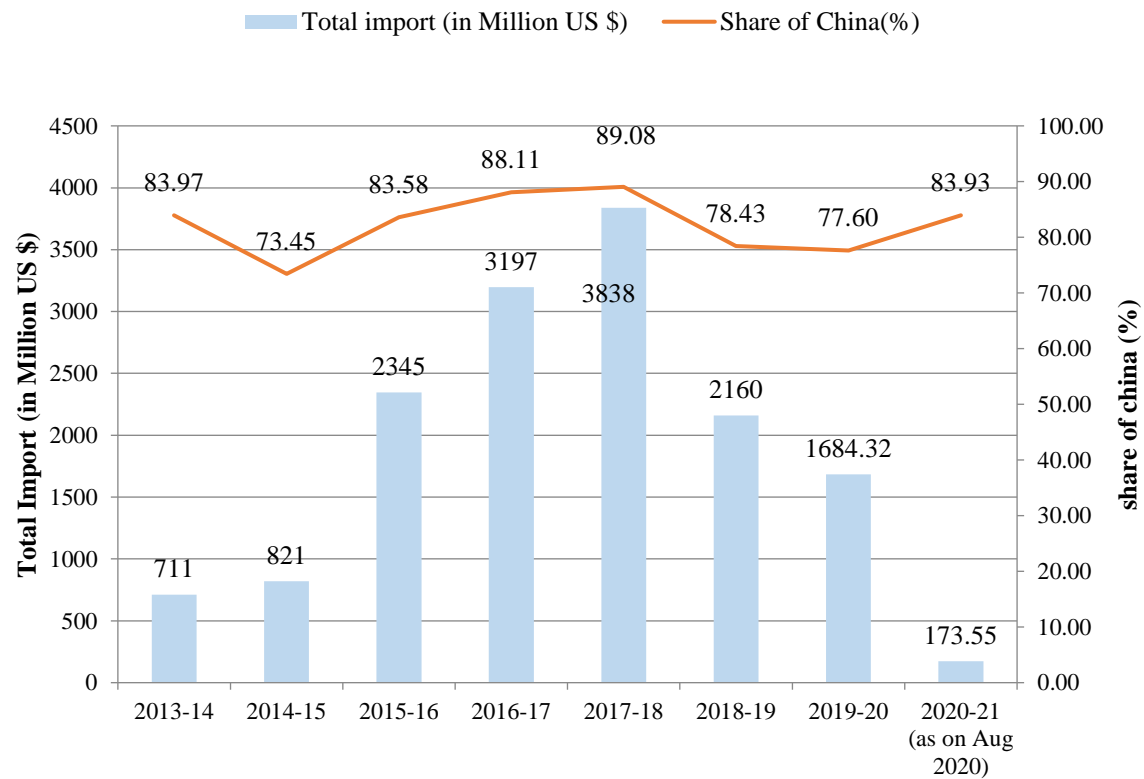
	2020	Actual Energy Consumption	YoY Change in energy Consumption		Amount Billed to Discoms	Amount paid by Discoms		Monthly Thermal PLFs	YoY Change in emissions
		MU	Percentage		Rs. (Billion)	Rs. (Billion)		Percentage	Percentage
PRE-COVID	JAN	105,158	+3.95%	DEMAND DECLINE	18.3	12.2	LOW REVENUES & RISING OVERDUES	57.61%	1%
	FEB	103,815	+11.73%		17.2	9.5		60.35%	-9%
	MAR	98,952	-8.68%		18.2	18.9		52.55%	-14%
LOCK-DOWN PERIOD	APR	84,550	-23.21%		19.6	5.1		42.40%	-32%
	MAY	102,089	-14.94%		17.6	6.5		47.92%	-23%
UN-LOCK PERIOD	JUN	105,086	-10.94%		15.3	7.6		49.52%	-19%
	JULY	112,147	-3.72%		15.9	16.8		52.92%	-3%
	AUG	109,657	-1.67%		16	12		49.01%	-3%
	SEPT				14.7	11.1		49.58%	9%
	OCT								

SHRINKING PLFs

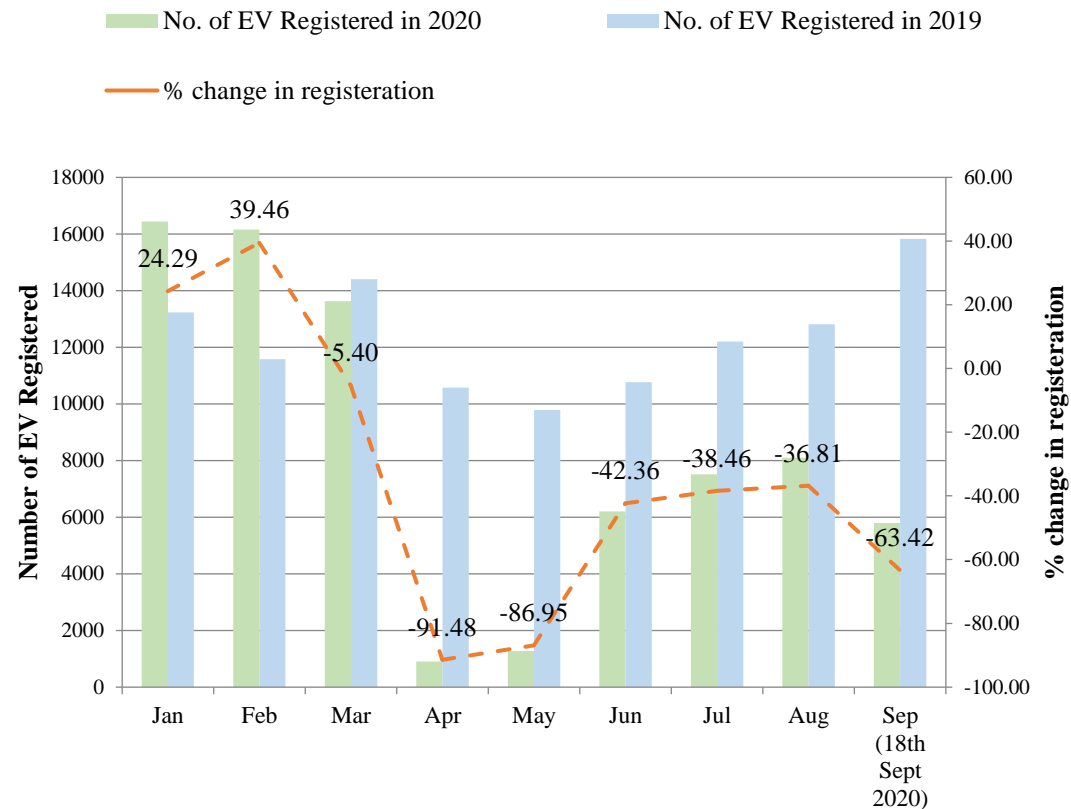
LESSER EMISSIONS

SUPPLY CHAIN DISTRUPTION

Trends of import of solar equipments



Number of EV registered and % change in registration



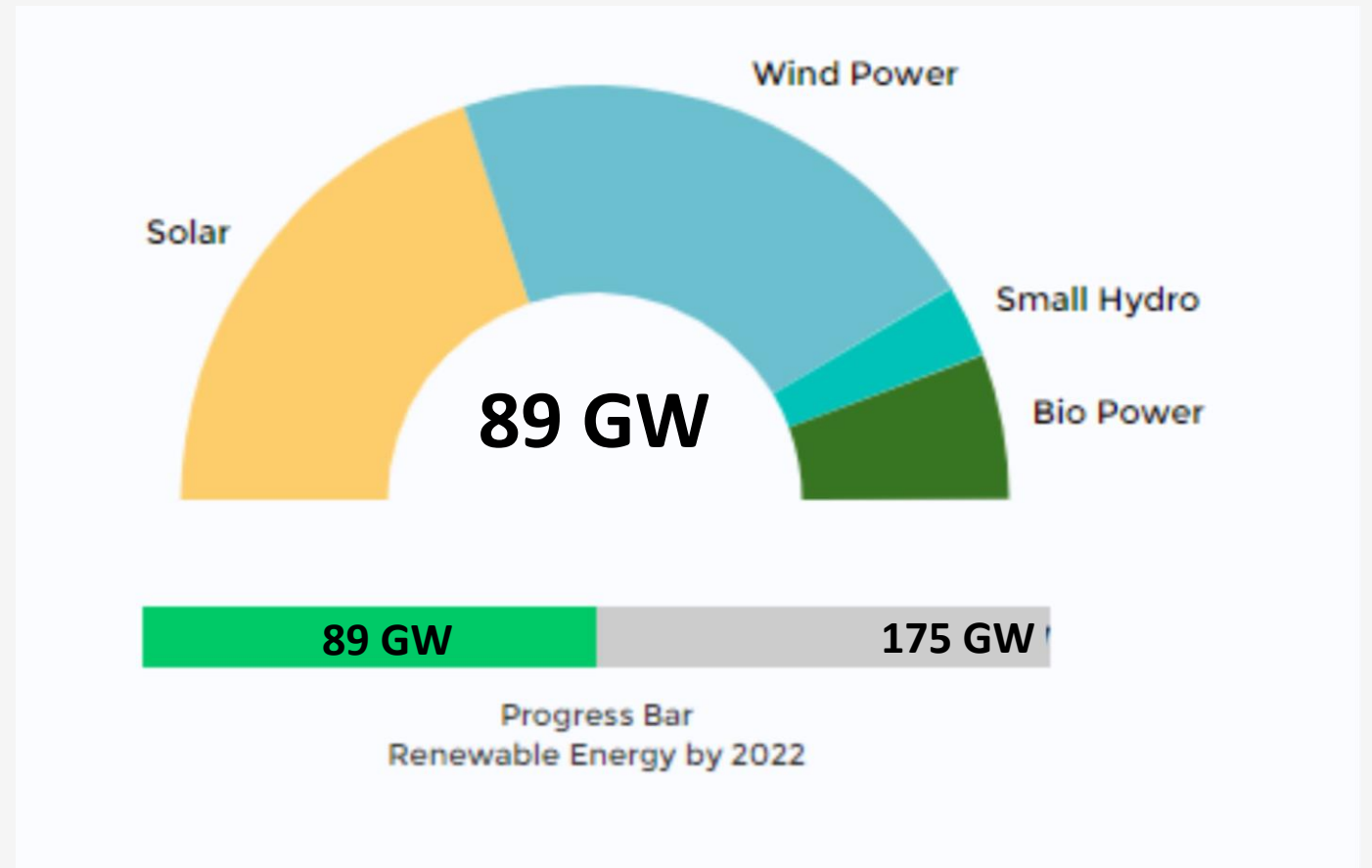
IREDA projects lowest revenue growth in 15 years for the financial year 2020-2021

Source: <https://energy.economictimes.indiatimes.com/news/renewable/ireda-projects-lowest-revenue-growth-in-15-years/79736173>

175 GW RE Target by 2022

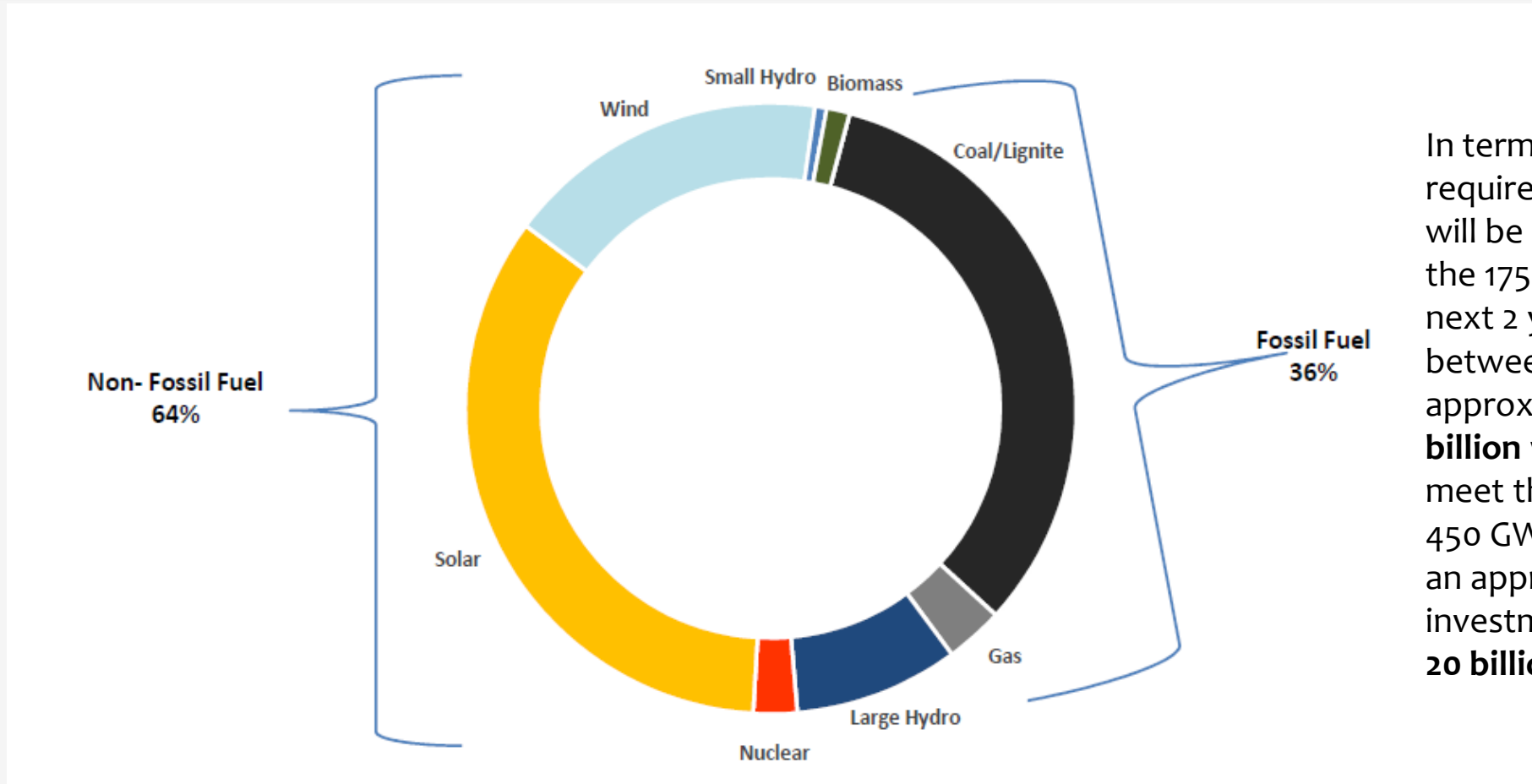
Current Progress

- The total installed capacity & capacity in pipeline is **178 GW**. This comprises **88.79** GW of actual installed capacity as of November 2020



Will the supply chain disruption delay in achieving the target of 175 GW??

Proposed RE Installed Capacity by 2030



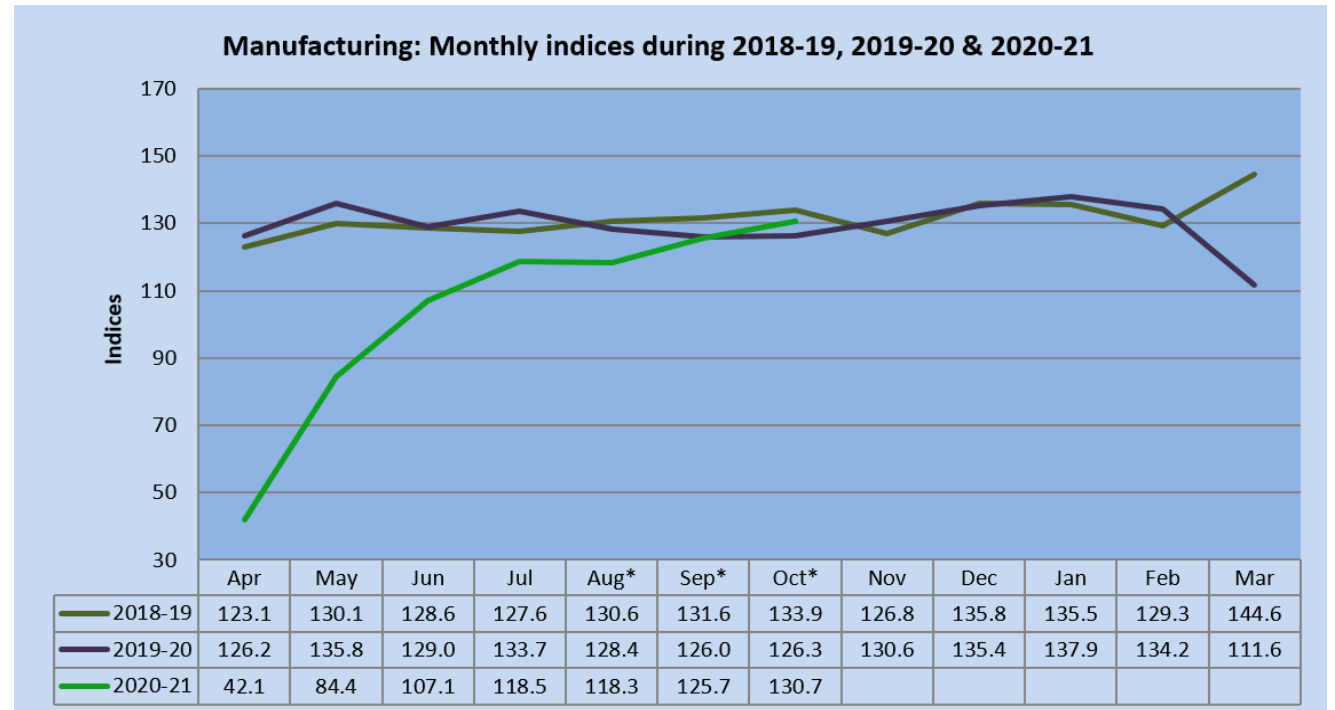
In terms of financing required, **USD 38 billion** will be required to meet the 175 GW target in the next 2 years, and between 2022 – 2030 approximately **USD 160 billion** will be required to meet the 2030 target of 450 GW. This will call for an approximate annual investment of **US\$ 15 – 20 billion** after 2022.

- As per CEA, Proposed Renewable energy installed capacity is **435 GW by 2030** which includes solar, wind, small hydro and biomass

- Non-fossil fuel share is expected to reach **64% by 2030**

Other Impacts of COVID-19 – Socio and Economic Impacts

- India's industrial output saw a huge contraction in the months of April to September 2020, as compared to the corresponding period in 2019.
- The contraction ranged from a high of 57 percent in April 2020 to 34.7% in May.
- The Centre for Monitoring Indian Economy (CMIE) estimates a total salaried job loss of 11 million from April to July in Urban India and a total loss of salaried jobs in rural India of 8 Million for the same period.
- The GDP at constant prices in Q1 of 2020-2021 showed a contraction of 23.9% as compared to Q1 of 2019-2020 (MOSPI – Press Note, 27-11-2020)
- The GDP at constant prices in Q2 of 2020-2021 showed a contraction of 7.5% as compared to Q2 of 2019-2020 (MOSPI – Press Note, 31-08-2020)



* The figures for August, September and October 2020 are provisional

Source: Ministry of Statistics and Programme Implementation, GoI

Key Elements of India's Recovery

India's relief package worth Rs. 20 lakh crores highlighted the government's vision of **self-reliant India**

- It is based on the 5 pillars of economy, infrastructure, technology-driven system, vibrant demography and demand.



Agriculture and Labour

Financing regional banks and Agri-Infrastructure Fund, allocation of Rs. 40 crores to NREGA and assistance to marine sector, animal husbandry, animal control, herbal cultivation etc.



Social Infrastructure

Emergency Health Response Package of Rs. 15 crores along with investment into Affordable Rental Housing Complexes for migrant workers/urban poor.



MSMEs and Banking Sector

Collateral-free loans to MSMEs along with subordinate funds and equity infusions, Partial Credit Guarantee and Special Liquidity Schemes have been launched for Micro Finance Institutions (MFIs) and Non-Banking Financial Corporations (NBFCs).



Large-scale Industrial Growth

Fast-track investment clearances for industrial upgradation, liberalizing the coal sector, enhancing private investments in the mineral sector, raising FDI limit in the defense sector, making India a global hub for aircraft maintenance, repair and overhaul.

Key Questions that Arise

- Is India's COVID recovery package sufficient for a green recovery?
- What would be the most efficient strategy or range of measures to integrate equity concerns and social safety nets within a green growth paradigm for India?
- With the country already facing job losses, how can a transition from coal to RE address the issue of potential further job loss in the coal and allied industries?
- What are the challenges that India could face in achieving a 450 GW RE target by 2030?
- With India's GDP contraction, will the investments for meeting the 450 GW of RE targets along with addressing other burning issues?
- How Can International Cooperation help in addressing India's ambitious RE Targets and in Energy Transition?

THANK YOU