ENERGY and CLIMATE WATCH

CUTS International

June 2022

We welcome you to the first edition of our monthly newsletter on energy and climate change. It consists of some significant development in India's energy and climate change field and worldwide.

It is vital to switch from energy systems based on petroleum to those on renewable resources to lessen reliance on dwindling fossil fuel reserves and slow down climate change. Additionally, the use of renewable energy has the potential to increase employment at all levels, particularly in rural areas. It would be possible to attract international investments and start the Green Energy Revolution by emphasising India's enormous renewable energy potential. However, the renewable sector suffers substantial obstacles. The absence of comprehensive policies and regulation frameworks prevents the adoption of renewable technologies, and the renewable energy market requires explicit policies and legal procedures to enhance its potential.

Similarly, we are also focusing on the issue of climate change in this edition. India's high population density, large spatial and temporal variability in rainfall, and high poverty rates make it particularly vulnerable to the impacts of climate change. There has been an increase in the national mean surface air temperature and the number of hot days, significant regional variations in rainfall patterns, measurable melting of Himalayan glaciers, and a rise in sea level on the country's coasts. India will need better climate models to predict impacts by state and region, a prerequisite for informed adaptation policy.

This newsletter focuses on news related to the renewable energy sector in India and the effect of climate change worldwide. It captures power statistics for June 2022 to update the reader regarding the development in the power sector. Several digital stories created under the EV Rajasthan project undertaken by CUTS have been showcased to understand the EV scenario in the state.

Contents

1. Haryana rolls out EV Policy

The Haryana government has approved the Electric Vehicle (EV) Policy 2022. Gurugram and Faridabad will be developed as model Electric Mobility (EM) cities with phase-wise goals to achieve 100 percent e-mobility. The policy aims to phase out all fossil fuel-based commercial fleets and logistics vehicles in all cities of Haryana by 2030.

What is it about?

The policy envisages faster EV adoption in the state through financial support to EV manufacturers and buyers by providing incentives on fixed capital investment (FCI) net SGST, stamp duty, and promoting employment generation. A 100 percent reimbursement on stamp duty and exemption in electricity duty is offered for 20 years. The EV Policy aims to protect the environment, reduce carbon footprint, make Haryana an EV manufacturing hub, ensure skill development in the EV field, encourage EV uptake, provide charging infrastructure and promote R&D projects. ***Read in detail***

2. Government notifies Green Open Access Rules, 2022

The Central Government notified the Green Open Access Rules, 2022 to further accelerate India's renewable energy programmes. These Rules are notified for promoting the generation, purchase and consumption of green energy, including waste-to-energy plants. It enables a simplified procedure for open access in green power trading. The Rules will help streamline the overall approval process for granting open access.

What is it about?

As per the new Rules, green open access is allowed to any consumer category. Open access transactions have been reduced from 1 MW to 100 kW to enable small consumers to purchase renewable power through open access. The Rules provide certainty on open access charges to be levied on green energy open access consumers, including transmission and wheeling charges, cross-subsidy surcharges and standby charges. ***Read in detail***

3. India ranks 3rd globally for total renewable additions in 2021

According to REN21's Renewables 2022 Global Status Report (GSR 2022), India ranked third globally for total renewable power capacity addition with 15.4GW in 2021, following only China (136GW) and the US (43 GW). The GSR is the world's only crowd-sourced report on renewable energy which covers policies, markets and renewable energy.

What is it about?

India added 843 MW of hydropower capacity in 2021, raising the total capacity to 45.3 GW. India was the second-largest market in Asia for new solar PV capacity and third globally (13 GW of additions in 2021). It ranked fourth in total installations at 60.4 GW overtaking Germany (59.2GW) for the first time. India ranked third globally for the total installed capacity of wind power (40.1 GW). ***Read in detail***

4. Nearly 5 million in India displaced due to climate change

The annual Global Trends Report by the UN Refugee Agency (UNHCR) highlighted that globally 100 million people were forced to flee their homes in 2021 due to violence, human rights abuses, food insecurity, climate crisis, and the war in Ukraine and other emergencies. The Report said that at the end of 2021, 89.3 million people were forcibly displaced worldwide, including 27.1 million refugees.

What is it about?

There were 23.7 million new internal displacements globally due to disasters (in addition to those internally displaced due to conflict and violence). The largest displacements in the context of disasters in 2021 occurred in China (6 million), the Philippines (5.7 million) and India (4.9 million). ***Read in detail***

5. Delhi airport first to run on hydro and solar power

Delhi's Indira Gandhi International Airport (IGIA) has become the first airport in India to run entirely on hydro and solar power. This is a major step by the airport toward achieving its goal of becoming a net-zero airport by 2030. Delhi International Airport Limited (DIAL) has signed a long-term power purchase agreement (PPA) with a Himachal Pradesh-based hydropower producing company to supply hydroelectricity for the airport until 2036.

What is it about?

On-site solar power plants meet approximately 6 percent of the airport's electricity requirement, and the remaining 94 percent of renewable energy use comes from the hydropower plant. This move will help Delhi Airport reduce indirect energy emissions whopping 200,000 tonnes of CO_2 annually. ***Read in detail***

6. Nepal to move Everest base camp from melting glacier

Nepal is preparing to lower the Everest base camp by 400 meters after climate change and human activity has made the current location unsafe. There are two base camps on the world's tallest mountain, with the southern side camp in Nepal at an altitude of 5,364 metres being the most sought after by climbers.

What is it about?

Nepal's base camp is located on the Khumbu glacier, a stretch of ice threatened by climate change. The ice is rapidly thinning and climbers say crevasses have begun to open up. The falling rocks and water on the glacier's surface make the base camp unsafe. It was found that a segment of the area's glacier is thinning at a rate of 1 metre per annum. According to experts, it loses around 9.5 million cubic metres of water annually. ***Read in detail***

CUTS AT WORK

Under the EV Rajasthan project, the focus of CUTS is to understand the current supply and demand-side gaps impeding the transition to EVs in Rajasthan. Surveys were conducted in five cities of Rajasthan: Jaipur, Jodhpur, Alwar, Kota and Udaipur to gauge the political, social, economic, technological and environmental aspects of the current regulatory and incentive structure for EVs. The findings from these surveys was the basis of digital stories curated as a series of episodes under 'EV-olution in Rajasthan'.

Do check out the city-wise digital stories below:

1. Jodhpur 2. Udaipur 3. Kota 4. Jaipur 5. Alwar

Power statistics for June 2022

Installed capacity	Thermal		RE		Thermal power penetration in the generation mix	RE power penetration in the generation mix	Peak demand	Peak demand met	Shortage
	Capacity	As a % of the total installation	Capacity	As a % of the total installation					
401.01 GW	236 GW	58.87	158.12 GW	39.43	75.08%	13.37%	212.76 GW	207.11 GW	2.72%

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