

We welcome you to the tenth edition of our monthly newsletter on energy and climate change. It consists of significant developments in India's energy and climate change space and worldwide.

It is vital to switch from energy systems based on fossil fuels to renewables to lessen reliance on the unpredictable fossil fuel market and combat climate change. Additionally, the use of renewable energy has the potential to increase employment across all regions, particularly in rural areas. It is essential to emphasise India's enormous renewable energy potential to attract international investments and start the Green Energy Revolution. However, comprehensive policy and regulatory framework assistance is required for the renewable sector. The push from industry is also necessary to adopt new technologies and make a rapid transition to a non-fossil-based energy ecosystem.

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 rising sea levels. India will need better climate adaptability models to predict impacts on states and regions, a prerequisite for an informed adaptation policy.

Additionally, the newsletter captures power statistics for March 2023 to update the reader on the developments in the power sector. CUTS organised a conference on "Competition and Big Tech" in New Delhi on Thursday, March 21, 2023, to deliberate on competition in digital markets and the regulation of large technology corporations and discuss new approaches to the regulation of large digital platforms. A brief of this event is discussed in the CUTS AT WORK section.

Contents

[1. Tamil Nadu Unveils Ethanol Blending Policy 2023](#)

[2. Government Allocates 39,600 MW of Solar PV Manufacturing Capacity Under PLI](#)

[3. India Releases Draft Carbon Credit Trading Scheme](#)

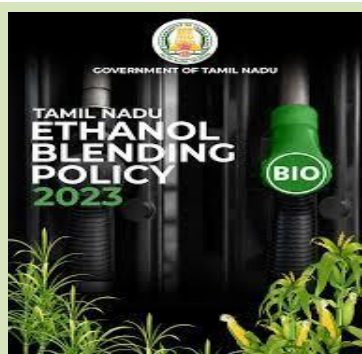
[4. Power Ministry Mandates 40% RPO for Thermal Power Plants](#)

[5. Investments in Renewable Energies Must Quadruple To Meet Targets](#)

[6. IPCC Report Calls for Urgent Climate Action for a Sustainable Future](#)

[7. Government Approves US\\$3.9 bn Hydropower Project Near China Border](#)

1. Tamil Nadu Unveils Ethanol Blending Policy 2023



The Tamil Nadu government on unveiled its ‘Tamil Nadu Ethanol Blending Policy 2023,’ with a mission to improve farmer income, revive the sugar industry and to attract investments worth ₹5,000 crores in molasses/grain based Ethanol production capacity. The targets for the policy term are to be self-sufficient and meet the estimated Ethanol blending requirement of 130 crore litres.

What is it about?

This policy is for attracting investments worth ₹5,000 crores in molasses/grain-based Ethanol production capacity in the State. The policy seeks to support indigenous production of fuel-grade ethanol under the EBP programme. Improving farmer income through price realisation and expansion in opportunities due to ethanol blending, reviving the sugar industry in Tamil Nadu through improved utilisation of existing mills and diversification to dual feedstock forms part of the Mission statement.

Simplifying/streamlining regulatory challenges by the creation of an institutional mechanism to support investors with faster clearances and facilitate assured procurement is one of the other key aspects outlined.

[Read in detail](#)

2. Government Allocates 39,600 MW of Solar PV Manufacturing Capacity Under PLI



The Central Government has allocated a total capacity of 39,600 MW of domestic solar photovoltaic (PV) module manufacturing capacity to 11 companies, with a total outlay of ₹14,007 crore under the production linked incentive (PLI) scheme for high efficiency solar PV modules (Tranche-II). The Tranche-II is expected to bring in an investment of ₹93,041 crore. It will also generate a total of 1,01,487 jobs with 35,010 getting direct employment and 66,477 being indirectly employed.

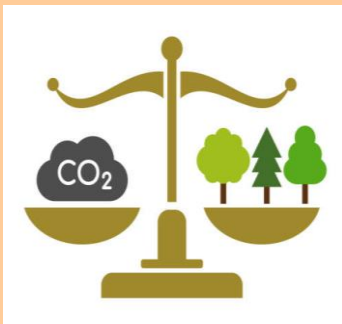
What is it about?

Manufacturing capacity totalling 7,400 MW is expected to become operational by October 2024; 16,800 MW capacities by April 2025; and the balance of 15,400 MW capacity by April 2026. A total integrated capacity of 8,737 MW was allocated under Tranche-I of the scheme, in November-December 2022. Considering the two tranches together, the total domestic solar PV module manufacturing capacity allocated under the PLI scheme is 48,337 MW, with cumulative support of more than INR 1,085 crore by the government.

A total of 16, 800 MW of manufacturing capacity was awarded under the wafers, cells, and modules basket. Under this, 6,000 MW was awarded to Waaree, 3,000 MW to Avaada and 4,800 MW was awarded to ReNew Solar. Under the cells and modules basket, 7,400 MW of total capacity was awarded. Vikram Solar was awarded 2,400 MW of manufacturing capacity, 1,000 MW was awarded to AMPIN, and 4,000 MW was awarded to Tata Power Solar.

[Read in detail](#)

3. India Releases Draft Carbon Credit Trading Scheme



India's Power Ministry has released a draft carbon credit trading scheme and is seeking views from stakeholders by April 14, as part of its process to establish a carbon credit market in the country. The draft scheme proposes a structure for the Indian carbon credit market, for both voluntary trading and compliance, which will be administered by a governing board comprising of secretaries and joint secretaries of the environment, power, renewable energy, steel, coal and oil ministries.

What is it about?

The proposed board will recommend procedures and rules for the market and frame the methodologies for voluntary carbon credit trading, as well as guidelines regarding the sale of carbon credit certificates to overseas buyers, according to the draft.

One of the provisions of the amendment bill empowers the Central Government to specify a carbon trading scheme in consultation with the Bureau of Energy Efficiency, an agency under the power ministry. The bureau will help to accredit an agency that will carry out validation or verification activities with respect to the carbon credit trading scheme. A carbon credit certificate, on the other hand, will be issued by the government to a registered entity or any authorised agency. Each certificate shall represent a reduction or removal of 1t of CO2 equivalent

Under the draft framework, the Ministry also proposes setting up an Indian Carbon Market Governing Board (ICMGB) headed by power and environment secretaries who will be responsible for direct oversight of administrative and regulatory functions.

[Read in detail](#)

4. Power Ministry Mandates 40% RPO for Thermal Power Plants



The Ministry of Power has mandated new coal or lignite-based thermal plants to either set up renewable energy capacity equivalent to at least 40 percent of the thermal plant's capacity or procure that much supply of green energy under renewable purchase obligation (RPO). These notifications by the ministry are sound attempts to enhance the 'supply-side' management for renewable energy and reduce dependence on coal for meeting the electricity demand.

What is it about?

The Power Ministry amended the Tariff Policy 2016 under Electricity Act 2003 to impose the renewable purchase obligation of 40 percent for the new coal or lignite-based thermal power plants to be set up from April 01, 2023, onwards. A coal/lignite-based thermal generating station with a commercial operation date (COD) of the project between April 1, 2023, and March 31, 2025, shall be required to comply with a renewable general obligation (RGO) of 40 percent by April 01, 2025. Any other coal/lignite-based thermal generating station with COD of the project after April 01, 2025, shall be required to comply with an RGO of 40 percent by the Commercial Operation Date.

Further, a captive coal/lignite-based thermal generating station shall be exempt from the requirement of RGO subject to its fulfilling RPOs as notified by the Central Government. This assumes significance given India's ambitious target of having 500 GW of renewable energy capacity by 2030.

[Read in Detail](#)

5. Investments in Renewable Energies Must Quadruple to Meet Targets



The International Renewable Energy Agency (IRENA) in its report World Energy Transitions Outlook said that global investments in energy transition technologies must more than quadruple annually to stay in line with commitments made under the Paris Climate Accord. It called for directing planned fossil fuel investments -around US\$1tn of fossil fuel investments per year by 2030 – toward renewable energy technologies and infrastructure.

What is it about?

Investments in renewable energy technologies reached a record of US\$1.3tn in 2022 but that figure must rise to around US\$5tn annually to meet the key Paris Accord target of limiting temperature increases to 1.5° C above pre-industrial levels. In total, the world needs around

US\$35tn for transition technology by 2030, including improving efficiency, electrification, grid expansion and flexibility.

Renewable energy deployment must grow from around 3,000 gigawatts annually today to over 10,000 gigawatts in 2030 though more equality is needed in renewable expansion between industrial and developing countries. New renewable energy projects in China, the European Union and the US accounted for two-thirds of installed capacity in 2022, while Africa accounted for only 1 percent of renewable capacity installed.

[Read in detail](#)

6. IPCC Report Calls for Urgent Climate Action for a Sustainable Future



Highlighting the need for urgent climate action, the Intergovernmental Panel on Climate Change (IPCC) released its Synthesis Report for the Sixth Assessment Cycle on in Interlaken, Switzerland. The report emphasised the need to reduce greenhouse gas (GHG) emissions and adapt to human-caused climate change through “mainstream effective and equitable action” for a ‘liveable sustainable future for all.’

The report highlighted the economic loss and damages incurred due to climate change and stressed on the need for financial resolution for a more equitable world.

What is it about?

The report highlights the urgency of drastically reducing the emission of GHGs and so limit rising global temperatures by 1.5 C from pre-industrial levels, set by the Paris Agreement. Despite the IPCC’s warnings in 2018, the increase in GHG emissions continued so much so that the global surface temperature has already warmed by 1.1 C over pre-industrial levels, leading to extreme and/or unpredictable weather events that risk human health, fortunes, and ecosystems. Noting the impact of the temperature rise, the report states that such events have made people much more susceptible to food insecurity, and water shortages with vulnerable populations disproportionately facing the brunt of climate change.

The report suggests climate-resilient development that will not only mitigate the effects of climate change but also provides wider benefits. Access to clean energy, improving air quality increasing employment opportunities, boosting healthcare through technology, and delivering equity are among the report’s recommended goals to help adapt to climate change.

The report also foregrounded the role of financial investments to achieve climate goals and encouraged public funding through central banks, government and financial regulators to reduce emissions, scale up climate resilience, and protect low-income and marginalised communities.

[Read in Detail](#)

7. Government Approves US\$3.9 bn Hydropower Project Near China Border



The Indian Government has approved its largest ever hydropower project in the mountainous northeastern region- Dibang Multipurpose Project (MPP). The project bordering China has received an approval of estimated investment of ₹1600 crore. The project will be developed by National Hydroelectric Power Corporation (NHPC) Limited. The Dibang project in Arunachal Pradesh is estimated to take nine years to build. The project will produce 2,880 MW (12x240 MW) of power, or 11223MU, of energy. When it is finished, the 278-meter-tall dam will be India's tallest.

What is it about?

The project is in the Lower Dibang Valley District of Arunachal Pradesh, on the Dibang River. It envisages the construction of a 278m high Concrete Gravity Dam (above the deepest foundation level), 6 Nos. horseshoe-shaped head race tunnels of length varying from 300m to 600m with 9m diameter, an underground powerhouse, and 6 Nos. horseshoe-shaped tail race tunnels of length varying from 320m to 470m with 9m diameter. The Government of Arunachal Pradesh will receive 1346.76 MU, or 12 percent of the project's cost, upon completion. Over the project's 40 years, the benefit to Arunachal Pradesh of free electricity and a contribution to the Local Area Development Fund will total ₹26,785 crores.

Dibang Multipurpose Project is intended to be a hydroelectric project based on storage, with flood control serving as the primary objective. The substantial area downstream will not be flooded if the Dibang MPP is built.

[Read in Detail](#)

CUTS AT WORK

CUTS International along with BRICS Competition Law and Policy Centre, the Competition Commission of India (CCI) and the CUTS Institute for Regulation & Competition (CIRC) organised a conference on "Competition and Big Tech" in New Delhi on March 21, 2023.

The event focused on competition in digital markets and the regulation of large technology corporations. Antitrust agencies often do not have the tools to assess digital companies and control competition in the IT market. Conference participants discussed new approaches to the regulation of large digital platforms and present important cases from their practice. The conference also included a Meeting of the BRICS Working Group for Research on the Competition Issues in Automobile Markets.

Panel II on "Ecological Approach to Competition Law in the New Economy" presented the eco antitrust project that the BRICS Competition Centre is developing together with the International Institute for Applied Systems Analysis (IIASA).

Panel III on "Ex Ante Rules and Competition Law for the Digital Economy — Indian Perspective" discussed the Indian approach to the digital economy that strives to combine *ex-ante* rules with the competition law machinery.

The event brought together the representatives of competition authorities of BRICS countries and international organizations, scientists and leading experts in the field of antitrust law including Andrey Tsyganov, Deputy Head, Federal Antimonopoly Service (FAS), Russia, Payal Malik, Advisor to the Economic Division of the Competition Commission of India (CCI), Ujjwal Kumar, Associate Director, CUTS International, Ettore Maria Lombardi, Professor, School of Law, University of Florence, Elena Rovenskaya, Program Director, IIASA and Jia Kai, Associate Professor, University of Electronic Science and Technology of China (UESTC).

[Read in Detail](#)

Power Statistics for March 2023

Installed capacity (GW)	Thermal		RE (including large hydro)		Thermal power penetration in the generation mix	RE power penetration in the generation mix	Peak demand (GW)	Peak demand met (GW)	Shortage
	Capacity (GW)	As a % of the total installation	Capacity (GW)	As a % of the total installation					
412.21	236.46	57.36	168.96	40.98	78.17%	18.85%	211.21	209.76	0.7%