

Liberte Égalité Fraternité

> REVUE DE PRESSE SECTORIELLE ENERGIE ET DEVELOPPEMENT DURABLE UNE PUBLICATION DU SERVICE ÉCONOMIQUE REGIONAL DE NEW DELHI

N° 16 – 17 novembre au 22 décembre 2021

## En bref

Infrastructures

- Des actifs de plusieurs entreprises publiques, dont Oil India, GAIL et NHAI, seront privatisés d'ici 2025 dans le cadre du programme *National Monetisation Pipeline.* 

### Ferroviaire

- Le chiffre d'affaires des *Indian Railways* a chuté de 4 Mds EUR en 2020-21 par rapport à 2019-20 du fait de la pandémie.

Développement et transports urbains

- L'Inde signe un accord avec la KfW pour un financement du projet de métro de Surat de 442 MEUR, s'ajoutant au financement de l'AFD de 250 MEUR.
- La Banque Asiatique de Développement va octroyer un prêt de 350 M USD à l'Inde pour le financement de l'amélioration des services urbains.

Energies fossiles et biocarburants

- La part du charbon dans le mix électrique indien à augmenté à 74 % en 2021, contre 72 % en 2020.
- La capacité de **production d'électricité à partir de charbon** indienne devrait atteindre son pic en 2030, selon un rapport du think tank gouvernemental NITI Aayog.
- La consommation indienne de gaz devrait tripler d'ici 2030, selon le directeur de l'entreprise publique GAIL.
- Le gouvernement souhaite encourager l'utilisation des résidus agricoles de chaume pour la production de biocarburants afin de réduire la pollution de l'air.
- L'Inde devrait devenir le troisième marché mondial pour l'éthanol d'ici 2026, après le Brésil et les Etats-Unis.

Electricité et énergies renouvelables



- L'entreprise publique NTPC a attribué le premier appel d'offres de micro-grid alimentée à l'hydrogène vert sur une de ses centrales du Madhya Pradesh.
- Les entreprises indiennes Larsen & Toubro et ReNew signent un accord de coopération sur l'hydrogène vert.
- Les acquisitions indiennes dans le secteur des renouvelables atteingnent 6 Mds USD sur les dix premiers mois de 2021, quatre fois plus **que sur l'année** 2020.
- Lors d'un évènement organisé par la *Confederation of Indian Industry*, l'Ambassadeur de France a rappelé l'importance du partenariat franco-indien dans le secteur des renouvelables.

### Mobilités électriques

- MG Motor India noue un partenariat avec Altero pour assurer la fin de vie et le recyclage des batteries de ses véhicules électriques.

### Environnement et qualité de l'air

- L'Inde compte 9 des 10 villes les plus polluées du monde, mais les capacités de mesure de la pollution restent en-deça des besoins.
- L'Inde vote contre le projet de résolution du Conseil de Sécurité des Nations Unies proposant de lier les enjeux de sécurité et de changement climatique.



## Revue de presse

## 1. Infrastructure

Assets Of State-Owned Indian Oil, GAIL And NHAI Selected For Monetisation

#### NDTV, 19/12/2021

Government has identified core assets of major public sector undertakings (PSUs) like National Highway Authority of India (NHAI), Airports Authority of India (AAI), National Thermal Power Corporation (NTPC), Indian Oil Corporation (IOC), GAIL, Hindustan Petroleum Corporation Limited (HPCL) and many others for monetisation under its National Monetisation Pipeline (NMP) between 2022-2025.

Some of the other PSUs whose assets it has identified for monetisation, include Mahanagar Telephone Nigam Limited (MTNL), Bharat Sanchar Nigam Limited (BSNL), NHPC, Food Corporation of India (FCI) and Neyveli Lignite Corporation.

According to finance ministry sources, under NMP, the core infrastructure assets of these selected PSUs have been identified as through the programme, the government plans to boost its finances, which have been badly hit owing mainly due to the Coronovirus pandemic in the almost two fiscals.

While government has exhausted the route of divesting its stake in major PSUs, the NMP has been designed to offer assets belonging to blue chip state-owned entities on rent to private entities, through which it aims to raise funds till 2025. What it calls as "unlocking value", will result in revenue generation for the government, for which it has already started identifying assets from these PSUs.

Finance minister Nirmala Sitharaman in August this year, had announced the NMP, which expects to raise ₹ 6-lakh crore by monetising the operating assets of the Central government over a four-year period ending 2025.

The NMP is devised to unlock the value of investments in brownfield public sector assets by tapping institutional and long-term capital. So, government-owned roads, railways, power plants, gas pipelines, airports, ports, warehouses etc, will be leased out for a specified period to nongovernment entities.

## 2. Ferroviaire

Indian Railways shares an update on how Covid impacted Railways revenue

#### Mint, 16/12/2021

Indian Railways had to face a huge loss due to the Covid-19 pandemic. In a written reply in Lok Sabha Minister of Railways, Communications and Electronics and Information Technology, Ashwini Vaishnaw informed that Indian Railways' total traffic revenue decreased by ₹34,145 crore compared to the previous year 2019-20.

This was mainly on account of the decrease in passenger and other coaching revenue by ₹35,421 crore and ₹2,544 crore respectively compared to the previous year. This decrease was partly offset by an increase in freight and sundry other revenues.

Earlier, The Minister of State for Railways was speaking at the foundation stone laying ceremony of an underbridge at the Jalna railway station.

"The passenger train segment always runs into losses. Since increasing the ticket fares affects the passengers, we cannot do so. During the pandemic, the Railways suffered losses of ₹36,000 crore," he said.

"Only goods trains generate revenue. During the pandemic, these trains played an important role in carrying goods and providing relief to people," he added.

The revenue shortfall, Piyush Goyal (former Railway Minister) earlier said in 2017-18 and 2018-2019, it was the "drop in originating passengers -- in non-suburban segment -- and drop in average sub-urban lead in actuals visa-vis the revised estimates, less loading in actuals vis-a-vis revised estimates (RE) and very low growth in other coaching revenue" that resulted in the shortfall.

He pointed out that remittance of dividend receipts from Railway PSUs to General Revenues, which hitherto used to be part of Railways' sundry revenue and lesser mobilisation under land monetisation, also contributed to the shortfall.

## 3. Développement et transports urbains

India reach Ioan agreement for Surat Metro Rail project

Railway Technology, 20/12/2021

The Indian Government has entered into a \$498.02m (€442.26m) loan pact with the Germany Development Bank – KfW (Kreditanstalt für Wiederaufbau) for the execution of Surat Metro Rail project in the Indian state of Gujarat.

The project's total cost has been estimated at \$1.69bn (€1.5bn), of which KfW is providing \$498.02m.

French Development Agency AFD (Agence Française de Développemet) will also cofund the project.

The Government of India reached an agreement with AFD for \$281.52m (€250m) in January this year.

Covering a distance of 40.35km, the Surat Metro project intends to improve the transport infrastructure of the region.

In a statement, Indian Ministry of Finance said: "The project also aims at an integrated multi modal transport system in the influence zone of metro corridor to provide first and last mile connectivity and improved access to the metro system. Further, solar energy shall be harnessed at both depots of Surat Metro."

The project is expected to provide a "reliable and safer public transport" and cut down long delays on key travel corridors in Surat city.

Separately, Indian Railways identified nearly 1253 railway stations for overhaul under Adarsh Station Scheme.

ADB to provide 350M USD loan to improve urban services in India

Business Standard 21/12/2021

The Asian Development Bank (ADB) will provide USD 350 million loan to improve access to urban services in India by accelerating policy actions and reforms to enhance service delivery and promote performance-based central fiscal transfers to urban local bodies (ULBs).

The ADB will provide knowledge and advisory support to the Ministry of Housing and Urban Affairs in programme implementation, including monitoring and evaluation, the multi-lateral agency said in a statement.

It will also support urban local bodies particularly in select low-income states to implement policy reforms, prepare investment plans, and provide recommendations on cross-cutting issues like climate change, environmental and social safeguards assessment, and gender equality and social inclusion.

Rajat Kumar Mishra, Additional Secretary in the finance ministry signed the loan agreement for the first sub-programme of USD 350 million under Sustainable Urban Development and Service Delivery Programme while Takeo Konishi, Country Director of ADB's India Resident Mission, signed for ADB.

The first sub-programme will establish essential policies and guidelines for urban reforms at the national level followed by specific reform actions and programme proposals at the state and ULB-level under second sub-programme.

After signing the agreement, Mishra stated that the programme is aligned with the government national flagship programmes that promote cities as engines of economic growth by improving the quality of urban life through the creation of high-quality urban infrastructure, assured service provisions, and efficient governance.

Konishi said the programme builds upon ADB's long engagement with India in the urban sector with continued support to the central and state governments to undertake reforms to ensure universal and improved access to basic urban services such as water supply, sanitation, and affordable rental housing, especially for the poor most affected by the Covid-19 pandemic.

The ADB said with increasing urbanization, cities are expected to become a strong engine of growth for Indiagenerating economic activity and outputs, creating jobs for a significant volume of workers, improving competitiveness and urban livability, and protecting the environment.

## 4. Energies fossiles et biocarburants

Record demand for coal power in 2021, way off Net Zero: IEA

#### Down To Earth, 21/12/2021

Carbon emissions from coal will be 3 gigatonnes higher in 2024 than required to achieve Net Zero emissions by 2050

Global demand for coal-fired electricity has grown 6 per cent in 2021 to 7,906 million tonnes (Mt) and generation 9 per cent to 10,350 terawatt-hours (TWh), according to a new report.

Generation has increased 12 per cent in India and 9 per cent in China, a record for both, the paper published by International Energy Agency (IEA), a Paris-based energy research unit, last week.

On the supply side, coal production did not keep pace with demand, stated the Coal 2021 Report.

Shortages occurred due to supply chain issues and adverse weather conditions leading to "power outages and idled factories", found the IEA.

In response, however, major coal producing countries such as China, India, Indonesia and Russia are expected to boost production. As a result, coal production will hit its highest level in 2022 and then plateau as demand flattens, the IEA projected.

The 2018 Report by the Intergovernmental Panel on Climate Change (IPCC) titled Global Warming of 1.5°C stated that to limit global temperature rise to 1.5 degrees Celsius above pre-industrial levels, coal use for power generation needs to peak by 2020 and be reduced quickly afterwards. It emphasised that use of coal should reduce steeply in all 1.5°C-consistent pathways and its share in the electricity mix should be reduced to close to nil by 2050 (with an approximately 66 per cent reduction by 2030).

Yet, the IEA report found that coal's share of the global power mix in 2021 is expected to be 36 per cent. This is 5 per cent lower than its 2007 peak but not in line with the IPCC's recommendations.

Recovery from the novel coronavirus disease (COVID-19) pandemic in most major economies has been driven by fossil fuel use. The latest Production Gap Report published by the United Nations Environment Programme (UNEP) in October 2021 found that production plans and projections by governments would lead to around 240 per cent more coal than global levels consistent, with limiting warming to 1.5°C.

Coal was in focus at the 26th Conference of Parties (COP 26) to the United Nations Framework Convention on Climate Change in Glasgow November 2021. "Cash, coal, cars and trees" was the marketing term used by United Kingdom Prime Minister Boris Johnson to capture the UK's strategy at the summit.

Several countries made commitments to phase out coal power or stop financing coal abroad through announcements like the Global Coal to Clean Power Transition Statement and the Powering Past Coal Alliance. Despite this, the new IEA report finds that the 2021 rebound in coal consumption and future trends will result in three gigatonnes higher CO2 emissions from coal in 2024 than its Net Zero Emissions by 2050 Scenario (NZE). The NZE outlines a roadmap for the energy sector to achieve net-zero carbon emissions by 2050.

China dominates coal use globally; "it is the largest consumer, producer and importer – has no parallel with any other country", said IEA in the report. The country's coal consumption is more than half of the global total, despite efforts to expand hydro, wind, solar and nuclear power, the report noted.

In India, coal comprised 74 per cent of the power mix in 2021, up from 72 per cent in 2020. As electricity access expands, coal demand is expected to increase by 3.9 per cent on average till 2024, IEA said.

The country plans to boost domestic coal production following the 2021 shortages, rising to an expected 955 Mt by 2024 from 793 Mt in 2021, according to IEA. This is a far cry from India's support of a coal "phase-down" in the final text of the COP 26 pact –



a thorny issue, that attracted a fair amount of backlash from Western media outlets, despite receiving support from countries like China and US.

India's ground reality is complex. Keeping its multiple developmental goals of energy access, livelihoods and poverty reduction in mind, the transition away from coal must be done with clear strategic intent and deliberate planning.

At the same time, the co-benefits of transitioning to a zero-carbon energy system as soon as possible are undeniable. And the **Union government's domestic efforts do not** echo its global statements.

Coal demand to peak in India by 2030, will back up renewables: NITI report

#### Business Standard, 21/12/2021

Coal will remain India's mainstay energy source and the country will shape global demand this decade, two reports have said a month after the government declared ambitious targets for being a Net Zero economy in 50 years and 500 Gw of renewable energy capacity addition.

NITI Aayog, the central government's think tank, said in a report coal demand will be in the range of 1192-1325 million tonne by 2030, led by usage from the electricity sector. The International Energy Agency (IEA), in its annual coal report said, stronger economic growth and increasing electrification will drive demand growth of 4 per cent per year.

Coal-based utility electricity generation capacity in India is likely "to peak at about 250 GW" by the end of this decade or immediately thereafter, said the NITI report. It added that coal-based utility electricity generation in India will slow down, and is likely to peak a few years later, i.e. later 2040.

IEA said iron and steel production use coal and there are not many technologies to replace the fuel immediately. "India's growing appetite for coal is set to add 130 million tonnes (Mt) to coal demand between 2021 and 2024. Continued expansion of India's economy is expected during 2022-2024, with annual average GDP growth of 7.4 per cent, fuelled at least partially by coal. We forecast coal consumption to increase at an average annual rate of 3.9 per cent, to reach 1185 Mt in 2024," IEA's Coal 2021 report said.

It said India's push to domestic coal mining through both Coal India and auction of coal blocks to private companies, coal usage in India will increase as it plateaus in other parts of the world, including China. It also said India is set to overtake China as the world's largest metallurgical coal importer.

The NITI report said while coal-based thermal power generation will grow in absolute terms for the next decade, its share in the total power generation mix of the country will decline to a 50-55 per cent (from current 72 per cent) in the next 10 years. This, it said would be due to the changing capacity mix with increasing share of renewable energy.

On November 1, at Glasgow global climate summit COP26, Prime Minister Narendra Modi announced India will be a Net Zero economy by 2070 and will have 500 Gw of renewable energy by 2040.



This paper reported had reported, this announcement is unlikely to put pressure on coal.

Senior government officials told Business Standard, Net Zero decision actually provides certainty to investors in coal – both state owned Coal India Limited (CIL) and private captive and commercial coal miners.

"The 1 billion tonne coal production target of CIL will get logged into the economy in this decade. For another 20-30 years the future of coal is secure in India. The mines awarded now have a clear business case to run for their lifetime," said an official requesting anonymity.

Even IEA noted in its report, the pledges to reach net zero emissions made by many countries, including China and India, should have very strong implications for coal – "but these are not yet visible in our near-term forecast, reflecting the major gap between ambitions and action."

NITI Aayog cautioned against the target versus achievement of renewable energy in India. "India is unlikely to achieve its target of 100 GW of solar and 60 GW of wind capacity by 2022. Given the current "surplus capacity" in the system, distribution utilities are reluctant to sign fresh power purchase agreements, given their already distressed financial situation. Investments are likely to be constrained following the COVD-19 pandemic. For all these reasons, the development of the renewables sector needs to be tracked carefully."

**"They should also be very cautious of adding** new coal capacity beyond 2030 as it risks locking in resources. India must enhance investments in the deployment of clean coal technologies throughout the coal value chain. Government power utilities must show the way by investing in the deployment of advanced clean coal technologies," it said.

India's gas consumption is projected to rise 3 times by 2030: GAIL Director

#### Mint, 25/11/2021

NEW DELHI: India's natural gas consumption is projected to rise to as much as 550 million standard cubic meters per day by the end of the decade from about 174 mmscmd now as the user base expands with the inclusion of newer industries such as steel, GAIL (India) marketing director E S Ranganathan said on Thursday.

Speaking the ETEnergyworld Gas at Conclave virtual event, he said the revolutionary move to commit to a net-zero carbon emission by 2070 has strongly Indian showcased the economy's reorientation towards a cleaner and lower emission economy.

"We now have a definitive policy direction towards phasing down of coal from primary energy mix with our targets carefully calibrated to account for India's energy needs. Against this background, gas along with derived products such as blue hydrogen and ammonia will have a greater role to play in starting down the slope from peak emissions to net-zero emission," he said.

While the government is targeting to increase the share of natural gas in the primary energy basket to 15 per cent by 2030 from the current 6.2 per cent, the share of the environment-friendly fuel in the total energy demand is only 2 per cent. "So the sector will undoubtedly see a strong demand," he said adding the city gas networks that retail CNG to automobiles and piped gas to the household kitchen, have seen consumption exceed pre-Covid levels and will see aggressive growth going forward.

Gas consumption presently is around 174 mmscmd, largely by fertilizer plants, city gas networks and power units. Of this, 49 per cent is met by domestic production and the rest through imports in form of liquefied natural gas (LNG).

"On the supply side, we estimate that the country will reach around 380 mmscmd by 2029-30 with the indigenous production and import of LNG plus biogas also contributing significantly," he said.

LNG, he said, will continue to play a leading role in meeting India's gas requirements in spite of a strong and welcome upswing in domestic production.

The indigenous production has already jumped around 19-20 mmscmd in the last quarter, he said adding LNG import capacity will rise to 40 million tonnes per annum.

Gas demand will be "380 mmscmd on the conservative side and 550 mmscmd on the optimistic side by the end of this decade," he said. "We also estimate the growth of renewable will be an opportunity for gas to grow. Gas being the lowest carbon-emitting alternative to that, so wherever renewable is not there, gas can pitch in so we can have a low carbon-emitting mechanism in place."

India needs ₹1.6 lakh crore in investments over the next 5-8 years to expand the use of natural gas, including building terminals and laying of pipelines, he said adding major gas demand is expected to come from industries using blast furnaces such as steel, oil refineries, long-haul transport, and heating and cooling requirement.

Demand from city gas is likely to rise to 140 mmscmd in 8 years from 35 mmscmd now while gas use in refineries is expected at 58 mmscmd from about 14 mmscmd now.

On pricing, Ranganathan said there is a need for a long-term "stable and healthy" price of LNG for gas demand to grow.

"We fundamentally see a value in long-term contracts because of the strong volatility that we are witnessing in the spot market (currently)," he said referring to the price of LNG in the spot market rising from USD 2 per million British thermal unit in June to USD 35 now.

Such volatility is "a matter of grave concern for us," he said adding this was possibly due to multiple reasons - expectations of long winter where heating needs will be larger, supply disruptions in Russia, drought in South America and growth of gas usage in power companies as economies rebound from Covid.

"This great volatility is not liked by anybody. We should look for a long-term, stable and healthy price for gas to grow," he said.

India needs to look at LNG for transport the same way it is doing for electric vehicles, Shell Energy India country head Nakul Raheja said at the same event.

Bringing gas under GST and reducing the cost of LNG-fuelled trucks can push the use of super-chilled fuel in transport.

LNG as a transport fuel in India is predicted to touch 14 million tonnes by 2035, he said adding LNG use in trucks can displace diesel consumption and reduce the country's oil import dependence.

Will use stubble for biofuel: Environnement Minister in Lok Sabha

The Indian Express, 10/12/2021

The government is working to convert stubble into biofuel in an attempt to reduce crop burning, Union Minister for Forests and Climate Change Bhupendra Yadav Friday said in Lok Sabha.

He was speaking during a debate on climate change which also saw Opposition members questioning the government on setting a net-zero emissions target by 2070 at the Glasgow climate summit.

On Friday, Shiromani Akali Dal member Harsimrat Kaur Badal stated that Punjab **farmers were being "defamed" over stubble** burning. She asked the Union government to provide farmers with resources to deal with the issue.

Yadav, in his intervention, said the state-run NTPC Ltd had recently procured around 3,000 tonnes of stubble to be used for making biofuel and added that the government will review the results.

He said stubble burning has been decriminalised and listed measures to put to use stubble for different purposes so that farmers don't burn them.

**"It has** allocated Rs 700 crore for machinery to get rid of stubble, and Uttar Pradesh used six lakh acres of land while Punjab and Haryana used one lakh acre each for using it as manure," he said. Taking a dig at the AAPled Delhi government, the minister said it used only 4,000 acres but put out big advertisements on using stubble as manure.

Meanwhile, Opposition members Friday alleged that Prime Minister Narendra Modi did a "volte-face" by setting a net-zero emissions target by 2070 at the climate summit in Glasgow and questioned the rationale behind it.

"Even a week before the COP 26, the government of India did not show any inclination to announce net zero target. Actually, the Environment Secretary had ruled it out in the media," Trinamool member Saugata Roy said during a discussion on climate change in Lok Sabha.

The discussion on climate change in Lok Sabha was initiated by DMK member Kanimozhi on Wednesday.

"What prompted and under what pressure the prime minister did a volte-face in Glasgow and announced net zero target in 2070? Is there any credible research available to vindicate the 2070 net zero target? Was any discussion carried out on the net zero target," Roy asked.

During the discussion N K Premachandran (RSP) accused developed nations of diluting their climate commitments over the past three decades since the 1992 Rio conference and that developed and developing countries should be treated separately on the basis of their capabilities.

Pointing out that 'Common but differentiated responsibility' has become an insignificant part of the Glasgow declaration," – referring to the concept first accepted at the UN Conference on Environment and Development in 1992 at Rio de Janeiro – Premachandran said: "The responsibility of the developing countries and developed countries are to be treated as per the capabilities of the nation and also what the historical polluters have done in the past. All these things should be taken into consideration in deciding this principle."

He alleged that India has failed in the negotiations to garner G-77 unity to prompt the industrial economies to agree to make a substantial reduction in carbon emission. He said the country has also failed to elicit binding commitments from the historic polluters to provide financial and technological support to the developing countries to tide over the problem created by the climate crisis. "The third suggestion is that India has to be better equipped for its negotiations,"the MP said.

"India must be in the forefront to meet the global demand for mitigation of climate change. At the same time, we should improve our capacity for adaptation," he suggested.

Ramesh Bidhuri (BJP) lauded the prime minister's initiatives to popularise use of energy efficient LED bulbs as an alternative to traditional lighting solutions and offer LPG subsidies which, he claimed, has reduced the dependence on firewood for cooking.

Bidhuri accused the Congress of "playing politics" with Mahatma Gandhi's ideals of cleanliness and sustainable living and the "failure" to enact a law to ensure clean air in the country. Jagdambika Pal (BJP) said, "We should not indulge in blame game.... All states irrespective of their political affiliation should work together on the issue of climate change and environment protection."

National People's Party (NPP) MP Agatha Sangma said development today has to be reconsidered and "we cannot follow the western model of development".

"We have to work toward the well-being of the planet and the people at the same time," Sangma said.

Congress's K Suresh said it is unfortunate that developing nations like India are being blamed for the changes in climate when responsibility of degradation of environment was of the developed world and its relentless pursuit for profit and greed.

Biofuel push: India set to be thirdlargest ethanol market by 2026: Report

#### Financial Express, 19/12/2021

India is set to become the third-largest market for ethanol in the world after the US and Brazil by 2026, a recent report by the International Energy Agency (IEA) said, adding that the country has tripled ethanol demand to an estimated 3 billion litres between 2017 and 2021.

**Buoyed by India's growing appetite, Asia is** set to overtake Europe in terms of biofuels production by 2026, the agency said. While annual global dem-and for biofuels is set to grow by 28% from 2021 levels by 2026, reaching 186 billion litres, Asia is seen to account for almost 30% of new production over the forecast period.

Government policies are seen to be the principal driver of the demand expansion. Other factors such as overall transport fuel demand, costs and specific policy design will also play a major role.

Prime Minister Narendra Modi had said in June that the government has resolved to meet the target of 20% ethanol blending in petrol by 2025. Earlier the target was set for 2030.

Analysts at CRISIL have recently pointed out that around 16-18 million tonnes of petrol sales is seen to be displaced due to ethanol blending.

"India will find it challenging to implement its 20% blending mandate in just five years, but even reaching 11% blending would make it the world's third-largest ethanol market behind the United States and Brazil," the IEA report stated.

A large segment of India's existing vehicle fleet may have compatibility issues with fuel blends above 10% ethanol. "Retrofits are an option, but the scale of the undertaking may make that impractical," IEA cautioned, adding that "flex-fuel vehicles or vehicles otherwise compatible with 20% blends will need to be made available and consumers will need to be convinced to purchase them". Currently, ethanol blending level in petrol is around 8.5%. Under the Ethanol Blended Petrol (EBP) programme, the government has already reintroduced the administered price mechanism for ethanol procurement, allowing ethanol production from multiple feedstocks like heavy

molasses, sugarcane juice, sugar, sugar syrup, damaged food grains, maize and surplus rice stocks with Food Corporation of India (FCI).

State-run oil marketing companies (OMCs) received 66.5 crore litres of ethanol in Ethanol Supply Year 2016-17 (December, 2016 – November, 2017), which increased to 173 crore litre in supply year 2019-20. As FE reported earlier, the government has already directed oil CPSEs to set up Second Generation (2G) Ethanol Bio-refineries in different parts of the country using agriresidues and biomass. OMCs are in the process of setting up twelve 2G biorefineries with an investment of `14,000 procured Ethanol EBP crore. under programme falls in the 5% GST slab.

The EBP programme aims is to address environmental concerns, reduce oil import bill and provide remunerative income to farmers. The procurement price of ethanol for Ethanol Supply Year 2O2O-21 was Rs 62.65/litre for sugarcane juice, Rs 51.55/litre for damaged food grains, Rs 56.87/litre for rice available with FCI, `51.55/litre for maize and for heavy molasses it is in the range of Rs 45.69/litre and Rs 57.61/litre. The sugar mills and distilleries are free to set up ethanol plants after obtaining statutory clearances and the government has already notified an interest subvention scheme to assist setting up of these plants.

# 5. Electricité et énergies renouvelables

NTPC gives first green hydrogen microgrid project to Simhadri plant

Mint, 16/12/2021

REVUE DE PRESSE SECTORIELLE ENERGIE ET DEVELOPPEMENT DURABLE

New Delhi: State-run NTPC Ltd has awarded the country's first green hydrogen microgrid project at its Simhadri plant in Andhra Pradesh.

Green hydrogen is produced by splitting water into hydrogen and oxygen using an electrolyzer powered by renewable energy sources such as wind and solar. The fuel can be a game-changer for the energy security of India, which imports 85% of its oil and 53% of gas requirements. To promote clean fuels, India is considering making it mandatory for fertilizer plants and oil refineries to purchase green hydrogen.

"NTPC Ltd, India's largest integrated energy company has awarded project of 'Standalone Fuel-Cell based Micro-grid with hydrogen production using electrolyser' at NTPC Simhadri (Andhra Pradesh). This will be India's first Green Hydrogen based Energy Storage Project and one of world's largest," NTPC said in a statement.

NTPC Renewable Energy Limited (NTPC REL) has also inked a pact with the Union territory of Ladakh for a green hydrogen mobility project, with the company along with NVVN jointly executing the project. India plans to soon call bids for building 4 gigawatt (GW) of electrolyzer capacity as part of its energy security strategy.

"It would be a precursor to large scale hydrogen energy storage projects and would be useful for studying and deploying multiple microgrids in various off-grid and strategic locations of the country," the statement added.

As part of its diversification strategy, NTPC is also looking to leverage hydrogen for transportation by mixing the fuel with natural gas for City Gas Distribution (CGD) network.

"This unique project configuration is designed in-house by NTPC. This unique project for India would open doors for decarbonising the far-off regions of the country like Ladakh, Jammu & Kashmir (J&K) etc., hitherto dependent on diesel generators. The project is in-line with the vision of the Hon'ble Prime Minister for becoming carbon neutral by 2070 and making Ladakh a carbon-neutral territory," the statement said.

This comes in the backdrop of NTPC, India's largest power generation firm's pivot towards green energy. NTPC Group posted a net profit of \$1.85 billion in FY21. It has also set an aim of 10% reduction in net energy intensity.

"The hydrogen would be produced using the advanced 240 kW Solid Oxide Electrolyser by taking input power from the nearby Floating Solar project. The hydrogen produced during sunshine hours would be stored at high pressure and would be electrified using a 50 kW Solid Oxide Fuel Cell. The system would work in a standalone mode from 5 PM to 7 AM," the statement said.

Indian firms, including Reliance Industries Ltd, Adani Group, Greenko and Acme Solar Holdings Ltd, have announced their green hydrogen plans. During the International Solar Alliance (ISA) assembly, a solar hydrogen programme was also launched to produce the emission-free fuel at \$2 per kg, sharply lower than the present price of \$5 per kg. REVUE DE PRESSE SECTORIELLE ENERGIE ET DEVELOPPEMENT DURABLE

NTPC has an installed capacity of about 67.907 GW across 70 power projects, with 18 GW under construction. It has set an ambitious aim of 60 GW renewable energy capacity by 2032 from the existing 4.7 GW. NTPC has won 4.32 GW of renewable energy bids since the last financial year. It plans to invest ₹1 trillion between 2019 and 2024 to become a 130GW power producer by 2032.

L&T and ReNew join hands to tap green hydrogen business

#### Mint, 03/12/2021

MUMBAI: Construction major Larsen & Toubro (L&T) and leading renewable energy company ReNew Power (ReNew) on Thursday signed an agreement to tap the \$60 billion emerging green hydrogen market in India.

The companies are targeting a business potential of \$2 billion from the segment in India and neighbouring countries in two years.

"The partnership brings together the track record of L&T in designing, executing and delivering EPC (engineering, procurement and construction) projects and the expertise of ReNew in developing utility-scale renewable energy projects," said S.N. Subrahmanyan, chief executive officer (CEO) and managing director of L&T.

Green hydrogen is produced by a process that does not emit any greenhouse gases. Efforts are on globally to make green hydrogen the fuel that can help countries attain their net-zero emission targets.

It is anticipated that the green hydrogen demand in India for applications such as refineries, fertilizers, and city gas grids will grow to 2 million tonnes per annum by 2030 in line with the nation's green hydrogen mission. This would call for investments upward of \$60 billion.

A number of opportunities are available in the green hydrogen segment and the partnership will not be constrained by capital availability, said Sumant Sinha, chairman and CEO at Gurugram-based **ReNew. "For each opportunity that comes** up, we will essentially put together a specific entity that will go ahead and pay for that particular project," said Sinha. He added that the companies will pool all their resources and put in a bid.

Many countries, including India, have announced specific policy interventions to push for widespread adoption of green hydrogen.

For India, with its ever-increasing energy import bill, it can also provide energy security by reducing the dependence on fossil fuels.

The estimated cost of setting up a 500megawatt hydrogen plant would be about a billion dollars, 70% of which typically goes into setting up renewable energy capacity, and 30% into electrolyzers. Subramanian Sarma, whole-time director and senior executive vice president (energy), L&T, said the companies are already exploring opportunities in the Indian market for green hydrogen. "We believe that in maybe two to three years' time we should be having something like a \$2 billion of a business building up, but it can accelerate quite quickly depending upon how the market works," he said. "We will see more such partnerships as the market is huge and with all companies announcing net zero ambitions, green hydrogen will help them achieve that," said a senior renewable energy official from an advisory company

Acquisitions in green energy sector jump 300% in Jan-Oct

Mint, 15/12/2021

NEW DELHI : In a reflection of investors' interest in India's green economy, the total value of acquisitions in India's renewable energy sector surged by more than 300% to \$6 billion in the first ten months of 2021 (till October) from less than \$1.5 billion reported in 2020, according to a study by CEEW Centre for Energy Finance (CEEW-CEF) and the International Energy Agency (IEA).

"The growth in acquisitions was supported by conducive global financial conditions and accommodative monetary policy maintained by the Reserve Bank of India. Adani Green's takeover of SB Energy India, in October, at a reported enterprise value of USD 3.5 billion was the biggest deal in the sector," CEEW-CEF said in a statement.

Earlier this year, Adani Green Energy Ltd (AGEL) bought Japan's SoftBank Group Corp.'s and Bharti Enterprises Ltd owned solar power producer SB Energy India for an enterprise value of \$3.5 billion. A recent case in point is the sale process of private equity firm Actis Llp' renewable energy platform in India—Sprng Energy—that has seen significant interest with at least 20 firms including BlackRock Inc., Adani Group, JSW Group and Canada's Brookfield Asset Management Inc. signing non-disclosure agreements (NDAs) as reported by Mint earlier. The others who have signed NDAs include KKR, Macquarie Group, and Canadian pension funds— Canada Pension Plan Investment Board (CPPIB), Caisse de dépôt et placement du Québec (CDPQ), Ontario Municipal Employees' Retirement System (OMERS) and Ontario Teachers' Pension Plan (Ontario Teachers).

The other deals include OMERS purchase of a 19.4% stake in NYSE-listed Azure Power Global Ltd. for \$219 million from IFC and IFC GIF Investment Company. Canadian **pension funds have been active in India's** green energy space and represent the socalled patient capital, which seeks modest **yields over time. Also, Thailand's state**owned energy major PTT Group announced its acquisition of a 41.6% stake in Avaada Energy Pvt Ltd for around \$454 million.

"However, the 'Clean Energy Investment Trends 2021' study highlighted that solar PV capacity awarded in the first six months of 2021 fell sharply to just 2.6 GigaWatt from 15.3 GW (including 1.6 GW solar-wind hybrid capacity) reported in the corresponding period in 2020. This was largely a result of a backlog of unsigned power sales agreements (PSAs) amounting to around 20 GW with the Solar Energy Corporation of India (SECI) at the end of 2020," the statement said.

India's decarbonization play has caught the investor's interest and the proposed deal for Sprng Energy comes in the backdrop of a growing focus on environmental, social and governance (ESG) investing. At the COP-26 summit in Glasgow, India also announced its plans to increase non-fossil fuel power generation capacity to 500 GW by 2030.

"The study also highlighted that India's renewable energy sector will face headwinds

in the near- term. An increase in prices of PV modules, driven in turn by rising raw material and shipping costs, could result in lower realised returns than those priced into tariffs at the time of bidding," the statement said.

The spike in global conventional fuel prices such as crude oil, gas and coal is now playing out in the solar space with module prices touching 28 cents per kilowatt-hour (kWh), the highest since 2019. This sharp jump in prices is on account **of China's worst**-ever power shortage, with factories running on limited days as reported by Mint earlier.

"Further, the Indian government's decision to levy a basic custom duty of 40 per cent and 25 per cent from April 2022, on imports of solar modules and cells respectively, is expected to increase module prices in the near term as well, as buyers advance their purchases to avoid the extra cost. The study estimated that an increase of 20 per cent in realised module prices, from those assumed in the most competitive tariffs - ₹1.99/kWh (discovered in December 2020) - could lower equity returns by around 45 per cent," the statement added.

With modules accounting for nearly 60% of a solar power project's total cost, any price increase will impact the internal rate of return (IRR) from such projects, many of which have already signed power purchase agreements (PPAs). With India having strict commissioning deadlines, the failure to meet them will result in penalties for developers.

France to continue supporting India in its renewable energy goals: Ambassador

The Economic Times, 21/12/2021

New Delhi: France will continue to support India to help achieve its ambitious target of having 500 GW of renewable energy by 2030, French Ambassador to India Emmanuel Lenain said on Thursday. Prime Minster Narendra Modi had announced the target of 500 GW of renewable energy in India by 2030 at the COP26 conference in Glasgow earlier this year. Participating in an international conference on One Sun, One World, One Grid (OSOWOG), organised by industry chamber CII, Lenain fully endorsed India's pioneering initiative of OSOWOG.

"As the co-president of International Solar Alliance, France fully supports the One Sun One World One Grid (OSOWOG) initiative, and we are happy to join its steering committee.

"We all share the objectives to increase the share of renewables in the energy matrix. France will fully support India to achieve the ambitious target set by PM Modi at COP26 in Glasgow," he said in a video message.

Roughly 10 per cent of solar capacity in India has been installed by French companies, and more than 20 GW of capacity addition is in pipeline with French support, the ambassador said.

He asserted that France will continue supporting India through its expertise, latest technology and finances.

Ajay Mathur, Director General, International Solar Alliance (ISA), said the vision of OSOWOG is based on the basic mantra of "The Sun Never Sets". The idea of crossborder solar connectivity is envisioned to set up a framework for facilitating global cooperation for interconnected renewable



energy resources that can be seamlessly shared among nations, he pointed out.

The ISA is taking the lead in enabling collective global action through a multilateral effort towards 'net zero' under the joint leadership of India and the UK.

A Steering Committee has been formed for Green Grids Initiative -- One Sun One World One Grid (GGI-OSOWOG) which comprises five members -- India, UK, US, Australia, and France. The committee will collectively decide on actions to take the OSOWOG initiative forward. The GGI-OSOWOG offers key benefits for participating countries by providing an opportunity to facilitate in global energy transition, multiple techno economic benefits and building global economic cooperation.

Upendra Tripathi, former director general of ISA, reaffirmed the vision of the Alliance for an interconnected grid. He said the smart grid technology will integrate different world zones -- that is, transmission of energy from areas which have surplus to those in deficit. The OSOWOG initiative is estimated to be more cost efficient than decarbonising the existing grid infrastructure.

Pratik Agarwal, chairman of CII taskforce and managing director, Sterlite Power, while moderating the session said CII has been deeply engaged with OSOWOG since the very beginning. The idea of OSOWOG is lucrative, feasible and implementable, and has the potential to reduce 70 per cent greenhouse gas emissions, caused by fossil fuels.

It provides a great opportunity for the world to address climate change challenge while ensuring energy security, he noted. For smooth take-off and scaling up of OSOWOG, there is a need for supportive regulatory environment, multilateral funding and vibrant cross-country power trading market, he added.

## 6. Mobilités électriques

MG Motor India leads the way in EV battery recycling, making electric mobility greener

#### *Times of India, 21/12/2021*

MG Motor India has teamed up with Attero Recycling to reuse and recycle Li-ion batteries of India's first Pure Electric Internet SUV - ZS EV. Focused on developing a sustainable and clean ecosystem, MG has recently collaborated with CleanMax to supply 4.85 MW of wind-solar hybrid power to MG's manufacturing facility in Halol, Gujarat. With this partnership, MG will abate approximately 2 lakh MT of CO2 over 15 years, equal to planting more than 13 lakh trees.

Rajeev Chaba, President and Managing Director, MG Motor India, said, "Ensuring end-to-end sustainability for electric vehiclesis something we are passionate about at MG. Since battery waste is a challenge for sustainable mobility, we believe battery recycling is the optimum way of bridging this void. We look forward to doing more work in this space to create sustainable, end-to-end solutions that will help us drive radical impact".

Nitin Gupta, CEO and Co-founder – Attero Recycling, **"As the mo**mentum of EV players grows, it is becoming critical for India to have a sustainable approach to managing Ewaste. It also holds the key to helping our country transition from a linear to a circular economy. We have the technology that enables us to extract almost 99% of all metals from a lithium-ion battery and we envision making India Atmanirbhar in precious metals such as Copper, Lithium and Cobalt through these processes. We are delighted to join hands with MG and our partnership will be instrumental in strengthening the EV ecosystem and set an **example across the industry.**"

In doing so, they have successfully recycled MG's first EV battery and the metal extracts and various other commodities from the recycling process can be used to develop new batteries. With this significant achievement, MG Motor India has further augmented its initiatives to strengthen EV ecosystem, essentially making it greener and sustainable. The move is also in synergy with MG's #ChangeWhatYouCan campaign, encouraging people to make a difference in their own lives and the world around them.

# 7. Environnement et qualité **de l'air**

India has 9 of 10 most polluted cities, but few air quality monitors

#### Business Standard, 16/12/2021

With its size, population and aggravating air pollution, India needs 1,600 to 4,000 air quality monitors but has only 804 as of September 16, 2021, most of which are concentrated in urban areas, shows research. This, experts say, prevents India from knowing the true extent, scale and geographical spread of various pollutants, and limits the government's ability for preventive public health measures. India has nine of the 10 most polluted cities in the world, but with 200 particulate matter (PM) 2.5 monitoring sites in operation during the 2010-2016 period, India's air quality monitor density--about 0.14 monitors per million people--is below China (1.2), the United States of America (3.4), Japan (0.5) and Brazil (1.8), according to research from 2019.

As a consequence, India does not accurately know the spread of pollutants, including sulphur dioxide (SO2), nitrous dioxide (NO2), respirable PM 10, the finer particulate matter or PM 2.5, lead, carbon monoxide (CO) and ammonia. Chronic exposure to these pollutants contributes to the risk of developing ailments such as cardiovascular, respiratory diseases, as well as of lung cancer, according to the World Health Organization.

Further, since existing air quality monitors are concentrated in urban areas, health and environmental authorities cannot assess the extent of air pollution in rural areas due to biomass, fuelwood, stubble burning and spraying of pesticides.

Real-time air quality monitoring needed

Ambient air quality is monitored by observing pollutants, including SO2, NO2, PM 10, PM 2.5, lead, CO and ammonia, present in the air. Currently, the country's clean air programme has set a tentative national target of 20%-30% reduction of air pollution in 132 non-attainment cities by 2024, taking 2017 as the base year. The 'nonattainment cities', called so because they did not meet the national ambient air quality standards (NAAQS) at the time, are required to formulate city-specific action plans in order to reduce air pollution. So,



while the thrust is on the most-polluted cities, rural and semi-urban areas are not being fully monitored for want of monitors and protocols.

In India, air quality has been traditionally monitored using manual readings. Data from 804 monitoring stations are used for monitoring ambient air quality. Even after the introduction of real-time monitors, the Central Pollution Control Board (CPCB) continues the practice of using data only from manual monitors to report compliance with air quality standards, according to a Centre for Science and Environment (CSE) report from 2020.

There are 261 real-time monitors whose data are updated on the central database. This network is technically part of the National Air Quality Monitoring Programme (NAMP) but its data are stored and treated separately because CPCB has not established a method of equivalence between the two monitoring techniques, the 2020 CSE report pointed out.

In the manual method, the monitoring of pollutants is carried out for 24 hours (fourhourly sampling for gaseous pollutants and eight-hourly sampling for particulate matter) with a frequency of only twice a week, whereas real-time monitors measure pollutants constantly. In simple terms, the readings from manual monitors are the ones the CPCB uses for ascertaining long-term air quality trends, including annual data on air quality. Data from real-time monitors are only included in calculating daily AQI (air quality index) of a location.

"These numbers from our 2020 report need updating but, in any case, coverage of overall urban population is inadequate and rural population is completely outside the ambit of monitoring today," said Anumita Roychowdhury, executive director at CSE and the report's author.

"Manual monitoring protocol requires readings from 104 days in a year but for some stations, we have found data was recorded only for 50-75 days," she said.

Manual monitors do not make sense for air quality monitoring anymore, said S.N. Tripathi, head of the civil engineering department at the Indian Institute of Technology, Kanpur and a member of the NCAP steering committee. "It is a very tedious procedure and readings once or twice a week are not very helpful for a dayto-day understanding of air quality. We need more frequent measurements--at least hourly readings are needed."

Experts have suggested that data from realtime monitors also be used for ascertaining long-term trends and not just for daily AQI.

In 2015, identifying this lack of monitors-there were even fewer at the time--IndiaSpend had launched its own network of low-cost sensors to measure the air quality in many Indian cities. You can read more about the project that ended in 2018, here.

India needs 1,500 air quality monitoring stations

The minimum number of stations to monitor suspended particulate matter where the area's population is less than 100,000 is four. The minimum number is three for SO2, four for NO2, one for CO, according to CPCB guidelines for ambient air quality monitoring released in 2003. The number of monitors required increases with the population. The number of sampling sites depends on the size of the area to be covered, variability of pollutant concentration, data requirements related to monitoring, pollutant to be monitored and population figures which can be used as indicators of criticality both from view of likely air quality deterioration as also health implications, the guidelines state.

When scientists compared the density of India's monitoring network with that of other high-population countries, they found large differences.

"It is like when a person is ailing, the doctor will need to measure fever before deciding the course of treatment, otherwise treatment can go wrong. The number of monitors we have recommended [in the paper] is the basic, bare minimum requirement," explained Tripathi, who is also one of the authors of this paper.

India's six megacities (Mumbai, Kolkata, Bengaluru, Chennai, Hyderabad, Delhi) need at least 23 to 44 air quality monitoring stations each, while the existing number of stations range between nine and 12 [excluding Delhi], according to the CSE report from 2020.

The monitors that India has are also not evenly distributed. "More than 33 per cent of the real-time monitors are concentrated in Delhi-NCR. Delhi alone has invested over Rs 100 crore to set up 38 stations over time," said the CSE report. In several states, including Manipur and Arunachal Pradesh, station density is very poor and only two to five years of data are currently available, said another paper, titled 'Monitoring particulate matter in India' published in Springer journal in 2019. For comparison, there are 87 monitoring stations for PM 10 and 32 for PM 2.5 in the Greater London region, a city of nine million, it said. In 2021, Manipur, with a population of 2.7 million, has only one monitoring station and Arunachal Pradesh, with a population of 1.25 million has two.

Using CPCB criteria, an average city of one million-plus residents requires around 25 monitoring stations, and if this number is extrapolated across 60 [million-plus] cities, a total of around 1,500 stations would be required, the Springer journal paper said.

An environment ministry report on NCAP agreed. "With reference to the existing 4,000 cities in the country, 703 manual monitoring stations in 307 cities reflect limited numbers and need augmentation. It is proposed to augment it to 1500 stations from existing 703 stations," it stated in its 2019 report.

At its very launch, NCAP had promised to increase the number of monitoring stations in the country, including rural monitoring stations.

The cost of measuring pollutants

To address the data gaps in monitoring pollutants, India will require 1,600-4,000 monitors (1.2-3 monitors per million people), the Elsevier paper said, and warned that even at these densities, only relatively basic information on common air pollutants would be available more frequently, and would cover a relatively limited area.

The average cost of a monitoring station is around Rs 1 crore with around 10% for annual maintenance costs, the 2019 Springer paper had estimated. This would require an initial investment [of setting up 1,500 stations] of



Rs 3,000 crore due to capital and operational costs for 10 years.

India has set aside a budget of Rs 470 crore for control of pollution in the financial year 2021-22, which includes funding for its ambitious National Clean Air Programme.

"On top of this, costs associated with infrastructure, personnel and training need to be accounted for; and this can be estimated as an additional Rs 3,000 crore; to cover other miscellaneous costs, an additional 50% is added to this, resulting in a total of Rs 7,500 crore. These estimates indicate that the average cost of running the Continuous Ambient Air Quality Monitoring [CAAQM] station network in each city over a 10-year period would amount to around Rs 12.5 crore per year," the paper read.

Rural areas should also be monitored

The NCAP report had itself pointed out the grave problem of air pollution in rural areas and proposed to set up 75 stations in rural areas.

Rural areas suffer from outdoor air pollution as well as indoor air pollution. Major sources of outdoor air pollution are indiscriminate use of insecticides/pesticides sprays and burning of wheat and paddy straw. Atmospheric concentration of ozone has been observed higher in rural areas as compared to urban areas, the report stated.

"Under NCAP, city-level action plans were to find out pollution sources within the city," said Sunil Dahiya, analyst, Centre for Research on Energy and Clean Air. "But instead of looking at just cities, look at airsheds [airshed is a region which shares similar air quality]. States were supposed to formulate their own state-level clean air plans based on cities' plans. Stubble burning, power plants, these are regional sources of pollution and not limited to a city or town. A hybrid of local and regional approach is needed. While we have formulated local city action plans, we are far away from state or regional plans."

Alternatives to expensive monitors

Procuring new air quality monitors is expensive and time-consuming.

"Apart from government monitors, there are monitors set up by industries. If that data is coupled with government data, it could give much more granular information for the situation of pollution across the country. It will also save the cost of setting up new stations," Dahiya said.

Another alternative to expensive monitors could be low-cost sensors. These sensors offer an opportunity to generate highresolution data at a lower cost, and with fewer deployment and access limitations. But they have not been proven to provide long-term, accurate data yet and efforts are underway to improve precision in such sensors. Latest analyses are supporting the case for deployment of well-designed lowcost sensors for measurement of air pollution at the city level, according to the Springer paper.

"While it is true that we have to expand our monitoring network, procurement of monitors is very expensive. India needs to leverage its real-time monitoring network for long-term trends and have a hybrid model with satellite monitoring and low-cost sensors that help in mapping the pollution



profile and exposure of a region," Roychowdhury said.

India votes against U.N. draft resolution on climate change

The Hindu, 14/12/2021

India on Monday voted against a draft resolution at the United Nations Security Council (UNSC) linking climate to security, saying it was an attempt to shift climate talks from the United Nations Framework Convention on Climate Change (UNFCCC) to the Security Council and a "step backward" for collective action on the issue.

The resolution was sponsored by Ireland and Niger, and it did not pass, with 12 UNSC members voting for it, India and Russia voting against it and China abstaining.

Niger, which holds the UNSC presidency for December, organised a debate on December 9 titled 'Maintenance of international peace and security: security in the context of terrorism and climate change.'

One of the objectives of the debate was to examine how terrorism and security risks could be linked to climate change, as per a concept note circulated by Niger.

"What is it that we can collectively do under this draft resolution that we cannot achieve under the UNFCCC process?" India's Permanent Representative and Ambassador to the U.N. T.S. Tirumurti said, positing that the reason countries were attempting to bring climate talks to the Security Council was that decisions could be taken without consensus or the involvement of most developing countries. A video of Mr. Tirumurti explaining India's vote was posted by official Indian handles on Twitter.

"If the Security Council indeed takes over the responsibility on this issue, a few states will then have a free hand in deciding on all climate-related issues. This is clearly neither desirable nor acceptable," he said.

The draft resolution, as per the ambassador, would undermine progress made at Glasgow, where the latest round of talks under the UNFCCC, the 26th Conference of the Parties (COP26), concluded in November.

Developing and 'least developed' countries had worked, over the last two decades, to make "common but differentiated" responsibilities a fundamental tenet of climate action, Mr. Tirumurti noted.

"Today's attempt to link climate with security really seeks to obfuscate lack of progress on critical issues under the UNFCCC process," Mr. Tirumurti said, adding that many of the UNSC members were the primary contributors to climate change due to historical emissions.

He said developed countries had not met their promises with regard to climate action and calling for these countries to provide \$1 trillion in climate finance "at the earliest."

Indian officials had said at the conclusion of COP26 that India alone would need a trillion dollars by 2030 to achieve its climate ambitions. Earlier, rich countries were supposed to start providing \$100 billion per year in climate finance for developing countries as a whole, by 2020.



Mr. Tirumurti said the attempt to discuss climate action and climate justice issues at the UNSC was "motivated by a desire to evade responsibility in the appropriate forum."

He said that climate change may have exacerbated conflicts in the Sahel region and across Africa, and India remained committed to peace and development in those regions but "viewing conflicts through the prism of climate change" was "misleading" and an oversimplification that could worsen conflicts rather than resolving them.

La direction générale du Trésor est présente dans plus de 100 pays à travers ses Services économiques. Pour en savoir plus sur ses missions et ses implantations : <u>www.tresor.economie.gouv.fr/tresor.international</u>



Pour s'abonner :

asie-du-sud

Rédacteurs

Responsable de la publication : Service économique de New Delhi 2/50-E, Shantipath, Chanakyapuri, New Delhi, Delhi 110021, INDIA

Marie Bourbon, Thomas Salez, Marion Velut

https://www.tresor.economie.gouv.fr/Pays/IN/breves-economiques-et-financieres-d-