MINT, Delhi, 4.5.2024
Page No. 13, Size:(16.92)cms X (7.46)cms.

Fossil fuel capacity grows 2.44% in FY24; non fossil-fuel rises 11%

New Delhi: The country's fossil fuel-based power generation capacity increased 2.44% to 243.22 GW in FY24 from 237.27 GW in March 2023, according to official figures. There was a 10.79% rise in non-fossil fuel based capacity (renewable energy sources) addition at 190.57 gigawatt (GW) in 2023-24 over 172.01 GW in 2022-23, the government data showed. **PTI**

PIONEER, Delhi, 4.5.2024
Page No. 10, Size:(12.91)cms X (11.47)cms.

India's fossil fuel capacity grows 2.44 per cent in FY24: Data

PTI ■ NEW DELHI

The country's fossil fuel-based power generation capacity increased 2.44 per cent to 243.22 GW in FY24 from 237.27 GW in March 2023, according to official figures.

There was a 10.79 per cent rise in non-fossil fuel based capacity (renewable energy sources) addition at 190.57 gigawatt (GW) in 2023-24 over 172.01 GW in 2022-23, the government data showed.

While the fossil fuel-based capacity includes power generation through coal, lignite, gas and diesel sources, the non-fossil fuel includes power generated from solar, wind and hydropower.

The nuclear power capacity addition rose to 8.18 GW from 6.78 GW in the last fiscal year, posting a year-on-year rise of 20.64 per cent.

In FY24, India's total power generation capacity rose 6.22 per cent to 441.97 GW over 416.06 GW, the data showed.

The coal-based capacity increased around 3 per cent to 210.97 GW from 205.24 GW in the last financial year, and gas capacity rose marginally to 25.04 GW from 24.82 GW in FY23.

The lignite- and diesel-based capacity were at 6.62 GW and 0.59 GW, respectively, in FY24.

The renewable energy sources capacity increased to 143.64 GW, up 14.76 per cent over 125.16 GW in FY23.

Hydropower capacity also increased to 46.93 GW from 46.85 GW in the last fiscal year.

BUSINESS STANDARD, Delhi, 4.5.2024
Page No. 3, Size:(15.87)cms X (40.96)cms.

90% funds for FAME-II used until deadline

NITIN KUMAR
New Delhi, 3 May

The central government's ambitious initiative to promote electric vehicles (EVs) in India saw approximately 90 per cent of the allocated funds utilised by the deadline of March 31, 2024.

Figures from the Ministry of Heavy Industries (MHI) reveal that the government spent ₹10,253 crore of total ₹11,500 crore earmarked for the five-year FAME-II scheme. This funding facilitated the support of 1.5 million vehicles in the past five years.

Government officials said that part of the available funds will be utilised for vehicles that were sold before March 31 but incentives for which have not been claimed yet.

"Some funds will be allocated to provide incentives to manufacturers who sold their vehicles in the previous financial year but applied for incentives afterwards," a senior official said.

The electric three-wheeler (e3W) category demonstrated the highest fund utilisation, with the allocated ₹991 crore being fully used.

In the bus category, 94 per cent of the ₹991-crore allocation was utilised, while in electric two-wheelers (e2Ws), 90 per cent of the ₹4,756 crore allocation was utilised.

The lowest fund utilisation was observed in the electric four-wheeler (e4W) category, where only 64 per cent of the allocated funds were utilised. The government has also spent ₹633 crore out of the allocated ₹839 crore on EV chargers.

The fund allocation was not fully achieved before the deadline.

This was due to the government's decision in October 2023 to increase the target of the scheme from ₹10,000 crore to ₹11,500 crore.

This adjustment came after the MHI exhausted the funds allocated for e2Ws and e4Ws.

In the scheme's initial phase in 2015, the government allocated approximately ₹900 crore, and this amount surged to around ₹10,000 crore during the second phase in 2019.

To date, the scheme has provided support to more than 1.5 million vehicles. The government also raised the target for the number of vehicles from approximately 1.5 million to 1.7 million. A total of 68 original equipment manufacturers (OEMs) were registered under the FAME-II scheme.

POWERING UP

- Funds allocated for 1.5 million vehicles over five years
- Highest fund utilisation in electric three-wheelers
- Electric four-wheelers saw lowest fund utilisation at 64%
- Centre spent ₹10,253 crore out of ₹11,500 crore allocated for the five-year scheme

In March, the MHI announced a new scheme, the Electric Mobility Promotion Scheme (EMPS), 2024, with a budgetary allocation of ₹500 crore, to promote the sale of e2Ws and e3Ws in the country.

A total of 11 EV manufacturers, including Ather Energy, Bajaj Auto, Hero MotoCorp, Ola Electric, and Mahindra were approved under the scheme, *Business Standard* had reported on April 10.

EV sales in FY24 witnessed a robust increase of over 41 per cent, notwithstanding the subsidy cuts and regulatory shifts.

Total EV registrations in FY24 surpassed 1.6 million, which is significantly higher than last year's 1.1 million. All this has pushed the overall EV penetration in the country during FY24 to 6.8 per cent against 5.3 per cent in FY23.

The uptick was despite the government's decision in June to reduce subsidies under FAME to a third of the maximum ₹66,000 subsidy it was offering on e2Ws.

HINDUSTAN TIMES, Delhi, 4.5.2024
Page No. 15, Size:(17.28)cms X (10.83)cms.

Adani's petchem plant close to ₹17k cr lifeline

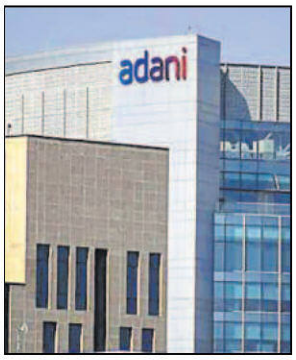
Rituraj Baruah
rituraj.baruah@livemint.com

NEW DELHI: Adani Group's petrochemical plant at Mundra is closer to getting a fresh lease of life as a clutch of banks prepares to lend the project about ₹17,000 crore, which is 60-70% of its capital expenditure requirement.

The loan, from a consortium led by State Bank of India (SBI), will be part of a financial closure programme for Adani Petrochemicals Ltd's coal-to-polyvinyl chloride plant, which would be India's largest PVC manufacturing facility once completed.

Last March, the group had halted the project saying it had decided to hold major equipment procurement and site construction activities pending financial closure, following the Hindenburg report that had alleged financial fraud at Adani group companies.

However, in July, the group resumed work on the plant, which requires an overall capex of ₹25,000-27,000 crore (about $3 billion).



The loan, from a consortium led by SBI, is 60-70% of the plant's capex requirement.

"An SBI-led consortium will finance around ₹17,000 crore (about $2 billion) for the project," said a person aware of the development.

Mint had in July 2022 reported that Adani Group had approached SBI for a ₹14,000 crore loan to build a petrochem plant in Mundra.

The agreement on the loan was finalised in March and SBI will shortly start onboarding other lenders, said another person familiar with the plans.

"The list of lenders is not final yet. SBI would downsell portions of the ₹17,000 crore loan to other banks," the second person said.

In financial parlance, downsell, or sell-down, refers to the selling of a loan portfolio by a bank to other banks and non-banking financial companies. It is a standard practice in infrastructure financing.

Adani Group and SBI did not immediately reply to queries on the loan plan.

Adani Petrochemicals expects the first phase of the project to be completed by 2026, with a capacity of 1 million tonnes, said the second person mentioned above, adding the company has secured approvals for 2 million tonnes per annum capacity.

PVC, or polyvinyl chloride, obtained by refining or processing products such as coal or natural gas, is an inexpensive and toxic plastic used in a variety of applications across sectors such as building and construction, healthcare, electronics, and automobiles.

"The coal would largely be imported, maybe from the (Adani group's) mines in Australia and also from other major sources such as Indonesia, depending upon the commercial viability," said the second person cited earlier.

Adani Enterprises in its FY23 annual report had said it would "leverage the group's resources at Mundra to build a state-of-the-art petrochemicals industry to enhance PVC import substitution".

BUSINESS LINE, Delhi, 4.5.2024
Page No. 10, Size:(2.99)cms X (6.39)cms.

Crude oil set for steepest weekly drop in 3 months

London: Crude oil prices edged higher on Friday, but headed for their steepest weekly loss in three months as uncertainty about demand and high interest rates drove a sell-off limited by the prospect OPEC+ will continue to curb output. Brent crude futures for July rose 31 cents to $83.98 a barrel. US West Texas Intermediate crude for June was up 26 cents to $79.21 per barrel. REUTERS

STATESMAN, Delhi, 4.5.2024
Page No. 6, Size:(11.72)cms X (21.84)cms.

Fuelling the future

Government intervention, in the form of incentivizing mega-biorefineries and ensuring duty-free import of dented corn, will be instrumental in catalyzing the 2G ethanol revolution. Moreover, empowering Indian farmers through lucrative incentives and technological support is of paramount importance in order to foster a conducive ecosystem for sustainable 2G ethanol production

IndianOil's 2G Ethanol Plant

India stands at a critical juncture in its quest for energy security and sustainable development. The country's growing energy demands, coupled with concerns over environmental degradation and climate change, necessitate a transition towards cleaner and more sustainable energy sources.

2G ethanol, derived primarily from agricultural feedstock such as sugarcane, corn, and dented corn, offers a viable solution to these pressing challenges. This paper aims to explore the potential of 2G ethanol to transform India's energy landscape, mitigate environmental degradation, and stimulate socio-economic growth.

2G Ethanol is hailed as a renewable, clean, and cost-effective alternative to traditional fuels like gasoline and cooking LPG. It holds immense potential for India. Its utilization not only bolsters energy security but also aligns with decarbonisation efforts, crucial in combating the looming spectre of climate change.

The strategic blending of 2G ethanol with petrol not only enhances combustion efficiency but also curtails harmful emissions, thereby mitigating the adverse impacts of vehicular pollution – a pressing concern in India's urban centres. Moreover, the substitution of ethanol for LPG presents a revolutionary shift, mitigating risks associated with single-fuel dependency. Ethanol offers advantages over using heavy LPG cylinders with substantial reduction in the costs associated with maintaining infrastructure for LPG. Ethanol thus emerges as a competing alternative to other fossil fuels with the least pollution.

India's strides in 2G ethanol blending initiatives over the past decade bear testament to its efficacy. Significant savings in foreign exchange, totaling to Rs. 78,118 crore, alongside a substantial reduction in CO2 emissions, amounting to 426 lakh MT, underscore the tangible benefits of embracing 2G ethanol as a viable energy solution. Moreover, these efforts have successfully substituted 142 lakh MT of crude oil during the same period, marking a significant contribution to energy security and sustainability. Equally noteworthy is the substantial support extended to farmers, underscoring the socio-economic dividends of 2G ethanol production.

Looking ahead, the trajectory for 2G ethanol's growth appears promising. Projections globally indicate a substantial increase in biofuel demand, with renewable diesel and 2G ethanol expected to drive a near 30 per cent growth, reaching 38 billion litres over 2023-2028. India, positioned as a key player in this global transition, has the potential to make significant strides in 2G ethanol production, thereby bolstering its energy resilience while mitigating the environmental impacts.

Global trends indicate a surge in biofuel demand, with 2G ethanol emerging as a key player in the transition towards renewable energy sources. Projections suggest a substantial increase in biofuel consumption, driven primarily by renewable diesel and 2G ethanol. According to industry forecasts, global biofuel demand is expected to expand by 30 per cent over the next decade, reaching 38 billion liters by 2028. India, with its vast agricultural resources and growing energy needs, is poised to capitalize on this trend and emerge as a major player in the global 2G ethanol market.

The production of 2G ethanol offers significant economic benefits for India, particularly in rural areas. 2G ethanol production creates employment opportunities across the value chain, from crop cultivation to processing and distribution. Moreover, the establishment of 2G ethanol biorefineries can stimulate rural industrialisation and infrastructure development, contributing to overall economic growth and poverty alleviation. Additionally, 2G ethanol production generates valuable by-products such as distillers' dried grains with solubles (DDGS), which can be used as high-protein animal feed, further enhancing the economic viability of 2G ethanol production. To fully unlock the potential of 2G ethanol and realize its socio-economic and environmental benefits, concerted efforts are required across multiple fronts. The following policy recommendations are proposed:

- The government should provide financial incentives and subsidies to promote 2G ethanol production, including tax breaks, grants for infrastructure development, and price support mechanisms for 2G ethanol producers.
- Increase the mandatory blending percentage of 2G ethanol in petrol to incentivize demand for 2G ethanol and stimulate investment in 2G ethanol production capacity.
- Invest in research and development initiatives to improve 2G ethanol production technologies, enhance crop yields, and develop sustainable feedstock supply chains.
- Facilitate market access for 2G ethanol producers by streamlining regulatory processes, reducing bureaucratic hurdles, and promoting public-private partnerships for 2G ethanol distribution and marketing.
- Provide technical assistance, training, and financial support to farmers to encourage the cultivation of 2G ethanol feedstock and ensure fair and remunerative prices for their produce.
- Develop and implement certification standards for sustainable 2G ethanol production to ensure environmental integrity and social responsibility across the 2G ethanol value chain.
- Invest in infrastructure development, including 2G ethanol biorefineries, storage facilities, and transportation networks, to support the expansion of 2G ethanol production and distribution capacity.

The global precedence set by leading 2G ethanol producers such as the United States and Brazil serves as a beacon of inspiration for India. By leveraging advanced technologies and fostering conductive policy environments, India can emulate their success, ushering in a new era of energy self-sufficiency and sustainability.

To realize this vision, concerted efforts are imperative. Government intervention, in the form of incentivizing mega-biorefineries and ensuring duty-free import of dented corn, will be instrumental in catalyzing the 2G ethanol revolution. Moreover, empowering Indian farmers through lucrative incentives and technological support is of paramount importance in order to foster a conducive ecosystem for sustainable 2G ethanol production.

In conclusion, the journey towards harnessing 2G ethanol's potential is fraught with challenges, yet brimming with opportunities. By embracing this renewable resource that is dented inedible corn with zeal and determination, India can chart a course towards a greener, more prosperous future – one powered by the transformative potential of 2G ethanol.

DR J P GUPTA

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BUSINESS LINE, Delhi, 4.5.2024
Page No. 11, Size:(9.47)cms X (11.96)cms.

India looks to fast-track work on hydrogen trains

Abhishek Law
New Delhi

Indian Railways has begun work towards developing "cost-efficient" hydrogen–fuel cell trains, with indigenous technology. Initial development show the technology to be some 12 times costlier than regular diesel locomotives. However work is being carried out to develop prototypes that are "less costly" but equally efficient, officials aware told *businessline*.

An official said the technology development is being done in-house. Typically, a key component of the hydrogen propulsion system is the fuel cell. This device converts chemical energy into hydrogen to generate electricity, which serves as fuel to run the train. One plan being discussed is retrofitting hydrogen fuel cells on diesel electrical multiple units (DEMUs), while another plan is to develop a new set of locomotives.

GO GREEN. A hydrogen-fuelled-cell train is more environment-friendly with lower footprints and practically zero emissions, than traditional engines (picture for representational purpose only)

DEVELOPMENT COST

"Initial studies show that the cost of development of one hydrogen-fuel-cell enabled locomotive could be higher by 12 times when benchmarked to a diesel or electric locomotive. So, some rework is being carried out to see that costs are brought down. Design changes are underway too," an official said.

"The technology and design will be completely India-made," he added. Indian Railways is expected to complete the electrification of tracks by FY25 and a move towards hydrogen-powered trains, on select routes, is seen as the logical next step.

While the train prototypes will most likely be developed at Integral Coach Factory in Chennai, the actual manufacture could be done through domestic and international partnerships. A hydrogen-fuelled-cell train is more environment-friendly with lower footprints and practically zero emissions, than traditional engines.

GLOBAL STORIES

Incidentally, Alstom's Coradia iLint was amongst the first to operate hydrails, transporting passengers in North America. It carried more than 10,000 passengers in a demonstration project in Quebec from mid-June to the end of September 2023 on the Réseau Charlevoix rail network along the Saint-Lawrence River.

Alstom also partnered with Saudi Arabia Railways (SAR) to operate and provide demonstrations for the first passenger hydrogen-powered train in Riyadh.

FINANCIAL EXPRESS, Delhi, 4.5.2024
Page No. 6, Size:(10.56)cms X (15.03)cms.

OIL PRICES HEAD FOR STEEPEST WEEKLY DROP IN 3 MONTHS

OIL PRICES EDGED lower on Friday, on course for their steepest weekly loss in three months, as investors weighed weaker-than-expected U.S. jobs data and the timing of a Federal Reserve interest rate cut. Brent crude futures for July were down 29 cents, or 0.35%, to $83.38 a barrel, while US West Texas Intermediate crude for June fell 37 cents, or 0.47%, to $78.58 per barrel.

DAINIK JAGRAN, Delhi, 4.5.2024
Page No. 2, Size:(20.35)cms X (8.92)cms.

लैंडफिल पर मीथेन गैस निकालने के लिए डाले गए जालीदार पाइप

जागरण संवाददाता, नई दिल्ली: लैंडफिल साइटों पर आग लगने की घटनाओं को कम करने के लिए निगम ने जालीदार पाइप डालने का कार्य शुरू किया है। निगम का मानना है कि इससे लैंडफिल साइटों पर आग लगने की घटनाओं में कमी आएगी, क्योंकि जालीदार पाइपों से कूड़े के अंदर उत्पन्न होने वाली मीथेन ऊपर की ओर निकल जाएगी।

नगर निगम ने अब तक गाजीपुर लैंडफिल पर 12 पाइप डाल दिए हैं। आगे भी यह पाइप डाले जाएंगे। गाजीपुर के साथ ही भलस्वा लैंडफिल पर भी 11 पाइप डाले जा चुके हैं। चूंकि ओखला लैंडफिल पर अभी कोई नया कचरा नहीं डल रहा है, इसलिए फिलहाल वहां पर यह पाइप नहीं डाले जाएंगे।

गाजीपुर लैंडफिल साइट में बना कूड़े का पहाड़ ● जागरण

दिल्ली नगर निगम के एक वरिष्ठ अधिकारी ने बताया लैंडफिल साइटों पर क्षमता से ज्यादा कूड़ा पड़ा है। ऐसे में हम नए-नए स्लोब बनाकर लैंडफिल पर कचरा डालते हैं। कचरा डालने की वजह से यह होता है कि वह कचरा फिसलकर नीचे की ओर ढलान पर चला जाता है। इसी दौरान

- जहां नया कूड़ा डलता है, वहां पर गैस के संपर्क में आने से लग जाती है आग
- गाजीपुर और भलस्वा लैंडफिल में दिल्ली नगर निगम ने डाले हैं जालीदार पाइप

लैंडफिल के अंदर से निकलने वाली मीथेन गैस के संपर्क में आने की वजह से आग की घटनाएं होती हैं। अधिकारी ने कहा कि यह जालीदार पाइप इस तरह की घटनाओं को कम करने में काफी मददगार होंगे।

आग की घटनाओं को रोकने के लिए किए इंतजाम: अधिकारी ने बताया कि एमसीडी 1800 मीट्रिक टन कचरा प्रतिदिन इस लैंडफिल पर डालती है। नया कचरा डलने के कारण ही आग लगने की घटनाएं होती है। तीनों लैंडफिल साइटों पर तापमान की निगरानी की जा रही है। 30 कैमरे ओखला लैंडफिल पर तो 31 भलस्वा पर और 10 कैमरे गाजीपुर लैंडफिल पर लगाए जा चुके हैं। जबकि तीनों लैंडफिल पर अलग-अलग शिफ्ट में 20 के करीब कर्मी तैनात किए गए हैं। दो स्प्रिंकलर हमने भलस्वा और एक गाजीपुर लैंडफिल पर तैनात कर रखे हैं। इसी तरह दो एंटी स्मोग गन भलस्वा पर एक एंटी स्मोग गन गाजीपुर लैंडफिल पर तैनात की हैं।