PIONEER, Delhi, 20.10.2023
Page No. 5, Size:(17.21)cms X (16.15)cms.

Emphasis on awareness about importance of Ganga

PIONEER NEWS SERVICE ■ PRAYAGRAJ

The New Delhi-based Indian Institute of Public Administration (IIPA) has been given the responsibility to clean the Ganga before Mahakumbh 2025. For the task, the institute aims to make people aware about the importance of Ganga.

The responsibility has been given to IIPA in the backdrop of the fact that under the Namami Gange scheme, huge amount of fund has been spent in the name of cleaning the Ganga, but the pollution in the river remains the same.

Talking to media, the research officer Kanishka Sharma said this is the second phase going on under the Namami Gange scheme. In the first phase, IIPA took online feedback of 18,000 school children and talked about creating awareness about cleaning the Ganga.

Now, under the second phase, which started from August 8, students of 10 schools of Prayagraj will be informed about the importance of Ganga and the collective feeling towards Ganga conservation will be promoted.

In the press conference, Prof Vinod Sharma said that soon four biodiversity parks are going to be built in UP. In this, along with various animals and birds, migratory birds will also be protected. In the coming time, these wetlands will become picnic spots where people will be made aware about the environment.

He said that the Pollution Control Board and all the IITs of the country have been entrusted with the responsibility of monitoring pollution in Ganga. Experts said Ganga was the largest basin in the country and there are a total of 14 basins in the 2,550 km long river. This river covers 40 per cent (pc) of the country's population and 65 pc of the underground water is recharged from this river. In such a situation, it is important to make people aware about the importance of Ganga. The experts also informed that 10 years ago there were around 300 dolphins in the river and now their number has increased to 3,000. They further claim that dolphins can be seen at many places, including Bhagalpur, Uttarakhand.

MAHAKUMBH: Arvind Kumar Sharma, who was made the minister in-charge of Mahakumbh 2025, said work on whatever projects have been approved should be started soon. He said the proposals for projects which are needed further should be sent to the government soon. He said the government will not allow any shortage of budget for organising Mahakumbh. He asked the official concerned to establish coordination with the people of the city in the projects.

UP Urban Development and Energy Minister Arvind Kumar Sharma reviewed the progress of 260 big projects worth about Rs 3833 crore in view of the Mahakumbh . He saw the progress report of the six-lane bridge being built on the Ganga and the Prayagraj-Rae Bareli highway four-lane project. He said the work of 63 km of Prayagraj-Rae Bareli four lane highway from Nawabganj to Rae Bareli (except bypass and Sai bridge) should be started under any circumstances from November. The work of the bypass and Sai river bridge is going on at a fast pace. Instructions were given to complete the under construction bridge on Ganga by October 2024.

Kumbh Mela Officer Vijay Kiran Anand said the fair will be organised in 4000 hectares and 25 sectors. Seven riverfront roads of 13 km will be built. There will be development of green belt on both sides of the road, facilities of drinking water, toilets, electricity system and vending zone.

Seven ghats are also being developed funded by the National Clean Ganga Mission, under which changing rooms, drinking water, electric parking, gates, signage, benches, dustbins, green belts and toilets will be constructed. Permanent bus stands are being further improved while 12 temporary stands will be built. Besides, 1000 shuttle buses will run in the city. Divisional Commissioner Vijay Vishwas Pant stressed on timely completion of NHAI projects, Alopibagh flyover and Subedarganj flyover and airport expansion related works. A 200 metric tonne capacity bio-CNG plant will be set up to dispose of the waste generated during Mahakumbh. The work of setting up 15 metric tonne capacity biogas plant and 150 metric tonne capacity MRF plant at three sites is also in progress. ADG Bhanu Bhaskar, connected through video conferencing, said Kumbh Mela SSP should be deployed.

Ethanol blending falls to 11.72% in August

Rishi Ranjan Kala
Prabhudatta Mishra
New Delhi

The percentage of ethanol blended with petrol by oil marketing companies (OMCs) fell to 11.72 per cent in August this year from 11.77 per cent in July, due to unavailability of feedstock such as rice.

The Ministry of Petroleum and Natural Gas (MoPNG) attributed the decline in blending to the discontinuation of rice supply by Food Corporation of India (FCI) since July 2023.

The lack of FCI rice supply led to a spike in prices of feedstock, namely domestic food grains (DFG) and maize, in the market, and a fall in the supply of grain-based ethanol by 2.5-3 crore litre per week, as grain-based distilleries halted operations for more than a month, the ministry added.

FEEDSTOCK SWITCH

The distilleries also asked for

higher prices to compensate for the high prices of DFG and maize.

The OMCs increased the ex-mill price of ethanol from DFG and maize in two tranches during August. The DFG-based ethanol price has been increased by 15.2 per cent, from ₹55.4 per litre to ₹64 per litre. Prices of maize-based ethanol were raised by 17.2 per cent, from ₹56.35 a litre to ₹66.07. OMCs have also allowed the switching of feedstock from FCI rice to DFG and maize.

For the ethanol supply year (ESY) 2022-23, the OMCs floated a tender for 599.7 crore litres of ethanol, against which letters of intent (LoIs) for 564.45 crore litres were issued. OMCs received 413.47 crore litres of ethanol, as of August 2023, and achieved a cumulative blending of 11.72 per cent for ESY 2022-23.

When asked about lack of feedstock, Food Secretary Sanjeev Chopra said, "We have a target of 15 per cent blending for 2023-24 season (November-October). We are discussing with agriculture and petroleum ministries. There are various feedback for ethanol production. Yes, we had issued 13-14 lakh tonnes of FCI rice this year which will not be available to the distilleries next season."

"Besides, the OMCs will shortly declare the ethanol purchase price for different feedstock and we hope that the new prices to be declared (for ethanol from grain) will incentivise the sugar mills to divert part of their stock. There will be main focus on ethanol from maize, as distilleries were earlier not using as the feedstock earlier. In the last two months, there has been substantial quantity produced from maize.The yield of maize can be raised from 3 tonnes per hectare to 5 tonnes per hectare in next two years, which will increase the availability of the feedstock for ethanol," Chopra said.

Maize production has potential to go up by 100 lakh tonnes from the current 360 lakh tonnes, he added.

TIMES OF INDIA, Delhi, 20.10.2023
Page No. 2, Size:(3.94)cms X (12.22)cms.

BRENT AT $91.30

Oil Cools as Venezuela Curbs Ease

Reuters

London: Oil prices were little changed on Thursday as the United States eased sanctions on Venezuela to allow more oil to flow globally, but traders remained nervous that Israel's military campaign in Gaza could escalate to a regional conflict.

Brent futures for December were down 20, or 0.2%, to $91.30 a barrel. U.S. West Texas Intermediate (WTI) futures for November, which expire on Friday, stood unchanged at $88.32 per barrel. At their session lows, both benchmarks were down more than $1 a barrel. The more active December WTI contract rose 0.2%, or 18 cents, to $87.45 a barrel.

The United States issued a six-month licence authorising transactions in Venezuela's energy sector, an OPEC member, after a deal was reached between Venezuela's government and the political opposition there to ensure fair 2024 elections.

PIONEER, Delhi, 20.10.2023
Page No. 1, Size:(12.96)cms X (18.86)cms.

TMC, BJP in LS turmoil

PTI ■ NEW DELHI

Darshan Hiranandani, the CEO of real estate-to-energy group Hiranandani, who allegedly paid TMC MP Mahua Moitra to raise questions in Parliament about Adani Group, on Thursday said the TMC leader targeted Gautam Adani to "malign and embrass" Prime Minister Narendra Modi whose impeccable reputation gave the Opposition no opportunity to attack him.

In a signed affidavit, a copy of which was reviewed by PTI, Hiranandani admitted at using Moitra's Parliamentary login to ask questions targeting Adani after state-owned behemoth Indian Oil Corporation (IOC) booked capacity at the Gujarat-based conglomerate's Dhamra LNG import facility in Odisha and not at his firm's planned facility.

Moitra, he claimed, "made frequent demands" including "expensive luxury items, providing support on renovation of her officially allotted bungalow in Delhi, travel expenses, holidays, etc, apart from providing secretarial and logistical help for her travels within India and to different parts of the world."

Earlier this week, BJP MP Nishikant Dubey and Moitra's estranged partner and lawyer Jai Anant Dehadrai alleged the Moitra took favours from Hiranandani to raise questions in Parliament. She responded by filing a defamation suit before the Delhi High Court against them.

Meanwhile, Dubey's complaint has been referred by the Lok Sabha Speaker Om Birla to Parliament's Ethics Committee. Hiranandani, who had this week reposted news about Adani group starting port operations in Kerala on X, couldn't be reached for comments. Once the affidavit became public, he deleted his account on X. Moitra could not be immediately reached for comments.

Having met Moitra at Bengal Global Business Summit in 2017 when she was a MLA, Hiranandani said she became a "close personal friend" over the years whom he had expected to use for getting business in States ruled by Opposition parties.

"Moitra was very ambitious and wanted to make a name for herself at the national level," he said of her winning the Lok Sabha election from Krishnanagar in West Bengal in 2019. "She was advised by her friends and advisers that the shortest possible route to fame is by personally attacking Modi."

However, the Prime Minister enjoyed "an impeccable reputation and was not giving any opportunity to anyone to attack him in policy, governance or personal conduct," he said. "As was her wont, she thought that the only way to attack Modi is by attacking Gautam Adani and his group as both were contemporaries and they belong to the same State of Gujarat."

She was helped by the fact that Adani had caused jealousy and had detractors among some sections of business, politics and media.

"So, she expected support from these sections in her endeavour to malign and embarrass the Prime Minister by targeting Adani," he said.

Hiranandani said she knew about IOC choosing Dhamra over his company's LNG terminal. "Based on this information, Moitra drafted a few questions that would have elements to embarrass the government by targeting the Adani group; questions that she could raise in Parliament."

"She shared with me her email ID as Member of Parliament, so that I could send her information, and she could raise the questions in Parliament. I went along with her proposal," he claimed.

Delighted at the response she received for the first set of questions he had sent to her relating to the Adani group, he said Moitra "requested" him to keep supporting her in her attacks on the Adani group. She "provided me with her Parliament login and password so that I could post the questions directly on her behalf when required."

BUSINESS STANDARD, Delhi, 20.10.2023
Page No. 9, Size:(33.19)cms X (25.80)cms.

Turning the tide on oil

India is the world's third-largest importer of crude oil, following the European Union and China. The share of oil imports in India's consumption basket rose to a massive 87.3 per cent in 2022-23, constituting 23.6 per cent of India's imports.

Oil and gas imports not only deplete foreign exchange reserves but also pose a strategic vulnerability, evident in geopolitical crises like the Iraq war, sanctions on Iran, and the ongoing Russia-Ukraine conflict, which is compelling India to make payments for Russian oil in Chinese yuan. Control over substantial oil reserves can give a nation significant leverage over other countries, especially those heavily reliant on oil imports. Oil-rich nations can leverage control over other oil importing countries by manipulating production quantity and prices or imposing access restrictions.

OFF THE GRID

AJAY KUMAR

India's oil dependence results from limited oil discoveries. While India has seen relatively more success in offshore regions, such as in Mumbai High and Bassein oil fields in the 1970s, and subsequently in the Krishna-Godavari basin and the Gulf of Khambhat in the 2000s, the scale of production remains modest compared with other parts of the Indian ocean or with countries like Saudi Arabia, Qatar, and Oman in the West and Malaysia, Indonesia and Vietnam in the East.

In 2022, Bangladesh found trillions of cubic feet of gas reserves in the Bay of Bengal, sufficient to meet its needs for a century. A massive oil reserve was discovered in one lakh square km off the coast of Kenya and Somalia. India's Exclusive Economic Zone (EEZ), a vast area of 2.36 million square km, shares the same geo-strata and is likely to have reserves much higher than those discovered so far. Unverified reports suggest the Bay of Bengal has 30 billion tonnes of oil equivalent (BTOE), 2.5 times Iraq's reserves, and almost as much as Saudi Arabia's. Conservative estimates put India's EEZ's undiscovered resources at over 7.4 BTOE, sufficient to meet its needs for more than 50 years. India's failure to locate these reserves and continued oil import raises serious questions.

Oil exploration necessitates the allocation of large, contiguous areas for exploration. This enables geologists to understand geological formations, identify potential oil traps and reservoirs, obtain more accurate sub-surface images using seismic surveys, and better understand the connectivity and extent of potential reservoirs. Most importantly, economically viable and technologically sophisticated exploration requires a large contiguous area.

However, this has not been possible in the Indian EEZ because nearly 42 per cent of the EEZ, i.e., over one million sq km, has been declared "no-go zones" by different government agencies. A no-go zone is an area where no activity is allowed. Compounding the issue, these no-go zones are not confined to a single area but are scattered pockets disrupting contiguity across most of the EEZ. The no-go zones were required for various safety considerations. The Defence Research and Development Organisation (DRDO) enforced a safety zone for missile testing; Indian Space Research Organisation (Isro) established secure zones for satellite launch debris; and the Navy for defence preparedness related considerations, especially in the underwater domain. While these reasons were undeniably vital, they came at a significant economic cost to the Indian economy.

The scenario began to change in mid-2022. Technological advancements enabled advanced radars and sensors to track and manoeuvre objects; geographic information system and satellite navigation systems enabled precise location tracking and information sharing; new technology also significantly improved under-water domain awareness. All of this prompted a rethink of the need to have large loosely defined no-go zones.

Moreover, it was argued that missile testing and satellite launches are infrequent and planned events that allow for coordination with oil exploration vessels. An agreement to adhere to Notam/Navera protocols and coordinate between oil exploration vessels and the DRDO and ISRO for vessel safety was agreed upon. It was also agreed that government agencies will be indemnified through adequate insurance cover in the event of an unlikely accident.

As a result of this review, it was decided to permit exploration activities across 99 per cent of the EEZ. In 2015, a consultative mechanism, the Sectoral Groups of Secretaries, was constituted to resolve inter-agency and inter-ministerial issues without having to escalate them to higher authorities. The group also formed a committee under the defence secretary to deal with any residual matters.

Following the agreement, the Ministry of Petroleum and Natural Gas (MoP&NG) uploaded a new map, liberating the Indian EEZ for oil exploration. The new map was uploaded on August 15, 2022, marking 75 years of India's Independence. Since then, swift progress has been made. In September 2022, the MoP&NG issued an operating framework. By June 2023, they completed the first-ever comprehensive seismic survey of the Indian EEZ. The MoP&NG has also launched a mega bid process, its largest ever, to attract companies to explore large offshore blocks. The goal is to cover 5 lakh sq km by 2025. The first pre-bid meeting was held in Houston, Texas in July 2023.

India is potentially looking to produce more oil and gas than it can consume, especially considering its plans for green renewable energy. Even if the global target of net zero emission by 2050 is not met, fossil fuels will see a significant decline in demand in the next 30 to 50 years. Therefore, India would need to export oil and gas to optimally benefit from its reserves. This is a game-changer. India faltered in locating its oil reserves for decades. No point in regretting missed opportunities. The dawn of *Amrit Kaal* promises oil security and new strategic options for India.

The writer is former defence secretary, and distinguished visiting professor, IIT Kanpur

बिनय सिन्हा

कार्बन मूल्य की चुनौती और भारत का रुख

उभरते बाजार अवरोधों के बीच कार्बन प्राइसिंग को लेकर भारत का बंटा हुआ रुख कोई दीर्घकालिक रणनीति नहीं है। विस्तार से बता रहे हैं नितिन देसाई

वर्ष 2015 में हुए पेरिस समझौते के बाद से कार्बन उत्सर्जन में कमी के लिए बाजार आधारित उपाय तेजी से विस्तारित हुए हैं। विश्व बैंक की एक हालिया रिपोर्ट के अनुसार अब 73 राष्ट्रीय या उपराष्ट्रीय क्षेत्रों में उनका क्रियान्वयन किया जा रहा है या इसकी योजना बनाई जा चुकी है जो 11.66 अरब टन कार्बन डाईऑक्साइड के समान है जो वैश्विक ग्रीनहाउस गैस उत्सर्जन के 23 फीसदी के बराबर है।

बाजार आधारित हलों को मोटे तौर पर दो रूप हैं। पहला है कुछ खास क्षेत्रों में बिना किसी खास लक्ष्य स्तर को तय किए कार्बन उत्सर्जन की कीमत। यह कार्बन उत्सर्जन में कमी लाने के लिए कार्बन उत्सर्जन की लागत पर निर्भर करता है। दूसरा है कैप और ट्रेड (सीएटी) व्यवस्था जिसमें लक्ष्य का स्तर तय होता है। इस तरीके में जो उत्पादक लक्ष्य को हासिल कर लेते हैं करता है वह कार्बन क्रेडिट को उन लोगों को बेच सकता है जिनका उत्सर्जन तय सीमा से अधिक है। कुछ अन्य स्वरूप भी हैं जिनमें कारोबार योग्य क्रेडिट या ऐसे उत्सर्जन पर कर शामिल है जो तय सीमा से कम या अधिक हो। यूरोप में स्वीडन ने 1991 में तयशुदा उत्सर्जकों के लिए कार्बन मूल्य निर्धारित किया जो 40 फीसदी उत्सर्जन के लिए उत्तरदायी थे। इस समय प्रति टन करीब 100 डॉलर कार्बन मूल्य लिया जा रहा है। इसका असर स्वीडन के कार्बन उत्सर्जन में अब तक आई 25 फीसदी कमी में देखा जा सकता है। चीन ने 2021 में आठ इलाकों में सीएटी व्यवस्था लागू की और अब यह उसके एक तिहाई उत्सर्जन को कवर करता है। बहरहाल, उत्सर्जन कारोबार से उभरने वाला कार्बन मूल्य केवल 8 डॉलर प्रति टन है। अमेरिका ने राष्ट्रीय स्तर पर कोई कार्बन मूल्य या सीएटी व्यवस्था लागू नहीं की है, हालांकि कैलिफोर्निया ने अपेक्षाकृत महत्त्वाकांक्षी सीएसटी प्रणाली लागू की है जिसमें व्यापक क्षेत्रवार कवरेज और महत्त्वाकांक्षी उत्सर्जन लक्ष्य शामिल हैं।

बहरहाल बराक ओबामा के बाद से अमेरिकी पर्यावरण संरक्षण एजेंसी ने कार्बन की सामाजिक लागत (एससीसी) का आकलन शुरू किया। ओबामा के कार्यकाल में प्रति टन कार्बन डाईऑक्साइड 43 डॉलर कीमत तय की गई थी जबकि ट्रंप के कार्यकाल में यह घटकर तीन से पांच डॉलर प्रति टन रह गई क्योंकि कार्बन उत्सर्जन के वैश्विक प्रभाव के बजाय केवल अमेरिका पर प्रभाव को ध्यान में रखा जाने लगा। हाल ही में अमेरिकी पर्यावरण संरक्षण एजेंसी ने प्रति टन कार्बन डाईऑक्साइड के लिए 190 डॉलर का मूल्य रखने का सुझाव दिया जिससे लगता है कि वह हकीकत के करीब जा रही है। इन अनुमानों का इस्तेमाल कार्बन उत्सर्जन में कमी के किसी विशेष प्रस्ताव की तुलना कार्बन की अनुमानित सामाजिक लागत से करने में किया जाता है। ऐसा इसलिए ताकि वे विकल्प हासिल हो सकें जिनकी लागत कार्बन की सामाजिक लागत से कम हो।

कार्बन की सामाजिक लागत पर यह निर्भरता समझदारी भरी नहीं लगती। ग्रीनहाउस गैस उत्सर्जन का कल्याण पर प्रभाव कई अनिश्चितताओं से भरा है। कार्बन उत्सर्जन के कई प्रभाव मसलन स्वास्थ्य, बस्तियों में जीवन परिस्थितियों, प्रजातियों के नष्ट होने और पारिस्थितिकी पर प्रभाव आदि का आकलन आसानी से नहीं किया जा सकता है। अक्सर कार्बन की सामाजिक लागत का आकलन करते समय इन्हें ध्यान में नहीं रखा जाता। कार्बन की सामाजिक लागत पर आधारित रुख इस अवास्तविक अवधारणा पर निर्भर करता है कि बाजार की उपयुक्तता को एकल सुधारात्मक कदम से महसूस किया जाएगा जो कार्बन उत्सर्जन को प्रभावित करने वाली अन्य बाजार विफलताओं के बारे में विचार किए बिना सभी उत्सर्जकों पर कार्बन की सामाजिक लागत को लागू करता है बिना उन अन्य बाजार विफलताओं पर विचार किए जो कार्बन उत्सर्जन को प्रभावित करती हैं।

जलवायु अनुकूल दिशा में उत्पादन और उपभोग के निर्णयों को प्रभावित करने के लिए बाजार की ताकतों का उपयोग निश्चित रूप से विचारणीय हैं लेकिन ऐसा कार्बन मूल्यांकन की सामाजिक लागत से नहीं किया जाना चाहिए। मूल्य, कर और सब्सिडी इस प्रकार डिजाइन की जानी चाहिए कि वह उत्सर्जन लक्ष्य को बढ़ावा दे और अगर हमें तापवृद्धि के तय लक्ष्य से नीचे रहना है तो इनका पालन करना होगा।

भारत में औपचारिक कार्बन मूल्य प्रणाली या कार्बन आधारित सीएटी कार्यक्रम नहीं हैं। बहरहाल, हमारे यहां कोयले पर उपकर और वस्तु एवं सेवा कर है जिससे साल 2019-20 में 600 अरब डॉलर की राशि एकत्रित हुई। उस वर्ष कोयला खपत के कारण 167.8 करोड़ टन कार्बन डाईऑक्साइड का उत्सर्जन हुआ। उस वर्ष की विनिमय दर के आधार पर कर संग्रह को डॉलर मे बदला गया। प्रति टन कार्बन डाईऑक्साइड पर 5 डॉलर कार्बन कर का आकलन किया गया। यह दर लैटिन अमेरिका और दक्षिण अफ्रीका के विकासशील देशों के लिए तय कार्बन दरों के साथ समतुल्य है।

पेट्रोलियम उत्पादों और प्राकृतिक गैस् पर लगने वाला कर कार्बन कर से बहुत अधिक है। 2019 में उन्होंने 80 करोड़ टन कार्बन डाईऑक्साइड का उत्सर्जन किया और 4.9 लाख करोड़ रुपये का राजस्व तैयार हुआ। यानी प्रति टन कार्बन के लिए 87 डॉलर की दर से जो वैश्विक मानकों से काफी अधिक है। परंतु हमें यह स्वीकार करना होगा कि पेट्रोलियम उत्पादों का कराधान पेट्रोलियम और गैस के इस्तेमाल को कम करने के बजाय राजस्व जुटाने पर केंद्रित रहा।

लब्बोलुआब यह है कि सीएटी के माध्यम से प्रत्यक्ष या अप्रत्यक्ष रूप से कार्बन मूल्य की प्रस्तुति कम विसंगति वाली होगी। इसमें बजटीय वित्त में कोयला उपकर, वस्तु एवं सेवा कर और उत्पाद शुल्क से अलग एक श्रेणी में आंशिक बदलाव शामिल हो सकता है। ऐसा यह मानते हुए हो सकता है कि आंशिक रूप से ही सही पेट्रोलियम उत्पादों पर राजस्व बढ़ाने वाला कराधान जारी रहेगा। कार्बन कर और सीएअी में कार्बन मूल्य कार्बन डाईऑक्साइड के प्रभाव पर आधारित होने के कारण कोयले की लागत भी बढ़ सकती है। कुछ राजनीतिक जटिलताएं भी होंगी क्योंकि जीवाश्म ईंधन पर केंद्र और राज्य दोनों सरकारें कर लगाती हैं। एक अन्य बड़ी चुनौती यह है कि कोयले का सबसे अधिक इस्तेमाल बिजली क्षेत्र करता है जिसकी वित्तीय स्थिति ठीक नहीं है।

भारत को जल्दी ही कार्बन मूल्य विकल्पों पर विचार करना होगा क्योंकि वैश्विक दबाव बढ़ रहा है। निर्यात क्षेत्रों पर कार्बन उत्सर्जन संबंधी व्यापार प्रतिबंधों का दबाव है। यूरोप कार्बन समायोजन सीमा प्रणाली लागू कर रहा है जो उन देशों से होने वाले आयात पर शुल्क लगाएगी जहां निर्यातक को कार्बन उत्सर्जन की कीमत नहीं चुकानी होती। ऐसा लगता है कि भारत सरकार ने इसे समझ लिया है और वह एक प्रत्यक्ष निर्यात कर पर विचार कर रही है जो इसे संतुलित करेगा।

कार्बन मूल्य को लेकर उभरते व्यापार गतिरोधों को लेकर टुकड़ों टुकड़ों में कदम उठाने का रुख सही नहीं है। भारत को क्षेत्रवार कार्बन आधारित सीएटी प्रणाली पर विचार करना चाहिए। बिजली उत्पादन, स्टील और सीमेंट उत्पादन में इस पर विचार हो सकता है। चूंकि कार्बन उत्सर्जन का वैश्विक असर होता है इसलिए इसे चीन की तरह कुछ भौगोलिक इलाकों के उत्पादकों तक सीमित करना शायद भारत के लिए उपयुक्त न साबित हो। हमें एक राष्ट्रीय प्रणाली चाहिए जो न केवल कार्बन उत्सर्जन में कमी को गति दे बल्कि प्रासंगिक तकनीकी विकास में शोध एवं विकास की भी वापसी करे।