

**GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE & INDUSTRY  
DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE  
RAJYA SABHA**

**STARRED QUESTION NO. 06.  
TO BE ANSWERED ON FRIDAY, THE 02<sup>ND</sup> FEBRUARY, 2024.**

**GREENHOUSE GAS EMISSION BY CEMENT INDUSTRY**

**\*6. Dr. Amar Patnaik:**

Will the Minister of **Commerce and Industry** be pleased to state:

- (a) the data regarding the current greenhouse gas emissions from the cement industry, broken down by individual companies, production unit-wise;
- (b) whether Government is planning to allocate funds or incentives to support the cement sector in transitioning towards a lower carbon footprint, if so, the proposed budget and mechanism; and
- (c) whether Government has taken measures to promote the utilization of alternate materials and waste streams in the cement industry, the contribution to emission reduction in terms of percentage?

**ANSWER  
THE MINISTER OF COMMERCE & INDUSTRY  
(SHRI PIYUSH GOYAL)**

**(a) to (c):** A statement is laid on the Table of the House.

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**STATEMENT REFERRED TO IN REPLY TO PARTS (a) to (c) OF THE  
RAJYA SABHA STARRED QUESTION NO. 06 FOR ANSWER ON 02.02.2024.**

- (a): The data pertaining to current greenhouse gas emission from cement industry broken down by individual companies is not maintained centrally.
- (b): The Government has not earmarked any budget specifically to support the cement sector in transitioning towards a lower carbon footprint. However, multiple initiatives have been undertaken by the Government to encourage and promote environment consciousness, research and responsibility in the cement industry.

The Government constitutes the Development Council for Cement Industry (DCCI) under which partial funding is provided to research projects of National Council for Cement and Building Materials (NCCBM), which conducts research in areas such as reduction in carbon footprint, reduction in thermal energy consumption, increase in utilization of alternate fuels and raw materials and utilization of renewable energy in Indian cement plants.

The NCCBM has also instituted the National Awards in Indian Cement Industry which includes categories, such as, Energy Excellence, Environment Excellence, Achieving Circular Economy and Total Quality Excellence.

Further, the Ministry of Power has notified India's Carbon Credit Trading Scheme, 2023 under the Energy Conservation Act, 2001 for setting up of the Indian Carbon Market (ICM) to enable the cement industry to adopt low-cost options by attracting technology and finance towards sustainable projects that generate carbon credits.

- (c): The Government has taken several measures to promote the utilization of alternate materials and waste streams in the cement industry.

The Central Pollution Control Board has brought out guidelines to facilitate State Pollution Control Board (SPCBs)/Pollution Control Committees (PCCs) to grant authorization for utilization of different kinds of wastes, including Hazardous and other wastes, without carrying out trial runs. Further, the Bureau of Indian Standards has formulated standards to enable the Indian Cement Industry to utilize various industrial wastes/by-products viz. Flyash based Portland Pozzolana Cement (PPC) and slag-based Portland Slag Cement (PSC).

In terms of percentage, the usage of waste derived alternative fuels in cement industry has increased to 7% in 2023 from 0.6% in 2010.

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भारत सरकार  
वाणिज्य और उद्योग मंत्रालय  
उद्योग संवर्धन और आंतरिक व्यापार विभाग  
राज्य सभा

तारांकित प्रश्न संख्या: 06

शुक्रवार, 02 फरवरी, 2024 को उत्तर दिए जाने के लिए

**सीमेंट उद्योग द्वारा ग्रीनहाउस गैस उत्सर्जन**

**\*06. डॉ. अमर पटनायक:**

क्या वाणिज्य और उद्योग मंत्री यह बताने की कृपा करेंगे कि:

- (क) सीमेंट उद्योग द्वारा ग्रीनहाउस गैस उत्सर्जन संबंधी मौजूदा आंकड़े क्या हैं, इनका कंपनी-वार और उत्पादन इकाई-वार अलग-अलग ब्यौरा क्या है;
- (ख) क्या सरकार सीमेंट क्षेत्र को न्यून कार्बन उत्सर्जन स्तर तक पहुँचने में सहायता करने के लिए धन आवंटित करने या प्रोत्साहन राशि प्रदान करने की योजना बना रही है, यदि हां, तो तत्संबंधी प्रस्तावित बजट और तंत्र का ब्यौरा क्या है; और
- (ग) क्या सरकार ने सीमेंट उद्योग में वैकल्पिक सामग्रियों और अपशिष्ट प्रवाहों के उपयोग को बढ़ावा देने के लिए उपाय किए हैं, यदि हां, तो इसके फलस्वरूप उत्सर्जन में कितने प्रतिशत की कमी आई है?

उत्तर  
वाणिज्य और उद्योग मंत्री  
(श्री पीयूष गोयल)

(क) से (ग) : विवरण सदन के पटल पर रख दिया गया है।

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दिनांक 02.02.2024 को उत्तर दिए जाने के लिए नियत राज्य सभा तारांकित प्रश्न संख्या 06 के भाग (क) से (ग) के उत्तर में उल्लिखित विवरण

(क) : सीमेंट उद्योग द्वारा ग्रीनहाउस गैस के मौजूदा उत्सर्जन के कंपनी-वार आंकड़े केंद्रीय रूप से नहीं रखे जाते हैं।

(ख) : सरकार ने सीमेंट क्षेत्र को न्यून कार्बन उत्सर्जन के स्तर को प्राप्त करने में सहायता करने के लिए विशेष रूप से कोई बजट चिह्नित नहीं किया है। हालांकि, सीमेंट उद्योग में पर्यावरण के बारे में जागरूकता, अनुसंधान और उत्तरदायित्व को प्रोत्साहित करने और उसे बढ़ावा देने के लिए सरकार द्वारा अनेक पहलें की गई हैं।

सरकार ने सीमेंट उद्योग विकास परिषद् (डीसीसीआई) का गठन किया है जिसके तहत राष्ट्रीय सीमेंट और भवन निर्माण सामग्री परिषद् (एनसीसीबीएम) की अनुसंधान परियोजनाओं को आंशिक निधीयन उपलब्ध कराया जाता है, जो कार्बन उत्सर्जन में कमी, ताप ऊर्जा के उपभोग में कमी, वैकल्पिक ईंधन और कच्चे माल के इस्तेमाल में बढ़ोत्तरी तथा भारतीय सीमेंट संयंत्रों में नवीकरणीय ऊर्जा के इस्तेमाल जैसे क्षेत्रों में अनुसंधान करता है।

एनसीसीबीएम ने भारतीय सीमेंट उद्योग में राष्ट्रीय पुरस्कारों की भी स्थापना की है जिसमें विभिन्न श्रेणियां शामिल हैं जैसे ऊर्जा उत्कृष्टता, पर्यावरण उत्कृष्टता, सर्कुलर अर्थव्यवस्था तथा समग्र गुणवत्ता उत्कृष्टता की प्राप्ति आदि।

इसके अलावा, विद्युत मंत्रालय ने भारतीय कार्बन बाजार (आईसीएम) की स्थापना के लिए ऊर्जा संरक्षण अधिनियम, 2001 के तहत भारत की कार्बन क्रेडिट व्यापार योजना, 2023 को अधिसूचित किया है ताकि सीमेंट उद्योग कार्बन क्रेडिट का सृजन करने वाली सतत परियोजनाओं की दिशा में प्रौद्योगिकी और वित्त आकर्षित करके कम लागत वाले विकल्प अपनाने में सक्षम बन सके।

(ग) : सरकार ने सीमेंट उद्योग में सामग्री और अपशिष्ट निपटान के विकल्पों के इस्तेमाल को बढ़ावा देने के लिए अनेक उपाय किए हैं।

केंद्रीय प्रदूषण नियंत्रण बोर्ड ने, पूर्व परीक्षण के बिना हानिकारक तथा अन्य अपशिष्ट सहित विभिन्न प्रकार के अपशिष्टों के इस्तेमाल के लिए पराधिकार प्रदान करने हेतु राज्य प्रदूषण नियंत्रण बोर्ड (एसपीसीबी)/प्रदूषण नियंत्रण समितियों (पीसीसी) हेतु दिशानिर्देश तैयार किए हैं। इसके अलावा, भारतीय मानक ब्यूरो ने, विभिन्न औद्योगिक अपशिष्ट/सह-उत्पादों जैसे फ्लाई एश आधारित पोर्टलैंड पोजोलाना सीमेंट (पीपीसी) तथा

स्लैग आधारित पोर्टलैंड स्लैग सीमेंट (पीएससी) के इस्तेमाल में भारतीय सीमेंट उद्योग को सक्षम बनाने के लिए मानक तैयार किए हैं।

प्रतिशतता के संबंध में, सीमेंट उद्योग में अपशिष्ट से बने वैकल्पिक ईंधन का इस्तेमाल वर्ष 2010 में 0.6 प्रतिशत से बढ़कर वर्ष 2023 में 7 प्रतिशत हो गया है।

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DR. AMAR PATNAIK: Sir, greenhouse gas emissions are at the core of the discourse on adverse climate effects. In the reply, the Ministry has said that they are monitoring industry-wise, or even company-wise, any data on greenhouse emissions made by each of the industries. Can I make a suggestion to the hon. Minister, since the Minister is here?

MR. DEPUTY CHAIRMAN: Please, put your question.

DR. AMAR PATNAIK: Sir, the question is the suggestion.

(MR. CHAIRMAN *in the Chair.*)

It is by way of a suggestion that you could have a portal, just like the Ministry of Corporate Affairs has a CSR portal, where companies upload whatever is the greenhouse emission made by them, which is available to public and other industry competitors, so that a fair amount of environment ecosystem is developed for controlling greenhouse emissions company-wise, because that is what is ultimately going to matter.

MR. CHAIRMAN: Hon. Minister.

SHRI PIYUSH GOYAL: Sir, 'the Government should not be interfering in every aspect of every industry' is a principle that we uphold because making such data in the public domain could also harm the interest of India's export competitiveness or export performance. Therefore, individual company-wise data is not something that the Government would like to interfere in. However, this is one Government which has always been very conscious of our global responsibility and it has been part of the solution across the world. Ever since Paris Agreement in 2015 at COP21, India, led by Prime Minister, Shri Narendra Modi, has been at the forefront of forging consensus and ensuring that the world wakes up to this climate crisis. We are, in fact, very proud that India, as a nation, is one of the few countries which regularly submits our biannual UNFCCC Report about our performance against the nationally-determined contributions of 2015. We are the best performing countries amongst all the G-20 countries when they were ranked by an independent agency and, therefore, the Government is focussing its attention at the macro level whereas industries, on their own, thanks to the consciousness that has been generated in the country, are looking at their own processes, looking at improving their own processes and playing an important positive role in addressing this problem of climate change.

DR. AMAR PATNAIK: May I suggest to the hon. Minister that in the reply they have mentioned that India's Carbon Credit Trading Scheme 2023 has been put in operation? It cannot be put under operation unless you have separate company-wise data of green house emissions and carbon emissions. However, the second supplementary is whether the de-carbonisation pathway has been proscribed for each industry or company by way of a notification, that is being reviewed so that we achieve the targets which you have mentioned of the hon. Prime Minister to make net zero by 2050 or even earlier.

SHRI PIYUSH GOYAL: Sir, as regards the Carbon Credit Trading scheme, the benefit will be taken by those who prepare the data and who are able to demonstrate that they are eligible for carbon credits. In a way, it is Government's efforts to encourage more and more companies to come within the ambit of the scheme to take benefit of this trading scheme. Therefore, we believe that a persuasive approach and taking industry together is the right way to achieve these goals. As regards the overall India's contribution to greenhouse gas emission reduction or to address the challenge of climate change, extensive data is being collected by the Ministry of Environment, Forest and Climate Change and extensive research is being done in different sectors on our ability to bring down the carbon emission and to create carbon sink. As regards both adaptation and mitigations measures, India is at the forefront of these measures. I can assure the hon. Member, through you, that India will relentlessly pursue the path both of inclusive growth and sustainable growth.

DR. AMEE YAJNIK: Thank you, Sir, for giving me this opportunity. I have seen the reply given by the hon. Minister. It is very clearly said that there is no database which has been formed for the cement industry. So, there is no greenhouse gas emissions database. You do not have a special budget also for this particular industry which is carved out for treating the greenhouse gas emissions. Given this situation, you talk about inclusive and sustainable growth. You have committed net zero emissions at the international level, but you do not have a roadmap or a budget or a plan, either shorter or longer, for the cement industry, which is one of the largest sectors and which contributes to the construction industry as well. So, when you do not have this, how would you go for emission trading or carbon credit trading without having anything or a roadmap in place? So, all these hollow statements do not give concrete examples of how you are going to bring zero net emissions at the international level.

SHRI PIYUSH GOYAL: Sir, I think, the same issue was agitated by the earlier speaker, but I would like to repeat...

MR. CHAIRMAN: It was with more force this time.

SHRI PIYUSH GOYAL: Yes, Sir. The question was regarding the current greenhouse gas emissions from the cement industry, broken down by individual companies and production unit wise. So, my reply relates to the question that we don't have every production unit's data for every industry running the cement plants. The country is collecting data for different sectors which are recognised as contributing to the greenhouse gas emissions at the aggregate level. The industry bodies are working in consultation and collaboration with the Government to address these issues. The cement industry is a very important sector of the economy. They are *suo motu* recognising the global problem and are taking necessary steps for mitigation of the greenhouse gas emissions. I think, the Indian industry today is self-reliant and I am proud to say this on behalf of the Indian industry as the Industry Minister. The industry in India is *Atma Nirbhar*. They are not looking for clutches for everything that has to be done. They don't look at the Government for every small thing. They are not looking at Government subsidies and it is not that only after those subsidies that they will act in the interest of the country or the nation. So, I think, the important thing to be noted is that industry is conscious of their obligations.

As regards the Carbon Credits Trading Scheme, the Bureau of Energy Efficiency is, as per this scheme, if you will care to go into the details of the scheme, already undertaking studies for the sectors which are obligated to be covered under this scheme and, accordingly, they will work out the targets and will work out the incentives or credits which should be given to each industry for improvement. Those targets, in due course after this study, will be notified by the Ministry of Environment, Forests and Climate Change, and it is only after that that they will be able to start giving the carbon credits. The Scheme has been notified. The trading process has been brought to fore. The auctioning of the scheme is under process. Thank you.

DR. AMEE YAJNIK: Regarding the carbon credits trading, it was already there in place. It is not a new thing that has come and Gujarat had one of the industries which was topping the list in chlorofluorocarbons. This is not a new thing. You already have a roadmap. So, how are you going to implement this? That is the question.

MR. CHAIRMAN: Hon. Member, I did not hear. What did you say about Gujarat?



DR. AMEE YAJNIK: In Gujarat, there is an industry which is already dealing in this emission trading. So, it was already there, brought during the UPA years. So, there is already a roadmap. They just have to follow it, but I think they are perplexed and not sure how to go about it.

SHRI PIYUSH GOYAL: Sir, I would like to...

MR. CHAIRMAN: She is appreciating you.

SHRI PIYUSH GOYAL: Yes, Sir. I would like to thank the hon. Member for having highlighted how the hon. Prime Minister, when he was the Chief Minister of Gujarat, was at the forefront of the fight against climate change. ...*(Interruptions)*...

DR. AMEE YAJNIK: The UPA Government was at the forefront. ...*(Interruptions)*...

SHRI PIYUSH GOYAL: The important point to be noted is that when the world was waking up to the challenge of the climate change, the Vice-President of one of the world's global super powers, the world's largest economy, came out with a book called '*An Inconvenient Truth*'. But, our hon. Prime Minister, in response to that, said as the Chief Minister of Gujarat that for us in India, we knew this 'inconvenient truth' for generations and centuries because India consciously respects nature and every aspect of nature. He came out with the book '*Convenient Action - Continuity for Change*'. That was the book that our hon. Prime Minister Modi wrote. He consistently worked as the Chief Minister. Whether it was the first solar power unit in India or whether it was the first wind power unit along the canals, I think, he has demonstrated, through actions right for the last 23 years where he has led the country in one form or the other in different initiatives, his sensitivity to the environment and his commitment to make India a global player when it comes to addressing the challenges of climate change.

MR. CHAIRMAN: Question No. 07 - Shri Anil Desai.