

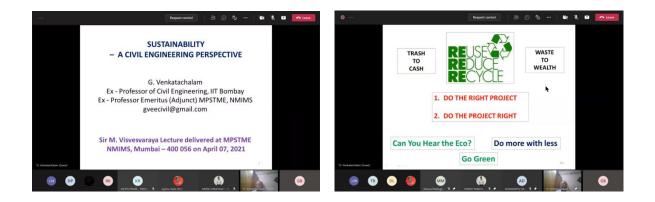


Sustainability- A Civil Engineering Perspective

Civil Engineering Student's Association(CESA) an International Student Chapter of American Society of Civil Engineers(ASCE) and Department of Civil Engineering, NMIMS' Mukesh Patel School of Technology Management and Engineering conducted the 1st Lecture of Visvesvaraya Lecture Series on 7th April, 2021 in an attempt to talk about sustainability from a civil engineer's perspective, our honorable professor Dr. G. Venkatachalam enlightened us about the urgent need of controlling the global CO₂ and Green House Gas emissions so as to ensure a cleaner and greener tomorrow.

He went on to explain the positive impact that the Covid-19 lockdown had in 2020. With Air Quality improving during the first few weeks of Lockdown 1.0, he stated that just 6 months into the pandemic- we returned to square-1 with toxic pollutants floating in the air and disrupting the pure equilibrium that the eco-system was trying to reach!

The construction industry consumes a humungous amount of energy, he goes on to mention. With statistics reporting that the Green House Gas (GHG) emissions from the building sector were the highest in 2019- with an estimated 10 GT (Giga tones) worth of emissions, which is approximately more than $1/3^{rd}$ the global CO₂ emission. Read that again, dear reader. That is something to ponder upon!



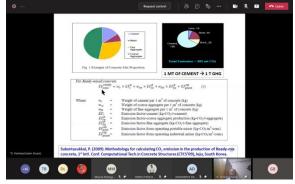
What is the world doing about it?

Global leaders are constantly embracing new ideas which are aimed at sustainable development, while the United Nations aims at reducing GHG by 30-35% by the end of 2030. Innovative and efficient waste-management systems will surely go a long way in

promoting sustainability. Andaman and Nicobar Islands achieved this feat after they constructed sophisticated luxury walls from plastic bottles filled with sand and dust, and pavements from huge amounts of rubber waste. Not only did the final product succeed in harvesting seeds of sustainability but also proved to be immensely strong and water resistant.

And last but not the least, all developed countries should make sustainability a priority. It is not a second option anymore, but an urgent need. From investigation, production and transportation to construction, utilization and waste-handling – if each stage of the design process is carried-forward with the sole goal of reducing GHG and CO₂ emissions and making the world a greener place, we're not too far from reaching our vision of a sustainable planet.





Faculty Mentor: Dr. Sahajanand Kamat Co- Faculty Mentor: Dr. Jigisha Vashi President: Ms. Aishwarya Das Vice-President: Mr. Harsh Panchal General Secretary: Ms. Deepakshi Paliwal Treasurer: Mr. Utsav Vora