



K.D.K College of Engineering, Nagpur

Department of Electrical Engineering



UMANG

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Vision

To impart quality technical education for developing competent electrical engineers capable of accepting challenges of the modern society.



Mission

M1 *To provide an adoptive academic environment with a continuous motivation to budding electrical engineers for making them academically excellent and technically competent having good managerial skills to fulfill the expectations of industries for developing sustainable solutions.*

M2 *To work for all round growth of students having good moral values in a dedicated manner.*

M3 *To inculcate a sense of responsibility among the students for well being of the society.*

Program Educational Objectives (PEOs)

- 1. Graduates of Electrical Engineering shall have sound technical knowledge and all round personalities ready to pursue high level career in industries and academics*
- 2. Graduates of Electrical Engineering shall have broad based trainings to cater to the requirements of modern electrical industries and ready for working as electrical consultants.*
- 3. Graduates of Electrical Engineering shall have sensitivity towards global environmental issues and sustainable developments through use of renewable energy sources.*

Program Specific Outcomes (PSOs)

The Department of Electrical Engineering will prepare the students to have:-

- Technical and managerial skills necessary to enter careers in design, application, installation, manufacturing, testing, operation and/or maintenance of electrical systems.*
- Knowledge of information technology skills including word processing, spread sheet, power point presentation, electrical system simulation, computer programming, internet/library research and electrical CAD drawing encouraging and increasing one's abilities for lifelong learning.*

Climate Engineering

Climate engineering, also known as geoengineering or climate intervention, is generally defined as large-scale deliberate intervention in Earth systems to counteract climate change.

Traditionally, climate engineering has been used as an umbrella phrase to refer to two very different kinds of potential intervention: solar geoengineering and carbon removal. We describe both below. It is important to note, however, that there has been a growing push to more fully separate solar geoengineering and carbon removal from one another, because the two forms of intervention are quite different. The term “climate engineering” increasingly refers only to solar geoengineering approaches, with carbon removal constituting a separate category of its own or counting as a component of climate change mitigation.

To account for this shift in the way in which people talk about solar geoengineering and carbon removal, a new stand-alone initiative has launched, the [Institute for Carbon Removal Law & Policy](#), that focuses strictly on carbon removal.

What Is Solar Geoengineering?

Solar geoengineering, also known as solar radiation management (SRM) or albedo modification, is a proposed method for cooling the planet by reflecting a small fraction of incoming sunlight back into space before it can warm the Earth. This could temporarily slow or even reverse global warming, although using solar geoengineering without reducing greenhouse gas emissions carries severe risks. Solar geoengineering would not directly reduce carbon dioxide levels in the atmosphere, although it could have some indirect effects that could slow the rise in atmospheric levels of carbon dioxide. Prominent proposals for implementing solar geoengineering include injecting tiny particles into the upper atmosphere (stratospheric aerosol injection) or brightening the skies over the open ocean (marine cloud brightening or marine sky brightening).



What Is Carbon Removal?

Carbon removal (CR), also known as carbon dioxide removal (CDR) or greenhouse gas removal (GGR), would remove carbon dioxide and potentially other greenhouse gases from the atmosphere and lock it away for decades, centuries, or millennia. This could permanently reduce or even reverse global warming, although CDR is too slow-acting and expensive to make a significant long-term difference unless humanity also reduces its greenhouse gas emissions dramatically. Technologies for implementing CDR are sometimes called negative emissions technologies (NETs). Some prominent ideas for NETs include planting massive new forests (afforestation), capturing and sequestering carbon from biomass-fired power plants (bioenergy with CCS or BECCS), spreading crushed rocks over land or the surface of the sea to absorb carbon dioxide from the air or water (enhanced weathering), and building machines that would suck carbon dioxide directly out of the atmosphere and bury it (direct air capture).

What Role Might Climate Engineering Play in Climate Policy?

While some researchers hope that some kind of climate engineering might be a useful addition to the climate policy toolkit, there is a strong consensus that climate engineering is not a suitable replacement for cutting greenhouse gas emissions. Thus, reducing our greenhouse gas emissions and adapting to climatic changes must remain the top priorities in climate policy.

Climate engineering remains controversial both because of significant scientific and technological uncertainty and because of the governance challenges and ethical concerns involved in research and any potential deployment.

By

Riya Chanpurkar

Tejswini Khawas

(1st year, EE)

News for the month

Guest lecture by Rakhi Mundada on Awareness of health through



Guest Lecture on Oral Cancer



HCL Technologies Visit





Motivational Quotes

- **Most people believe the mind to be a mirror, more or less accurately reflecting the world outside them, not realizing on the contrary that the mind is itself the principal element of creation.**

— **Rabindranath Tagore**

- **I believe that a simple and unassuming manner of life is best for everyone, best both for the body and the mind.**