IIT KANPUR TO BE CARBON NEUTRAL
(Steered by Chandrakanta Kesavan Centre for Energy Policy and Climate Solutions)

WHAT IS CARBON NEUTRAL

Carbon neutral: Situation when anthropogenic carbon emitted in the atmosphere is balanced by the anthropogenic removal of carbon from atmosphere (IPCC, 2021).

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Increasing temperature and global warming necessitate that we need to make immediate efforts for being carbon neutral i.e., having net zero carbon emissions to avert the climate change and mitigate the adverse impacts. Realizing the extreme importance of this, IIT Kanpur has committed itself to become carbon neutral as a part of its duty to be an environmentally and socially responsible institute. The initiative will not only be important for its own campus, it can also present an example for other institutes and organizations to emulate.

Partners

1. 14 trees Foundation
2. The Energy Resource Institute
3. Power Grid Corporation of India Ltd.

Tangible Outcomes

o Energy efficient campus
o Energy saving campus
o Water saving and harvesting
o Waste management
o Carbon sensitive transport
o Community awareness
o Carbon sinks and green cover

Clean
Green
Responsible

IITK

APPROACH

1. **Measuring carbon sources via 3 scopes (ISO-14064)**:
Scope 1: Direct emissions including production of electricity and steam, waste generation, vehicle fleet etc.
Scope 2: Carbon emissions from the generation of purchased electricity consumed by the organization
Scope 3: All indirect emissions that occur from the sources not owned or controlled by the organisation such as travel for conferences and seminars, waste disposal, electrical products etc.

2. **Evaluating carbon sink** i.e., estimating the sequestration potential of tree and soil within campus
3. **Examining the technological and non-technological measures leading to energy sustainability and carbon offset**
4. **Analysing investment needed for being carbon neutral**
5. **Preparing an action plan**
6. **Implementation, execution, testing, verification and certification**

Timeline : 5 Years

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