

CMPDI Announces Results of Hackathon on Carbon Capture Technology

Posted On: 30 JUN 2025 8:16PM by PIB Delhi

The Central Mine Planning and Design Institute, a subsidiary of Coal India Limited under the Ministry of Coal declared the results of Hackathon on Carbon Capture Technology, conducted from 12th May, 2025 to 10th June, 2025.

The hackathon focused on three problem statements,

1. Direct Air Capture (DAC) of GHG

- ii. Geological storage of captured CO₂ in the coal bearing regions of India.

1. Development of carbon capture-based bio-fuel utilizing algae cultured in the mine pit lakes.

On problem statement of 'Direct Air Capture of Green House Gases,' Urjanovac Pvt Ltd emerged as winner. IIT Jammu came second while IIT (ISM) Dhanbad secured the third place.

On second problem statement, 'Geological Storage of captured CO₂ in the coal bearing regions of India,' NIT Calicut emerged victorious. TechX Earth Space Pvt Ltd became 1st runner up and IIT (ISM) Dhanbad became 2nd runner up.

Algae Labs Pvt Ltd from Tamilnadu secured first place on problem statement 3, 'Development of carbon capture based biofuel utilizing algae cultured in the mine pit lakes. North East Institute of Science and Technology Jorhat, Assam secured second place, while Central Institute of Mining and Fuel Research (CIMFR) came third.

A total 24 proposals were received on three problem statements. Top 5 proposals for each problem statement were selected through evaluation criteria and were presented before distinguished judges.

This hackathon saw participation from startups, academic institutions, research bodies, corporations and non-profit organisations. Participants came up with innovative solutions that align with India's climate goals and the Prime Minister Shri Narendra Modi's vision of Atmanirbhar Bharat. Winners will get a chance to collaborate with industry experts, solve real world challenges and drive an impactful change in the energy sector by developing sustainable solutions for carbon management.

Shuhaib T

(Release ID: 2140935)