

Indian Institute of Technology (IIT) Jodhpur: an Institutional Approach to Sustainability

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The Indian Institute of Technology Jodhpur (IITJ) has implemented an innovative sustainability master plan, focusing on Scope 1 and Scope 2 emissions. The campus functions as an interlocking, integral network, akin to the metabolism of a living organism. IITJ has pioneered approaches for communities to adapt to challenges like extreme heat, water management, and unique regional biodiversity. In 2023-2024, direct emissions (Scope 1) from fuel use were 474 tonnes of CO₂e, primarily from kitchens and vehicles. Indirect emissions (Scope 2) from electricity use amounted to 108,773 tonnes of CO₂e, with mitigation efforts including solar power generation (962 332.6 kWh) and expanded green cover. The Center for Emerging Technologies for Sustainable Development (CETSD) drives these initiatives, reinforcing IITJ's commitment to sustainability in Western Rajasthan. Through collaborations with industry and NGOs, the institute aims to achieve net-zero greenhouse gas emissions by 2050, leveraging research, student engagement, and green technologies to lead desert institutions in India.