



13 CLIMATE ACTION



SUSTAINABLE DEVELOPMENT GOALS

REPORT 2022



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SDG 13 Through integrated policies, education, the development of institutional capacity, and the mobilisation of finance, SDG 13 seeks to strengthen climate change resilience, adaptive capacity, and mitigation efforts. Manipal University Jaipur is dedicated to transforming campus operations toward carbon neutrality and is a visionary in climate change research, education, and planning.

SDG 13 CLIMATE ACTION

Introduction

Climate change stands as one of the most pressing challenges facing our planet, necessitating urgent and collective action to safeguard the environment and secure a sustainable future for generations to come. The call for climate action has reverberated worldwide, with increasing urgency to address the dire consequences of a changing climate. Climate change refers to the significant and lasting alterations in the Earth's climate patterns, largely driven by human-induced activities such as deforestation, greenhouse gas emissions, industrial practices, and fossil fuel consumption. This phenomenon has resulted in rising global temperatures, extreme weather events, melting ice caps, sea-level rise, and the disruption of ecosystems.

The urgent need to address climate change is imperative. The impacts of global warming are increasingly evident, affecting communities, economies, and natural ecosystems. Addressing climate change is not solely the responsibility of governments and global organizations. Every individual, community, business, and nation play a role in climate action. Adopting sustainable practices, reducing carbon footprints, advocating for environmental policies, and supporting clean energy initiatives are crucial steps that individuals and organizations can take to contribute to the fight against climate change.

Climate action is an urgent necessity, demanding a global response that involves every sector of society. By implementing comprehensive strategies that encompass mitigation, adaptation, resilience, and embracing innovative solutions, we can collectively combat climate change. The time to act is now, and the actions taken today will shape the trajectory of our planet's future. Through individual commitments, collective efforts, and global cooperation, we can pave the way for a more sustainable and resilient world for generations to come.

Manipal University Jaipur is Leading the Charge on climate action.

In the face of the existential threat posed by climate change, Manipal University Jaipur is stepping up to address this global challenge through a range of proactive measures. As knowledge hubs and pioneers of research and innovation, the institution is leveraging its expertise, resources, and influence to spearhead meaningful actions against climate change.

Commitment to Sustainability and Emission Reduction

Universities are actively committing to sustainability goals and emission reduction. Many have pledged to achieve carbon neutrality, implementing initiatives to reduce their carbon footprint through energy-efficient infrastructure, renewable energy sources, and eco-friendly practices. They are not only addressing their operational impacts but also setting an example for the broader community.

Manipal University Jaipur believes Addressing climate change requires a multi-faceted approach that encompasses mitigation, adaptation, and resilience-building efforts:

1. Mitigation strategies focus on reducing greenhouse gas emissions, transitioning to renewable energy sources, enhancing energy efficiency, and implementing sustainable practices across various sectors to curb climate-altering activities.
2. Climate adaptation involves preparing for and responding to the impacts of climate change. This includes developing resilient infrastructure, sustainable agricultural practices, and ecosystem restoration to mitigate the effects of changing climate conditions.

3. Building resilience is crucial to withstand and recover from climate-related challenges. It involves creating systems and communities that can endure and bounce back from climate-induced disruptions and disasters.

Incorporating Climate Change in Curriculum

Manipal University Jaipur is embedding climate change education into the curriculum across various disciplines. Manipal University Jaipur is fostering a deeper understanding of climate issues, sustainability, and environmental stewardship among students. Manipal University Jaipur is offering courses of climate action and facilitating innovative solutions, developing new technologies, and promoting policy changes aimed at mitigating the effects of climate change.

List of Courses upon SDG 13 climate action
CV4154 Water Resources Planning and Management
CV4157 Geoenvironmental Engineering
CV3246 Sanitation Technology
CV3241 Advanced Design of Reinforced Concrete Structures
CV4140 Earthquake Resistant Design of Structures
CV3242 Environmental Impact Assessment
CV3242 Environmental Impact Assessment
CV3243 Air Pollution and Control
CV4142 Solid and Hazardous Waste Management
CV4143 Industrial Wastewater Treatment
CV3084 Rural Water Supply and Sanitation
CV2080 Environmental Impact Assessment
CV3083 Solid Waste Management
CV3081 Environmental Management

Engagement in Community Outreach and Awareness

Manipal University Jaipur is engaging in community outreach to raise awareness and educate the public about climate change. It organizes seminars, workshops, and public events to disseminate knowledge, promote sustainable practices, and encourage community involvement in environmental conservation efforts. Manipal University Jaipur is actively engaging in advocacy efforts, lobbying for policy changes and collaborating with governments, businesses, and non-profit organizations. By forming

partnerships, they foster collective action to address climate change at a broader level, influencing policy decisions and advocating for environmental conservation and sustainable practices.

Investment in Sustainable Infrastructure and Practices

Manipal University Jaipur is investing in sustainable infrastructure and practices. Manipal University Jaipur drives its energy consumption from solar energy, it has 970.64 kWp Solar system. It is retrofitting buildings for energy efficiency, investing in renewable energy sources, implementing waste reduction programs, and promoting sustainable transportation alternatives. These steps contribute to reducing the carbon footprint and promoting a culture of sustainability within the campus and surrounding communities.



Empowering Research and Innovators

Manipal University Jaipur is nurturing a generation of researchers and innovators committed to addressing climate change. By instilling knowledge and values of sustainability, they are empowering students to drive change, encouraging them to develop innovative solutions and become advocates for a more sustainable future. In addition to mitigating climate change, Manipal University Jaipur is focusing on adaptation and resilience strategies. Manipal University Jaipur is studying the impacts of climate change and developing solutions to address the effects on vulnerable communities, ecosystems, and infrastructure, promoting strategies for resilience in the face of a changing climate.

Activity of Manipal University Jaipur



Within: SDG 13: Climate Action | Year range used for metrics: 2020 to 2022

Summary

+ Add Summary to Reporting

+ Add to Reporting

Performance


47

Scholarly Output  





 [View list of publications](#)

2.51

Field-Weighted Citation Impact  



11

International Collaboration  



1,392

Views Count 

355

Citation Count  

List of Research publication under SDG 13 Climate action

Polyhydroxyalkanoates biopolymers toward decarbonizing economy and sustainable future
Performance and Emissions Characteristics of Diesel Engine Run on Citrullus Colocynths Biodiesel with Zinc Oxide Additive
Performance and Emission Characteristics of Single-Cylinder Diesel Engine Fueled with Biodiesel Derived from Cashew Nutshell
Opportunities & challenges of hempcrete as a building material for construction: An overview
A review: Effect on performance and emission characteristics of waste cooking oil Biodiesel- diesel blends on IC engine
Effect of simultaneous & consecutive melting/solidification of phase change material on domestic solar water heating system
Current situation analysis of solar PV waste management in India
Experimental and Statistical Evaluation of Mechanical Properties of Green Cement Concrete - Taguchi Integrated Supervised Learning Approach
Evaluation of co-culture system to produce ethanol and electricity from wheat straw hydrolysate using Saccharomyces cerevisiae and Pichia fermentans
Effect of fuel additives on internal combustion engine performance and emissions
Ecotoxicity of Concrete Containing Fine-Recycled Aggregate: Effect on Photosynthetic Pigments, Soil Enzymatic Activity and Carbonation Process
Internet of Things Based Real-Time Monitoring System for Grid Data
A comprehensive review on machine learning in agriculture domain
Use of artificial intelligence (AI) in the optimization of production of biodiesel energy
Future prospects of biodiesel production from jatropha in India
A Green Approach—Cost Optimization for a Manufacturing Supply Chain with MFIFO Warehouse Dispatching Policy and Inspection Policy
Opportunities and challenges of using nanomaterials and nanotechnology in architecture: An overview
Sustainable Rural Development through Renewable Energy Technologies: Identification of Potential Methods to Increase Rural Incomes
Development of the Indian Future Weather File Generator Based on Representative Concentration Pathways
Estimation of thermodynamic and enviroeconomic characteristics of khoa (milk food) production unit
The digital agricultural revolution: Innovations and challenges in agriculture through technology disruptions
Biopolymeric membranes and their role in CO ₂ separation: A review
Market trends with cryptocurrency trading in industry 4.0