



AMITY UNIVERSITY MAHARASHTRA

Established vide Maharashtra Act No. 13 of 2014, of Government of Maharashtra, and recognized under section 2(f) of UGC Act 1956.

A

Report on



GOAL 13: Climate Action

Sustainable Development Goals

Year 2022

Amity University Maharashtra, Bhatan Post - Somathne,
Mumbai - Pune Expy, Panvel, Bhatan Pada,
Maharashtra 410206

Table of Contents

GOAL 13: Climate Action.....	3
Carbon Reduction Target Covering Scope 1 & 2 Emissions	3
By Year 2050	3
Carbon Reduction Target for Scope 1.....	3
Carbon Reduction Target for Scope 2.....	4
Strategy on Reaching Net-Zero.....	5
Climate Action Plan Policy	7
Expert talk on “One Earth: An Integrated Approach towards Climate Change Adaptations and Mitigation using Geo-spatial Technology”)	8
World Environment Day 2022: Theme Only One Earth.....	11

GOAL 13: Climate Action

Carbon Reduction Target Covering Scope 1 & 2 Emissions

By Year 2050

The Amity University Maharashtra has carbon emission reduction target covering scope 1 and scope 2.

Carbon Reduction Target for Scope 1

The scope 1 which is direct greenhouse gas emissions that occur from sources owned or controlled by the University, such as burning fossil fuels on-site, process emissions, and emissions from owned vehicles. The university has the following strategies to reduce Scope 1 carbon emissions:

- **Energy Efficiency Improvements:** The university has a plan to Conduct an Energy Audit to identify areas where energy consumption can be reduced. The university Implement energy-efficient technologies and practices to optimize energy use in buildings, and equipment's.
- **Switch to Renewable Energy:** Utilize renewable energy sources such as solar and wind.
- **Adopting Low-Emission Technologies:** University has planned to identify and replace high-emission fuels with lower-emission alternatives. The university has decided to consider using cleaner fuels or biofuels instead of conventional fossil fuels. The use of electric vehicles and equipment to produce fewer emissions compared to traditional combustion engine vehicles and machinery.
- **Implementing Carbon Capture and Storage (CCS):** University is exploring the possibility of capturing and storing carbon dioxide emissions from the processes and power generation to prevent them from entering the atmosphere.
- **Maintenance and Upkeep:** University will continue to regularly maintain and optimize equipment and machinery to ensure they operate efficiently and minimizing emissions.
- **Process Optimization:** University has started Identifying emission-intensive processes and find ways to optimize or redesign them to reduce carbon emissions.
- **Waste Management:** University is already having the plans on the reduction on emissions associated with waste disposal by implementing sustainable waste management practices. The university segregates the wate, and performs the recycling, composting, or converting waste into energy.

- **Use of Sustainable Materials:** The university has decided to zero down the combustion of raw materials results in emissions, consider using more sustainable and eco-friendly alternatives.
- **Employee Awareness and Training:** The university has decided to educate all employees about the importance of reducing emissions and involve them in identifying opportunities for improvement. The best practices will be implemented in the university.
- **Setting Emission Reduction Targets:** The university has clearly established the ambitious emission reduction targets for Scope 1 emissions, and regularly monitoring the progress towards achieving those targets.
- **Carbon Offsetting:** In cases where complete elimination of Scope 1 emissions is challenging, consider investing in carbon offset projects to balance out the remaining emissions such as by tree plantation.

The university has decided to conduct a thorough assessment of various operations to identify the most effective and feasible emission reduction measures under scope 1. Additionally, setting long-term sustainability goals and integrating emission reduction into the overall university strategy can help drive meaningful change.

Carbon Reduction Target for Scope 2

The Amity University Maharashtra has the target to reduce the carbon emission happening under Scope 2, i.e., indirect emissions resulting from the consumption of purchased electricity, heat, or steam. The emissions generated off-site but are associated with a university operation. This target will contribute to the carbon neutrality and combating climate change. Following points comes under the university strategy to reduce the carbon emission.

- **Energy Efficiency and Conservation:** The university has decided to Improve energy efficiency within the campus organization by adopting energy-efficient technologies, optimizing processes, and upgrading to more efficient equipment. The university has also decided to reduce the overall energy consumption will directly lead to lower Scope 2 emissions.
- **Renewable Energy Procurement:** The university already using the solar panels to generate the electricity and having plan to more toward the transition to renewable energy sources to power operations. The university is also having plan to purchase electricity generated from renewable sources like solar, wind, hydro, or geothermal. The university has plan to use the green energy purchasing options.

- **Power Purchase Agreements (PPAs):** University has a plan to enter into long-term agreements with renewable energy producers through PPAs. The university is looking for the competitive prices and provide a stable, predictable supply of renewable electricity.
- **Carbon Offsetting:** The university has plan to invest in high-quality carbon offset projects that reduce or remove emissions equivalent to your Scope 2 emissions.
- **Energy Tracking and Reporting:** The university has plan to implement an energy tracking and reporting system to monitor your energy consumption accurately. The university will be regularly analysing the data to identify opportunities for further efficiency improvements.
- **Employee Engagement:** The university has the plan to Involve employees in sustainability efforts and encourage them to adopt energy-saving practices in the university campus, such as turning off lights and equipment when not in use.
- **Collaborate with Suppliers:** The university has plan to engage with suppliers to encourage them to reduce their emissions and switch to cleaner energy sources.
- **Certifications and Standards:** The university has plan to obtaining certifications like ISO 50001 (Energy Management) to help manage and reduce energy use effectively.
- **Invest in Battery Storage:** The university generate the renewables solar energy on-site and planning to invest in increasing the battery storage systems to store excess energy. This will ensure a stable supply of clean energy even during periods when renewable sources may not be producing at their peak.
- The university has decided to conduct a thorough assessment of various operations to identify the most effective and feasible emission reduction measures under scope 2. Additionally, setting long-term sustainability goals and integrating emission reduction into the overall university strategy can help drive meaningful change.

Strategy on Reaching Net-Zero

Amity University Maharashtra has prepared a strategy to contribute in the reduction of meeting the global objective of minimizing global warming to 1.5°C by 2050. It is the strategy for achieving a balance between the greenhouse gases emitted into the atmosphere and the amount removed or offset.

In this direction the University has decided the following steps to be implemented with proper discussion with all employees and involvement of the students in the university.

- **Reduce Greenhouse Gas Emissions:** The university has decided to find the emission sources of Carbon Dioxide (CO₂), Methane (CH₄), and Nitrous Oxide (N₂O). University has vision of adopting cleaner energy sources, improving energy efficiency, transitioning to renewable energy, and implementing sustainable practices in the university campus and related activities conducted by the university outside of the campus.
- **Transition to Renewable Energy:** In continuation to the existing Investment in renewable energy sources like solar, the university is also planning to invest in the wind, hydro, and geothermal power, so that, the university can have minimal or zero greenhouse gas emissions. University has plan to completed avoid the fossil and reduce CO₂ emissions.
- **Energy Efficiency:** University has plan to do the automation in to further Improve energy efficiency in buildings, transportation, and university campus premises. This includes using energy-efficient appliances, better insulation, and sustainable practices in the University Campus buildings and hostel.
- **Promote Electric Transportation:** With reference to the existing battery vehicles in the campus, the University has plan to adoption of electric vehicles (EVs) for all operations and invest in transportation systems powered by clean energy to reduce emissions due to the transportation activities.
- **Afforestation and Reforestation:** The university is established in the green environment. University is Planting trees and restoring forests can act as natural carbon sinks, absorbing CO₂ from the atmosphere. This helps in offsetting some of the remaining emissions.
- **Carbon Capture and Storage (CCS):** The university has plan to Implement CCS technologies that capture CO₂ emissions, then store them safely underground or use them for other purposes.
- **Circular Economy:** The university is planning to be more active to a circular economy, where products will be used that are more durable, reusable, and recyclable, reducing waste and associated emissions.
 - **Reducing Methane Emissions:** University has a plan to control methane leaks from natural from infrastructure.
- **Government Policies and Regulations:** The university follows the rules and regulations for the smooth transition to a net-zero economy by implementing

supportive policies, setting emissions reduction targets, and promoting sustainable practices.

- **Public Awareness and Participation:** The university has the plan to raise awareness about the importance of net-zero and involving the public in sustainable actions can drive collective efforts towards a low-carbon future.
- The university has plan to collaborate with governments, businesses, communities, and individuals, for the sustainable solutions.

Climate Action Plan Policy

Climate Action Plan Framework of AUM	
Curriculum on Sustainability	Research Activities around Climate Change
Community Activities on Climate plan.	Sustainability in Procurement and Investment

The university has the policy to have fully dedicated or part of the curriculum focusing on the climate change and its impact on the survival of the human being. The University has a policy to focus on the research conducted by the Faculty members and the students to address the climate change and its impact. The University has a policy to conduct the community outreach and awareness programs in the society to make the people about the climate change. The University has a vision to have collaboration with the other Universities, Government and Non-Government organizations on the matter of the Climate action. The University calculate the carbon emission and impact on the climate footprints whenever there is any purchase or investment happening. The Under Graduate Programs run by the university have the Environment Science Course of 4 Credits, to make the students aware about the Environmental and Climate change issue

The University has a vision to establish the Center of Excellence working around the Climate change and sustainability and encourage and support to the existing Center of Excellence in the University. The University has the policy to have maximum involvement of the students in the Climate Action Plan and Framework developed. The University has the policy to avoid use of the Plastic on Campus. The University has a policy to encourage and educate the students to save electricity and void carbon emission. The University has the policy to keep the university activities synchronized with the research reports published by the various climates monitoring organization. Considering the changing scenario of the climate, the University has focus to update the climate change framework, as and when required and specified by the State Government, Central Government and various regulatory bodies including the guidelines given by the University Grants Commission.

[Expert talk on “One Earth: An Integrated Approach towards Climate Change Adaptations and Mitigation using Geo-spatial Technology”](#))

General Information :

Date of Event : 03/06/2022
Venue : Online
Organized by : Civil, ASET and ASAS
Total Participation : 85

Details of Expert/Speaker/Resource Person/Judge:

Country Name: India
Expert Name: Dr. Sanjay Narayan Patil
Organization: School of Environmental and Earth Sciences, North Maharashtra University
Designation: Professor
Specialization: Earth and environment Sciences

Point wise Outcome Report:

1) What was the Inspiration behind taking up this Particular Subject for the Webinar ?

The objective of these webinars is to discuss and critically analyse the climate change crisis and the consequences that our mother earth has been facing these years in terms of global warming, impact of water resources, emission of GHGs, adverse impact on agriculture etc. and the application of Geo -spatial technology i.e Geographic Information System (GIS) and Remote Sensing (RS) as a step towards the climate change adaptations.

2) Who were the Distinguished Guest Speakers Invited for the Event. Kindly give their Names. Designations, Organisation, Qualifications, Area of Expertise and any Honours and Awards received by them.

- The details of the guest speaker are:
- Expert Name: Dr. Sanjay Narayan Patil
- Organization: School of Environmental and Earth Sciences, North Maharashtra University
- Qualification: PhD
- Designation: Professor
- Specialization: Earth and environment Sciences

3) What was the Criteria Considered for inviting the Various Individual Guests, Internal as well as External ?

- Speaker is an expert in the Earth and Environmental field with very high quality research.

4) Were the guests in advance and if yes, from what previous interaction? Were the guests recommended by someone. If yes, who ?

- Guest was recommended by one of the colleagues Dr. Nilesh Wagh who previously worked with the expert.

5) Who all attended the Webinar? Also, if possible, give the numbers.

- Faculties and students: Total 85

6) What were the 'Take Homes' for the Guests and the Attendees in the form of knowledge, facts, information etc.? Please give the Salient Novel Points Covered by the Guest Speakers, in Bullet Points Format.

- Climate change crisis and the consequences that our mother earth has been facing these years in terms of global warming, impact of water resources, emission of GHGs, adverse impact on agriculture.
- application of Geo -spatial technology i.e Geographic Information System (GIS) and Remote Sensing (RS) as a step towards the climate change adaptations.

- Application of GIS and RS in environmental impact assessment.
- 7) Has the Webinar been able to generate any Tangible Gains for the Faculty, Researchers and Students of Amity. If yes, what are these ?
- Participants received an overview of the climate change crisis and its impacts.
 - Participants got to know about the applications of GIS and RS in different environmental studies.
 - Participants got an overview of the advantages of GIS and RS in assessing the environmental impact.
- 8) What are the 'Progressive Outcomes /Way Forward' planned, based on the event of the webinar. Please give them pointwise, with timelines and names of the persons responsible for their execution.

Nothing as such is planned as of now.

- 9) Have we Followed-Up with the Guests to consider Various Collaborations such as Joint Research Papers and Publications; Joint Funded Projects; Student Internships and Placements; Participation in National/ International Seminars/Conferences, /Workshops ; Student/Faculty Exchange Programmes ; Post Doctorate tie ups ; etc.

Yes, we have followed up with him for research publications.

- 10) What are the plans for utilizing the contacts developed with the Invited Guests, for future cooperation to meet the targets of 'Mission: Connect' and Mission: Synergy of Brains? Please give a roadmap with timelines.

A discussion is going on to collaborate on some research projects

World Environment Day 2022: Theme Only One Earth

General Information :

Date of Event	6th June 2022
Venue	Room No. 322 Amity Business School
Organized by	Environment Committee of ABS
Total participation	20

Details of Expert/Speaker/Resource Person/Judge:

Country Name	India
Expert Name	Dr. Reshma Nair
Organization	Amity Business School
Designation	Assistant Professor
Specialization	Human Resource

Point wise Outcome Report:

What was the Inspiration behind taking up this Particular Subject for the Webinar ?

This is an attempt to follow the theme “Only One Earth” to celebrate the World Environment Day 2022 on the occasion of World Environment Day. Amity Business School’ Environment Committee organized the event to create awareness about reducing pollution in the environment and finding out best possible ways to reuse the waste.

Details are given below:

- Kahoot game about the environment and pollution
- “Best out of waste” competition

Event was attended by Students and Faculties as well. No. of attendees were 50.

Kahoot Quiz about the Environment and Pollution: Through Kahoot quiz about the environment and pollution students gain the knowledge. Only One Earth focuses on to live sustainably in harmony with nature, and shifting to greener lifestyles.

Competition on Best out of waste: Here students utilize their knowledge and coming up with new ideas /innovation of waste product. Waste product can be utilize in better manner. Best out of waste is a application of knowledge. Guest and dignitaries were felicitated by bucket of plants. The event helped students to widen their knowledge and understanding in their Environment related activities, further they generate sustainable ideas/innovation in products which increases sustainable/ greener lifestyles. To achieve sustainable development goals via creating awareness among students regarding sustainably in harmony with nature and shifting to greener lifestyles.

Amity Business School creating awareness through the event Only One Earth. The event consisted of two levels. For the first stage, all 15 participants had to play a kahoot game that was based on environment and pollution related questions. As qualifiers, top 10 students were then selected from their final scores after the first round as qualifiers for the second round “Best out of waste”. The chief guest of the event was Dr. Bhawna Sharma and the judge was Rd. Reshma Nair

Chief Guest, Jury, Senior Dignitaries were facilitated by plants. The event was attended by the participants with faculty members and the organizing committee. Three teams won the final round of the competition- Ashutosh Dhyani and Parth Wadnerkar secured the first place, Aditya Kadale and Adarsh Choudhary won the second place and Shruti Namdev and Ritik Khandelwal secured the third position.

