



SUSTAINABILITY SNAPSHOT



CENTRE FOR SUSTAINABILITY



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FROM THE DESK OF THE VICE-CHANCELLOR

It is with great pleasure that I release the inaugural edition of “Sustainability Snapshot”, the newsletter from Mahindra University’s Centre for Sustainability. Mahindra University established the Centre for Sustainability (CFS) to cater to the crying need for solutions and manpower to combat climate change. In a short span of time the Centre has built a team of accomplished faculty who are from the best institutions in the world and continues to grow its team in line with its plans.

Since its inception, the Centre has made significant strides. It has got its first internationally funded project, published multiple papers and won accolades at international events. It is gradually building up a body of research in the built-environment, exploring other areas of research that are crucial for achieving climate goals and facilitating green practices at the University.

On the academic front, the Centre has launched foundational sustainability courses, embedded sustainability concepts into existing curricula, and introduced specialized elective courses. It has even launched insightful courses in personal sustainability that help students clean up cobwebs in their mind and stride forth powerfully to be the best that they can be. Looking ahead, the Centre plans to establish Masters and Doctoral level programs apart from a minor in sustainability for undergraduates.

The Centre is located in the greenest part of the campus. The interplay of natural light and ventilation and adoption of sustainable solutions makes its operating area a great place to work. I extend my best wishes to the faculty and staff at the Centre for Sustainability. I am confident that their expertise and dedication will play a pivotal role in developing a vibrant sustainability ecosystem at Mahindra University and the Centre will make a mark not just in India but globally.



Dr. Yajulu Medury

- Dr. Yajulu Medury

FROM THE DESK OF THE HEAD OF THE CENTRE



Mr. Anirban Ghosh

Welcome to the inaugural edition of Sustainability Snapshot, a newsletter published by the Centre for Sustainability (CFS) at Mahindra University. This publication will keep you informed about our people, programs, courses, research, outreach, initiatives and achievements. It will also have a few interesting insights into the concept of sustainability and implementation of sustainability solutions. This issue covers all this along with the inauguration of the Centre earlier this year.

श्वतम्, प्रकृति-मानव-सङ्गतम्
**The relationship between
nature and people is eternal**

Mahindra University established The Centre for Sustainability in 2023 as a part of its crusade to create global thinkers and engaged leaders.

Climate being the biggest problem that the world has to solve it is inconceivable that we can create global thinkers or engaged leaders who do not have a deep understanding of sustainability with a bias towards action. The Centre is committed to enable a better and more equitable world where human beings live in harmony with nature. It will do so by developing engaged sustainability leaders through education, research and collaboration.

The Centre and its people have had a great start through its first publications, initial set of courses it has curated and delivered, partnerships it has entered, outreach programs it has conducted and competitions it has participated in. We are very grateful to all the people and teams from other Schools and Centres in the University who partnered with us in our journey, and you will find expression of our gratitude in this newsletter.

We are in the process of curating a cutting-edge Masters in Sustainability program tailored to the needs of its stakeholders. We also look forward to a time when Mahindra University will award doctoral degrees in sustainability and students in the undergraduate program will have the option of completing a minor in sustainability along with their major degree. Committed to fostering research, innovation, education and collaboration, the Centre aspires to be a national hub for sustainability.

I hope you enjoy reading this newsletter and walk together with us in the journey to shape a sustainable future together.

INAUGURATION OF THE CENTRE FOR SUSTAINABILITY



*Inauguration at
Vineet Nayyar
Academic Block*

The Centre for Sustainability was opened on 2nd August 2024. It was opened by the Chancellor, Mr. Anand Mahindra, along with our Vice-Chancellor Dr. Yajulu Medury in the presence of Mr. C.P. Gurnani, Member of the Board of Mahindra University. Anirban Ghosh, Head of the Centre introduced the people in the team to the dignitaries and explained the significance of the motifs at the Centre such as sabi baskets at the entrance, a majestic faux tree with Warli art at the base of the podium, panoramic pictures of a rainforest and a waterfall, a tree shaped bookshelf and carpets made of recycled material. The mural depicting the Sustainable Development Goals, logo of COP21 held at Paris, satirical illustrations of the progress of climate action and innovatively named meeting spaced lend authenticity to the space.

The Centre aims to build a more equitable world where human beings live in harmony with nature and plans to do so by developing engaged sustainability leaders through education, research, innovation and collaboration.



RESEARCH & PUBLICATIONS

Faculty at the Centre for Sustainability are engaged in innovative research addressing climate change and environmental sustainability. Key focus areas include energy and transport sector decarbonization, river basin management for water security, and exploring the complex interactions between the built environment and urban heat. These efforts are geared towards creating practical, impactful solutions to address urgent global challenges. Here is a list of some notable projects undertaken by faculty at the Centre for Sustainability.



Project Title: **“Assessing the impact of AI on heat mitigation and adaptation”**

- Principal Investigator: Prof. Surekha Tetali
- Funding Agency: Future of Life Institute
- Budget: USD 15,000

Project Title: **“Bharatiya's Perspectives on Grid Connected Roof Top Solar PV Implementation”**

- Principal Investigator: Prof. Balasubramanian Sambasivam
- Funding Agency: ICSSR
- Budget: INR 10,00,000

Project Title: **“An experimental assessment of the impact of cool roof on PV panel performance”**

- Principal Investigator: Prof. Surekha Tetali, Prof. Balasubramanian Sambasivam. Prof. Anirban Ghosh
- Funding Agency: Internal Research Grant, MU
- Budget: INR 6,00,000

Publications (2024-2025)

Surekha Tetali, A Narrative on Urban Heat Island (UHI) in India - a need for a system thinking approach to integrate technologies and policies for climate and humankind, and Urban Heat Island: An Exclusive Interview with Dr. Surekha Tetali,,GT Publications, June 29, 2024

Narayana Sarma, R., Sambasivam, B. & Sundararaman, M. A technoeconomic analysis of hydrogen production in a high renewable resource electricity grid using alkaline electrolysis, polymer electrolyte membrane electrolysis and solid oxide electrolysis. Environ Sci Pollut Res (2024). <https://doi.org/10.1007/s11356-024-35212-7>

Balasubramanian Sambasivam and Rakesh Narayana Sarma. India's national green hydrogen mission: an analysis of the strategies, policies for net-zero emissions and sustainability. lopscience (2024). <https://doi.org/10.1088/2753-3751/ad8fb2>

Venkata Kousthuba Ippagunta, Ashritha Chittireddy, Ylr Sri Vaishnavi Borusu, Surekha Tetali Predicting air temperature from land surface temperatures utilizing machine learning, International Conference on Climate Change, Mumbai, Jan 18-19, 2025

ONGOING PROJECTS

1. Predicting air temperatures from land surface temperatures using machine learning techniques:

Land Surface Temperatures (LST) from satellite data provide higher spatial and temporal resolution than air temperature measurements. Using LST to predict air temperatures is crucial for areas without weather stations, supporting microclimate studies and solutions like optimal cooling Centre placement. This project proposes to use Machine Learning (ML) to estimate air temperature across different urban Centres of Hyderabad.



2. Land Use Classification of Hyderabad using machine learning techniques:

Understanding land use dynamics in rapidly growing cities like Hyderabad is key to sustainable urban development. Enhancing national and global datasets with local data improves land use classification accuracy in diverse urban areas. This project aims to create a detailed land use map for Hyderabad by integrating observational and local datasets, supporting precise impact assessments and informed decision-making.



3. An AI-ML based Decision Support Tool for Optimizing Green Infrastructure to Mitigate Air Pollution in Urban Built Environments: This study integrates insights from existing research and contextual data to optimize green infrastructure for air pollution reduction in and around buildings.

4. Manifestations of climate change on rivers and its implications for river resilience:

The key area of inquiry in this study is to understand how altered flow regimes affect river-floodplain interactions, with particular emphasis on channel-floodplain connectivity and its implications for riverine habitats and water security.

5. Impact of Electric Vehicle Integration on Grid Emissions:

This study explores the impact of electric vehicle (EV) integration on emissions from the electricity grid, providing critical insights into the interplay between EV adoption and grid decarbonization.



COURSES OFFERED & PEDAGOGY

The Centre for Sustainability aims to integrate concepts of sustainability across courses in all the Schools at Mahindra University. It currently offers nine courses and plans to increase this number to 25 in future, including a Masters' program to prepare market-ready professionals and conduct cutting-edge research. Many of the courses are offered in collaboration with industrial partners and leading practitioners of their fields. Faculty adopt innovative ways, such as interactive games, peer learning, micro learning, advanced online tools, audio-visual stimuli and project-based learning to enhance the ability of students to comprehend sustainability concepts.

Fall Semester

- Sustainability and AI
- Climate Solutions I
- Mind Over Matter
- Industry 5.0

Spring Semester

- SDGs and Our Careers
- Water and Us
- Personal Sustainability
- Climate Solutions II
- Earth and Environment

Semester Projects offered for Third year and Fourth year Engineering school students



EXECUTIVE EDUCATION

Integrating Environmental Education in School Curriculum



The Council for Indian School Certificate Examination (CISCE) is introducing environmental education in the middle school curriculum of Indian schools. They have partnered with Mahindra University **to conduct teacher training workshops to enable middle school teachers to teach environmental topics in an engaging, interactive manner.** An impactful two-day program was held at the CISCE's Centre for Excellence in Habsiguda, Hyderabad on 3rd and 4th October 2024 to kickstart the process. The program was thoughtfully designed and delivered by a six-member interdisciplinary team from Mahindra University. The team members were Prof. Anirban Ghosh (CFS), Prof. Anjali Rajan (SoM), Prof. Surekha Tetali (CFS), Prof. Jyothi Basu Yerramadha (IMSoE), Prof. Keerthi Katam (ECSoE) and Ms. Soumya Gupta (CFS).



The program was attended by 24 teachers from 23 schools located across the length and breadth of the country.

EXECUTIVE EDUCATION

“Impact Specialist Program”



The Impact movement is gathering momentum around the world. It has been spawned to ensure that sustainability work is done in a manner that it creates real impact and to enable investments to move towards projects that have real on-ground impact. Aspire Circle, UPES and Mahindra University came together to create Impact Specialists in the Indian ecosystem. The second part of a **two-part program** was held in MU at Hyderabad from 28th to 30th November. 32 senior and mid-level professionals from diverse industries and the social sector participated in the program.

The faculty at the program were Mr. Amit Bhatia (CEO and Founder, Aspire Circle), Prof. Anirban Ghosh (Head - Centre for Sustainability), Mr. Kieron Boyle (CEO and Director of 100x, the world's largest impact venture accelerator), Mr. Mauricio Samper (Director SEAF Colombia Agribusiness Fund), Dr. Sunita Purushottam (Head - Sustainability, Mahindra Lifespaces) and Ms. Prarthana Borah (VP - Sustainability Momentum India). The participants spoke highly about the accommodation, food, transport and academic facilities at Mahindra University and appreciated the members of the faculty for making difficult subjects simple.



GREEN INITIATIVES COMMITTEE

The Green Initiative Committee is one of 6 strategic committees set up as a part of IQAC at Mahindra University. The committee has been established in April 2024. Its members are Prof. Jyothi Basu Yerramadha (IMSoE), Prof. Keerti Pendyal (SoM), Prof. Bharghava Rajaram (SoE), Prof. Keerthi Katam (SoE), Prof. Jayato Nayak (CLS), Prof. Aditi Nidhi (SoL), Mr. Subrahmanyam KVR (Head Infrastructure), and Mr. Sudhakar Reddy (Head Corporate Services) and it is chaired by Prof. Anirban Ghosh.

The committee's working group, constituting members from the Centre for Sustainability, has developed a comprehensive framework to foster environmental stewardship and promote sustainability across the institution, with the ambitious goal of transforming Mahindra University into a net-zero campus.

To achieve this vision, the committee has set both two-year and five-year milestones. One of the goals is to obtain green building certification for the entire campus, reflecting the university's commitment to eco-friendly infrastructure. Initial discussions with the Indian Green Building Council (IGBC) have taken place to support this initiative and some new buildings have already been certified green.



IGBC members sharing their work with Mr. Anirban Ghosh

In addition to certification, the committee is planning to work on sustainable waste management, expanding solar energy capacity, wastewater recycling, energy audits, and environmental awareness programs. These efforts aim to integrate sustainability into the university's operations and foster a culture of environmental responsibility among students and staff.



Do you know we have a waste water recycling plant on our campus?



The recycled water is used to maintain the lush green spaces that you see around you!

OUTREACH AT CENTRE FOR SUSTAINABILITY

CONFERENCES

- Rockwell India Inc On The Move, Rockwell India Inc , February 2023
- UBS Conference: Net Zero Summit Awards UBS , March 2023
- ESG Designation Program Competent Boards, Canada, September 2023
- ESG Designation Program Competent Boards, Canada, November 2023
- ESG Fundamental Program Competent Boards, Canada, November 2023
- Sustainability Conclave 2023 Bombay Chamber of Commerce and Industry, December 2023
- BW Businessworld Supply Chain Summit Reinventing traditional supply chains in wake of global uncertainty BW Businessworld Supply Chain, December 2023
- Conference on Business-Friendly Cities (7th Edition of FICCI Cities Summit & 5th Edition of Smart Urban Innovation Awards FICCI, June 2024
- 2nd GRIHA Regional Conclave, GRIHA , August 2024
- Invitation to the 3rd International Convention on Sustainable Trade and Standards (ICSTS)
International Convention on Sustainable Trade and Standards (ICSTS), November 2023
- Moral Money Summit Asia, The Economist, September 2024
- SAP Sustainability Summit SAP Labs , September 2024
- IFAT India Conference 2024 IFAT, October 2024
- Sustainability Conclave 2024 Bombay Chamber of Commerce and Industry, December 2024



SOCH TALKS

The Centre for Sustainability has created a platform called “Sustainable Options for Climate and Humans” (SOCH) to host thought provoking discussions on subjects associated with climate change and living a better life on the planet.



Y20 Talks

Climate Change & Disaster Risk Reduction

Making Sustainability a Way of Life



Prof K. Purushottam Reddy

ACADEMICIAN, ENVIRONMENTALIST,
DEVELOPMENTAL ACTIVIST



1st November 2023
3 P.M. to 4 P.M.



The 2nd SOCH Talk was delivered by Dr. Rajat Kathuria, Dean, Shiv Nadar University and former Director and Chief Executive, ICRIER. He delivered a talk on the implications of sustainable development. He commented on **how interrelationships between international trade and environment impact the sustainable development of a country.** Addressing an audience of more than 45 students, he shared valuable insights on the subject, and this resulted in an engaging discussion, where students actively exchanged ideas with him.

The first SOCH Talk was on 1st November 2023, in partnership with Y20 in the run-up to the G20 conference held in India. Prof. K. Purushottam Reddy, an academican, environmentalist and development activist, spoke about “Making Sustainability a Way of Life”.

During his talk he lucidly connected critical incidents like the Bhopal Gas Tragedy and the ensuing legislations that followed in India and around the world. This approach helped listeners get a better understanding of **how the climate movement has developed.** He emphatically **pointed to the escalating levels of greenhouse gas emissions, which have precipitated a surge in extreme weather events on a global scale.** He underscored the critical need to integrate sustainability into our daily lives. The talk was attended by more than 65 students and SOCH Talks was off to a great start.

Guest Lecture



Interrelationship between international trade and the environment : implications for sustainable development.



15/11/2023
Start At 02:40pm
CR2, Academic Building

SPEAKER

Dr. Rajat Kathuria

School of Humanities and Social Sciences
Shiv Nadar University (snu.edu.in)



ENROLL NOW

<https://forms.office.com/r/7KZkcJDENT>



SOCH TALKS

The 3rd SOCH Talk was delivered by Dr. Sailesh Rao, Founder and Executive Director of Climate Healers, a non-profit dedicated to healing the Earth's climate. A systems specialist with a Ph. D. in Electrical Engineering from Stanford University, Dr. Rao delivered an engaging and powerful talk on engineering a sustainable planet, which was attended by more than 55 participants. **He shared valuable insights from his experiences in re-engineering the food system, dairy farming and other industries.** He highlighted that changing some of our habits can be a significant step towards a more sustainable planet. He explained the monumental cascading sustainability benefits of moving towards a plant-based diet and one of our students was motivated enough to commit to becoming vegan at the end of the talk.



The 4th SOCH Talks event on 14th February 2024 featured Dr. Neal Phillip, Professor, Bronx Community College, City University of New York. This edition succeeded the installation of the weather station at Mahindra University. Dr. Phillip talked about **the importance of weather data both for climate research and for general awareness of the population at large.** Dr. Phillip shared examples and methods of how the data could be used as he spoke to a gathering of more than 70 members of faculty and students.



SOCH TALKS



The 5th SOCH Talks event was a joint endeavor with MUVing Images, a platform created by The School of Digital Media and Communications (then referred to as The School of Media). This was the first time a SOCH Talks featured a film as the basis for conversation followed by a student debate. On 14th February 2024, **SOCH Talks and MUVing Images presented, "Virundhu" (The Feast)**, a short film by Rishi Chandna that had recently won the Special Jury Award at the Clermont Ferrand International Short Film Festival in France."

The film was a very good precursor to an intra-university student **debate on the topic, "Development Destroys the Planet."** More than 50 students attended the debate which was won by Aditya Chourasia and Yashica Anumala from the Centre for Life Sciences.



The debate was chaired by Prof. Anirban Ghosh, Head, Centre for Sustainability and the winners were felicitated by Dr. Shashidhar Nanjundaiah, Dean, School of Digital Media and Communications.



On 5th March 2024 SOCH Talks had the honor of hosting Dr. Saket Pande, a renowned hydrologist and water economist from TU Delft, Netherlands, for its 6th edition. The event drew more than 80 participants eager to learn from his expertise. Dr. Pande delivered an insightful lecture titled, "The Last Mile: Technology Adoption in the Agricultural Water Sector," highlighting key but often overlooked obstacles to scaling innovations in agricultural water management. He also discussed **his team's work, Makara, designed to foster behavioural change and encourage the sustained adoption of irrigation technologies.** The session was thought-provoking, inspiring attendees to reconsider traditional methods of technology dissemination in agriculture and underscoring the need to integrate socio-psychological factors into future interventions. We are grateful to Dr. Nilanjan Banik (School of Management) for making this session with Dr. Pande possible.



SOCH TALKS



SOCH Talks continued its journey of curating interactive, engaging events by hosting Vachana Shetty and her team from Akshaykalpa Organics for a talk and an organic food pop-up on 24th April 2024 as a part of our extended Earth Day celebrations. Vachana, on behalf of Akshaykalpa Organics, a rising leader in organic and **sustainably sourced food, delivered an insightful talk on the intricacies of our food system, shedding light on essential topics such as sustainability, transparency, and the purity of the food we consume.** The event attracted 80 enthusiastic participants eager to explore the deeper meaning of what makes food truly "good". Vachana emphasized the importance of making mindful food choices that not only fuel our bodies but also contribute to a healthier planet. Attendees were treated to complimentary samples of organic cheese, crackers, flavored milk and other dairy products. More than 200 goodie-bags with organic honey, ghee and coconut oil were distributed. Many members of the faculty and students have now got first-hand experience of the benefits of organic produce, and we have heard that some members of our community at Mahindra University have adopted Akshaykalpa's organic products in their consumption baskets.



AEIFORIA :THE SUSTAINABILITY CLUB



AeiForia, 2024

The sustainability club called AeiForia Club, was formed on 13th March, 2024. The club creates a forum for initiating, collaborating and organizing various techniques and strategies that can be incorporated bringing in Sustainability in prime focus. The club aims to enhance awareness of pressing ecological issues and promote a greener, yet convenient, lifestyle within our community at MU. The club would like to nurture solution orientation and enable those associated with it to be sustainability leaders of the future. The club aims to achieve its goals by giving wide exposure to the vibrant sustainability ecosystem to all, thus promoting collaborations and convergence at university.



WELCOME



CLUB AEIFORIA WELCOMES ALL OUR FRESHERS

CERAMIC BEAD MAKING WORKSHOP



Freshers, 2024

Aeforia, the Sustainability Club, made a splash at The Freshers event on Saturday, 31st August 2024. New students in MU were introduced to the Club's vision, its goals and the initiatives it has organized in the past. A hands-on bracelet making workshop using natural materials like roses (reused from temple flowers) and wooden beads added a creative, eco-friendly touch to the event. Many students enthusiastically created their own floral bracelets and embraced the spirit of sustainability.

AEIFORIA :THE SUSTAINABILITY CLUB

Aeiforia, the sustainability club, commemorated Earth Day 2024 with a series of activities and events starting from 22nd April to 26th April 2024. The landmark Paris Agreement had been signed on Earth Day 2016 by 193 nations, and it was a special day for the Mahindra Group since Mr. Anand Mahindra was invited to represent businesses of the world by speaking on the occasion.

22nd April 2024: The first day of the Green Action Week saw an effort to build awareness about the food waste that is generated on campus everyday through the **“Watch Your Waste” initiative**. Users of the canteen facilities were asked to empty the food waste from their plates in the “Watch your Waste” container before putting their plate for cleaning. The total amount of food wasted was announced later in the day. This simple activity gave concrete dimension to the general observation that the level of food waste from plates was high. The initiative has resulted in boards being put up in the canteen about the amount of food waste generated every day and efforts are being made to reduce the waste produced.

Students and faculty participated in a Fingerprinting Pledge just outside the canteen where they physically marked their commitment to consume responsibly by putting their thumb impression on the image of a tree. The exercise was done on recycled banners and posters to further drive home the message that reuse, recycle and repurpose, is an important part of responsible consumption.



*Watch
your
waste!*



*“I pledge to
consume
responsibly”*

DIY- ORGANIC COLOUR MAKING AND RANGOTSAV



Mahindra University celebrated Holi in style on Monday 25th March 2024. Aeforia started the festivities early on Wednesday 20th March 2024 with a workshop to make vibrant, eco-friendly colors using everyday ingredients like corn starch as the base and vegetables like beetroot, spinach, and turmeric for pigments. Participants used mortars and pestles to grind vegetables into natural dyes and graters to finely shred ingredients for easier extraction. The hands-on experience, from grinding to mixing, showed how easy, fun and creative it is to make organic colors with easily available everyday items.



Holi
2024



RANGOTSAV

FESTIVAL OF COLORS



On the big day, more than 700 students and faculty played Holi (Rangotsav) with dry, organic colors in the old football ground on campus. Upbeat music, surprise flash mob, energetic dancing, spirited tug-of war, surprise arrival of water hoses, gujias, thandai and enthusiastic participation overall made it an occasion to remember. Holi at Mahindra University was a tribute to sustainable celebration with unbridled joy.

AEIFORIA :THE SUSTAINABILITY CLUB



Paper recycling!



23rd April 2024: On the second day students participated in a recycling event and an awareness building activity. They crafted flowers (Bloom) from newspapers, demonstrating the potential of creative recycling. Each flower carried a quote. Students influenced the campus canteen, "Coffee Talk", to switch from plastic plates and glasses to paper-based products and their success helped them recognize that the transition to paper alternatives is both feasible and impactful.

24th April 2024: The focus of the third day was on sustainable food. Akshayakalpa, an organization focused on growing food sustainably and consuming sustainable food, reinforced the importance of supporting local farmers who prioritize environmental health and food quality. The Akshaykalpa food tent introduced students to the taste and goodness of organic honey and dairy products.

Good food campaign!



Choose green!



25th April 2024: Eco-conscious fashion was the theme for the fourth day of the Green Action Week. Aeforia collaborated with Voguenze, MU's fashion club and encouraged students to wear earthy colors on the day. The clubs highlighted how personal fashion choices impact the environment, and raised awareness of how clothing consumption can contribute to or alleviate strain on resources. They helped students understand that quality, eco-friendly fashion is an accessible and personal step toward sustainability and thus upheld the virtues of sustainable fashion.

AEIFORIA :THE SUSTAINABILITY CLUB



26th April 2024: On the fifth day Green Action Week went from sustainable fashion to a photography contest. Titled “Lens for Change”, the contest invited students to explore sustainability visually, capturing images related to one of the Sustainable Development Goals (SDGs). This opportunity for self-expression gave students a chance to cover a wide range of sustainability related topics with their lenses and build a deeper connection with better living on earth.



*Lens for
Change*



AEIFORIA :THE SUSTAINABILITY CLUB



On **9th October, 2024** Aeiforia celebrated Telengana's very own Bathukamma festival in front of the main building. Students, faculty, staff, helping staff, everyone participated in the celebration. The helping staff taught the students and others how to make **"Bathukamma"**, which was subsequently placed on a beautifully crafted rangoli. 'Bathukamma' means 'Mother Goddess comes Alive'. It is a beautiful flower stack, arranged with different unique seasonal flowers, most of them with medicinal values, in seven concentric layers in the shape of a temple gopuram.

Historically, "Bathukamma" meant "the festival of life".

Many female students and staff of Mahindra University gathered in a circle around the "Bathukamma" and danced to the sounds of traditional folk music in wonderful rhythmic flow. The cultural celebration was an expression of joy and embodied the spirit of Sustainable Development Goals such as SDG 10 (gender inequality), SDG 12 (Responsible Consumption and Production), and SDG 15 (Life on Land). It left participants and observers with a sense of unity and cultural pride.



PARTNERSHIPS

The Centre for Sustainability has entered three impactful partnerships so far.

The first to materialize was the partnership with Bronx Community College, City University of New York for the installation of a weather station on the Mahindra University campus. The compact, high tech weather station provides real-time weather data on variables like temperature, wind speed, rainfall, solar radiation and air quality. The data can be viewed on the website, "Weather Underground" and can be downloaded from "WeatherLink", a Davis instruments website, for research.

The weather station was inaugurated on 14th February 2024 by Dr. Yajulu Medury, Prof. Neal Phillip (BCC, CUNY) and Prof. Anirban Ghosh. The inauguration was preceded by a talk on the weather station project by Prof. Neal Phillip and Mr. Salil Kader from the US Consulate.



The second partnership was formalized very soon after on 27th February 2024 with Rockwell Automation at the conference titled "India Inc. On the Move 2024" at Chennai. The MoU was signed by Mr. Dilip Sawhney, MD, Rockwell Automation and Prof. Anirban Ghosh, Head - Centre for Sustainability. The two organizations agreed to equip students with skills and knowledge in sustainability best practices and has resulted in the curation of an elective course titled, "Climate Solutions - I" incorporating knowledge about climate solutions and exposure to "GLens", a real time data acquisition, monitoring and analytics suite of products for industrial emissions, effluent discharges and ambient air monitoring.

PARTNERSHIPS

In June 2024, the Centre for Sustainability joined UNESCO's Greening Education Partnership. This Partnership enables institutions around the world to embed sustainability into their curriculum. The Centre joined the partnership to keep abreast of best practices and progress in sustainability education. The partnership is built on four key pillars: Greening Schools (focusing on implementing climate-smart policies, building resilient facilities, encouraging inclusive decision-making, and fostering community engagement), Greening Curriculum (emphasizing delivery of high-quality, climate-focused education through innovative pedagogy), Greening Teacher Training (dedicated to empowering educators through training and development) and Greening Communities (promoting lifelong learning and youth-led climate action to build resilient and sustainable communities).

Mahindra University has joined UNESCO's Greening Education Partnership to help build the next generation of climate champions.



**17 PARTNERSHIPS
FOR THE GOALS**



ACHIEVEMENTS

In a short span of time the Centre for Sustainability has experienced success in international and domestic hackathons.

*Winners of
two themes*



Weather & Climate Hackathon (WATCH), Bhubaneswar, 2024

The installation of a weather station on campus led to the opportunity to participate in a nationwide hackathon amongst teams from locations which had weather stations in the same network. 20 colleges participated in the Weather & Climate Hackathon (WATCH) hosted by Kalinga Institute of Social Sciences from 19 to 21 September 2024. The hackathon was facilitated by the Bronx Community College of the City University of New York and the US Consulate, Hyderabad.

Mahindra University was represented by Geethika Choudhary Yadlapalli (SE22UCSE101), Monisha Kollipara (SE22UARI098) and Sri Dhruti Tikkiseti (SE22UARI175), all students of 3rd Year ECSOE. They finished runners-up in both Heatwaves, the primary theme, and Sustainable Cities, the surprise theme. The MU team, led by Prof. Surekha Tetali from the Centre for Sustainability, was the only team to win awards in both the themes of the hackathon.

The team presented two innovative solutions: "Terra Tide", A comprehensive tool for heatwave prediction, preparedness, and public participation to enhance heatwave adaptation strategies and "Vaayu Sudhi" - a tool designed to optimize green infrastructure and reduce indoor and outdoor air pollution in urban areas.

Hack Your District (HYD), Taiwan, 2024 ,



*Runner up
HYD -2024*

Prof. Balasubramanian Sambasivan presented a paper titled (name of paper) at "Hack Your District 2024: Open Data and Open Tools for Net Zero Urban Transport" organized by National Cheng Kung University and TU Berlin in Taiwan from 4th to 8th November 2024. A hackathon with the theme "Strategies for reducing emissions in public transport" was organized at the conference. Prof. Bala and his team members Prof. Amit Agarwal (IIT Roorkee), Moritz Sontheimer (National Taiwan University) and Dr. Kwon YongSeok (Smart City Research Committee, South Korea) won second place at the competition with the solution they presented.

ACHIEVEMENTS



*Team Terra
Tide winning
Sopra Steria
Nationals*



SOPRA STERIA STUDENT CHALLENGE, DELHI NCR , 2025

We are thrilled to share that our students—Cherith Reddy Yerabolu, Geethika Y., Monisha Kollipara, and Sri Dhruti Tikkiseti—from Mahindra University have won the National Finals of the Sopra Steria International Student Competition that challenges to leverage AI to solve global environmental issues, driving creativity and impactful ideas.

Under the guidance of Prof. Surekha Tetali from the Centre for Sustainability, the team stood out among over 500 entries with their groundbreaking idea, Terra Tide: The 3P Approach to Adapt to Increasing Heat on Earth. The team will now represent India at the International Competition, scheduled to be held this March in Spain. We wish the team all the very best!

OPEN HOUSE & GUEST VISITS AT CENTRE FOR SUSTAINABILITY

The Centre hosted its first Open House on September 24, 2024, welcoming faculty and staff from across the University. Prof. Anirban Ghosh shared the Centre's courses, research initiatives and engagement activities. The event provided an excellent opportunity for networking and exchange of ideas among colleagues and peers from diverse domains.

A highlight of the Open House was a presentation by the students who represented the University at the Climate Hackathon. They shared the award-winning solutions they had developed and presented at the competition. The presentation concluded with an engaging open discussion.

The evening ended with a thought-provoking movie screening on water conservation, highlighting the severe consequences faced by vulnerable communities and the public health challenges associated with desalination of ocean water.



The Centre for Sustainability at Mahindra University had the honor of hosting Narsing Rao, former head of Coal India and a former member of the Telangana government. During his visit, he engaged in a brief yet insightful conversation with the team, covering topics such as sustainability, agriculture, and more. His vast experience in both the energy sector and government provided a unique perspective, fostering meaningful discussions that could shape future initiatives.



Dr. Raj Reddy, Turing Award laureate and professor at Carnegie Mellon University, visited Mahindra University's Centre for Sustainability on December 23, 2024. Known for his pioneering work in artificial intelligence, Dr. Reddy's presence was a significant moment for the institution. During his visit, Dr. Reddy met with the Centre's team and had a brief but engaging conversation. Though brief, his visit left a profound impact, inspiring the team to continue innovating and driving positive change.

TEAM



Anirban Ghosh

Ex CSO Mahindra & Mahindra

Anirban Ghosh has been working in the Mahindra Group since 1999. He has headed Strategy, Marketing and Business Planning in the Farm Equipment Sector before becoming the President of Mahindra USA and subsequently the Chief Sustainability Officer of the Group. Under his leadership companies in the Mahindra Group achieved international accolades and he was recognized as a Thought Leader and a Top C-Level Sustainability Leader. He currently heads the Centre for Sustainability at Mahindra University.



Surekha Tetali

Assistant Professor

Ph.D. Carnegie Mellon University, Pittsburgh, USA. Research area: Interactions between urban climate and the built environment, utilizing advanced analytical techniques, computational models, and remote sensing data.

Her work encompasses various topics, including cool roofs, urban heat islands and building performance simulations, urban climate modeling, and overall - sustainability across buildings and cities.



Sonam Sahoo

Assistant Professor

PhD in Earth Sciences, Indian Institute of Technology Gandhinagar, Gujarat.

Her research focuses on the dynamics of hydro-geomorphic processes and their implications for river health and water security.

Before joining MU she was a Fulbright -Kalam Climate Postdoctoral Scholar at the Department of Civil and Environmental Engineering at the University of Maine, Orono, USA.



Balasubramanian Sambasivam

Assistant Professor

PhD in Energy and Sustainability, Indian Institute of Science, Bangalore.

Postdoctoral research positions at the University of Texas at Austin, USA, where he worked in the Operations Research and Industrial Engineering and Civil, Architectural, and Environmental Engineering departments.

He also served as a postdoctoral fellow at the Hong Kong Institute of Asia-Pacific Studies, the Chinese University of Hong Kong. Dr. Balasubramanian's research focuses on planning and developing innovative solutions to combat climate change and achieve net-zero emissions, particularly in the energy and transport sectors.



Sonam Sahu

Assistant Professor

Ph.D. Kyoto University, Kyoto, Japan

Sonam is a Climate Action Planner with 10 years of experience and technical expertise in urban climate policy analysis. During her PhD, she researched on localizing the Paris Agreement and designed a multi-criteria scoring tool to support city-level climate targets. She has vast experience in developing Scope 1, 2, and 3 GHG emissions inventory, and developing emissions targets and intervention actions for cities.



Soumya Gupta

Manager

Master in Social Work & Commerce, Tata Institute of Social Sciences, Mumbai

Soumya is a development professional with over 6 years of diverse experience across corporate, government and development sectors. Her work primarily focuses on education, livelihood, inclusion, policy and diversity, emphasising people and project management through innovative instructional design, strategies with government, non-government organisations. Her experiences covers working with vulnerable population in the area of governance, research, development and social impact with organizations like NIMHANS, E&Y, MoTA, Center for Good Governance, MWCD, MOE, Pratham, etc.



Divya Khare

Research Associate

Masters in Environmental Science, University of Friburg.

Divya worked as a Project Associate at TERI, Delhi, specializing in agriculture and molecular biology. She later served as a Research Associate at the Hahn Schickard Institute, focusing on agriculture and biotechnology. Additionally, she has expertise in Life Cycle Assessment (LCA) and the circular economy.



***Sustainability has to be
a way of life to be a
way of business. You
cannot rise if you take
more from the
community than you
put back.***

- Anand Mahindra

