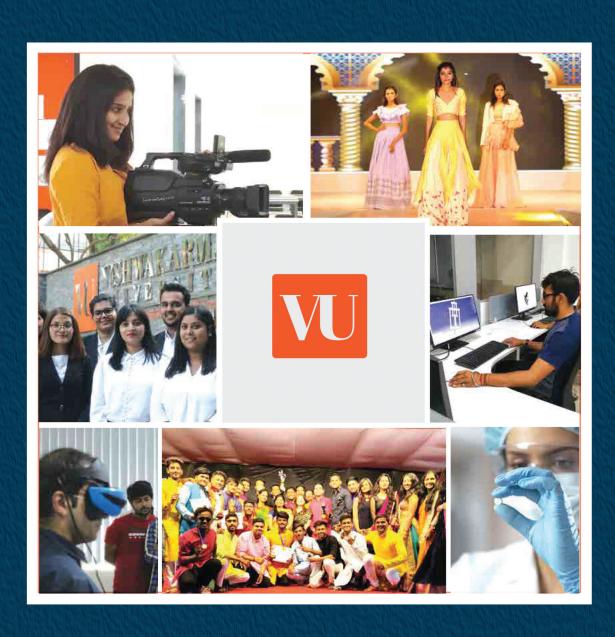
## VISHWAKARMA UNIVERSITY

SDG 13 REPORT 2024









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Maximising Human Potential

### **About This Report**

At Vishwakarma University (VU), our steadfast commitment to sustainable development is profoundly aligned with the United Nations' 2030 Agenda for Sustainable Development. These global goals delineate an aspirational vision for a sustainable future, one that VU has deeply integrated into its institutional framework and curriculum.

Our foundational principle, Unleashing Human Potential, reflects our dedication to cultivating an environment conducive to the holistic development of our students, empowering them with the resilience and confidence required to navigate contemporary challenges.

As part of our sustainability mission, VU has reimagined itself as an Eco-campus, exemplifying innovative and sustainable practices. This report details our continual efforts to minimize our carbon footprint and highlights the impactful partnerships underpinning these achievements. For instance, our Certificate Programme in Sustainability Management, developed collaboratively with Hof University of Applied Sciences, Germany, equips students with advanced competencies in business management and contemporary sustainable practices. Additionally, through a strategic partnership with the Wilo Foundation, we have established the Water Quality Centre of Excellence, aimed at advancing water treatment, purification, and public awareness of clean drinking water.

VU's commitment to sustainability extends beyond environmental stewardship. We have launched a dedicated Center for Sustainability, NEXUS, that undertakes activities aligned with the Sustainable Development Goals (SDGs). Our mission is to cultivate informed, ethical, and skilled individuals who uphold principles of equity, inclusivity, and excellence. By engaging students in practical applications of their knowledge, we bridge the divide between theoretical frameworks and real-world challenges.

Our participatory development model actively involves students and industry stakeholders, ensuring that our academic philosophy equips learners with the competencies essential for addressing the complexities of the modern business landscape. VU's extensive network, encompassing over 45 collaborations with prominent industries and educational institutions—including the Maharashtra State Faculty Development Academy, Queen Mary Technical Institute, Buldhana Urban Cooperative Credit Society, and TATA Technical Limited—facilitates industry projects, live projects, internships, and placements, thus enhancing practical exposure and career prospects for our students.

Furthermore, VU is committed to fostering a well-rounded education and community engagement through initiatives such as the VU-Centre for Communication Development, the Sahyadri Communication Project, and the VU Legal Aid Clinic, all integral components of our VU-iPAR Model. This model emphasizes community involvement, and we encourage student leadership through programs such as the National Service Scheme (NSS) and the Student Council. In alignment with the National Education Policy (NEP) 2020, we offer NEP 2020 courses and have established the VUWCOE – VU Wellness Center of Excellence, supporting holistic development in both academic and wellness dimensions.

In summary, Vishwakarma University's commitment to sustainable development and the SDGs is firmly embedded within our institutional ethos. Through collaborative engagement with diverse stakeholders, we consistently integrate sustainability into our operations, fostering a culture of innovation, research, and learning. VU remains committed to preparing future leaders equipped to drive impactful change, contributing meaningfully to the global vision of sustainable development.

Prof. (Dr) Siddharth Jabade Vice-Chancellor Vishwakarma University, Pune, India

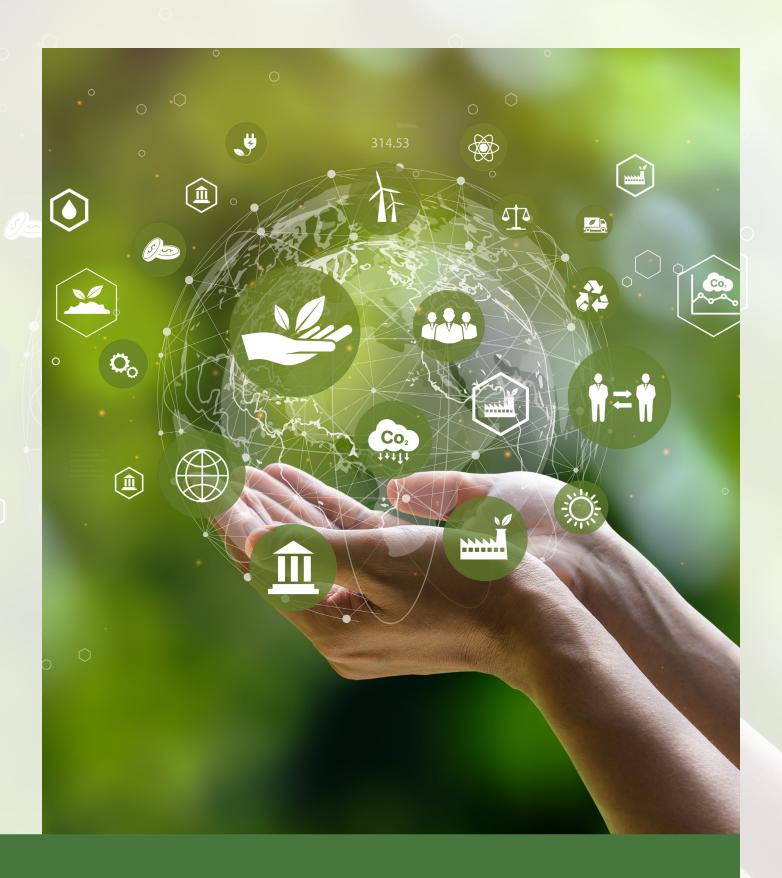
#### VU's Participation in the THE Impact Rankings 2024

Vishwakarma University (VU) also participated last year in Times Higher Education (THE) Impact Rankings 2024, which looks at global universities' commitment and performance in furthering the Sustainable Development Goals (SDGs).

VU took part in the 4 SDGs listed below plus the mandatory SDG 17 and the results were as follows:

#### **Overall Ranking 1001+**





13 CLIMATE ACTION

Climate Action In 2024, Vishwakarma University actively contributed to Sustainable Development Goal 13 -Climate Action because Climate change is now affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.

People are experiencing the significant impacts of climate change, which include changing weather patterns, rising sea level, and more extreme weather events. The greenhouse gas emissions from human activities are driving climate change and continue to rise. They are now at their highest levels in history. Without action, the world's average surface temperature is projected to rise over the 21st century and is likely to surpass 3 degrees Celsius this century—with some areas of the world expected to warm even more.

To take initiatives for climate action Vishwakarma University Contributed in various ways by promoting activities regarding awareness about climate, saving water, saving earth, rain water harvesting tree plantation etc. Furthermore, the university celebrated World Water Day, Tree Plantation, World Environmental Day etc.

#### 13.1. Publications:

Air quality measurement, prediction and warning using transfer learning based IOT system for ambient assisted living	Sonawani S.; Patil K.	International Journal of Pervasive Computing and Communications	2024	1742-7371	https://www. emerald. com/insight/ publication/ issn/1742-7371	https://doi.org/10.1188/ LJPCC-97-2922-9271	UGC CARE-II (Scopus/Web of Science) UGC CARE-II (Scopus/Web of Science)	Article  Conference paper  Conference paper
Experimental Evaluation of an Internet of Things Powered Sewage Gas Monitoring and Reporting System using Artificial Intelligence Strategy	Anusha P.; Balaji A.; Nithyasundari B.; Patil Y.D.; Ravi S.	Proceedings 3rd International Conference on Advances in Computing, Communication and Applied I Informatics, ACCAI 2024	2024	9798350- 315912	https://www. proceedings. com/70162.html	https://doi.org/10.1109. ACCAH51051.2024.10601957	UGC CARE-II (Scopus/Web of Science)	
Retrieving Energy from an Inline Hydro Turbine of Irrigation- Dependent Hydropower Plant Under Part Flow Conditions	Kurulekar M.; Kumar K.; Joshi S.	Lecture Notes in Mechanical Engineering	2024	2195-4364	https://www. springer.com/ series/11236	https://doi.org/10.1007/978- 981-99-5755-2-48		

#### 13.2. Low Carbon Energy Use

#### **Policies:**

VU Clean Energy Technology

**VU Campus Water Quality Assurance Policy** 

VU Green Building and Well-being Policy

**VU Water Reuse and Maximisation Policy** 

VU Renewable energy pledge

**VU NSS Policy** 

#### 13.3. Environmental Educational Measures:

https://www.vupune.ac.in/event/world-water-day-24



#### **Event Details:**

Date: March 22, 2024

Venue: Vishwakarma University, Building No. 02, Pune

#### **Session Attendees:**

All students and faculty members of Vishwakarma University, Pune.

#### **About the Event:**

The Water Quality Centre of Excellence and the Department of Engineering Science, in collaboration with WILO, are celebrating World Water Day on March 22nd, 2024. Event aimed for raising awareness and spreading the importance of water. Different competitions were organised like Ideathon, Water themed refreshment without fuel, Animated videos etc

#### **Objective:**

To create awareness on the importance of water conservation and its role in sustainable living.

To highlight the link between equitable water access, peace, and community well-being.

To encourage adoption of smart and eco-friendly water management practices.

To engage students and community members as active participants in water conservation initiatives.

To align the celebration with SDG 6 (Clean Water & Sanitation) and SDG 16 (Peace, Justice & Strong Institutions).

#### **Outcomes:**

The World Water Day celebrated successfully with great efforts, World Water Day seeks to inspire greater appreciation for water, encourage responsible use, and foster global cooperation in protecting this vital resource for future generations.

Photos of events:

#### **Social Media Link for event:**

https://www.instagram.com/p/Cq2UplAOL3e/?igshid=YmMyMTA2M2Y= https://www.facebook.com/100065188080428/posts/ pfbid0JcaMFCquMbWdkLUnV3D6NAbuVpYxYXyL4uavxxfrw6UtLGnDqwawqGowvSfacHf5l/?app=fbl

#### **Summary of event:**

In conclusion, the World Water Day event at Vishwakarma University was a resounding success, uniting students, faculty, and staff in raising awareness about water sustainability. From Mr. Ravi Ulangwar's enlightening session to engaging competitions, parcipants demonstrated a deep commitment to addressing water challenges.



#### 13.3.2. World Environment Day Celebration

Date: 05/06/2024

#### **Objectives:**

- · Educate participants about environmental issues
- Encourage sustainable practices
- · Sensitize the participants of their surroundings.
- Theme: "Land Restoration, Drought Resilience, and Combating Desertification."

Google Form Link: <a href="https://forms.gle/e3j7Le33SrbS11WY9">https://forms.gle/e3j7Le33SrbS11WY9</a>



#### **Summary:**

The Centre for Sustainability nexus organized an Online Photo Contest to celebrate the World Environment Day 2024. The theme was focused on "Land Restoration Drought Resilience, and Combating Desertification." The contest aimed to raise awareness and inspire action by encouraging participants to capture images of local land restoration efforts and drought resilience projects. There was a total of 12 submissions by both Students and Faculties of Vishwakarma University. This event was also mapped globally to the UNEP Page





#### 13.3.3. Plantation Drive:

Vishwakarma University, in partnership with the Forengers Organisation, hosted an event on June 23rd and 24th. The goal of the drive was to encourage environmental stewardship and community engagement as a foundation for ongoing sustainability efforts.



#### Conclusion

Vishwakarma University made significant strides in 2024 towards achieving

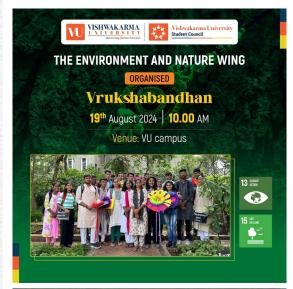
#### **Social Media Post:**

https://www.linkedin.com/posts/vishwakarmauniversity\_plantation-drive-activity-7216040798193127425-GQHc?utm\_source=share&utm\_medium=member\_desktop

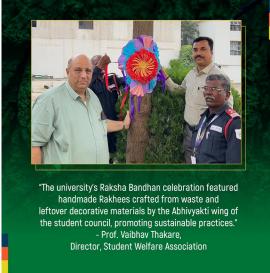
https://www.instagram.com/p/C9KSkX\_BUfo/?utm\_source=ig\_web\_copy\_link&igsh=MzRlODBiNWFIZA==

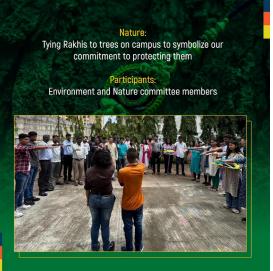
#### 13.3.4. Vrukshabandhan

The Environment and Nature wing, Vishwakarma University celebrated Vrukshabandhan. The university's Raksha Bandhan celebrated featured with handmade rakhees crafted from waste and leftover decorative materials by Abhivyakti wing of student council, promoting sustainable practices. The university's Raksha Bandhan celebrated featured with handmade rakhees crafted from waste and leftover decorative materials by Abhivyakti wing of student council, promotiong sustainable practices.









#### Conclusion

Climate change knows no border, so its time humanity unites to protect our planet. This initiative stems from Indian's tradition of loving and caring for nature. Vishwakarma University celebrated Vrukshabandhan on August 19th,2024 showcasing their commitment to a greener future! Students tied Rakhi's to trees, symbolizing their dedication to protecting the environment. These beautiful Rakhi's were crafted from waste materials, reflecting their focus on sustainability's.

#### **Social Media Post:**

Facebook

Vrukshabandhan | Vishwakarma University - VU

#### 13.3.5. Guest Session:

#### Date of activity: 4 Sep 2024

Vishwakarma University arranged guest session on SDG-based Environment and Climate Education for B.Tech Computer Engineering students on September 04th, 2024, featuring experts Mrs. Bharati chavan and Mr. Dr Vikrant Kulkarni, coordinated by Dr.Kavita Kumavat and Prof. Suhas Chavan.







#### **Social Media Post:**

https://x.com/VU\_Connect/status/1829438146414592205

https://www.instagram.com/p/C\_SZ2qpyw4u/?utm\_source=ig\_web\_copy\_link&igsh=MzRlODBiNWFIZA==

#sdgenvironmenteducation #btechcomputerengineering #guestsession #sustainablefuture #vishwakarmauniversitypune | Vishwakarma University - VU

#### 13.4.1. Commitment to carbon neutral university:

Vishwakarma University is committed to becoming a carbon-neutral campus by integrating clean energy solutions, sustainable infrastructure, and eco-friendly practices. A major step in this direction is the promotion and adoption of electric vehicles (E-vehicles) and facility for charging to significantly reduce greenhouse gas emissions from campus transport.





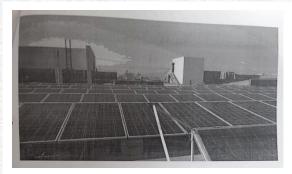
#### **Rain Water Harvesting:**

As part of its commitment to sustainability and SDG 13 – Climate Action, Vishwakarma University has adopted Rainwater Harvesting (RWH) as a key initiative to conserve water and promote eco-friendly practices on campus.



## Solar System and Sensor Light Installation Facility: Solar Power System

Purpose: To generate clean, renewable electricity for powering lights and other electrical needs.





#### **Sensor-Based Lighting System**

Purpose: To automate lighting, save energy, and improve safety/security.



#### **Key Outcomes**

Awareness & Engagement – Multiple events (World Water Day, World Environment Day, Plantation Drive, Vrukshabandhan, Guest Sessions) successfully raised awareness on climate action, sustainability, and conservation among students, faculty, and the community.

**Academic Contribution** – Research publications and conference papers on climate-related technologies (IoT for air quality, sewage gas monitoring, hydropower solutions) contributed to global knowledge aligned with SDG 13.

**Policy Initiatives** – Implementation of VU Clean Energy Technology, Water Reuse & Maximisation Policy, Renewable Energy Pledge, and Green Building Policy demonstrated institutional commitment to low-carbon energy use.

**Community Outreach** – Activities like plantation drives and sustainable celebrations (e.g., eco-friendly rakhees for Vrukshabandhan) fostered environmental stewardship beyond campus.

**Global Linkages** – Events were mapped with international observances (UNEP World Environment Day, UN's SDGs) showcasing VU's alignment with global sustainability goals.

**Commitment to Carbon Neutrality** – The university reaffirmed its mission towards becoming a carbon-neutral campus.

#### **Summary Note for SDG 13**

In 2024, Vishwakarma University made significant strides towards Sustainable Development Goal 13: Climate Action through research, policies, and community-driven activities. The institution fostered climate awareness and sustainable practices by celebrating World Water Day, World Environment Day, Plantation Drives, and unique initiatives like Vrukshabandhan. Research outputs in renewable energy and IoT-driven environmental monitoring showcased academic contributions to addressing climate challenges.

The adoption of clean energy, water reuse, and green building policies highlighted the university's institutional commitment. With active student and faculty participation, and global alignment to UNEP and SDG frameworks, Vishwakarma University strengthened its role as a sustainability leader. The overall efforts emphasized awareness, responsibility, and innovation, reaffirming its pledge to work towards a carbon-neutral future.



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