VISHWAKARMA UNIVERSITY

SDG 14 REPORT 2023

SUSTAINABLE DEVELOPMENT GOALS

VISHWAKARMA UNIVERSITY
Maximising Human Potential
University Grants Commission (UGC) Approved State Private University

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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 2023

Vishwakarma University (VU) also participated last year in Times Higher Education (THE) Impact Rankings 2023, 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+

14 LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Aims to conserve and sustainably use the oceans, seas, and marine resources. Oceans cover over 70% of the Earth's surface and play a crucial role in regulating the global climate, supporting marine biodiversity, and providing livelihoods and food security for billions of people. However, marine ecosystems are under severe threat from human activities, including overfishing, plastic pollution, oil spills, and climate change, leading to ocean acidification and habitat loss.

It emphasizes reducing marine pollution, particularly from land-based activities like agricultural waste and plastics, and appeals for the protection of marine and coastal ecosystems to avoid significant adverse impacts. It also strives for the importance of regulating fishing to prevent overexploitation. Addressing ocean acidification through climate action and enhancing marine scientific knowledge is also essential under this goal.

The Vishwakarma university has always been a staunch supporter of sustainable co existence and it has reflected through the academics and extracurricular activities. Its inclusive participatory model of development includes participation of all stakeholders in the development initiatives. The curriculum has been designed in such a manner that it deals with contemporary challenges.

The sustainable development goal, life below water asks for maintaining sanctity of water bodies, and promotion of sustainable usage of aquatic resources. The Vishwakarma University has contributed in this regard. Following are the details.

14.4.1 Water discharge guidelines and standards

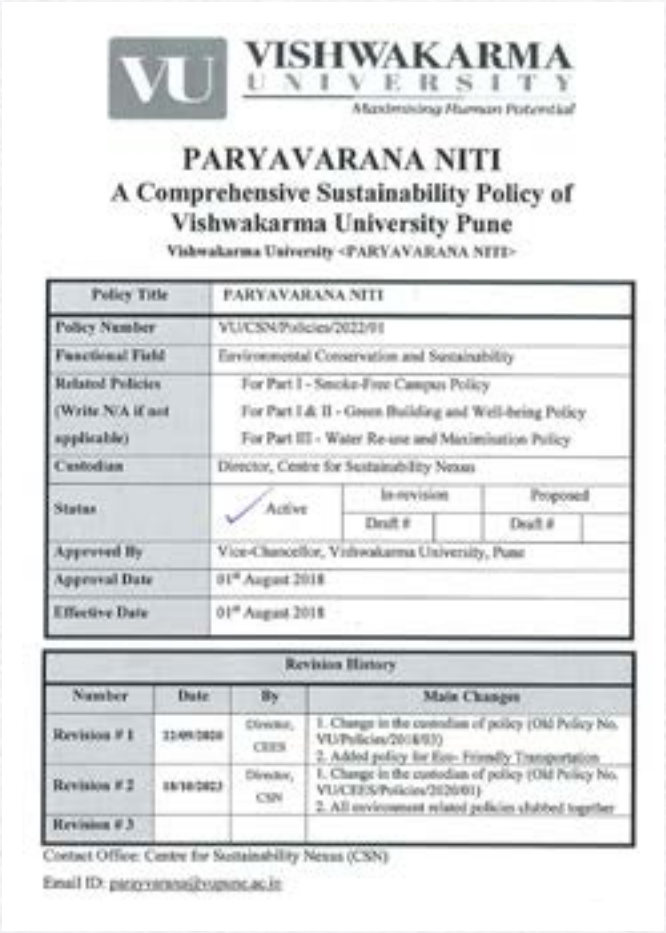
To address the need for clean water in areas with limited land availability, Vishwakarma University collaborated with Wilo Mather and Platt Pumps Private Limited, Pune, India, to conceptualize and develop a Vertical Sewage Treatment Plant (VSTP) capable of producing potable water. The plant has a capacity of 10,000 liters per day, and the project commenced in 2019. Key stages of the project included ideation of VSTP technology, conceptualization, design of individual components, system design and configuration, installation on the university campus, patenting, investigation, testing, validation, simulation, and modeling. The VSTP has been installed at the Vishwakarma University campus, and operational testing in a controlled environment at Technology Readiness Level 5 has been successfully completed. A Memorandum of Understanding (MoU) is attached (Disclosure: A Non-Disclosure Agreement has been signed with Wilo, and the document is not publicly available).

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.vupune.ac.in/images/IQAC/Sustainability-Mission/vu-sdg17-2022.pdf

14.4.2 Action plan to reducing plastic waste

The Vishwakarma university has comprehensive 'Paryavarana Niti', a comprehensive environmental and sustainability policy as the administrative mechanism to deal with issues like plastics, water and trees.

https://drive.google.com/file/d/1Kb2zPlsaRemVxQPGpkrKXkb-HoZr8dls/view?usp=drive_link



VISHWAKARMA UNIVERSITY

Maximizing Human Potential

PARYAVARANA NITI

A Comprehensive Sustainability Policy of Vishwakarma University Pune

Vishwakarma University <PARYAVARANA NITI>

Policy Title	PARYAVARANA NITI		
Policy Number	VU/CSN/Policies/2022/01		
Functional Field	Environmental Conservation and Sustainability		
Related Policies (Write N/A if not applicable)	For Part I - Smoke-Free Campus Policy For Part I & II - Green Building and Well-being Policy For Part III - Water Re-use and Maximization Policy		
Custodian	Director, Centre for Sustainability Nexus		
Status	✓ Active	In-revision Draft #	Proposed Draft #
Approved By	Vice-Chancellor, Vishwakarma University, Pune		
Approval Date	01st August 2018		
Effective Date	01st August 2018		

Revision History			
Number	Date	By	Main Changes
Revision # 1	22/09/2020	Director, CEES	1. Change in the custodian of policy (Old Policy No. VU/Policies/2018/03) 2. Added policy for Eco- Friendly Transportation
Revision # 2	10/10/2023	Director, CSN	1. Change in the custodian of policy (Old Policy No. VU/CEES/Policies/2020/01) 2. All environment related policies clubbed together
Revision # 3			

Contact Office: Centre for Sustainability Nexus (CSN)

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14.5.1 Minimizing alteration of aquatic ecosystems (plan)

To address the need for clean water in areas with limited land availability, Vishwakarma University collaborated with Wilo Mather and Platt Pumps Private Limited, Pune, India, to conceptualize and develop a Vertical Sewage Treatment Plant (VSTP) capable of producing potable water and minimizing alteration of aquatic system.

Vertical sewage treatment plant :

A vertical Sewage Treatment Plant (VSTP) is an innovative wastewater treatment solution designed to maximize efficiency in urban areas where space is limited. Instead of spreading out horizontally, the treatment processes are stacked vertically, allowing the plant to occupy a smaller footprint while still handling a high volume of sewage. This design is particularly suited for dense urban environments, high-rise buildings, and areas where land is scarce or expensive.

https://research.vupune.ac.in/patent

Patent No 434249 Application No 202121043909 Dated 28-09-2021 Date of Granted 09-06-2023.
Freeze concentration technology application in vertical sewage concentration technology application in vertical sewage treatment plan to generate potable water

Freeze concentration technology can be effectively applied in vertical sewage treatment plants (VSTPs) to generate potable water by separating pure water from contaminants through freezing.

https://research.vupune.ac.in/patent
Patent No 506625 Application No 202121043907 Dated 28-09-2021 Date of Granted 02-02-2024.

A method of the optimization of optimization to minimize combined volume of aerobic and anaerobic reactor To optimize and minimize the combined volume of aerobic and anaerobic reactors in a wastewater treatment process, a balance between the biological requirements and space or cost constraints must be achieved. The objective is to reduce the overall size (volume) of both reactors while maintaining or improving the efficiency of treatment.

https://research.vupune.ac.in/patent
Patent No 492661 Application No 202121044823 Dated 04/10/2021 Date of Granted 01/01/2024.

A method of the optimization of optimization to minimize combined volume of aerobic and anaerobic reactor To optimize and minimize the combined volume of aerobic and anaerobic reactors in a wastewater treatment process, a balance between the biological requirements and space or cost constraints must be achieved. The objective is to reduce the overall size (volume) of both reactors while maintaining or improving the efficiency of treatment.

https://research.vupune.ac.in/patent
Patent No 492661 Application No 202121044823 Dated 04/10/2021 Date of Granted 01/01/2024.

14.5.3 Programmes towards good aquatic stewardship practices

6.5.1 World Water day
World water day 2023, a National level event was celebrated at VU on the theme of "Accelerating the change to solve the Water & Sanitation Crisis". VU- Wilo Water Quality Centre of Excellence shouldered the responsibility to sensitize the youth. The celebration began on 12th April with the activity of training and analysis of water samples brought by students. April 13th started with the glorious morning of tree plantation at the hands of chief guest Mr. Hemant Watve, CEO&MD of WILO Mather & Platt and other dignitaries.
Please find the link of the World Water Day celebrations-
https://drive.google.com/drive/folders/1MhwfSAdkOa6hhg_VIBtJyfj6kzc4Q55S?usp=drive_link

Mr. Hemant Watve CEO&MD of WILO Mather & Platt, Prof. Siddharth Jabade VC Vishwakarma University, Prof. Vasudev Gade VP Vishwakarma University, Prof. Nitin Satpute Dean Science and Technology and Prof. Dhananjay Bhatkhande Director Water Quality Center of Excellence shared the dais. Prof. Siddharth Jabade VC Vishwakarma University delivered the Welcome address in which he also informed that Ministry Of Jalshakti has signed MOU with VU for Namami Gange project. Mr. Hemant Watve in his interactive speech deliberated on the national theme" Accelerating the change on water and sanitation Crises." Prof. Dhananjay Bhatkhande gave vote of thanks.

Following competitions were organized

1. Photography
2: Quiz
3. Hold the water molecule.
4. Game development
5. Partom i Orbis

Mr Ravi Ulangwar, Mr. Ravindra Akki, Mr. Mukul Pendase and Mr. Anshuman Bade from Wilo were judges for various events of the day. More than 450 students from all over India participated in the program. Partom i Orbis was designed to develop the landscape layout for the smart city mission. Q-cards provided were expected to paste as per the function & operation on landscape layout. Total 13 teams (each of 5 members) participated from different institutes in the event.

The winners were (1st) Vishwakarma University -Tanvi Bokil, Priya Shingare, Rutik suryawanshi, Suraj Davane, Hrushikesh Satve.

(2nd)Vishwakarma Institute of Information Technology-Mayuresh Bhol, Sumit Lokare, Vibhavari Tidke, Hrugwed Hirve, Yash Revandkar.

(3rd)D Y Patil Institute of Technology Pimpari-Harshad Shendage, Shravani Chillal, Sangram Kad, Roshini Ankushkar, Akash Narkhede.

Photography, Quiz, Game development was conducted on the theme of water day. Soniya Parsewar, Diksha Jaju and Anushka sonti won 1st, 2nd and third prize. Neel Khatri & Shambhavee Nawani from Vishwakarma University won the quiz competition. In Hold the water molecule event the tram of Eesha Pansare, Sukanya Pujari, Kartik Ghorpade, Om Godse stood first and team of Mansi Chandurkar, Pranav Baitule, Aashirwad Mehare, Phalguni kate, Atharva Kshirsagar stood second. Game development on the theme of Water day was hit by Noopur Rane stood first & Marwin Pintu won the second prize in the Game development on the theme of Water day.

Prof.Maya Kurulekar & Mrunmai Ranade worked as Faculty Coordinator of the event and Mr. Divyansh Renkuntlwar worked as student coordinator of the event.

Vishwakarma University has collaborated with Wilo Mather and Platt Pumps Private Limited to address the critical need for advancements in the Water and Sanitation sector. The university also participates in Unnat Bharat Abhiyan, a national initiative to provide clean and safe water to rural communities.

https://drive.google.com/drive/folders/1llZQ1mIN5YkM1wv-Cig0QHgUAXE1Tzl8?usp=sharing


VISHWAKARMA UNIVERSITY
wilo
Water Quality Centre of Excellence and
Department of Engineering Science
of
Vishwakarma University
in collaborations with
WILO
celebrating
WORLD WATER DAY
a National level event
on
Thursday April 13, 2023
On the theme of
"Accelerating the change to solve the Water & Sanitation Crisis"
QUIZ/MCQs
Photography
Hold the water molecules


wilo
WORLD WATER DAY
Celebration at VU
12th-13th April 2023


GPS Map Camera
Vishwakarma University
Pune, Maharashtra, India
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Long 73.88363°
12/04/23 10:06 AM GMT +05:30

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