



UNIVERSITY WITH A PURPOSE

Climate Strategy

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1. About UPES

UPES is a State Private University established in the year 2003 through UPES Act (2003) of the State Legislature of Uttarakhand and listed under Section 2(f) of UGC Act. The University is multidisciplinary with eight Schools focused on Engineering, Computer Science, Design, Law, Business, Health Sciences, Modern Media and Liberal Arts. Located in Dehradun, Uttarakhand with an area of over 40 acres across 2 campuses, the University offers over 141 programs to more than 12000 students and employs over 1000 faculty and staff. UPES is NAAC grade A accredited University with five of its School of Engineering programs NBA accredited as well. The NIRF 2021 ranked the University amongst Top 100 Universities in India (Rank 100) with School of Engineering ranked at 91, School of Law at 25 and School of Management at 46. The university is QStar Four-Star rated, as well as the first University to receive the IACBE accreditation for two of its School of Business programs. Apart from this the institution has been awarded the Advanced E-LEAD (E-Learning Excellence in Academic Digitization) certification by the QS I-GAUGE ranking agency, and has been ratified as a 'Great Place to Work' by the Great Place to Work® Institute for the past 3 years in continuation

2. Background

UPES is sponsored by Hydrocarbon Education Research Society (HERS). Climate change is a global concern today. A long-term change in the average weather patterns affecting the Earth's local, regional and global climates it is primarily driven by human activities. The impacts include warming temperatures, changes in precipitation, extreme weather conditions and rising sea level result in increasing stress on natural ecosystems and basic resources like air, water and food.

With a commitment to combat climate change more than 170 countries including India, officially signed the Paris Agreement in 2016 with a goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. The Intergovernmental Panel on Climate Change (IPCC) provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and option. It released the first part of its Sixth Assessment Report (AR6) titled Climate Change 2021: The Physical Science Basis, suggesting that global net-zero by 2050 was the minimum required to keep the temperature rise to 1.5 degree Celsius. In the Indian context the Government of India launched the National Action Plan on Climate Change (NAPCC) in 2008 outlining eight National Missions on climate change. In the recent crucial international climate summit COP 26Y, India has pledged to become net zero emitter of carbon by 2070 to achieving 500 gigawatts non-fossil energy capacity by 2030.

Universities are significant centers of change. With a vision of Nation building, UPES has continuously shown commitment to the environment and society through its curriculum, teaching, research, operations and investments. The University visions to practice and promote high standards of professional ethics and develop harmonious relationship with environment and society in its charter.

Dehradun with its geographical location in Uttarakhand has its own locational advantages as well as disadvantages to achieve these goals. UPES is GRIHA awarded (4 star) university through National rating system for green buildings (campus) in India. The University is ISO certified – ISO 9001:2008 ISO 14001:2004 OHSAS 18001:2007

3. About Climate Strategy

This Climate Strategy has been drafted towards a comprehensive collaborative approach to climate change mitigation supported by students, alumni, faculty, staff and other stakeholders at UPES.

The Climate Strategy applies to UPES) and sets out framework of measures and timelines towards a sustainable mitigation of impact of climate change.

4. Objectives

- Institutional holistic alignment towards commitment to mitigation of Climate change impact.
- Create awareness on environment safe and friendly sustainable measures.
- Promote teaching, learning and research competencies on environment sustainable practices.
- Promote re-use, re-cycle energy saving renewable procurement and usage practices

5. General Principles

i. Current Initiatives at UPES

- The following are some key practices and initiatives towards environment friendly ecosystem at UPES.
- With about 12426 shrubs and trees, 100+ migration birds visiting the campus UPES campus is naturally landscaped with green cover optimized versus the buildings
- Extensive plantation drives in and around the campus.
- The campus has pedestrian friendly roads and walkways with green cover

remaining undisturbed.

- UPES Campus is Smoke free, No Smoking Zone as prescribed by the by Ministry of Health and Family Welfare
- The University makes conscious effort in implementing a plastic-free campus. Glass bottles and biodegradable reusable utensils are used. Plastic bags are prohibited within campus.
- The university offers
 - specialized programs (M.Tech. (Renewable Energy Engineering), MTech (Health, Safety and Environment Engineering) and M.Tech (HSE with specialization in Disaster Management), M.B.A.(Oil and Gas Management), B.A.(Hons.) Energy Economics) and
 - courses (eg. Natural Resources and management, Environmental Laws, Biodiversity and Conservation, Mining etc) that address multi-dimensional issues concerning environmental sustainability in the areas of engineering, management and law aligned with UGC mandate.
- UPES had installed 07 numbers of" rainwater harvesting systems" (RWHP) within the campus with dedicated bore well and water flow meters to keep track of the water charged in a season.
- Well established Waste Management System disposal of hazardous and managing separate disposal of solid, liquid and e-waste
- UPES Operates on Zero Water Discharge Policy.
- Initiative for use of renewable energy within campus with 100 kW Solar PV Power Plant and 61500 LPD Solar Water heating plants.
- The University provides uninterrupted power supply with industrial generators having
- 1350 KVA sanctioned load and 2500 KVA backup power from emergency DG sets
- Piezometer (Online Water Table Monitoring System) installed for Systematic groundwater level monitoring
- Several research projects by faculty and students related to environment
- Public transport and pooling system is encouraged and adopted by students and faculty for travel to work. This supports in managing traffic and reducing the pollution levels.
- All transportation modes terminate at the university gate for the students; for the faculty, designated parking places are allotted. This helps to mediate the air quality levels and encourage a peaceful green campus.
- Use of E-carts and environment friendly electric bicycles within campus.
- Promotion of Paperless Office with maximization of online
- Strong CSR initiatives for nearby villages, particularly on environment,

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sustainability like Project Swachhta, Project Utthan.

- Extracurricular activities carried out for skill development and environment sustainability like Women technological park (WTP) project, Atmosfair, Swach Bharat Abhiyan etc.

ii. Proposed Climate Strategy Measures

Proposed Measure	Start Date	End Date	Ownership
Establishment of an Environment Management System <ul style="list-style-type: none"> ▪ Constitute an Environment Sustainable Practices and Protection committee for to create awareness and promote sustainable environment friendly initiatives and practices within the University. ▪ This committee to be strengthened with collaborative support from societies and clubs, CSR team. Students, alumni, faculty and staff. ▪ Apply for GRIHA (Green Building) re certifications from 4 star to 5 star rated Green Buildings (In the GRIHA specifically sustainability of the campus will be measured and evaluated under major heads as Energy conservations, Water conservations and waste disposable processes). 			
Sustainable practices to be followed by Academic and Non-Academic functions of the University. <p>The following Best Practices suggested :</p> <ul style="list-style-type: none"> ▪ Increased engagement in online and hybrid mode of academic and non-academic functions and activities. ▪ Reduce <ul style="list-style-type: none"> ➤ print on both sides of paper 			

<ul style="list-style-type: none"> ➤ use electronic files rather than paper files ➤ reduce the amount of junk mail ➤ reduce waste by choosing products that have minimal packaging and can be used productively and then recycled ▪ Re-use <ul style="list-style-type: none"> ➤ re-use containers, packaging or waste products, wherever possible ➤ reuse paper for printing draft copies ➤ make scribble pads from paper used on one side ➤ use recycled toner cartridges ➤ use rechargeable batteries instead of single-use batteries ▪ Recycle waste ▪ Green office program - using energy efficient office equipment which will reduce operating and environmental costs, including greenhouse gas emissions and using "green" power ▪ <u>Optimal Use of Energy/Energy Efficient Practices</u> <ul style="list-style-type: none"> ➤ maintain air-conditioning at 20°-24°C in winter and in summer between 23°-26°C. ➤ control direct sunlight with blinds and window treatments to minimize heat build-up ➤ Turn off electric appliances after use ➤ use power saving options for appliances ➤ replace incandescent light bulbs with energy-efficient compact fluorescent bulbs ➤ ensure that air conditioner filters are cleaned regularly ➤ Presently the use of solar energy pie is 6 % will be 12 % in coming years by adding up solar PV Power plants. 			
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Increase in number of courses / content on Environmental Sustainability in current University curriculum. <ul style="list-style-type: none"> Current Curriculum to be updated to include minimum one (1) course/ part of course/student projects on sustainability per academic year 			
Increase in research and incubation related to environmental sustainability <ul style="list-style-type: none"> Minimum 1 Living Lab per program every academic year Increase by research and incubation by minimum 2 per school every academic year on environment sustainability 			
Identify and enhance biodiversity measures on campus Increase in plantation drives, securing and maintaining of landscapes and improve ecosystems within the campus and nearby areas			
Increase in sustainable measures in food court /canteen at University and create and implement policies on food waste awareness			
Increased sustainability measures to be followed in construction and maintenance of infrastructure and promote Disaster Management awareness			
Limit transport emissions through use of : <ul style="list-style-type: none"> Buses for faculty and staff from city as common conveyance Use of electric cabs by University for official travel use of public transport pooling of vehicles for day to day and other travel. 			
Financial investments in Corporate Social Responsibility and other Environment Sustainability initiatives.			

Create awareness among students, faculty and staff to inculcate sustainability in strategic and operational engagements.			
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6. Risk Management

The University is committed to regulating and minimizing risk by identifying, analyzing, evaluating and treating the exposures that may be barriers for the University in achieving its goals. Risk management plans are developed to identify the potential risk, which may include strategic, operational, compliance, and reputational risk. Once risk has been identified is requires to be investigated and classified under low, medium and high. The policy advises that risk assessment is being performed on all the activities, systems, and business processes.