## Climate Action Plan

As we stand at the precipice of a rapidly changing climate, the imperative for action has never been more urgent. At UPES (University of Petroleum and Energy Studies) in India, we recognize that the impacts of climate change pose profound challenges not only to our environment but also to our society, economy, and future generations. As a university deeply rooted in the fields of petroleum, energy studies, and sustainability, we understand the critical role that we must play in addressing these challenges and shaping a sustainable future.

The importance of applying a robust climate action plan at UPES cannot be overstated. As an institution dedicated to advancing knowledge and innovation in energy and environmental sciences, we have a unique opportunity and responsibility to lead by example in mitigating greenhouse gas emissions, promoting renewable energy, and building climate resilience. By taking decisive action to reduce our carbon footprint and embrace sustainable practices, we not only contribute to global efforts to combat climate change but also inspire and educate the next generation of leaders in sustainability.

Furthermore, the urgency of working on our climate action plan cannot be understated. The impacts of climate change are already being felt around the world, from extreme weather events and rising sea levels to disruptions in food production and loss of biodiversity. These impacts are not distant threats but immediate realities that demand immediate action. As a university at the forefront of energy and environmental research, we have a moral obligation to prioritize climate action and work tirelessly to mitigate the worst effects of climate change.

By approaching our climate action plan with the seriousness and commitment it deserves, UPES has the potential to make a significant difference in the fight against climate change. Through collaboration, innovation, and determination, we can create a more sustainable and resilient future for our planet and all its inhabitants. The time to act is now, and the responsibility falls on all of us to rise to the challenge and be part of the solution. Together, we can make a meaningful impact and leave a lasting legacy of environmental stewardship for generations to come.

### **UPES Strategy:**

UPES are implementing various strategies to mitigate the impacts of the climate change. Here are some approaches that UPES are working on:

• **Research and Education:** UPES conducts research on climate change, its impacts, and potential solutions. They offer courses, degrees, and programs related to climate science, renewable energy, sustainability, and environmental studies to educate students and raise awareness about the issue. *(examples included below)* 

- **Sustainability Initiatives:** UPES implements sustainability initiatives to reduce their carbon footprint and promote environmentally friendly practices on campus. This includes energy conservation measures, waste reduction and recycling programs, water conservation efforts, and promoting sustainable transportation options. *(examples included below)*
- **Green Infrastructure:** UPES invest in green infrastructure projects such as solar panels, wind turbines, and rainwater harvesting systems to generate renewable energy, reduce energy consumption, and treating sewage water. *(examples included below)*
- **Partnerships and Collaboration:** Collaboration with other institutions, government agencies, businesses, and community organizations to enhance the effectiveness of climate change initiatives. UPES joins networks and partnerships focused on sustainability and climate action to share best practices and leverage resources. *(examples included below)*
- Advocacy and Outreach: UPES plays a major role in advocating for policy changes and raising awareness about climate change issues among policymakers, stakeholders, and the general public. This involves organizing events, conferences, and campaigns to engage with the wider community. (examples included below)
- Incorporating Climate Considerations into Decision-Making: UPES integrate climate considerations into their decision-making processes, such as campus planning, investment strategies, and procurement practices, to ensure sustainability is embedded across all aspects of their operations.

# Major Activities Conducted/ Policies Implemented by UPES:

https://www.upes.ac.in/sustainable-development-goals/13

- Through awareness campaigns and project-based learning, students are encouraged to develop eco-friendly products such as edible cutlery, which are nutritious as well as have significant potential to replace plastic menace.
- Tree Plantation Drive
- Cleaning Drives
- Integrated Wastewater Reclamation Plant: UPES engages in a pilot-scale project for an integrated wastewater reclamation plant, utilizing microalgae to treat sewage water. This innovative project produces byproducts such as bio-oil, bio-gas, and bio-manure, aligning with sustainable industrial practices and efficient resource use.

## <u>Centre for Energy, Environment, and Sustainability</u> <u>Studies (CEESS)</u>

https://research.upes.ac.in/centre-for-energy-environment-and-sustainability-studies-ceess/[1]

Centre for Energy, Environment, and Sustainability Studies (CEESS) is a constituent think tank and research centre of excellence of School of Business, UPES. Its primary aim is to promote multidisciplinary research in areas of Economics, Environment, Energy, Globalization, Trade, Transport, Supply chain and Sustainable Development. Considering the Environmental policies of the country against thriving energy requirement and demand for infrastructure development in achieving high economic growth needs a balanced approach that can be derived from informed and effective research and development. Given what has been said, CEESS will be a major player to suggest policy reforms, as a result of its R&D that will help the policymakers to achieve sustainable development goals. Along with the vision of "Make in India" and "Atmanirbhar Bharat Abhiyan", CEESS through its research and publication will assist policymakers to design their policies towards self-dependence, generation of employment and increasing value-addition with new initiatives to support both the manufacturing and services sectors and improving the 'ease of doing business' in the country.

The centre will promote research on issues pertaining to the economy, energy, environment, and society in the context of trade, transport and globalization with a specific focus on sustainable development. Centre will help suggest strategies for the implementation of energy, environmental and economic policies through R&D that will help policymakers to design effective policies for the country and the rest of the world.

#### **BROAD RESEARCH THEMES**

- The broad themes that will be primary areas of research at CEESS are:
- Energy Business: Renewable and Non-renewable energy business
- Business and Sustainable Development
- Environmental Economics and Energy
- Climate Change Economics and Policy
- Economics and Business Studies
- Transportation and Green Supply Chain Management
- Trade, Environment and Globalization
- Marketing Management and Energy Business
- Public Policy and Governance

#### FUNCTIONS OF THE CENTRE

- To promote Research and Development
- To promote international and national research collaborations
- To promote to submit joint funded research proposals
- To promote interdisciplinary and multidisciplinary research

• To conduct research workshops, seminars, conference, panel discussions, and guest/distinguished lectures

• To help in disseminating research output through publication, workshop, seminar etc.

• Building a network with industry, research think tank, ministry at the national and international level for joint research collaboration and funding.

### STI Forum 2023

https://twitter.com/DrSKrishnan/status/1654360058854080520 [2]

Co-organised #STIForum 2023 event with @IndiaDSTon Community Resilience Resource Centres for Post-Covid Socioeconomic Recovery. Impactful use cases by @wii\_india @AmritaUni @UPESDehradun on community resilience.

@UNDPAccLabs

@Gina\_labs

@RozitaSingh

@swetha\_kolluri

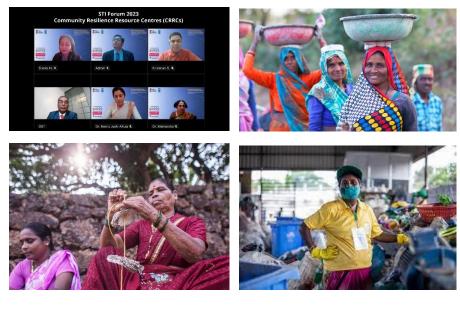
@ErikaAntoine

Leveraging science, tech & innovation (#STI) for #ClimateResilience.

@IndiaDST & @UNDP

IN organized an event at #STI Forum on role of Community Resilience Resource Centres for SDGs & post COVID-19 recovery.

Over 100 participants from 40 countries participated in the forum.



STI Forum 2023 https://twitter.com/shokonoda/status/1654141419978629122 [3] Science, Tech & Innovation (#STI) are protecting communities & 🔌 from #ClimateChange.

Participated in an event on building community resilience by

@IndiaDST

&

@UNDP

IN at #STI Forum 2023 w/

@srivaric

Highlighted IN's use of frugal innovation ♥ for SDGs & post-pandemic recovery.



### Project Swachhta

https://www.upes.ac.in/social-impact/project-swachhta [4]

Aligned with the objectives of Swachh Bharat Mission to clean up streets, roads and public spaces in the cities, towns, urban and rural areas, Project Swachhta has evoked a sense of responsibility among the residents of Dehradun too. Cleanliness drives are being conducted at regular interval in areas adjoining the campus. The local residents have also been sensitized to join the program. The aim is to instill the value of cleanliness among youth through voluntary work in order to take the cleanliness drive to the next level.

## Zero-waste accessories and gifting solutions by UPES students

https://blog.upes.ac.in/zero-waste-accessories-and-gifting-solutions-by-upes-students/[5]

PRADEEP JAGWAN · AUGUST 27, 2021



Team Kalakrit, comprising UPES School of Design students – Khyati Gupta, Ridhi Sood, and Kashish Kohli – make biodegradable and eco-friendly products under the guidance of their professor, Manas Ranjan Misra

During the festive season, we often come across gifts that are non-biodegradable and add to the carbon footprints. Team Kalakrit, comprising UPES School of Design students – Khyati Gupta, Ridhi Sood, and Kashish Kohli – have come up with a sustainable solution under the guidance of their professor, Manas Ranjan Misra.

These students have been making baked clay earrings, home décor items, therapeutic aromatic candles, and they even take customised orders for similar products. The products are organic, vegan, natural, sustainable, recycled, handmade, and biodegradable.

Says Khyati Gupta, "The idea came from the basic thought of 'wastage and burden' that a rakhi creates in its wake. Due to religious reasons, the thread cannot be disposed of in a bin and plastic is extremely harmful to nature. We can do a lot for our environment by making gifting options at home with ecofriendly materials instead of plastics, sparkles, beads, etc., caring for the environment, while retaining style, coolness, purpose, and fashion. Our products are zero-waste and come with zero-waste packaging."



These products are zero-waste and come with zero-waste packaging

She further adds, "Through our products, we attempt to support the families who have lost their primary breadwinners due to Covid-19. We want to support underprivileged people by offering them employment opportunities. We also intend to conduct workshops in the less developed areas to create awareness of these handicrafts. We even want to expand our venture, targeting all the Indian festivals and events."

Talking about the response to their products, Kashish Kohli says, "We are overwhelmed with the feedback that we got from our audience. Some people have even extolled our products as 'revolutionary'. Some people also appreciated the finishing and design, and we are going to keep improving on it in all our upcoming projects. UPES provided us with a platform and audience who supported us throughout. We are even looking forward to getting registered with UCIE."

### Green Up Club

https://www.facebook.com/greenupupes/ [6]



### The Health Effect of Air Pollution

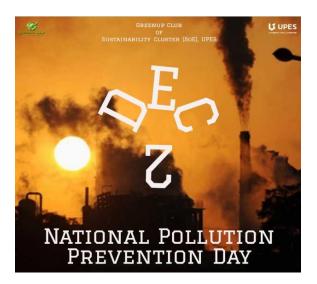
### https://www.facebook.com/greenupupes/photos/a.1533322970215340/3125976874283267/ [7]

Air pollution is causing way more damage to not only us but to our kids and animals. More and more people are suffering form air pollution. Kids with asthma have such a hard time breathing. They can't even play outside sometimes. Pollution has risen dramatically in past years affecting air pollution to cause the greenhouse effect and health problems, land pollution which causes harm to our environment, and water pollution which impairs water ecosystems. These obstacles cause harm and distress to plants, animals and humans. The rising of these various types of pollution is an everyday problem that affects our life and future and the environment day by day. So we should take our time and think about our actions before we do them. So help stop air pollution.



### National Pollution Prevention Day

https://www.facebook.com/greenupupes/photos/a.1533322970215340/3032183520329270/ [8]



Every year, 2 December is observed as National Pollution Prevention Day in order to commemorate those who lost their lives in the Bhopal Gas Tragedy in 1984.

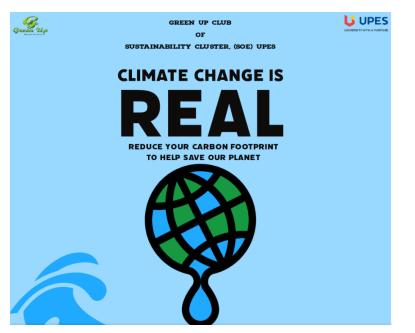
This day also aims to make people understand the need for preserving our natural resources.

National Pollution Prevention Day 2021 is observed with the theme of raising awareness around pollution along with urging the government to adopt policies that can help in reducing the effects of pollution.

On the National Pollution Prevention Day, it is our responsibility to avoid wastage of natural resources and prevent industrial pollution. We also need to focus on afforestation to combat the loss of green cover in the country.

## Climate Change

https://www.facebook.com/greenupupes/photos/a.1519593978254906/2999142333633389/ [9]



Climate change is no longer some far-off problem; it is happening here; it is happening now."

•The Day recognizes the Earth and its ecosystems as humanity's common home and the need to protect her to enhance people's livelihoods, counteract climate change, and stop the collapse of biodiversity.

The theme for 2021 is Restore our Earth.

•Tropical forests are incredibly effective at storing carbon, providing at least a third of the mitigation action needed to prevent the worst climate change scenarios. Yet nature-based solutions receive only 3% of all climate funding.

•Natural climate solutions such as restoring degraded forests could create as many as 39 jobs per million dollars spent — that's a job-creation rate more than six times higher than the oil and gas industry.

SOME WAYS TO REDUCE CLIMATE CHANGE and not limited to is:

- 1. Leave the car at home
- 2. Plant more trees
- 3. Eat less meat and dairy
- 4. Reduce water waste
- 5. Invest in energy-efficient appliances

### Stop Global Warming

https://www.facebook.com/greenupupes/photos/a.1533322970215340/2992838577597098/ [10]



It's time we start taking care of our #Mother\_Earth or else we and our generations will have to suffer.

Global warming is increasing rapidly all over the world.

Technology and urbanization are developing at a cost and i.e., our environment.

We have to start working on the concept of #Sustainable development

Socio-economic development should be sustainable.

Take a pledge to work for the environment and help this environment to grow better.

"We don't own the earth, we borrow it from our children"

### References

- [1] [Online]. Available: https://research.upes.ac.in/centre-for-energy-environment-and-sustainability-studies-ceess/.
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