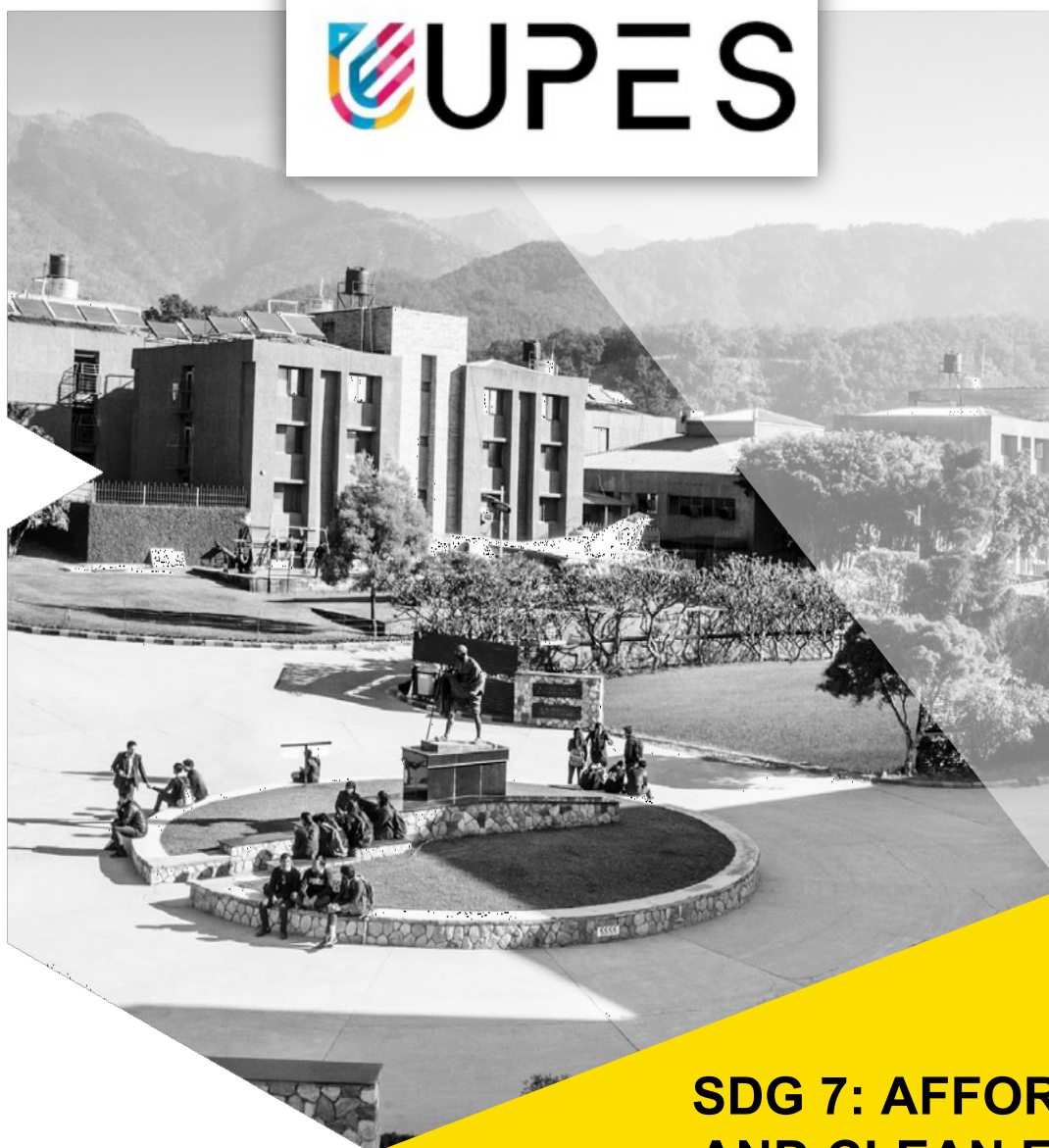




SUSTAINABLE DEVELOPMENT GOALS



**SDG 7: AFFORDABLE
AND CLEAN ENERGY**

2025

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UPES University – Community Initiatives in Energy Efficiency & Clean Energy

Community Outreach & Public Awareness Programs

UPES University (Dehradun, India) actively engages the local community to promote energy conservation and clean energy awareness. Aligned with **UN Sustainable Development Goal 7**, the university runs outreach programs and workshops to educate the public on the benefits and practical uses of clean energy upes.ac.in. These initiatives encourage adoption of renewable energy in **local households and businesses**, highlighting how switching to solar, improving energy efficiency, and other green practices can combat climate change while fostering inclusive development upes.ac.in. UPES' commitment to sustainability is embedded in its operations and community engagement – *“from promoting clean energy and waste management to ... running awareness campaigns, UPES empowers students, faculty, and stakeholders to drive meaningful change”* upes.ac.in. Many of these awareness efforts are free and open to the public, aiming to build a culture of energy efficiency in the region.

As part of its community outreach, UPES often collaborates with local groups and government on public awareness drives. For example, the university has **adopted nearby villages** under its social initiatives, working to transform them into “smart” model villages with sustainable infrastructure. In these villages, UPES experts have introduced clean-energy solutions like **solar lighting and efficient cooking technologies** as demonstrations of affordable, modern energy. Such projects not only improve living conditions but also serve as hands-on awareness campaigns about renewable energy's importance. University volunteers and students participate in these rural outreach activities, helping residents understand simple steps for energy conservation (like using LED bulbs or solar lanterns) and the long-term economic benefits of energy efficiency. The **target audience** for these programs ranges from rural households and local farmers to small businesses and schoolchildren – essentially anyone in the community who can benefit from cleaner energy practices. All outreach workshops are provided as a public service (free of cost), supported by UPES or partner organizations' funding.

Workshops & Training Sessions for the Public

Beyond informal outreach, UPES also hosts **formal workshops, training sessions, and events** focused on sustainable energy, many of which are accessible to the public or external participants. A notable example is the annual **Energy Summit**, a flagship event since 2022 that brings together leading energy experts, researchers, and policymakers upes.ac.in. While academic in nature, the Energy Summit is open for registration to anyone interested (students, professionals, or local stakeholders) and features discussions on energy transition, decarbonization, and affordable clean energy solutions upes.ac.in upes.ac.in. Similarly, the university's **Sustainability Fair 2022** was a four-day public event inaugurated by the Uttarakhand Governor, showcasing sustainability research and practical solutions. The fair included **training sessions, model demonstrations, exhibitions, and panel discussions**, drawing participants from various sectors and even international delegates upes.ac.in. This mix of activities provided a learning platform not just for UPES students but also for **visiting school groups, local entrepreneurs, and citizens**, who could freely attend exhibitions or talks on

topics like urban solar power, energy-saving technologies, and sustainable lifestyles. Sponsorship from industry and government bodies helped ensure these events remained accessible upes.ac.in.

UPES also conducts **capacity-building programs** in the clean energy domain for broader audiences. The university's faculty and centers have organized specialized training workshops on subjects like renewable energy technology, often in partnership with industry. For instance, UPES hosted a workshop on advances in battery technology for electric vehicles as part of a clean energy project sponsored by industry upes.ac.in upes.ac.in. While such technical workshops target academia and professionals, the university extends training to other groups as well. Under its outreach mandate, **UPES experts have provided energy management training to local institutions and businesses** – for example, offering **energy efficiency advisory services to industries** and customized training (one recent program trained power company employees on energy storage and renewables). These sessions help transfer the latest clean-energy knowledge to practitioners and support the community's transition to sustainable technologies. **Most workshops for the general public or local community are offered free** (as part of UPES's social responsibility), whereas specialized training for industry or advanced learners may be fee-based or sponsored by the requesting organization.

Partnerships with Schools, NGOs & Local Organizations

A key strategy of UPES in promoting clean energy awareness is through **educational partnerships and collaborative projects**. The university frequently partners with local schools, NGOs, and government agencies to reach a wider community audience. For example, under its CSR and sustainable development initiatives, UPES launched “**Project Artisan**” in collaboration with local NGOs to empower women weavers in a remote Ladakh village upes.ac.in. This project introduced modern design skills *while integrating affordable clean energy solutions* into the weaving process (e.g. using solar-powered equipment) upes.ac.in. By demonstrating clean energy in traditional livelihoods, the program raised awareness of how renewable energy can preserve culture and improve incomes – a model that avoids migration and showcases sustainability to the community. Another collaborative effort, **Project UK**, connects UPES with experts to modernize small **watermills in Uttarakhand's hill villages**, reviving these renewable micro-energy sources for rural income generation upes.ac.in. This not only provides cheap, clean electricity to remote communities but also educates villagers on the value of sustainable energy infrastructure.

Closer to home, UPES works with government schools around its campus to promote STEM education with a sustainability twist. Through initiatives under “**EDUDHARMA**” and related programs, the university has adopted local schools and incorporated modules on environmental science and energy conservation for young students upes.ac.in upes.ac.in. University volunteers conduct interactive sessions on topics like **solar energy, recycling, and climate change**. For instance, UPES students ran an awareness drive in 16 government schools to instill values of equality and sustainability upes.ac.in – such drives often include demonstrations of solar gadgets or energy-saving tips alongside their primary theme. In the rural “**Smart Village**” project mentioned earlier, UPES partnered with village panchayats and state agencies to implement solar street lights and bio-gas units. Local youth were trained to maintain this equipment, creating a sense of ownership and ongoing learning about clean energy. Moreover, the **Centre for Sustainability and Environmental initiatives at UPES** collaborates with bodies like the **Uttarakhand Renewable Energy Development Agency (UREDA)** and NGOs in environmental campaigns (tree plantations coupled with solar lamp distributions, etc.),

reinforcing the importance of energy conservation in everyday life. These partnerships expand UPES's reach beyond campus and ensure that energy efficiency knowledge is disseminated through trusted community channels (schools, women's self-help groups, local leaders). All such joint programs are offered at no cost to the beneficiaries – they are funded by the university or grant/CSR funds, aiming primarily at **public good and awareness** rather than profit.

Online Courses, Lectures & Public Resources

UPES leverages online platforms to make clean energy education accessible to a broader audience. Notably, the university offers formal **academic programs in renewable energy** that anyone (meeting eligibility) can enroll in, including several first-of-their-kind programs in India. For example, UPES has degrees like **B.Tech. in Clean Energy Technologies**, **M.Tech. in Renewable Energy**, an MBA specialization in **Power Management & Sustainability**, and even a 10-month **Post-Graduate Certification in Renewable Energy available online** upes.ac.in. These programs (while tuition-based) attract students and professionals from all over the country, effectively building capacity in clean energy management. The **online PGP Renewable Energy course** is especially flexible and global-focused, allowing working professionals or distant learners to gain practical expertise in sustainable power solutions via remote learning upes.ac.in. By offering such programs, UPES contributes skilled manpower to the clean energy sector and indirectly raises community understanding as graduates carry knowledge into their workplaces and circles.

Beyond formal courses, **UPES provides free knowledge resources** through webinars, talks, and digital content. The university's online learning platform regularly hosts **free masterclasses and webinars led by industry experts** on topics like renewable energy trends, sustainable technology, and energy management best practices. These sessions are open to the public with simple online registration. For instance, UPES faculty have delivered open webinars on renewable energy and sustainability – in one case, a UPES professor gave a webinar on “*Renewable Energy Systems & Sustainability – Education, Research and Outreach*” that was open to students, researchers, and interested citizens nationwide iferp.in. Such webinars often include Q&A and provide e-certificates to encourage participation. UPES also shares expert talks and panel discussions via YouTube and social media, expanding reach to anyone interested in clean energy. The **target audience** for these online resources ranges from curious high schoolers and college students to working professionals looking to upskill in green technologies. All live webinars and their recordings are provided free of charge, reflecting UPES's mission to disseminate knowledge beyond its enrolled students.

Additionally, the university publishes articles, case studies and blog posts that are freely accessible, highlighting sustainable projects and energy innovations. According to a recent UPES blog on advancing the SDGs, university research has directly contributed to **United Nations clean energy projects**, and UPES has conducted **capacity-building programs and social impact studies in the clean energy field** upes.ac.in. These publications serve as educational material for the community and policymakers, emphasizing real-world impacts of clean energy adoption. They cover topics like energy-efficient campus design (e.g. the **UPES campus uses a 100 kW solar plant supplying ~8% of its electricity and serves as a live training facility for students** upes.ac.in), and policy recommendations for wider renewable energy use. By openly sharing such experiences and data, UPES provides a knowledge

repository that local communities, other institutions, or even families can learn from when considering their own energy usage practices.

Recent and Ongoing Initiatives

UPES's community-focused energy initiatives are continually evolving, often in response to current sustainability challenges. In recent years, the university has emphasized innovation and entrepreneurship in clean energy for social impact. Students and faculty have worked on prototype solutions like a **"Solar Tree" (a small self-powering unit with solar panels, LEDs and charging ports)** to demonstrate off-grid energy in public spaces upes.ac.in. They also developed a model **electric bicycle and an electric cart (U-BAHN)** for campus mobility, showcasing e-mobility possibilities to visitors upes.ac.in upes.ac.in. These models are displayed on campus and during community events, sparking conversations with the public about transitioning to electric vehicles and renewable power. In outreach to rural women, UPES has introduced **solar dryers** for food and herb processing and taught the making of **biochar briquettes** from agricultural waste – both low-cost clean energy technologies that improve livelihoods upes.ac.in. By training women in nearby villages to use solar dryers to preserve crops and to replace wood fuel with cleaner bio-briquettes, the university is simultaneously addressing economic development and clean energy adoption at the grassroots. This ongoing program (part of a women's technology park initiative) is free for participants and has been well received, with many women now earning income through sustainable practices they learned via UPES workshops.

Another ongoing effort is UPES's **pledge towards 100% renewable energy** on campus. The university has announced goals to significantly ramp up its on-site solar generation (building on the existing 100 kW plant) and explore wind/biomass options, aiming to meet all campus electricity needs with renewables in the coming years. This pledge, once fulfilled, not only makes campus operations greener but also serves as a live demonstration for students and the local community of a **100% clean energy ecosystem**. In parallel, UPES is formulating policies and research for clean energy tech deployment in society – its faculty are involved in **policy development for clean energy and low-carbon innovation**, advising government bodies and hosting forums to discuss sustainable energy policies upes.ac.in. Through these policy dialogues and innovation incubators, the university extends its influence to the broader public by shaping the environment in which clean energy projects flourish (e.g. advocating for better incentives for solar adoption in Uttarakhand, or supporting startups working on energy-efficient devices).

Finally, UPES's initiatives are not limited to local impact; they tie into global networks and knowledge exchange. The newly launched **RISE Centre at UPES** (Research Initiative for Sustainable Energy) has started an executive education program on ESG and sustainability leadership, in partnership with international institutions globaluniversitysystems.com globaluniversitysystems.com. While this is a **paid professional program**, it exemplifies UPES's role in preparing a wider community of leaders who can champion clean energy and efficiency in their organizations. The first part of this program was delivered on the UPES campus in 2024, allowing participants to interact with UPES's sustainable campus and learn from its practices globaluniversitysystems.com. By blending academics, community outreach, and industry collaboration, UPES ensures that its work on energy efficiency and clean energy awareness resonates both locally and beyond.

Conclusion

In summary, **UPES University is deeply involved in promoting energy efficiency and clean energy awareness among the local community** through a spectrum of programs. From free outreach workshops in villages and schools, to public sustainability fairs and expert conferences, from grassroots projects with NGOs to online webinars open to all – these initiatives cover various audiences and needs. The *scope* of offerings ranges from basic household energy-saving tips for rural families, to advanced renewable energy training for professionals. Accessibility is a priority: community campaigns and educational partnerships are offered free-of-cost, and even professional courses are delivered in flexible formats (including online) to reach a wider population. The *target audiences* include local residents of Uttarakhand (especially around Dehradun), school and college students, women entrepreneurs, working professionals in the energy sector, and anyone keen to learn about sustainable energy. Recent initiatives illustrate an ongoing commitment, whether it's installing solar infrastructure and using it as a teaching tool on campus upes.ac.in, or empowering villagers with clean-tech for livelihoods upes.ac.in. Backed by official university policy and India's clean energy goals, UPES serves as both an **education hub and a community partner** in driving the clean energy transition. By providing knowledge, skills, and tangible demonstrations of renewable energy and efficiency, UPES is helping the local community understand the importance of these issues and encouraging widespread adoption of clean energy solutions upes.ac.in upes.ac.in.