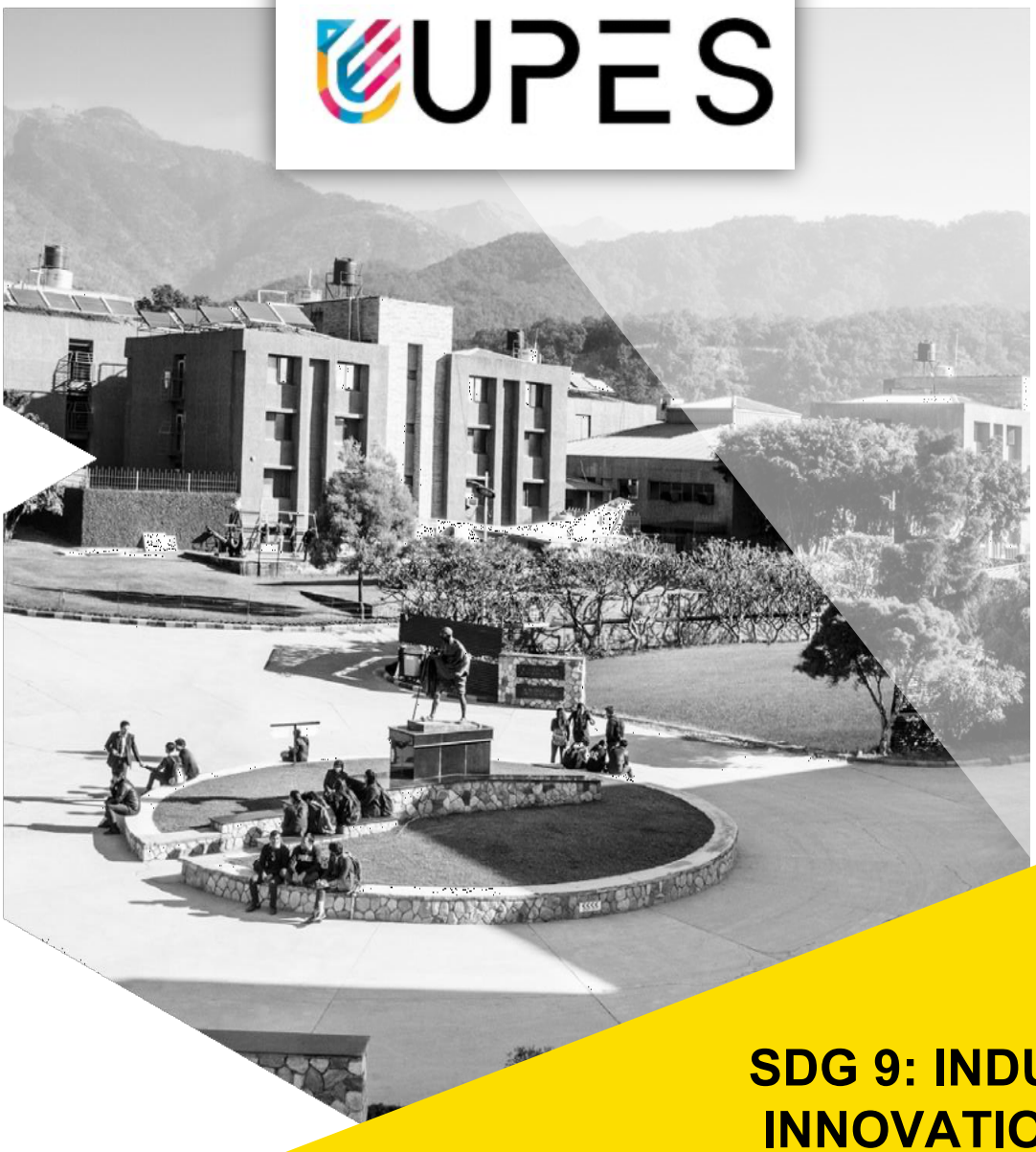
SUSTAINABLE DEVELOPMENT GOALS

UPES



SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

2025

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UPES SDG 9 Impact Report: Industry, Innovation and Infrastructure (2020–2025)

University of Petroleum and Energy Studies (UPES), Dehradun, India demonstrates a strong commitment to Sustainable Development Goal 9 (Industry, Innovation and Infrastructure) through comprehensive programs in entrepreneurship, research collaboration, sustainable campus development, community industrial initiatives, and policy engagement. The following report details UPES's key initiatives and verifiable outcomes from 2020 onward, aligning with **Times Higher Education Impact Rankings – SDG 9** criteria.

1. University Support for Industry-Related Innovation and Entrepreneurship

UPES has established a robust ecosystem to foster innovation, startups, and practical learning for students and faculty. A flagship initiative is the **Runway Incubator**, launched in 2021 as a start-up incubation program. Runway provides mentorship, seed funding, and networking to translate ideas into scalable businesses [1]. Over the past four years, Runway has incubated **250+ start-ups** and enabled them to raise more than ₹20 crore in funding [1]. This includes substantial backing from national innovation schemes – for example, UPES secured a ₹5 crore grant under the **DST NIDHI i-TBI** (Inclusive-Tech Business Incubator) program to strengthen its incubator infrastructure [1]. Recently, Runway's **4th cohort** alone pre-incubated 100 new start-ups, reflecting the growing pipeline of entrepreneurs [1]. To date, UPES-supported ventures have collectively attracted funding from agencies like the Department of Science & Technology (DST), Ministry of Electronics and IT (MeitY), **NITI Aayog's Atal Innovation Mission**, and industry CSR sources [2]. This multi-source support underscores UPES's role as a regional innovation hub.

*UPES hosts major startup competitions like **"The Pitch"** (2025), where early-stage ventures from UPES and other top institutions pitch to investors. Such events provide seed funding and mentorship to innovative ideas in renewable energy, health-tech, ed-tech, and AI* [3].

Beyond incubation, UPES actively cultivates an innovation culture through competitions, hackathons, and accelerators open to students across disciplines. The **UHackathon** series, organized by the School of Computer Science, has become a marquee 24-hour coding marathon. In 2022–2023, *UHackathon 3.0* and *4.0* drew overwhelming participation – UHackathon 4.0 (2023) attracted over **1,200 participants** comprising 350+ teams from all over India and abroad [4]. The event, themed on the Metaverse, sourced real-world problem statements from industry partners (e.g. India Blockchain Alliance, XR Couture) to ensure relevance to current technological challenges [4]. Finalists included 25 national and 5 international teams, with the top winners (Team *Hyperkin* from UPES) awarded ₹1 lakh and an international team from Germany winning $1000 [4]. Notably, the hackathon engaged experts from companies like Apple, Microsoft, BP, and CleverInsight on its jury, and even led to recruiters (e.g. KPMG India) offering jobs to participants [4]. Such outcomes demonstrate how UPES hackathons not only spur student innovation but also directly connect talent with industry opportunities.

UPES's entrepreneurial initiatives extend beyond its campus community to nurture the next generation of innovators. In 2025, UPES launched the **Future Founders Challenge**, a national entrepreneurship competition for high school students (Classes 9–12) in collaboration with Runway Incubator [2]. This program provides young students mentorship from industry experts, hands-on startup workshops, and a platform to pitch solutions to real-world problems before an esteemed jury [2]. The competition aligns with national agendas like **Startup India**, the National Education Policy 2020, and NITI Aayog's Atal Innovation Mission, reflecting UPES's vision as a "University of Tomorrow" and a "Start-up University" [2]. Top teams are awarded substantial prizes (e.g. ₹1 lakh for the champion school team) and consideration for incubation support at UPES [2]. By reaching out to schools, UPES is actively cultivating an entrepreneurial mindset at an early age, thereby contributing to a stronger future pipeline of innovators regionally and nationally.

In summary, UPES provides holistic support for innovation through its **Runway incubator (250+ startups, ₹20 Cr+ raised)** [1], regular hackathons and idea competitions (with international participation and industry juries) [4], and outreach programs like Future Founders that embed entrepreneurship in education [2]. This vibrant innovation ecosystem prepares students not just as job-seekers but as **job creators**, resonating with SDG 9's focus on fostering innovation and inclusive industrial growth.

2. Research Collaboration with Industry and Technology Transfer

UPES actively pursues research partnerships with industry and other institutions, translating academic expertise into practical solutions and intellectual property. The university's research strategy emphasizes collaboration, evidenced by the fact that **52% of UPES publications involve international co-authors or partners** [5]. Many of these collaborations are with industrial partners and national research organizations, ensuring research is aligned with real-world industrial needs.

Several formal **MoUs and joint initiatives** have been established since 2020 to promote industry-academia research and development. For instance, in December 2021 UPES signed an MoU with **AIIMS Rishikesh** (a national medical institute) to ally on health science research and infrastructure development [6]. This partnership has already led to collaborative research across microbiology, biochemistry, and clinical fields, including joint publications in health diagnostics that have gained global attention [6]. UPES and AIIMS are also co-developing research proposals for external funding, a partnership aimed at improving healthcare innovation and infrastructure for the people of Uttarakhand [6]. Likewise, UPES's School of Health Sciences partnered with **Drishti Eye Institute** (a leading eye hospital) in November 2021 to promote exchanges of research materials, jointly organize research programs and conferences, and collectively advance ophthalmic technology [6]. Another key collaboration was forged with **Merck Life Science Pvt Ltd** in December 2021 – this MoU focuses on scientific skill development for students, where Merck provides subject matter experts, regulatory consultation, and training at its high-tech Skill Development Centre [6]. By engaging a global life-sciences company in training, UPES is helping bridge the gap between academic research and industry-regulatory standards in biotechnology.

UPES's industry collaborations also target sector-specific innovation challenges. A notable example is the partnership with **HCLTech** initiated in 2023 to develop advanced digital solutions for the oil & gas industry with a focus on sustainability [7]. Under this collaboration, UPES students and research scholars work alongside HCLTech's teams on projects leveraging **AI/ML, IoT, and cloud computing** to

optimize hydrocarbon exploration and reduce the carbon footprint of oil & gas operations [7]. HCLTech has committed to offering internships and job placements to UPES students who excel in these projects, ensuring knowledge transfer and talent pipeline development [7]. As UPES Vice-Chancellor Dr. Ram Sharma noted, this academia-industry initiative aims to tackle critical energy sector challenges (like operational safety and emissions) while connecting industry sponsors with faculty expertise – benefiting both academia and industry and fostering low-carbon industrial innovation [7]. Collaboration of this nature directly contributes to SDG 9 by promoting sustainable industrialization through R&D and by giving students practical exposure to industry 4.0 technologies.

In addition to partnerships, UPES strongly encourages **technology transfer and commercialization** of research. The university has a dedicated Intellectual Property Rights (IPR) cell to facilitate patents, design registrations and copyrights arising from research [5]. As of late 2024, UPES researchers have filed a **total of 1,957 IP assets**, including **134 patents granted** for technological innovations [5]. This impressive IPR output highlights a focus on applied research with potential industrial applications. Many patents are in cutting-edge areas relevant to industry needs (energy, engineering materials, health tech, etc.), indicating that research at UPES often leads to tangible innovations. The university's support mechanisms like **SEED funding** (for proof-of-concept studies) and the **Anusandhan capacity-building program** encourage faculty to pursue market-driven research projects [5]. There is also the **SHODH program** for student-led innovation and entrepreneurship, and a "Learning with Leaders" series where industry experts mentor students on research and innovation projects [5]. These initiatives create a pipeline from lab to industry by nurturing ideas, protecting them through patents, and potentially spinning off startups or licensing deals.

Outcomes of UPES research are increasingly being translated into practice. A number of collaborative projects have direct industry or societal impact. For example, UPES is involved in a **Mission Innovation** initiative on Hydrogen Energy – it was identified among key research stakeholders (alongside IITs and CSIR labs) in a 2022 national roadmap for hydrogen R&D, due to its work on clean fuel technologies [8]. In the biotechnology arena, UPES's tie-up with **Taipei Medical University** (Taiwan) has facilitated exchange of scholars and joint research projects, and it's noteworthy that TMU's incubation ecosystem (18 startups, biomed accelerator) provides a model which UPES is learning from to accelerate commercialization of research findings [6]. This kind of international collaboration enhances UPES's capability to turn research into innovative products.

Overall, through strategic partnerships (AIIMS, Merck, HCLTech, etc.), joint research initiatives, and a strong IPR-commercialization framework, UPES is advancing SDG 9 targets of fostering innovation and supporting **technology transfer**. The university's growing research output (2,064 Scopus-indexed publications in 2024 alone) and high citation impact comparable to global elite institutions [5] further evidence that UPES's research endeavors are both prolific and relevant. By co-creating solutions with industry and safeguarding intellectual property, UPES ensures that new knowledge contributes to sustainable industrial development and economic growth.

3. Sustainable Infrastructure Development on Campus

UPES has invested significantly in building and upgrading campus infrastructure to be resilient, sustainable, and conducive to innovation. These efforts align with SDG 9's emphasis on **resilient infrastructure and sustainable industrialization**. On its two campuses in Dehradun, UPES has

implemented green infrastructure projects to reduce carbon emissions and improve resource efficiency:

Renewable Energy and Energy Efficiency

UPES operates a **100 kW solar power plant** on campus, which in recent years has supplied about 8% of the university's total electricity demand [9]. This on-site solar generation not only cuts carbon emissions but also serves as a live training and research facility for students working on solar energy projects [9]. In addition, UPES maintains **solar thermal systems** with a capacity of **61,500 liters** for water heating in hostels and cafeterias, significantly reducing reliance on electric heaters [9]. The university has adopted a policy to retrofit all conventional lighting with LED fixtures; by replacing old lights with energy-efficient LEDs, UPES has achieved substantial energy savings on campus [9]. Moreover, the electrical infrastructure at UPES is optimized to maintain a *unity power factor*, eliminating energy wastage in power transmission [9]. These measures reflect a holistic approach to a low-carbon campus: combining clean energy production, efficiency upgrades, and smart power management to minimize the environmental footprint of campus operations.

Water and Waste Management

As per Central Ground Water Authority criteria, UPES is a **"Zero Water Discharge"** campus – an integrated water management system ensures that no untreated wastewater leaves the campus [9]. The university has a **550 KLPD (kiloliters per day) sewage treatment and recycling plant** that treats wastewater to a level fit for reuse. In 2021–2022, over 250 kiloliters of treated water were reused daily for campus horticulture and landscaping needs [9]. Rainwater harvesting is deployed extensively, with all recharge pits metered to monitor groundwater recharge, resulting in 89% water savings through conservation and recycling [9]. A standout innovation is UPES's **Integrated Wastewater Reclamation Plant** pilot project, which uses microalgae to treat sewage while producing valuable byproducts [9]. This algae-based system not only purifies water but also generates **bio-oil, bio-gas, and bio-manure** as outputs, exemplifying a circular approach to infrastructure [10]. The project serves as a model of sustainable industrial practice in waste management and offers hands-on research opportunities in bioresource engineering for faculty and students. Solid waste on campus is also managed sustainably – for instance, UPES operates a **Waste-Paper Recycling Lab** that teaches and employs rural women in producing paper, pencils, and stationery from campus waste paper, thus linking infrastructure to community livelihood (described more in section 4) [9].

Resilient Construction and Facilities

UPES continually upgrades its academic and research facilities to be state-of-the-art and disaster-resilient. All new buildings comply with stringent structural safety norms (given Dehradun's seismic zone) and incorporate climate-responsive design. A highlight is the development of advanced science and engineering laboratories through government grants. Under the **DST-FIST program**, UPES established a **Battery Testing and Management Systems Lab** equipped with a 50 kW dual-channel regenerative Battery Testing Unit – this sophisticated lab can test lead-acid and Li-ion battery packs (8V–200V, up to 300A) and feed unused energy back to the grid, improving efficiency [11]. The lab's CAN-Bus integrated systems allow precise battery simulations and have enabled researchers to improve battery thermal management and State-of-Charge accuracy [11]. Importantly, this facility

supports industry as well: it provides R&D and consultancy services to electric vehicle and energy storage companies, contributing to India's e-mobility ecosystem [11]. Likewise, DST-FIST funding of ₹2 crore was used to procure an advanced **Nuclear Magnetic Resonance (NMR) machine** at UPES, establishing a dedicated center for designing sustainable advanced materials [11]. This new NMR facility boosts interdisciplinary research in organocatalysis, drug development, and waste-to-wealth technologies. It is also **benefiting local industry** – chemical and pharmaceutical companies in Uttarakhand now have access to high-end molecular analysis support, which accelerates innovations in drug discovery and materials development [11]. By strengthening scientific infrastructure in-house, UPES is fostering a regional innovation ecosystem and building local capacity for research-driven industrial development [11].

Digital Infrastructure

Recognizing the importance of digital connectivity and smart infrastructure, UPES has invested in campus-wide high-speed internet, smart classrooms, and virtual labs. In 2023, UPES rebranded and expanded its online education arm **"UPES ON"**, supported by upgraded IT infrastructure to deliver hybrid and remote learning programs [12]. This digital expansion not only broadened access to UPES programs (aligning with the government's digital education drive) but also provided students and working professionals with modern Learning Management Systems, AI-integrated curricula, and global virtual masterclasses [12]. UPES's focus on digital infrastructure extends to supporting research and incubation: e.g., the Runway Incubator provides virtual collaboration platforms for startup teams and has set up an online portal to connect student entrepreneurs with mentors and angel investors worldwide [1]. The integration of digital tools has proven essential during the pandemic and beyond, ensuring resilience of educational and innovation activities under any circumstances.

Through these infrastructure initiatives, UPES exemplifies how a university can serve as a "living lab" for sustainability and innovation. The campuses themselves demonstrate **resilient, low-carbon infrastructure** – from solar energy to wastewater recycling – and provide experiential learning for students in engineering sustainable solutions. Meanwhile, the creation of cutting-edge labs and centers (Battery Lab, NMR center, Central Instrumentation Centre, etc.) underpins research and industry collaboration, directly contributing to SDG 9. UPES's commitment to modernizing its infrastructure has earned recognition; for instance, visitors to campus (academicians and industry experts alike) have lauded the high-end research facilities and the emphasis on sustainability in campus operations [13]. By continuously upgrading its physical and digital infrastructure, UPES is building the foundation for long-term innovation and demonstrating leadership in sustainable campus development.

4. University Initiatives for Regional and National Industrial Development

UPES extends its impact beyond campus through initiatives that develop industry-relevant skills in the community, promote entrepreneurship in the region, and engage in public-private partnerships for industrial innovation. These efforts contribute to inclusive and sustainable industrialization (SDG target 9.2) by building human capital and supporting small enterprises at the local and national level.

A key endeavor is the establishment of specialized training centers in partnership with industry and government. One shining example is the **UPES BEST – Bajaj Engineering Skills Training Centre**, launched as a CSR partnership with Bajaj Auto Ltd. [14]. The BEST Centre, inaugurated in 2022 at UPES's Bidholi Campus, is equipped with state-of-the-art laboratories for *Mechatronics, Robotics &*

Automation, Motion Control, and Industry 4.0/Smart Manufacturing training [14]. It offers intensive upskilling programs to **Graduate Trainee Engineers (6-month)** and **Diploma Engineers (4-month)**, focusing on high-demand manufacturing skills like sensor technology, CNC machining, and industrial IoT [14]. This program is aligned with National Occupational Standards and addresses the skills gap in the automotive and manufacturing sectors [14]. By the end of each training, participants receive certification and placement support, making them job-ready for advanced manufacturing roles [14]. Importantly, the Centre provides scholarships to trainees from economically weaker sections to ensure inclusive access [14]. Through the BEST Centre, UPES and Bajaj Auto are effectively creating a talent pipeline for **Industry 4.0**, supporting India's drive towards a skilled workforce for "Make in India" initiatives. This academia-industry partnership model has been well-received, and the labs (e.g. Automation & Robotics labs with real industrial robots) are also used by UPES engineering students and faculty for project work, thereby enriching regular curricula with practical exposure.

UPES is also home to an **Atal Community Innovation Centre (ACIC)**, supported by NITI Aayog's Atal Innovation Mission, which focuses on nurturing grassroots innovation and entrepreneurship in Uttarakhand. According to recent reports, UPES's Runway incubator secured **₹5 crore from NITI Aayog** to establish an ACIC on campus [2]. The ACIC program is designed to encourage innovation in underserved and rural communities by providing ideation support, prototyping facilities, and mentorship to local entrepreneurs and students. At UPES, the ACIC has facilitated projects such as value-added local crafts (like bamboo product design) and appropriate technology solutions for hill farmers and artisans, integrating traditional knowledge with modern design. These efforts tie into other UPES community programs: for example, *Project Vikalp*, the UPES **Rural Women Technology Park**, empowers women in neighboring villages with technology training [9]. Through this project (funded under a government scheme), women are taught to create products such as recycled paper goods, ICT-based art designs, and to cultivate medicinal and aromatic plants for commercial use [9]. UPES provides technical backup and even helps budding women entrepreneurs in marketing their products, thereby creating sustainable livelihood opportunities [9]. This directly contributes to local industrial development by turning rural women into micro-entrepreneurs and integrating them into value chains.

The university's **community outreach and skill development programs** further illustrate its role in regional development. Under the Government of India's Skill India Mission, UPES has conducted training for underprivileged groups outside its student body. In 2020, for instance, UPES faculty volunteered to provide **upskilling workshops for inmates at Dehradun District Jail** in trades and skills that can enhance their livelihood options post-release [9]. This unique initiative helped inmates gain certifications and hands-on abilities, exemplifying inclusive industrial growth by not leaving behind those in custodial institutions. UPES has also worked with local NGOs to support artisans and small businesses hit by the pandemic. A project termed **"Craft Story Making"** involved a collaboration where UPES organized a fair showcasing products made by orphaned children, marginalized women, and local artisans, to help them recover economically by finding new markets [9]. Such projects connect creative industry and social enterprise, indicating UPES's holistic approach to economic development.

To bolster regional infrastructure and development planning, UPES engages with local government and communities on special projects. **Project Utthan**, for instance, is an initiative aiming to transform two villages (Dhalani and Koti in Dehradun district) into model *smart villages* with improved healthcare, education, and livelihood facilities [9]. UPES provides technical expertise and student volunteers to implement solutions like solar lighting, water purification, tele-health services, and digital education in these villages. By upgrading infrastructure and skills in rural areas, the project intends to reduce urban migration and spur rural industrial activities (such as food processing or

handicrafts) in a sustainable way [9]. Early outcomes have been positive, with these villages beginning to see better access to services and new income-generating activities, a template that can be replicated across the state.

On the **national stage**, UPES contributes to industrial development through thought leadership and collaboration in key sectors. Originating as a university focused on petroleum and energy, UPES maintains strong ties with the energy industry and government bodies. Faculty from UPES have been part of national forums on energy policy, and the university has hosted conferences like the *National Space Convention Renaissance 3.0* (2022) and *Energy Summit 2022* that brought together industry leaders, policymakers, and academics to deliberate on future technologies [13]. These events often result in whitepapers or recommendations that feed into industrial strategy – for example, discussions on alternative fuels and carbon capture at UPES events align with India's industrial decarbonization goals.

UPES's emphasis on **entrepreneurship education** ensures that its graduates contribute to economic development wherever they go. The curriculum across schools (Engineering, Business, Computer Science, etc.) is co-designed with industry partners (IBM, Microsoft, KPMG, Bosch, and others) to include practical projects and emerging skill sets [15]. Live industry projects are embedded into courses via the *Industry Connect* program so that students solve real business problems and often help companies innovate in the process [16]. By producing industry-ready graduates and new entrepreneurs, UPES supplies the talent and innovation needed for industries to grow. The success is evident in placement statistics and startup outputs: over 90% of UPES graduates find employment each year (even through the pandemic) and many have joined or started ventures in sectors like renewable energy, robotics, and digital services, thereby contributing to India's economic growth [7].

In summary, UPES leverages partnerships (like **Bajaj Auto for skill centers** [14], **NITI Aayog for ACIC** [2]), community engagement (women's technology park, inmate training, artisan fairs), and academic alignment with industry needs to drive **inclusive industrial development**. These initiatives help build a skilled workforce, support small enterprises and innovation at the grassroots, and strengthen the link between education and employment. This multi-faceted approach resonates strongly with SDG 9's call for inclusive and sustainable industrialization that benefits society at large.

5. Engagement in Public Policy and Contribution to Industrial Strategy

UPES's role in **public policy engagement** and shaping industrial or digital transformation strategies is evident through its collaborations with government bodies and alignment with national initiatives. The university often acts as a bridge between academia, industry, and government, contributing its expertise to policy dialogues and development programs at state and national levels.

The commitment of UPES to national development priorities has been recognized at the highest levels of government. In September 2023, **India's Union Education Minister Dharmendra Pradhan** personally inaugurated UPES's online education platform (UPES ON) and highlighted the university as a valuable partner in advancing India's digital and skill-development agenda [12]. He praised UPES's two decades of experience in technology and education, noting that such institutions are crucial for India to assume a leadership position in technology-driven growth [12]. This endorsement came with references to flagship government digital initiatives like Aadhaar and DigiLocker – UPES is among the first universities to integrate with DigiLocker for issuing student certificates, supporting the government's push to eliminate paperwork and digitize education administration [12]. The Chief

Minister of Uttarakhand and state education ministers have also engaged with UPES. **Dr. Dhan Singh Rawat, Uttarakhand's Higher Education Minister**, lauded UPES for its contribution to the state, noting that with 23 private universities in Uttarakhand, UPES "plays a crucial role in development activities" of the region [12]. Such remarks underscore that UPES's work – from educating thousands of students (including many from other states and abroad) to providing expertise in local projects – is influencing regional development policies and outcomes.

UPES aligns its programs explicitly with national policy frameworks. The introduction of new academic programs in areas like *Digital Business, Artificial Intelligence, Renewable Energy, and even an MBA in Metaverse* reflects alignment with India's industrial strategy on digital transformation and emerging tech [10]. UPES was quick to respond to the **National Education Policy (NEP) 2020** by expanding multidisciplinary and online offerings to increase access to quality education. Vice Chancellor Ram Sharma noted that to achieve NEP's target of 50% Gross Enrollment Ratio by 2030, universities must embrace online and hybrid models – UPES's expansion of online courses and integration of AI in curricula is a direct contribution to this strategic goal [12]. Moreover, UPES's focus on entrepreneurship and innovation feeds into national economic strategies: as mentioned, initiatives like the Future Founders Challenge explicitly complement **Startup India** and Atal Innovation Mission objectives [2]. By instilling entrepreneurial skills in youth and facilitating startups (with support from Atal Innovation Mission and DST), UPES is effectively advancing government programs aimed at boosting India's innovation and startup ecosystem.

In the realm of industrial policy and planning, UPES experts lend their knowledge to government and industry bodies. Faculty members have been part of consultative committees for sectors like energy, environment, and law. For example, UPES was a contributing organization to the Government of India's **Leopard Conservation Report 2018** (demonstrating input to environmental policy) [9]. In industrial domains, UPES researchers frequently collaborate with public sector units and ministries on research that informs policy. One such example is a multi-year project assessing heavy metal pollution and health in Bihar's Gangetic plains, conducted with support from the **Indian Council of Medical Research (ICMR)** [11]. This study is generating data to guide public health interventions and policy measures for pollution mitigation, showing UPES's ability to contribute to evidence-based policy making in sustainable development [11]. In technology policy, UPES is associated with **NITI Aayog's initiatives** – the presence of former Atal Innovation Mission Director Mr. Ramanan Ramanathan on UPES's advisory board and as a mentor in the incubator indicates a two-way flow of insights between UPES and national policymakers [1]. Through such channels, UPES helps shape conversations on innovation policy, startup regulations, and industry-academia linkages at the national level.

At the international level, UPES engages in partnerships that align with global development policies and standards. The university's commitment to the **United Nations Sustainable Development Goals (SDGs)** is evident in the breadth of its programs (with dedicated SDG coordination and reporting on campus) [10]. UPES contributes to global policy dialogs on sustainability: for instance, its **RISE Centre (Research in Sustainability and ESG)** launched in 2024 (in partnership with Aspire Impact and supported by corporate partners) is training mid-career professionals to become *"Impact Officers"* who can lead ESG (Environmental, Social, Governance) transformations in industry [17]. This program addresses global issues like climate change and is India's first certified ESG leadership course – aligning with international frameworks like the Paris Agreement and UNDP's sustainability criteria [17]. By building capacity in ESG, UPES indirectly influences how industries will formulate sustainable strategies and comply with future regulations on emissions, social impact, etc.

Finally, UPES's performance in global and national rankings (e.g., NIRF, QS, THE) has a policy dimension. Its rise in rankings has been driven in part by factors like industry collaboration, research

impact, and employability of graduates [5] [7], which are areas of interest for educational policymakers. UPES often shares best practices at forums like the Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce & Industry (FICCI) conferences on education and skill development, thereby contributing thought leadership to shaping higher education policy in relation to industry needs.

In summary, UPES contributes to **industrial strategy and policy** by: working closely with government initiatives (NEP 2020, Startup India, Skill India) [2] [12]; providing expertise and data for policy formulation (through research and expert participation in committees) [11]; and championing global best practices in sustainability and digital transformation. The university's engagement with public officials – from union ministers inaugurating its programs to state authorities acknowledging its developmental role – attests to its influence. Through these activities, UPES is not only implementing policy directives but actively helping to shape a policy environment that favors innovation, sustainable industrialization, and inclusive growth, which is the essence of SDG 9.

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