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SUSTAINABLE DEVELOPMENT GOALS

Sustainability & Climate Action Report

Reaching Carbon-neutrality by 2050

KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY (KIIT)
Deemed to be University U/S 3 of UGC Act, 1956

KIIT Deemed to be University

SUSTAINABILITY & CLIMATE ACTION POLICY REPORT 2025

(QS Sustainability Rankings – Environmental Impact Submission)

Approved by IQAC

1. Executive Summary

KIIT Deemed to be University, located in Bhubaneswar, reaffirms its strong commitment to environmental sustainability and climate action through this *Sustainability & Climate Action Policy Report 2025*. The policy provides a comprehensive, evidence-based framework aligned with global sustainability priorities, including the United Nations Sustainable Development Goals (SDGs), and supports the institution's vision of achieving **Net Zero carbon emissions by 2050**.

Recognizing the urgency of climate change and its regional implications, KIIT has adopted a holistic approach that integrates sustainability across **academics, research, campus operations, governance, and community engagement**. The University offers a wide range of courses focused on climate science and environmental sustainability, with *Environmental Science* as a mandatory subject for all students, and is progressively expanding interdisciplinary programmes in renewable energy, electric mobility, smart grids, and sustainable development.

KIIT has established multiple specialized research centres dedicated to environmental sustainability, focusing on areas such as renewable energy, electric and hybrid vehicles, water conservation, biodiversity, and climate resilience. These centres contribute significantly to high-impact research, innovation, and policy development aimed at addressing global environmental challenges.

The University has implemented a robust environmental management system encompassing **carbon footprint reduction, energy efficiency, renewable energy generation, waste management, water conservation, and biodiversity protection**. KIIT has been actively monitoring its greenhouse gas emissions in alignment with the GHG Protocol Corporate Standard since 2015, ensuring transparency and accountability in its sustainability reporting.

Significant strides have been made in clean energy adoption, with large-scale solar photovoltaic installations and energy-efficient infrastructure, resulting in substantial reductions in energy consumption and emissions. Sustainable mobility initiatives, including the adoption of electric vehicles and battery-operated campus transport, further contribute to reducing the institution's carbon footprint.

Student engagement remains a cornerstone of KIIT's sustainability strategy. Through initiatives such as KIIT Green and various student-led societies, the University conducts over 150 awareness programmes annually, fostering a culture of environmental responsibility and active participation.

The policy is supported by a strong governance framework led by the Internal Quality Assurance Cell (IQAC), ensuring systematic implementation, monitoring, and continuous improvement. KIIT also maintains active collaborations with national and international organizations, strengthening its role as a global contributor to sustainability.

Through this policy, KIIT Deemed to be University demonstrates its commitment to **lead by example**, embedding sustainability into its institutional DNA while contributing meaningfully to climate action at local, national, and global levels. This report serves as a strategic roadmap for achieving long-term environmental goals and enhancing the University's performance in global sustainability rankings, including the QS Sustainability Rankings.

2. Net Zero Commitment

KIIT publicly commits to achieving Net Zero carbon emissions by 2050, covering Scope 1 and Scope 2 emissions.

3. Governance & Policy Framework

KIIT Deemed to be University has established a robust and well-defined governance structure to effectively implement, monitor, and continuously enhance its sustainability and climate action initiatives. The framework is designed to ensure institutional accountability, stakeholder engagement, and alignment with global sustainability standards, including the United Nations Sustainable Development Goals (SDGs).

At the apex of the governance structure is the Internal Quality Assurance Cell (IQAC), which serves as the central coordinating body for sustainability-related policies and initiatives. The IQAC, under the leadership of the Dean, provides strategic direction, formulates policies, and ensures that sustainability is embedded across all academic, research, and operational domains of the University. Regular reviews and performance assessments are conducted to track progress against defined sustainability targets.

Supporting the IQAC is a dedicated Sustainability Committee, chaired by the Vice Chancellor with the Registrar serving as the Convener. The committee comprises an Environmental Scientist, two Deans, two Heads of Departments, two Professors, two Assistant Professors, and QA representatives.

This committee is entrusted with the implementation of sustainability policies, monitoring of key performance indicators, and facilitating cross-functional coordination across departments. The inclusion of diverse stakeholders ensures a participatory approach and fosters a culture of shared responsibility across the institution.

KIIT has developed and operationalized a comprehensive suite of sustainability-focused policies that guide its environmental practices and decision-making processes. These include, but are not limited to:

- Energy Efficiency and Green Building Policy: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Energy-Efficiency-and-Green-Building-Policy_compressed.pdf
- Carbon Reduction and Fossil Fuel Divestment Policy: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Carbon-Reduction-and-Fossil-Fuel-Divestment-Policy_compressed-1.pdf
- Water Discharge and Management Guidelines: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Water-Discharge-Management-Guidelines_.pdf
- Biodiversity Conservation and Land Restoration Policies:
- Marine Pollution Prevention Policy: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Marine-Pollution-Prevention-Policy_compressed.pdf
- Plastic Reduction Action Framework: https://sustainability.kiit.ac.in/docs/SDG-12-KIIT-2024.pdf
- Restoration of Land: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Restoration-of-Land_compressed.pdf

- Monitoring for IUCN-Listed: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Monitoring-for-IUCN-Listed_compressed.pdf
- Managing IAS and Promoting Biodiversity: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Managing-IAS-and-Promoting-Biodiversity_compressed.pdf
- Coastal and Aquatic Ecosystem Conservation: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Coastal-and-Aquatic-Ecosystem-Conservation_compressed.pdf
- Aquatic Food Sourcing: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Aquatic-Food-Sourcing_compressed.pdf
- Action Framework for Plastic Reduction: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Action-Framework-for-Plastic-Reduction_compressed.pdf

These policies collectively address critical areas such as energy management, carbon emissions reduction, sustainable resource utilization, waste minimization, and ecosystem conservation. Each policy is aligned with national regulations and international best practices, ensuring both compliance and leadership in sustainability.

To strengthen transparency and accountability, KIIT adopts structured monitoring and reporting mechanisms. The University utilizes advanced IoT-enabled environmental monitoring systems to track parameters such as air quality, water quality, soil health, and energy consumption in real time. Additionally, greenhouse gas emissions are measured and reported in accordance with the GHG Protocol Corporate Standard, reinforcing the institution's commitment to credible and standardized reporting.

The governance framework also emphasizes periodic policy review and continuous improvement. Policies are revisited annually or as required to incorporate emerging technologies, updated regulations, and evolving sustainability goals. Feedback from stakeholders, including students, faculty, industry partners, and the community, is actively sought to refine strategies and enhance impact.

Through this integrated governance and policy framework, KIIT ensures that sustainability is not treated as a standalone initiative but is deeply embedded into the institution's strategic planning and operational ethos. This structured approach enables the University to effectively progress towards its long-term goal of achieving Net Zero emissions by 2050 while maintaining excellence in education, research, and societal contribution.

4. Academic Integration: Courses on Climate Science & Environmental Sustainability

KIIT Deemed to be University has institutionalized sustainability and climate education through a comprehensive and interdisciplinary academic framework spanning undergraduate, postgraduate, and doctoral programs. The University's curriculum is strategically aligned with global priorities, including the United Nations Sustainable Development Goals (SDGs), ensuring that students are equipped to address complex environmental and climate challenges.

4.1 Undergraduate and Postgraduate Course Offerings

The University offers **more than 45 courses specifically focused on climate science, environmental sustainability, renewable energy, and sustainable development**, cutting across disciplines such as engineering, rural management, public health, law, and management.

Sustainability-Focused Courses with SDG Mapping

Course Code	Course Title	Level	Department	Credits	Type	SDG Mapping
CH 108	**Environmental Science**	UG	All Programs	2	Mandatory	13, 12, 15
CE 3009	**Environmental Chemistry & Environmental Science**	UG	Civil	3	Mandatory	13, 6
CE 4010	**Global Warming and Climate Change**	UG	Civil	3	Mandatory	13
CE 3006	**Green Buildings & Disaster Management**	UG	Civil	3	Mandatory	11, 13
CE 3105	**Water Resources Engineering**	UG	Civil	3	Mandatory	6
CE 3185	**Water Resources Design**	UG	Civil	3	Mandatory	6
BB 2001	**Climate Change, Sustainability and Traditional Knowledge Systems**	UG	Rural Mgmt	3	Mandatory	13, 15
BB 2010	**Natural Resource Management and Climate Change**	UG	Rural Mgmt	3	Mandatory	13, 15
RM 1004	**Climate Change, Sustainability & Traditional Knowledge Systems**	PG	Rural Mgmt	2	Mandatory	13
RM 2002	**Natural Resource Management and Climate Change**	PG	Rural Mgmt	2	Mandatory	13, 15
RM 3001	**Climate-Smart Pathways in Sustainable Agrifood Systems**	PG	Rural Mgmt	3	Mandatory	2, 13
RM 2003	WASH (Water, Sanitation and Hygiene) in Health	PG	Rural Mgmt	2	Mandatory	6, 3
CE 4007	**Sustainable Development and Energy Efficiency of the Built Environment**	PG	Civil	3	Optional	11, 7
CE 2110	**Climate Change and Disaster Resilient Built Environment**	PG	Civil	3	Optional	11, 13
CE 3133	**Air and Noise Pollution Control**	PG	Civil	3	Optional	3, 13
CE 4089	**Coastal Management**	PG	Civil	3	Optional	14
CE 4053	**Solid and Hazardous Waste Management**	UG	Civil	3	Optional	12
CE 4156	**Environmental Impact Assessment**	UG	Civil	3	Optional	13
CE 3131	**Transport of Water & Waste Water**	UG	Civil	3	Optional	6
CE 4051	**Flood and Drought Estimation and Management**	UG	Civil	3	Optional	13
ME 3033	**Renewable Energy Sources**	UG	Mechanical	3	Optional	7
EE 3046	**Solar Power Technologies**	UG	Electrical	3	Optional	7

EE 4045	**Non-Conventional Energy Systems**	UG	Electrical	3	Optional	7
EE 7012	**Green Car Technology and Maintenance**	UG	Electrical	3	Mandatory	7, 13
BB 1011	Perspectives in Tribal Development	UG	Rural Mgmt	2	Mandatory	10
BB 2004	Interpreting Data for Community Development	UG	Rural Mgmt	2	Mandatory	11
BB 3008	Social Change and Community Development	UG	Rural Mgmt	2	Mandatory	11
MP 1012	COVID Awareness and Prevention	PG	Public Health	2	Optional	3
MP 2006	COVID Care	PG	Public Health	2	Optional	3
MP 1013	Health and Stress Management	PG	Public Health	2	Optional	3
YG 1081	Yoga and Human Consciousness	UG	Yoga	2	Mandatory	3
EAA	Extra Academic Activities (SDG aligned)	UG/PG	All	2	Mandatory	All SDGs

At the undergraduate level, **Environmental Science is a mandatory course for all programs**, providing foundational knowledge on ecological systems, climate change, and sustainable practices. This is complemented by a wide range of specialized technical courses, including *Global Warming and Climate Change*, *Green Buildings & Disaster Management*, *Water Resources Engineering*, *Environmental Impact Assessment*, and *Solid and Hazardous Waste Management*.

The curriculum also emphasizes **clean energy and low carbon technologies**, with dedicated courses such as *Renewable Energy Sources*, *Solar Power Technologies*, *Non-Conventional Energy Systems*, and *Green Car Technology and Maintenance*. These courses prepare students to contribute to energy transition and decarbonization efforts.

4.2 Degree offering Post Graduate Program

At the postgraduate level, **KIIT offers advanced, domain-specific degree offering programs** that directly address sustainability challenges, including:

- **Environmental Engineering**
- **Water Resources Engineering**
- **Geotechnical Engineering** (with applications in sustainable infrastructure)
- **MBA in Rural Management**
- **MBA in Agribusiness Management**
- **Master of Public Health**
- **MA/MSc in Public Policy**
- **PG Diploma in Community Development**

These programs are supported by specialized courses such as *Climate Change and Disaster Resilient Built Environment*, *Sustainable Development and Energy Efficiency*, *WASH (Water, Sanitation and Hygiene)*, and *Climate-Smart Pathways in Sustainable Agrifood Systems*, enabling students to engage in applied and policy-oriented sustainability solutions.

A key strength of KIIT's academic model is its focus on **community-centric and inclusive sustainability**, with courses addressing natural resource management, rural livelihoods, sanitation, and traditional knowledge systems. This aligns strongly with the concept of a *just and equitable transition*, a critical dimension in global sustainability frameworks.

Additionally, **Extra Academic Activities (EAA) aligned with SDGs are mandatory** for all students, ensuring experiential learning through field engagement, community projects, and sustainability initiatives.

4.3 Doctoral Research Programs in Sustainability

KIIT further strengthens its academic ecosystem through a diverse portfolio of doctoral programs addressing advanced research in environmental sustainability and climate action. Key PhD areas include:

- Water Research and Climate Change
- Remote Sensing and Disaster Management
- Environmental Science
- Water Resource Engineering
- Waste Material Utilization
- Ground Improvement and Geotechnical Engineering
- Bio Materials and Bio Process Engineering
- Public Health and Life Sciences

These doctoral programs are closely linked with the University's research centres and focus on developing innovative, data-driven, and scalable solutions to address climate change, resource management, disaster resilience, and environmental health challenges.

4.4 Interdisciplinary and Holistic Approach

A defining feature of KIIT's academic framework is its **interdisciplinary integration of sustainability across technical, social, and policy domains**. The curriculum bridges engineering solutions with societal needs, combining climate science with governance, health, and economic development.

This holistic approach ensures that graduates are not only technically proficient but also socially responsible and globally aware, capable of contributing effectively to climate action and sustainable development.

Through its extensive portfolio of sustainability-focused courses and programs at all academic levels, KIIT demonstrates a strong institutional commitment to embedding climate literacy and environmental responsibility within its educational ecosystem. This integrated academic approach significantly enhances the University's contribution to global sustainability goals and strengthens its position in the QS Sustainability Rankings.

5. Research and Research Centre on Environmental Sustainability

KIIT Deemed to be University has developed a comprehensive and interdisciplinary research ecosystem to address pressing challenges related to climate change and environmental sustainability. The University has established multiple specialized research centres that focus on advancing scientific knowledge, technological innovation, and policy solutions aligned with global sustainability priorities, including the United Nations Sustainable Development Goals (SDGs).

These research centres act as hubs of excellence, fostering collaboration among faculty, researchers, students, industry partners, and international institutions. The centres are equipped with advanced laboratories and infrastructure to support cutting-edge research in sustainability domains.

5.1 Key Research Centres

- **Electric & Hybrid Vehicle Research Centre** – Focused on clean mobility, battery technologies, and electric drivetrain systems.
- **Centre for Renewable Energy and Sustainable Energy Systems** – Dedicated to solar photovoltaics, wind energy, smart grids, and energy storage systems.
- **Centre of Excellence for Water and Wastewater Management** – Engaged in water conservation, wastewater treatment, and hydro-environment engineering.
- **Environmental Engineering and Sustainability Laboratory** – Focuses on pollution control, waste management, and sustainable infrastructure.
- **Interdisciplinary Centre for Materials and Nano-Sciences** – Works on advanced materials for clean energy and environmental applications.
- **Centre of Excellence for Sustainability and Equity** – Addresses sustainability from socio-economic and policy perspectives.
- **IoT and Smart Environment Monitoring Centre** – Develops real-time monitoring systems for environmental parameters.
- **Thin Film Photovoltaic Lab:** This laboratory is committed to researching and improving thin film photovoltaic technology, a renewable energy source that harnesses sunlight to generate electricity without depleting finite resources.

The University further strengthens its research ecosystem through collaborations with leading industry partners such as Schneider Electric and Siemens, enabling applied research in energy management, automation, and sustainable technologies. Additionally, the university is actively working on the development of various Centers of Excellence that aim to become leaders in specific areas of research and innovation related to environmental sustainability:

- NI Centre of Excellence
- Centre of Excellence for Water
- Centre of Excellence for Rare Earth Materials
- Schneider Lab
- TBI-NIDHI Centre of Excellence
- Siemens Laboratory
- Interdisciplinary Research Centre in Materials and Nano-Sciences
- Interdisciplinary Center of Energy with special reference to Renewable Energy

KIIT's sustainability-focused research spans a wide range of interdisciplinary domains. The major thrust areas include:

- Renewable Energy Technologies (Solar PV, Wind, Fuel Cells)
- Electric and Hybrid Vehicles & Battery Management Systems
- Energy Storage and Smart Grid Technologies
- Power Quality and Sustainable Energy Systems
- Thin Film Photovoltaics and Functional Energy Materials
- Water Science, Wastewater Treatment, and Hydro-Environment Engineering
- Waste Management and Waste-to-Energy Technologies
- Environmental Biotechnology and Bio-process Engineering
- Climate Change and Sustainable Agriculture
- Biodiversity Conservation and Natural Resource Management
- Geo-informatics and Climate Data Analysis
- Artificial Intelligence and Machine Learning for Environmental Applications
- Sustainable Urban Planning and Infrastructure
- Corporate Social Responsibility and Sustainability Policy

These thrust areas ensure that the University's research remains relevant, impactful, and aligned with emerging global challenges.

5.2 Research Contributions to Climate Action and Environmental Sustainability

KIIT Deemed to be University has made significant contributions to climate action and environmental sustainability through high-quality research outputs, innovation, and community-focused initiatives. The University's research efforts are aimed at developing practical, scalable, and technology-driven solutions to mitigate climate change and enhance environmental resilience.

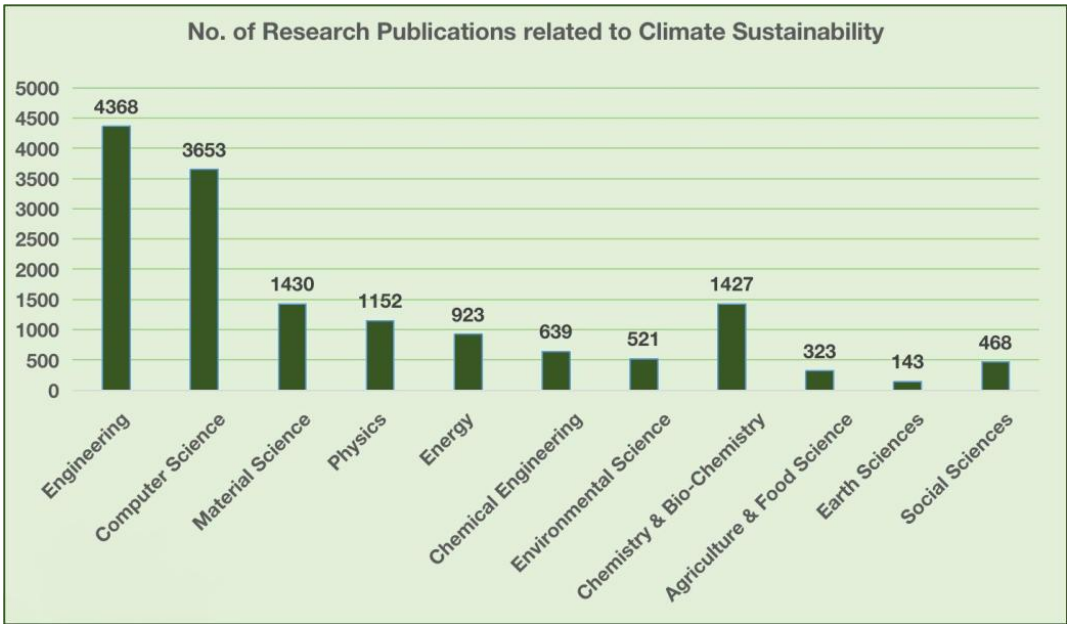


Figure 1 Research outcomes in various subjects related to climate sustainability.

Figure 2 Research publications indexed in Scopus and WoS.

In the domain of renewable energy, KIIT researchers have contributed to the advancement of solar photovoltaic technologies, energy-efficient power electronics, and smart grid systems, enabling cleaner and more reliable energy generation and distribution. Research in electric mobility has led to the development of energy-efficient electric vehicles and battery management systems, supporting the transition towards low-carbon transportation.

Significant work has been carried out in water resource management, including wastewater treatment technologies, groundwater modelling, and sustainable water reuse practices. These efforts contribute to addressing water scarcity and improving water quality in both urban and rural settings.

In the field of environmental monitoring and data analytics, KIIT has implemented IoT-based smart systems to monitor air, water, and soil quality in real time. These systems generate actionable insights that support evidence-based decision-making and policy formulation.

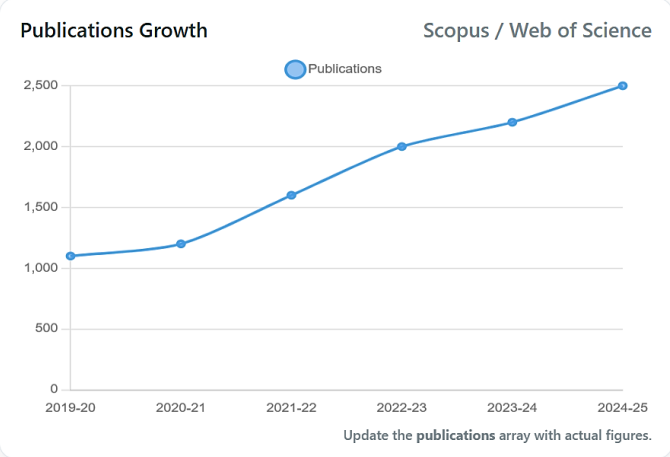
The University has also undertaken impactful research in biodiversity conservation and ecosystem management, including studies on natural habitats, afforestation initiatives, and ecological restoration. Collaborative research projects, such as studies on microbial communities in sensitive ecosystems like Chilika Lagoon, demonstrate KIIT's commitment to preserving ecological balance.

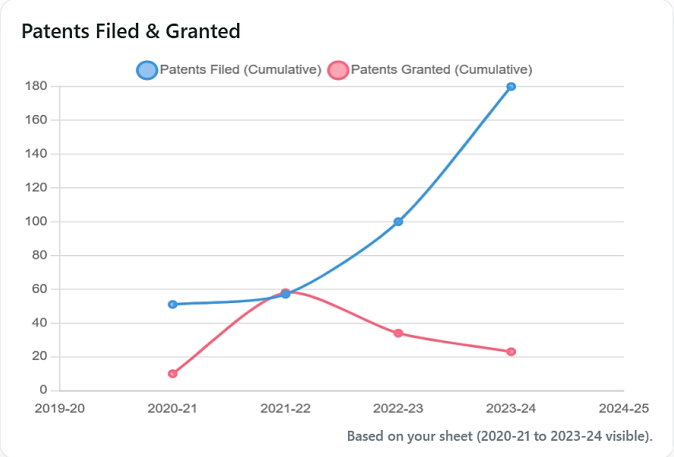
KIIT University is at the forefront of sustainability research, undertaking diverse projects aimed at addressing environmental challenges and promoting sustainable practices. From renewable energy advancements to climate resilience strategies, our research endeavours are making significant contributions to a more sustainable and eco-friendly future. Some of the ongoing projects are:

- Social determiners of water Inequity:-A systematic investigation at Bhubaneswar.
- Natural Disaster and Vulnerability: An Empirical Study in Drought Prone Region of Western Odisha.
- An Assessment of Central and State Water Laws Address Water Management Problems of Mid-sized Cities: A Case Study at Bhubaneswar.
- Toilet Stories from a Coastal Village of Odisha:-A Participatory Study of Sanitation and Social Change in collaboration with Mahatma Gandhi National Council of Rural Education:
- Relationship between household sanitation and woman's experience of menstrual hygiene under Swachha Bharat Mission (Clean India Mission) in Odisha, in collaboration with ICSSR.
- Baseline Survey in 13 blocks of Sundargarh Districts and Angul Districts, Odisha
- Development of GaN-FET Based high Efficiency Converter
- A novel approach for the efficiency enhancement of Copper Indium Gallium Diselenide (CIGS) based thin film solar cell.
- Novel AL nano-structure based electrodes for batteries & supercapacitor devices.
- Vitamin biofortification through fermentation of common energy denses food of India and South Africa for young children 3-10 years

- Development of Natural Emulsion based Beverage and its domain in energy drink
- Validation of anti-cancer activity of Phytochemicals from traditional herbal healing practices

KIIT's research outputs include a substantial number of publications indexed in reputed databases such as Scopus and Web of Science, along with patents and funded projects in sustainability-related domains. The University actively engages in interdisciplinary and international collaborations, enhancing the global relevance and impact of its research.





Furthermore, the KIIT Technology Business Incubator (KIIT-TBI) plays a pivotal role in translating research into real-world solutions by supporting startups in clean technology, renewable energy, environmental biotechnology, and sustainable innovation. This integration of research, innovation, and entrepreneurship strengthens the University's contribution to climate action.

Major collaborations on various SDGs related to climate actions

SDG		Areas of Projects	Funded by
SDG 3	Good Health and Well-Being	Wellness of Tribal Children, Women Health, Remote Health, Development of Diagnostics Platforms, Clinical Assessment of Cancer, Diagnosis of pneumonia in children	DST, ICSSR, ITRA, DBT, MSME, ICMR
SDG 6	Clean Health and Sanitation	Women's sanitary health, Faecal Sludge and Septage Management, Study of Sanitation and Social Change in Rural Odisha	ICSSR, Ernst & Young LLP
SDG 7	Affordable and Green Energy	Development of thin film solar cells, Research on Battery, Research on Grid connected renewable system, Micro Grid, Solar Based Electric Vehicle	DST, MNRE
SDG 11	Sustainability Cities and Communities	Policing a Smart City, Social determiners of water Inequity, Natural Disaster and Vulnerability study, Assessment of Central and State Water Laws, ICTs in Urban Policing	ICSSR
SDG 12	Responsible Consumption and Production	Waste Water Management, Enhancing the shelf-life of food products, Vitamin Bio-fortification	Karolinska Foreign Project, DST,

SDG 13	Climate Action	Climate Change Effects on Livelihoods, Natural Disaster and Vulnerability, Ground water Sources, Renewable energy,	ICSSR, DST, BRNS, DAE
SDG 14	Life Below Water	Littoral Microbial Flora of Chilika Lake,	ICZMP
SDG 15	Life on Land	Enhancing life of food products	DST

Through its well-established research centres, clearly defined thrust areas, and impactful research outcomes, KIIT demonstrates a strong institutional commitment to advancing environmental sustainability and climate action. The University's integrated approach—combining research, innovation, industry collaboration, and societal engagement—positions it as a leading contributor to sustainable development at regional, national, and global levels.

KIIT-Technology Business Incubator (KIIT-TBI)

The KIIT Technology Business Incubator (KIIT-TBI) is a non-profit Section (8) incubator established in 2009, supported by prestigious government bodies like NSTEDB, DST, MeitY, MSME, BIRAC, and TDB. As a recipient of the National Award for TBI in 2017, it serves as a vital initiative of KIIT Deemed to be University, Bhubaneswar, aimed at fostering the entrepreneurial ecosystem in the country. Recognized as a Centre of Excellence in Incubation by DST, Govt of India, KIIT-TBI offers an extensive platform and world-class infrastructure of approximately 130,000 sq. ft. to nurture startups. It provides a wide array of incubation facilities and services, enabling aspiring entrepreneurs to transform their innovative ideas into commercially viable products. With a successful track record, having incubated and mentored 350+ startups, KIIT-TBI focuses on various domains, including IT and Engineering, Cleantech, Healthcare and Life Sciences, Biotechnology, Agri and Food Tech, and other social innovation areas, contributing to climate sustainability and addressing crucial societal challenges.

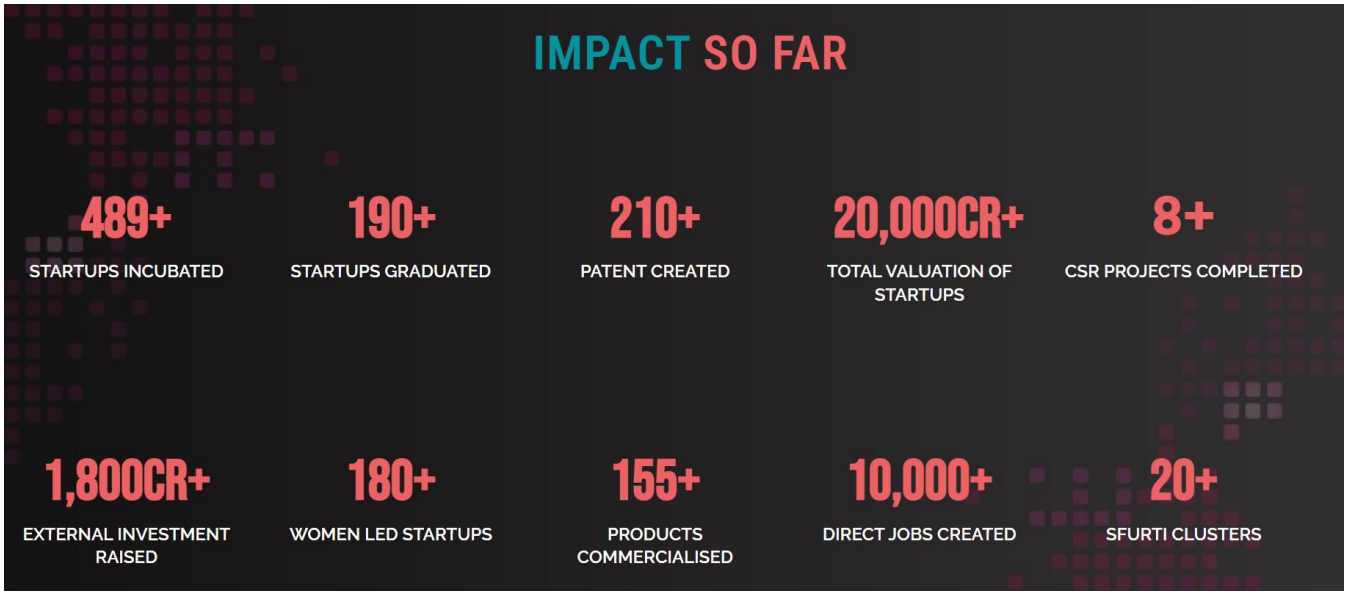


Figure 3 Impact of KIIT TBI

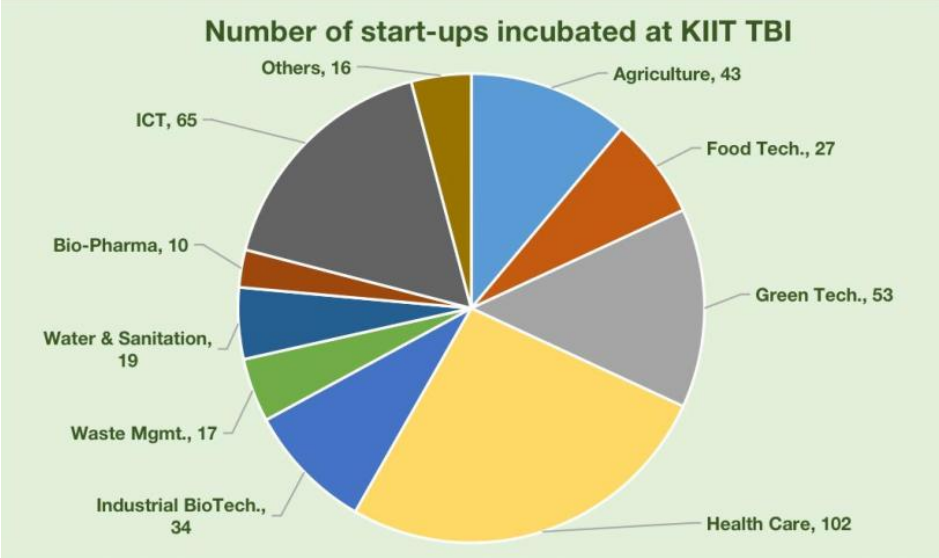


Figure 4 Number of start-ups incubated at KIIT TBI till date in various domains

6. Student Engagement (QS Indicator)

Student Engagement

KIIT Deemed to be University actively fosters a culture of sustainability through strong student engagement, positioning students as key drivers of climate action and environmental responsibility. The University's structured engagement framework is aligned with the United Nations Sustainable Development Goals (SDGs) and emphasizes experiential learning, leadership development, and community impact.

Student-Led Sustainability Ecosystem under KSAC

The **KIIT Student Activity Centre (KSAC)** serves as the central platform for student engagement, hosting a diverse range of clubs and societies that actively contribute to sustainability and climate action initiatives. Key student bodies and clubs contributing to sustainability include:

- **KIIT Green (Environment & Sustainability Club)**

  The flagship student-led environmental initiative focusing on:

  - Tree plantation drives and afforestation campaigns
  - Campus cleanliness and plastic-free initiatives
  - Awareness programs on climate change and biodiversity

- **Konnexions (Social Responsibility Club):**

  Engages students in:

- Community outreach and rural development programs
- Sustainability awareness campaigns in nearby villages
- Social impact initiatives aligned with environmental justice

❖ **Khwahishein (Social Welfare Society):**

Focuses on:

- Community engagement and inclusive development
- Awareness programs on sanitation, hygiene, and sustainable living

❖ **Kzarshion (Innovation & Entrepreneurship Society):**

Encourages:

- Student-led startups in sustainability domains
- Innovation challenges on clean technology and environmental solutions

❖ **Qutopia (Quizzing Society):**

Conducts:

- Sustainability-themed quizzes and awareness competitions
- Knowledge dissemination on climate change and global issues

❖ **Kreative Eye & Kzarshion Media Teams**

Support sustainability communication through:

- Digital campaigns
- Environmental storytelling and awareness content

Major Student-Led Sustainability Activities

Students at KIIT actively organize and participate in a wide spectrum of sustainability-focused activities, including:

- **Tree Plantation & Biodiversity Drives:** Large-scale plantation initiatives across campus and surrounding communities.
- **Plastic-Free Campus Campaigns:** Awareness drives and implementation of waste segregation practices.
- **Environmental Awareness Campaigns:** Programs on climate change, water conservation, and sustainable lifestyles.
- **Cleanliness Drives (Swachh Bharat Initiatives):** Regular student-led cleanliness campaigns within and beyond campus.
- **Water Conservation and Sanitation Awareness:** Outreach programs promoting responsible water use and hygiene practices.

- **Air Pollution Awareness & Innovation Activities:** Participation in events such as the **AIROTHON hackathon**, where students develop actionable solutions for urban air quality challenges.

Integration with Academic and Experiential Learning

Student engagement is further strengthened through **mandatory Extra Academic Activities (EAA)** aligned with SDGs, ensuring that all students participate in sustainability-related initiatives. These include:

- Field-based rural engagement programs
- Community development projects
- Environmental surveys and awareness campaigns
- Participation in sustainability-focused workshops and seminars

Innovation, Leadership, and Entrepreneurship

KIIT encourages students to move beyond participation to leadership and innovation through:

- Sustainability-focused hackathons and competitions
- Startup incubation support via KIIT Technology Business Incubator (KIIT-TBI)
- Interdisciplinary collaboration on climate solutions

This ecosystem enables students to develop scalable and impactful solutions addressing real-world environmental challenges.

Community-Centric and Inclusive Engagement

A defining strength of KIIT's student engagement model is its focus on **inclusive sustainability**. Students actively work with rural and underserved communities, contributing to:

- Sanitation and hygiene awareness
- Sustainable livelihood initiatives
- Environmental education and behavioural change

This aligns with global priorities of **equity, inclusion, and just transition.** Through a structured and vibrant student ecosystem led by KSAC, KIIT ensures that sustainability is deeply embedded in student life. The combination of student-led initiatives, experiential learning, innovation, and community engagement creates a dynamic platform for developing environmentally conscious and socially responsible global citizens.

7. Sustainable Procurement & Investment

KIIT Deemed to be University has adopted a responsible and forward-looking approach to procurement and investment, integrating sustainability principles into its institutional decision-making processes. The University's policies are aligned with global frameworks, including the United Nations Sustainable Development Goals (SDGs), and reflect its commitment to reducing environmental impact while promoting ethical and socially responsible practices.

Sustainable Procurement Framework

KIIT follows a structured **Sustainable Procurement Policy** that prioritizes environmentally responsible purchasing, lifecycle efficiency, and resource optimization. The policy ensures that all procurement decisions consider environmental, social, and economic impacts.

Key principles guiding sustainable procurement include:

❖ **Preference for Eco-Friendly Products**

Procurement of energy-efficient equipment, low-emission materials, recycled products, and environmentally certified goods.

❖ **Energy-Efficient Infrastructure and Equipment**

Adoption of energy-efficient electrical systems, LED lighting, green-certified appliances, and smart energy solutions aligned with the University's **Energy Efficiency and Green Building Policy**.

❖ **Waste Reduction and Circular Economy Practices**

Emphasis on minimizing packaging, promoting reusable materials, and supporting recycling initiatives in line with the University's **Plastic Reduction Action Framework**.

- **Sustainable Water Management Systems**

Procurement of water-efficient fixtures and systems supporting conservation and reuse practices.

- **Compliance and Ethical Sourcing**

Vendors are encouraged to comply with environmental regulations, labor standards, and ethical business practices.

- **Green Construction and Infrastructure Development**

Integration of sustainability criteria in construction projects, including the use of eco-friendly materials, energy-efficient designs, and climate-resilient infrastructure.

Sustainable Aquatic Food Sourcing Policy: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Aquatic-Food-Sourcing_compressed.pdf

Sustainable Procurement Policy: https://kiit.ac.in/sustainable-procurement-policy/.

Water Discharge management Guidelines: https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Water-Discharge-Management-Guidelines_.pdf

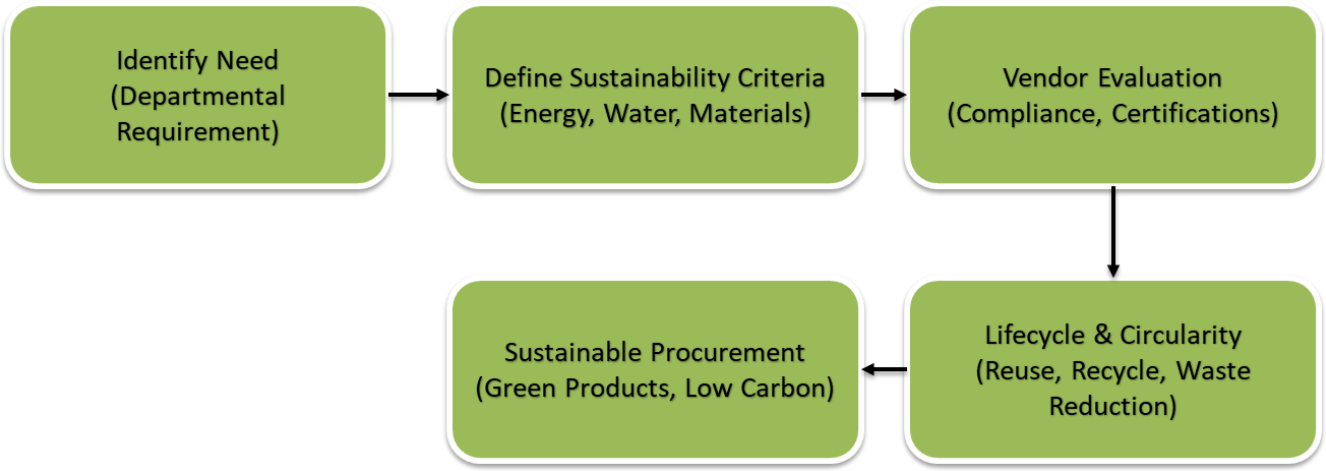


Figure 5 Sustainable Procurement Framework

Sustainable Investment Practices

KIIT integrates sustainability considerations into its financial and investment decisions, ensuring alignment with long-term environmental and societal goals. Key features of the University's sustainable investment approach include:

❖ **Carbon Reduction and Fossil Fuel Divestment**

The University promotes investment strategies aligned with its **Carbon Reduction and Fossil Fuel Divestment Policy**, minimizing exposure to carbon-intensive assets and supporting low-carbon initiatives.

❖ **Investment in Renewable Energy and Clean Technologies**

Allocation of resources towards solar energy installations, energy-efficient infrastructure, and research in clean technologies.

❖ **Support for Sustainability-Focused Research and Innovation**

Financial support for projects and startups working on renewable energy, environmental monitoring, sustainable agriculture, and climate resilience.

❖ **Partnerships with Responsible Organizations**

Collaboration with industry partners and institutions that adhere to sustainability principles and environmental best practices.

❖ **Integration of ESG (Environmental, Social, Governance) Principles**

Consideration of ESG factors in institutional investments and financial planning.

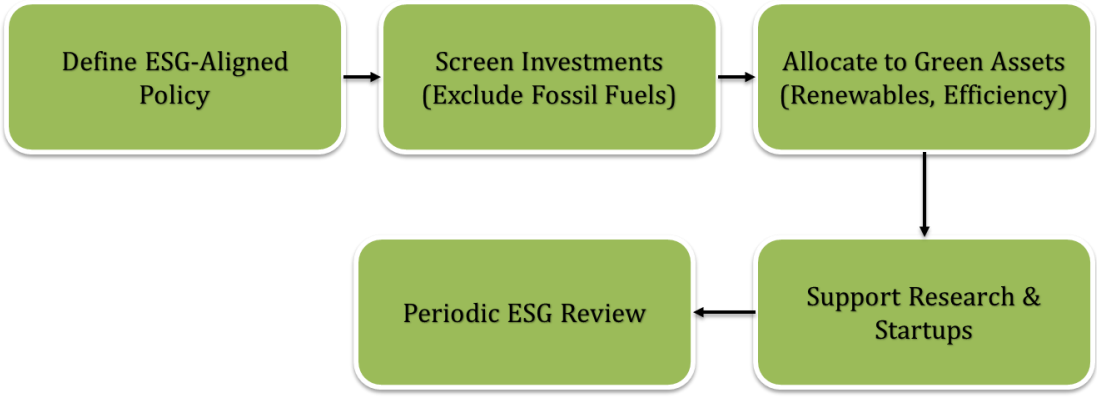


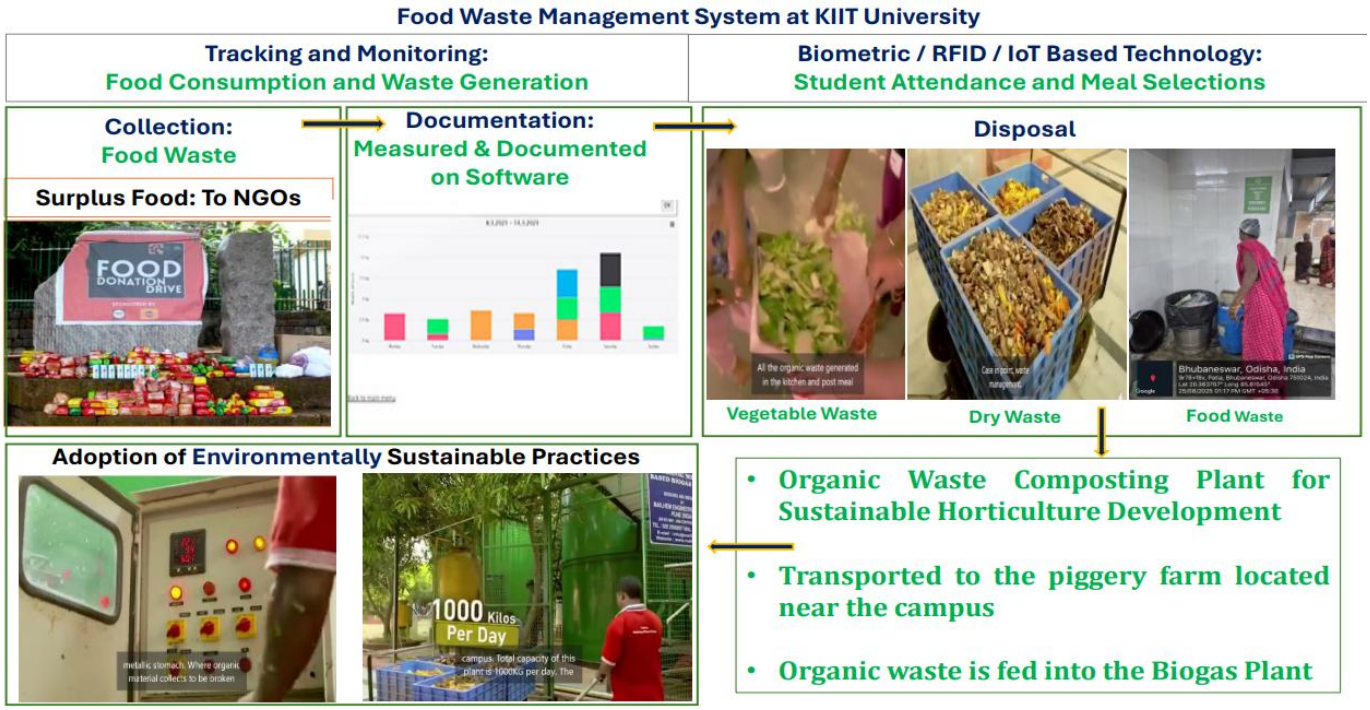
Figure 6 Sustainable Investment Practices

Transparency, Monitoring, and Continuous Improvement

KIIT ensures transparency and accountability in procurement and investment practices through:

- Periodic review and updating of procurement policies
- Monitoring of supplier compliance with sustainability criteria
- Integration of sustainability indicators into institutional audits

- Alignment with internationally recognized frameworks such as the GHG Protocol Corporate Standard



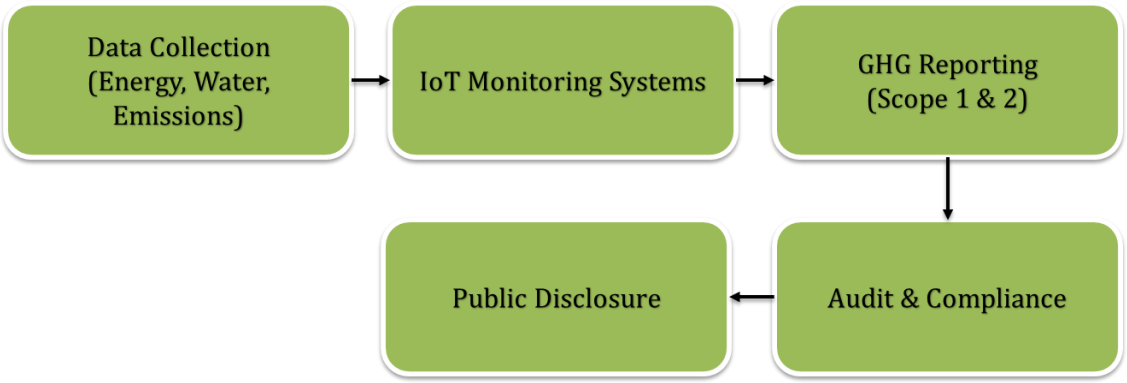


Figure 7 Transparency, Monitoring, and Continuous Improvement

Alignment with Institutional Sustainability Goals

The Sustainable Procurement and Investment framework plays a critical role in supporting KIIT's broader sustainability objectives, including:

- Reduction of carbon emissions
- Promotion of resource efficiency
- Advancement towards Net Zero by 2050
- Enhancement of environmental and social impact

Through its integrated approach to sustainable procurement and responsible investment, KIIT ensures that sustainability principles are embedded not only in academic and research activities but also in institutional operations and financial decisions. This comprehensive framework strengthens the University's commitment to climate action.

8. Carbon Emissions & GHG Reporting (QS Indicator)

GHG Protocol followed since 2015.

Year	Scope 1	Scope 2	Total (tCO2e)

9. Energy & Sustainable Infrastructure (QS Indicator)

KIIT Deemed to be University has adopted a comprehensive approach to energy management and sustainable infrastructure development, integrating energy efficiency, renewable energy adoption, and green building practices across its campuses. These initiatives are aligned with global sustainability frameworks, including the United Nations Sustainable Development Goals (SDGs), particularly SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action).

Renewable Energy Integration

The University has made significant progress in transitioning towards clean energy through the deployment of renewable energy systems across campus. Key initiatives include:

- **Solar Energy Installations**

Rooftop solar photovoltaic (PV) systems installed across academic buildings, hostels, and administrative blocks contribute to on-campus energy generation.

Solar Power Plant

- 10 Nos. of Roof-Top Solar PV power Plants
- Total Electricity Generation=1000 kWp
- Total CO2 emission avoided= 2977 Tons

Solar Power Plant

Solar Water Heating System

- Numbers of Roof-Top Solar Heating - 40
- Total Solar Based Water Heating Systems Installed-91,500 Ltrs per day
- Total CO2 emission avoided= 832 Tons


Solar Water Heating System

Solar Water Heating System

❖ **Renewable Energy Utilization**

The generated solar energy is utilized for campus operations, cooking food at hostels and canteens, reducing dependence on conventional grid electricity and lowering carbon emissions.

Fully mechanized steam kitchen

❖ **Energy Storage and Optimization (Planned/Progressive)**

The University is exploring advanced energy storage solutions and smart grid integration to enhance efficiency and reliability.

Energy Efficiency Measures

Annual internal energy audits are conducted to identify areas of energy waste.

S. No.	Audit Findings	Action Plan Completed
1	Lights and air conditioning might remain on after classes end.	Red blinking indicators have been installed outside rooms to clearly identify electricity usage. Additionally, duty staff and security personnel are assigned to patrol on a rotating schedule.
2	Non-essential lighting in areas that are not in use, such as restrooms, corridors, pantries, and vacant offices.	The Energy Saving Cell oversees efforts to promote energy conservation among the campus community. Advanced IoT-based monitor sensors are installed in areas with low foot traffic to manage lighting efficiently.
3	Insulation of academic section's AC condenser units are damaged and are exposed to the sunlight, water, dust, etc. There is a reduction in the performance of the machine.	The refrigerant pipes from the outdoor to indoor units have been insulated with new thick coated sheet.
4	Protection System	To install IoT base advance fault detection system on all DB's.
5	Energy Monitoring	To install IoT base remote energy monitoring system. This will help to track all load properly, optimize energy consumption.

KIIT has implemented a wide range of energy efficiency initiatives aimed at reducing energy consumption and improving operational efficiency:

- **LED Lighting Transition:** Replacement of conventional lighting systems with energy-efficient LED lighting across campus.
- **Energy-Efficient Equipment:** Procurement and deployment of energy-efficient electrical appliances, HVAC systems, and laboratory equipment.
- **Smart Energy Management Systems:** Implementation of monitoring systems for tracking energy consumption and identifying optimization opportunities.
- **Preventive Maintenance Practices:** Regular maintenance of electrical systems to ensure optimal performance and reduced energy losses.

Solar Power & Solar Heater Generating Unit Maintenance

Green Buildings and Sustainable Infrastructure

KIIT integrates sustainability principles into infrastructure development through its **Energy Efficiency and Green Building Policy (**https://sustainability.kiit.ac.in/wp-content/uploads/2025/10/Energy-Efficiency-and-Green-BuildingPolicy_compressed.pdf**)**, ensuring that all new constructions and retrofitting projects adhere to environmentally responsible standards.

Key features include:

- Green Building Design
- Sustainable Construction Materials
- Thermal Efficiency and Climate-Responsive Design
- Water-Efficient Infrastructure

Campus-Wide Infrastructure for Sustainability

The University has developed a robust infrastructure ecosystem to support sustainability across all operations. Waste separation bins have been strategically placed across the campus to facilitate the sorting of waste. Recyclable materials are collected at the 3Rs yard, which stands for Reduce, Reuse, and Recycle, before being sent to recycling vendors for processing. Additionally, food waste from the hostel's mess / cafeteria / office, including kitchen scraps, is collected daily to be composted, contributing to sustainable waste management practices. This approach not only promotes recycling but also helps in minimizing the amount of waste sent to landfills by repurposing organic waste into compost.

Different types of waste generated in the KIIT University and their disposal

Types of waste	Particulars	Disposal method
E-Waste	Computers, electrical and electronic parts	Direct selling
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc	Direct selling
Solid wastes	Damaged furniture, paper waste, paper plates, food wastes	Reuse after maintenance energy conversion
Wastewater	Washing, urinals, bathrooms	Soak pits
Glass waste	Broken glass wares from the labs	Direct selling
Sanitary Napkin		Napkin Incinerators

❖ Water Management Systems

Efficient water supply, recycling, and wastewater treatment facilities.

✧ 3 Numbers of Sewage Treatment Plant

STP at Campus 18 (Capacity – 90 KLD)

Sewage Treatment Plant at KIMS (2 million Liter per Day)

∴ Water Conservation

✧ Rain-water based ground water recharging pit all campus

✧ Sensor based pump controllers in 175 bore holes

Sensor Based Over Head Tank Water Controller

Automatic Water Controller with Pump Starter

Rainwater Recharge Pit

Liquid Waste Treatment Plants

Use of Sensors for Overhead Water Tanks

❖ **Waste Management Infrastructure**

Systems for waste segregation, recycling, and safe disposal, aligned with circular economy principles.

✧ **Biogas plant for organic waste**

1000 Kg / day Capacity Biogas Plant

✧ **Composting for long decomposable organic waste**

500 Kg/Day Capacity Biogas Plants

❖ **Green Campus Development**

Extensive green cover, landscaping, and biodiversity conservation initiatives.

❖ **Sustainable Mobility (Emerging Focus)**

Promotion of eco-friendly transportation within campus, including pedestrian-friendly pathways and cycling initiatives.

Energy Data, Reporting, and Targets

KIIT systematically monitors and reports its energy performance and carbon emissions:

- Annual tracking of energy consumption and renewable energy generation
- Integration with greenhouse gas (GHG) accounting frameworks
- Alignment with institutional carbon reduction targets and Net Zero commitments

The University reports emissions in line with internationally recognized standards such as the GHG Protocol Corporate Standard, ensuring transparency and accountability.

10. Campus Footprint

Insert total built-up area (sq ft)

11. Carbon Reduction Targets

Reducing our carbon footprint is a primary objective for us. Since 2015, we have been regularly measuring and monitoring our CO2 emissions. Over the years, we have increased our renewable power generation and decreased our dependency on the grid. We have also integrated energy efficient electrical systems, substituted the conventional vehicles by electric vehicles and certified zero-emission vehicles, conducted mega plantation drives in and around the campus and introduced various environmental awareness programs and courses on sustainability and climate action. This has resulted in reduction of carbon footprint of our university.

We will set ambitious targets for greenhouse gas emissions reduction, aligned with scientific recommendations, and develop strategies to achieve them. Our goal is to reach carbon neutrality by 2050. We will invest in more renewable energy sources, energy-efficient technologies, and sustainable transportation options to minimize our carbon emissions. We will regularly assess and adjust our strategies to ensure progress towards our targets.

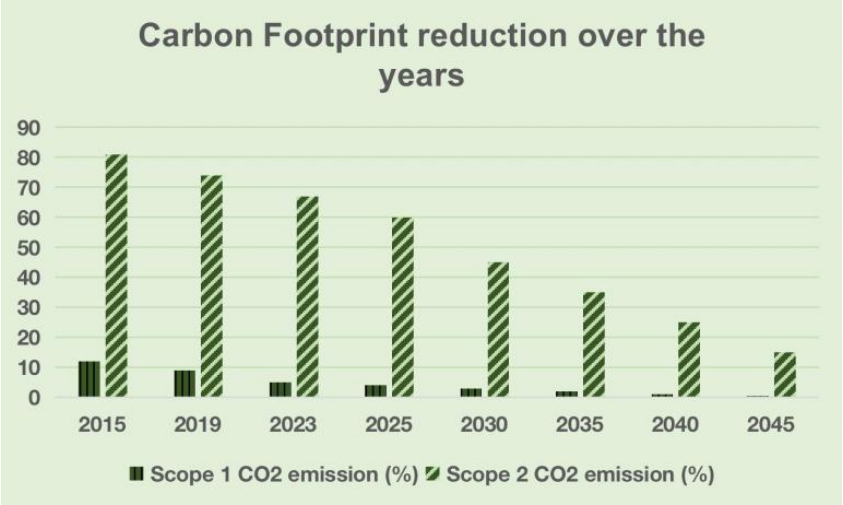


Figure 8 Evolution and Projection of Carbon footprint of KIIT University over the

12. Environmental Stewardship

KIIT Deemed to be University demonstrates a strong commitment to environmental stewardship through a comprehensive framework of policies, practices, and initiatives aimed at conserving natural resources, protecting biodiversity, and minimizing environmental impact. The University's approach is aligned with global sustainability frameworks, including the United Nations Sustainable Development Goals (SDGs), particularly SDG 6 (Clean Water and Sanitation), SDG 12 (Responsible Consumption and Production), SDG 13 (Climate Action), SDG 14 (Life Below Water), and SDG 15 (Life on Land).

Biodiversity Conservation and Ecosystem Protection

KIIT actively promotes biodiversity conservation within and beyond its campus through dedicated policies and programs:

❖ Green Campus and Afforestation Initiatives

The University maintains extensive green cover through systematic tree plantation drives and landscaping initiatives, enhancing carbon sequestration and ecological balance.

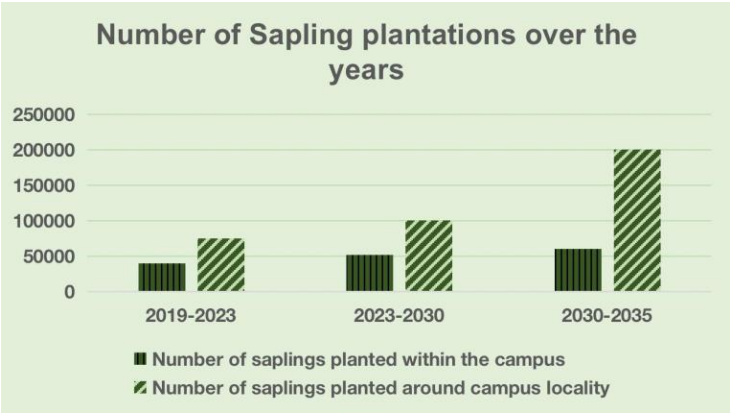


Figure 9 Number of saplings planted over the years along with projected numbers

Figure 10 KIIT Green Campus

❖ Protection of Flora and Fauna

Implementation of policies for monitoring and protecting species, including those listed by global conservation frameworks such as the International Union for Conservation of Nature (IUCN).

❖ Management of Invasive Alien Species (IAS)

Measures to control invasive species and promote native biodiversity, ensuring ecological sustainability.

❖ Coastal and Aquatic Ecosystem Conservation

Programs focused on protecting marine and freshwater ecosystems, reflecting KIIT's commitment to environmental responsibility beyond campus boundaries.

Water Resource Management

KIIT adopts a holistic approach to water conservation and management:

- Efficient Water Use and Conservation
- Wastewater Treatment and Reuse
- Rainwater Harvesting Systems
- Water Discharge Management Guidelines

Waste Management and Circular Economy

The University follows a structured approach to waste management aligned with circular economy principles:

- Waste Segregation at Source
- Recycling and Resource Recovery
- Plastic Reduction Initiatives
- Hazardous Waste Management

Pollution Prevention and Environmental Protection

KIIT has adopted proactive measures to prevent and mitigate environmental pollution:

- Air and Noise Pollution Control
- Marine Pollution Prevention Policy
- Environmental Monitoring Systems

Sustainable Land Use and Restoration

The University integrates sustainable land management practices into its operations:

- **Land Restoration Initiatives:** Efforts to restore degraded land and enhance ecological productivity.
- **Sustainable Campus Planning:** Development of infrastructure that balances-built environment with green spaces.

Community Engagement and Environmental Awareness

KIIT extends its environmental stewardship efforts beyond campus through:

- Awareness programs on sustainability and conservation
- Community-based environmental initiatives
- Student-led campaigns on biodiversity, waste management, and climate action

Policy Framework and Governance

Environmental stewardship at KIIT is supported by a robust policy framework, including:

- Energy Efficiency and Green Building Policy
- Carbon Reduction and Fossil Fuel Divestment Policy
- Plastic Reduction Action Framework
- Water Discharge Management Guidelines
- Biodiversity and Ecosystem Conservation Policies

These policies ensure a structured and accountable approach to environmental management. Through its comprehensive environmental stewardship framework, KIIT demonstrates leadership in sustainable campus management and ecological conservation.

Figure 11 KIIT received Awards at the Odisha State Energy Conservation Awards for contribution towards energy conservation

The integration of biodiversity protection, resource efficiency, pollution control, and community engagement reflects a holistic approach to sustainability, significantly contributing to the University's performance towards Sustainability.

13. Sustainable Transportation

Promoting environmentally friendly transport options is crucial for lowering carbon emissions. Biking, walking, carpooling, and using public transportation are all forms of alternative mobility that we support and encourage. We have lessened the reliance on single-occupancy automobiles and promoted a culture of sustainable mobility by providing infrastructure and incentives for these

alternatives. The number of electric vehicles used by our university is growing yearly. By 2030, we want a higher proportion of people in our community to use alternate forms of transportation.

Electric Vehicles (EVs)

One of the most important components of our sustainable mobility plan is the uptake of electric vehicles (EVs). Within our organisation, we prioritise the usage of electric fleet vehicles and make investments in EV charging infrastructure. Additionally, we inform and entice employees and students to think about EVs for their own transportation requirements.

By encouraging EV adoption, we hope to lower transportation-related carbon emissions and get closer to our objective of becoming carbon neutral. Green vehicles (powered by solar energy and an electric battery) have been built by the University's automobile society and the KIIT student research centre for use in campus transportation and for conducting green vehicle research. Our goal is to have 70% of our fleet battery operated by 2030.

Figure 12 KIIT offers battery-operated shuttle services for intra-university transport.

14. Monitoring & Transparency

KIIT Deemed to be University has established a comprehensive and data-driven Monitoring & Transparency framework to ensure accountability, accuracy, and continuous improvement in its sustainability and climate action initiatives. The framework is aligned with globally recognized standards such as the GHG Protocol Corporate Standard and supports transparent reporting for global benchmarks including the QS Sustainability Rankings.

Integrated Sustainability Data Management

The University maintains a centralized system for the collection, management, and analysis of sustainability-related data across all campuses. Key data domains include:

- Energy consumption (grid electricity, renewable energy generation)
- Water consumption and wastewater discharge
- Waste generation, segregation, and recycling
- Greenhouse gas (GHG) emissions (Scope 1 and Scope 2)

This integrated approach ensures data consistency, traceability, and readiness for audits and reporting.

Digital and Real-Time Monitoring Systems

KIIT is progressively deploying **smart and digital monitoring systems** to enhance operational efficiency and environmental performance:

- Smart metering for energy and water consumption
- Building-level monitoring of utilities and performance
- Tracking of renewable energy generation (e.g., solar PV systems)
- Integration of IoT-based systems for real-time analytics

We have implemented IoT enabled Smart Environment Monitoring systems in and around the University campus. KIIT aimed to implement a Smart Sensors system for continuously monitoring air, soil, and water quality within their large campuses. The system utilizes a variety of sensors to measure parameters such as PM 2.5, PM 10, CO, CO_2, NO, NO_2, SO_2, O_3, Temperature, Humidity, Soil Moisture, NPK (Nitrogen, Phosphorous, Potassium), pH, TDS, Turbidity, and Iron levels. Sensors are strategically placed, and data is integrated into a centralized platform to calculate the Air Quality Index (AQI) and provide real-time monitoring, generating alerts if parameters exceeded set thresholds.

Regular maintenance, calibration, and awareness campaigns are conducted to ensure accurate and reliable data, enabling KIIT to take proactive measures in preserving a healthy environment for its campus community.

Figure 13 Soil Quality, Water Quality and Air Quality Monitoring Sensors

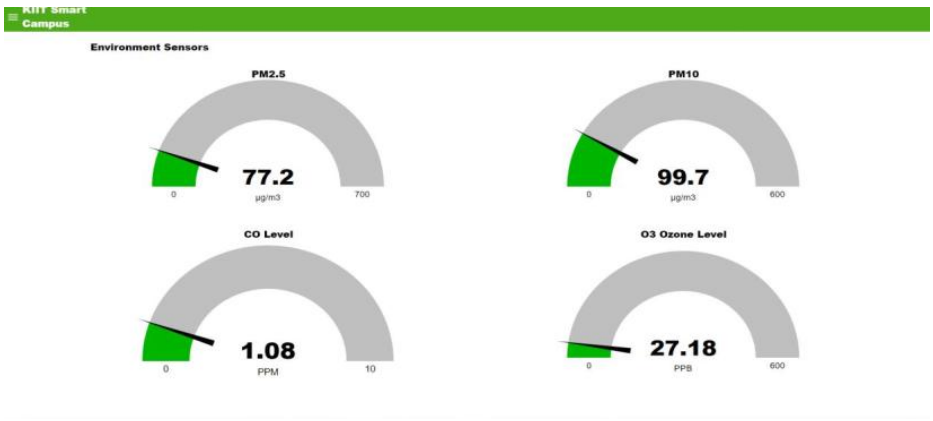


Figure 14 Environment monitoring data displayed on web in real-time.

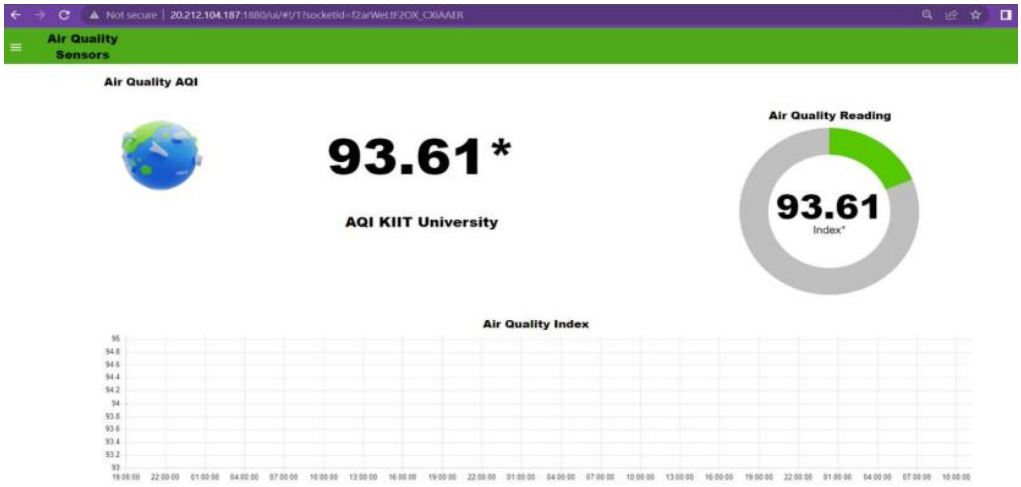


Figure 15 Air-quality monitoring data displayed on web in real-time.

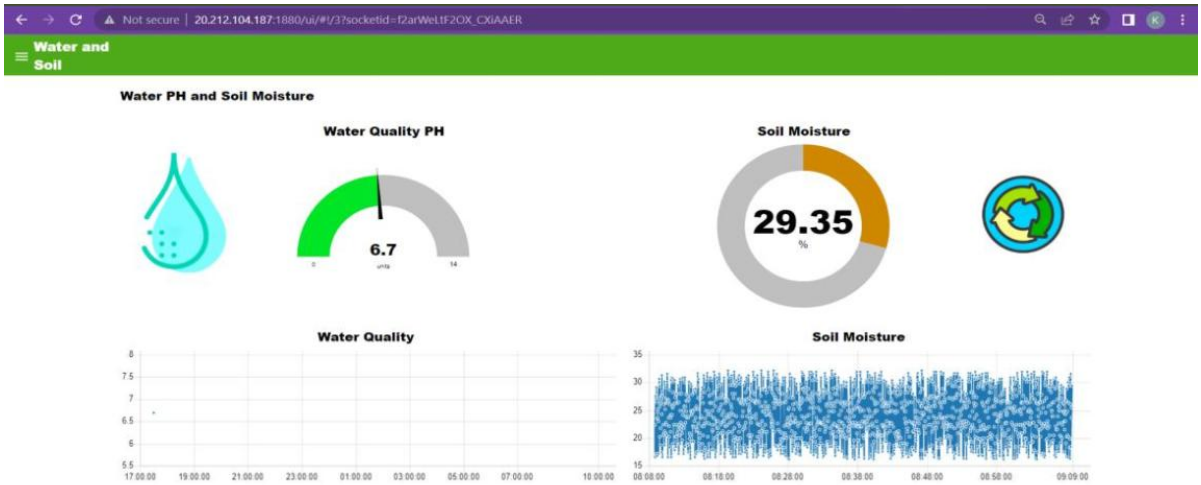


Figure 16 Water and soil quality data displayed on web in real-time.

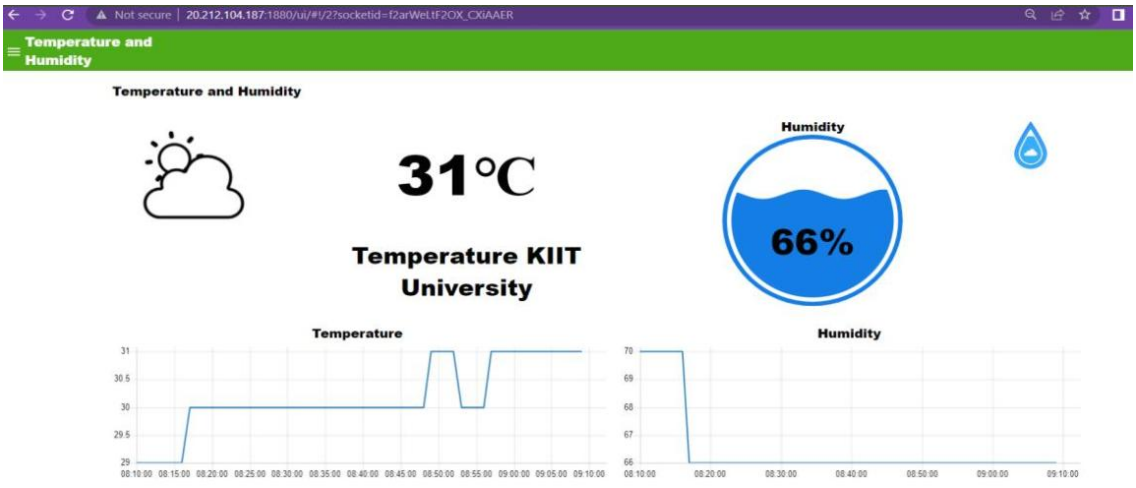


Figure 17 Temperature and Humidity data displayed on web in real-time.

Figure 18 Overall analysis window for all the environmental data with minimum and maximum values

These systems enable **proactive identification of inefficiencies** and support evidence-based decision-making.

GHG Emissions Accounting and Reporting

KIIT follows internationally accepted methodologies for carbon accounting and reporting:

- Measurement and reporting of **Scope 1 (direct)** and **Scope 2 (indirect)** emissions
- Establishment of a baseline year for emissions tracking
- Annual reporting and trend analysis of emissions data
- Alignment with institutional carbon reduction targets and Net Zero commitments

This structured approach ensures credibility and comparability with global institutions.

Audit, Compliance, and Verification

To ensure integrity and accountability, KIIT has implemented robust audit and compliance mechanisms:

- Periodic internal sustainability audits
- Compliance with national environmental regulations and standards
- Third-party verification where applicable
- Integration with Institutional Quality Assurance systems (IQAC)

Public Disclosure and Reporting

Transparency is a key pillar of KIIT's sustainability strategy. The University ensures public access to sustainability information through:

- Annual Sustainability & Climate Action Reports
- SDG Reports and disclosures
- Publication of policies and performance data on official websites
- Submission of data to national and global ranking frameworks

These practices enhance stakeholder trust and institutional credibility.

Benchmarking and Continuous Improvement

KIIT adopts a continuous improvement approach through:

- Benchmarking against peer institutions and global standards
- Use of sustainability Key Performance Indicators (KPIs)
- Periodic review and updating of policies and practices
- Incorporation of feedback from stakeholders

Governance and Institutional Oversight

The Monitoring & Transparency framework is supported by strong governance structures:

- Dedicated Sustainability Committees and administrative bodies
- Oversight by University leadership (Vice-Chancellor, Deans, and functional heads)
- Cross-departmental coordination for data collection and implementation

This ensures that sustainability is embedded in institutional planning and decision-making processes. Through its comprehensive Monitoring & Transparency framework, KIIT ensures accurate measurement, accountability, and continuous enhancement of its sustainability performance. The integration of digital monitoring, standardized reporting, and transparent disclosure positions the University as a responsible and forward-looking institution, significantly strengthening its commitment towards sustainability and climate action.

15. Collaboration and Partnerships

Stakeholder Engagement

Engaging stakeholders is essential for the success of our sustainability initiatives. We actively involve our students, staff, faculty, alumni, and local community in decision-making processes and seek their input and feedback. Regular dialogue and collaboration ensure that our sustainability efforts align with the needs and aspirations of our stakeholders. We establish sustainability committees and forums to facilitate stakeholder engagement and promote co-creation of sustainability solutions.

Partnerships

We are aware of how effective collaborations can be in bringing about positive change. To share best practices, make the most of resources, and work together to address climate change and sustainability concerns, we are looking to collaborate with local and international organizations, research institutes, industries, and governmental agencies. Through these collaborations, we are able to influence more people outside of our school. In order to support worldwide efforts for a sustainable future, we actively participate in regional and international sustainability networks and initiatives. By 2030, we want to treble the number of alliances we have with academic institutions, scientific research facilities, and commercial enterprises.

Alumni Engagement and Collaboration

KIIT University, a renowned educational institution in India, has produced a multitude of exceptional graduates who have gone on to make significant contributions in various fields. Among these fields, one area stands out as crucial to the future of humanity and our planet - climate sustainability. The alumni of KIIT University have emerged as champions in the global fight against climate change, demonstrating their commitment to environmental preservation through innovative solutions, impactful initiatives, and policy advocacy. A significant percentage, approximately 35%-45%, of KIIT's alumni, are actively engaged in addressing Climate Sustainability across diverse fields.

- ***Climate-conscious Entrepreneurship:***

A remarkable aspect of KIIT University's alumni community is the number of entrepreneurs who have embraced climate-conscious business practices. These forward- thinking graduates have launched startups and companies that prioritize sustainability and eco-friendliness. By incorporating renewable energy, sustainable supply chains, and waste reduction measures, they are setting new standards for the business world. Not only are they proving that profitability and environmental responsibility can go hand in hand, but they also serve as inspiring examples for other aspiring entrepreneurs to follow suit.

- ***Research and Innovation:***

Several KIIT alumni have made their mark in the field of environmental research and innovation. These individuals have been at the forefront of developing cutting-edge technologies to combat climate change. From renewable energy advancements and green materials to carbon capture and storage solutions, their research has played a pivotal role in shaping a more sustainable future. Moreover, their contributions have been recognized by prestigious institutions and organizations worldwide, further promoting the institution's commitment to climate sustainability.

❖ *Global Advocacy and Leadership:*

Many KIIT graduates have taken up leadership positions in international environmental organizations and governmental bodies. Their roles involve formulating and implementing climate policies, advocating for green initiatives, and negotiating international agreements to address climate challenges. The alumni's dedication to creating a healthier planet through policy and diplomatic means is evident, as they work tirelessly to mobilize global efforts and foster cooperation between nations.

❖ *Social and Community Initiatives:*

The impact of KIIT alumni in climate sustainability extends beyond the professional realm. Numerous graduates have initiated grassroots projects and community-based efforts to raise awareness about environmental issues and drive positive change at the local level. These initiatives range from tree-planting campaigns and waste management drives to education programs on sustainable practices. By actively engaging with communities, the alumni have demonstrated their commitment to nurturing a culture of environmental consciousness and empowering the public to take action.

❖ *Climate Education and Awareness:*

KIIT alumni have also made significant contributions in the realm of climate education and awareness. Through public lectures, workshops, and online platforms, they have been instrumental in disseminating accurate information about climate change and its impact on the world. By fostering environmental literacy, these individuals are empowering people to make informed decisions and adopt sustainable practices in their daily lives, thereby multiplying the collective efforts to combat climate change.

The alumni of KIIT University have truly emerged as influential change- makers in the global fight for climate sustainability. Through their entrepreneurship, research, advocacy, community initiatives, and educational endeavors, they have contributed significantly to shaping a greener, more sustainable world. Their efforts serve as an inspiring testament to the institution's commitment to fostering socially responsible and environmentally conscious individuals.

As KIIT University continues to produce exceptional graduates, it is certain that their commitment to climate sustainability will remain at the forefront of their endeavors, further advancing the cause and leading humanity towards a more sustainable and resilient future.

15. Net Zero Commitment and Roadmap to Net Zero

KIIT Deemed to be University has committed to achieving **Net Zero greenhouse gas (GHG) emissions by 2050**, demonstrating its leadership in climate action and alignment with global

frameworks such as the United Nations Framework Convention on Climate Change and the Paris Agreement.

The University adopts a **phased, data-driven, and action-oriented roadmap** that integrates emissions reduction, renewable energy transition, sustainable infrastructure, and community engagement.

Baseline Assessment and Target Setting (2020–2025)

During this foundational phase, KIIT focuses on establishing a strong baseline and implementing rapid-impact interventions:

❖ *Greenhouse Gas Inventory*

- Comprehensive assessment of the University's carbon footprint
- Identification of key emission sources:
    - Energy consumption
    - Transportation
    - Waste generation
    - Procurement activities

❖ *Target Setting and Strategic Planning*

- Establishment of **quantifiable and time-bound emission reduction targets**
- Development of a structured roadmap prioritizing high-impact sectors such as:
    - Buildings
    - Energy systems
    - Transportation

❖ *Energy Efficiency Enhancement*

- Retrofitting buildings with:
    - LED lighting
    - Smart thermostats
    - Occupancy sensors
- Deployment of energy management systems for real-time monitoring
- Promotion of energy conservation practices among campus stakeholders

❖ *Renewable Energy Transition*

- Installation and expansion of **on-campus solar photovoltaic systems**
- Procurement of renewable energy through partnerships
- Exploration of energy storage solutions for optimized utilization

❖ *Sustainable Waste Management*

- Implementation of integrated waste management systems:
  - Recycling and composting
  - Hazardous waste management
- Awareness programs on waste reduction and Promotion of sustainable and recycled materials

Decarbonization and System Integration (2026–2030)

This phase focuses on scaling sustainability initiatives and embedding them across institutional functions:

❖ *Sustainable Transportation*

- Development of cycling infrastructure and promotion of non-motorized mobility
- Incentivization of public transport and carpooling
- Transition towards electric mobility:
  - Installation of EV charging infrastructure
  - Gradual electrification of campus fleet

❖ *Curriculum Integration and Research Expansion*

- Integration of climate change and sustainability across academic programs
- Strengthening of interdisciplinary teaching and research
- Establishment of research centres focused on climate adaptation and mitigation

❖ *Community Engagement and Partnerships*

- Collaboration with local communities, government agencies, and NGOs
- Development of climate resilience strategies at regional level
- Partnerships with industry for sustainable innovation

Carbon Neutral Operations and Ecological Enhancement (2031–2040)

In this phase, KIIT advances towards carbon neutrality through technological and ecological strategies:

❖ *Carbon Neutrality in Operations*

- Adoption of advanced low-carbon technologies
- Minimization of residual emissions
- Investment in high-quality carbon offset projects

❖ *Monitoring and Verification*

- Regular audits and performance tracking
- Transparent reporting aligned with the GHG Protocol Corporate Standard

❖ *Sustainable Land Use and Biodiversity Conservation*

- Implementation of biodiversity action plans
- Restoration of natural habitats and green spaces
- Promotion of sustainable land management practices:
    - Native plantation
    - Organic landscaping
- Engagement in citizen science and conservation programs

Climate Resilience and Net Zero Achievement (2041–2050)

The final phase focuses on achieving Net Zero and strengthening long-term resilience:

❖ *Climate Adaptation and Resilience*

- Climate risk and vulnerability assessments
- Implementation of nature-based solutions:
    - Urban forestry
    - Green infrastructure
- Capacity building for climate resilience among stakeholders

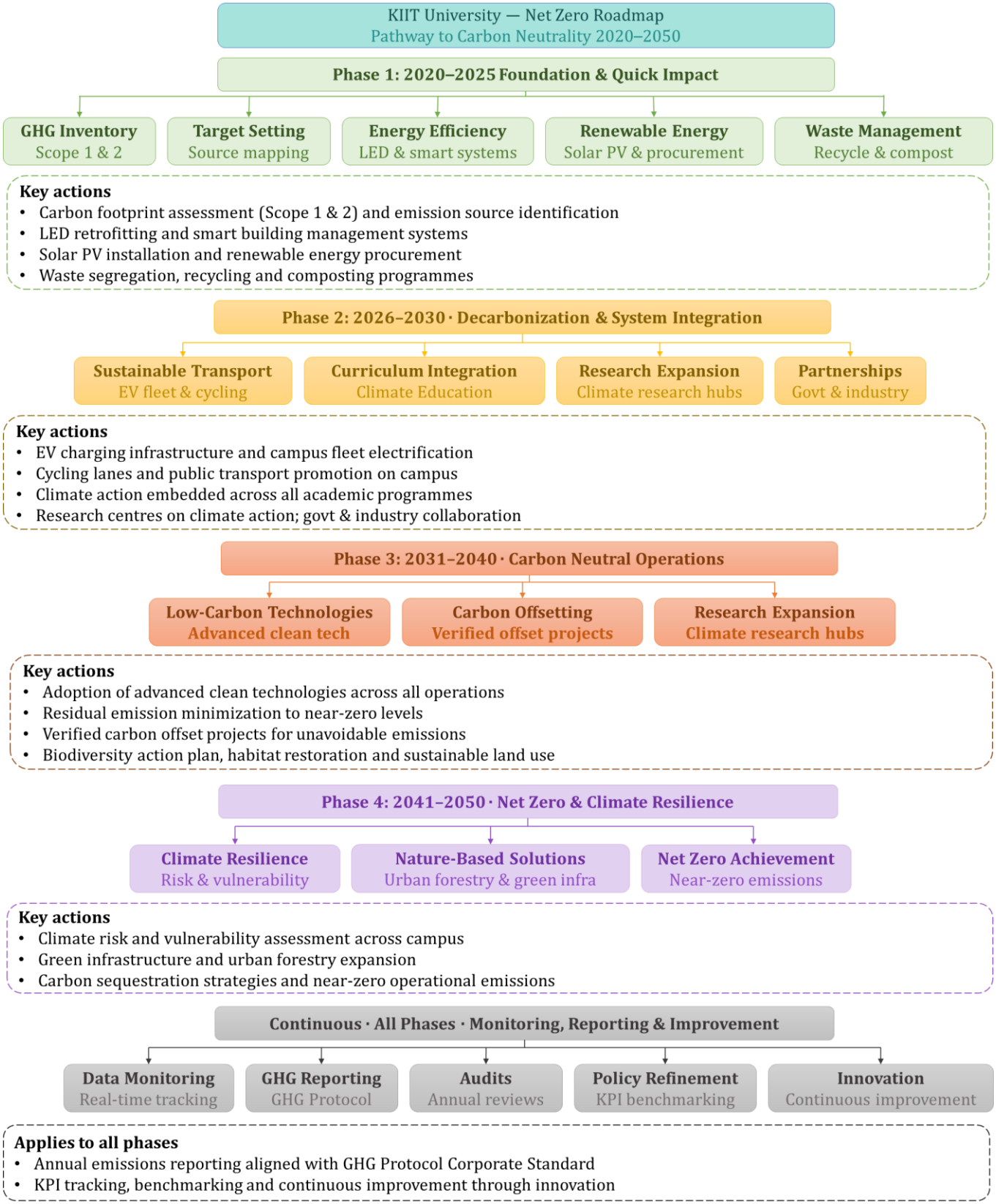
❖ *Final Emissions Neutralization*

- Achieving near-zero operational emissions
- Strategic use of carbon sequestration and offset mechanisms

❖ *Continuous Monitoring, Evaluation, and Improvement*

Across all phases, KIIT ensures a strong monitoring and feedback system:

- Annual assessment of emissions and sustainability performance
- Evaluation of effectiveness of implemented strategies
- Continuous policy refinement based on data and global best practices
- Adoption of emerging technologies and innovations



KIIT's structured and phased roadmap to Net Zero demonstrates a comprehensive, realistic, and ambitious approach to climate action. By integrating energy transition, sustainable infrastructure,

ecological conservation, and stakeholder engagement, the University is well-positioned to achieve carbon neutrality by 2050.