K.R. MANGALAM UNIVERSITY
THE COMPLETE WORLD OF EDUCATION

Ref. No.: KRMU/Admin./O.O./2023-24/ 3216 **Date: 08.09.2023**

OFFICE ORDER

Subject: Revised K.R. Mangalam University Sustainable Environment and Green Campus Policy (Edition- 2023).

With reference to office order KRMU/Admin./O.O./2018-19/ 1322 dated 31.10.2018 wherein K.R. Mangalam University Sustainable Environment and Green Campus Policy was notified for implementation from the academic session 2018-19.

In continuation to K.R. Mangalam University's commitment to environmental responsibility, energy efficiency, and sustainable campus development in compliance with United Nations Sustainable Development Goals and national environmental standards, the University has revised the K.R. Mangalam University Sustainable Environment and Green Campus Policy." as approved in the Approved in the 55th Board of Management Meeting, Agenda Item No. 55.26, held on 31.08.2023 is notified for information and implementation with immediate effect.

This issues with the approval of Competent Authority.

Registrar
K.R. Mangalam University

Copy to:

- The Hon'ble Vice Chancellor- for kind information
- Dean Academics
- Dean -Research
- Dean Students Welfare
- All deans and School Coordinators- for implementation.
- Chairperson, Environment and Sustainability Committee (ESC).
- IQAC Cell – for record and monitoring
- Administrative Office
- Accounts
- Admission Office
- Examination Office
- Notice Board
- University Website
- Office Copy

K.R. MANGALAM UNIVERSITY
THE COMPLETE WORLD OF EDUCATION

Revised Sustainable Environment and Green Campus Policy

K.R. Mangalam University

(Revised Edition: Academic Year 2023–24)

Approved in the 55th Board of Management Meeting, Agenda Item No55.26, held on 31.08.2023

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1. Title

K.R. Mangalam University Sustainable Environment and Green Campus Policy (2023–24 Edition)

This revised policy supersedes the 2018 edition and sets forth comprehensive principles, operational procedures, and measurable targets to guide the University's transition toward a low-carbon, resource-efficient, and climate-resilient campus.

2. Preamble

Since the notification of its first Sustainable Environment and Green Campus Policy (2018), K.R. Mangalam University (KRMU) has advanced several initiatives—solar-PV installation (310 kWp), food-waste-to-biogas conversion, e-office digitization, and tree-plantation drives—that collectively strengthened its sustainability profile.

Recognizing the accelerating climate crisis and India's national pledge for Net Zero 2070, the University envisions an expanded sustainability agenda leading to a "Carbon-Neutral Campus 2035."

This 2023–24 revision re-aligns the University's sustainability strategy with emerging global and national frameworks—particularly the United Nations Sustainable Development Goals (SDGs 6, 7, 11, 12, 13 and 15)—and integrates environmental literacy and social responsibility into all aspects of institutional life.

The policy underscores that sustainable development is not a parallel activity but an organizing principle across KRMU's governance, academics, and community outreach.

3. Purpose

The purpose of this policy is to:

- Reaffirm KRMU's institutional commitment to environmental stewardship, responsible resource management, and social equity.
- Provide a measurable framework for transitioning toward a net-zero-carbon, zero-waste, and climate-resilient campus.
- Institutionalize sustainability as a cross-functional responsibility spanning governance, academics, research, and operations.

- Encourage collaboration with government, industry, and civil-society partners to scale sustainable innovations beyond the campus.

4. Scope

This policy is applicable to all entities under K.R. Mangalam University, including:

1. Physical and Infrastructure Domains – Academic buildings, hostels, laboratories, libraries, sports complexes, utilities, and landscaping.
2. Academic and Research Domains – Teaching, curriculum design, student projects, laboratories, and sponsored research activities.
3. Administrative and Operational Units – Procurement, transport, catering, information technology, maintenance, and construction divisions.
4. Stakeholders – All students, faculty members, administrative staff, contractual workers, vendors, partners, and campus visitors.

All persons or agencies engaged in University activities are expected to comply with the sustainability principles outlined herein.

5. Policy Objectives

The Revised Sustainable Environment and Green Campus Policy (2023–24) seeks to achieve the following institutional objectives:

1. Carbon Neutrality by 2035 – Establish baseline carbon inventory and progressively reduce GHG emissions through renewable energy, efficiency measures, and verified offsets.
2. Zero-Waste Campus – Attain 100 % waste segregation at source and ≥ 80 % landfill diversion by 2028 via composting, recycling, and circular-economy initiatives.
3. Renewable Energy Transition – Generate ≥ 40 % of total electricity demand from on-campus or contracted renewable sources by 2028.
4. Water Security and Sustainable Food Systems – Conserve, harvest, and recycle water resources; promote sustainable dining and biogas utilization.
5. Education and Research Integration – Embed environmental education, sustainability research, and community outreach into all curricula and extension programmes.

6. Digital and Paperless Governance – Reduce paper usage by 60 % through e-office and ERP platforms by 2026.
7. Inclusive Participation – Ensure representation of students and staff in all sustainability committees to foster a campus-wide culture of environmental responsibility.

6. Governance Framework

6.1 Environment and Sustainability Committee (ESC)

The ESC is constituted as the apex implementing and monitoring authority for this Policy.

- Chairperson: Registrar
- Members: Deans of Schools, Head (Maintenance & Facilities), Finance Officer, Dean (Student Welfare), Coordinator (IQAC), Faculty Nominees, and Student Representatives.
- **Functions:**
    - Approve annual sustainability action plans and budgets.
    - Oversee policy execution and compliance.
    - Review quarterly progress and recommend improvements.
    - Submit the Annual Sustainability Report to the Vice-Chancellor and Board of Management.

6.2 Sub-Committees / Thematic Cells

To operationalize the ESC's agenda, the following cells shall function with defined mandates:

Sub-Committee / Cell	Primary Mandate
Energy & Carbon Cell	Renewable-energy deployment, energy audits, carbon-inventory management.
Waste & Water Cell	Solid/liquid waste segregation, STP reuse, rainwater harvesting.
Biodiversity & Landscape Cell	Green-cover expansion, native species plantation, biodiversity documentation.

Sub-Committee / Cell	Primary Mandate
Green Procurement Cell	Environmentally responsible sourcing and vendor compliance.
Awareness & SDG Reporting Cell	Training, outreach, data collection for SDG/ESG disclosures.
Safety & Resilience Cell	Laboratory safety, disaster preparedness, and HSE compliance.

Each cell shall meet monthly and submit progress updates to the ESC Secretary.

6.3 Review and Audit Mechanism

- Quarterly Review: ESC convenes to evaluate KPI performance and resource utilization.
- Annual Report: Consolidated progress presented to the Board of Management and made public on the University website.
- Third-Party Green Audit: Independent audit every two years covering energy, waste, water, and compliance metrics; corrective actions implemented within 90 days.

7. Policy Coverage

7.1 Water Conservation and Reuse Policy

1. Purpose and Rationale

The purpose of this policy is to secure long-term water sustainability across the campus by optimizing water consumption, promoting the reuse of treated water, and replenishing groundwater reserves. The rapid expansion of academic and residential facilities has significantly increased dependence on both municipal and groundwater sources. Therefore, the institution aims to ensure water resilience and self-sufficiency through systematic conservation, treatment, and rainwater harvesting interventions.

This policy also reflects the university's commitment to environmental stewardship and sustainable campus operations in line with Sustainable Development Goals (SDG 6: Clean Water and Sanitation) and National Education Policy (NEP 2020, §22.2).

2. Scope and Applicability

This policy applies to all water-related activities within the university premises, including:

- Academic and Administrative Buildings: Classrooms, laboratories, libraries, offices, and auditoria.
- Residential and Hostel Areas: Student hostels, staff quarters, and guest houses.
- Service and Utility Zones: Canteens, maintenance facilities, and mechanical workshops.
- Landscaping and Horticulture: Gardens, lawns, sports grounds, and green belts.
- Construction and Vendor Operations: All contractors and service providers involved in water-intensive processes such as cleaning, catering, and civil works.

3. Detailed Provisions and Implementation Mechanism

a. Rainwater Harvesting (RWH)

- RWH systems to be installed on every building rooftop, with a minimum of one recharge pit per 500 m^2 of roof area.
- Each pit shall include sediment filtration chambers, silt traps, and recharge wells connected to groundwater aquifers.
- Annual desilting and maintenance shall be scheduled before monsoon.
- Digital logbooks to record rainfall data, harvested volume, and recharge rate.

b. Sewage Treatment and Reuse

- Maintain Sewage Treatment Plant (STP) capacity of $\geq$ 300 KLD to treat domestic wastewater.
- Implement tertiary treatment using filtration and disinfection units.
- Reuse of treated water for:
    - Toilet flushing in academic and hostel buildings,
    - Irrigation of landscaped areas, and
    - HVAC cooling towers, thereby reducing freshwater dependency.
- STP operations to comply with CPCB and SPCB discharge standards.

c. Smart Water Monitoring

- Deploy IoT-enabled water meters across all major consumption points for real-time usage tracking.
- Install leak-detection sensors in hostels, laboratories, and washrooms with auto-alert features to minimize losses.
- Integrate data into a central digital dashboard under the Estate Department for analysis and reporting.

d. Water-Efficient Fixtures and Technologies

- Install dual-flush cisterns, aerators, and sensor-based taps across campus facilities.
- Retrofit all new constructions and renovations with low-flow plumbing systems and smart irrigation controls.
- Enforce procurement standards for BEE-rated and water-efficient equipment.

e. Capacity Building and Awareness

- Launch campus-wide campaigns such as “Every Drop Counts” and “Save Water – Sustain Future”.
- Conduct biannual training sessions for housekeeping, maintenance, and gardening staff.
- Involve student eco-clubs in monitoring, poster drives, and innovation projects related to water conservation.

4. Monitoring Indicators & Key Performance Indicators (KPIs)

Indicator	Target / Benchmark	Frequency
Percentage of treated water reused	≥ 80%	Quarterly
Rainwater harvested (m^3/year)	100% of roof area potential	Annually
Per capita water consumption (L/day)	≤ 120 L/day	Quarterly
Number of awareness/engagement programmes	≥ 4 per year	Annual

5. Responsible Units and Timeline

- Estate & Maintenance Department: Infrastructure implementation, operation of STP, and rainwater systems.
- Environmental Sustainability Cell (ESC) – Water Cell: Technical monitoring, IoT data management, and performance audits.
- Internal Quality Assurance Cell (IQAC): Annual documentation, policy compliance reporting, and sustainability benchmarking.

Timelines:

- FY 2024–25: Completion of full digital water audit.
- By 2026: 100% IoT coverage for all major water points and leak detection systems.

6. Targets (2024–2028)

- Reduce freshwater consumption by 40%.
- Reuse ≥ 85% of treated wastewater.
- Achieve 100% rainwater recharge for rooftop catchment areas.
- Establish a self-sustaining water cycle within the campus ecosystem.

7. SDG and NEP Alignment

- SDG 6: Ensure availability and sustainable management of water and sanitation for all.
- SDG 13: Take urgent action to combat climate change and its impacts.
- NEP 2020, Section 22.2: Mandates environmental awareness, conservation practices, and sustainable infrastructure in higher education institutions.

8. Expected Outcomes and Impact

- Environmental Impact: Replenishment of groundwater table and reduced extraction from municipal sources.
- Operational Impact: Reduction in water utility costs and enhanced system efficiency.
- Institutional Recognition: Attainment of “Water-Positive Campus” status and replication model for other institutions.

- Social and Educational Impact: Enhanced awareness among students and staff about responsible water use and environmental ethics.

7.2 Energy Efficiency and Renewable Energy Policy

1. Purpose and Rationale

The policy aims to minimize dependency on fossil fuels, enhance energy efficiency, and promote renewable energy generation within the university campus. It seeks to build a carbon-neutral and energy-resilient campus by integrating sustainable technologies, improving operational efficiency, and encouraging behavioural change toward responsible energy use.
This policy aligns with SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action) and operationalizes the vision of NEP 2020 (§18: Sustainability in Infrastructure).

2. Scope and Applicability

This policy applies to all units and stakeholders associated with energy generation, distribution, and consumption within the campus, including:

- Academic and Administrative Buildings: Lighting, HVAC systems, ICT equipment, and laboratories.
- Residential and Hostel Facilities: Lighting, air conditioning, and appliance use.
- Outdoor Infrastructure: Street lighting, parking lots, and landscape lighting.
- Transport and Utilities: Electric vehicles, diesel generators, lifts, and water pumping stations.
- Construction and Renovation Projects: Adoption of energy-efficient materials, systems, and practices.

3. Detailed Provisions and Implementation Mechanism

a. Renewable Energy Expansion

- Expand the existing 310 kWp solar PV system to ≥ 500 kWp by 2028 through rooftop and carport installations.
- Integrate net-metering arrangements with DHVBNL for export of surplus energy.

- Explore solar thermal systems for water heating in hostels and kitchens.
- Conduct annual energy yield verification and panel cleaning audits.

b. Energy-Efficient Infrastructure and Retrofits

- Achieve 100% LED conversion across academic, residential, and outdoor areas.
- Install motion sensors and occupancy detectors in corridors, washrooms, and classrooms.
- Introduce energy-efficient ceiling fans, HVAC systems, and laboratory equipment.
- Ensure all new buildings are designed as IGBC/GRIHA-compliant green structures.

c. Smart Energy Monitoring

- Implement IoT-enabled smart meters to record energy use at building and department levels.
- Create a digital energy dashboard for real-time monitoring and performance analytics.
- Conduct quarterly internal audits and annual third-party energy audits to identify saving potential.

d. HVAC and Building Management Optimization

- Use Variable Frequency Drives (VFDs) and Building Management Systems (BMS) for optimized temperature control.
- Schedule preventive maintenance to minimize energy wastage and equipment inefficiency.
- Introduce natural ventilation and daylight optimization measures in future designs.

e. Green Behaviour and Awareness

- Launch campaigns like “Switch Off – Save Power” and “Green Campus, Clean Energy”.
- Conduct orientation sessions and Green Ambassador programmes for students and staff.
- Display energy-saving signage in common areas to reinforce behavioural compliance.

4. Monitoring Indicators & Key Performance Indicators (KPIs)

Indicator	Target / Benchmark	Frequency
Share of electricity from renewable sources	≥ 40%	Annually
Per capita energy consumption (kWh/person)	≤ 25% reduction from 2024 baseline	Quarterly
CO_2 emissions avoided (tCO_2e/year)	≥ 350 tCO_2e	Annual
Number of energy audits completed	≥ 1 per year	Annual

5. Responsible Units and Timeline

- Estate Department: Implementation of retrofits, solar expansion, and smart metering systems.
- ESC Energy Cell: Performance monitoring, data analytics, and sustainability reporting.
- External Energy Audit Agency: Independent annual energy audit and verification.
- IQAC: Annual compilation, benchmarking, and inclusion in sustainability reports.

Timelines:

- By FY 2025: Smart metering in all major facilities; 25% solar capacity addition.
- By FY 2028: 500 kWp solar generation, full LED retrofit, and digital energy dashboard operational.
- By 2030: Achieve carbon-neutral electricity status.

6. Targets (2024–2028)

- ≥ 40% electricity from renewable sources.
- 25% improvement in energy efficiency from 2024 baseline.
- Zero fossil-fuel dependency for lighting and HVAC by 2030.
- Complete integration of digital energy monitoring systems across all units.

7. SDG and NEP Alignment

- SDG 7: Affordable and Clean Energy.

- SDG 13: Climate Action.
- NEP 2020 §18: Promotes green and energy-efficient campus infrastructure.

8. Expected Outcomes and Impact

- Operational Impact: Reduction in electricity costs and improved reliability.
- Environmental Impact: Avoidance of ~350 tCO_2e/year and decreased air pollution.
- Reputational Impact: Recognition as a Model Solar Campus in Haryana.
- Educational Impact: Enhanced student engagement in renewable energy innovation projects.

7.3 Solid and Liquid Waste Management Policy

1. Purpose and Rationale

This policy aims to promote scientific, systematic, and sustainable management of solid and liquid waste generated on campus. It reinforces the university's commitment to environmental protection by minimizing waste generation, promoting segregation, and encouraging recycling and resource recovery. The ultimate goal is to achieve "Zero Waste Campus" status through active participation, efficient systems, and circular economy principles. Aligned with SDG 12 (Responsible Consumption and Production) and SDG 6 (Clean Water and Sanitation), and in consonance with NEP 2020 §14, this policy supports environmentally responsible institutional operations.

2. Scope and Applicability

The policy is applicable to all stakeholders and facilities within the campus, including:

- Academic and Administrative Buildings
- Hostels, Canteens, and Food Courts
- Laboratories and Workshops
- Residential Quarters and Guest Houses
- Construction and Maintenance Sites

- External Vendors and Contractors involved in waste-handling activities.

3. Detailed Provisions and Implementation Mechanism

a. Waste Segregation at Source

- Implement a 4-bin colour-coded system:
    - Green: Biodegradable waste
    - Blue: Recyclable waste (paper, plastic, metal, glass)
    - Red: Hazardous and biomedical waste
    - Black: Inert/reject waste
- Conduct awareness and signage campaigns to ensure 100% compliance.
- Mandatory segregation for all vendors, food outlets, and residential units.

b. Composting and Organic Waste Management

- Operate an on-site Composting Unit (≥ 1 tonne/day capacity) for kitchen and garden waste.
- Use resultant compost in campus horticulture, reducing chemical fertilizer use.
- Maintain digital records of waste volume processed and compost generated.

c. Sewage and Liquid Waste Management

- Operate and maintain Sewage Treatment Plants (STP) to treat and reuse wastewater.
- Utilize treated water for gardening, flushing, and cooling purposes.
- Regular testing of treated water for BOD, COD, and TSS compliance.

d. Vendor and Recycling Management

- Engage only authorized recyclers for plastic, e-waste, metal scrap, and paper disposal.
- Maintain annual vendor certifications and traceability documentation.
- Periodically review contracts to ensure compliance with CPCB and SPCB regulations.

e. Training and Awareness

- Conduct quarterly training sessions for housekeeping staff, students, and vendors.
- Organize Zero Waste Week and Clean Campus Drives involving student clubs.
- Display waste segregation guidelines and signage across all collection points.

4. Monitoring Indicators & Key Performance Indicators (KPIs)

Indicator	Target / Benchmark	Frequency
Waste segregated at source	≥ 95%	Monthly
Organic waste composted (t/day)	≥ 1	Quarterly
Waste diverted from landfill (%)	≥ 80%	Annual
Treated wastewater reused (litres)	≥ 90% of total treated	Monthly
Training/awareness sessions conducted	≥ 4 per year	Annual

5. Responsible Units and Timeline

- ESC Waste Management Cell: Coordination, training, and performance tracking.
- Estate & Maintenance Department: Composting, waste collection, and disposal.
- IQAC: Annual sustainability reporting and compliance verification.

Timelines:

- By 2025: Full implementation of 4-bin system and composting operations.
- By 2026: 100% segregation and 80% landfill diversion.
- By 2028: Attain Zero Waste Campus status.

6. Targets (2024–2028)

- 100% waste segregation at source by 2026.
- 80% reduction in landfill-bound waste.
- 100% reuse of treated liquid waste.

- Zero single-use plastic campus by 2027.

7. SDG and NEP Alignment

- SDG 12: Responsible Consumption and Production.
- SDG 6: Clean Water and Sanitation.
- NEP 2020 §14: Encourages environmentally responsible operations in Higher Education Institutions.

8. Expected Outcomes and Impact

- Environmental: Reduced landfill dependency, improved groundwater quality, and enhanced recycling ecosystem.
- Operational: Cost savings in waste transport and fertilizer procurement.
- Institutional: Attainment of Zero-Waste Campus recognition by 2028.
- Educational: Creation of a living laboratory for sustainability learning and student participation in circular economy practices.

7.4 Green Infrastructure and Biodiversity Conservation Policy

1. Purpose and Rationale

This policy aims to preserve and enhance biodiversity, integrate green infrastructure into campus development, and create a climate-resilient ecosystem. The university recognizes that ecological preservation is a key component of sustainable development and directly impacts air quality, microclimate, and overall well-being.

The policy fosters a nature-positive campus that acts as both a living laboratory and a sanctuary for native flora and fauna. It aligns with SDG 15 (Life on Land) and NEP 2020 §22.2, which emphasize environmental responsibility and conservation of biodiversity.

2. Scope and Applicability

The policy applies to all:

- Campus landscaping, plantation, and green cover development projects.
- Construction, renovation, and expansion works affecting natural landscapes.

- Academic, residential, and recreational zones, including gardens and open spaces.
- External contractors and vendors engaged in horticulture or tree maintenance activities.

3. Detailed Provisions and Implementation Mechanism

a. Green Campus Development

- Maintain minimum 35% green cover of total campus area through plantations, lawns, and green corridors.
- Incorporate green roofing, vertical gardens, and shade-providing native trees in all new constructions.
- Implement permeable pavements and bio-swales to facilitate groundwater recharge and reduce surface runoff.

b. Biodiversity Conservation

- Prepare a Campus Biodiversity Register (CBR) documenting native flora and fauna species.
- Develop Thematic Gardens (medicinal plants, butterflies, aromatic herbs) for academic and ecological value.
- Establish bird nesting zones and pollinator gardens to sustain biodiversity.
- Prohibit removal or pruning of trees without written approval from the Estate Department and ESC Biodiversity Cell.

c. Green Landscaping and Maintenance

- Use treated wastewater from the STP for irrigation purposes.
- Replace high-water-demand plants with xerophytic and indigenous species.
- Ban chemical fertilizers and pesticides; use compost and organic pest control.
- Adopt smart irrigation systems (drip/sprinkler) to minimize wastage.

d. Awareness and Participation

- Organize annual Van Mahotsav and Campus Plantation Drives involving students and staff.

- Conduct biodiversity walks, poster campaigns, and eco-club initiatives.
- Display QR-coded botanical labels on trees for educational engagement.

4. Monitoring Indicators & KPIs

Indicator	Target / Benchmark	Frequency
Percentage of campus green cover	≥ 35%	Annual
Number of native species planted	≥ 500/year	Annual
Volume of treated water used for irrigation	≥ 90%	Quarterly
Number of biodiversity events organized	≥ 4/year	Annual

5. Responsible Units and Timeline

- Estate Department: Landscaping, maintenance, and irrigation systems.
- ESC Biodiversity Cell: Documentation, biodiversity audits, and awareness activities.
- IQAC: Annual sustainability report integration.

Timelines:

- By 2025: Establish Campus Biodiversity Register.
- By 2026: 100% organic landscaping practices.
- By 2028: Recognition as a Biodiversity-Friendly Campus.

6. Targets (2024–2028)

- Increase tree population by 25%.
- Achieve 100% organic landscape management.
- Create five biodiversity zones on campus.
- Maintain zero chemical pesticide use.

7. SDG and NEP Alignment

- SDG 15: Life on Land.

- SDG 13: Climate Action.
- NEP 2020 §22.2: Ecological stewardship and environmental ethics.

8. Expected Outcomes and Impact

- Improved air quality and microclimate regulation.
- Enhanced biodiversity and ecosystem resilience.
- Stronger environmental learning environment for students.
- Contribution to carbon sequestration and campus livability.

7.5 Sustainable Transportation and Mobility Policy

1. Purpose and Rationale

This policy seeks to promote low-carbon, safe, and inclusive mobility across the campus by encouraging non-motorized and shared transport options, reducing vehicular emissions, and improving accessibility.

Transportation significantly contributes to campus carbon footprint; therefore, this policy supports a transition to eco-friendly commuting solutions consistent with SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action).

2. Scope and Applicability

Applicable to:

- All faculty, staff, students, visitors, and service vehicles entering campus.
- University fleet, including buses, cars, and maintenance vehicles.
- Vendors and contractors responsible for logistics or transport services.

3. Detailed Provisions and Implementation Mechanism

a. Promotion of Non-Motorized Transport (NMT)

- Develop dedicated pedestrian and cycling tracks across campus.
- Provide bicycle-sharing facilities for students and staff.
- Install bicycle parking bays near all major academic and hostel blocks.

b. Green Fleet Management

- Gradually replace university-owned fossil-fuel vehicles with electric or hybrid models.
- Install EV charging stations at strategic points.
- Introduce carpooling and shuttle services for inter-block movement and nearby commute.

c. Traffic Management and Emission Control

- Designate vehicle-free zones in core academic areas.
- Restrict vehicle idling and introduce green pass system for entry control.
- Implement monthly air quality checks near major parking areas.

d. Awareness and Incentives

- Launch campaigns like "Pedal for Planet" and "Walk to Work Wednesdays."
- Provide incentives such as priority parking for carpoolers and cyclists.
- Engage student clubs in mobility audits and emission-reduction challenges.

4. Monitoring Indicators & KPIs

Indicator	Target / Benchmark	Frequency
Percentage of non-motorized trips	≥ 30%	Annual
Electric/hybrid vehicles in fleet	≥ 25%	Annual
Number of EV charging points	≥ 10 by 2026	Annual
Vehicle-free zones operational	≥ 3	Annual

5. Responsible Units and Timeline

- Transport and Estate Department: Fleet conversion, parking, and EV charging setup.
- ESC Mobility Cell: Data tracking and behavioural campaigns.
- IQAC: Inclusion in annual carbon audit.

Timelines:

- By 2025: Launch bicycle-sharing and carpool programmes.
- By 2026: Install EV charging infrastructure.
- By 2028: Transition 25% fleet to electric vehicles.

6. Targets (2024–2028)

- Reduce transport-related emissions by 35%.
- Achieve 100% pedestrian-friendly core campus.
- Convert 25% of fleet to electric by 2028.

7. SDG and NEP Alignment

- SDG 11: Sustainable Cities and Communities.
- SDG 13: Climate Action.
- NEP 2020 §18: Green infrastructure and sustainability in university design.

8. Expected Outcomes and Impact

- Lower greenhouse gas emissions and noise pollution.
- Improved student health and campus livability.
- Recognition as a Sustainable Mobility Campus.
- Model for urban campuses transitioning to green mobility.

7.6 Sustainable Procurement and Resource Use Policy

1. Purpose and Rationale

This policy establishes a framework for environmentally and socially responsible procurement that minimizes lifecycle impacts of goods and services used by the university. It ensures that sustainability is embedded in every purchase — from stationery and furniture to construction materials and IT equipment — while promoting resource efficiency and circular economy practices.

Aligned with SDG 12 (Responsible Consumption and Production) and NEP 2020 §18 & §22, the policy promotes conscious consumption and institutional accountability.

2. Scope and Applicability

Applicable to:

- All departments, offices, and committees engaged in procurement.
- Vendors, contractors, and suppliers providing goods or services.
- Construction, maintenance, and renovation projects involving material procurement.
- Events, conferences, and canteens involving resource use and waste generation.

3. Detailed Provisions and Implementation Mechanism

a. Green Procurement Standards

- Prioritize eco-labeled, recyclable, and energy-efficient products (e.g., BEE, EPEAT, Energy Star).
- Ban single-use plastics, polystyrene, and non-recyclable packaging in all purchases.
- Prefer locally sourced materials to reduce transport emissions.
- Require vendors to submit Environmental Compliance Declarations.

b. Paper and Stationery Management

- Mandate double-sided printing and digital submission of documents.
- Promote use of recycled paper and refillable writing instruments.
- Target 80% digitalization of administrative paperwork by 2026.

c. Sustainable Construction Materials

- Ensure new buildings use low-VOC paints, fly ash bricks, and certified timber.
- Enforce Life Cycle Cost Analysis (LCCA) in project approval processes.
- Mandate reuse of demolition waste in landscaping or road base.

d. Vendor and Contract Management

- Include sustainability clauses in tender documents and MoUs.
- Evaluate vendors based on environmental performance, certifications, and waste responsibility.
- Maintain an approved list of green vendors updated annually.

e. Awareness and Capacity Building

- Train procurement officers and committee members on green purchasing principles.
- Host workshops on sustainable supply chains and eco-labelling practices.
- Engage student innovators in developing circular economy prototypes.

4. Monitoring Indicators & KPIs

Indicator	Target / Benchmark	Frequency
% of tenders with sustainability clauses	100%	Annual
% of recycled/eco-certified materials purchased	≥ 60%	Annual
% reduction in single-use plastic procurement	100% elimination by 2026	Annual
% administrative digitalization	≥ 80% by 2026	Annual

5. Responsible Units and Timeline

- Purchase and Finance Department: Integration of green criteria in procurement.
- ESC Resource Management Cell: Data compilation, reporting, and capacity building.
- IQAC: Audit compliance and performance benchmarking.

Timelines:

- By 2025: Integration of sustainability clauses in all procurement contracts.
- By 2026: Complete ban on single-use plastics.
- By 2028: Full adoption of digital procurement systems.

6. Targets (2024–2028)

- 100% sustainable procurement compliance by 2028.
- 80% paperless administration by 2026.
- 100% elimination of single-use plastic campus-wide.
- Green vendor certification for all key suppliers.

7. SDG and NEP Alignment

- SDG 12: Responsible Consumption and Production.
- SDG 13: Climate Action.
- NEP 2020 §18 & §22: Encourages sustainable resource use and responsible institutional operations.

8. Expected Outcomes and Impact

- Reduced material waste and procurement costs.
- Environmentally conscious supplier ecosystem.
- Institutional recognition for Sustainable Procurement Excellence.
- Enhanced awareness among staff and students regarding sustainable consumption.

7.7 Food Waste Utilization and Circular Economy Policy

1. Purpose and Rationale

To systematically manage post-consumption food waste by promoting reuse and resource recovery mechanisms that convert waste into valuable by-products such as biogas and organic fertilizer. This aligns with the University's goal of a circular campus economy that minimizes waste and maximizes resource efficiency.

2. Scope and Applicability

Covers all mess kitchens, hostels, cafeterias, canteens, and food service areas generating biodegradable waste. It applies to catering contractors, student committees, and the estate maintenance teams involved in waste collection and processing.

3. Detailed Provisions and Implementation Mechanism

- Segregation at Source: Dedicated bins for biodegradable waste in dining areas, labelled and color-coded as per campus waste management protocol.
- Biogas Plant Operation: Installation of a plant processing ~1 ton of food waste per week. Produced biogas is used for cooking in hostels, reducing LPG consumption.
- Organic Fertilizer Utilization: Slurry output from the biogas digester to be treated and reused as nutrient-rich compost for lawns and gardens.
- Menu Rationalization: Mess Committees to design menus based on consumption data to prevent overproduction and wastage.
- Awareness and Engagement: "Waste Less Food" poster campaigns and competitions to promote mindful consumption.

4. Monitoring Indicators & KPIs

- Quantity (kg) of food waste processed per month
- Volume (m^3) of biogas generated and utilized
- Quantity (kg) of compost produced
- Number of awareness drives conducted annually

5. Responsible Units and Timeline

Hostel Administration and ESC Waste Management Cell to oversee operations; monthly data reporting to IQAC Sustainability Cell.

6. Targets (2024–2028)

- Reduce food waste generation by 60%
- Achieve 100% utilization of biodegradable waste through biogas and compost conversion by 2028

7. SDG and NEP Alignment

SDG 2 (Zero Hunger), SDG 12 (Responsible Consumption), SDG 7 (Clean Energy); NEP 2020 § 18 (Sustainable Campus Practices).

8. Expected Outcomes and Impact

Creation of a self-sustaining circular waste economy, reduction of methane emissions, and production of organic manure for on-campus horticulture, making the University a replicable model for sustainable food waste management.

7.8 Paperless Culture and Digital Transformation Policy

1. Purpose and Rationale

To promote digital-first operations by minimizing paper usage, optimizing administrative efficiency, and reducing the campus carbon footprint. The initiative supports sustainability while enhancing transparency and workflow speed.

2. Scope and Applicability

Applies to all academic, administrative, financial, HR, and examination processes, including internal communications, student records, and faculty workflows.

3. Detailed Provisions and Implementation Mechanism

- E-File & ERP System: All official communications routed through Google Workspace and the University ERP.
- E-Assessment & Online Evaluation: Transition to secure digital exam systems and electronic evaluation.
- QR-Based Monitoring: Attendance, library use, and feedback digitized through QR codes.
- Sustainable Printing Protocols: Duplex printing as default; recycled or FSC-certified paper used only for essential documentation.
- Capacity Building: Periodic workshops on digital record management and cybersecurity awareness.

4. Monitoring Indicators & KPIs

- Reduction in paper consumption (pages saved/semester)
- Number of processes digitized
- Cost savings in paper procurement and printing

5. Responsible Units and Timeline

IT Department, Registrar Office, and IQAC Digitalization Cell; full transition to paperless operations by FY 2026–27.

6. Targets (2024–2028)

- 60% reduction in paper use within 3 years
- 100% ERP adoption and workflow automation by 2028

7. SDG and NEP Alignment

SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption); NEP § 23 (Digital Enablement in Education).

8. Expected Outcomes and Impact

Enhanced operational efficiency, reduction in resource wastage, improved record accessibility, and establishment of the University as a digitally mature and environmentally responsible institution.

7.9 Green Procurement Policy

1. Purpose and Rationale

To embed environmental sustainability into all procurement activities, reducing lifecycle impacts of purchased goods and supporting eco-conscious suppliers.

2. Scope and Applicability

Applies to all purchase, finance, and store departments, and to all vendors and contractors providing products or services to the University.

3. Detailed Provisions and Implementation Mechanism

- Eco-Labelling in Tenders: Incorporate mandatory green product certifications (e.g., FSC, Energy Star, EPEAT).
- Local & Recycled Product Preference: Prioritize locally sourced and recycled materials to reduce transport emissions.
- Ban on Single-Use Plastics: No procurement of plastic bottles, packaging, or non-recyclable disposables.

- Supplier Environmental Declaration: Vendors to provide sustainability compliance documentation.
- Annual Supplier Evaluation: Assess supplier performance against environmental criteria.

4. Monitoring Indicators & KPIs

- % of procurements meeting green standards
- Number of compliant vendors
- Annual procurement-related carbon footprint (tCO_2e)

5. Responsible Units and Timeline

Finance & Purchase Department with ESC Procurement Cell; annual green procurement audits starting FY 2024–25.

6. Targets (2024–2028)

≥ 70% of procurement processes to comply with green standards by 2028.

7. SDG and NEP Alignment

SDG 12 (Responsible Consumption), SDG 13 (Climate Action); NEP § 22 (Sustainable Practices in HEIs).

8. Expected Outcomes and Impact

Reduction in environmental impact of purchases, increased supplier accountability, and alignment of University operations with national ESG procurement frameworks.

7.10 Biodiversity and Land-Use Management Policy

1. Purpose and Rationale

To preserve, restore, and enhance campus biodiversity through systematic land-use planning and eco-restoration practices that support local ecosystems and environmental education.

2. Scope and Applicability

Covers all open spaces, green belts, gardens, water bodies, and undeveloped land parcels across the University campus.

3. Detailed Provisions and Implementation Mechanism

- Campus Biodiversity Register: Comprehensive database of existing flora and fauna, updated annually.
- Native and Adaptive Plantation: At least 70% of planted species to be indigenous, drought-resistant, and pollinator-friendly.
- Green Cover Expansion: Annual plantation drives adding >500 saplings each year.
- Eco-Zones Creation: Establish butterfly and herbal gardens, bird perches, and biodiversity trails.
- Organic Landscaping: Use only compost and manure from campus food-waste recycling; avoid synthetic pesticides.
- Integration with Curriculum: Facilitate student-led research and biodiversity mapping projects.

4. Monitoring Indicators & KPIs

- Total green cover area (m^2)
- Number of species documented
- % of native species in overall plantation

5. Responsible Units and Timeline

ESC Biodiversity Cell + School of Agriculture and Environmental Studies; biodiversity audit each June.

6. Targets (2024–2028)

Increase total green cover by 20%; publish the KRMU Biodiversity Atlas by 2026.

7. SDG and NEP Alignment

SDG 15 (Life on Land), SDG 11 (Sustainable Communities); NEP § 23 (Environmental Consciousness and Education).

8. Expected Outcomes and Impact

Improved micro-climate, enhanced ecological resilience, educational opportunities for students, and development of a model eco-campus in Haryana.

7.11 Climate Action and Carbon Neutrality Plan

1. Purpose and Rationale

To set a definitive pathway for achieving carbon neutrality by 2035 through systematic reduction of greenhouse gas (GHG) emissions, renewable integration, and offset strategies, aligning the University with India's national climate commitments.

2. Scope and Applicability

Applies to all University activities including energy use, construction, transport, waste management, procurement, and outreach, with active participation encouraged from all stakeholders—students, faculty, and staff.

3. Detailed Provisions and Implementation Mechanism

- Annual Carbon Inventory: Comprehensive assessment of Scope 1, 2, and 3 emissions as per GHG Protocol.
- Emission Reduction Strategies: Incorporate renewable energy, efficiency retrofits, sustainable mobility (EV shuttles, bicycles), and carbon-conscious operations.
- Carbon Offset Mechanisms: Campus-level afforestation (≥ 2 acres/year) and purchase of verified carbon credits where required.
- Climate Literacy and Capacity Building: Conduct climate resilience workshops, faculty seminars, and student-led green innovation projects.
- Net-Zero Campus Framework: Phased implementation plan approved by Environmental Sustainability Committee (ESC).

4. Monitoring Indicators & KPIs

- Annual total tCO_2e emitted vs. offset
- % reduction in emission intensity (kWh/m^2 or tCO_2e/student)

- Number of carbon offset projects executed

5. Responsible Units and Timeline

ESC Carbon Cell and IQAC Sustainability Office; annual GHG audit and report submission to Vice Chancellor and Board of Management by December each year.

6. Targets (2024–2028)

25% reduction in GHG emissions by 2028; 100% renewable electricity by 2030; net-zero operations by 2035.

7. SDG and NEP Alignment

SDG 13 (Climate Action), SDG 7 (Clean Energy); NEP § 22.2 (Environmental Stewardship).

8. Expected Outcomes and Impact

Significant emission reduction, enhanced campus resilience to climate impacts, elevated institutional standing as a carbon-neutral university, and development of climate-conscious graduates equipped to drive sustainability transitions.

7.12 Sustainable Construction and Green Building Design Policy

1. Purpose and Rationale

To ensure that all new construction, retrofitting, and renovation projects undertaken by the University embody green-building principles that reduce environmental impact, optimize energy and resource consumption, and enhance user well-being. The policy promotes climate-responsive design and supports India's transition to sustainable infrastructure.

2. Scope and Applicability

Applies to all buildings, extensions, and major refurbishments initiated by KRMU, including academic, residential, administrative, and recreational facilities, as well as projects executed through public–private partnerships or external contractors.

3. Detailed Provisions and Implementation Mechanism

- **Design Standards:** All new constructions to comply with GRIHA 3-Star rating and the Energy Conservation Building Code (ECBC 2017).

- Eco-Friendly Materials: Use of fly-ash or hollow blocks, low-VOC paints, recycled aggregates, and regionally sourced materials to minimize embodied carbon.
- Passive Design: Incorporate natural daylighting, cross-ventilation, shaded façades, and cool roofs to reduce cooling loads.
- Integrated Systems: Mandatory installation of rooftop solar PV, rainwater harvesting systems, and dual plumbing for greywater reuse.
- Construction Waste Management: Segregation of demolition debris and reuse/recycling of at least 90% of non-hazardous material.
- Lifecycle Assessment: Include environmental performance evaluation at the design stage for every major project.

4. Monitoring Indicators & KPIs

- Energy intensity (kWh/m²) of new buildings
- % of construction waste recycled or reused
- Number of buildings GRIHA/ECBC certified or pre-certified

5. Responsible Units and Timeline

Engineering & Projects Department with ESC Infrastructure Cell; third-party Green Building Audit after each major project completion.

6. Targets (2024–2028)

- 100% new buildings to achieve minimum GRIHA 3-Star certification
- 20% reduction in embodied energy compared to baseline projects

7. SDG and NEP Alignment

SDG 9 (Industry, Innovation & Infrastructure), SDG 11 (Sustainable Cities and Communities); NEP 2020 § 23 (Sustainable Campus Infrastructure).

8. Expected Outcomes and Impact

Sustainable, energy-efficient, and user-friendly campus buildings with reduced lifecycle costs and improved indoor environmental quality.

7.13 Pollution Prevention (Air, Noise, Water) Policy

1. Purpose and Rationale

To prevent and mitigate pollution of air, water, and noise arising from University operations, safeguarding health, productivity, and environmental quality in and around the campus.

2. Scope and Applicability

Applies to all campus zones, laboratories, workshops, hostels, construction sites, and transportation facilities, as well as external vendors operating within campus premises.

3. Detailed Provisions and Implementation Mechanism

- Air Quality Management: Install continuous ambient air monitoring systems for $PM_{2.5}$ and PM_{10}; maintain green buffer zones along campus boundaries.
- Noise Control: Limit outdoor event noise to ≤ 75 dB; designate “no honking” and “silence” zones around academic buildings.
- Water Quality Compliance: Conduct monthly testing of STP outlet water for BOD, COD, TSS, and oil & grease levels, ensuring discharge meets CPCB standards.
- Vehicle Emission Control: Implement annual PUC verification, idling bans, and preference for electric or shared campus transport.
- Awareness and Clean Air Campaigns: Organize “Clean Air Week” every December involving students and staff.

4. Monitoring Indicators & KPIs

- $PM_{2.5}$ and PM_{10} concentration levels ($\mu g/m^3$)
- Average noise levels in core academic zones (dB)
- STP effluent BOD/COD compliance rate (%)

5. Responsible Units and Timeline

ESC Pollution Control Cell with Estate & Maintenance Department; quarterly data reporting to Haryana State Pollution Control Board (HSPCB).

6. Targets (2024–2028)

- Maintain ambient air and water quality within prescribed CPCB norms
- Achieve zero non-compliance in water discharge and noise control audits

7. SDG and NEP Alignment

SDG 3 (Good Health & Well-Being), SDG 11 (Sustainable Communities); NEP § 22 (Environmental Ethics and Compliance in Campuses).

8. Expected Outcomes and Impact

Cleaner air and water, reduced exposure to pollutants, and compliance with all state and national environmental regulations.

7.14 Sustainable Food Policy and Catering Services

1. Purpose and Rationale

To promote sustainable food systems within the University by sourcing responsibly, minimizing waste, improving nutrition, and supporting local economies, thereby aligning campus catering with environmental and social responsibility goals.

2. Scope and Applicability

Applies to all University-managed and outsourced food facilities—cafeterias, canteens, hostels, and catering for institutional events.

3. Detailed Provisions and Implementation Mechanism

- Local Procurement: Source at least 60% of food ingredients within a 150 km radius to support local farmers and reduce transport emissions.
- Sustainable Serving Practices: Prohibit use of single-use plastics, Styrofoam, and non-recyclable cutlery. Encourage steel or compostable alternatives.
- Healthy and Low-Impact Diets: Promote vegetarian options, “Meat-Free Mondays,” and balanced meal plans with seasonal produce.
- Staff Capacity Building: All kitchen staff to undergo FSSAI-certified hygiene and sustainability training.

- Food Waste Integration: Ensure linkage with the biogas plant for conversion of kitchen waste to energy and manure.

4. Monitoring Indicators & KPIs

- % of local or sustainable sourcing
- kg of plastic waste generated per month
- Number of staff trained under FSSAI and sustainability modules

5. Responsible Units and Timeline

Catering Committee and ESC Food Sustainability Cell; conduct bi-annual food sustainability audits and hygiene inspections.

6. Targets (2024–2028)

- Eliminate single-use plastics in all food service areas by 2026
- Achieve 80% local sourcing by 2028

7. SDG and NEP Alignment

SDG 2 (Zero Hunger), SDG 12 (Responsible Consumption and Production); NEP § 18 (Sustainable Campus Lifestyle).

8. Expected Outcomes and Impact

Healthier, low-carbon food systems, reduced waste generation, enhanced local partnerships, and student sensitization towards sustainable diets.

7.15 Green Events and Sustainable Procurement Guidelines

1. Purpose and Rationale

To institutionalize sustainability principles in the organization and execution of all University events, ensuring that campus celebrations, conferences, and activities minimize waste and resource use while promoting environmental consciousness.

2. Scope and Applicability

Applicable to all academic, cultural, sports, and administrative events organized by University departments, schools, and student clubs.

3. Detailed Provisions and Implementation Mechanism

- Zero-Plastic Events: Prohibit disposable plastic bottles, flex banners, and single-use cutlery; encourage reusable or compostable materials.
- Digital Operations: Replace printed invitations, brochures, and certificates with digital versions.
- Energy Efficiency: Use LED lighting and energy-efficient audio-visual equipment.
- Vendor Responsibility: Enforce compliance with Green Procurement Policy for all event vendors.
- Green Compliance Reporting: Post-event sustainability report mandatory for every major event, including waste management data.

4. Monitoring Indicators & KPIs

- Number of events certified as “Green Events” annually
- % of events free from single-use plastics
- Total waste generated vs. recycled during events

5. Responsible Units and Timeline

Dean, Student Welfare and ESC Event Sustainability Cell; annual Green Event Certification Awards for best-performing organizers.

6. Targets (2024–2028)

- Achieve 100% plastic-free events by 2026
- Institutionalize Green Event Certification by 2025

7. SDG and NEP Alignment

SDG 12 (Responsible Consumption), SDG 13 (Climate Action); NEP § 23 (Sustainability and Social Responsibility).

8. Expected Outcomes and Impact

Environmentally responsible campus events, enhanced sustainability culture, and reduction in event-related waste and emissions.

7.16 Community Engagement and Rural Outreach Policy

1. Purpose and Rationale

To extend the University's sustainability ethos beyond campus boundaries by engaging local rural communities in environmental stewardship, livelihood enhancement, and education initiatives. This policy aligns with Unnat Bharat Abhiyan (UBA) and NEP 2020's focus on community-connected experiential learning.

2. Scope and Applicability

Covers all NSS/NCC units, Schools of Education, Social Sciences, and Agricultural Sciences, along with outreach programmes coordinated by the Dean (Student Welfare).

3. Detailed Provisions and Implementation Mechanism

- Village Adoption: Adopt at least two villages under UBA for holistic and sustainable development projects.
- Community Water and Waste Initiatives: Establish local STPs, waste segregation systems, and composting pits in collaboration with Gram Panchayats.
- Skill and Entrepreneurship Development: Conduct green skill workshops (solar maintenance, vermicomposting, organic farming).
- Awareness and Literacy Campaigns: Organize climate literacy drives, hygiene awareness, and digital education programmes.
- Collaborative Partnerships: Partner with NGOs, government departments, and Haryana Environment and Renewable Energy Agency (HAREDA) for implementation.

4. Monitoring Indicators & KPIs

- Number of villages adopted / households impacted
- Number of participants trained in green livelihoods

- Community projects completed annually

5. Responsible Units and Timeline

Dean (Student Welfare) and ESC Outreach Cell; annual reporting under UBA framework to the Board of Management and Ministry of Education portal.

6. Targets (2024–2028)

- Adopt minimum five villages by 2028
- Train at least 2,000 community members in sustainability practices

7. SDG and NEP Alignment

SDG 1 (No Poverty), SDG 11 (Sustainable Communities), SDG 13 (Climate Action); NEP § 12 (Community Engagement and Experiential Learning).

8. Expected Outcomes and Impact

Empowered rural communities, improved livelihood resilience, enhanced student experiential learning, and demonstrable regional sustainability impact consistent with the University's social mission.

7.17 Sustainability Education and Research Integration Policy

1. Purpose and Rationale

To institutionalize environmental sustainability and Sustainable Development Goals (SDGs) across teaching, learning, and research practices—enabling students and faculty to contribute solutions to real-world sustainability challenges. The policy aims to create a learning ecosystem that promotes critical thinking, interdisciplinary research, and innovation for sustainable development.

2. Scope and Applicability

Applies to all Schools, Departments, Centres, and Research Units offering undergraduate, postgraduate, and doctoral programmes at the University.

3. Detailed Provisions and Implementation Mechanism

- Curriculum Integration: Incorporate sustainability modules and SDG-aligned content in all core and elective courses by 2026.
- Green Credit Framework: Introduce credit-bearing environmental/community-based projects under "Earn Green Credits" initiative.
- Faculty Development Programmes: Annual FDPs on sustainability pedagogy, SDG-linked assessment, and project-based learning.
- Research Incentives: Dedicated research grants and recognition for SDG-aligned interdisciplinary projects (₹10 lakh annual fund).
- Knowledge Dissemination: Annual "Sustainability Research Conclave" showcasing student and faculty innovations.
- International Collaborations: Partnership with UNAI/UNESCO chairs for SDG-focused academic exchange.

4. Monitoring Indicators & KPIs

- % of programmes integrating SDG-based curriculum.
- No. of research publications and funded projects under SDG themes.
- Total Green Credits earned per academic year.
- Number of interdisciplinary sustainability collaborations.

5. Responsible Units and Timeline

IQAC + Dean (Academics) + Office of Research & Development; Annual review each March.

6. Targets (2024–2028)

- 100% of academic programmes to include sustainability component by 2026.
- At least 50 SDG-themed projects funded and completed by 2028.

7. SDG and NEP Alignment

SDG 4 (Quality Education), SDG 13 (Climate Action); NEP 2020 §17 (Holistic and Experiential Learning).

8. Expected Outcomes and Impact

Enhanced academic relevance to global challenges, improved ranking performance (QS/NAAC/ARIIA), and a strong culture of sustainability-driven innovation and research.

7.18 Environmental Awareness and Capacity Building Policy

1. Purpose and Rationale

To nurture an environmentally conscious university community by creating awareness, empowering individuals through training, and fostering behavioural transformation toward sustainable living practices.

2. Scope and Applicability

Applicable to all students, faculty, administrative staff, contract workers, and service partners across the University.

3. Detailed Provisions and Implementation Mechanism

- Annual Green Calendar: Thematic activities on Earth Day, World Water Day, Energy Conservation Week, and Environment Day.
- Eco-Club Empowerment: Certification of student clubs contributing to campus greening and sustainability projects.
- Mandatory Orientation: Sustainability sensitization during student and employee induction.
- Green Ambassadors Network: Each department to nominate two trained student ambassadors for sustainability outreach.
- Communication Channels: Launch of monthly Green KRMU Bulletin (digital and physical) and use of social media campaigns.
- Capacity Building: Specialized workshops for maintenance staff and hostel wardens on waste, water, and energy management.

4. Monitoring Indicators & KPIs

- Number and diversity of events conducted per year.

- Attendance and participant feedback scores.
- Digital engagement metrics (views, shares, reach).

5. Responsible Units and Timeline

Dean (Student Welfare) + ESC Awareness Cell; quarterly reporting to IQAC.

6. Targets (2024–2028)

- Minimum 30 awareness/training events annually.
- 100% student and staff participation in at least one environmental programme per year.

7. SDG and NEP Alignment

SDG 4 (Quality Education), SDG 12 (Responsible Consumption); NEP §22 (Environmental Responsibility and Ethics).

8. Expected Outcomes and Impact

Heightened environmental consciousness, collective behavioural change, and an engaged university community championing sustainability both on and off campus.

7.19 Health, Safety, and Environment (HSE) Compliance Policy

1. Purpose and Rationale

To ensure a safe, healthy, and environmentally compliant campus that safeguards human life, property, and ecological well-being while adhering to statutory and institutional standards.

2. Scope and Applicability

Applicable to all academic departments, laboratories, offices, hostels, cafeterias, and outdoor spaces on campus.

3. Detailed Provisions and Implementation Mechanism

- Comprehensive HSE Manual: Each department to maintain a manual specifying safety protocols, PPE use, and emergency response steps.
- Fire and Electrical Safety: Fire extinguishers and alarms tested quarterly; electrical systems audited annually.

- Chemical and Biological Safety: Fume hoods, eyewash stations, and chemical waste disposal systems mandated in all labs.
- Medical Preparedness: On-campus health centre with trained paramedics, ambulance service, and emergency helpline.
- Incident Reporting Portal: Centralized online system for hazard reporting, inspection tracking, and preventive maintenance.
- Training and Mock Drills: Biannual fire and safety drills with evacuation protocols.

4. Monitoring Indicators & KPIs

- No. of HSE audits completed annually.
- Incidents reported and resolved within response time standards.
- % compliance rate across departments.

5. Responsible Units and Timeline

Registrar + HSE Officer + ESC Safety Cell; half-yearly compliance review by IQAC.

6. Targets (2024–2028)

Zero major incidents or fatalities; 100% departmental HSE compliance by 2026.

7. SDG and NEP Alignment

SDG 3 (Good Health & Well-being), SDG 8 (Decent Work and Growth); NEP §24 (Safe and Inclusive Learning Environments).

8. Expected Outcomes and Impact

A culture of safety and preparedness, reduction in accident risk, improved confidence in campus infrastructure, and enhanced compliance with statutory regulations.

7.20 Emergency Response and Risk Resilience Policy

1. Purpose and Rationale

To establish a comprehensive disaster management and risk resilience framework, ensuring the University can effectively respond to and recover from emergencies while maintaining operational continuity.

2. Scope and Applicability

Covers all University premises, including academic and residential buildings, outdoor areas, and off-campus facilities.

3. Detailed Provisions and Implementation Mechanism

- Disaster Management & Business Continuity Plan: Developed as per ISO 22301 and integrated into campus emergency SOPs.
- Emergency Response Team (ERT): Trained multi-disciplinary staff group responsible for immediate response actions.
- Infrastructure Readiness: Fire alarms, public address systems, signage, and emergency exits audited bi-annually.
- Early-Warning and Alert Systems: IoT-based rainfall, flood, and temperature sensors linked to control room notifications.
- Evacuation and Simulation Drills: Conducted twice annually involving all stakeholders.
- Inter-Agency Coordination: Collaboration with local fire, police, medical, and disaster authorities for joint preparedness exercises.
- Post-Incident Review: Structured debriefing and policy revision after every major drill or real incident.

4. Monitoring Indicators & KPIs

- Average response time during mock drills.
- Number of trained ERT members.
- Compliance level with ISO 22301 audit and recommendations.

5. Responsible Units and Timeline

Registrar + HSE Officer + ESC Resilience Cell; annual emergency preparedness report to Board of Management.

6. Targets (2024–2028)

Conduct at least 2 full-scale campus drills per year; achieve ISO 22301 certification by 2028.

7. SDG and NEP Alignment

SDG 11 (Sustainable Cities & Communities), SDG 13 (Climate Action); NEP §22 (Disaster Preparedness in Higher Education Institutions).

8. Expected Outcomes and Impact

A resilient, disaster-ready campus with minimal operational disruption, enhanced stakeholder confidence, and a model institutional framework for emergency management.

8. Implementation Framework

8.1 Purpose

The implementation framework defines the operational structure, accountability system, and resources necessary for effective enforcement of the Sustainable Environment and Green Campus Policy. It ensures that strategic goals are translated into measurable actions through coordinated planning across all University departments and units.

8.2 Institutional Mechanism

1. **Environment and Sustainability Committee (ESC):**
    - Apex body responsible for policy execution and progress oversight.
    - Chaired by the Registrar, with members from all Schools, IQAC, Dean (Students' Welfare), and Administrative Heads.
    - Meets once a month to review implementation progress and recommend actions.
2. **Sub-Committees / Cells under ESC: Each thematic sub-policy (7.1 – 7.20) shall be managed by a dedicated cell:**
    - Water & Waste Cell
    - Energy & Carbon Cell

- Biodiversity & Landscape Cell
- Green Procurement & Events Cell
- Awareness & Education Cell
- Safety & Resilience Cell

3. **Department-wise Sustainability Champions:**
    - Every School and Administrative Division shall nominate one faculty/staff member as Sustainability Champion to coordinate local initiatives, report progress data, and mentor students.
    - Champions will serve a one-year renewable term and participate in quarterly training by the ESC.

8.3 Action Plans and KPI Matrix

Each sub-policy (7.1 – 7.20) will have a corresponding Action Plan with:

- Objectives: What outcome is expected.
- Activities: Specific actions (e.g., installation of sensors, training sessions).
- Indicators: Quantitative Key Performance Indicators (KPIs) for measurement.
- Responsible Office: Department or Cell accountable.
- Timeline: Annual milestones for 2024–2028.
- Budget Source: University fund, CSR contribution, or grant.

The KPI Matrix will be integrated into the University Sustainability Dashboard, maintained by IQAC and updated every quarter.

8.4 Financial and Resource Support

1. **Annual Budget Allocation:**
    - A minimum of 1 % of the total University operational budget shall be earmarked annually for sustainability and green campus activities.
    - Departments may submit project proposals to ESC for funding approval.

2. **CSR and Industry Collaboration:**
    - Partnerships with corporate entities under CSR Schedule VII (Environment & Education) for co-funding of renewable-energy, waste-management, and community projects.
    - Joint initiatives with Swarna Jayanti Haryana Institute for Fiscal Management (SJHIFM), HSPCB, and industry skill councils for resource support and technical training.
3. **Capacity Building:**
    - Annual Sustainability Leadership Workshop for administrators and champions.
    - Student internships and credit courses linked to ongoing projects.

8.5 Implementation Timeline (2024–2028)

Phase	Duration	Major Deliverables
Phase I	2024–25	Establish ESC Cells, adopt KPI matrix, launch sustainability dashboard
Phase II	2025–26	Implement full IoT-based monitoring, initiate carbon inventory
Phase III	2026–27	Mid-term Green Audit, curriculum integration completed
Phase IV	2027–28	Achieve 80 % of set targets; publish “Green KRMU 2028 Report”

9. Monitoring, Evaluation & Reporting

9.1 Purpose

To ensure accountability, transparency, and continuous improvement through regular performance measurement, internal evaluation, and external verification.

9.2 Monitoring System

1. Monthly Monitoring by ESC:Each sub-cell submits progress data on implementation indicators (energy, waste, water, etc.) every month. Corrective measures are discussed in monthly ESC meetings.
2. Quarterly Green Performance Scorecard:

- A quantitative dashboard summarizing KPIs for each department.
- Color-coded performance ratings (Green = Achieved, Yellow = Partially Achieved, Red = Pending).
- Circulated to Vice-Chancellor and Deans each quarter.

3. Departmental Self-Assessment:
   - Sustainability Champions submit brief self-audit checklists with supporting evidence and photographs.
   - Best-performing units recognized during annual Environment Day celebrations.

9.3 Evaluation Mechanisms

1. Annual Sustainability Report:

   Compiled by the ESC Secretary and IQAC, consolidating all performance data, research, and outreach activities.

   The report shall be tabled before the Board of Management and uploaded on the University website by every August.

2. Third-Party Green Audit & Carbon Assessment (Biennial):
   - Conducted by accredited external auditors recognized by HSPCB/UGC.
   - Covers compliance with environmental laws, energy audits, and carbon-emission verification.
   - Audit findings form the basis of policy updates and resource allocation.

3. Feedback & Corrective Action:
   - Post-audit action plan prepared by ESC and monitored for closure within 90 days.
   - Lessons integrated into next-year Action Plan.

9.4 Documentation and Data Management

ll data, reports, and audit certificates shall be stored in the University Sustainability Portal (Google Workspace Drive with restricted access)

Each department maintains digital records for minimum five years for accreditation and ranking audits**.**

9.5 Performance Review

An Annual Performance Review Meeting chaired by the Vice-Chancellor will evaluate progress against the five-year roadmap and direct strategic interventions.

10. Alignment with National and Global Frameworks

10.1 National Alignment

1. National Education Policy (NEP 2020):
    - § 22 & 23 – Promotes environmental awareness, sustainable campus operations, and experiential learning through community engagement.
    - § 24 – Encourages institutions to model environmentally responsible behavior.
2. National Action Plan on Climate Change (NAPCC): KRMU aligns with national missions such as the National Solar Mission, Water Mission, and Energy Efficiency Mission through renewable energy, rainwater harvesting, and carbon-neutral practices.
3. AICTE Green Campus Manual (2023):

    Provides benchmarks for green building design, waste management, and environmental education, adopted by KRMU for engineering and allied programmes.
4. UGC ESG Guidelines (2023):

    Ensures Environmental, Social, and Governance (ESG) compliance and reporting for higher-education institutions.

10.2 Global Alignment

1. United Nations Sustainable Development Goals (2030 Agenda): KRMU contributes directly to:
    - SDG 4 – Quality Education
    - SDG 6 – Clean Water and Sanitation

- SDG 7 – Affordable and Clean Energy
- SDG 11 – Sustainable Cities and Communities
- SDG 12 – Responsible Consumption and Production
- SDG 13 – Climate Action
- SDG 15 – Life on Land

2. Paris Agreement and Net-Zero Commitment 2030+:

   The University's Carbon Neutrality Plan and Renewable Energy Strategy operationalize India's pledge toward net-zero emissions.

3. ISO 14001 (Environmental Management System):

   KRMU progressively aligns internal procedures and audits with ISO 14001 standards to institutionalize sustainable operations.

10.3 Strategic Positioning

This alignment ensures that KRMU:

- Contributes to national climate targets and Sustainable India 2030 Vision.
- Demonstrates measurable compliance during NAAC, NIRF, and THE Impact Rankings.
- Qualifies for national and international funding opportunities under sustainability frameworks (e.g., AICTE MODROB, DST Climate Fellowships, CSR Partnerships).

11. Expected Outcomes (2024 – 2028)

11.1 Purpose

To establish a measurable outcomes framework that translates policy goals into verifiable results, ensuring that all sustainability interventions yield tangible environmental, economic, and academic benefits.

11.2 Key Outcome Domains

Domain	Expected Outcome by 2028	Impact Area
Energy and Carbon Management	40 % of total electricity from solar PV; 25 % reduction in per-capita energy use; initiation of net-zero carbon campus programme.	Reduced carbon footprint and operational cost.
Water Conservation and Reuse	≥ 85 % treated water reuse; 100 % rainwater harvesting coverage.	Ground-water recharge and water-positive campus status.
Waste Management and Circular Economy	80 % landfill diversion; full food-waste-to-biogas utilization.	Zero-waste campus model.
Biodiversity and Green Cover	20 % increase in tree cover; publication of Campus Biodiversity Atlas by 2026.	Enhanced ecosystem resilience and air quality.
Digital Transformation and Paperless Operations	60 % reduction in paper use; complete ERP adoption by 2028.	Resource efficiency and process transparency.
Community Engagement and Outreach	Five villages adopted under UBA; 2,000 individuals trained in sustainability skills.	Social impact and regional development.
Education and Research Integration	100 % programmes with SDG components; ≥ 50 SDG-linked research projects.	Sustainability embedded in academics and innovation.
Health, Safety and Resilience	Zero major incidents; two emergency drills per year.	Safe and prepared learning environment.

11.3 Cross-Cutting Benefits

- Environmental: Improved air and water quality, biodiversity protection, and climate resilience.

- Economic: Reduced utility bills (energy and water savings), CSR funding for projects.
- Academic: Enhanced student experiential learning, new research grants.
- Social: Inclusive participation of students, staff, and local communities in green initiatives.

11.4 Outcome Dissemination

- Annual Green Campus Report: Published on University website each August.
- Public Exhibitions: Infographics displayed at entrances and academic blocks.
- Benchmarking: Submission of KRMU's data to national and international ranking frameworks (e.g., THE Impact, UI GreenMetric).

12. Compliance and Review

12.1 Purpose

To institutionalize a system of periodic review, ensuring legal compliance, continuous improvement, and long-term policy relevance.

12.2 Regulatory Compliance

1. Legal Obligations: Compliance with Environment (Protection) Act 1986, Water Act 1974, Air Act 1981, E-Waste and Hazardous Waste Rules, and all directions of the Haryana State Pollution Control Board (HSPCB).
2. Audit Records: All certificates and audit reports retained for five years for inspection by regulatory agencies.
3. Incident Reporting: Any violation or environmental incident must be reported to the Registrar and ESC within 24 hours; corrective action initiated immediately.

12.3 Review Process

1. Biennial Internal Review: Conducted by ESC with IQAC participation to evaluate policy effectiveness and goal achievement.
2. Third-Party Evaluation: Independent Green Campus Audit and Carbon Assessment every two years; recommendations implemented within 90 days.

3. Five-Year Revision Cycle: Comprehensive revision of the entire policy undertaken every five years or earlier if mandated by UGC/AICTE guidelines or statutory changes.

12.4 Accountability Mechanisms

- Registrar & ESC: Jointly responsible for ensuring adherence to the implementation timeline and reporting non-compliance.
- Deans and Heads of Departments: Ensure unit-level execution and documentation of evidence.
- Finance Office: Tracks budget utilization against approved green initiatives.
- IQAC: Integrates environmental performance metrics into annual quality assurance reports.

12.5 Transparency and Disclosure

- Policy documents, audit summaries, and sustainability reports shall be made public through the University website.
- Summary results will also be shared with students and staff through official communication channels each semester.

12.6 Continuous Improvement

KRMU commits to adopting emerging technologies and best practices in energy management, digital monitoring, and environmental education. Feedback from stakeholders will be systematically collected and integrated into future revisions to maintain leadership in sustainable campus development.