

CCE SDG POLICY

Leave No One Behind

1. PREAMBLE

This is a comprehensive SDG Policy. Integrating global sustainability matrices into an engineering curriculum and campus ecosystem as vital. This document provides a transparent, quantifiable, and auditable framework that tries to successfully bridge institutional operations with the United Nations 2030 Agenda. It establishes clear baselines, accountability, and verification pathways necessary for robust institutional auditing. It recognizes this responsibility, that **Christ College of Engineering (Autonomous)** is committed to, to integrate sustainable practices into its academic, administrative, research, and campus operations. The Institution seeks to create a clean, healthy, resource-efficient, and environmentally responsible campus by promoting the principles of waste minimization, resource conservation, pollution prevention, biodiversity conservation, and responsible consumption.

2. VISION

To be a premier, globally recognized engineering institution that pioneers **sustainable technological innovations** and cultivates socially responsible engineers dedicated to achieving a equitable, carbon-neutral future..

3. MISSION

Mission

- **Curricular Integration:** To embed SDG principles into every engineering discipline, ensuring students develop sustainable design-thinking capabilities.
- **Operational Excellence:** To transform the campus into a living laboratory for green technologies, zero-waste management, and resource conservation.
- **Impactful Partnerships:** To collaborate with local governance, industry partners, and global networks to co-create engineering solutions for localized community challenges.

4. SCOPE

This policy applies to all stakeholders and operations within the engineering college campus. The **three core dimensions** of its scope include:

- **Academic & Research:** All undergraduate, postgraduate, and doctoral curricula, capstone projects, faculty publications, and institutional research grants.
- **Campus Operations:** Infrastructure management, energy consumption, waste systems, water usage, procurement, and daily administrative workflows.
- **Community Engagement:** Institutional extension activities, corporate social responsibility (CSR) partnerships, and local community outreach programs.

5. Institutional Objectives & Measurable Outcomes

The college focuses on **six primary SDGs** where engineering directly drives systemic change.

Focus SDG	Institutional Strategic Objective	Measurable Outcome (Target: 3 Years)
SDG 1: No Poverty	Projects and products to increase production, reduce time & effort	Every department produce 5 such projects or products
SDG 2: Zero Hunger	Projects and products to increase yield, reduce waste, value addition, harvest, store etc. of food resources, reduce time & effort	Every department produce 5 such projects or products
SDG 3: Good health & wellbeing	Supplement a course on health and wellness with Projects and products including diagnostics, after care, mental health etc.	Every department produce 5 such projects or products
SDG 4: Quality Education	Integrate sustainability modules across all engineering branches. Educate the underserved with IT related empowerment.	100% of core engineering courses map at least one course outcome (CO) to an SDG. Every department undertake one such programme.
SDG 5: Gender Equality	Conduct sessions and awareness campaigns on rights and responsibilities and protection measures.	Every department undertake one such programme.
SDG 6: Clean Water	Implement smart campus water-grids and total recycling systems. Supplement with projects and research. Supplement with projects and research	Achieve zero water wastage and recycle 100% of campus greywater for landscaping/flushing. Interdisciplinary work to produce 5 such projects or products
SDG 7: Affordable & Clean Energy	Transition campus grid reliance to renewable energy infrastructure. Supplement with projects and research	Source 60% of total campus energy from on-site solar and smart-grid installations. Interdisciplinary work to produce 5 such projects or products

SDG 8: Decent Work and Economic Growth	Need assessment, Planning and budgeting a proposal and seeking funding for execution.	By 3 years try to execute a college level project for livelihood creation for an underserved community.
SDG 9: Industry, Innovation, & Infra	Fund and incubate green-tech startups and patent sustainable designs.	File a minimum of 15 patents related to green engineering or frugal innovation annually.
SDG 10: Reduced Inequalities	Seek out vulnerable communities and educate to empower with a career for their family and tribe.	Educate at least 5 students from remote locations and help them to get jobs.
SDG 11: Sustainable Cities and Communities	Set up Student centres to assess needs of communities and make projects. Projects and products to reduce pollution of water, air, soil and due to E-waste.	Every department produce 5 such projects or products
SDG 12: Responsible Consumption	Establish a circular economy model for campus waste management.	0% single-use plastic campus; divert 90% of organic and electronic waste from landfills.
SDG 13: Climate Action	Measure, audit, and systematically reduce the institutional carbon footprint.	Achieve a 35% net reduction in Scope 1 and Scope 2 carbon emissions.
SDG 17: Partnerships for the Goals	Canvass and sign MoUs with similar oriented institutions and industries.	Every department sign one or two MoUs.

6. Implementation Guidelines

To ensure compliance and audit-readiness, departments must follow these operational directives:

Academic & Research Guidelines

- **Syllabus Mapping:** Course coordinators must explicitly tag relevant lecture modules with United Nations SDG icons in the course delivery plan.
- **Capstones:** A mandatory **Sustainability Impact Assessment (SIA)** section must be included in all final-year engineering project reports.

- **Incentivized Research:** The institution will allocate **25%** of internal seed funding exclusively to interdisciplinary research targeting SDG solutions.

Campus Infrastructure & Operations Guidelines

- **Green Procurement:** The purchasing department must prioritize vendors with ISO 14001 certification or energy-star rated equipment.
- **Smart Monitoring:** Deploy IoT-based sensors across campus blocks to log real-time power, water consumption, and ambient air quality data.
- **E-Waste Protocols:** All obsolete lab computers and electronic scrap must pass through authorized, certified e-waste recyclers with chain-of-custody documentation.

7. 5. Evaluation and Audit Rubric

This rubric serves as the primary instrument for annual internal and external audits to evaluate departmental performance.

PERFORMANCE LEVEL CRITERIA

1 - UNSATISFACTORY	2 - PROGRESSING	3 - EXEMPLARY
• No documented data. • Under 20% compliance. • No corrective action plan.	• Ad-hoc initiatives tracked. • 21% to 74% targets met. • Basic action plans active.	• Continuous automated logs. • 75%+ targets achieved. • Closed-loop feedback system.

Auditable Criteria Matrix

- **Criterion 1: Curriculum Mapping**
 - *1 - Unsatisfactory:* SDGs are not mentioned in course files or lesson plans.
 - *2 - Progressing:* SDGs are mapped on paper, but lack assessment questions in exams.
 - *3 - Exemplary:* Exam papers contain specific questions evaluating sustainable engineering designs.
- **Criterion 2: Resource Conservation (Energy/Water)**

- *1 - Unsatisfactory:* Utility bills are paid without tracking consumption trends or leaks.
 - *2 - Progressing:* Monthly manual logs exist; some conservation targets are met.
 - *3 - Exemplary:* Live IoT dashboards showcase data-driven reductions and automated leak isolation.
- **Criterion 3: Student Ecosystem & Innovation**
 - *1 - Unsatisfactory:* No student clubs or projects focus on environmental or social impact.
 - *2 - Progressing:* Active green clubs exist; students work on localized sustainability ideas.
 - *3 - Exemplary:* Student startups are incubated with commercialized products tackling specific SDGs.

8. **6Governance & Review Mechanism**

- **SDG Steering Committee:** Co-chaired by the Principal and an external Sustainability Expert. The committee will meet **biannually** to review data dashboards.
- **Annual Sustainability Audit:** An external third-party audit will be conducted every October to validate resource savings, carbon metrics, and academic integration compliance.