



SDG 13: Climate Action

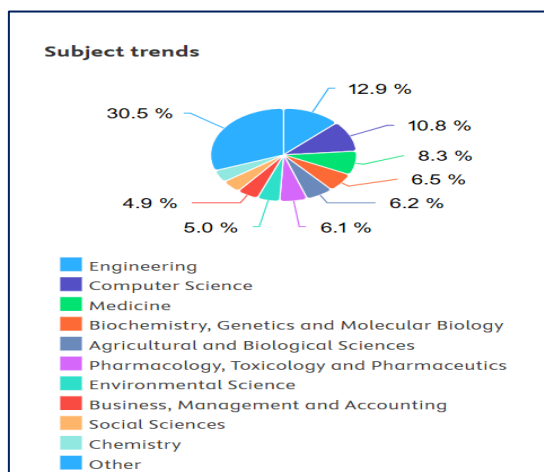
GD Goenka University – Sustainability Initiatives and Achievements

1. Introduction

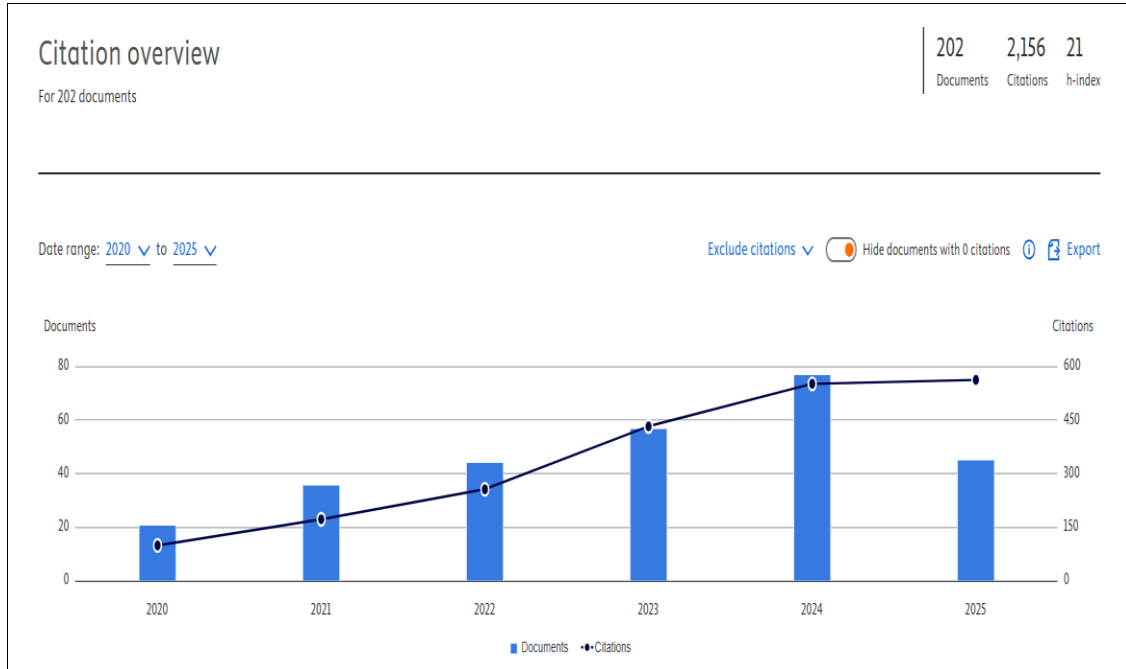
In alignment with SDG 13 – Climate Action, the urgent imperative is to take decisive action to combat climate change and its wide-ranging impacts. Climate change has led to record warm decades, increased forest fires, severe droughts and floods, shifting weather patterns, rising sea levels, and other environmental disasters that affect agriculture, food security, economies and human lives globally. SDGs

Educational institutions must therefore play a leading role by raising awareness, integrating sustainability education, conducting action oriented research and adopting policy innovations. In this context, GD Goenka University has embedded climate action and sustainability into its academic and operational framework. The University offers dedicated programmes such as a Certificate in ESG & Sustainability and an MBA in ESG & Sustainability Management, demonstrating its commitment to building capacity for climate mitigation and adaptation. gdgoenkauniversity.com+2gdgoenkauniversity.com+2

Additionally, the University's sustainability efforts include deploying solar photovoltaic systems, harvesting rainwater, incorporating electric vehicles for campus transportation and implementing waste recycling mechanisms, all of which contribute to reducing greenhouse gas emissions and resource consumption. gdgoenka.com. This report presents the status of implementation of SDG 13 (Climate Action) and the governing policy framework at GD Goenka University, Sohna (Gurugram), Haryana, India, for the year 2023.



GD Goenka University Scopus Publication



2. GD Goenka University Initiatives

a) Education

The global imperative under SDG 13 – Climate Action calls for higher education institutions to take urgent steps to mitigate climate change and its impacts. Climate change has led to rising global temperatures, extreme weather events, floods, droughts, and other environmental disasters affecting agriculture, economies, and human lives. Higher education institutions, therefore, play a vital role by integrating sustainability into education, research, and institutional practices.

At GD Goenka University, this commitment is reflected through specialized academic programmes, research initiatives, and hands-on learning experiences focused on sustainability and climate action. Key academic offerings include:

- Certificate in ESG & Sustainability – addressing environmental laws, ESG compliance, and sustainability practices. (Certificate in ESG & Sustainability)
- MBA in ESG & Sustainability Management – developing leadership skills and analytical competencies in sustainable management. (MBA - (ESG & Sustainability Management))
- M.Tech in Environmental Engineering with ESG & Sustainability Specialization – equipping students with the tools to design sustainable systems and tackle real-world environmental challenges. (M. Tech in Environmental Engineering with ESG & Sustainability Specialization)



In addition to formal programs, GDGU actively promotes research, innovation, and practical sustainability initiatives. Faculty and students engage in projects involving renewable energy, waste management, water conservation, and sustainable urban development. Initiatives like the Green Energy Audit and the University's Net Zero Commitment showcase institutional strategies toward climate neutrality. (Green Energy Audit 2023)

The Sustainable Development Club empowers students through hands-on activities such as biogas systems, renewable energy workshops, and community awareness programs. (Link) Additionally, campus infrastructure integrates sustainability through rooftop solar PV systems, rainwater harvesting, water reuse networks, and energy-efficient building designs. (Sustainability)

Through these educational and research initiatives, GDGU demonstrates a strong commitment to building capacity in students and faculty to address climate change challenges. The University's approach combines knowledge, practical skills, and community engagement to create responsible global citizens capable of driving meaningful climate action.

As an educational conglomerate, GD Goenka Group is dedicated and committed towards preserving the environment. GD Goenka University has been awarded the Titanium band in Green Ranking 2025 by R World Institutional Ranking. Our work has also been recognised by Times Higher Education Impact Ranking – Rank 401-600 in Clean Water & Sanitisation. We are continually focused on reducing our ecological footprint while fostering sustainability with initiatives such as:



- Centralised digital systems to reduce paper usage
- Solar photovoltaic systems across rooftops of GD Goenka Education City for continuous generation of renewable electricity, reducing electrical pollution
- 14 borewells across the GD Goenka University campus to harvest rainwater, successfully raising the ground waterbed level from 800 to 150 feet
- Treating and reusing the groundwater within the facilities, ensuring no treated water from our institutions are discharged outside
- Water-efficient fixtures and sewage treatment plants to minimise water waste
- Using hydroponic farming method to support organic agriculture
- Electric vehicles (EV) for campus transportation to reduce carbon emissions
- Recycling food waste into manure for horticulture activities and training staff in sustainable waste decomposition methods

GD Goenka University hosts the annual TLASH - International Conference on Transforming Lives through Adoption of SDGS: Role of Higher Education Institutions. Through meaningful deliberations by SMEs, panel discussions, poster presentations, and research presentations, TLASH aims to showcase best practices, strengthen global collaborations, and address emerging challenges in sustainability. With a strong focus on actionable solutions, this event serves as a platform for meaningful dialogue and transformative initiatives in higher education.

b) Research & Innovation

GD Goenka University actively fosters research and innovation aimed at addressing climate change and promoting sustainable development. The University supports interdisciplinary projects that combine technology, environmental science, policy, and community engagement — aligning closely with the goals of UN SDG 13: Climate Action.

Faculty and students at GDGU engage in research across diverse domains such as renewable energy, energy efficiency, waste management, water conservation, sustainable agriculture, and resilient urban design. These initiatives are supported through specialized facilities and centres, including the Centre of Excellence in Occupational Health, Safety, Fire & Environment (C-OHSFE), which enables cutting-edge research and training in sustainability and ESG practices.



Fire Drills, Awareness Program on Fire, Health Safety

Notable sustainability-driven initiatives include:

- **Green Energy Audit & Net Zero Commitment** – A structured approach to assess and reduce the University's carbon footprint, promoting renewable energy use through on-campus solar photovoltaic systems.

SENERGY CONSULTANTS PVT LTD
Green, Energy and Environment Audit Report
G D Goenka University

Ref: SCP/PR-922-211223
Date: December 21, 2023

G.D. Goenka University,
Sohna Road, Gurugram
GREEN, ENERGY AND
ENVIRONMENT AUDIT
REPORT

Shruvasha
Helping You to Conserve Energy

G.D. GOENKA UNIVERSITY
REGISTRAR

Net Zero Commitment

At GD Goenka University, we believe that education must not only shape minds but also help shape a more sustainable future. In line with our mission to foster responsible global citizens and leaders, we are proud to announce our commitment to achieving Net Zero carbon emissions by the year 2030.

Our Commitment

We are setting out an ambitious, science-based pathway to reduce greenhouse gas emissions across our operations, supply chains, and broader ecosystem. Our Net Zero commitment includes:

Scope 1 emissions: Direct emissions from university-owned sources such as vehicles, heating, and on-site energy generation.

Scope 2 emissions: Indirect emissions from the consumption of purchased electricity and energy.

Scope 3 emissions: All other indirect emissions, including those from business travel, commuting, waste, water use, procurement, and infrastructure development.

Key Actions

1. Transition to renewable energy sources for campus electricity by 2030.
2. Implement energy-efficient infrastructure and green building practices in all new constructions.
3. Adopt sustainable transportation initiatives including EV charging stations, cycling infrastructure, and campus shuttle upgrades.
4. Promote waste reduction and recycling programs throughout the university.
5. Integrate climate-conscious procurement policies.
6. Engage our students, faculty, and partners in sustainability research and climate action projects.

- **Environmental Sustainability Practices at GD Goenka** – Campus-wide initiatives involving rainwater harvesting, wastewater recycling, solid waste segregation, and energy-efficient infrastructure.



- **Sustainable Development Practices to Mitigate Climate Change** – Student-led programs, innovation challenges, and community outreach activities designed to promote practical climate action.



Through these efforts, GD Goenka University contributes significantly to advancing sustainability-oriented research and fostering innovation that benefits both academia and society. Collaborative engagements with government agencies, industries, and non-profit organizations further ensure that research outcomes are applied effectively for climate resilience and environmental well-being. By integrating **education, research, and practical innovation**, GDGU continues to strengthen its leadership as a higher education institution committed to environmental stewardship and sustainable growth.

c) Combating Climate Change Impact

According to the United Nations, global carbon dioxide emissions rose by nearly 6% in 2021 — the highest level ever recorded — emphasizing the urgent need for climate mitigation across nations. Despite international commitments, climate finance continues to fall short by USD 100 billion annually, leaving developing regions especially vulnerable. Over 700 million people are projected to be displaced by 2030 due to droughts, floods,

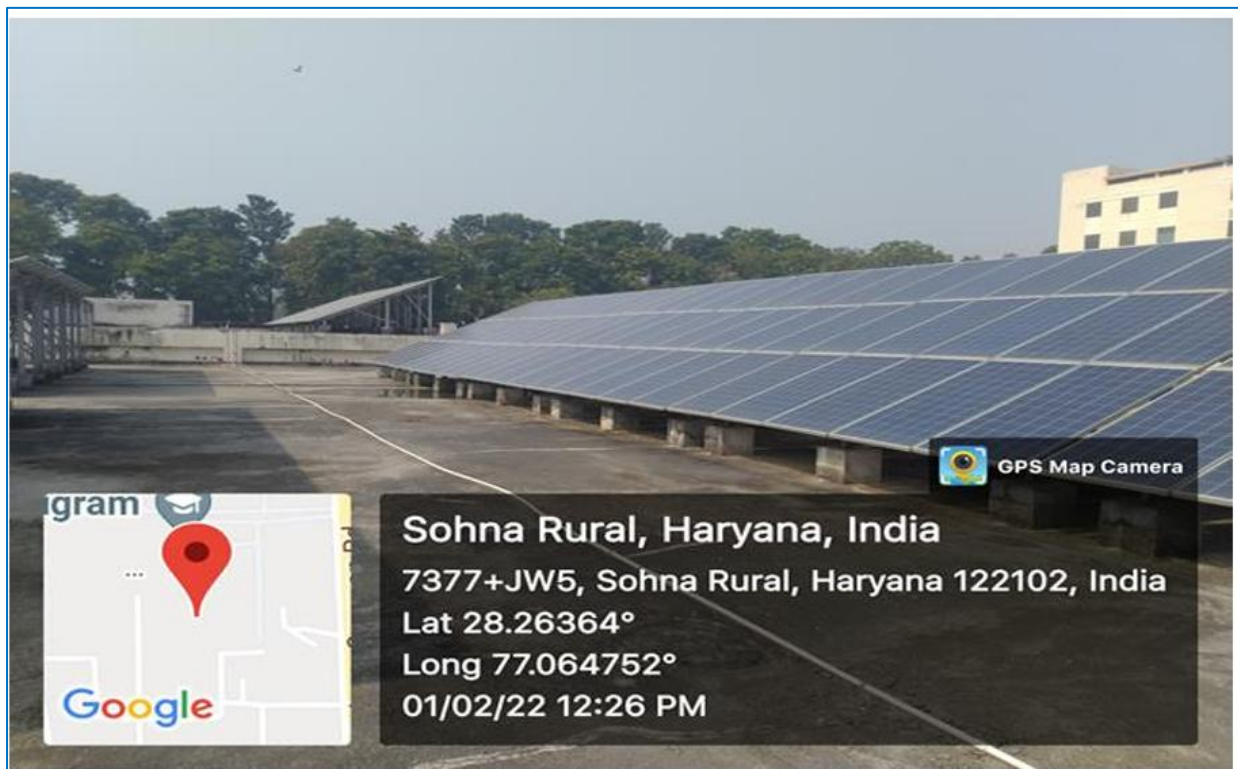
and rising sea levels expected to increase by 30–60 cm by 2100.

In response, the United Nations Sustainable Development Goal 13 calls for immediate and coordinated action to reduce emissions, increase resilience, and promote sustainable technologies. GD Goenka University aligns closely with this global agenda through campus-wide sustainability initiatives and policies aimed at mitigating environmental impact. The University's climate action efforts focus on clean energy, responsible resource management, sustainable mobility, and biodiversity enhancement.

Key Initiatives Include

- Solar Power Generation: Installation of rooftop solar photovoltaic (PV) systems across the GD Goenka Education City to generate renewable electricity and reduce reliance on grid power.

GD Goenka Sustainability Initiatives





- Water Conservation and Reuse**

Implementation of rainwater-harvesting systems and 14 borewells, raising the groundwater table from approximately 800 ft to 150 ft. All treated wastewater is fully reused for irrigation and campus maintenance.



Transforming Waste into Wealth to Recycle Resources, and Nourish Growth





Waste Management for Organic Manure Production



Wastewater recycling/STP



Vermicompost Unit & Organic Manure



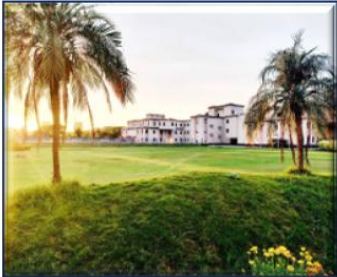


Fertigation and Climate Control Unit

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Green Campus Initiatives





Landscaping of Campus



Battery Powered Vehicles



Eco-Friendly Campus



CNG Bus and Cars



Pedestrian Pathways



Plastic Free Campus

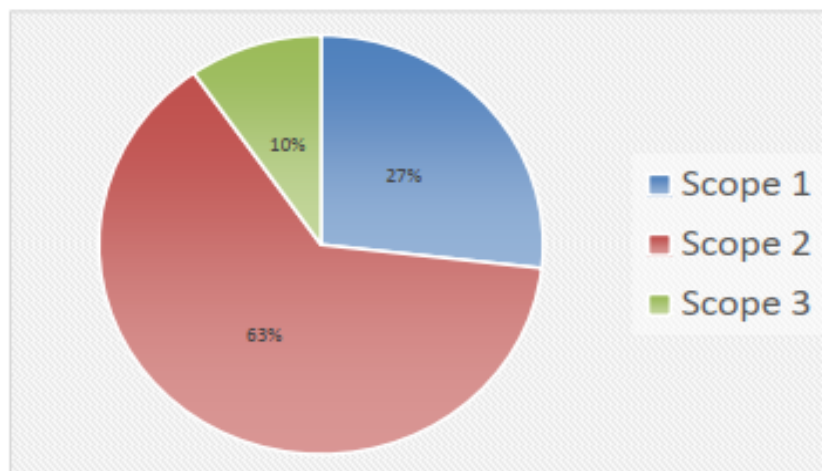
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- Biodiversity and Green Campus: Continuous tree-plantation drives, hydroponic farming, and eco-landscaping initiatives that enhance biodiversity and create a clean, sustainable learning environment.



Comparing the cumulative CO₂ equivalent emissions generally for over the past three years a general decrease in the overall emissions could be observed.

Overall % contribution by each of the scopes to the cumulative CFP value has stayed almost uniform with a very slight variation over the years.



Through these measures, GDGU demonstrates strong institutional commitment to combating climate change and contributing to India's transition toward a low-carbon, sustainable future.

d) Towards a Carbon-Neutral Sustainable Campus through Mandatory Energy and Environment Policies

To systematically achieve sustainability targets, GD Goenka University has framed its Energy and Environment Policies, aligning institutional operations with the national mission on renewable energy and carbon neutrality. The policies aim to make the GD Goenka Education City a carbon-neutral campus by 2025 through efficient energy management, clean technologies, and resource optimization.

- **Solar PV Deployment:** Expand rooftop and ground-mounted solar installations to meet a major share of campus electricity demand.
- **Solar Water Heating Systems:** Introduce solar-based water-heating solutions in hostels and cafeterias to replace LPG-based systems.
- **Community Steam Cooking:** Implement concentrated solar-thermal systems for large-scale kitchen operations to reduce conventional fuel consumption.
- **Solar Street Lighting:** Transition all external lighting to solar-powered LED fixtures.
- **Biogas Generation:** Establish small-scale biogas units using food and organic waste to generate clean energy for cooking and heating.
- **Wastewater Recycling:** Maintain a closed-loop system for water reuse through advanced treatment and distribution networks.
- **Tree Plantation & Carbon Sink Development:** Conduct annual afforestation drives and protect existing green cover to balance unavoidable emissions.



Innovation Ecosystem



Notable Achievement

Ms. Shweta Kamboj

2nd Year. M Pharmacy

**Won Cash Prize Rs. 10000 & Trophy at
Anveshna 2025 for her innovative
research work**

**"Biodegradable baby diapers using eco-
friendly materials"**



Heat Pump



01

BIOGAS Plant

Cost (1000 Kg) : INR 30,00,000/-*
LPG Generation: 70 kg/day
Energy Consumption : 40 kWh/day



Producing biogas gives many advantages for the environment, companies and people involved. The advantages are: Biogas is a green energy source in form of electricity and heat for the local grid. Considerable environmental advantages - less emission of the greenhouse gasses methane, CO₂ and nitrous oxide



02

Plastic Waste Converter

Cost - INR 4,95,600 /-



ZELENO- reverse vending machine allows you to easily dispose of your plastic PET bottles and Aluminum/steel cans of different sizes. The machine automatically accepts the trash and crushes them to be recycled later.

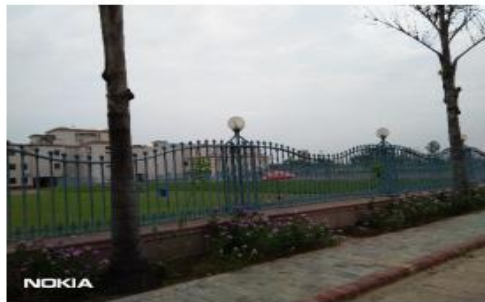


ZELENO-RVM generates an instant reward for the trash disposed and creates a receipt, which can be redeemed at the chosen outlets.

The University's sustainability committee periodically monitors progress toward these goals, ensuring measurable reductions in greenhouse-gas emissions and continued improvements in energy efficiency.

- WCM 11 – Use of Drip Irrigation at Mature Trees & Shrubs

Mature trees have least water demand than the other existing plantation in the campus. These can be served best with the help of drip irrigation as the rate of watering is kept least with only provision near the tree root unlike the flooding of whole area.



d) Sustainable Procurement Policy and Sustainable Investment Policy

To complement its environmental policies, GD Goenka University has adopted a Sustainable Procurement and Investment Framework that embeds environmental and social responsibility into all institutional purchasing and funding decisions.

Sustainable Procurement Policy:

- Preference for suppliers who follow eco-friendly manufacturing processes, use recyclable or biodegradable materials, and maintain transparent sustainability certifications.
- Inclusion of sustainability criteria (energy efficiency, lifecycle cost, recyclability) in tenders and purchase decisions.
- Promotion of local sourcing to minimize transportation emissions and support regional green enterprises.
- Sustainable Investment Policy:
- Prioritization of investments in green technologies, renewable energy, and ESG-compliant ventures.
- Avoidance of partnerships with organizations linked to high carbon emissions, deforestation, or non-ethical practices.
- Encouragement of collaborative research funding and innovation projects that generate measurable sustainability outcomes.

ENVIRONMENT AND SUSTAINABILITY POLICY  G D GOENKA UNIVERSITY G D GOENKA EDUCATION CITY GURGAON SOHNA ROAD HARYANA – 122103 INDIA P: +91 124 3315900 F: +91 124 3315970 W: www.gdgoenkauniversity.com	ADDENDUM TO ENVIRONMENT AND SUSTAINABILITY POLICY SUSTAINABLE PROCUREMENT / PURCHASING POLICY G D Goenka University, Haryana Addendum to: Environment and Sustainability Policy v.01 Original Policy Date: January 22, 2022 Addendum Version: v.01 Effective Date: May 23, 2022 1. Purpose This policy outlines GD Goenka University's commitment to integrating sustainability principles into procurement decisions. It aims to promote environmental stewardship, social responsibility, and economic efficiency throughout the procurement process. 2. Scope This policy applies to all procurement activities—including goods, services, and works—conducted by or on behalf of GD Goenka University across all academic, research, and administrative units. 3. Objectives • To minimize negative environmental and social impacts associated with procurement. • To promote the use of energy-efficient, recyclable, durable, and ethically sourced products and services. • To reduce the university's ecological footprint through responsible supply chain practices. • To support local enterprises, micro and small businesses, and innovation in sustainable products and services. 4. Guiding Principles • Lifecycle Costing: Evaluate the total cost of ownership, including acquisition, operation, maintenance, and disposal. • Environmentally Preferable Products (EPP): Prioritize products that are reusable, recyclable, compostable, or made from renewable materials. • Energy Efficiency: Favor equipment and appliances that meet ECBC or BEE energy efficiency standards. • Reduced Packaging: Avoid single-use plastics and non-biodegradable packaging where alternatives are available. • Local and Ethical Sourcing: Encourage procurement from local vendors and those adhering to fair labor and ethical sourcing standards. • Digital Preference: Emphasize paperless processes in alignment with the University's E-Governance Policy. 5. Responsibilities • Environment Compliance Committee (ECC): Oversight, implementation monitoring, and periodic review of this policy. • Procurement and Finance Departments: Ensure policy integration in tendering, vendor selection, and contract management. Page 1 2 GDGC GREEN POLICY/ENVIRONMENT AND SUSTAINABILITY POLICY
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These policies ensure that GDGU's financial and operational decisions support the broader vision of environmental stewardship and long-term sustainability while fostering a culture of accountability and ethical growth.

e) Disaster Management Policy

GD Goenka University has formulated a comprehensive Disaster Management Policy that integrates sustainability, safety, and climate resilience into campus operations. The policy focuses on preparedness, prevention, and response strategies to minimize risks from natural and human-induced disasters.

Energy Performance Index:

Description	Unit	Value
University	M ²	102028.6
Total Area	M ²	102028.6
Annual Consumption	KWH	6047773.9
Energy Performance Index	KWH/M ² /Year	59.28

The energy performance index is quite decent considering almost all the space is air conditioned.

The University established the Centre of Excellence in Occupational Health, Safety, Fire & Environment (C-OHSFE), which promotes research, training, and education in disaster management, fire safety, and environmental protection. The Centre also addresses process safety, risk engineering, and sustainable recovery planning. Regular activities such as the International Conference on Advances in Health, Safety, Fire, Environment, Allied Sciences and Sustainability (HSFEAS 2023), along with campus drills and awareness workshops, strengthen disaster readiness and community resilience.

Through these initiatives, GD Goenka University aligns its efforts with the national Disaster Management Act, 2005, and the United Nations Sustainable Development Goal 13 on Climate Action.

In the university's "Admin Manual 2023-24 Onwards" (Chapter 5.10, Health, Safety and Security Policy, page 176) a dedicated section on "Disaster Management" outlines key operational directives: everyone must proceed to designated Emergency Assembly Points in cases of fire, earthquake, cloud burst or other emergencies; campus mock drills will be conducted regularly; emergency exits and stairways must remain unobstructed at all times to ensure rapid access and egress for individuals and the emergency response team; and an evacuation plan as well as emergency response plan must be available and actively implemented. The manual is publicly available online. Admin-Manual



f) Lowering GHG Emissions by Solar Energy Production and Consumption

GD Goenka University has installed rooftop solar photovoltaic systems across its academic blocks, hostels, and parking areas to promote clean energy generation. The electricity produced from these installations supplements grid supply and significantly reduces the University's dependency on fossil fuels.

Through these solar initiatives, GDGU contributes to lowering greenhouse gas emissions and advancing India's renewable energy goals. The University's Green Energy and Environment Audit and Carbon Footprint Reports reaffirm its commitment to achieving a low-carbon, energy-efficient campus in line with SDG 7 (Affordable and Clean Energy)



INFRASTRUCTURE AND LEARNING RESOURCES



121 86	Classroom Academic Laboratory	1	Health OPD
1 1 1	Herbal Garden Nursery Poly House	1	Animal House (CCSEA Approved)
5 10	Sports (Indoor) Sports (Outdoor)	5	Research Laboratory
03	Center of Excellence	1 1	Legal Aid Clinic MOOT Court
1 1	Gymnasium Auditorium	4	Yoga & Cultural Center



- Academic Block-01
- Admin & Academic Block -02
- Academic Block- 03
- Staff Parking
- Student Parking
- Hostel

Electricity Consumption:

The details of power consumption from total as well as from the grid along with solar power generation is as under.

Month	University		
	DHBVN	Solar	Total
	KWH	KWH	KWH
Dec-22	133453	12921	146374
Jan-23	125574	10160	135734
Feb-23	141387	14474	155861
Mar-23	292012	14661	306674
Apr-23	467452	15563	483015
May-23	592330	15445	607775
Jun-23	526222	13934	540156
Jul-23	520391	12324	532715
Aug-23	700276	13991	714267
Sep-23	732612	12571	745184
Oct-23	512874	14805	527679
Nov-23	230780	9106	239886
Total	4975364	159956	5135320

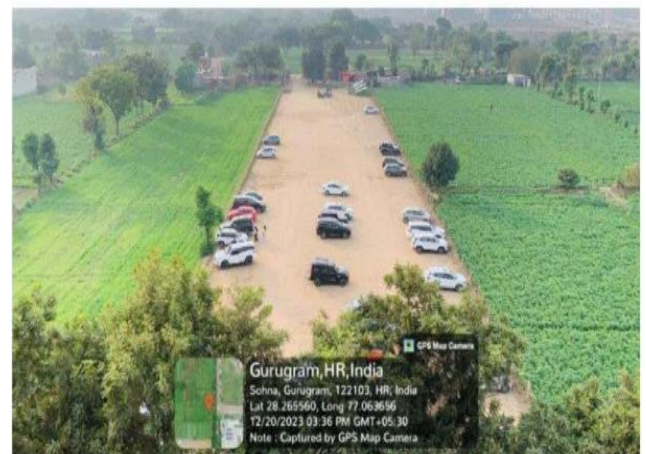
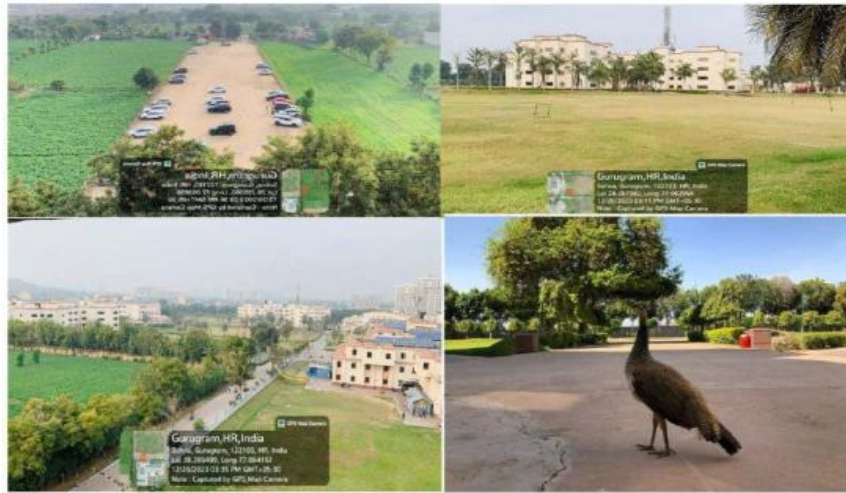
g) Climate Responsive Green Campus with Vegetation Coverage

GD Goenka University maintains a climate-responsive campus design that harmonizes with its natural surroundings in the Aravalli region. The campus integrates green infrastructure and landscape planning to moderate microclimate conditions, improve air quality, and enhance biodiversity.

Extensive green belts, tree plantations, and landscaped lawns across the Education City contribute to carbon sequestration and thermal comfort. The University regularly conducts tree plantation drives and biodiversity conservation activities involving students and staff to strengthen its ecological footprint.

Architectural designs emphasize natural ventilation, daylight utilization, and the use of sustainable building materials. These features not only reduce the urban heat island effect but also align with the principles of energy efficiency and sustainable development.

GD Goenka University's commitment to a green and climate-resilient campus directly supports SDG 11 (Sustainable Cities and Communities) and SDG 13 (Climate Action), fostering a healthier, more sustainable learning environment.



h) Reducing Carbon Emissions and Fossil Fuel Consumption in Campus Transportation

GD Goenka University promotes eco-friendly mobility by using non-polluting electric carts for on-campus transport. This initiative reduces fossil fuel consumption, lowers carbon emissions, and supports the University's goal of creating a sustainable, green campus.

Green Campus Initiatives



Landscaping of Campus



Battery Powered Vehicles



Eco-Friendly Campus



www.gdgoenkauniversity.com

CNG Bus and Cars



Pedestrian Pathways



Plastic Free Campus

i) Reducing Conventional Electricity Consumption through Solar and LED Lighting

GD Goenka University has implemented several energy-efficient initiatives to reduce its dependence on conventional electricity. The campus features rooftop and parking-area solar photovoltaic installations with a total capacity of approximately 825 kW, generating clean electricity for daily operations. In addition, around 80% of all campus lighting has been converted to LED fixtures in accordance with ECBC 2007 norms, significantly lowering energy consumption.

Solar streetlights have also been installed throughout the campus to promote renewable energy use and ensure sustainable outdoor illumination. These combined measures contribute to substantial reductions in greenhouse gas emissions and support the University's commitment to achieving a low-carbon, energy-efficient campus.



j) Wastewater Treatment and Recycling Plant

GD Goenka University operates an on-campus Sewage Treatment Plant to ensure effective wastewater management and reuse. The treated water from the STP is utilized for campus horticulture, green landscaping, and flushing systems, thereby conserving freshwater resources.

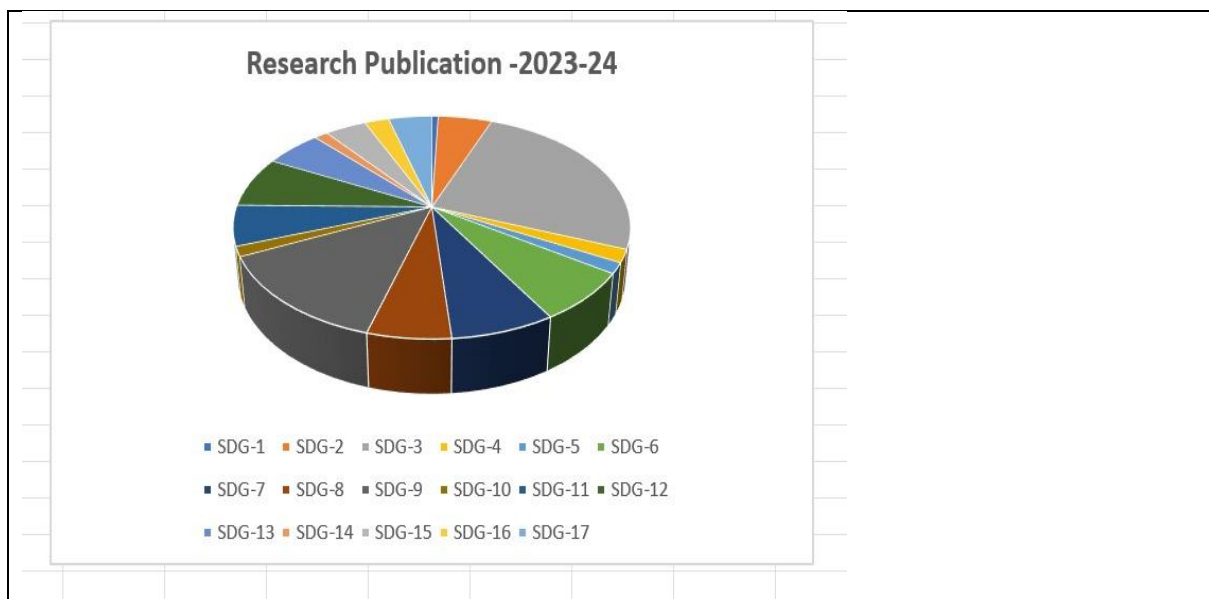
This closed-loop recycling approach minimizes environmental impact, supports sustainable water management, and aligns with the University's commitment to achieving zero liquid discharge operations. These initiatives directly contribute to SDG 6 (Clean Water and Sanitation) and SDG 13 (Climate Action) by promoting responsible water use and circular sustainability practices.





3. Publication

SDG 13 – Climate Action - Publications – 53



S.No.	Type	Title	Authors	Journal / Book	Year
1	Article	Pythagorean fuzzy decision-making framework for assessing the alternative strategies in urban mobility with digital carbon footprint	Devi, S., Kumari, R.	Journal of Ambient Intelligence and Humanized Computing	2025
2	Conference Paper	Climate Change and Threat to Coral Reefs of Lakshadweep, Laccadive Sea: An Analysis through Legal Lens	Bansal, S., Pandey, S., Avasthi, P., Chhuttani, P.	E3s Web of Conferences	2025
3	Article • Open access	Solar ViT: Vision Transformer for Fault Detection in Solar PV Systems	Makwane, P., Kumar, Y., Srivastava, A., ..., Singh, S., Sisodiya, V.	International Journal of Basic and Applied Sciences	2025
4	Article	Unraveling the nexus between crop residue burning and air quality in Haryana state, India	Neelam, N., Rathee, R.K., Mishra, S.K.	Paddy and Water Environment	2025
5	Book Chapter	Empowering women in India through innovative incubators and accelerators for energy entrepreneurship	Ahmed, N.	University Incubators and their Role in the Entrepreneurial Ecosystem	2024
6	Article • Open access	Climate consciousness: assessing climate change awareness in Gurugram, India	Rimple, M.	Journal of Asian Business and Economic Studies	2024
7	Conference Paper • Open access	Assessing the Environmental Impact of Advanced Energy Storage Solutions: A Comparative Lifecycle Analysis	Mishra, M., Dutt, A., Saini, N., ..., Srikanth, T., Talukdar, S.	E3s Web of Conferences	2024
8	Conference Paper • Open access	Polymer Matrix Nanocomposites for Lightweight Sustainable Automotive Parts	Sehgal, A., Sharma, D., Kataria, A., ..., Vivek Kumar, C., Naath Mongal, B.	E3s Web of Conferences	2024
9	Conference Paper • Open access	Optimizing Solar-Wind Hybrid Microgrid Designs with Particle Swarm Techniques for Sustainable Energy Integration	Jain, A.K., Prakash, S., Bansal, S., ..., Satyanarayana, G.V., Mongal, B.N.	E3s Web of Conferences	2024
10	Conference Paper • Open access	Recycling of Solar Panels: Sustainable Disposal of Photovoltaic Materials	Gera, R., Singh, H., Ikram, M., ..., Prasad Raju, V.S., Kampani, S.	E3s Web of Conferences	2024
11	Book Chapter	Recent advances in CRISPR/Cas9 for climate-resilient agriculture in vegetable crops	Dinkar, V., Kushwaha, A.K., Singh, A.K., ..., Kumar, A., Singh, B.	Climate Resilient Agriculture A Molecular Perspective	2024

12	Article	Groundwater Resilience in Rice-Growing Regions: Utilizing GRACE Data for Sustainable Water Management	Neelam, Rathee, R.K., Mishra, S.K., Kumar, A.	Water and Energy International	2024
13	Article • Open access	Climate change impact assessment on the water resources of the Upper Yamuna River Basin in India	Rathee, R.K., Mishra, S.K.	Environment Development and Sustainability	2024
14	Conference Paper • Open access	Polymer Matrix Nanocomposites for Sustainable Packaging: A Green Approach	Vafaeva, K.M., Chhetri, A., Sudan, P., ..., Sankara Babu, B., Mongal, B.N.	E3s Web of Conferences	2024
15	Conference Paper • Open access	Novel Nanocomposite Electrolytes for Sustainable Fuel Cells	Chhabra, S., Joshi, A., Mishra, S., ..., Kampani, S., Kumar, K.	E3s Web of Conferences	2024
16	Conference Paper • Open access	Characterization of Advanced Nanomaterials for Sustainable Energy Applications	Mittal, A., Deorari, R., Pandey, S., ..., Varanasi, S., Mongal, B.N.	E3s Web of Conferences	2024
17	Conference Paper • Open access	Reuse and Recycling of Waste Materials for Green Nanocomposite Fabrication	Sharma, V., Negi, A.S., Sharma, N.K., ..., Prashanthi, B., Sharma, P.	E3s Web of Conferences	2024
18	Conference Paper • Open access	Catalytic Conversion of Greenhouse Gases Using Sustainable Nanocatalysts	Mittal, V., Saxena, A.K., Dhawan, A., ..., Rao, S.G., Shradhey	E3s Web of Conferences	2024
19	Conference Paper • Open access	Life Cycle Analysis of Energy Storage Technologies: A Comparative Study	Sanduru, B.T., Dhyani, M., Thakur, R., ..., Bhardwaj, N., Talukdar, S.	E3s Web of Conferences	2024
20	Conference Paper • Open access	Sustainable Synthesis of Perovskite Solar Cells Using Green Materials	Kansal, L., Joshi, A., Mishra, R., ..., Lakshmi Prasanna, J.L., Sharma, P.	E3s Web of Conferences	2024
21	Conference Paper • Open access	Catalytic Conversion of Biomass to Biofuels using Green Nanocatalysts	Usanova, K.I., Dhall, H., Chandna, M., ..., Mouli, K.C., Vyas, A.	E3s Web of Conferences	2024
22	Article	Sustainable Management of Floral Waste to Reduce Environmental Pollution by Conversion to Value-Added Products and Their Applications in the Synthesizing of Nanomaterials: a Review	Gupta, V.K., Kumar, R., Dhanker, R., Kamble, S.S., Mohamed, H.I.	Water Air and Soil Pollution	2024
23	Book Chapter	Enhancing nutrient uptake with nano fertilizers and soil amendments	Tomar, B., Patle, T., Parihar, S.S., Singh, P.K., Tomar, S.S.	Harnessing Nanoomics and Nanozymes for	2024

				Sustainable Agriculture	
24	Book Chapter	Nanotechnology and agricultural sustainability: Environmental impacts and benefits	Kumari, M., Tomar, B., Singh, P.K., ..., Patle, T., Parihar, S.S.	Harnessing Nanoomics and Nanozymes for Sustainable Agriculture	2024
25	Conference Paper • Open access	Evaluating the Impact of AI-Based Sustainability Measures in Industry 5.0: A Longitudinal Study	Glazkova, V.V., Kirola, M., Gupta, M.K., ..., Acharya, P., Sharma, R.	Bio Web of Conferences	2024
26	Conference Paper • Open access	Reducing Carbon Emissions: An Analysis of Smart City Initiatives and the Carbon Reduction Test	Chulenyov, A.S., Nautiyal, M., Singla, A.K., Arora, R., Kumar, A.	Bio Web of Conferences	2024
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52	Article	Electrocatalytic hydrogen production and carbon dioxide conversion by earth abundant	Sengupta, S., Khan, S., Naath Mongal, B.,	Polyhedron	2020

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53	Article	Causal dynamics of CO2 source emissions and population in India using Bayesian approach	Babbar, S., Babbar, R.	Modeling Earth Systems and Environment	2018

4. Impact and Way Forward

GD Goenka University is committed to advancing SDG 13 – Climate Action through sustainable operations, research, and education. The University aims to strengthen renewable energy use, promote low-carbon infrastructure, and enhance awareness on climate resilience.

Ongoing efforts include green audits, energy-efficient initiatives, and collaborations with industries and institutions to develop climate solutions. GDGU continues to work toward a carbon-neutral and climate-resilient campus, empowering its community to drive meaningful environmental impact.