

7 AFFORDABLE AND CLEAN ENERGY



SDG 7: Affordable & Clean Energy

GD Goenka University – Sustainability Initiatives and Achievements

About Us

GD Goenka University (GDGU), established in 2013, is a State Private University located on Sohna Road, Gurugram, in the National Capital Region of India. Founded under the vision of Shri A.K. Goenka, GDGU is part of the larger G.D. Goenka Group, which has been a pioneer in Indian education for over three decades. The University aspires to be a global leader in higher education, nurturing intellectual excellence, creativity, leadership, and social responsibility. Guided by its motto “Thrive to Life”, GDGU emphasizes holistic development, preparing students to succeed academically, professionally, and personally.

GDGU offers a wide spectrum of undergraduate, postgraduate, and doctoral programmes across multiple disciplines, including Engineering & Sciences, Management, Law, Liberal Arts & Social Sciences, Healthcare & Allied Sciences, Hospitality & Tourism, Design & Creative Studies, and Agricultural Sciences. The University is recognized by the University Grants Commission (UGC) and approved by relevant professional councils, ensuring high academic standards and global relevance.

The University’s 60-acre state-of-the-art campus is nestled at the foothills of the Aravalli Range, providing modern classrooms, advanced laboratories, smart learning spaces, premium hostels, and extensive sports and recreational facilities. GDGU is committed to sustainable development, integrating renewable energy solutions such as solar power, promoting energy efficiency, rainwater harvesting, waste recycling, and electric mobility solutions—efforts directly aligned with SDG 7: Affordable and Clean Energy. These initiatives reduce the campus’s carbon footprint while instilling a culture of environmental responsibility among students.

With a diverse body of several thousand students from multiple nationalities, GDGU fosters a culturally rich, inclusive, and collaborative learning environment. The University emphasizes interdisciplinary learning, industry engagement, global exposure through student exchange programmes, internships, and a strong focus on innovation and entrepreneurship. Its proximity to Delhi and major corporate hubs enhances employability and industry readiness of graduates.

GD Goenka University defines excellence as inspiring students to learn, innovate, and serve, creating a lasting positive impact on society. By combining academic rigor, holistic growth, and sustainable practices, GDGU prepares responsible global citizens while actively contributing to affordable and clean energy solutions.

Green Energy & Environment Audit Report

SENERGY CONSULTANTS PVT LTD

Green, Energy and Environment Audit Report
G D Goenka University

Ref: SCPL-PR-922-211223
Date: December 21, 2023

II Executive Summary

The premises were evaluated against the various criteria laid down by the various Ranking and Accreditation agency. The major observations are:

Renewable Energy:

- The Roof-top Solar Photovoltaic System with grid synchronization is installed on most of the roofs.
- The hostels are installed with heat pumps for generating hot water, while Roof-top Solar Photovoltaic System with grid synchronization is installed on the roofs. This is more efficient and effective methods for energy optimization.
- The possibility of installing biogas plant from canteen waste is being assessed and planned during the next semester. This could reduce LPG consumption in the canteen, while generating organic manure. The University has already installed compost pit, while remaining food waste is handed over to an agency for composting. The agency provides organic manure for gardening and plantation.

Green Campus Initiative:

- The movement of vehicle inside the campus is restricted and limited to cater to very few and specific requirements.
- Pedestrian friendly pathways have been constructed for easy movement inside the campus.
- The electrical vehicles, bicycles are available for in-campus movement.
- There is a ban on plastic usage inside the campus.
- The campus is surrounded with a lot of greenery, trees, and proper landscaping.
- The campus has sewage treatment plants to treat the entire sewage is treated; which is then used for gardening. There is no discharge of treated water outside campus.
- The rain water in the entire campus (rooftop as well as open areas) is systematically collected and fed back in to the soil for ground water recharge. There is marked improvement in the water table over a period time after incorporating this path breaking rain water harvesting technique.

Environment & Energy Initiative:

- There are multiple activities and initiatives taken for conservation of energy and environment.

Air Quality & Ventilation:

- The entire space is air conditioned and properly ventilated to ensure proper air quality.
- The fans are appropriately installed to ensure proper air circulation and minimize load on the air conditioning.
- The outdoor plants have also been provided to improve the environment.

Lighting System:

- The usage of natural light is optimized through well designed structure and windows.
- Almost all the light fitting are provided with high efficiency LED lamps.
- The lighting in washrooms and common area is being automated with sensor based control.

Water Quality & Conservation:

- The ground water drawn through a set of three bore wells and further treated as per requirement on the usage.

Recognized among India's greenest campuses with prestigious LEED Platinum Certification for sustainability excellence.



Commitment to Sustainability: GD Goenka University Sohna Campus Wins LEED v4.1 EBOM Platinum Level Certification



-  BETTER ENERGY PERFORMANCE - SOLAR PV PLANT, SMART HVAC
-  BETTER WATER PERFORMANCE - LOW-FLOW FIXTURES AND WATER REUSE SYSTEMS
-  BETTER WASTE MANAGEMENT - STRONG RECYCLING AND RESPONSIBLE DISPOSAL
-  BETTER INDOOR AIR QUALITY



Sustainable Development Goals – SDG 7: Affordable and Clean Energy

SDG 7 aims to ensure access to affordable, reliable, sustainable, and modern energy for all. While global progress has been made in increasing access to electricity and improving energy efficiency, millions of people still lack reliable energy, and access to clean cooking fuels and technologies remains insufficient. Inadequate energy infrastructure also affects critical services such as healthcare, limiting the capacity of health facilities to function effectively.

GD Goenka University actively contributes to SDG 7 through education, research, and sustainable campus initiatives. The University integrates renewable energy solutions across its campus, including solar power installations, energy-efficient infrastructure, and electric mobility systems, reducing carbon emissions while providing a living laboratory for students. Through its solar energy-based training programmes, GDGU offers hands-on education and skill development for emerging energy planners, engineers, and rural youth, equipping them to drive sustainable energy solutions.

The University's research focuses on optimizing the use of natural resources and advancing integrated practices for cleaner, more affordable energy production. By exploring synergies in resource efficiency, energy recycling, and renewable technologies, GDGU is building expertise in sustainable energy and empowering students and communities to implement practical, high-impact solutions. These initiatives reinforce the University's commitment to fostering a culture of sustainability, innovation, and social responsibility while supporting global progress toward SDG 7.

Targets:

Goal 7.2: University measures towards affordable and clean energy

Goal 7.2.1: Energy-efficient renovation and building

Goal 7.2.2: Upgrade buildings to higher energy efficiency

Goal 7.2.3: Carbon reduction and emission reduction process

Goal 7.2.4: Plan to reduce energy consumption

Goal 7.2.5: Energy wastage identification

Goal 7.2.6: Divestment policy

Goal 7.3: Energy use density

Goal 7.3.1 Indicator: Energy usage per sqm

Goal 7.4: Energy and the community

Goal 7.4.1: Local community outreach for energy efficiency

Goal 7.4.2: 100% renewable energy pledge

Goal 7.4.3: Energy efficiency services for industry

Goal 7.4.4: Policy development for clean energy technology

Goal 7.4.5: Assistance to low-carbon innovation

In alignment with the 2030 Agenda for Sustainable Development, GD Goenka University (GDGU) in Gurugram continues its unwavering commitment to a sustainable future that ensures access to clean, reliable, and affordable energy for all. Since its establishment in 2013, GDGU has remained dedicated to fostering positive societal impact, not only through its academic initiatives but also by inspiring its students to champion sustainability in their own capacities.

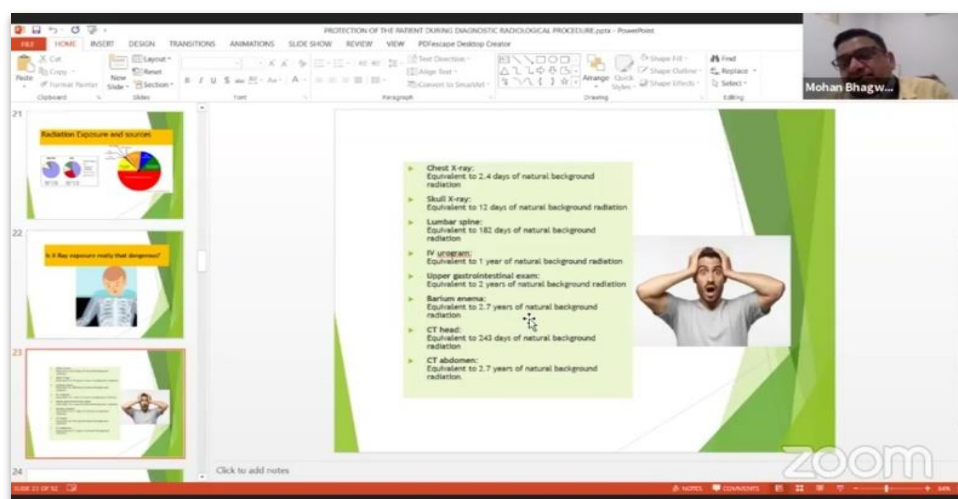
As an institution with the power to drive change, GDGU actively engages with policymakers, industry leaders, businesses, NGOs, media, students, and academic scholars to explore and implement collaborative solutions aimed at reducing energy consumption, promoting renewable energy production, and contributing to the global pursuit of a sustainable energy future. Our dedication to Sustainable Development Goal 7 (SDG-7), which focuses on affordable and clean energy, remains central to our mission.



At GDGU, our commitment to sustainability extends beyond rhetoric and embraces practical action. The University's campus serves as a living laboratory for sustainable practices, with multiple SDG-7 related initiatives spanning research, innovation, teaching, operations, outreach, and partnerships. GDGU has undertaken efforts to map academic programs and courses to relevant aspects of SDG-7, creating a comprehensive sustainability course inventory. Student engagement in sustainability, including community-based learning, renewable energy projects, and energy awareness campaigns, further embeds SDG-7 principles within the University's educational ethos.

Looking forward, GD Goenka University remains resolute in advancing SDG-7 and contributing to a cleaner, more sustainable energy landscape. We are committed to shaping not only informed and skilled graduates but also responsible global citizens who actively contribute to sustainable development, clean energy solutions, and positive change for society and the planet.

Awareness Program



"Awareness of Radiation Protection" (29th June 2021)

Report design for SDG-7 at GDGU:

- Research on clean energy
- University measures towards affordable and clean energy
- Energy use density
- Energy and the community
- News

Research on clean energy:

GD Goenka University collaborates with national and international partners to promote clean energy. The University focuses on solar power, green campus initiatives, and optimal energy use, using the campus as a living laboratory for sustainable energy solutions.

University measures towards affordable and clean energy:

- GDGU follows India's energy efficiency standards for new buildings and renovations to reduce carbon emissions, optimize electricity use, and minimize waste.
- Buildings are designed for reduced heat absorption, natural ventilation, and lighting efficiency. Energy-efficient technologies such as LED lighting, smart classrooms, and locally sourced materials are used to lower running costs and support sustainable energy use.

Electrical System

Lamps:

GD Goenka University has upgraded the lighting across the campus to high-efficiency LED lamps in offices, classrooms, hostels, labs, and street lighting. Lighting in washrooms and common areas is automated using sensor-based controls to optimize energy usage.

Details of Light Fittings:

Location	LED Lamps 36 W	LED Lamps 10 W
Phase 2 Hostel	418	216
Dining	300	240
Fitness	180	50
Hercules	130	50
Guest House	40	28
Sophia Hostel	104	84
Academic Building	900	114
Lab Building	548	30

Air Conditioning Units

GD Goenka University operates a centralized chilled water system along with VRV units, split AC units, and precision AC units in UPS and server rooms. The chilled water system includes:

- 2 water-cooled centrifugal chillers (550 TR each)
- Primary chilled water pumps (18.5 kW × 2)
- VFD-driven secondary chilled water pumps (37 kW)
- Condenser pumps (45 kW × 2)
- Cooling towers (300 TR × 4)

The campus has over 500 Air Handling Units (AHUs) catering to all air-conditioned areas. Fans are operated at lower speeds to enhance air circulation, improving efficiency and reducing energy consumption.

Air Conditioning System

- The entire campus is air-conditioned using centralized Chilled Water Systems and Variable Refrigerant Volume (VRV) units. Operations are automated to optimize energy consumption.
- All windows are equipped with Double Walled Glass (DWG) to minimize heat gain and loss.
- The outer glass panes are tinted or glazed to reduce heat gain from direct solar radiation.
- As centralized chilled water systems make it difficult to segregate vacant spaces, they are being progressively replaced with energy-efficient VRV systems.
- Room temperatures are maintained between 24°C and 25°C, within recommended comfort levels.
- Air conditioners are serviced regularly and well maintained to ensure efficient operation.
- The performance of the centralized chiller system is monitored and remains satisfactory.
- VRV and other air conditioning units are energy-efficient and compliant with current standards.
- All air-conditioned spaces are properly sealed to prevent outside air ingress and cold air loss.

System Details by Location:

Location	VRV/HP	Chiller TR
Phase 2 Hostel	-	1600
Fitness	-	-
Hercules	-	94
Dining	-	27
Guest House	-	100
Sophia Hostel	-	1125
Academic Building	-	375
Lab Building	-	-



VRV Systems (Outdoor Units)



Double Walled Glass (DWG) with tinted glazing is used to minimize heat ingress.

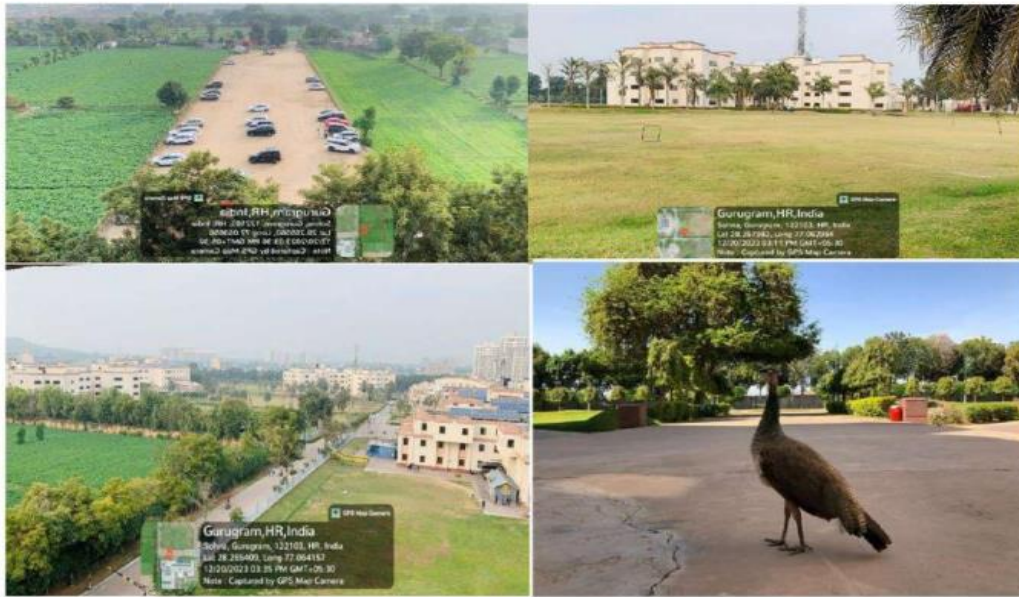


Control for VRV Units (Remote Switching & Monitoring)

Roof-top Solar Photovoltaic System

GD Goenka University has installed roof-top solar photovoltaic systems across multiple campus buildings, contributing to renewable energy generation and reducing dependency on grid electricity. The installed capacity and actual power generation details are as follows:

Sr No	Location	Inverters (kW)	Panels (kW)
1	DG Room	60	68.25
2	Dining Hall	60	74.75
3	A Block University	120	140.225
4	B Block University	120	134.225
5	C Block University	50	61.75
6	Parking	200	234
7	Basement	80	87.75
-	Overall	690	800.95



Renewable Energy (On-Site Solar)

GD Goenka University has installed a total of 563.2 kW of on-site solar capacity. During inspection, it was observed that a thick layer of dust had accumulated on the panels due to limited maintenance, which may reduce the efficiency of renewable energy generation. Regular cleaning and upkeep are recommended to ensure optimal performance of the solar installation.



Waste Management

- The campus is equipped with sewage treatment plants, and all treated sewage water is reused for gardening. No treated water is discharged outside the campus.
- Organic waste is segregated and composted on-site, while remaining food waste is handed to an external agency for composting. The resulting organic manure is used for gardening and plantation.
- Separate dustbins are installed across the campus for the collection of dry and wet solid waste.
- No hazardous or medical waste is generated within the University.
- Slightly obsolete electronic gadgets, including computers, are donated to nearby schools.
- Waste paper is collected and sent to an agency for recycling or reprocessing, with a portion reused on campus.

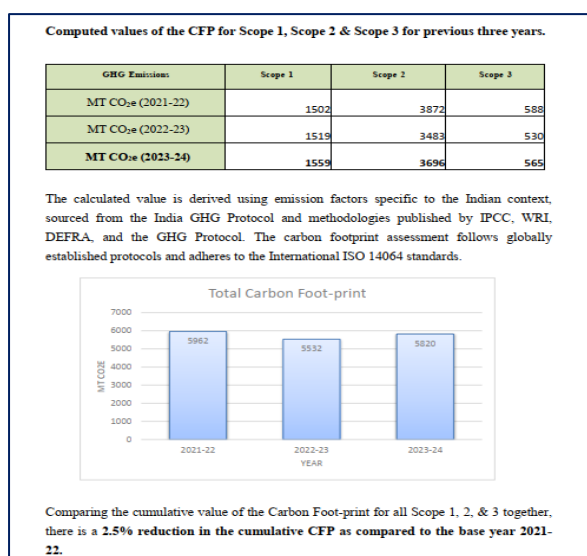
Green IT Culture

- GD Goenka University uses energy-efficient computers and laptops across departments to reduce overall electricity consumption.
- The University encourages electronic communication and digital workflows to minimize paper use.
- Most paper used on campus is reused for double-sided printing, reflecting GDGU's commitment to sustainable and eco-friendly practices.

Carbon Foot Print

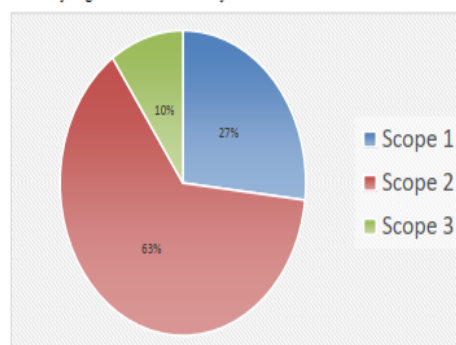
- A carbon footprint report is an essential tool for universities aiming to address environmental challenges and demonstrate a commitment to sustainability. Universities are microcosms of society, often encompassing a wide range of activities that contribute to greenhouse gas (GHG) emissions, including energy consumption, transportation, construction, and waste management. By quantifying these emissions, a carbon footprint report provides a clear picture of the environmental impact of campus operations. This data allows institutions to identify areas of inefficiency and prioritize actions to reduce emissions, paving the way for more sustainable practices.
- Such reports also align universities with global efforts to combat climate change, including the United Nations' Sustainable Development Goals (SDGs) and the Paris Agreement. As centers of education and research, universities have a unique responsibility to lead by example and inspire broader societal changes. A robust carbon footprint report not only helps institutions measure progress toward their sustainability goals but also supports the development of innovative solutions that can benefit communities beyond the campus. By addressing their carbon footprint, universities can directly contribute to reducing global emissions while fostering a culture of environmental awareness among students, faculty, and staff.
- The benefits of a carbon footprint report extend beyond environmental stewardship. In today's competitive landscape, sustainability is a key factor influencing decisions made by students, faculty, and funding organizations. Demonstrating a commitment to reducing emissions enhances the university's reputation, attracting environmentally conscious individuals and securing partnerships or grants aimed at promoting sustainability. Furthermore, regulatory frameworks and local or national climate policies increasingly require organizations to monitor and mitigate their environmental impact. A carbon footprint report ensures compliance with these requirements and positions the institution as a proactive leader in climate action.

- Moreover, integrating findings from a carbon footprint report into educational programs and research initiatives amplifies its impact. Universities can use the data to inform curriculum design, conduct research on climate solutions, and provide students with hands-on learning opportunities in sustainability practices. This approach not only enriches the educational experience but also equips future leaders with the knowledge and skills needed to address environmental challenges effectively



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.



When it comes to reducing human-caused emissions of greenhouse gases, especially carbon dioxide, trees play a vital role. Through photosynthesis, trees absorb CO₂ from the atmosphere and use it for growth—helping to balance the ecosystem. GD Goenka University actively contributes to this effort by organizing plantation drives throughout the year, both within the campus and in nearby communities, to enhance green cover and promote environmental awareness.

Various initiatives undertaken by the University to reduce carbon emissions include:

1. Eco-friendly transportation within the campus
2. Promotion of bicycle usage among students and staff
3. Use of electric vehicles for on-campus mobility
4. Adoption of natural gas for cleaner energy operations
5. Regular tree plantation drives in and around the campus

Green Campus Initiatives



Landscaping of Campus



Battery Powered Vehicles

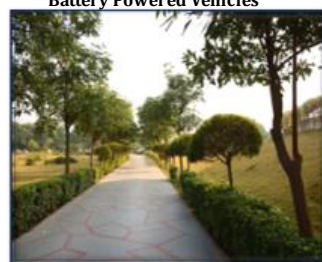


Eco-Friendly Campus



www.gdgoenkauniversity.com

CNG Bus and Cars



Pedestrian Pathways



Plastic Free Campus

Alternate Sources of Energy

Alternate sources of energy and energy conservation measures



Solar Energy
269.10 KWP
power generation



**Use of LED Bulbs/
Power Efficient
Equipment**



**Sensor-based
Energy
Conservation**



**Wheeling
to
The Grid**



www.gdgoenkauniversity.com

Student Initiative & Collaboration

GD Goenka University actively supports Sustainable Development Goal 7 by encouraging student-led initiatives, academic programs, and collaborations that promote clean and affordable energy solutions. The School of Engineering and Sciences offers specialized programs such as B.Tech in Energy Engineering and M.Tech in Renewable Energy Engineering, which equip students with the knowledge and skills to develop sustainable energy technologies, including solar, wind, and bioenergy systems. Students actively participate in research projects, innovation challenges, and industrial internships focused on renewable energy and energy efficiency.

Through the university's Eco Club and Innovation & Entrepreneurship Centre, students organize energy conservation campaigns, awareness drives, and workshops on sustainable energy practices. The university has also integrated renewable energy solutions on campus, such as solar photovoltaic systems and energy-efficient lighting, making the campus a living model of sustainability.

In addition, GD Goenka University's annual SPEED (Student Project Exhibition on Engineering Design) showcases student projects on renewable energy and green technology, fostering creativity and problem-solving skills among young innovators. Collaborative partnerships with industries, government agencies, and NGOs provide students with opportunities to translate their clean energy ideas into real-world applications. Through these initiatives, GD Goenka University cultivates a culture of sustainability, empowering students to become future leaders in the clean energy transition and contributing directly to the achievement of SDG 7 — ensuring access to affordable, reliable, sustainable, and modern energy for all.

WELCOME TO THE ENERGY ENGINEERING DEPARTMENT AT GD GOENKA UNIVERSITY

Energy is the driving force of modern civilization, and as the world shifts towards sustainable and efficient energy solutions, the demand for skilled professionals in this sector is skyrocketing. The Energy Engineering Department at GD Goenka University is committed to equipping future engineers with the expertise to lead this transformation.

Our **B.Tech program in Energy Engineering** gives the potential undergraduate students to specialize in cutting edge programs in energy to help the students to become the leaders of the energy sector. Students can choose to specialize in **Renewable Energy, Nuclear Energy or in Oil & Gas Engineering**.

Our flagship program **M.Tech in Renewable Energy Engineering** program offers cutting-edge specializations in Solar Power, Wind Power, Marine Power, Hydropower and Biomass among others. It is designed to prepare students for dynamic careers in one of the most crucial sectors of the 21st century. With India's ambitious goals for **net-zero emissions**, rapid expansion of renewable energy capacity, and increasing investments in nuclear power, this field presents unparalleled growth opportunities. Our program is designed to empower the future energy leaders for a sustainable world.

Our **M.Tech in Nuclear Engineering** program offers cutting-edge analyses of Nuclear Energy Reactors, Nuclear Processes, Non-destructible Testing Methods and Medical Applications as well as Research.

Our **M.Tech programs** are designed to be dual degree programs and the student in the second year can choose a dual degree option in France or can choose to do 6 months Internship & Exchange abroad. Our **B.Tech Programs** also have one semester exchange abroad to create the global engineers of the future.

PROGRAM HIGHLIGHTS

- ✔ **Specializations and Expertise** – Gain in-depth expertise in cutting-edge technologies like solar, wind, hydro, bioenergy, oil & gas, petroleum, power systems and nuclear power.
- ✔ **Global Exposure: Study Abroad & International Internships** – The last year of the programs includes a semester abroad and/or an internship opportunity at a prestigious international university or research institution, providing students with hands-on global experience.
- ✔ **State-of-the-art Research & Laboratories** – Work with advanced energy systems, simulation software, and high-tech labs to develop innovative energy solutions.
- ✔ **Industry-Aligned Curriculum & Collaborations** – Engage with experts from leading energy companies, participate in live projects, and gain exposure to industry best practices.
- ✔ **Internships & Placement Support** – Benefit from our strong network of industry partners, ensuring top-notch placement opportunities in renewable energy firms, power plants, research labs, policy organizations, and multinational energy corporations.

A GROWING FIELD WITH LIMITLESS CAREER PROSPECTS

India is on the path to becoming a global leader in **clean energy adoption**, with ambitious targets like **500 GW of renewable energy by 2030** and increasing investments in **nuclear power expansion**. This has created a massive demand for skilled professionals in **energy generation, storage, distribution, and policy-making**. Graduates from our program will be well-equipped to **lead projects in sustainable energy, contribute to research and innovation, and take up key roles in energy corporations, government agencies, and global sustainability initiatives**.

BE A PART OF INDIA'S ENERGY REVOLUTION

This is more than just an academic program—it's a **gateway to a transformative career**. By choosing **Energy Engineering Programs at GD Goenka University**, you will gain not only a strong technical foundation but also an **international perspective and global connections** to shape the future of energy.

EMPOWERING THE FUTURE ENERGY LEADERS FOR A SUSTAINABLE WORLD

Join us in building a clean, efficient, and sustainable world. Your journey to becoming an energy leader starts **here!**

Research and Capacity Building Aligned with SDG 7

GD Goenka University actively contributes to the goals of affordable and clean energy (SDG 7) through its engagement in multiple PMKVY 4.0 Green Jobs projects, funded by the National Skill Development Corporation (NSDC). These initiatives focus on skill development and vocational training in areas such as solar power installation, maintenance, and entrepreneurship, empowering youth with practical expertise in renewable energy technologies.

Through these short-term and year-long projects, faculty members and trainers at GDGU are building capacity for a cleaner energy future—promoting sustainable livelihoods, supporting national green energy goals, and fostering innovation in solar and environmental technology sectors.



Sl No	Name of of the PI/ Co-PI/Name of the person holding the Chair	Title of the research project, endowments, Research Chairs	Name of the funding agency	Duration	Year of award or Sanction
1	Prasenjit Mondal	PMKVY 4.0 RPL Green Jobs-Safai Karamchari	National Skill Development Corporation	3 Months	2023-24
2	Anju Rani	PMKVY 4.0 RPL Green Jobs-Santization Expert	National Skill Development Corporation	3 Months	2023-24
3	Uzma Rukshar	PMKVY 4.0 RPL Green Jobs-Helper	National Skill Development Corporation	3 Months	2023-24
4	Anindita Roy Chowdhury	PMKVY 4.0 Special Project Green Jobs- Solar Water Heater Installer (Surya Mitra)	National Skill Development Corporation	2 months	2023-24
5	Sudipta K Mishra	PMKVY 4.0 Special Project Green Jobs- Solar Light Installer (Surya Mitra)	National Skill Development Corporation	2 months	2023-24
6	Naresh Sharma	PMKVY 4.0 Special Project Green Jobs- Solar Technician (Surya Mitra)	National Skill Development Corporation	2 months	2023-24
7	Deepika Garg	PMKVY 4.0 Special Project Green Jobs- Solar Panel Expert (Surya Mitra)	National Skill Development Corporation	2 months	2023-24
8	Shashikant Gupta	PMKVY 4.0 Special Project Electronics- CCTV Installation Technician	National Skill Development Corporation	2 months	2023-24
9	Alina Banerjee	PMKVY 4.0 Special Project Electronics- CCTV and Security Expert	National Skill Development Corporation	2 months	2023-24
10	Renu Chaudhary	PMKVY 4.0 Special Project Electronics- CCTV Repair Technician	National Skill Development Corporation	2 months	2023-24
11	Manka Sharma	PMKVY 4.0 Special Project Electronics- Wiring Technician	National Skill Development Corporation	2 months	2023-24
12	Rangoli Goyal	PMKVY 4.0 Special Project Green Jobs- Solar Photovoltaic Entrepreneur	National Skill Development Corporation	2 months	2023-24
13	Mainak Basu	PMKVY 4.0 Special Project Green Jobs- Solar Photovoltaic Assembling Expert	National Skill Development Corporation	2 months	2023-24
14	Neha	PMKVY 4.0 Special Project Green Jobs- Solar Photovoltaic Technician	National Skill Development Corporation	2 months	2023-24

15	Mir Mohsin John	PMKVY 4.0 Skill Hub Green Jobs-Safai Karamchari	National Skill Development Corporation	1 year	2023-24
16	Achyut Sharma	PMKVY 4.0 Skill Hub Green Jobs- Safai Mitra	National Skill Development Corporation	1 year	2023-24
17	Sandeep Kumar Yadav	PMKVY 4.0 Skill Hub Green Jobs-Santization Technician	National Skill Development Corporation	1 year	2023-24
18	Rajat Sharma	PMKVY 4.0 Skill Hub Green Jobs-Safety Expert	National Skill Development Corporation	1 year	2023-24

Publications

The university's faculty and researchers actively contribute to publications addressing global challenges related to sustainable energy and environmental responsibility. GD Goenka University's research outputs include policy briefs, journal articles, and case studies focusing on renewable energy technologies, energy efficiency, sustainable infrastructure, and green innovation. These scholarly contributions demonstrate the university's commitment to advancing Sustainable Development Goal 7 (SDG 7) by generating actionable knowledge that supports affordable, reliable, and clean energy solutions for a sustainable future.

SDG - 7 Affordable clean energy - Publications - 70

S.No.	Type	Title	Authors	Journal / Book	Year
1	Article	DoE based development and optimization of ion sensitive in situ nanoemulgel containing bimatoprost for sustained ocular delivery	Singh, M.; Devi, M.K.; Singh, R.P.; Monika; Jhawar, V.C.	International Journal of Biological Macromolecules	2025
2	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
3	Book Chapter	Intellectual property and energy efficiency in food safety: Legal protections for innovations in India	Singh, A.; Rana, S.; Tiwari, P.; Kaushik, K.	Energy Efficient Technologies for Food Safety Quality and Security	2025
4	Book Chapter	Future Trends and Emerging Technologies of Heat Exchangers	Jana, S.; Verma, D.; Gupta, S.	Advanced Applications in Heat Exchanger Technologies AI Machine Learning and Additive Manufacturing	2025
5	Article • Open access	Optimization and Intelligent Control in Hybrid Renewable Energy Systems Incorporating Solar and Biomass	Johri, A.; Verma, V.; Basu, M.	Energy Engineering Journal of the Association of	2025

				Energy Engineering	
6	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
7	Conference Paper • Open access	Sustainable Approaches for Recycling Solar Panel Materials: A Circular Economy Perspective	Yadav, R.; Singla, A.K.; Ghalwan, M.; Vyas, A.; Karthikeyan, R.	E3S Web of Conferences	2024
8	Conference Paper • Open access	Sustainable Energy Conversion via Organic Photovoltaics: Material Selection and Evaluation	Sharma, V.; Nautiyal, M.; Saini, P.; Charyulu, V.S.; Vyas, A.	E3S Web of Conferences	2024
9	Conference Paper • Open access	Green Synthesis of Nanocomposite Catalysts for Environmental Remediation	Jain, A.K.; Prakash, S.; Bansal, S.; Satyanarayana, G.V.; Naath Mongalc, B.	E3S Web of Conferences	2024
10	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.; Mongalc, B.N.	E3S Web of Conferences	2024
11	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
12	Conference Paper • Open access	Sustainable Vision-Based Navigation for Autonomous Electric Vehicle Charging	Srivastava, N.; Singh, H.; Ikram, M.; Prasad Raju, V.S.; Kampani, S.	E3S Web of Conferences	2024
13	Conference Paper • Open access	Green Synthesis of Nano catalysts for Sustainable Petrochemical Refining	Singla, T.S.; Bisht, D.; Taneja, M.; Hemalatha, K.; Talukdar, S.	E3S Web of Conferences	2024
14	Conference Paper • Open access	Sustainable Approaches for Recycling Lithium-ion Battery Materials	Gera, R.; Bhardwaj, N.; Mishr, N.; Bindu, O.S.; Sharma, P.	E3S Web of Conferences	2024
15	Conference Paper • Open access	Particle Swarm Optimization for Sizing of Solar-Wind Hybrid Microgrids	Sanduru, B.T.; Negi, A.S.; Sharma, N.K.; Kalele, G.; Vyas, A.	E3S Web of Conferences	2024
16	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
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Impact and Way Forward (SDG 7)

GD Goenka University's initiatives in sustainable energy education have significantly contributed to advancing awareness, research, and innovation in the field of clean energy. Through specialized academic programs, workshops, and industry collaborations, students gain both theoretical knowledge and practical skills in renewable energy technologies, energy management, and sustainability practices. The university's focus on experiential learning and interdisciplinary education fosters innovation and environmental responsibility among its student community.

Looking ahead, GDGU aims to further strengthen its contribution to SDG 7 by expanding research in renewable energy, enhancing partnerships with clean-tech industries and government bodies, and integrating green technologies into campus operations. By advancing these strategies, the university remains committed to promoting affordable, reliable, and sustainable energy solutions while preparing students to lead global energy transitions toward a cleaner future.