



Dr. Bhimrao Ambedkar University Agra

Paliwal Park Agra -282004

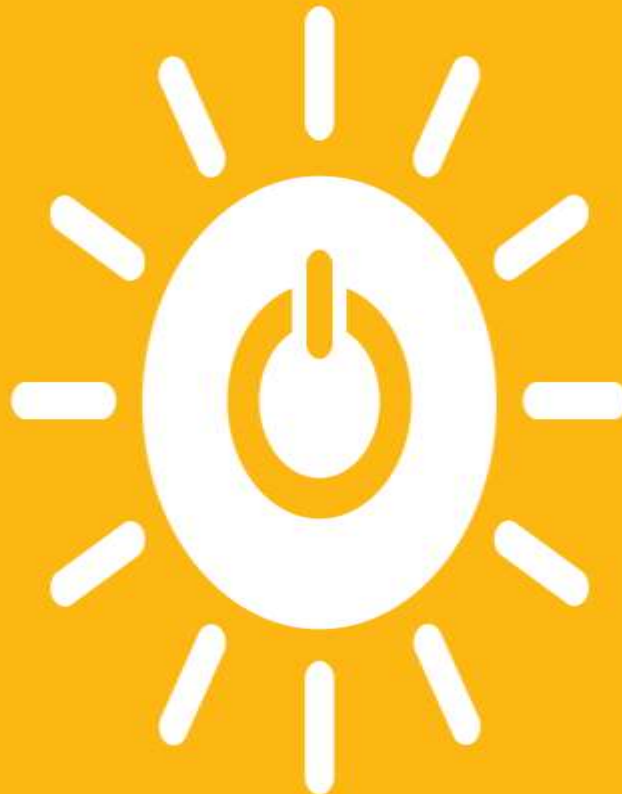
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SDG – 7: Affordable and Clean Energy

(Ensure access to affordable, reliable, sustainable and modern energy to all)

7 AFFORDABLE AND CLEAN ENERGY





Dr. Bhimrao Ambedkar University, Agra recognizes that sustainable energy management is essential for environmental protection, climate action, and long-term institutional development. Through structured planning, clean energy projects, and awareness initiatives, the University is steadily reducing dependence on conventional energy sources and promoting renewable energy adoption across its campuses.

The University has established a strong policy framework to ensure that all newly constructed and renovated buildings comply with energy efficiency standards. As documented, newly constructed buildings are energy-efficient and GRIHA-compliant

These buildings integrate sustainable design elements such as insulation, energy-efficient lighting, solar panels, rainwater harvesting systems, and environmentally responsible construction materials. By adopting the GRIHA rating system, the University ensures reduced carbon emissions, improved indoor environmental quality, and optimal energy utilization. These measures collectively strengthen the institutional commitment to sustainable infrastructure and clean energy transition.

Solar energy plays a pivotal role in the University's clean energy strategy. The University has installed solar power systems across its campuses, producing 60 kWh at the Khandari Campus and 70 kWh at the Challesar Campus.

These rooftop solar installations significantly contribute to meeting daily electricity requirements and reduce reliance on conventional grid power. The integration of solar cells into campus infrastructure reflects a strategic move toward renewable energy utilization and carbon footprint reduction.



**Solar Power System
University Campus – 60KWh**

I.B.S.

Picture	
Capacity	60 KW
Cost per Unit (KWh)	230 Units
Application	Solar power back up for existing electrical appliances viz., Table lights, Fans, Laptops, Computers, Printers etc., HVAC, Pumping etc.
Scope of Supply	System includes 60 KWp Solar Module, GI modular support, 60 KW grid interactive Inverter
Solar Panel Voltage	545 Wp
Battery Support	
Power Saving (KWh)	7,200 Units
Money saved INR / Year (EIR incl. cost assumed @9.00 Rs.)	Rs. 61,800.00 / Rs 7,77,600.00
Warranty	05 year for the system
Approx. system cost	1514
Approx. system cost after depreciation benefit/subsidy	1514 (Theoretically final investment cost if avail AED benefits)
ANR cost	67.25 per annum after 01 year
Payback with AED benefits	3 Years
Life time Income	1NR

**Solar Power System
University Campus – 60KWh**



**Solar Power System
University Campus – 70KWh**

Chhalesar

Picture	
Capacity	70 KW
Output Units (KWp)	280 Units
Application	Use of power for lighting and other electrical appliances viz., Tube lights, Fans, EPODs, Computers, Printers etc., HVAC, Pumping etc.
Scope of Supply	System includes 70 KWp Solar Module, C&I
Solar Panel Wattage	645 Wp
Battery Support	200Ah 240V LITHIUM
Power Rating (KW)	0.400 KW
Money saved 1 st Year / Year	Rs. 75,600.00 / Rs. 9,07,200.00
IEB and cost assumed @9.00 Rs./k	
Warranty	05 year for the system
Approx. system cost	INR
Approx. system cost after depreciation benefits/summary	INR (theoretically final investment cost if avail AD benefits)
ASIC cost	for 2% per annum after 01 year.
Payback with AD benefits	3 Years
Life time Earnings	INR

**Solar Power System
University Campus – 70KWh**

In addition to renewable energy generation, the University emphasizes energy conservation and efficiency. Energy-saving lighting systems, efficient electrical fixtures, and sustainable technologies have been adopted across campus facilities

These measures help minimize electricity consumption while maintaining operational efficiency. By integrating smart energy management practices, the University ensures responsible energy use and promotes a culture of conservation among staff and students.

Sustainable mobility is another important component of the University’s clean energy initiatives. Students and staff are encouraged to use bicycles within the campus premises, and battery-operated vehicles are provided for differently abled students and for campus transportation needs

These initiatives reduce fuel consumption and vehicular emissions, contributing to a cleaner and healthier campus environment.





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The University also promotes environmental awareness through plantation drives and sustainability campaigns. As highlighted in the report, plantation activities involve active participation from faculty, staff, and students, fostering ecological responsibility

Furthermore, the University has implemented a complete ban on single-use plastic items and promotes the use of reusable alternatives, reinforcing sustainable lifestyle practices within the campus community.



Registrar - Dr. Rajeev Kumar and Prof. Manu Pratap Singh (Director of IET) are actively contributing to a plantation drive aimed at raising awareness about environmental conservation.





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Through solar energy integration, energy-efficient infrastructure, sustainable mobility practices, and environmental awareness initiatives, Dr. Bhimrao Ambedkar University, Agra demonstrates a comprehensive and practical approach toward Affordable and Clean Energy. Its continuous efforts in renewable energy adoption and energy conservation reflect a strong institutional commitment to sustainability and responsible energy management, positioning the University as a progressive and environmentally conscious higher education institution.