



Low carbon energy tracking

The Women University of Azad Jammu and Kashmir (WUAJK) is deeply committed to advancing sustainability and minimizing its carbon footprint. Through innovative energy practices, efficient infrastructure, and eco-friendly behaviors, WUAJK continues to lead the way in sustainable campus development.

In 2024, the university built upon its previous initiatives by expanding the use of renewable energy, strengthening energy conservation efforts, and improving infrastructure efficiency. Situated in a naturally green and forested environment, the campus takes advantage of abundant natural resources, such as daylight, optimal weather conditions, and surrounding greenery, further reducing its dependence on artificial energy systems.

1. Maximize Daylight Utilization

In 2024, on the new campus, additional classrooms and laboratories were constructed, featuring larger energy-efficient glass windows designed to maximize natural lighting ([Annex I & Annex II](#)).

2. Excellent Weather Conditions

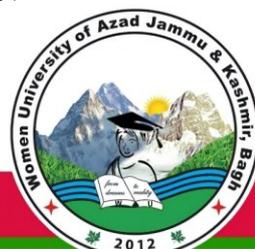
Natural Ventilation Improvements: New classroom blocks were constructed with a cross-ventilation design, reducing the reliance on fans ([Annex I](#)).

Shaded Green Spaces: In 2024, tree plantation drives under the Prime Minister's Green Youth Program led to the planting of over 500 new saplings, increasing shaded areas across the new campus ([Annex II](#)).

Forest Campus Effect: The surrounding forest continued to reduce indoor cooling requirements, with monitoring data showing a **2–3°C lower indoor temperature** compared to nearby urban campuses.

3. Optimize UPS Use

- **Energy-Efficient UPS Models:** Outdated UPS units were replaced with **high-efficiency models** in the admin and IT blocks.
- **Smart Load Management:** Only critical systems (IT servers, labs, security) are connected to UPS backups, reducing unnecessary load and energy waste.





4. Energy Conservation Initiatives

Behavioral Practices Strengthened:

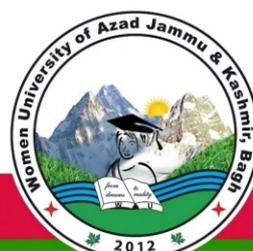
- Notices and awareness campaign materials have been posted in classrooms.
- Green Student Ambassadors (2024) launched to encourage eco-friendly behavior (Annex III).
- Evening inspections by security staff ensured that over 90% of unnecessary lights and fans were turned off daily.

5. Rainwater Harvesting Project

A pilot system was introduced in the second academic block to reduce water pumping energy (Annex V).

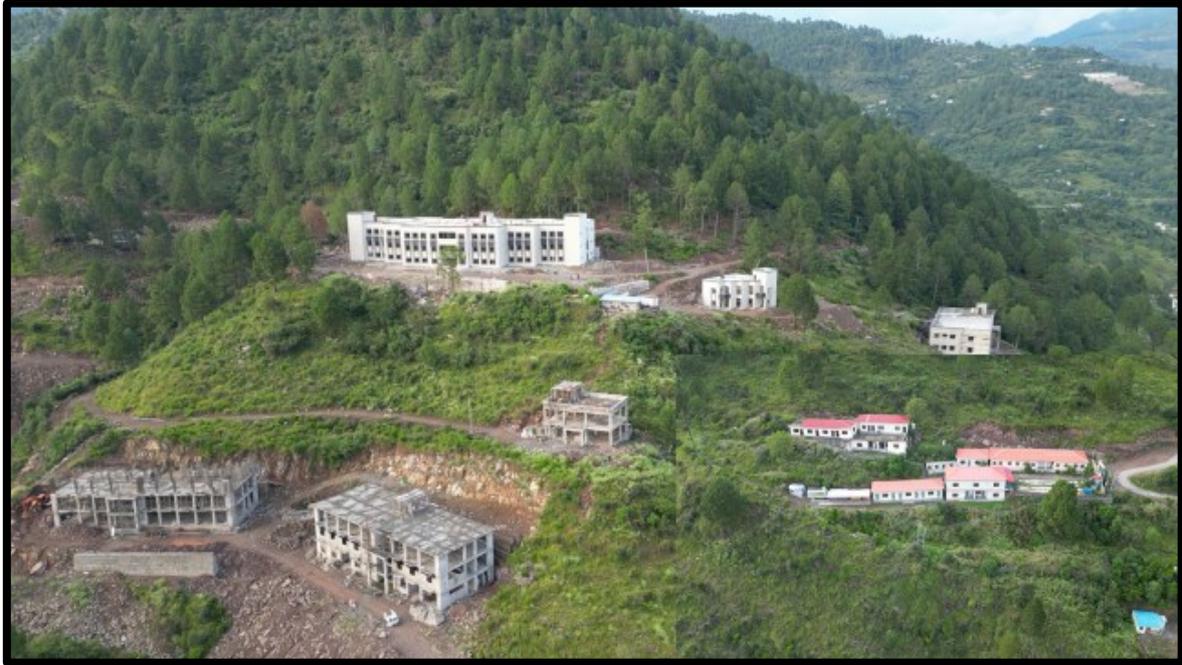
Summary

WUAJK has made significant strides in sustainable campus development during 2024, especially in expanding renewable energy, improving natural ventilation, and promoting eco-conscious behavior. With upcoming large-scale solar integration and green initiatives, WUAJK is well-positioned to become a **model green university in Pakistan**.

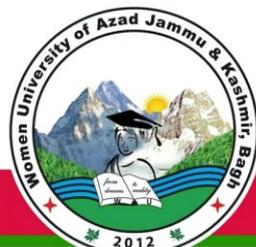




Annex I



Annex II

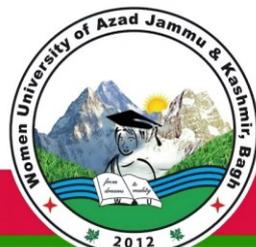




Annex III



Annex IV





Annex V

