NALSAR UNIVERSITY OF LAW, Hyderabad

7.2.1 - Does your university as a body have a policy in place for ensuring all renovations / new builds are following energy efficiency standards? (relevant standards to be indicated)

Policy: Energy-Efficiency Requirements for New Builds & Renovations

1. Purpose

To ensure that all new construction and significant renovations across NALSAR University of Law meet mandatory energy-efficiency benchmarks, minimize whole-life energy use and greenhouse-gas emissions, and align campus practice with national and internationally recognised standards and rating systems. This will reduce operational costs, improve occupant comfort, and support the University's SDG commitments (notably SDG-7 and SDG-13).

2. Scope

Applies to:

- All **new buildings**, major extensions, and major renovation projects on NALSAR campuses funded or managed by the University.
- Design, procurement, construction, commissioning, and handover stages.
- Applicable to consultants, contractors, and internal project teams. Minor maintenance works that do not alter the building envelope, services, or area are out of scope unless they affect energy systems.

3. Policy Statement

NALSAR will require that all covered projects demonstrate compliance with applicable energy-efficiency codes and seek independent verification against recognised standards or rating systems. At a minimum, projects must comply with the Energy Conservation Building Code (ECBC) or the successor national building code provisions (e.g., ECSBC / NBC 2016 clauses on energy). Where feasible, projects should also pursue third-party green building certification (e.g., GRIHA, IGBC, or ISO 50001-aligned Energy Management Systems).

4. Relevant Standards & Guidance (to be used as the baseline)

- **Energy Conservation Building Code (ECBC)** — minimum mandatory performance for commercial buildings in India (thresholds by connected load/contract demand). Use the latest ECBC / BEE guidance.
- **Energy Conservation & Sustainable Building Code (ECSBC) / ECBC updates (2024/2017/2016)** — adopt relevant new provisions where applicable.
- **National Building Code of India (NBC 2016)** — energy-related provisions (adaptive thermal comfort, solar provisions).
- **GRIHA** (Green Rating for Integrated Habitat Assessment) — recommended for public/institutional buildings for a holistic life-cycle assessment and certification

- **IGBC** (Indian Green Building Council) rating systems — alternative recognised green certification (new buildings, net-zero pathways).
- **ISO 50001** — for those buildings/campus operations implementing formal energy management systems.

Projects must reference the latest published versions or amendments of the above codes/standards at the time of project approval.

5. Minimum Requirements (summary)

1. **Mandatory compliance:** Demonstrable compliance with ECBC / ECSBC / NBC energy provisions for all qualifying projects (connected load/contract demand thresholds per BEE guidance). Evidence: compliance report and modelling
2. **Envelope & Passive Design:** Optimised orientation, thermal insulation, U-values, shading, and fenestration performance consistent with code limits and best practice.
3. **HVAC & Lighting Efficiency:** HVAC systems sized and selected for high efficiency; lighting designs to meet daylighting and minimum wattage/controls requirements (occupancy sensors, daylight dimming). Energy performance modelling (e.g., hourly simulation) must be submitted.
4. **Renewables & On-site Generation:** Evaluate and incorporate on-site solar PV (roof or canopy) where feasible; projects should demonstrate how renewables reduce grid energy use and EV/charging readiness.
5. **Commissioning & Metering:** Mandatory design & functional commissioning; sub-metering for major systems (HVAC, lighting, chillers, solar) from day one. Commissioning report required before handover.
6. **Operational Energy Management:** Buildings should include Energy Performance Index (EPI) targets, and campus energy management practices (consider ISO 50001 for campus operations).

6. Roles & Responsibilities

- **Campus Planning & Projects Office (CPPO):** Policy owner — enforces policy, chairs project review, ensures standards selection and funding allocation.
- **Project Lead / Nominated Owner:** Ensures procurement documents include energy requirements and engages certified consultants.
- **Design Consultants:** Provide energy modelling, compliance documents, and specifications for efficient systems.
- **Contractors:** Deliver works to specification; support commissioning and handover.
- **Sustainability / Energy Cell:** (establish or designate) reviews energy models, audits post-occupancy, monitors meters, and collects evidence for reporting.
- **External Verifier / Third-party Auditor:** Perform independent checks, e.g., for ECBC compliance and GRIHA/IGBC certification submissions.

7. Compliance & Approvals Process (project lifecycle)

1. **Project Initiation:** CPPO confirms scope; Energy Policy checklist attached to Project Brief.

2. **Design Stage:** Appoint an energy consultant; produce baseline energy model and compliance path (ECBC/ECSBC and target certification level). Submit technical brief to CPPO.
3. **Tendering:** Tender docs include mandatory energy clauses, minimum equipment efficiencies, commissioning requirements, and sub-metering.
4. **Construction & Commissioning:** Contractor delivers per specs; independent commissioning agent verifies systems; submit commissioning report and as-built energy model
5. **Handover & Post-occupancy:** Handover only after certification checklist and commissioning sign-off. Post-occupancy energy audit at 12 months and corrective action if EPI targets are not met.

8. Documentation & Evidence (for THE / audits)

For each covered project, maintain:

- Project Brief with energy objectives and chosen standard(s).
- Tender clauses and equipment specifications (efficiency ratings).
- Commissioning report, as-built drawings, sub-meter readings.
- Third-party certification documents (GRIHA/IGBC/ECBC compliance certificate) or a written exemption rationale if certification not pursued.

9. Exceptions & Phased Implementation

- Small, low-impact renovations may use a simplified compliance route (checklist + functional tests) but must still meet key efficiency measures (lighting, controls, HVAC replacements).
- Where full third-party certification is not feasible (budget constraints), projects must document a binding action plan to meet energy targets and undergo independent ECBC compliance verification.

10. Monitoring, Reporting & Continuous Improvement

- The Sustainability / Energy Cell will maintain a central register of all certified/compliant projects and publish an annual energy performance report.
- Conduct energy performance reviews at 1 year and 3 years after occupation; implement corrective actions if targets are not met. Consider rolling out ISO 50001 for campus-wide energy management where the cost-benefit is favourable.

11. Capacity Building & Procurement Preference

- The University will require bidders to show experience in ECBC/GRIHA/IGBC projects and will prioritise suppliers/contractors with proven energy-efficiency credentials.
- Provide periodic training for CPPO, project teams, and facilities staff on code updates and best practices.

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12. Review Frequency

This policy is reviewed every **two years** or more frequently when national/regulatory codes (ECBC, ECSBC, NBC) or the University's strategy change. The Sustainability / Energy Cell will propose updates.

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