Energy Efficiency Policy

1. DOCUMENT METADATA

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Policy Owner	CLM Office	Effective Date	19-04-2024
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2. POLICY FRAMEWORK

2.1. Purpose & Objective

SRM University-AP is committed to the responsible and efficient use of energy across its academic, research, residential, administrative and support activities. This Policy establishes a university-wide framework to avoid unnecessary energy consumption, improve the energy performance of buildings and equipment, reduce energy waste and associated greenhouse-gas emissions, and embed energy efficiency in planning, procurement, construction, renovation and daily operations.

This is a forward-looking institutional policy. It establishes requirements and responsibilities irrespective of the energy systems, meters, building controls or renewable-energy installations currently available. Implementation status and performance must be reported using verified evidence and must not be inferred from the existence of this Policy alone.

The objectives of this Policy are to:

- Reduce avoidable energy consumption and improve energy performance over time, using a documented baseline and measurable targets.
- Require energy-efficiency standards to be considered in all new buildings, major renovations, retrofits and relevant infrastructure projects.
- Identify and prioritise existing buildings, systems and activities with significant energy-saving potential.
- Measure and review energy consumption and energy-use intensity using consistent methods and documented records.
- Integrate lifecycle energy performance into procurement, design, operation, maintenance and replacement decisions.
- Support appropriate reductions in energy-related greenhouse-gas emissions and complement the University's climate and sustainability commitments.
- Promote energy-conscious practices among students, faculty, researchers, staff, contractors and campus service providers.



- Maintain evidence that is auditable and, where appropriate, publicly accessible for institutional reporting and sustainability assessments.

2.2. Scope of Application

This Policy applies to all University-controlled or University-operated campuses, buildings, laboratories, classrooms, offices, libraries, hostels, residences, kitchens, sports and common facilities, utilities, workshops, data/IT facilities, and other relevant infrastructure. It applies to energy purchased, generated, consumed or controlled by the University, including electricity and fuels used in buildings and associated equipment.

The requirements apply to university departments, schools, centres, project teams, facilities and maintenance teams, procurement and finance functions, contractors, consultants, construction and renovation partners, and other parties acting on the University's behalf. Where operational control is shared or rests with a third party, the responsible University office shall seek equivalent energy-efficiency provisions through contracts, service-level agreements or coordination arrangements.

2.3. Definitions & Glossary

- Energy efficiency: delivering the required service or output with lower energy input, without compromising safety, research integrity, accessibility or essential service quality.
- Energy baseline: a documented reference period and set of energy data used to compare performance and track progress.
- Energy-use intensity (EUI): energy consumed over a defined period divided by a relevant activity or area measure, such as building floor area, where data quality permits.
- Energy review/audit: a documented assessment of energy use, significant energy-consuming systems, operating practices, losses and opportunities for improvement.
- Major renovation: a renovation or retrofit project that materially affects a building's envelope, lighting, HVAC, electrical systems or other significant energy-consuming systems. The responsible technical office shall define project thresholds in implementing procedures.
- Energy performance: measurable results related to energy use, consumption and efficiency.

2.4. Policy Statements

1. Energy-efficiency standards for new buildings and renovations

- All new buildings and major renovation projects shall incorporate applicable national and state building requirements and recognised energy-efficiency standards, codes or equivalent technical benchmarks, as determined by the competent technical authority.

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- Energy performance shall be considered from the concept and design stage, including building orientation and envelope, daylighting, ventilation, efficient lighting, HVAC design, controls, equipment selection and commissioning.
- Project briefs, tender documents and contracts shall specify relevant energy-efficiency requirements and require appropriate design review, commissioning, testing or handover documentation.
- Where a recognised certification or standard is pursued, the project team shall retain the applicable design, compliance, certification or assessment evidence. Any claim of certification must be supported by a valid record.
- Where a requirement cannot reasonably be met, the project owner shall document the technical, safety, legal or financial justification and obtain approval through the designated exception process.

2. Improving the efficiency of existing buildings

- The University shall establish and periodically update a prioritised plan for improving the energy performance of existing buildings and major energy-consuming systems.
- Priority shall be informed by energy use, operating hours, floor area, building function, equipment age, occupant comfort, research and laboratory requirements, maintenance history, and opportunities for cost-effective savings.
- Potential measures may include efficient lighting and controls, HVAC optimisation, temperature and scheduling controls, equipment upgrades, insulation and shading, sealing of air leakage, power management, preventive maintenance, and replacement of inefficient equipment.
- Retrofits shall be evaluated for lifecycle cost, energy savings, service reliability, safety, indoor environmental quality and compatibility with specialised research or laboratory needs.
- Projects shall record the intervention, approval, commissioning or handover details, and post-implementation performance where measurement is feasible.

3. Energy reviews and identification of waste

- The University shall conduct periodic energy reviews to identify significant energy uses, avoidable consumption, abnormal patterns and opportunities for improvement.
- Reviews may use utility bills, sub-meter data, equipment inventories, building inspections, operating schedules, building-management-system data, audits and staff observations, as available.
- The frequency and depth of reviews shall be proportionate to energy use, risk, building function and available resources. High-consumption buildings and systems should receive priority.

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- Each review shall document the scope, period, data sources, key findings, recommended actions, responsible owner and target completion date.
- Findings shall be translated into a corrective-action or energy-improvement register, with progress reviewed by the designated policy owner.

4. Energy measurement, baseline and reporting

- The University shall maintain a central record of energy consumption for the areas and activities within its operational control, using utility bills, fuel records, meter readings and other verifiable sources.
- Energy data should cover the whole University wherever practicable. Where only partial coverage is available, the coverage and limitations shall be explicitly documented and a plan for improving coverage established.
- The University shall establish a baseline year or period and calculate relevant indicators, such as total electricity use, fuel use, total energy in a consistent unit, building floor area and energy-use intensity, where reliable data are available.
- Energy generated on site and energy purchased shall both be included in total energy-use accounting, while avoiding double-counting of generated energy that is subsequently consumed.
- Conversions between units shall use documented and consistently applied conversion factors. Estimates shall be labelled as estimates, with assumptions and calculation methods retained.
- Annual energy performance shall be reviewed against the baseline, targets and previous reporting periods. Material changes in floor area, occupancy, operating hours or research activity should be considered when interpreting results.

5. Energy-efficiency plan and targets

- The designated policy owner, in coordination with Facilities and other relevant offices, shall maintain a documented Energy Efficiency Plan.
- The Plan shall include the baseline, energy data coverage, identified significant energy uses, priority projects, measurable targets, actions, responsible persons, timelines, resource requirements and monitoring arrangements.
- Targets shall be evidence-based and approved by the competent authority. They may address absolute energy consumption, energy-use intensity, building or equipment performance, implementation of audit recommendations, or other relevant indicators.
- The Plan shall be reviewed at least annually and revised when monitoring, audits, major changes in campus operations or new technical requirements indicate that revision is necessary.
- The University shall not report an achieved target or a quantified saving unless the result is supported by appropriate records and a stated calculation method.

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6. Procurement, equipment and operational practices

- Energy efficiency and lifecycle energy cost shall be considered in procurement of appliances, laboratory equipment, IT systems, lighting, HVAC equipment, pumps, motors, lifts and other significant energy-consuming assets, subject to functional, safety and research requirements.
- Procurement specifications should prefer equipment with applicable energy-performance labels, ratings or recognised efficiency standards where available and appropriate.
- Equipment sizing and specifications shall be based on actual or reasonably forecast demand; unnecessary oversizing and continuous operation should be avoided.
- Departments shall implement suitable shutdown, sleep, scheduling and standby-management practices when these do not compromise experiments, sample integrity, safety, security or essential services.
- Facilities and maintenance teams shall maintain equipment according to manufacturer recommendations and shall investigate avoidable losses, poor control settings, leaks, simultaneous heating and cooling, and abnormal consumption where relevant.
- Energy-saving measures shall not override laboratory safety, biosafety, chemical storage, cold-chain requirements, IT resilience, accessibility, or statutory obligations.

7. Lighting, HVAC and building controls

- Lighting and HVAC systems shall be designed, operated and maintained to provide required illumination, thermal comfort, ventilation and indoor environmental quality with reasonable energy efficiency.
- Where appropriate, the University shall use zoning, occupancy/daylight sensors, timers, temperature set-points, scheduling, variable-speed controls and other suitable control strategies.
- Operating schedules shall reflect actual building use and occupancy, while accommodating extended research hours and critical facilities.
- Control settings shall be reviewed periodically and after major changes in building use or equipment.

8. Renewable energy and carbon management interface

Energy efficiency shall be pursued as a priority alongside the responsible evaluation of renewable and other lower-carbon energy options. This Policy does not by itself constitute a renewable-energy pledge, divestment policy or complete greenhouse-gas inventory. Energy-related emissions shall be accounted for through the University's applicable carbon-management or climate policy and documented methods.

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9. Awareness and engagement

- The University shall provide periodic communication or awareness activities on practical energy conservation and efficient use of facilities.
- Departments and facility managers shall communicate relevant operating practices to occupants and service providers.
- Feedback on energy waste and improvement opportunities shall be encouraged and routed to the designated responsible office.

10. Public transparency and evidence

The University shall make the approved Policy and suitable non-confidential summaries of its implementation framework publicly accessible through an official institutional webpage or other stable public location. Supporting evidence may include approved plans, standards used, audit summaries, energy dashboards or annual reports, subject to privacy, safety, procurement and security restrictions. Public claims shall be accurate, dated and traceable to underlying records.

11. Implementation and accountability

- Within a reasonable period after approval, the policy owner shall coordinate an implementation plan assigning accountable offices, deliverables and timelines.
- The University shall identify available energy data, gaps in coverage, relevant building and equipment inventories, and a practical sequence for establishing the baseline and conducting reviews.
- Priority actions shall be entered in an Energy Improvement Register, including the finding or opportunity, action owner, expected outcome, target date, status and evidence of completion.
- Where feasible, energy-efficiency measures shall be assessed after implementation to verify whether the intended outcome was achieved.

2.5. Nodal Department and Responsibility

- Board of Governors / competent approving authority: approve the Policy and material revisions; review institutional performance where required.
- Policy owner / CLM Office: coordinate implementation, maintain the policy and action register, consolidate evidence, track KPIs, facilitate annual review and coordinate public disclosure.
- Facilities, Engineering and Maintenance: maintain energy records within their remit; coordinate energy reviews, audits, operational controls, maintenance and efficiency projects; verify technical outcomes.
- Planning, Design and Project teams: incorporate applicable energy-efficiency requirements in new construction, renovation, retrofit design, tendering, commissioning and handover.

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- Procurement and Finance: incorporate approved energy-performance criteria and lifecycle-cost considerations in procurement and project appraisal; retain relevant procurement and expenditure records.
- Schools, departments, laboratories, centres and administrative units: identify significant energy uses, follow operating practices, report abnormal consumption and support reviews and improvement actions.
- Information Technology and specialised facility managers: implement suitable power-management measures while preserving system reliability, research needs and information security.
- Human Resources, communications and sustainability-related units: support awareness, training and communication as assigned.
- Contractors, consultants and service providers: comply with relevant contractual energy-efficiency requirements and provide records required to verify performance.
- All campus users: use energy responsibly, avoid unnecessary operation of equipment and report suspected waste or faults.

3. COMPLIANCE AND EXCEPTIONS

- Exceptions: Exceptions to this Policy must be documented, justified and approved by the designated authority. Exceptions shall be time-bound where appropriate and include mitigating measures.
- Non-Compliance: Non-compliance, significant energy waste or material data-quality concerns shall be referred to the relevant supervisor and policy owner for corrective action.

4. ROLES & RESPONSIBILITIES (RACI MATRIX)

Task / Activity	CLM Office	Facilities / Engineering	Planning / Projects / Procurement	Departments / Units
Policy coordination and implementation plan	A	C	C	I
Energy data collection and baseline	A	R	I	C
Energy reviews and audits	A	R	I	C
Standards for new buildings and major renovations	I	C	A	I
Retrofits and efficiency improvement projects	C	A	R	C



Task / Activity	CLM Office	Facilities / Engineering	Planning / Projects / Procurement	Departments / Units
Procurement of energy-efficient equipment	C	C	A	I
Operational practices (shutdown, scheduling, controls)	I	A	I	R
Awareness and engagement	A	C	I	R
KPI tracking, evidence and public disclosure	A	C	C	C
Annual review of Plan and targets	A	R	C	C

(R = Responsible, A = Accountable, C = Consulted, I = Informed)

5. DATA COLLECTION & MONITORING

Key Performance Indicators (KPIs):

The policy owner shall select and report indicators appropriate to the University's data availability and approved targets. At a minimum, the following should be considered:

- Annual total electricity consumption and other energy consumption, with units and source records.
- Total energy consumed in a consistent unit, with purchased and on-site generated energy accounted for without double-counting.
- University-controlled building floor area and energy-use intensity where reliable data are available.
- Percentage of buildings or energy-consuming areas covered by measured or documented energy data.
- Number and proportion of new-build/major renovation projects reviewed against the applicable energy-efficiency standards.
- Number of existing buildings or major systems reviewed, audited or included in an upgrade plan.
- Number of energy-saving actions identified, completed and pending, with supporting evidence.
- Progress against approved energy-consumption or energy-intensity targets.
- Energy savings and associated emissions reductions only where a documented method supports the calculation.
- Training, communication or awareness activities conducted, where applicable.



Data Quality:

- Energy data shall be traceable to bills, meter readings, fuel purchase and use records, equipment logs, audit reports or other verifiable sources.
- The University shall define a responsible data custodian for each major data source and a process for checking completeness, consistency and anomalies.
- Calculation methods, conversion factors, assumptions, reporting boundaries and any estimation methods shall be documented and applied consistently.
- Record Retention: Records supporting policy implementation and sustainability reporting shall be retained for at least five years, or longer where required by university rules, law, grant conditions or applicable reporting requirements.
- Audit: Internal review or audit may be undertaken periodically to assess compliance, data reliability, action closure and progress against targets.
- Review and Continuous Improvement: The Policy shall be reviewed at least once every three years and sooner where required by changes in law, applicable energy codes or standards, campus operations, audit findings or institutional sustainability priorities. The Energy Efficiency Plan and performance indicators shall be reviewed at least annually. Proposed revisions shall be documented and submitted to the competent approving authority.

6. VERSION HISTORY

Version	Date	Author/Editor	Summary of Changes
1.0	19-04-2024	CLM Office	Initial release.

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