MISAMIS UNIVERSITY

Ozamiz City

Quality Assurance Office

Government Advisory, Technical Assistance, and Policy Support on Clean Energy and Energy-Efficient Technologies Policy and Procedure

1. Policy Statement

Misamis University commits to serving as an authoritative academic, scientific, and engineering partner to local, regional, and national government bodies in the formulation, evaluation, and implementation of clean energy and energy-efficient technology policies. The University shall proactively translate its research outputs, technical models, and engineering expertise into actionable policy briefs, Local Energy Efficiency and Conservation Plans (LEECPs), renewable energy feasibility studies, and regulatory impact assessments.

Withholding publicly relevant clean-energy research findings from partner government agencies, engaging in partisan or commercially biased policy lobbying that contradicts scientific and engineering evidence, or executing public-sector energy advisories without rigorous peer validation and conflict-of-interest disclosure are strictly prohibited. All academic colleges, research centers, and extension units shall actively engage with Local Government Units (LGUs), regional research consortia, electric cooperatives, and national line agencies to accelerate evidence-based public energy transition and efficiency governance.

2. Purpose

This policy establishes institutional mechanisms, technical advisory workflows, and governance controls that enable the University to systematically inform and support government policy development in clean energy and energy-efficient technologies; fulfill public-sector capacity-building mandates under Republic Act No. 11285 (Energy Efficiency and Conservation Act) and Republic Act No. 9513 (Renewable Energy Act); support the University's ISO 21001 Educational Organizations Management System (EOMS); and provide auditable evidence for global sustainability reporting, specifically Times Higher Education (THE) Impact Rankings under SDG 7 (Indicator 7.4.4).

3. Scope

This policy applies to all Misamis University academic colleges (particularly the College of Engineering and Technology, Graduate School, and College of Arts and Sciences), the Misamis University Research Center (MURC), the Misamis University Community Extension Program (MUCEP), the Campus Engineering Office, and external linkages offices. It covers all formal and informal policy advisories, technical working group (TWG) representations, legislative/ordinance consultations, LGU energy audits, joint DOST/DOE research grants, and public-sector capacity-building programs. It binds University administrators, faculty researchers, graduate students, extension personnel, and seconded technical experts.

4. Definitions

Term	Definition
Clean Energy Policy Support	The provision of empirical data, power system simulations, techno-economic

	modeling, and regulatory recommendations to government entities to advance solar PV, hydro, wind, biomass, battery energy storage systems (BESS), microgrids, and virtual power plants (VPPs).
Energy-Efficient Technology Advisory	Technical guidance provided to public bodies regarding green building codes, public street-lighting LED retrofits, high-efficiency municipal pumping, smart metering, and government facility demand-side management.
Local Energy Efficiency and Conservation Plan (LEECP)	The mandatory multi-year energy transition and conservation plan required of all Philippine Local Government Units (LGUs) under RA 11285 and DILG-DOE Joint Memorandum Circulars.
Policy Brief	A concise, evidence-based document prepared by University researchers translating academic findings or engineering simulations into specific legislative, ordinance, or regulatory recommendations for government decision-makers.
Technical Working Group (TWG)	An official multi-sectoral committee convened by a government agency, legislative body, or regional development council where University faculty serve as subject-matter experts.
Government Partner Entity	Any municipal, city, or provincial LGU, national line agency (DOE, DOST, DENR, DILG, NEDA), regional R&D consortium (e.g., NorMinCIEERD), or local distribution utility/electric cooperative (e.g., MOELCI-II).

5. Responsibilities

Role	Responsibilities
University President or Authorized Official	Approves institutional Memoranda of Understanding/Agreement (MOUs/MOAs) with government bodies, authorizes official policy position papers, and grants faculty service credits or deloading for government advisory roles.
Misamis University Research Center (MURC)	Directs clean-energy and load-forecasting research programs; coordinates with DOST-PCIEERD and NorMinCIEERD; reviews and validates technical policy briefs; and tracks research-to-policy translation metrics.
College of Engineering and Technology (CET) & Graduate School	Provides licensed Professional Electrical/Mechanical/Civil Engineers (PEE/PME/CE) and faculty researchers to conduct grid modeling, LGU energy audits, renewable microgrid design, and ordinance reviews.
Misamis University Community Extension Program (MUCEP)	Facilitates LGU partnerships, organizes public-sector training workshops on LEECP formulation and GEMP compliance, and deploys community renewable energy and water-energy infrastructure projects.
Physical Plant / Campus Engineering Office	Shares institutional living-lab data (campus Solar PV, BESS, sub-metering, and building EUI benchmarks) with LGUs and government agencies as replicable technical models.
Quality Assurance Office	Audits policy-support documentation under the ISO 21001 EOMS

	framework and compiles verified evidence for THE Impact Rankings (SDG 7.4.4).

6. Procedure

6.1 Identification of Government Policy Needs and Institutional Alignment

1. At the start of each academic year, the Misamis University Research Center (MURC), College of Engineering and Technology (CET), and MUCEP shall consult with city, municipal, and provincial LGUs (e.g., Ozamiz City, Misamis Occidental, Lanao del Norte, Zamboanga del Sur), regional agencies (NEDA-X, DOST-X, DOE Mindanao Field Office), and MOELCI-II to identify priority policy and technical gaps in clean energy and energy efficiency.

2. Faculty and master's/doctoral thesis research agendas shall be aligned to address regional public-sector challenges, including machine-learning load forecasting, photovoltaic-BESS microgrid sizing, virtual power plant (VPP) aggregation, and energy-efficient community water reservoir pumping systems.

6.2 Structured Channels for Government Policy Development and Support

Misamis University shall inform and support government policy development across five (5) standardized institutional mechanisms:

Policy Support Mechanism	Target Government / Public Body	Applicable Regulatory / Technical Framework	Tangible University Deliverable
1. Local Energy Efficiency & Conservation Plan (LEECP) Formulation	Municipal, City, and Provincial LGUs (Planning, Engineering, &EEC Offices)	RA 11285; DILG-DOE JMC No. 2020-01; GEMP Guidelines	Co-drafting of LGU LEECP documents, municipal baseline energy audits, and local green building/solar ordinance templates.
2. Evidence-Based Policy Briefs & Techno-Economic Modeling	DOE, DOST-PCIEERD, NorMinCIEERD, NEDA Regional Development Council	Philippine Energy Plan (PEP); RA 9513 (Renewable Energy Act)	Submission of peer-reviewed policy briefs on PV microgrids, BESS integration, load forecasting, and water-energy nexus optimization.
3. Representation in Government Technical Working Groups (TWGs)	Sangguniang Panlungsod / Panlalawigan Committees, R&D Consortia, IIEE Chapters	Local Government Code (RA 7160); PEC Part 1 & 2; PGBC	Official expert testimony, committee position papers, and technical review of local energy/infrastructure codes and ordinances.
4. Public Infrastructure Audits & Clean Technology Feasibility Studies	LGUs, Public Hospitals/Schools, Barangay Water Districts, Electric Cooperatives	ASHRAE Level 1/2 Audit Standards; IEEE 1547 (DER Interconnection)	Engineering feasibility studies for solar street lighting, public building solar-PV retrofits, and high-efficiency pumping.
5. Capacity Building for Government	LGU Designated Energy Efficiency and	RA 11285 Capacity-Building Mandates; ISO	Training workshops on GHG accounting (ISO 14064), energy

Engineers & Policy Officers	Conservation Officers (DEECOs)	50001:2018	auditing, life-cycle cost analysis (LCCA), and green public procurement.

6.3 Research-to-Policy Translation and Policy Brief Protocol

1. Every externally or internally funded University research project involving renewable energy, battery storage, smart grids, energy conservation, or environmental engineering must produce a two-to-four-page Executive Policy Brief upon completion.

2. The Policy Brief shall be structured for non-specialist policymakers and must contain: (a) Context and Regulatory Problem Statement, (b) Empirical/Simulation Methodology and Key Findings, (c) Techno-Economic and Carbon Impact Analysis, and (d) Concrete Legislative or Administrative Policy Recommendations.

3. All Policy Briefs shall undergo technical peer review by the CET Dean and MURC Director before official transmittal to the target government agency.

6.4 Techno-Economic and Environmental Impact Verification

When advising government entities on clean energy capital projects or efficiency ordinances, University engineering teams shall quantify public benefits using standardized decision metrics, including Net Present Value (NPV), Levelized Cost of Energy (LCOE), and Public Carbon Abatement:

$$\text{LCOE (PHP/kWh)} = \left[\Sigma \left(\text{Capital}_t + \text{O\&M}_t + \text{Fuel}_t\right) / (1 + r)^t \right] / \left[\Sigma \left(\text{Energy Generated}_t\right) / (1 + r)^t \right]$$

6.5 Living-Lab Demonstration and Open Data Sharing

1. Misamis University shall operate its campus infrastructure as an open 'Living Laboratory' for regional policymakers, allowing LGU officials and government engineers to inspect campus rooftop Solar PV installations, BESS units, Automatic Power Factor Correction (APFC) systems, and green building retrofits.

2. Aggregated, non-confidential campus energy performance data (EUI reductions, solar yield profiles, and payback periods) shall be shared with government partners to de-risk public-sector adoption of clean technologies.

6.6 Academic Independence, Ethics, and Conflict-of-Interest Controls

All faculty and staff representing the University in government policy consultations or TWGs shall:

- Maintain strict scientific objectivity and vendor neutrality, recommending performance-based technical specifications (e.g., IEC, IEEE, PEC, DOE 5-Star standards) rather than proprietary commercial brands;
- Disclose any financial, consulting, or familial ties to energy suppliers or contractors prior to participating in government advisory work; and
- Execute formal Memoranda of Understanding (MOUs) or Non-Disclosure Agreements (NDAs) when handling sensitive government utility grid data or infrastructure plans.

7. Competence and Communication

Faculty members and researchers assigned to government policy advisory panels shall hold relevant graduate qualifications (Master's or Doctorate in Electrical/Mechanical Engineering, Environmental Science, or Public Management), active PRC professional licenses, or certifications in energy management and policy analysis.

Through professional organizations such as the Institute of Integrated Electrical Engineers (IIEE) and regional consortia like NorMinCIEERD, the University shall co-host annual Policy Forums and Clean Energy Summits bridging academia, government, and electric utilities.

8. Records

The Misamis University Research Center (MURC), MUCEP, College of Engineering and Technology, and Quality Assurance Office shall maintain the following auditable records:

- Approved Policy and signed MOUs/MOAs with Local Government Units (LGUs), DOST, DOE, and electric cooperatives
- Published Policy Briefs, White Papers, and Position Papers transmitted to government bodies (with official receiving stamps/acknowledgments)
- Co-developed Local Energy Efficiency and Conservation Plans (LEECPs) and draft local ordinances
- Official appointment letters, attendance sheets, and minutes from Government Technical Working Groups (TWGs) and public hearings
- LGU facility energy audit reports, solar/microgrid feasibility studies, and community water-energy infrastructure proposals
- Training documentation, syllabi, and attendance registries from capacity-building workshops for government personnel
- Internal audit reports and ISO 21001 Management Review minutes

Records shall be controlled, protected, retrievable, and retained in accordance with the University Records Retention Policy and sustainability reporting cycles.

9. Monitoring and Evaluation

The MURC, MUCEP, and Quality Assurance Office shall monitor and evaluate the University's government policy impact annually during the ISO 21001 Management Review. At a minimum, the University shall track:

- **Number of Policy Briefs and Technical Studies Submitted:** Count of clean-energy and energy-efficiency policy briefs or feasibility studies formally transmitted to local, regional, or national government agencies (Target: ≥2 per academic year);
- **LGU and Government Agency Partnerships:** Number of active MOUs/MOAs and LGUs assisted in formulating or updating their Local Energy Efficiency and Conservation Plans (LEECPs);
- **TWG and Committee Representation:** Number of faculty experts serving on government advisory boards, regional R&D consortia (NorMinCIEERD), or legislative consultations;
- **Public-Sector Capacity Building:** Number of government engineers, DEECOs, and LGU officials trained in clean energy and energy efficiency technologies; and
- **Policy Adoption Rate:** Number of University recommendations adopted into local ordinances, agency guidelines, or funded public infrastructure projects.

10. Review and Continual Improvement

This policy shall be reviewed at least annually and whenever there are updates to the Philippine Energy Plan (PEP), RA 11285 / DILG-DOE JMC guidelines, DOST National Harmonized R&D Agenda (NHRDA) priorities, ISO 21001 standards, or Times Higher Education (THE) Impact Rankings methodology for SDG 7 (Indicator 7.4.4).

11. Noncompliance

Unauthorized use of the University's name to endorse commercial energy vendors to government bodies, falsification of technical modeling data in policy briefs, or breach of government data confidentiality shall result in revocation of advisory authority, administrative or disciplinary action under University rules, and corrective notification to the partner government agency.

12. Related Documents and Legal References

Reference	Application
Republic Act No. 11285 & DILG-DOE JMC No. 2020-01	Energy Efficiency and Conservation Act of 2019 and Joint Guidelines mandating LGUs to establish Local Energy Efficiency and Conservation Plans (LEECPs) in partnership with academic institutions.
Republic Act No. 9513	Renewable Energy Act of 2008; promotes academic-government collaboration in renewable energy resource assessment, microgrid deployment, and net-metering policies.
Philippine Energy Plan (PEP) & DOST Harmonized National R&D Agenda	National strategic frameworks guiding academic research and policy support in clean energy, energy storage, smart grids, and sustainable technologies.
Republic Act No. 7160 (Local Government Code of 1991)	Empowers LGUs to enact local environmental, building, and energy ordinances and engage higher education institutions as technical partners.
ISO 21001:2018 & ISO 50001:2018	Educational Organizations Management Systems (EOMS) and Energy Management Systems; govern social responsibility, knowledge transfer, and stakeholder engagement.
University Documents	EOMS Manual; Research and Development Manual; Community Extension (MUCEP) Manual; Institutional EE&C Plan Policy (SDG 7.2.4); Intellectual Property Policy; and Code of Ethics.