Westlock COUNTY
growing opportunity

POLICY NO. 1202-015 **May 27, 2025**
TITLE: ENERGY POLICY

PURPOSE: This policy establishes Westlock County's commitment to effective energy management, ensuring that reducing energy waste and promoting efficient energy use are central to all county operations. The policy outlined supports economic priorities, responsible environmental stewardship, community education on energy conservation, and enhanced health & safety outcomes.

SCOPE: This policy governs all energy usage across Westlock County operations, including facilities, transportation, procurement processes, and capital expenditures, impacting all departments.

1.0 DEFINITIONS:

1.1 "County" means the municipality of Westlock County.
1.2 "Corrective Maintenance" means maintenance performed to correct and restore failed equipment to proper operation.
1.3 "CSA (Canadian Standards Association)" refers to a standards organization that certifies products and services to ensure they meet recognized Canadian safety, performance, and environmental standards.
1.4 "DIY (Do It Yourself)" means tasks or projects carried out by individuals without professional assistance, often referring to home improvements or energy-saving actions that residents can perform on their own.
1.5 "Electric Vehicle (EV)" means a car or truck powered by electricity.
1.6 "ENERGY STAR" refers to a certification awarded to products, buildings, or equipment that meet high energy efficiency standards set by national agencies such as Natural Resources Canada.
1.7 "Energy Audit" refers to a systematic analysis to identify energy-saving opportunities.
1.8 "Energy Efficiency" means using less energy to perform the same task or produce the same result.
1.9 "Energy Management System (EMS)" refers to a system of hardware and software used to monitor, control, and optimize energy consumption.

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1.10 "Energy Resilience" refers to the ability of an energy system to withstand and recover from disruptions.

1.11 "Energy Stewardship" means responsible planning and management of energy resources for environmental, social, and economic sustainability.

1.12 "Environmental Product Declarations (EPDs)" refers to third-party verified documents that provide transparent information about the environmental impact of products throughout their lifecycle.

1.13 "EPEAT (Electronic Product Environmental Assessment Tool)" refers to a global ecolabel that rates electronic products based on environmental criteria such as energy efficiency, hazardous materials, and recyclability.

1.14 "Greenhouse Gas (GHG)" means gases such as carbon dioxide (CO_2) and methane (CH_4) that trap heat in the atmosphere.

1.15 "HVAC" refers to heating, ventilation, and air conditioning systems used to control the indoor climate.

1.16 "Idle Reduction" means practices aimed at minimizing the unnecessary idling of vehicle engines to conserve energy.

1.17 "ISO (International Organization for Standardization)" refers to an independent organization that develops global standards to ensure quality, safety, and efficiency.

1.18 "ISO 14001" refers to a standard developed by ISO for environmental management systems to improve environmental performance through efficient use of resources and waste reduction.

1.19 "ISO 50001" refers to a standard developed by ISO that provides a framework for establishing and maintaining energy management systems to improve energy performance.

1.20 "Lifecycle Energy Analysis" means evaluation of energy use and cost over a product or project's entire lifespan.

1.21 "Life Cycle Assessment (LCA) Software" refers to digital tools used to assess the environmental impact of products or systems over their entire lifecycle.

1.22 "Light Emitting Diode (LED)" means an energy-efficient lighting technology.

1.23 "Public-Private Partnership" means a cooperative arrangement between public and private sectors to finance and deliver projects.

1.24 "Proactive Maintenance" means maintenance that includes predictive, preventive, and corrective practices to prevent energy waste.

1.25 "Predictive Maintenance" means using data and analytics to predict equipment failure before it occurs.

1.26 "Preventive Maintenance" means scheduled servicing to prevent equipment failures and energy waste.

1.27 "Renewable Energy" means energy from sources that naturally replenish, such as solar, wind, geothermal, or hydro.

1.28 "Smart Technology" means technology integrated with sensors or controls to automate and optimize energy use.

1.29 "Total Cost of Ownership (TCO)" refers to the full cost of a product or system over its entire lifespan, including purchase, operation, maintenance, and disposal.

2.0 GENERAL PRINCIPLES:

2.1 Efficient Energy Management

2.1.1 The County shall invest in energy-efficient systems, smart technologies, and proactive maintenance strategies to minimize energy consumption across all operations.

2.2 Economic Energy Utilization

2.2.1 The County shall optimize energy use within municipal buildings, vehicle fleets, and infrastructure to achieve cost reductions and fiscal responsibility.

2.3 Agricultural and Renewable Energy Synergy

2.3.1 The County shall promote the integration of renewable energy solutions within the agricultural sector to stimulate local economic development and decrease dependence on external energy markets.

2.4 Integrated Health, Safety, and Energy Initiatives

2.4.1 The County shall develop and implement initiatives that harmonize energy management with health and safety protocols, ensuring that energy systems contribute to a secure working environment.

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2.5 Civic Participation and Outreach

2.5.1 The County shall actively disseminate information to the community to promote energy conservation, cost reduction, and the adoption of energy-conscious behavior.

3.0 FACILITIES:

3.1 Energy Monitoring and Audits

3.1.1 The County shall implement Energy Management Systems (EMS), guided where appropriate by the ISO 50001 framework, in all municipal facilities and conduct regular energy audits to identify and rectify inefficiencies.

3.1.2 The County shall support these systems with regular, proactive, and preventive maintenance practices to maintain peak performance and prevent energy waste.

3.1.3 The County shall ensure that findings from energy audits inform maintenance schedules and system upgrades aligned with preventive and proactive maintenance strategies.

3.2 Renewable Energy Integration

3.2.1 Where feasible, the County shall adopt renewable energy systems to improve energy sustainability and significantly reduce dependency on non-renewable energy sources across all County facilities.

3.3 Retrofitting for Energy Efficiency

3.3.1 The County shall upgrade facilities with energy-efficient measures, such as air tightening and insulation, LED lighting, and high-efficiency HVAC systems, to significantly reduce energy consumption and operational costs.

3.4 Energy and Smart Safety Systems

3.4.1 The County shall enhance safety protocols by integrating energy management systems that can automatically shut down in hazardous conditions to prevent accidents.

3.4.2 The County shall implement emergency energy controls in facilities to ensure safe operations during power failures or other energy-related emergencies.

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3.5 Support for Community-Owned Facilities

3.5.1 The County shall seek grant funding opportunities to enhance energy efficiency in non-profit and community-owned facilities, thereby contributing to their vibrancy and resilience.

4.0 TRANSPORTATION AND VEHICLES:

4.1 Vehicle Monitoring and Route Optimization

4.1.1 The County shall implement energy monitoring tools in vehicles that can alert drivers to maintenance needs, preventing breakdowns and ensuring safer operations.

4.1.2 The County shall optimize fleet routes and schedules to minimize unnecessary energy consumption.

4.2 Idle Reduction

4.2.1 The County shall enforce idle reduction policies to decrease the energy wasted through unnecessary idling of County-operated vehicles, directly addressing energy waste.

4.3 Driver Efficiency Training

4.3.1 The County shall combine energy efficiency training with safety training.

4.3.2 The County shall train all vehicle operators in fuel-efficient driving techniques, such as smooth acceleration, reduced braking, and maintaining proper tire pressure, to improve energy efficiency while emphasizing safe driving practices.

4.4 Fleet Modernization

4.4.1 The County shall prioritize the gradual replacement of County vehicles with fuel-efficient, hybrid, or electric models to significantly reduce energy consumption, operational costs, and environmental impacts.

4.5 Energy-Supportive Infrastructure

4.5.1 Explore opportunities to develop charging infrastructure for County-owned electric vehicles to support the operation of energy-efficient vehicles within the County.

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5.0 PROCUREMENT:

5.1 Energy Efficient Procurement

5.1.1 The County shall ensure that all procurement decisions incorporate energy efficiency and sustainability criteria tailored to the nature and scale of the purchase. A tiered approach shall be adopted:

i. High-Impact or Capital Purchases:

- Require formal lifecycle energy and environmental analysis using tools such as
  a. Total Cost of Ownership (TCO),
  b. ENERGY STAR ratings,
  c. Environmental Product Declarations (EPDs), or
  d. Life Cycle Assessment (LCA) software.
- Vendors must provide energy efficiency data and warranty terms.

ii. Mid-Level Equipment and Supplies:

- Prioritize products that meet recognized environmental certifications such as
  a. ENERGY STAR,
  b. EPEAT,
  c. CSA Energy Efficiency Verified, or
  d. ISO 14001.
- Consider cost over product lifespan rather than lowest up-front cost.

iii. Routine Consumables and Low-Cost Purchases:

- When practical, select environmentally preferable products that are nontoxic, low-waste, recyclable, or refillable.
- Use green product catalogues and vendor scorecards for routine selections.

5.2 Energy and Cost-Informed Investments

5.2.1 The County shall prioritize capital projects that incorporate energy-efficient designs, equipment, and systems demonstrating long-term cost savings and environmental benefits.

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5.2.2 The County shall require all new County buildings and major renovations to meet energy efficiency standards appropriate to the project size, budget, and function.

5.2.3 The County shall use lifecycle cost analysis, energy modeling, or cost-benefit tools where practical to guide investment decisions.

5.2.4 The County shall balance performance targets with available funding and expected impact, ensuring energy investments are also fiscally responsible.

5.2.5 The County shall include consideration of maintenance, comfort, safety, and reliability in energy investment evaluations.

5.3 Energy Grant and Funding Utilization

5.3.1 The County shall actively seek government and industry funding opportunities for energy efficiency and energy waste reduction projects, leveraging external resources to support and expand local initiatives.

5.4 Public-Private Partnerships for Energy Efficiency

5.4.1 The County shall collaborate with local businesses, industries, and educational institutions to co-invest in energy-efficient solutions that benefit both the community and the local economy, fostering innovation and shared expertise.

6.0 ENERGY WASTE REDUCTION AND MONITORING:

6.1 Energy Reporting and Evaluation

6.1.1 The County shall issue annual reports on county-wide energy consumption, detailing cost savings, waste reduction progress, and efficiency improvements, to monitor performance and inform future initiatives.

6.1.2 The County shall highlight safety improvements resulting from energy projects, policies, or procurements, emphasizing the synergy between energy efficiency and workplace safety.

6.1.3 The County shall establish a formal feedback system to refine energy practices and policies based on audit findings, staff input, and emerging technologies.

6.2 Proactive Maintenance

6.2.1 The County shall use predictive maintenance tools to identify and resolve energy inefficiencies before they lead to excessive energy waste, breakdowns, or safety issues.

6.2.2 The County shall integrate preventive maintenance schedules with facility operations to extend equipment life, reduce unplanned downtime, and support energy goals.

7.0 COMMUNITY EDUCATION AND OUTREACH:

7.1 Public Energy Awareness Campaigns

7.1.1 The County shall initiate ongoing public education initiatives to inform residents, businesses, and farmers about practical ways to reduce energy waste and lower energy costs.

7.1.2 The County shall provide workshops, webinars, open houses, or community meetings focused on home and business energy efficiency.

7.1.3 The County shall use newsletters, social media, posters, rural mail-outs, and radio to reach diverse segments of the community, including those with limited digital access.

7.2 Residential and Business Energy Efficiency Support

7.2.1 The County shall develop guides and checklists for residents and businesses on how to reduce energy waste and access energy efficiency rebates.

7.2.2 The County shall collaborate with utilities and energy experts to offer free or subsidized energy audits for local businesses and homeowners.

7.2.3 The County shall maintain a public-facing resource hub listing active rebate programs, local contractors, and DIY energy-saving tips.

7.3 Recognition and Incentives for Energy Efficiency

7.3.1 The County shall establish an Energy Efficiency Recognition Program to highlight residents and businesses implementing energy-saving measures.

7.3.2 The County shall explore incentive options such as certificates, awards, and grant funding for top-performing energy projects or community contributions.

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7.3.3 The County shall feature recognized champions in County communications to inspire others and build momentum for community-wide energy action.

8.0 CONCLUSION:

8.1 Commitment to Energy Efficiency

8.1.1 The County reaffirms its commitment to reducing energy waste, lowering operational costs, and improving energy performance across all County operations.

8.1.2 Energy efficiency and environmental stewardship shall remain central to planning, budgeting, procurement, and service delivery across departments.

8.2 Cross-Departmental Collaboration

8.2.1 The County shall encourage collaboration between departments to share best practices, align goals, and ensure coordinated implementation of energy-saving initiatives.

8.2.2 The County shall support training and knowledge-sharing opportunities for staff to strengthen internal capacity and drive continuous improvement in energy management.

9.0 REVIEW OF POLICY:

9.1 This policy will be reviewed every three years by the Chief Administrative Officer or their designate to ensure relevance and effectiveness.

9.2 Recommendations for updates will be based on audit results, performance data, new technologies, and feedback from County staff and the public.

9.3 Progress will be tracked and reported publicly to demonstrate accountability and transparency in achieving energy and sustainability goals.

10.0 END OF POLICY

Reeve

Chief Administrative Officer

June 3/2025

Date Signed

POLICY HISTORY:

First Enacted: May 27, 2025
Reviewed:
Reviewed and amended:

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