



General Sir John Kotelawala Defence University

POLICY FOR ENERGY EFFICIENT INFRASTRUCTURE

Policy Statement

KDU commits to integrating energy efficiency principles into all renovation and new construction projects. This policy aims to reduce energy consumption, minimize environmental impact, and optimize operational costs.

By adhering to this policy, KDU expects to reduce its energy consumption, lower operational costs, and contribute to a more sustainable future.

Objectives

1. Minimize energy usage in all KDU buildings and infrastructure to lower operational costs.
2. Reduce greenhouse gas emissions and promote sustainable practices by decreasing reliance on fossil fuels.
3. Lower long-term operational expenses by reducing energy consumption and maintenance costs.
4. Improve the overall performance of KDU buildings by optimizing energy efficiency and indoor environmental quality.
5. Cultivate a culture of sustainability within KDU by setting an example of energy-efficient practices.
6. Adhere to relevant local, national, and international energy efficiency standards and regulations.

Energy Efficiency Standards to be followed

Building Envelope:

- Maximize insulation in roofs and other places necessary.
- Utilize high-performance glazing to reduce heat loss and gain.
- Seal air leaks to prevent energy loss.

HVAC Systems:

- Install energy-efficient HVAC.

- Implement demand-controlled ventilation to optimize airflow.
- Utilize advanced control systems for precise temperature and humidity control.

Lighting Systems:

- Use energy-efficient LED lighting fixtures.
- Install occupancy sensors and timers to automate lighting control.

Water Heating Systems:

- Use solar water heating systems.
- Install high-efficiency water heaters.
- Implement low-flow fixtures.

Renewable Energy Sources:

- All new construction and major renovations must integrate solar energy sources.

Design and Construction Standards

- **Energy Modeling:** Conduct energy modeling to assess the energy performance of proposed designs for improvement.
- **Material Selection:** Prioritize the use of sustainable and energy-efficient building materials.
- **Construction Practices:** Adhere to energy-efficient construction practices, such as minimizing waste and maximizing insulation.
- **Commissioning and Verification:** Ensure that all systems are properly commissioned and verified to operate at peak efficiency.

Operations and Maintenance

- **Regular Maintenance:** Implement a comprehensive maintenance program to keep energy systems operating efficiently.
- **Monitoring and Optimization:** Monitor energy consumption and identify opportunities for improvement through optimization and retrofits.
- **Staff Training:** Provide training to staff on energy-efficient building operations and maintenance.

Policy Implementation

All renovation and new construction projects must undergo a rigorous design review process to ensure compliance with energy efficiency standards. KDU allocates sufficient funds for energy-efficient design and construction. Prioritize energy-efficient equipment and materials in procurement decisions. It is required to track energy consumption and report on progress towards energy efficiency goals.

Compliance and Enforcement

- **Compliance Officer:** Appoint a designated compliance officer/ Head of Project Management Unit responsible for overseeing the implementation of this policy.
- **Regular Audits:** Conduct periodic audits to assess compliance with energy efficiency standards.
- **Corrective Action:** Implement corrective action plans to address any identified deficiencies.

Review

This policy will be reviewed periodically to ensure its effectiveness and compliance with applicable laws and regulations. Any necessary updates will be made to maintain energy efficiency practices.

Related policies:

Water Reuse Policy

ECO-FRIENDLY GUIDELINES FOR KDU

Effective Date	5 th December 2023
Reviewed on	1 st August 2024