



Template for Evidence(s) UI GreenMetric Questionnaire

University : Sisaket Rajabhat University
Country : Thailand
Web Address : www.sskru.ac.th

[2] Energy and Climate Change (EC)

[2.16] Impact of Energy and Climate Change programs in supporting the Sustainable Development Goals (SDGs)



Green Building Systems of the Energy-Conserving Building Project

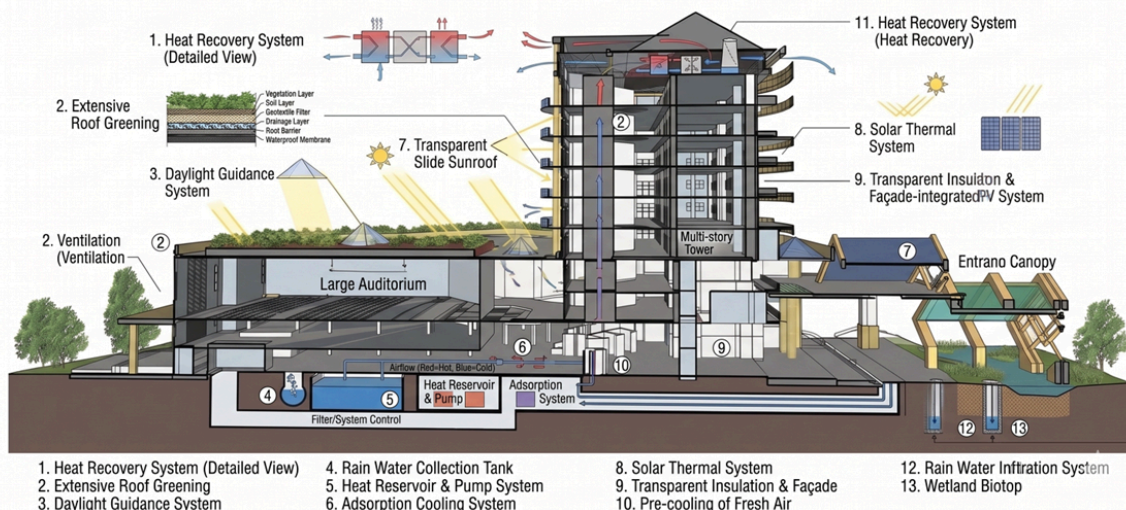


Figure: Energy and climate change programs at Sisaket Rajabhat University supporting renewable energy, energy efficiency, greenhouse gas reduction, and Sustainable Development Goals (SDGs).



Description:

The university has undertaken a wide range of energy and climate-related programs that contribute significantly to the achievement of Sustainable Development Goals (SDGs). These initiatives demonstrate a strong commitment to reducing carbon emissions, improving energy efficiency, promoting renewable energy utilization, and strengthening climate resilience. Key programs include:

- Installation of **solar photovoltaic (PV) systems** on campus buildings to generate renewable electricity and reduce dependence on fossil fuel-based energy sources. During 2025, the solar power system generated **435,536 kWh** of electricity.
- Utilization of **clean biomass energy** generated from wood waste and agricultural residues as renewable fuel sources to support sustainable energy production and resource utilization.
- Adoption of **energy-efficient appliances** across campus, including LED lighting systems, energy-saving air conditioners with Thailand's No. 5 Energy Efficiency Label, efficient electric fans, and Energy Star-certified computers, with an average implementation rate of **99.22%**.
- Implementation of **smart building technologies** covering **17 smart buildings (226,453 m²)** through automatic lighting systems, occupancy sensors, CCTV systems, access control systems, smart ventilation systems, and energy management systems to improve operational efficiency and reduce energy consumption.
- Development of **green building systems** through the Energy Conservation Building Project and BEC Award-certified building designs, emphasizing energy-efficient construction, renewable energy use, indoor environmental quality improvement, and water conservation.
- Implementation of **greenhouse gas reduction programs**, including free EV charging stations, solar energy utilization, carpooling campaigns, walking and cycling campaigns, and the "United for EV: Driving Toward a Better Environment" initiative to reduce transportation-related emissions.
- Establishment of innovative climate action and community-based projects, including carbon neutrality and greenhouse gas reduction programs, sustainable wastewater management, community forest conservation projects, and reduction of rice stubble burning among farmers in Sisaket Province.
- Conducting **annual carbon footprint assessments** following the UI GreenMetric methodology to monitor emissions and support evidence-based climate action planning.
- Promotion of circular economy practices through the **Green Cycle Project**, converting fallen leaves and organic waste into compost under the BCG (Bio-Circular-Green Economy) model.
- Collaboration with local communities, municipalities, and external organizations to strengthen climate adaptation, environmental education, and sustainable development initiatives.

These efforts directly support SDGs 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, and 17, and contribute indirectly to broader sustainability outcomes, including:

- **SDG 2 – Zero Hunger:** Supporting sustainable agriculture and food security initiatives.
- **SDG 3 – Good Health and Well-being:** Improving environmental quality and reducing pollution-related health risks.
- **SDG 4 – Quality Education:** Providing sustainable learning environments and climate-related education opportunities.
- **SDG 6 – Clean Water and Sanitation:** Supporting sustainable wastewater and water management systems.
- **SDG 7 – Affordable and Clean Energy:** Increasing the use of renewable and energy-efficient technologies.
- **SDG 8 – Decent Work and Economic Growth:** Supporting green innovation and community development initiatives.
- **SDG 9 – Industry, Innovation and Infrastructure:** Advancing smart infrastructure and technological



innovation.

- **SDG 10 – Reduced Inequalities:** Providing equitable access to sustainable infrastructure and environmental learning opportunities.
- **SDG 11 – Sustainable Cities and Communities:** Developing sustainable and low-carbon campus systems.
- **SDG 12 – Responsible Consumption and Production:** Promoting resource efficiency and circular economy practices.
- **SDG 13 – Climate Action:** Reducing greenhouse gas emissions and strengthening climate resilience.
- **SDG 15 – Life on Land:** Supporting biodiversity conservation and ecosystem protection.
- **SDG 16 – Peace, Justice and Strong Institutions:** Strengthening institutional sustainability through environmental governance, carbon monitoring, and evidence-based decision-making.
- **SDG 17 – Partnerships for the Goals:** Strengthening collaboration with communities and external stakeholders for sustainable development.

Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):