Green Energy and Energy Management Policy

Background

The energy crisis and global warming concerns are gaining much attention from governments to counteract their impacts on environment. This can be accomplished via distributed generation and efficient utilization of available renewable energy sources in cooperation with traditional ones. Since Arab Academy for Science and technology is considered as a center of excellence not only in Egypt but in the ARAB League, it is quietly concerned with energy research in the fields of optimal energy management, energy saving and diversion towards clean green energy not only within AASTMT campuses but also sustaining services to the surrounding community and environment. This comes in accordance with the AAST Strategic plan.

Consequently, AAST Energy Research Unit and Energy Management Committee have integrated these energy objectives with AASTMT environmental policy, Sustainable Investment Policy, and Consumption Recycling policy into the updated version of Green Energy and Energy Management policy. The **Green Energy and Energy Management Policy** version has been approved by 2023, then reviewed annually to make sure it remains effective, relevant, and aligned with current goals, technologies, and regulations. Regular reviews allow the institution to identify areas for improvement and incorporate new energy-efficient practices or innovations. This ongoing evaluation helps maintain accountability, supports sustainability and demonstrates AASTMT commitment to environmental responsibility and sustainable energy management.

Policy

Energy-efficient facilities

- Ensuring all renovations or new buildings follow energy efficiency standards in lighting, HVAC ...etc
- Analysis of energy demand, updating development priorities and upgrading the existing facilities.
- Ensuring the implementation of smart building technology by employing clean energy, energy efficiency strategies and Building Management System (BMS) in new buildings design.
- Utilizing the unused space to build clean energy resources such as PV plants and Solar heaters.

Regular Monitoring

- Performing regular (online) monitoring and analysis of energy consumption.
- Regular monitoring to the air quality and environment condition.

Emissions Reduction

- Carbon Footprint Estimation Towards developing a “Model for Promoting Sustainable Development Goals (Green Campus)”
- Climate action plan is being implemented towards “50% Reduction in Emissions by 2040” and “Net Zero Carbon by 2050”.

Community Engagement and Governments Support

- Sustain Serving the Surrounding Community and the Environment towards clean energy.
- Inform and support governments in clean energy and energy-efficient technology policy development
- Preparing a specialized practical training in the field of energy management and renewable energy for serving the community needs.
- Carrying out consultant services in the field of energy management and environment.

Education

- Upgrading the existing education programs and develop a new program (B.Sc. and Masters) relegated to energy and environment.
- Linking graduation project in AAST with energy research and community needs.

Investments

- Divesting investments from carbon-intensive energy industries notably coal and oil to renewable energy initiatives including wind, solar, hydro, bioenergy, …. etc. projects.
- Sustainability-focused investment approach towards projects that promote environmental conservation, and clean energy technologies.
- Investments in start-ups and businesses that not only demonstrate a potential for economic growth, but also operate responsibly with a strong focus on sustainability and environmental stewardship.

Research

- Expand research on green building and infrastructure projects that meet internationally recognized sustainability standards.
- Focus on carbon emission reduction projects and energy recovery projects via energy recuperation.

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