

SDG Buildings Policy

Introduction:

Aswan University is very interested in maintaining the application of the SDG buildings policy for many reasons, including environmental preservation and the creation of a competitive, balanced, and diversified economy within the context of sustainable development, especially in light of Egypt's Vision 2030 of the local and global challenges.

The demand and desire for more eco-friendly and energy-efficient building methods. to construct a sustainable building for various reasons including the advantages to the environment, the economy, and society. Modern sustainability initiatives need an integrated and synergistic design for new building projects and the alteration of existing buildings, as well as the integration of the building's life cycle with all green practices.

Goals:

Aswan University has established a sustainable building strategy with the objectives of preserving the environment; lowering emissions at the lowest cost possible with a rate of 45% by 2030 and 100% by 2050.

- Replacing and updating structures to conform to buildings policy.
- Raising energy efficiency standards and rationalizing consumption.
- Increasing reliance on large-scale central systems for renewable • energy, such as wind farms, concentrated solar power, and photovoltaic solar power plants, as well as vital energy stations for all university facilities and sectors.
- Reducing and eliminating the harmful effects that buildings have on the environment and people's health.
- The inclusion of fresh renewable energy sources, such as greenhydrogen.
- Stimulating the production and consumption of biofuels as a replacement for fossil fuels.

- Work together with the local or regional or global community to promote and broaden the scope SDG buildings policy, protect the environment, and rationalize energy use.

Implementation Mechanisms:

Inspired by the SDG buildings policy, our strategy aims to provide a rough rationalization of a variety of practices, technologies, and capacities keen to use renewable resources, such as rationalizing 40% of carbon dioxide emissions and 30% of water usage, utilizing more than 50% of recycled materials by applying these techniques to structures, by 2030:

A-Using a variety of alternative construction techniques to become environmental allies, such as:

- Replacement and renovation of buildings and recycling to use building materials.
- Use low-impact building materials or use packed gravel or permeable concrete instead of the traditional concrete or cement filtered to promote the renewal of the water in the atmosphere.
- The use of environmentally sound building materials such as volatile gray concrete and triple-glazed windows.
- Using thermal insulation in buildings.

B-Saving and rationalizing energy consumption in facilities:

- Utilize the sunlight through pure solar energy, active solar energy, grid connected photovoltaic systems, and photovoltaic equipment.
- Permeate plants and trees through green roofs, and reduce the runoff of reflective rainwater.
- Implementation of available lighting systems using the provided LED bulbs.
- The usage and replacement of complying electronics and electrical equipment to reduce energy consumption.

-To increase the production and usage of biofuels as a substitute for fossil fuels.

-The consumption of dirty water reduces the consumption of water.

-We are supporting and giving alternatives to water absorption .

C-Supporting creativity and the design process for green building.

D- Reducing carbon emissions to reduce global warming and caring for the planet.

Reports:

In evaluating the amount of energy used, measure performance and estimate the percentage of the plan. This study summarizes energy efficiency's scope and economic worth in terms of:

A- Reducing carbon emissions.

B-Evaluating reasons of wasting energy.

C-Presenting plans in details about saving and rationalizing the energy and raising its efficiency.

D- Discussing obstacles and challenges that prohibit implementing the previously mentioned.

E- Ecological footprint.

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