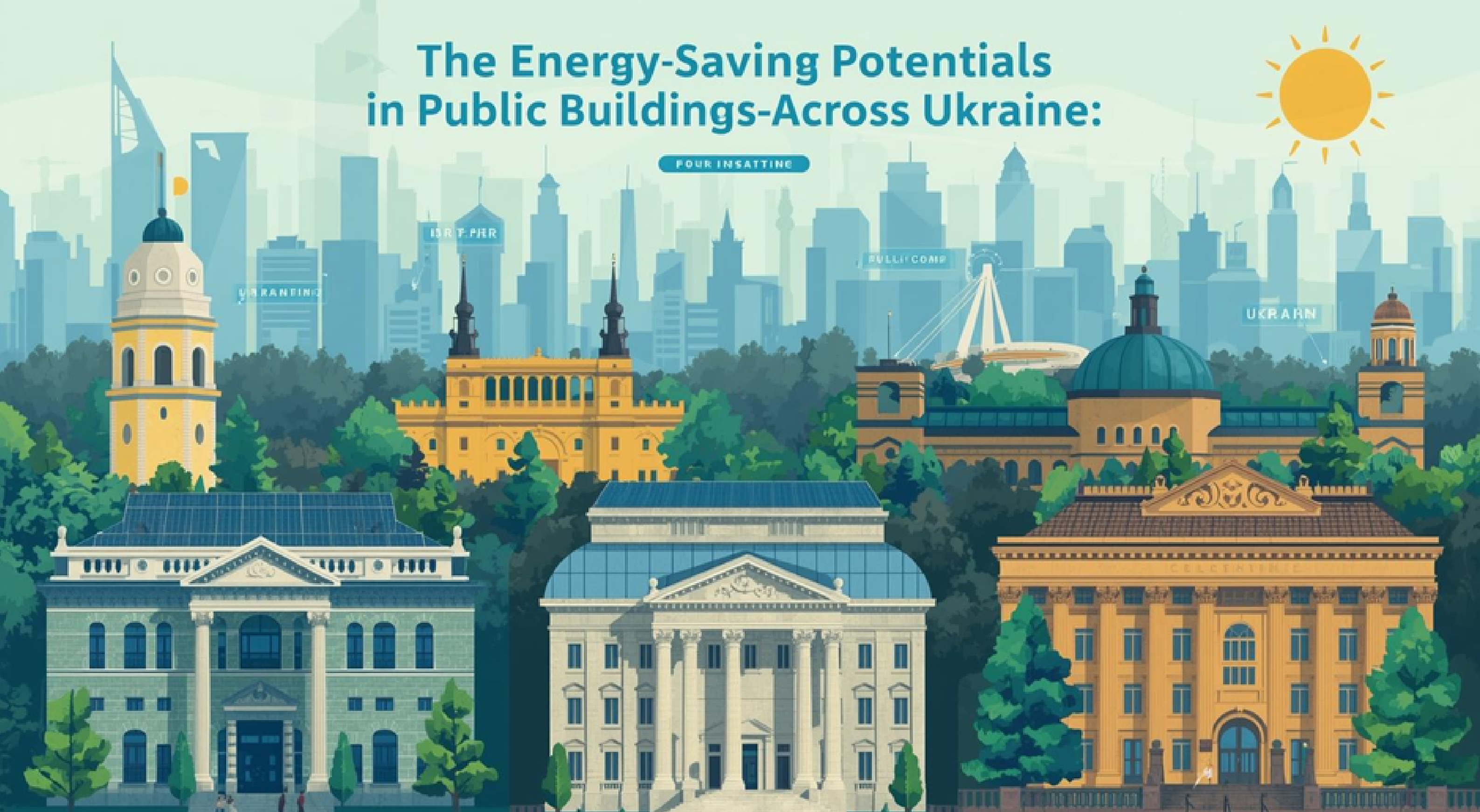




Public buildings can significantly reduce their annual energy consumption and operating costs by implementing energy efficiency measures.

Common Energy Efficiency Measures

The following measures are frequently identified in energy audits as having the highest potential for energy savings in public buildings in Ukraine.

Building Envelope Upgrades:

The building envelope, which includes the roof, walls, ground floor construction, windows, and doors, is a primary source of heat loss.



Window and door replacement

Older, single-pane windows and poorly sealed doors can be replaced with modern, double- or triple-glazed units to dramatically reduce heat transfer and improve comfort.



Insulation of external walls and roof

Adding thermal insulation to walls and roofs can prevent heat from escaping in the winter and entering in the summer, lowering the burden on heating and cooling systems.

Optimizing Building Systems:

Improving a building's internal systems is key to smart energy use.



Heating system

Upgrading from older, inefficient systems to modern two-pipe heating systems.



Ventilation system

Adding mechanical ventilation with heat recovery can improve air quality while recovering energy that would otherwise be lost.



Energy monitoring

Implementing a real-time energy monitoring system allows building managers to track consumption, identify areas of waste, and optimize the operation of equipment.



Lighting system

Replacing outdated lighting, such as fluorescent lamps, with energy-efficient LED luminaires can significantly decrease electricity consumption and maintenance costs

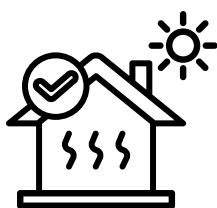
Benefits and Environmental Impact

Adopting these Energy Efficiency measures offers a range of benefits beyond just financial savings. The overall goal is to achieve greater energy independence and reduce the environmental impact of public infrastructure.



Reduced Operating Costs

Decreasing energy consumption leads directly to lower utility bills and significant financial savings over the long term.



Improved Comfort

Upgrades to the building envelope and internal systems can lead to a more comfortable and stable indoor environment for occupants.



Environmental Impact

Energy efficiency improvements result in a substantial reduction in greenhouse gas emissions, contributing to broader climate goals and a healthier environment.