
An Efficient Way to Take Control of Utility Costs

by Michael Lotfy

Michael Lotfy, ABB Senior Vice President, Buildings Solutions Business Head, Americas, discusses ABB's connected solutions that deliver impactful building sustainability, healthy occupant experiences, and security.

Building automation has traditionally been driven by a demand for security, comfort, and economic benefits. In recent years, the remarkable share of total energy consumption by buildings (around 35–40%) has played a more significant role in the global energy and climate agenda. This has been a new driver for the increased application of building automation. Buildings have a large potential to reduce their total share of energy consumption, while at the same time maintaining and improving indoor environment while reducing utility costs.

Statistics show that within the United States, owners of small to medium commercial buildings are overspending by up to 60% on energy bills. Causes for higher costs include aging infrastructure, lack of user visibility, and increasing occupant demands.

Understanding the size of the problem

Building systems, including lighting, HVAC, elevators, etc., account for 30% of total energy consumption in the United States. In large urban centers like Chicago and New York, however, this figure exceeds 70%, according to the Harvard Business Review.²

At the end of 2020, the average age of a commercial building in the United States was 53 years old. It is reported that over 75% of existing buildings will still be in use in 15 years.² As buildings age and become less efficient, building owners must commit to increasing energy efficiency by at least 20% over the next ten years.¹

The post-COVID environment: a catalyst for change

The significant effect that the COVID pandemic has had on the building industry has highlighted the crucial role that buildings, whether that be airports, office buildings, commercial buildings, or shopping malls, play in our lives. Building owners must ensure that their buildings are being operated and maintained as efficiently as possible due to the current greater focus on enhancing and protecting the well-being of building occupants than ever before.

Buildings account for almost 40% of global carbon emissions, demonstrating the critical role that they play in reducing carbon footprints and the potential they have in helping achieve more sustainable futures.

Achieving tangible results through better energy management

With HVAC and lighting alone accounting for more than about 50% of energy use in an average commercial building, there is unparalleled potential to increase energy efficiency while saving costs. Smart building technology allows buildings of any scale to use existing systems more efficiently, reducing energy consumption and emissions by up to 20%.

New technologies grant complete visibility of your building's power consumption – highlighting how and where it is used most – allowing for better-informed decisions.

Existing buildings can become smart buildings

Smart buildings are the quickest route to creating a central management system that monitors energy consumption. Managing multiple sites and tracking overall utility usage across different geographical locations is easy with smart buildings.

You're in control

Greater visibility and energy management is easy when you have the right tools. Transform your building with **ABB Ability™ Building Ecosystem with Active Energy**.
