

## **Commissioning and energy savings**

Building owners like to reduce energy use in their facilities by ensuring that the building's systems and equipment are energy efficient and are installed to work correctly.

A commissioning provider is responsible for ensuring that the delivered building can really realize the owner's energy efficiency goals. Energy efficient is ALWAYS an important goal for any building project since it can introduce significant cost saving for day to day building operation. .

To reduce a building's energy use, during the design phase all energy issues will be thoroughly discussed among the project team. At the design review, they will look for design issues that may lead to inefficient system operation and wasted energy. Places where energy efficiency measures might fail will also be identified.

## **The concept of Net Zero Energy Building**

Net Zero Energy Building NZEB is a concept of highly efficient buildings that meet the criteria of Net Zero. The National Renewable Energy Laboratory NREL offers several definitions for the term "net zero energy", including Net Zero Site Energy, Net Zero Source Energy, Net Zero Energy Costs and Net Zero Energy Emissions. Site Energy represents the energy consumed and generated at a building site. Source Energy deals with the primary energy that is needed for extracting and delivering energy to a building site. Net Zero Energy Cost means a building site has an energy utility bill of zero dollar over a year. Under the concept, the building's energy needs may be met with different renewable energy technologies. In reality, most Net Zero Energy Buildings are not disconnected to the electric grid.