

## ASHRAE sets new and more energy-efficient standards in order to conserve energy

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During the last 3 decades, the HVAC industry has experienced 2 turning points.

In the late seventies, energy costs started to escalate due to the oil crisis. Electrical rates and utility steam and gas charges have doubled and tripled. The costs of operating and maintaining building cooling and heating systems have escalated drastically.

Accordingly, ASHRAE started to set new and more energy-efficient standards in order to conserve energy. Conserving energy became a national interest.

By using the new ASHRAE standards, manufacturers redesigned their equipment to be more energy-efficient. Engineers were developing heating and cooling approaches emphasizing lower capital and operating costs. By performing an analysis of economic comparison, engineers were able to determine which heating and cooling concepts were applicable to the specific building and occupancy and also what will the projected operating costs be.

The late nineties brought the building construction industry, the second turning point, by introducing the philosophy of environmentally friendly systems, green design and sustainability.

New buildings are rated for being green buildings by using a scoring system that was created by the U.S. Green Building Council.

The framework titled Leadership in Energy and Environmental Design (LEED) establishes credits and points in the disciplines of innovative design, sustainability, water usage efficiency, energy consumption, materials and resources and indoor air quality.

By working closer with building owners and developers, professionals face the challenge of designing buildings and systems which require lower capital outlay, cheaper operating cost, more efficient energy utilization and friendlier environmental impact.

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