



Shaping Tomorrow's
Built Environment Today

ENERGY USE METRICS AND TARGETS FOR COMMERCIAL BUILDINGS

THE ISSUE

Commercial buildings consume about 18% of all energy used in the United States.¹ Considering a building's utility costs comprise some of its largest operating expenses, improved energy performance can also result in financial gains.

Energy metrics that are widely accepted, robust and validated, are critical to achieving desired policy objectives including benchmarking, code compliance and investment decisions. You can't manage what you don't measure, and building owners, operators and policymakers can't effectively communicate goals, evaluate potential investments and measure success if they don't all speak the same language.

Common, widely accepted and validated definitions and metrics of building energy use do not currently exist. By working with stakeholder groups and Federal agencies to develop, validate and establish these common metrics and associated targets, Congress can help solve this communication problem.

ASHRAE's ROLE

ASHRAE develops standards and guidelines to provide common, widely accepted and validated definitions and metrics – which might be better stated here with references to appropriate standards. For example, ASHRAE Standard 211 establishes consistent practices for conducting and reporting energy audits for commercial buildings. Additionally, ASHRAE Standard 214 provides uniformity in the building energy labeling and disclosure process and can be used in international, national, and regional legislation, policy making and regulation activities.

Further, ANSI/ASHRAE/IES Standard 90.1 has been the basis for State commercial building energy codes since 1975. Standard 90.1 also serves as the U.S. Department of Energy's baseline for measuring relative energy use improvement in Federal buildings. ASHRAE Standard 100 Energy Conservation in Existing Buildings, and Standard 105 Standard Methods of Determining, Expressing and Comparing Building Energy Performance and Greenhouse Gas Emissions also are critical resources.

ASHRAE's VIEW

Energy use targets must be based on the best technical data available to foster innovation. They must include all building loads, from lighting and HVAC to plug-and process loads in appliances.

Congress should support regular updates to the Commercial Buildings Energy Consumption Survey. The

¹ "Monthly Energy Review June 2019." Table 2.1 Energy Consumption by Sector, U.S. Energy Information Administration (EIA), www.eia.gov/totalenergy/data/monthly/pdf/sec2_3.pdf.



Shaping Tomorrow's
Built Environment Today

2012 update was the first in nine years. Maintaining recent data on energy consumption in the U.S. will make it easier to identify opportunities to increase efficiency and assess progress towards energy efficiency goals. International efforts to gather and disseminate data on commercial buildings worldwide should also be encouraged.