

Updating building energy codes: How much can your state save?

November 6 2013

How much in energy and cost savings would your state realize if it updated its commercial building energy codes? You can find out in a new on-line publication* from the National Institute of Standards and Technology (NIST). The state-by-state reports were the product of a new building energy efficiency analysis tool developed by NIST.

For each state, benefits and bottom-line impacts of upgrading to later editions of the nation's benchmark <u>energy</u> standard** for <u>commercial</u> <u>buildings</u> are condensed into two-page summaries. Calculated are energy use savings, energy <u>cost savings</u>, life-cycle costs, and energy-related reductions in carbon emissions. For each metric, summaries list total savings to be realized over a 10-year period.

The state-by-state summaries are the latest outputs of NIST economist Joshua Kneifel's analysis of energy usage and other variables for more than 12,500 buildings simulations across 228 U.S. cities. (See States Realize Big Benefits by Keeping Current with Energy Standards for Buildings at <u>www.nist.gov/el/energy-020613.cfm</u>)

The analysis is based on a new NIST sustainable-buildings database and associated software tools that will debut this winter. Called BIRDS (for Building Industry Reporting and Design for Sustainability), the free, Web-based resource will provide baseline <u>energy-efficiency</u> measurements for prototypical buildings. These measurements will be able to be adjusted to reflect energy-related improvements so that energy, environmental and economics benefits and costs can be



calculated.

More information: *J. Kneifel, Benefits and Costs of Energy Standard Adoption in New Commercial Buildings: State-by-State Summaries (NIST Special Publication 1165), Sept. 2013. Downloadable from: <u>www.nist.gov/manuscript-public ... ch.cfm?pub_id=914711</u>

**ASHRAE Energy Standard for Buildings Except Low-Rise Residential Buildings (ASHRAE-90.1-). For more information: <u>www.ashrae.org/resources</u>—publications/bookstore/standard-90-1#2007

Provided by National Institute of Standards and Technology

Citation: Updating building energy codes: How much can your state save? (2013, November 6) retrieved 2 May 2024 from <u>https://phys.org/news/2013-11-energy-codes-state.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.