



## 2014 ENERGY EFFICIENCY INDICATOR

North American Summary: A Watershed Year



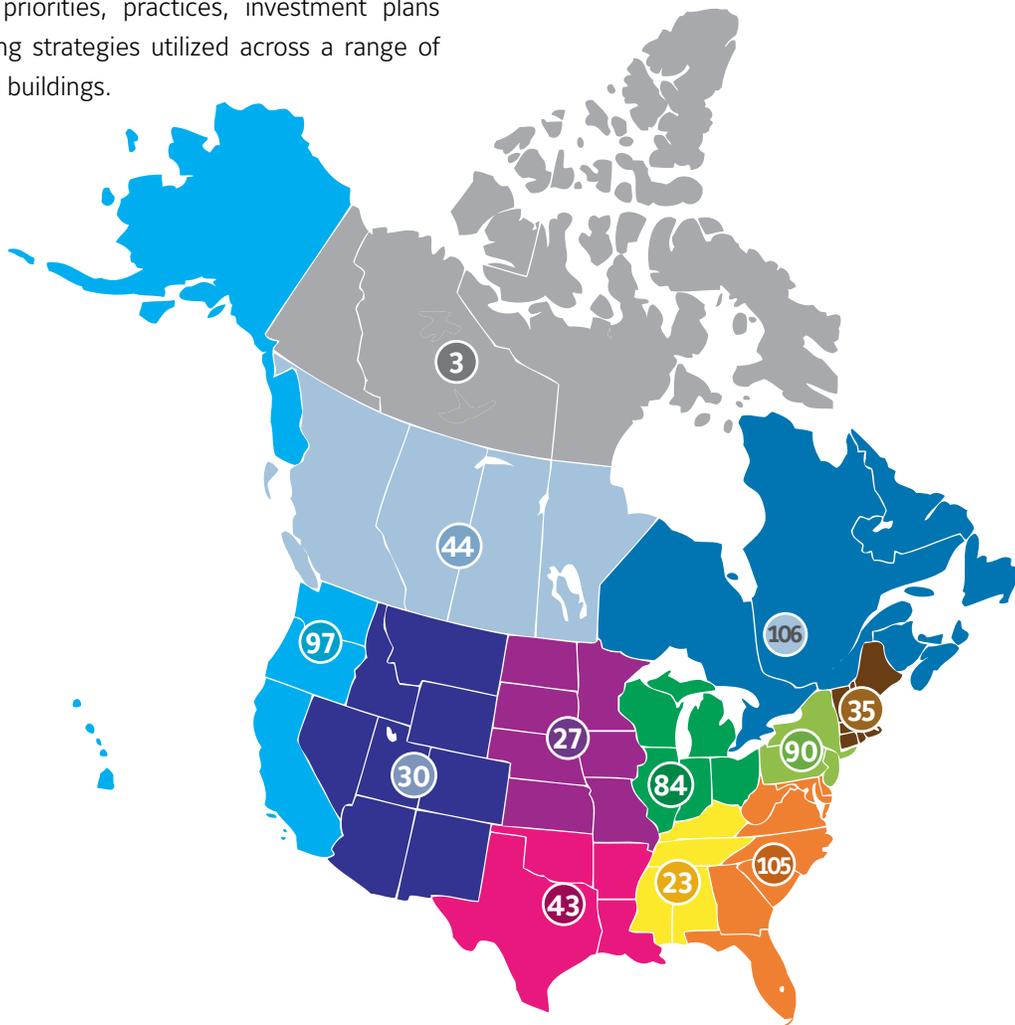
# INTRODUCTION AND OVERVIEW

Strong improvements in key indicators signal major commitments to energy efficiency, high-performance buildings, distributed energy systems and smart building technologies.

The 2014 Energy Efficiency Indicator (EEI) survey of executives and building owners responsible for energy management and investment decisions showed nearly across-the-board increases in interest and investment in energy efficiency in North America's non-residential buildings. The survey tracks the priorities, practices, investment plans and financing strategies utilized across a range of commercial buildings.

While many of these indicators have improved steadily across past years' EEI surveys, the magnitude of the improvement from 2013 to 2014 is noteworthy. Numerous indicators showed strong double-digit percentage point gains, and a number of indicators showed the greatest one-year improvements in EEI history.

This eighth annual EEI survey drew 687 respondents from the United States and Canada. The summary shares the 2014 results and tracks changes in key indicators since the survey's North American inception in 2007. Three key themes emerged from the survey.



# 1

Executives describe growing attention to energy efficiency and energy management, with increasing investment in building energy efficiency and renewable energy.

When the Energy Efficiency Indicator survey was launched in 2007, fifteen percent of North American executives responded that energy management was extremely important to their organizations. Each year since, energy management importance has grown. This year was the largest increase in the eight years of the survey: 53 percent of respondents in 2014 said energy management was extremely important to their organizations, up from 39 percent in 2013. Investment planning also shows this shift: 68 percent of this year's executive decision-makers said they plan to increase investments in energy efficiency or renewable energy in the next 12 months, versus 42 percent who said so last year.

Perhaps more significant, results indicate that the greatest barrier to efficiency investments cited in past EEI surveys – lack of access to capital –

may be breaking down. This year, 30 percent of respondents said they have an energy or climate-specific set aside within their capital budget for energy efficiency and renewable energy projects, up from 20 percent in 2013.

Significantly more organizations were using external capital to pay for their efficiency and renewable energy projects (23 percent versus historical levels of between 10-15 percent), and they are also expanding use of energy service contracts or agreements (32 percent versus 21 percent).

The 2014 survey also found growing appreciation for the multiple benefits of energy efficiency. When asked about the influence of a variety of drivers of action, respondents indicate each year that the most significant influence on their decisions is energy cost savings. However, nearly twice as many respondents ranked as extremely significant the benefits of reducing greenhouse emissions, improving brand image, improving customer attraction, and enhancing energy security. Given the growing recognition of these benefits, perhaps the plans to increase investment in energy efficiency should not be surprising.



# 2

Green and high-performance buildings and workspaces are becoming mainstream.

Green buildings are mainstream in real estate markets. Among the executive respondents, 44% have certified at least one green building prior to 2014, and 25% plan on certifying at least one of their buildings or facilities in the future. Only 31% indicated they had no plans to certify their buildings.

Since 2011, we also have tracked the emerging market interest in leasing space in green buildings. This year 36 percent of respondents said their organizations would be willing to pay a premium to lease space in green buildings - up from 15 percent. Not only are these respondents interested in identifying green buildings, they also

are taking a more active role in the green build-out of their leased space in buildings: 28 percent said they planned to build out tenant spaces to high-performance (above-code) standards, up from 18 percent last year.

Another emerging green building trend is the aspiration of achieving net or near zero energy buildings. Sixty eight percent (versus 43 percent last year) said they planned to achieve near zero, net zero or energy positive status for one or more of their buildings in the future. This is striking in that at present, the New Buildings Institute reports only slightly more than 200 commercial buildings in the U.S. hold such status. Our survey results indicate that awareness of net zero building and aspirations are high; future Energy Efficiency Indicator studies will track how quickly these ambitions translate into action.



**3** Investments in distributed energy systems, demand response and energy storage are accelerating.

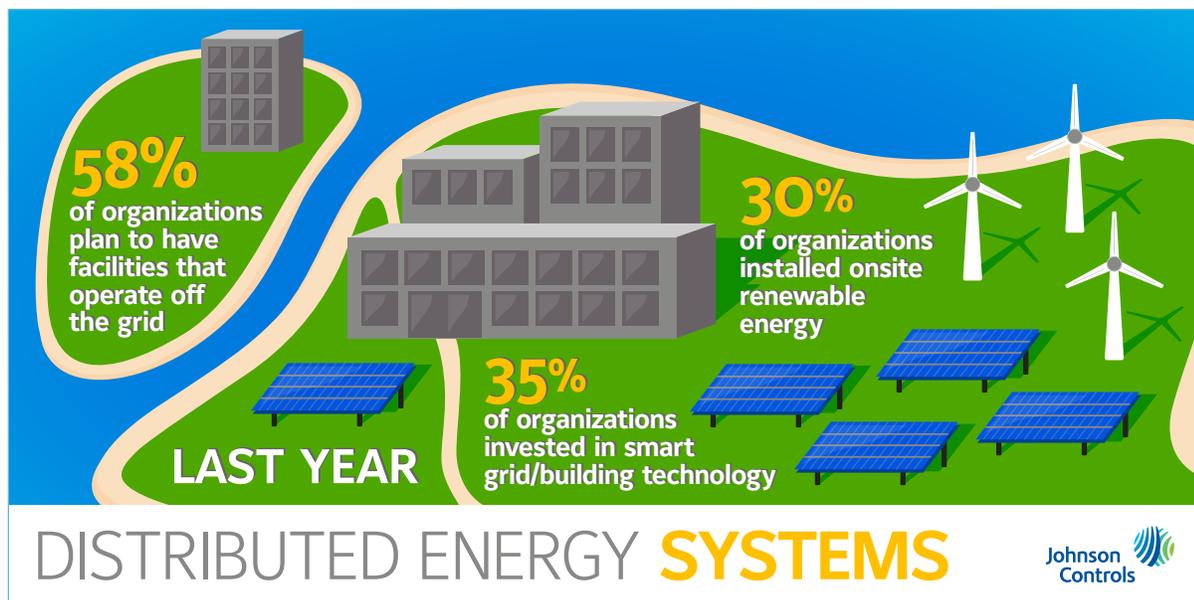
The 2014 EEI survey probed more deeply into attitudes and actions toward distributed energy. Executives are accelerating investment in smart technologies, driven by desires for energy cost savings, and energy security among other benefits.

The technology options selected by executives in 2014 include a number of technologies that support a more distributed energy system. Thirty-five percent of respondents said they had invested in smart building or smart grid technology in the past year (versus 20 percent in 2013). Investment in on-site renewable energy technology also increased significantly in the past year, from 19 percent in 2013 to 30 percent in

2014. And when asked which technologies would have the greatest increase in market adoption in the next decade, 12 percent of executives (up from 8 percent) cited stationary electric energy storage. These results indicate that building owners may want to be both energy consumers and suppliers of energy in the future.

Demand response programs in the United States help reduce energy demand periods of high demand, help balance renewable energy, and stabilize the grid. Only 30 percent of 2014 respondents reported they were not participating at all in demand response efforts. Thirty percent of executives indicated they were participating in electric utility programs and 17 percent participated through third party curtailment provider.

Finally, in the 2014 EEI survey, 58 percent of respondents said that within the next 10 years they planned to have at least one facility able to operate off the grid, if necessary.



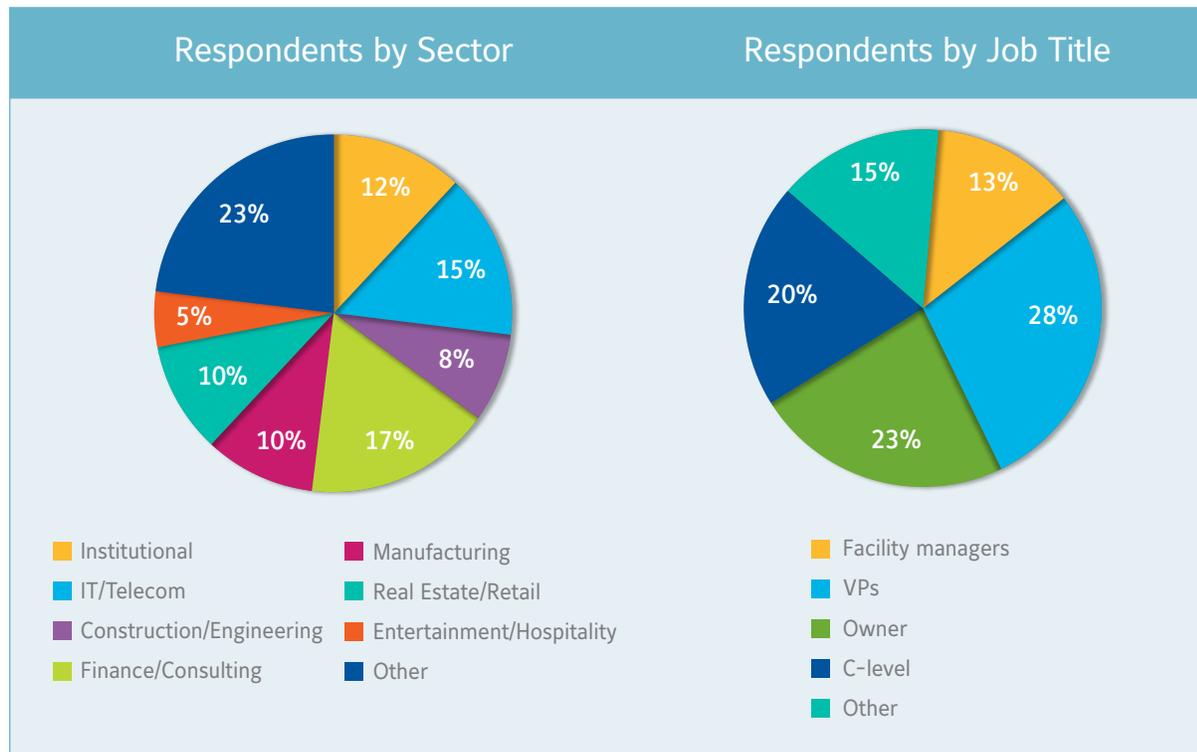
## ABOUT THE EEI SURVEY

The Energy Efficiency Indicator (EEI) survey is conducted annually by the Johnson Controls Institute for Building Efficiency (IBE). It analyzes the technologies, policies and practices of executive decision makers responsible for energy and facility management in buildings.

The survey is conducted online during March and April. Respondents remain anonymous. To qualify, survey respondents must:

- **Have budget responsibility** for their organizations' facilities.
- **Have duties** that include reviewing or monitoring energy usage or proposing/approving initiatives to make those facilities more efficient.

While previous EEI surveys reached respondents worldwide, the eighth annual survey concentrated on North America. It drew 687 responses (519 from the United States and 168 from Canada), up from a total of 600 responses from those two countries in 2013. Below are breakdowns of the 2014 respondents.



## EEI SURVEY PARTNERS

The IBE conducted the 2014 EEI survey in partnership with the International Facility Management Association.

IFMA is the world's largest and most widely recognized international association for facility management professionals, supporting 24,000 members in 96 countries. The association's members, represented in 131 chapters and 17 councils worldwide, manage more than 37 billion square feet of property and annually purchase more than US\$100 billion in products and services. Formed in 1980, IFMA certifies professionals in facility management, conducts research, provides educational programs and produces World Workplace, the world's largest facility management conference and exposition. To join and follow IFMA's social media outlets online, visit the association's [LinkedIn](#), [Facebook](#), [YouTube](#) and [Twitter](#) pages. For more information, visit the IFMA press room or [www.ifma.org](http://www.ifma.org).



The Institute for Building Efficiency is an initiative of Johnson Controls providing information and analysis of technologies, policies, and practices for efficient, high performance buildings and smart energy systems around the world. The Institute leverages the company's 125 years of global experience providing energy efficient solutions for buildings to support and complement the efforts of nonprofit organizations and industry associations. The Institute focuses on practical solutions that are innovative, cost-effective and scalable.



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