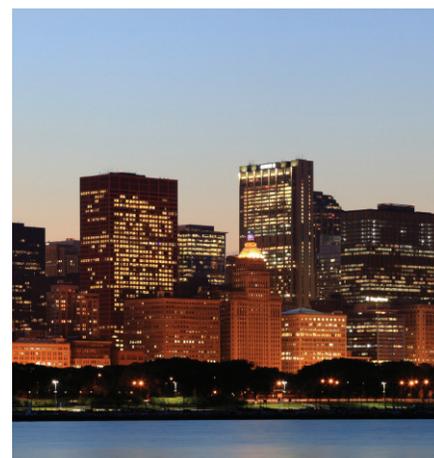


2012 ENERGY EFFICIENCY INDICATOR SURVEY: CHINA RESULTS

The Johnson Controls Institute for Building Efficiency conducts an annual Energy Efficiency Indicator survey tracking the energy priorities, practices and investments being made by executive decision-makers for buildings in markets around the world. In 2012, nearly 3,500 executives from the commercial, industrial and institutional sectors provided insights into their energy management practices, the barriers to energy efficiency they face, and what motivates them to act. This is the third year the survey has extended to China, where there were 369 respondents this year. The complete EEI survey results can be found at www.InstituteBE.com.

FINDINGS FROM THE 2012 CHINA EEI SURVEY RESPONDENTS:

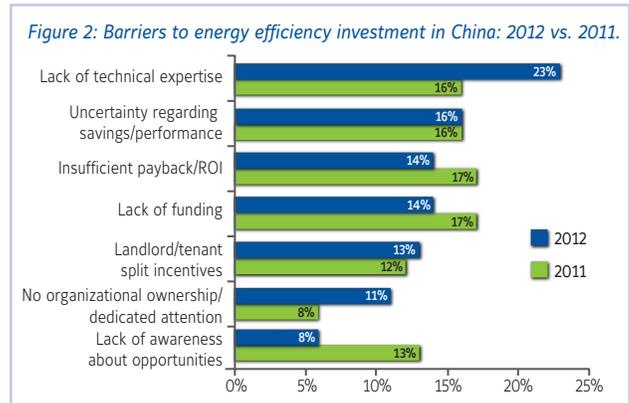
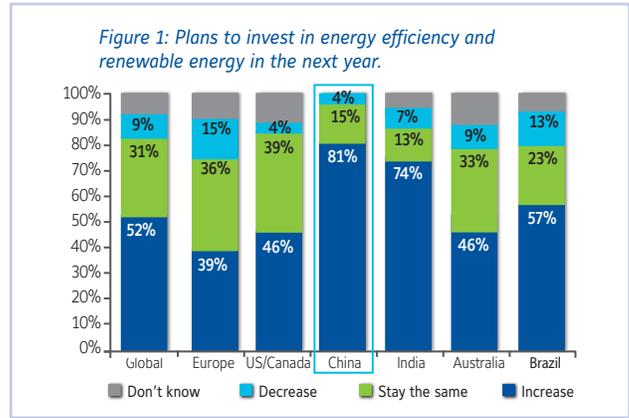
- There was strong interest in energy efficiency among building executives in China: 92% said energy management was very or extremely important to their organizations (compared to 84% in 2011), and 92% said they were paying more attention to energy in 2012 than in 2011.
- Seventy-two percent of Chinese executives responding to the survey have invested in energy efficiency in the past year; 45% invested in renewable energy, the highest of any region or country. Eighty-one percent of respondents planned to increase spending in energy efficiency or renewable energy in the next 12 months (Figure 1).
- Energy cost savings, increasing energy security, and existing government policy led as the main drivers for energy efficiency action in China. In contrast, the main drivers globally were energy cost savings, government and utility incentives or rebates, and enhanced brand or public image.
- In the next 12 months, nearly 20% of the respondents planned to pursue green building certification for either a new building or for an existing building. Forty-eight percent planned to pursue certification (including local standards such as China's Three Star and global standards such as LEED) in both new construction and existing buildings.
- The top three energy efficiency measures adopted in China in the past 12 months included: lighting improvements (73%), water efficiency improvements (71%), and HVAC and/or controls improvements (61%).
- When asked which on-site technologies they expected to see the greatest market adoption in the next 10 years, executives selected solar thermal (42%) followed by solar PV (32%) and smart building technologies (32%).
- The average allowable payback on efficiency projects averaged 3.2 years, versus 3.5 years in 2011. This is slightly below the 2012 global average of 3.4 years.



OVERVIEW

The 2012 Global Energy Efficiency Indicator (EEI) survey reveals the energy priorities, practices, investment plans and barriers facing building decision-makers responsible for energy investments and activities in their companies. The global survey included nearly 3,500 facility managers and building executives and owners. The 2012 survey is the sixth global EEI survey conducted by Johnson Controls through its Institute for Building Efficiency.

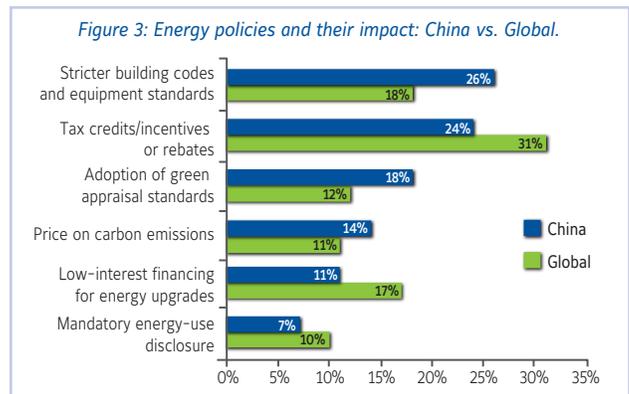
- The top barrier to pursuing energy efficiency cited by Chinese executives was lack of technical expertise to evaluate or execute projects (23%, up from 16% in 2011), followed by uncertainty regarding project savings and performance (16%) and insufficient payback/ROI (14%) and insufficient payback/ROI (14%) (Figure 2).
- Chinese executives saw project execution as the greatest risk when considering energy efficiency or renewable energy projects.
- When asked which energy policy would have the greatest impact on improving energy efficiency in buildings, 26% of executives said stricter building codes and equipment standards, 24% selected tax credits/incentives or rebates, and 18% indicated changes in property valuation from green appraisal standards (Figure 3).
- Chinese executives were more likely than their global counterparts to measure and analyze energy information – 81% said they measured and recorded data at least weekly, and 33% reviewed and analyzed data at least weekly, both well above the global averages (56% and 20%).
- The top energy management practices adopted in Chinese respondents' facilities were: creating an action plan to implement energy improvement projects (57%), defining and communicating an energy policy/goals (54%), measuring and verifying energy project savings (51%) and dedicating a capital budget for energy improvement projects (51%).



SURVEY RESPONDENT DEMOGRAPHICS

To qualify, EEI survey respondents must have budget responsibility for at least one nonresidential building, and their responsibilities must include energy use, either through monitoring of usage or proposing or approving energy-related projects. The EEI survey is conducted anonymously.

Among Chinese respondents, 53% classified their facilities as commercial, 40% as industrial and 7% as institutional (government buildings, hospitals and schools). Sixty-three percent of respondents managed more than 500,000 square feet of building space.



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.

If you are interested in contacting the authors, or engaging with the Institute for Building Efficiency, please email us at: InstituteforBE@jci.com.

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