

2017 Energy Efficiency Indicator Survey: BRAZIL RESULTS

Johnson Controls conducts an annual Energy Efficiency Indicator survey tracking current and planned investments, key drivers, and organizational barriers to improving energy efficiency in facilities. Since the first survey was released in 2007, almost 24,000 energy and facility management leaders have been surveyed.

INTEREST AND INVESTMENT

IN ENERGY EFFICIENCY

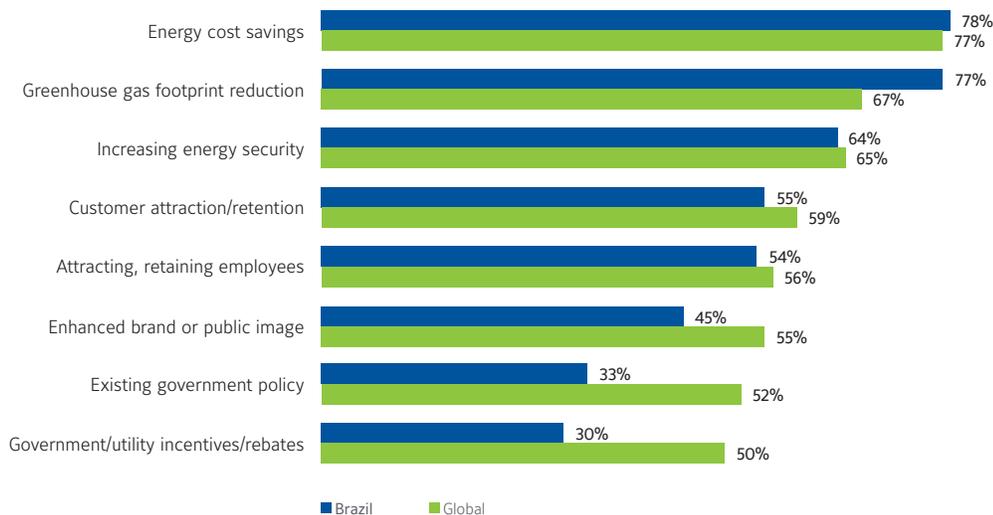
TO GROW IN BRAZIL

Highlights from the 2017 Brazil Survey:

- Energy efficiency is increasing in importance and investment remains high. 42% of organizations are paying more attention to energy efficiency than they were one year ago, which is translating into investment. 43% of organizations plan to increase energy efficiency and renewable energy investments in the next year, with an additional 41% planning to keep their investment level the same.
- Energy cost savings is the most important driver in energy investment decisions in Brazil. 78% of organizations rated energy cost savings as very or extremely important in driving investment decisions. Other important drivers included greenhouse gas reduction (77% of respondents rating it as very or extremely important) and increasing energy security (64% of respondents rating it as very or extremely important).

Drivers of energy efficiency investments:

Organizations rating as very or extremely significant



- The top energy efficiency measures adopted over the past twelve months include heating, ventilation, and air conditioning improvements (84%), building controls improvements (58%), energy focused behavioral or educational programs (58%), and thermal energy storage (55%).
- When asked about planned investment over the next twelve months, thermal energy storage led the way with 57% of respondents indicating they would invest. It was followed by heating, ventilation, and air conditioning improvements (53%), building controls improvements (49%), and onsite renewable energy (48%).

THIS YEAR MARKS THE 11TH YEAR of the survey with over **1,500** respondents represented from **twelve** countries, including almost **130** leaders from Brazil.

Highlights from the 2017 Brazil Survey:

- For 43% of respondents, the top barrier to pursuing energy efficiency is lack of funding to pay for improvements. Other common barriers include lack of technical expertise to evaluate or execute projects (20%), and uncertainty regarding savings/performance (17%).
- Even with demand for green buildings increasing, more organizations plan to have net zero energy buildings than certified green buildings in the future. 49% of organizations already have or plan to have at least one certified green building in the future and 41% of organizations are willing to pay a premium for space in a certified green building. More organizations plan to achieve near zero, net zero or energy positive status for at least one building in the next 10 years, with 56% indicating it is very or extremely likely.
- Resiliency is an increasingly important consideration for building infrastructure investments. 56% of organizations stated that maintaining critical operations during severe weather events or extended power outages is very or extremely important when considering future infrastructure investments. In addition, 14% of organizations are very or extremely likely to have one or more facilities able to operate off the grid in the next 10 years.
- Building systems integration continues to build momentum as the focus on smart buildings increases. 55% of organizations invested in systems integration in the past 12 months and 36% plan to invest in the next 12 months. Security systems are leading the way with 43% of respondents indicating they have already been integrated with other building technology systems. This is followed by energy management systems (integrated with other building technology systems for 36% of respondents) and life safety systems (integrated with other building technology systems for 32% of respondents).
- In Brazil, performance benchmarking and certification is the most effective policy driving energy efficiency improvements with 80% of respondents ranking it as very or extremely important. Other policies that are effective in driving energy efficiency improvement are financial incentives and programs (72% of organizations rated as very or extremely important), building energy codes and product standards (64% of organizations rated as very or extremely important), and government leadership in leasing, building design, and retrofits (60% of organizations rated as very or extremely important).

Policies driving energy efficiency improvements:

Organizations rating as very or extremely important



2017 BRAZIL SURVEY DEMOGRAPHICS

To qualify, respondents must have facility budget responsibility and propose or approve energy efficiency initiatives for their organization. The survey was administered anonymously by a third party partner. For the 2017 Brazil survey, there was a good mix of respondents from institutional, commercial, and industrial organizations, as well as a mix of organizational titles, including c-level executives, vice presidents, directors and managers. 62% of respondents have responsibility for facilities that cover more than 500,000 square feet, 25% cover 50,000 to 500,000 square feet, and 13% cover less than 50,000 square feet.

For more information go to www.johnsoncontrols.com/insights/2018/buildings/features/energy-efficiency-indicator-survey