

2019 Energy Efficiency Indicator Survey

Brazil Results



The thirteenth edition of the Energy Efficiency Indicator Study surveyed 100 energy and facility management executives across Brazil.

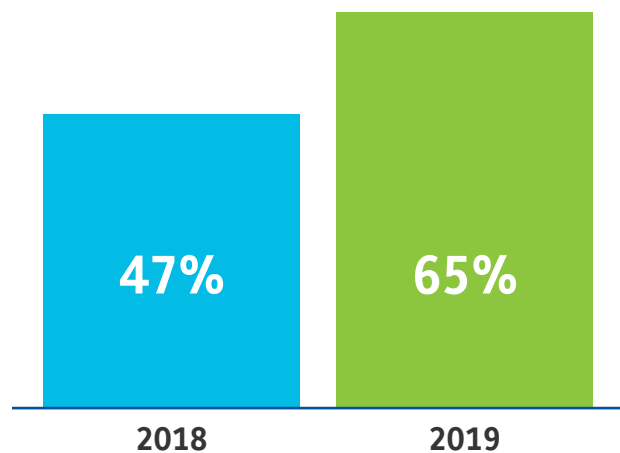
Survey respondents meet one of at least the following criteria:

- They review or monitor the amount of energy used by organization’s facilities
- They propose or approve energy efficiency or smart building initiatives
- They have budget management or investment responsibility for organization’s facilities

Survey respondents			
Commercial	28%	C-Level	16%
Institutional	23%	Vice President/Director	40%
Industrial	31%	Manager	44%
Other	18%	Other	0%

Investment in energy efficiency, renewable energy and smart building technology is expected to increase significantly next year

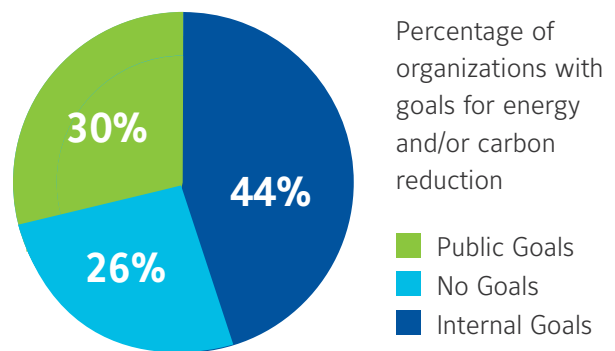
Percentage of organizations that will increase investment in energy efficiency, renewable energy or smart building technology over the next 12 months



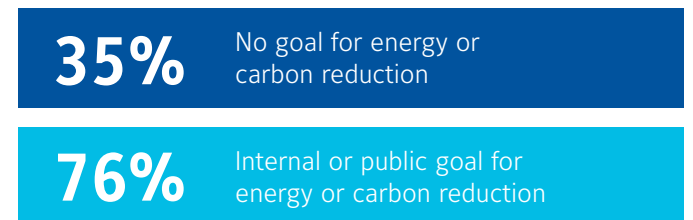
Energy cost savings, energy security and employee recruitment are the biggest drivers of investment

Rated as 'extremely or very significant' by organizations	
Energy cost savings	77%
Increasing energy security	72%
Attracting, retaining employees	71%
Increasing asset value of buildings	70%
Improving operational efficiency	69%
Improving life safety and security	68%
Greenhouse gas footprint reduction	66%

Organizations that have goals for energy and/or carbon reduction are more than twice as likely to increase investment next year



Percentage of organizations that will increase investment in energy efficiency, renewable energy or smart building technology over next 12 months

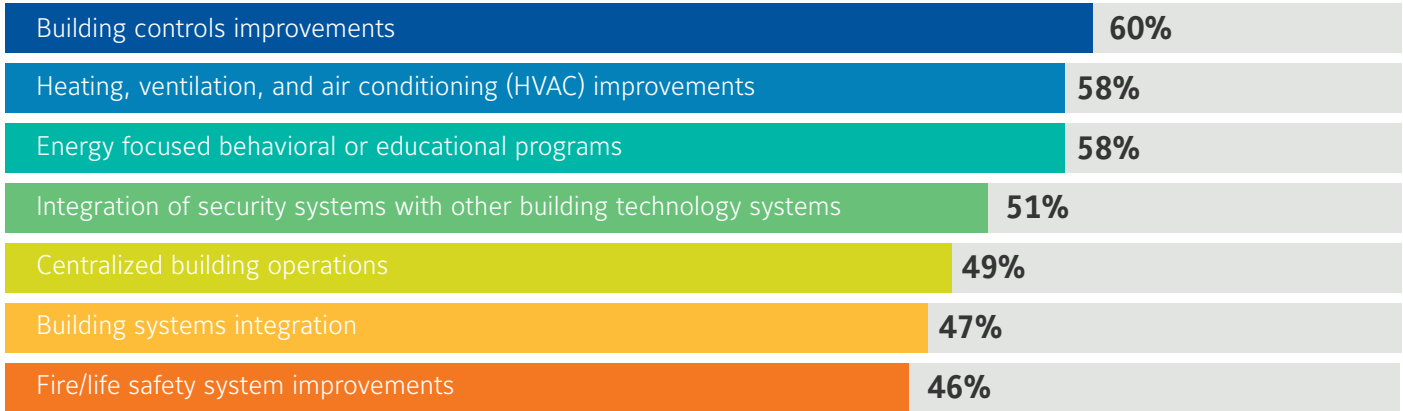


Technology trends expected to have the largest impact on smart building investments over the next 5 years.

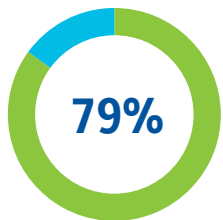
Rated as 'extremely significant' by organizations	
Cybersecurity	36%
Data analytics / Machine learning	34%
Advanced sensing	31%
Internet of Things	29%
Data Privacy	29%
Advanced sensing	29%

Building controls, HVAC and energy-focused educational programs are expected to be the biggest investments in the next year

Top 7 building/energy investments organizations plan in the next 12 months



Interest in achieving green building certification and leasing space in green buildings

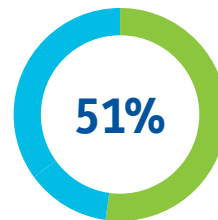


Green building certification

Respondents that have achieved or plan to achieve voluntary green building certification

Increase from 2018 of 21%

21% have achieved
58% plan to achieve

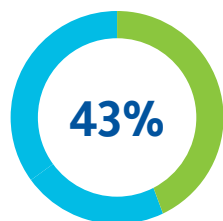


Leased Space in Green Buildings

Respondents that are willing to pay a premium for space in a certified green building

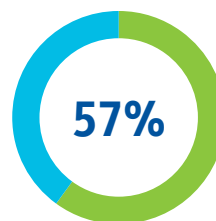
Increase from 2018 of 4%

The trend towards decarbonization is increasing interest in net zero carbon buildings as well as on-site renewable energy



Net zero energy / carbon facility

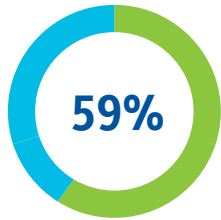
Respondents that are very or extremely likely to have one or more facilities that are nearly zero or net zero energy or carbon, or which will achieve positive carbon or positive energy status, in the next ten years



Investment in on-site renewable energy

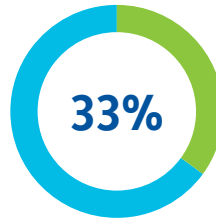
Respondents that invested in on-site renewable energy last year

Minimizing use of fossil fuels is an important investment driver



Minimizing use of fossil fuels

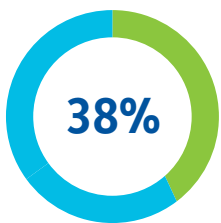
Respondents that indicated that minimizing the use of fossil fuel in space and water heating is very or extremely important



Heat pump replacement of fossil fuel heating

Respondents that invested in replacing fossil fuel space / water heating with heat pump technology last year

Resilience and independence from the grid are increasingly important drivers in future building infrastructure investments



Going off the grid

Respondents that are very or extremely likely to have one or more facilities able to operate off the grid in the next ten years

82% of respondents indicated **resilience** is very or extremely important when considering infrastructure investments, up 20% from last year

Security, fire/life safety and lighting systems received the most systems integration investment last year

Organizations investing in the past 12 months

Security systems integration	65%
Fire / life safety integration	49%
Lighting systems integration	42%
Building management systems integration	37%
Smart building equipment integration	29%
Energy information management software	27%
Distributed energy resource integration	25%

There was a significant year-over-year increase in distributed energy resource investments

Change in percentage of organizations investing in distributed energy in 2020 compared to 2019

Planned to be completed in the next 12 months versus completed over the previous 12 months

Non-renewable distributed energy generation	10%
Electric energy storage	4%
Integration with distributed energy resources	1%
Thermal storage	0%