



Energy Efficiency Indicator

U.S. and Global Survey Highlights

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Presented
To ESC



What is driving Smarter Communities?



Urbanization



Sustainability: reducing emissions & consumption



Resiliency amidst the impacts of climate change



Efficiency in a time of funding cuts

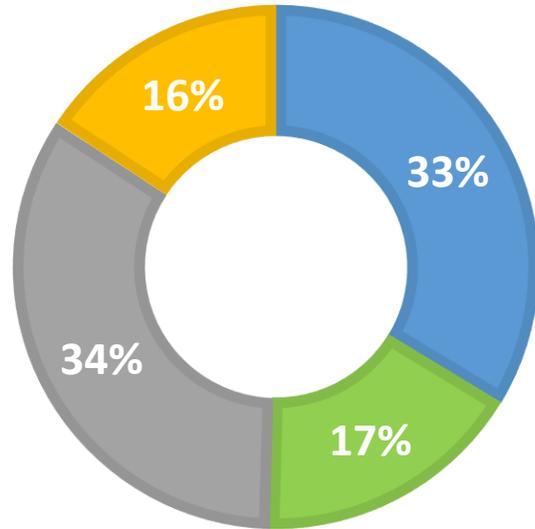


Economic development

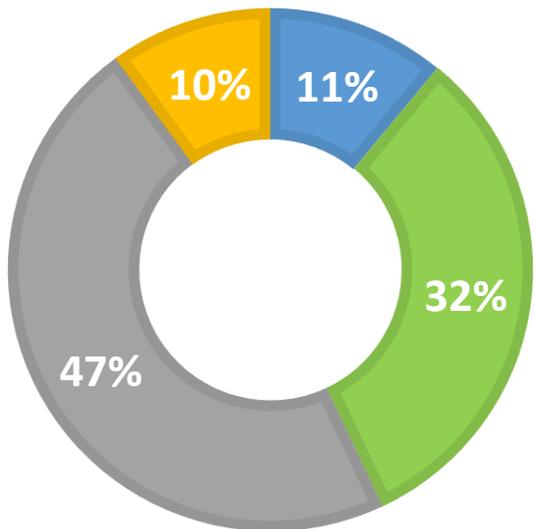


Proliferation of IoT and connected devices

The 2018 Energy Efficiency Indicator Study surveyed 1,901 energy and facility management executives from twenty countries



- Commercial
- Institutional
- Industrial
- Other

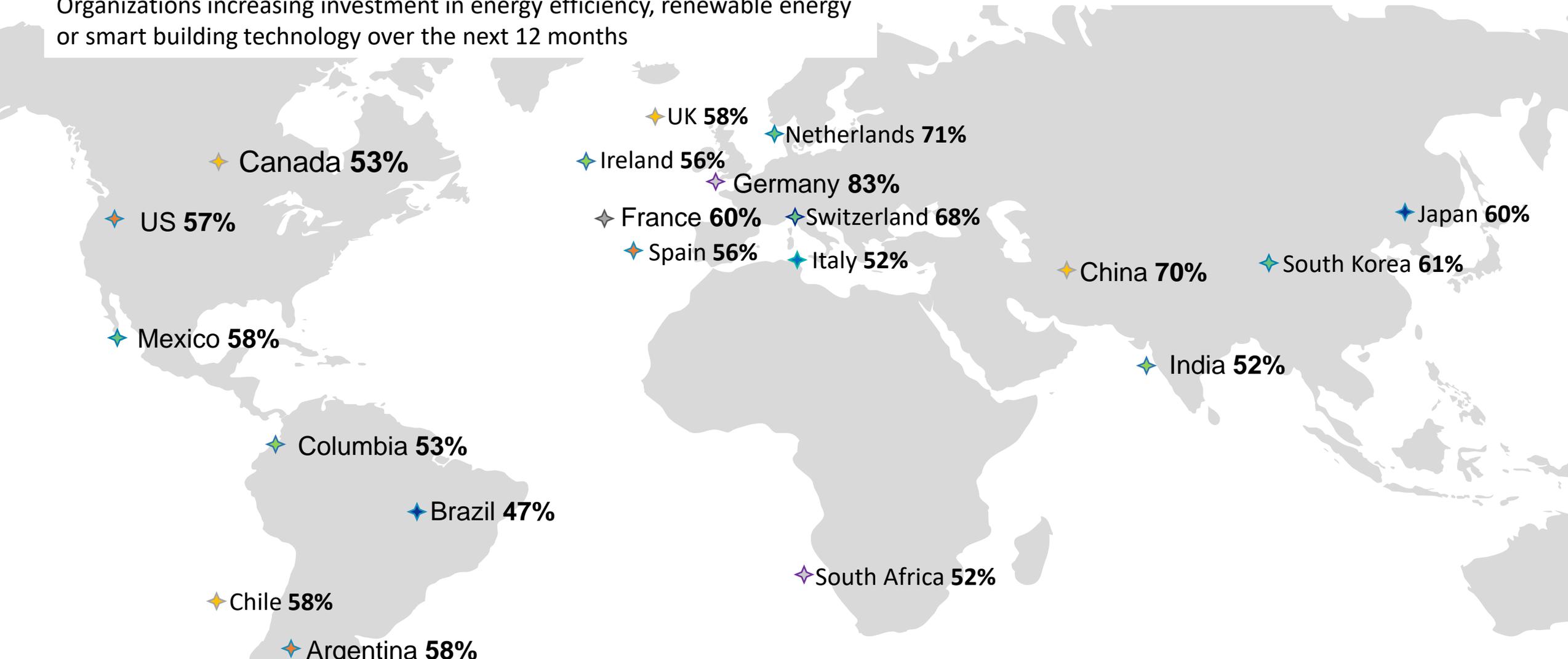


- C-Level
- Vice President / Director
- Manager
- Other

- Argentina
- Brazil
- Canada
- Chile
- China
- Colombia
- France
- Germany
- India
- Ireland
- Italy
- Japan
- Mexico
- Netherlands
- South Africa
- South Korea
- Spain
- Switzerland
- United Kingdom
- United States

Investment in energy efficiency, renewable energy, and smart building technology is expected to increase globally

Organizations increasing investment in energy efficiency, renewable energy or smart building technology over the next 12 months



Net zero and resilience are also important drivers in future building infrastructure investments globally

Very or extremely likely to have one or more facilities that are nearly zero, net zero or positive energy or carbon status in the next ten years / Very or extremely likely to have one or more facility able to operate off the grid in the next ten years

✦ Canada **68% / 53%**

✦ US **61% / 54%**

✦ Mexico **48% / 47%**

✦ Columbia **40% / 45%**

✦ Brazil **45% / 53%**

✦ Chile **44% / 43%**

✦ Argentina **39% / 52%**

✦ UK **52% / 48%**

✦ Ireland **36% / 36%**

✦ Netherlands **33% / 50%**

✦ Germany **63% / 56%**

✦ Switzerland **64% / 61%**

✦ France **59% / 50%**

✦ Spain **45% / 57%**

✦ Italy **67% / 53%**

✦ South Africa **38% / 44%**

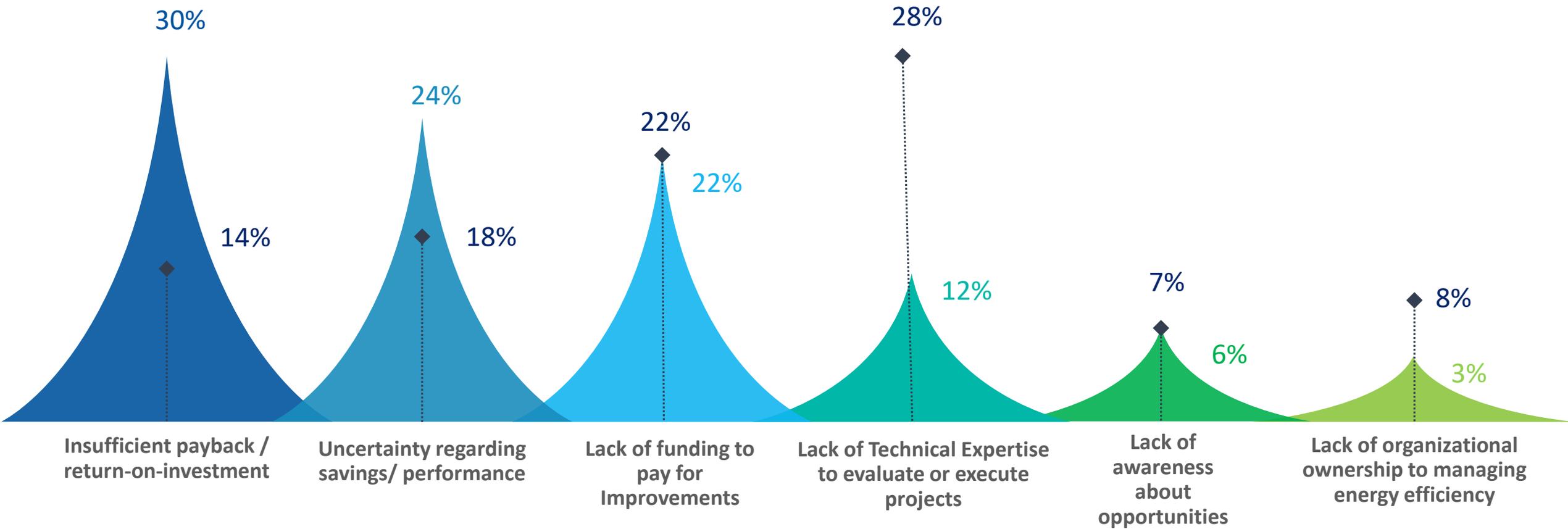
✦ China **44% / 54%**

✦ Japan **56% / 45%**

✦ South Korea **44% / 48%**

✦ India **40% / 44%**

Insufficient ROI was rated as the top barrier to energy efficiency investments in the U.S., while globally, it is lack of technical expertise

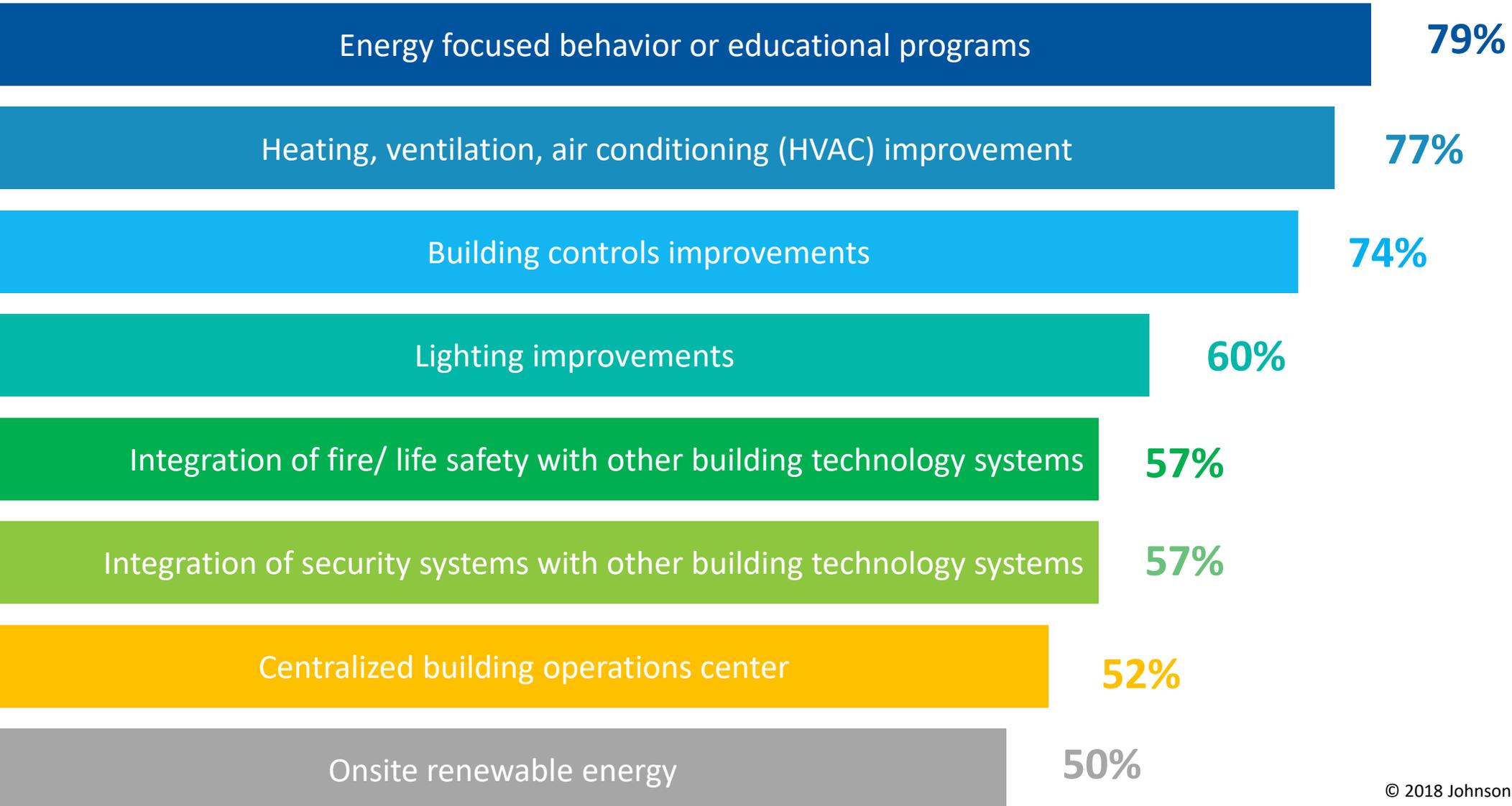


▲ United States

◆ Global

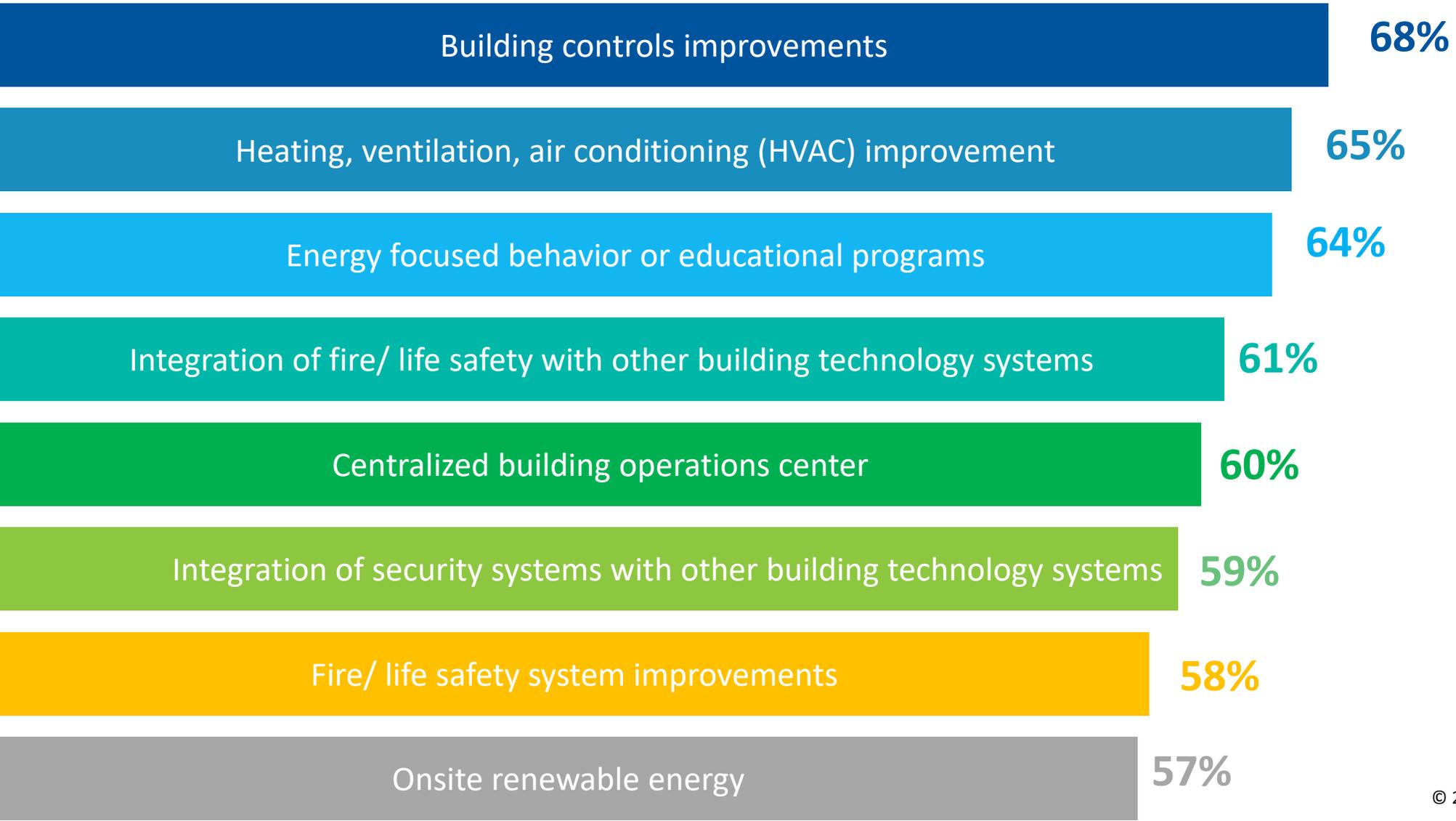
Energy focused behavioral / educational programs were the most invested in improvement measure over the past year

organizations investing in the past 12 months

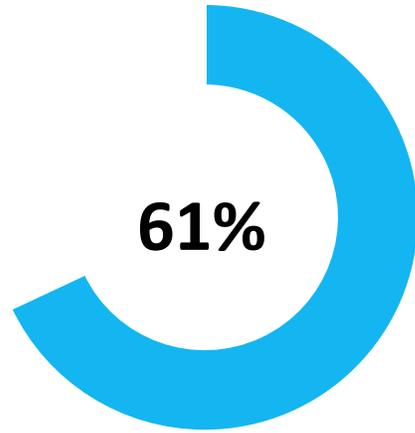


Building controls improvements are expected to have the greatest rate of investment over the coming year

organizations investing in the next 12 months

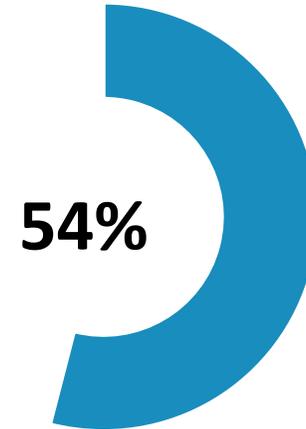


Net zero and resilience are important drivers in future building infrastructure investments



Net Zero Energy / Carbon

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



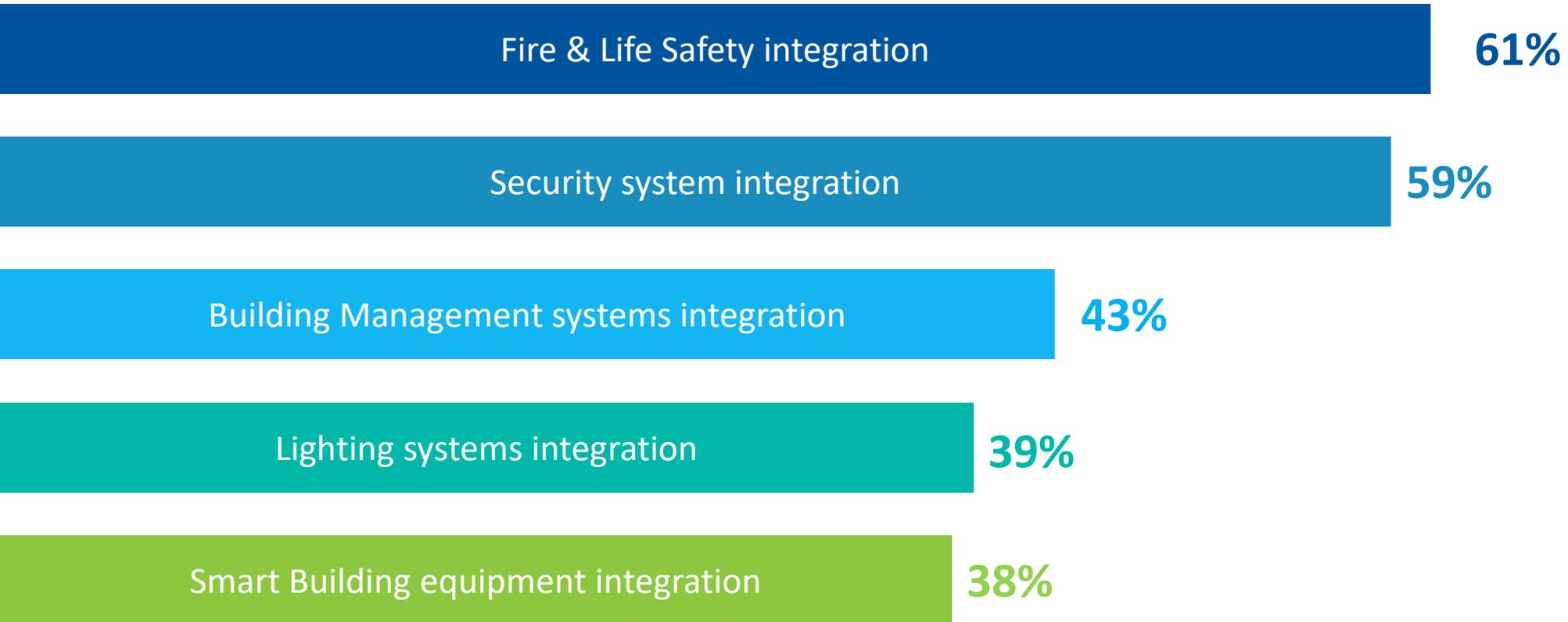
Going off the grid

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

68% of respondents indicated **resilience** is very or extremely important when considering infrastructure investments

The trend towards integration will continue with strong investment planned in the next year

organizations investing in the next 12 months





Future Community:

- Adaptive, Secure & Resilient
- Embraces Technology & Innovation attached to measurable outcomes
- Utilizing & Monetizing Data w/positive economic impacts
- Enhancing the citizen's experience
- People bring families- Work, Live & Play
- Supports a Smarter & Sustainable & Connected Workforce
- Is **Distinctive & Desirable**