Uptime Institute Climate Change Survey 2021

Q3/Q4 2021



Data center operators are attentive to their risks from climate change and extreme weather. They are assessing risk more frequently and focusing more on vulnerabilities. Operators describe data center sustainability performance as average, compared with other industries — but think efforts are not yet reducing environmental impacts.

ABOUT THIS SURVEY

The Uptime Institute Climate Change Survey 2021 was conducted in September and October 2021 and had over 400 global respondents. This report highlights responses from data center owners and operators.

Management considers climate risk real, but manageable

Thinking about how your organization responds to the impacts of climate change and extreme weather events, which of these statements do you think is most accurate? (n=312)

Our management sees a **dramatic increase in risk** to our data centers due to climate change and **is taking steps** to improve the resiliency of our critical infrastructure

9%

Our management sees an **increased risk** to our data centers due to climate change and **is taking steps** to improve the resiliency of our critical infrastructure

26%

Our management has determined the vulnerability of our data centers to climate change and **believes we have adequate protections in place** for the foreseeable future

35%

Our management has yet to formally assess the vulnerability of our data centers to climate change

30%

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Grid resiliency is most reviewed, but water concerns rise

Regarding your organization's climate change/weather-related resiliency assessments, which of the following areas do you typically review? Choose all that apply.

Ground water dependency/use/resiliency

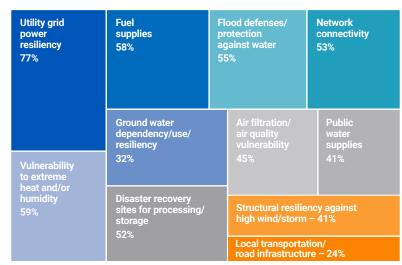


Flood defenses/protection against water



2021 All responses

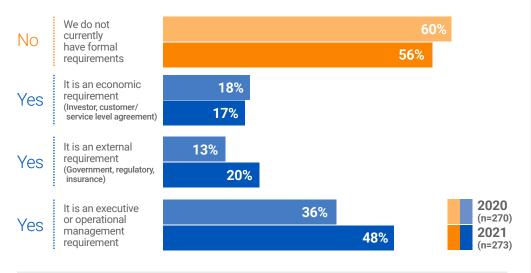
(n=119)



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More stakeholders want resiliency assessments

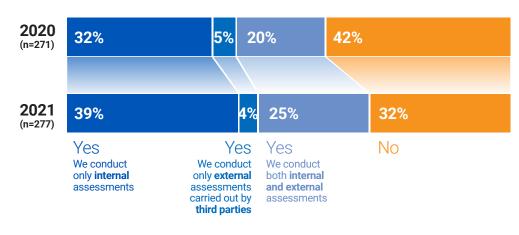
Are you formally required to conduct climate change/weather-related resiliency assessments for your data center infrastructure? Choose all that apply.



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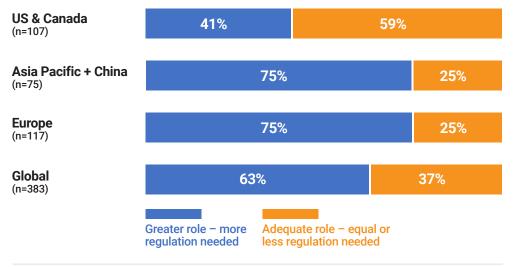
Majority are conducting climate risk assessment

Does your organization currently conduct climate change/weather-related resiliency assessments for your data center infrastructure? (All figures rounded)



Majority invite more regulation for sustainability

What role do you think government regulations should play in improving the overall environmental sustainability of the data center sector?



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Annual climate risk assessment is most common

How often does your organization conduct ongoing climate change/weather-related resiliency assessments of your existing data center infrastructure? (n=94)

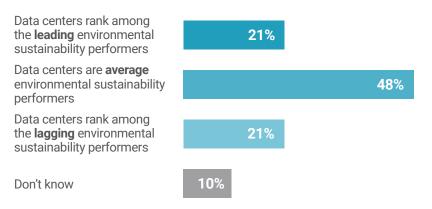


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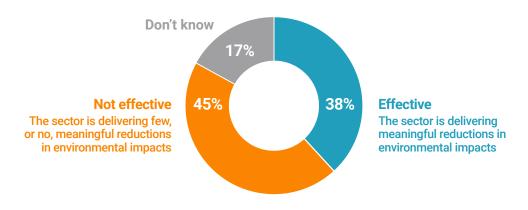
Industry rates itself average for sustainability...

Compared with other areas of business activity (e.g., in-store commerce, manufacturing, logistics), which of these would you say most accurately describes the data center sector's performance in terms of environmental sustainability? (n=407)



...but largely critical of its environmental impact

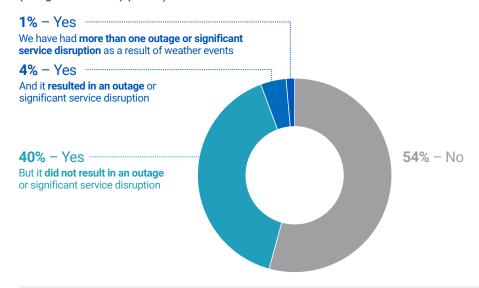
Regarding the global data center sector, do you think its environmental commitments are effective in curbing data center energy use, water use, and greenhouse gas emissions? (n=406)



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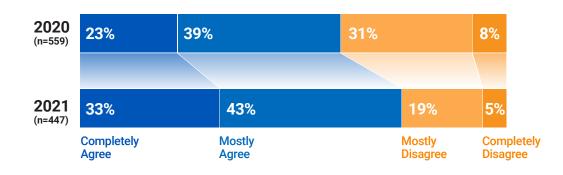
Extreme weather events common, but sometimes disruptive

Within the last three years, have your organization's data centers in your region experienced an extreme weather event that threatened continuous operation? (All figures rounded) (n=282)

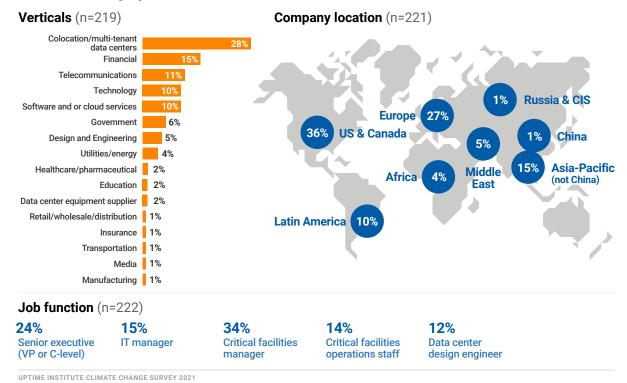


More agree: Climate change threatens supply chains

Agree or Disagree: Over the next 10 years, climate change and weather-related events will disrupt data center supply chains. (All figures rounded)



Uptime Institute Climate Change Survey 2021: End user demographics



Uptime Institute Climate Change Survey 2021: Vendor demographics

Company location (n=173)



Job function (n=173)

42%

Consultant/advisory/ services firm: manager/ advisor/other

27%

Product provider/ vendor: manager/ advisor/other

31% Data center design or engineering firm: manager/ designer/advisor

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ABOUT UPTIME INSTITUTE INTELLIGENCE

Uptime Institute Intelligence is an independent unit of Uptime Institute dedicated to identifying, analyzing and explaining the trends, technologies, operational practices and changing business models of the mission-critical infrastructure industry. For more about Uptime Institute Intelligence, visit uptimeinstitute.com/ui-intelligence or contact research@uptimeinstitute.com.

Uptime Institute - The Global Data Center Authority®, a division of The 451 Group, has office locations in the US, Mexico, Costa Rica, Brazil, UK, Spain, UAE, Russia, Taiwan, Singapore and Malaysia. Visit uptimeinstitute.com for more information.

All general queries:

Uptime Institute, 5470 Shilshole Avenue NW, Suite 500, Seattle, WA 98107 USA

+1 206 783 0510; info@uptimeinstitute.com

