

# Uptime Institute Direct Liquid Cooling Survey 2022

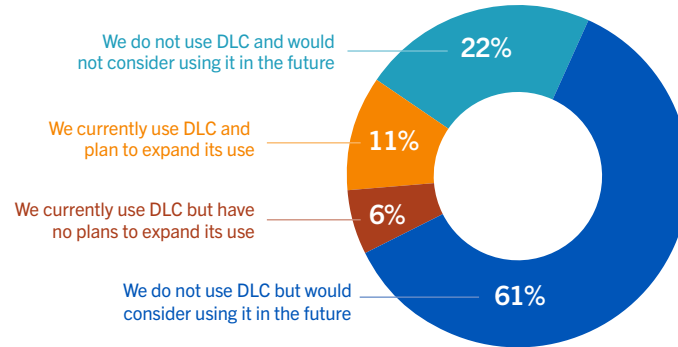
Q4 2021 / Q1 2022

## SUMMARY

Direct liquid cooling (DLC) delivers operational savings and sustainability benefits, yet its adoption is fringe. Most data center operators predict a substantial increase in use within five years, particularly for cold plate systems. However, concerns over the cost of change, coolant leaks, supply chain challenges and system failures persist.

### DLC use remains sporadic but interest is high

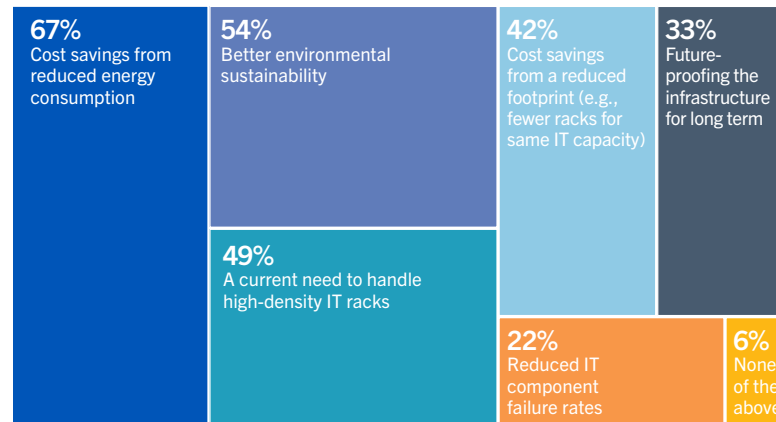
Do you currently use, or are you considering using, any DLC technology in your owned data centers? (n=179)



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### Energy savings are the most attractive driver

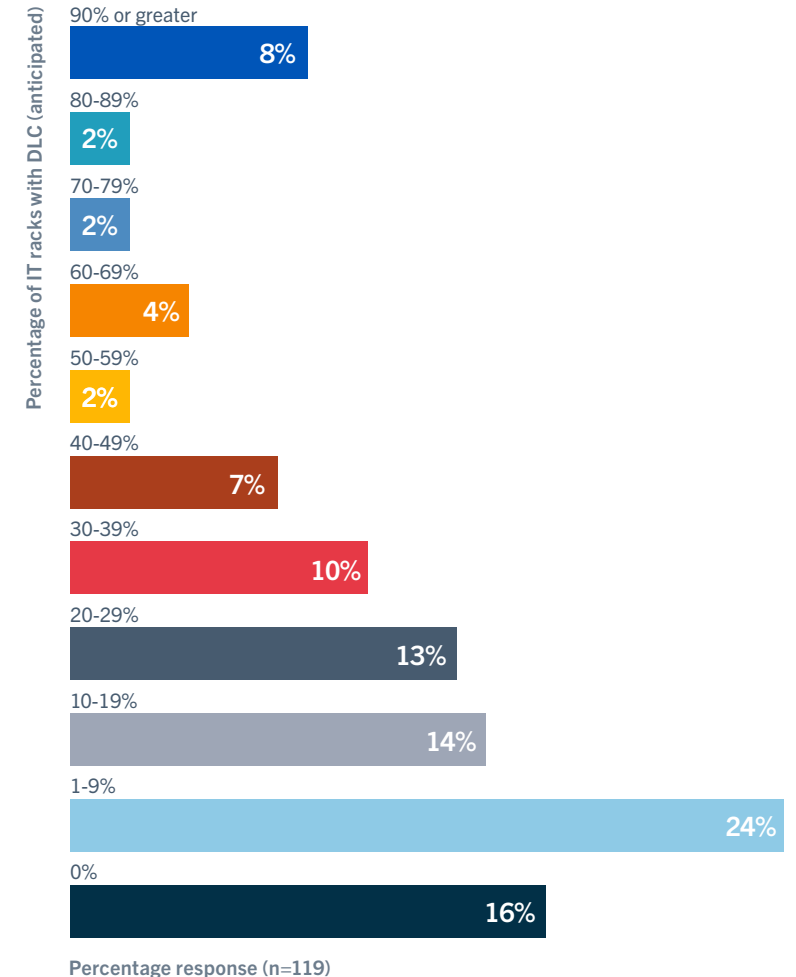
Which of the following benefits would most likely convince your organization to switch to DLC for your owned data center(s)? Choose all that apply. (n=106)



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### Most predict significant adoption within five years

Looking ahead three to five years, what percentage of your IT racks (if any) do you expect to incorporate DLC? (n=119)



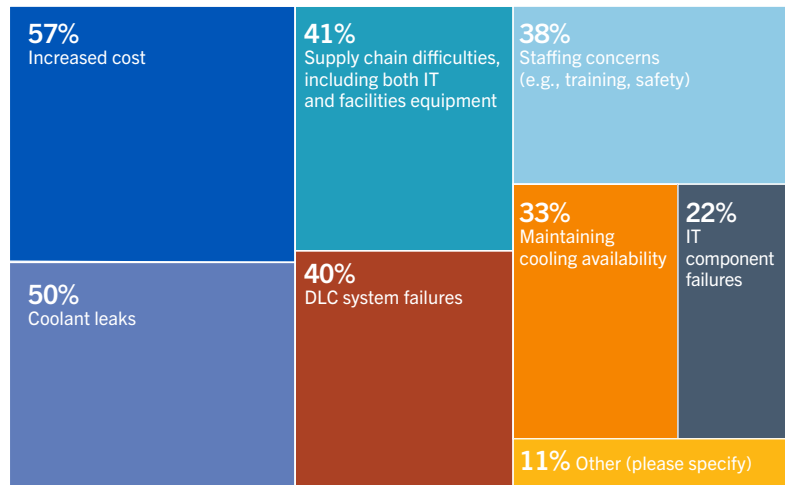
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#### ABOUT THIS SURVEY

The Uptime Institute Direct Liquid Cooling Survey 2022 was conducted in December 2021 and January 2022 and had 179 end user respondents.

## Concerns around cost of change and faults are common

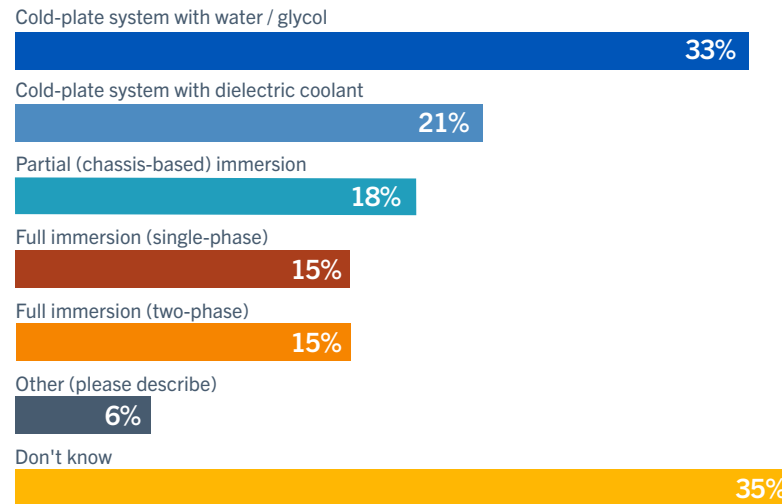
Which of the following do you consider major hurdles in deploying DLC for your owned data centers? Choose no more than three. (n=104)



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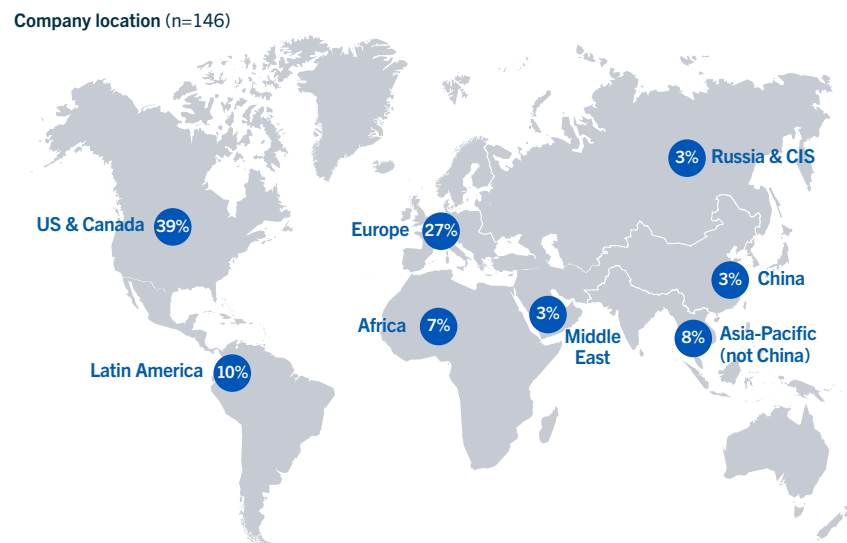
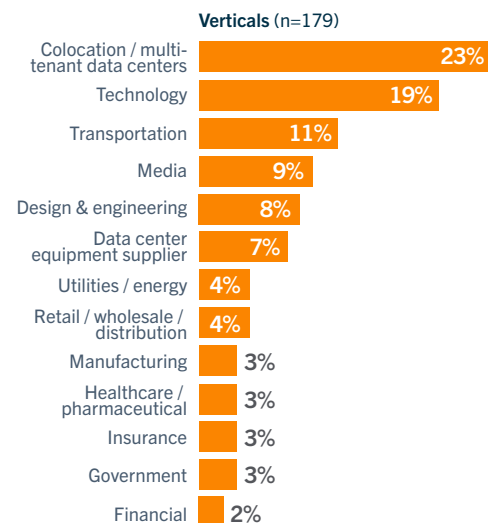
## Cold plates are the most popular but many are undecided

Which types of DLC is your organization considering for your enterprise data centers? Choose all that apply. (n=110)



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## Uptime Institute Direct Liquid Cooling Survey 2022: end user demographics



### Job function (n=179)



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### About Uptime Institute

Uptime Institute is the Global Digital Infrastructure Authority. Its Tier Standard is the IT industry's most trusted and adopted global standard for the proper design, construction, and operation of data centers – the backbone of the digital economy. For over 25 years, the company has served as the standard for data center reliability, sustainability, and efficiency, providing customers assurance that their digital infrastructure can perform at a level that is consistent with their business needs across a wide array of operating conditions.

With its data center Tier Standard & Certifications, Management & Operations reviews, broad range of related risk and performance assessments, and accredited educational curriculum completed by over 10,000 data center professionals, Uptime Institute has helped thousands of companies, in over 100 countries to optimize critical IT assets while managing costs, resources, and efficiency.

Uptime Institute is headquartered in New York, NY, with offices in Seattle, London, Sao Paulo, Dubai, Singapore, and Taipei. For more information, please visit [www.uptimeinstitute.com](http://www.uptimeinstitute.com)

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