Capgemini
RESEARCH INSTITUTE

Sustainable IT

Why it's time for a Green revolution for your organization's IT

Enterprise IT contributes significantly to the world's carbon footprint

89% of organizations recycle less than 10% of their IT hardware.

In 2019, **53.6** million tons of e-waste were generated worldwide – an increase of 21% in five years.[1]

Data centers accounted for nearly **1%** of the world's energy demand in 2019.[2]
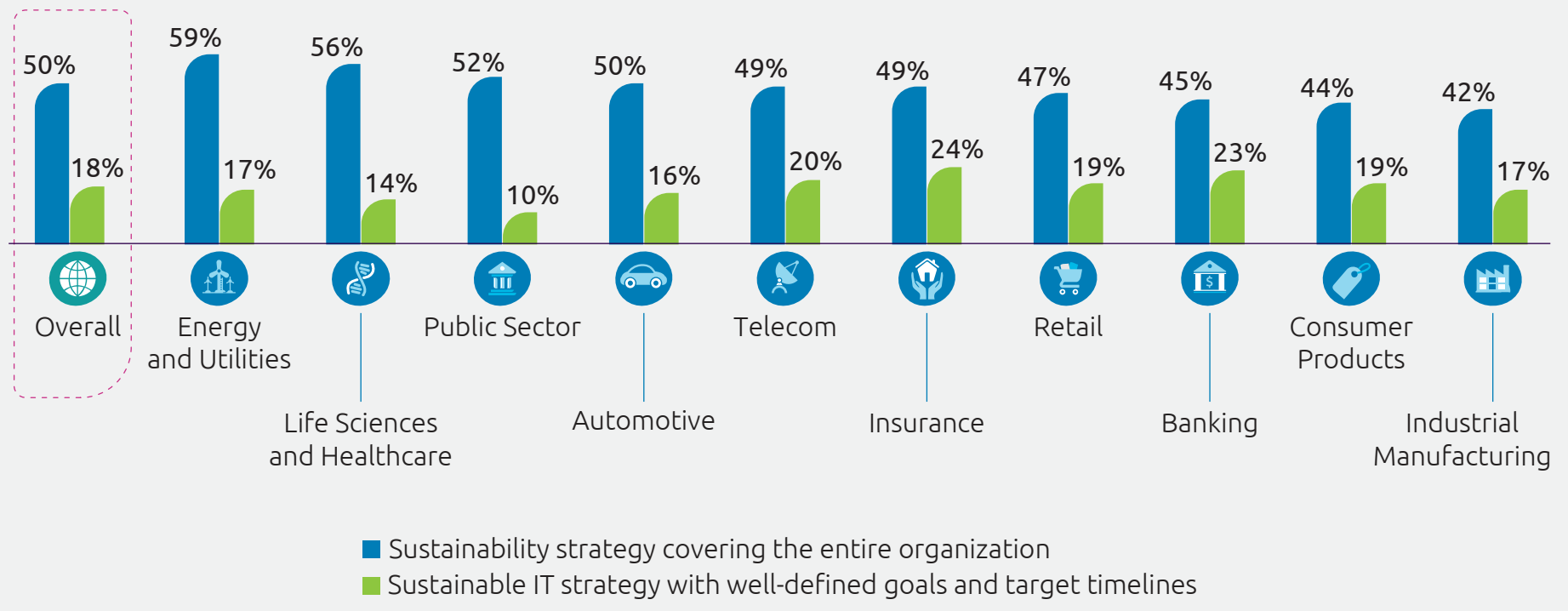
1. United Nations Institute for Training and Research, "GLOBAL E-WASTE SURGING: UP 21 PERCENT IN 5 YEARS," July 2, 2020.
2. IEA, "Global trends in internet traffic, data centre workloads and data centre energy use, 2010–2019," June 2020.

Despite significant growth in the carbon footprint of IT, sustainable IT is not a priority for most organizations

Globally, only **43%** of executives say they are aware of their organization's IT footprint.

50% of firms say they have an enterprise-wide sustainability strategy, but only **18%** have a comprehensive sustainable IT strategy with well-defined goals and target timelines.
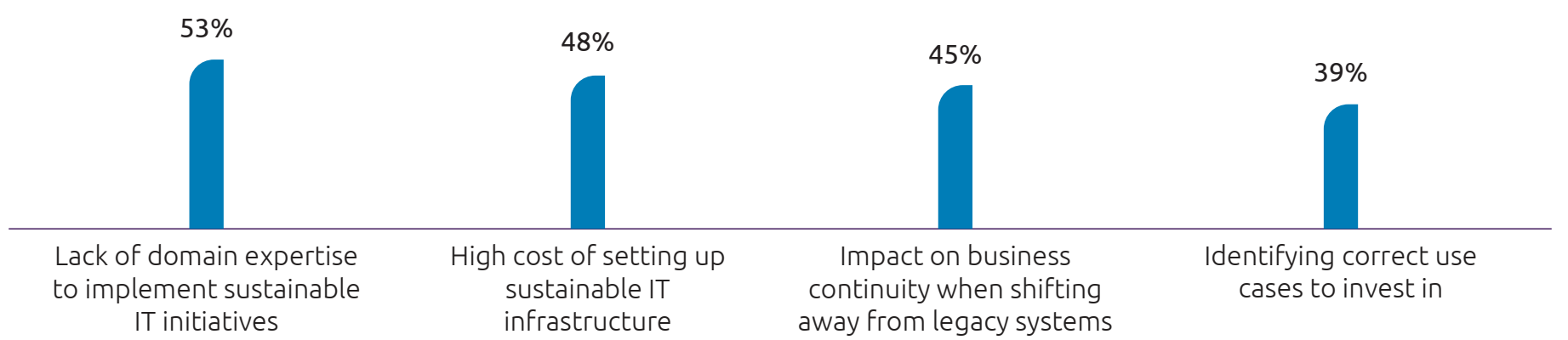
Category	Sustainability strategy covering the entire organization	Sustainable IT strategy with well-defined goals and target timelines
Overall	50%	18%
Energy and Utilities	59%	17%
Life Sciences and Healthcare	56%	14%
Public Sector	52%	10%
Automotive	50%	16%
Telecom	49%	20%
Insurance	49%	24%
Retail	47%	19%
Banking	45%	23%
Consumer Products	44%	19%
Industrial Manufacturing	42%	17%

- Sustainability strategy covering the entire organization
- Sustainable IT strategy with well-defined goals and target timelines

Source: Capgemini Research Institute, Sustainable IT survey, December 2020–January 2021, N=1,000 organizations.

Adoption and deployment of solutions is undermined by a lack of tools and expertise

49% say a major challenge, when it comes to implementing sustainable IT initiatives, is the lack of tools or standards/ratings to evaluate the carbon footprint of IT.

Implementation challenges are a major roadblock with **53%** saying they do not have the required expertise for sustainable IT implementation.

53% Lack of domain expertise to implement sustainable IT initiatives	**48%** High cost of setting up sustainable IT infrastructure
45% Impact on business continuity when shifting away from legacy systems	**39%** Identifying correct use cases to invest in

Source: Capgemini Research Institute, Sustainable IT survey, December 2020–January 2021, N=1,000 organizations.

High maturity organizations deliver significant benefits

6% of the organizations in our survey can be classified as highly mature when it comes to sustainable IT

61% of those highly mature companies have improved their ESG (environmental, social and governance) score and brand image

56% have improved customer satisfaction.

A three-stage roadmap is key to driving progress and seizing the sustainable IT prize

Roadmap for sustainable IT implementation

Assess: Set the foundation for sustainable IT initiatives
- Baseline and benchmark the environmental footprint of enterprise IT
- Create a sustainable IT strategy aligned to global sustainability strategy
- Define key performance indicators, targets, frameworks and set carbon cost to IT operations
- Create a transformation roadmap for sustainable IT

Governance Plan: Create effective governance for sustainable IT initiatives
- Ensure all stakeholders are committed to implementing sustainable IT initiatives
- Align services, business models, and go-to-market strategy with sustainable IT
- Create dedicated sustainable IT team

Implement: Operationalize sustainable IT initiatives
- Ensure sustainability in software architecture
- Identify environmental impact of AI during design and training
- Make environmental impact a criterion to select IT vendors
- Develop sustainability culture among employees and teams
- Select and scale the right sustainable IT use cases

Source: Capgemini Research Institute analysis.

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