

# Sustainability at the Edge

The Gap Between Enterprise Plans and Sustainability Programs  
for Core and Distributed IT



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# Key Takeaways

- Nearly all companies we surveyed agree that IT infrastructure needs to become more sustainable and are planning to have sustainability programs in place in the next year, even firms that do not see sustainability as a key focus currently. This includes both core datacenters and distributed IT locations and “edge” sites.
- Larger firms are further along with these programs but are also still adding to them – particularly around energy use, waste and embodied carbon.
- Most firms seem to look at their IT infrastructure holistically when it comes to sustainability programs, with both the core datacenter and distributed IT included in the sustainability plan. It makes sense to set up programs and tools and to gather data for distributed IT and core datacenters simultaneously, since core and distributed IT have similar requirements when it comes to sustainability.
- Once a program is in place, one of the key issues is obtaining the data/metrics needed to track progress. Software is essential – datacenter infrastructure management (DCIM) and environmental, social and governance (ESG)/environmental sustainability management (ESM) software – not just spreadsheets.
- The first metric most firms start to track is energy consumption, including total energy consumption, power usage effectiveness (PUE) and total renewable energy consumed.
- Greenhouse gas emissions are the most difficult to calculate and standardize. Manufacturers are aware that this is becoming a priority, and some are including information about greenhouse gases emitted during the manufacturing and transport of products. This is also where ESG-specific software may be the most helpful, with tools to help calculate and track these emissions.
- Organizations may have sustainability programs in place, but these programs often only cover a few of the many possible metrics or do not track metrics for all equipment (both core and distributed). There is also, of course, a big difference between tracking sustainability metrics and taking action to improve those metrics. So firms may well be less advanced than they realize.
- Gaps between perception and reality are an issue. Nearly half of respondents think or hope they are more advanced with their sustainability programs than they are in reality.
- When asked what was important for vendors to offer, nearly 45% of respondents selected “solutions to improve operational efficiency,” 40% said “product environmental data,” and another 35% said “tools to monitor and manage energy consumption of the product” (respondents could select multiple options).

# Introduction

For many enterprises, IT deployments are in flux. Traditionally, data and workloads were stored in centralized enterprise datacenters, with some smaller deployments in regional facilities. Now, companies have data and workloads outside of core enterprise datacenters, in centralized public cloud sites, leased datacenters and at edge locations. This is often due to the amount of data being created in edge locations that requires local storage or compute, such as for latency reasons, or when customers or employees need access to data nearby and using a central datacenter or public cloud region would add latency and impact performance.

Putting workloads at the edge means that organizations increasingly need to add infrastructure at the edge to store and analyze data, as well as network connectivity to transport the data to the core. We estimate global electricity used by IT equipment in edge settings (server rooms, micro datacenters, datacenters with <100kW of power) at 140 terawatt hours in 2021. This is growing rapidly, as IoT and 5G applications produce increasing amounts of data that is stored near devices. Projections from Schneider Electric estimate datacenter energy consumption at 2,700 terawatt hours by 2040, with 60% of that consumption from distributed sites. This means more equipment, more power use and, therefore, more to keep track of.

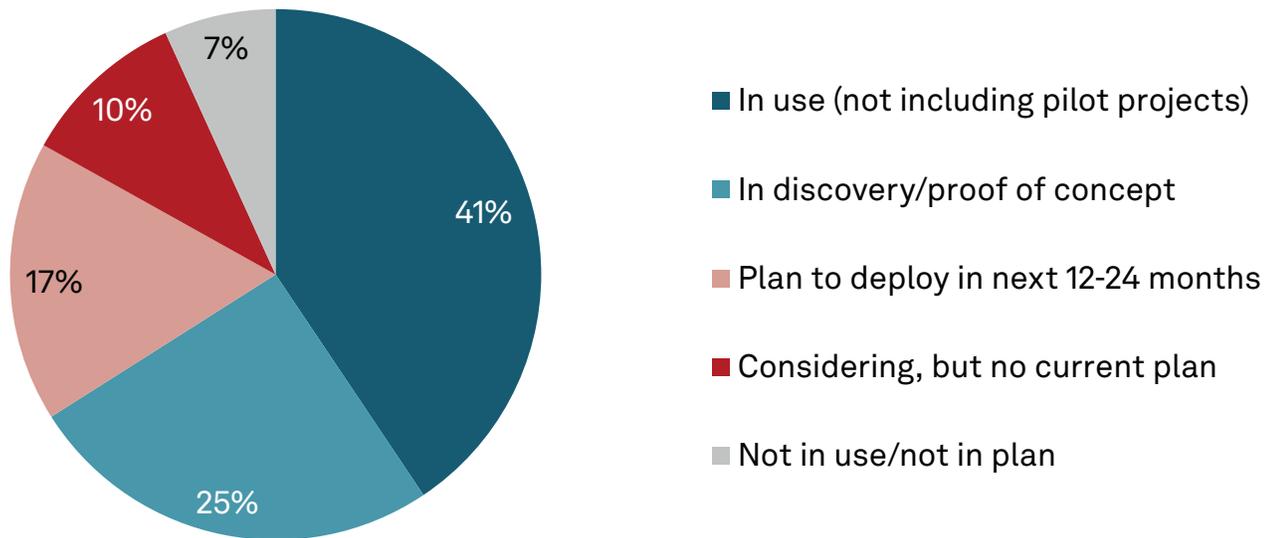
At the same time, enterprises around the world are looking to improve their carbon footprint and sustainability profile while the growing amount of distributed IT has an increasing impact on the environment. We wanted to determine whether enterprises are starting to include distributed IT in their sustainability plans and what might distinguish enterprises that are more advanced in this effort. In addition, we thought it would be helpful to examine what steps firms typically take as they set up programs to measure, monitor and improve sustainability for their IT equipment.

To answer these questions and develop a maturity curve regarding sustainability for enterprises' IT infrastructure, Schneider Electric commissioned 451 Research/S&P Global Market Intelligence to conduct a study on enterprise sustainability and distributed IT and edge datacenters. We surveyed IT decision-makers from more than 1,150 enterprises based in China, France, Germany, India, Italy, the Netherlands, Poland, Singapore, Spain, Sweden, the U.K. and the U.S. These organizations included medium-sized and large enterprises and represented more than 20 verticals including retail, healthcare, IT, education, financial services and industrial manufacturing. Respondents were required to have knowledge of enterprise sustainability programs, as well as distributed IT and datacenter resources.

# Distributed IT and Edge Is Growing in Various Shapes and Formats

There are various reasons for deploying distributed IT infrastructure, or infrastructure at the edge, and definitions of “distributed” vary. These definitions can include deployments outside of the core enterprise datacenter, such as regional datacenters, backup/disaster recovery sites, network points of presence, print servers in server closets and infrastructure for internet of things (IoT) that is as close as necessary to where data is generated and consumed. Looking specifically at IoT workloads, which tend to generate large and growing volumes of data, 41% of respondents to a recent 451 Research survey said they have IoT projects in use and another 42% have projects in discovery/proof of concept or plan to deploy IoT within two years (see Figure 1). When asked about plans to use edge venues for IoT workloads, 41% said they currently use edge venues and 42% have projects in discovery/proof of concept or planned to deploy workloads at the edge within two years.

Figure 1: IoT Edge Venues



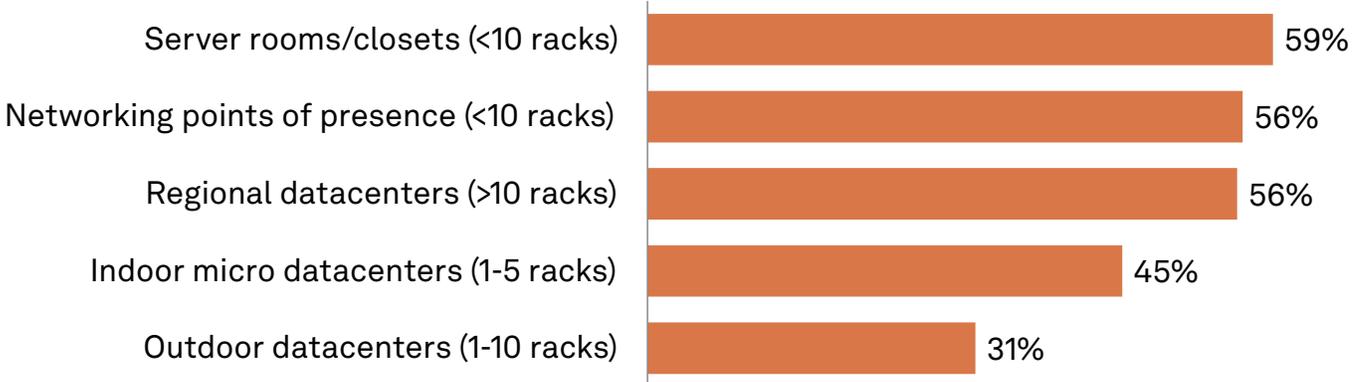
Q. Which of the following best describes your organization's use of edge venues (i.e., IT environments outside of centralized public cloud or enterprise datacenters and/or third-party colocation facilities) for IoT workload deployment and execution?

Base: All respondents, abbreviated fielding (n=414)

Source: 451 Research's Voice of the Enterprise: Internet of Things, Infrastructure 2022

For this survey, all respondents have some element of distributed IT, ranging from regional datacenters to micro datacenters, server rooms and closets (see Figure 2). In addition, 83% of respondent organizations own or lease a core datacenter, with the remaining 17% saying they instead use software as a service, hosting or cloud.

Figure 2: Distributed IT Resources



Q. Please identify any distributed IT resources your company has.

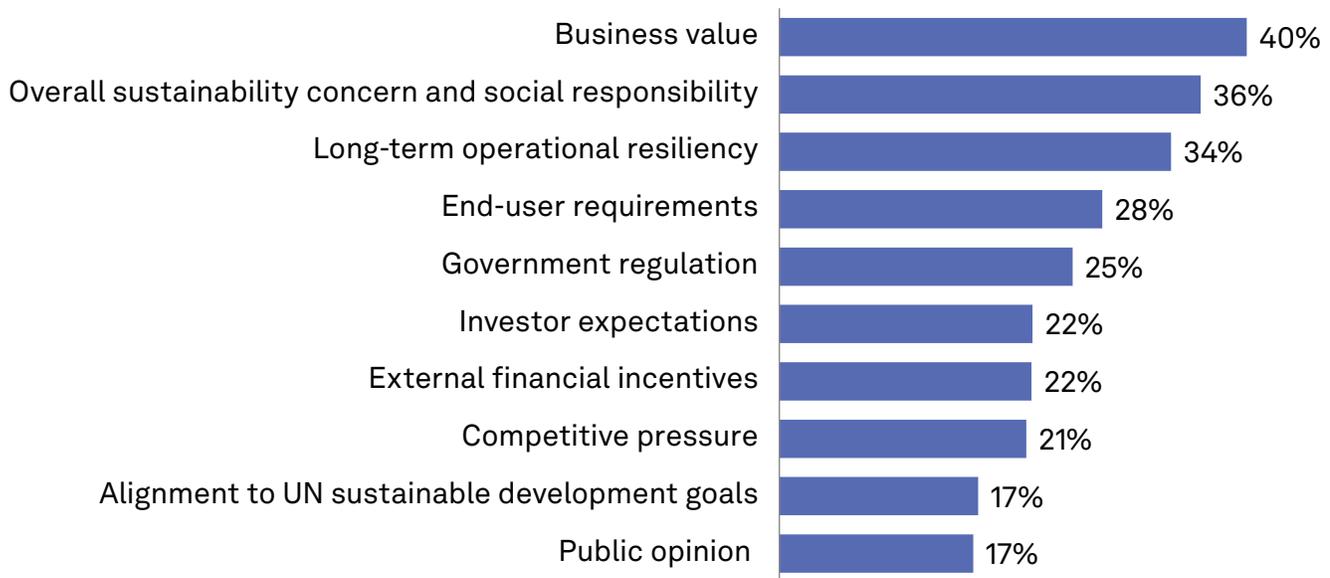
Base: All respondents (n=1,150)

Source: 451 Research custom survey, 2022

# Why Sustainability Is Important to Enterprises

What is driving the need for sustainability? In the survey, business value was the most cited reason (by 40% of respondents), followed by overall sustainability concerns/social responsibility and long-term operational resiliency (see Figure 3). It is not surprising that business value is the top reason, since business leaders need to make a case internally for putting resources into sustainability projects and would, therefore, examine how improving sustainability would likely enhance business value (starting with potential cost savings, then whether there are opportunities for additional revenue). One would expect, however, that other external pressures such as end-user requirements or government regulations would be the next most important factors. In that context, it was surprising that overall sustainability concern and social responsibility was the second most common choice. The third most common choice was “long-term operational resiliency,” which could be because firms are concerned about climate change and its effects on operations.

**Figure 3: Sustainability Drivers**



Q. Which of the following factors are most important in driving sustainability initiatives for your distributed IT infrastructure now? Select up to three.

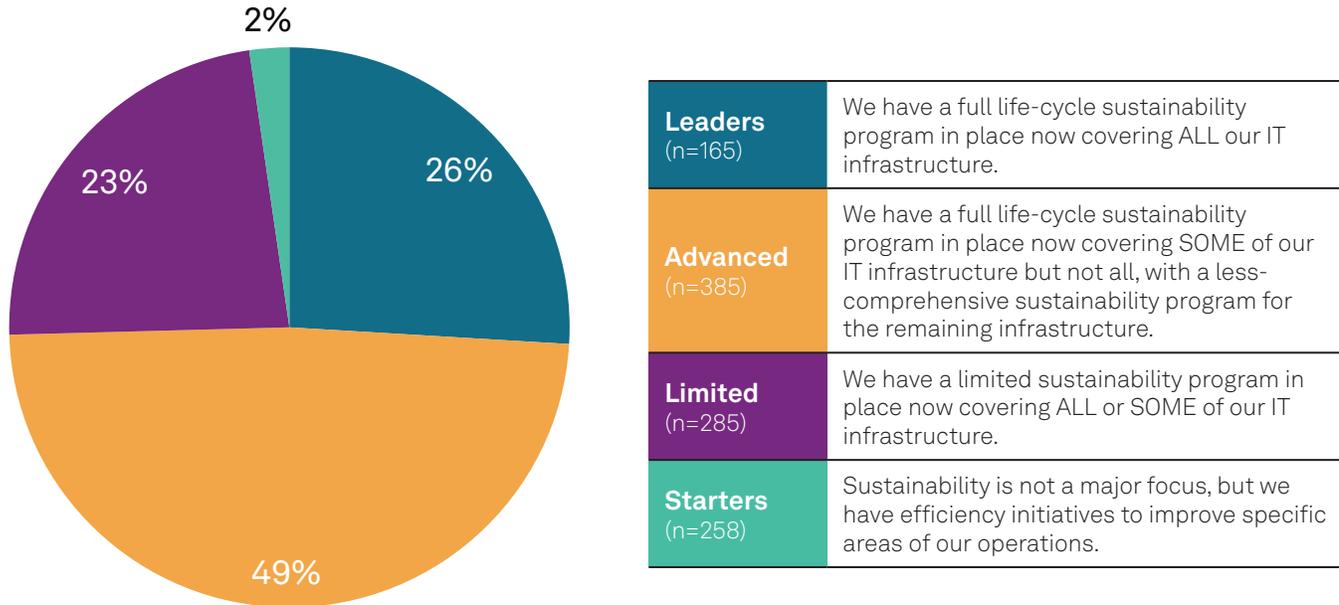
Base: All respondents (n=1,134)

Source: 451 Research custom survey, 2022

## Enterprise Sustainability Maturity Levels

Based on the survey results, we categorized respondents into groups, according to how mature the respondents thought their company’s approach to sustainability was with regard to their enterprise IT infrastructure, including core datacenters and distributed IT and edge datacenters (see Figure 4).

**Figure 4: Maturity Regarding Sustainability Programs, by Respondents’ Self-Identification**



Q. Which of the following statements most accurately reflects the maturity of the sustainability initiatives at your organization now and/or in the next two years?

Base: All respondents

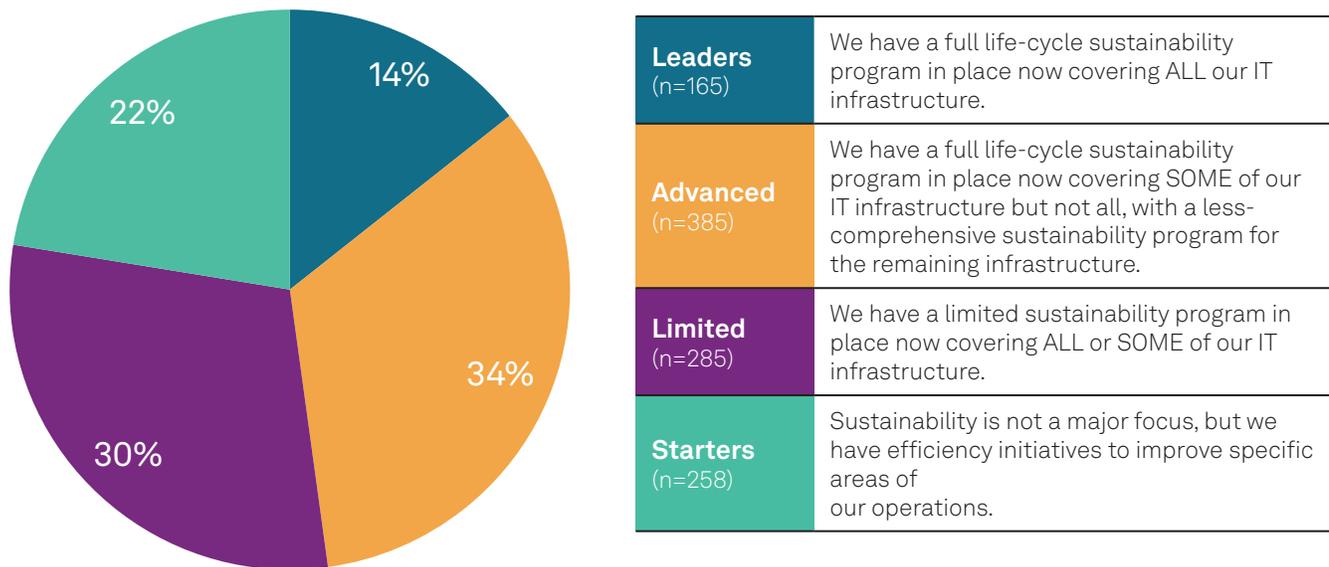
Source: 451 Research custom survey, 2022

Respondents tended to give their organizations high marks for maturity; only 2% indicated that sustainability is not a focus. According to their responses, 75% believe they have a full life-cycle sustainability program for at least part of their IT infrastructure. Included in that number are 26% who believe they have a full life-cycle sustainability program covering ALL of their IT infrastructure.

However, the maturity evaluations of nearly half (48%) of respondents did not match a previous answer. For example, when asked whether the organization had a sustainability program in place for the core datacenter and/or for distributed IT, firms responded they did not have one or the other but then indicated that they consider their organizations to be leaders in maturity. It could be that some respondents counted sustainability programs for servers and IT equipment as part of the firm’s maturity, or that some counted sustainability programs they expect to be in place in the next 12 months as already being in place. Or perhaps they did not read the question thoroughly. Still, one of the first takeaways from the survey is that nearly half of respondents think or hope that their sustainability programs are more advanced than they really are.

To gain a more accurate understanding of maturity, we combined respondents’ self-evaluations with their responses to other questions, particularly about programs in place, with the aim of developing a more realistic maturity curve. This showed that more than 50% of enterprises were actually either just starting their sustainability programs or had limited programs (rather than the 25% that were self-reported in those categories). This approach did find that 48% of firms can be considered to have a full sustainability program for at least part of their infrastructure, including 14% that can be considered to have a full sustainability program for all IT infrastructure, including core datacenters and distributed IT and edge resources (see Figure 5).

**Figure 5: Maturity Regarding Sustainability Programs, by Program Answers Combined With Self-Identification**



Q. Which of the following statements most accurately reflects the maturity of the sustainability initiatives at your organization now and/or in the next two years?

Base: All respondents

Source: 451 Research custom survey, 2022

Maturity roughly correlates with company size: Midsize firms that have 1,000-2,500 employees are the most likely to be either Leaders or Advanced (21% and 37%, respectively), followed by firms with 5,000+ employees (18% Leaders and 37% Advanced). The smallest companies, with fewer than 500 employees, had the highest proportion in the Starters category (31%), meaning either sustainability is not yet a focus or the firm is in the process of adding a sustainability program (see Figure 6). This makes sense because the resources needed to start a sustainability program would be a smaller portion of overall staffing and spending for larger firms than for the smallest firms, and larger firms could perhaps come under more pressure (from investors, clients, regulators, etc.) to launch sustainability programs. We looked at maturity differences by country/region as well, but we found that these were much more closely correlated with company size than with the location of headquarters.

**Figure 6: Maturity of Sustainability Programs, by Company Size**



Q. Which of the following statements most accurately reflects the maturity of the sustainability initiatives at your organization now and/or in the next two years?  
 Base: All respondents  
 Source: 451 Research custom survey, 2022

When it comes to maturity, organizations may believe they are more mature because they have sustainability programs in place or plan to within the next year, but these programs may only cover a small number of the many possible metrics to track. There is a big difference between tracking sustainability metrics and actually taking action to improve those metrics.

## Challenges Regarding Sustainability

Optimizing energy use was the top-cited sustainability challenge regardless of maturity, chosen by more than 40% of respondents (see Figure 7). Obtaining consistent data and metrics was also a key issue, particularly for Advanced and Leaders, perhaps because you can only see whether you have improved something when you can measure it. Some Limited firms noted challenges meeting enterprise sustainability targets. For Starters, lack of skilled staff was the second-most-highlighted problem, along with obtaining consistent data, which could be because many Starters are smaller companies that have fewer staff overall and may not have the resources to hire dedicated staff for sustainability programs.

**Figure 7: Sustainability Challenges in the Enterprise – by Maturity Level**

	Starters (n=258)	Limited (n=342)	Advanced (n=385)	Leaders (n=165)	Total (n=1,150)
<b>Obtaining consistent data and metrics needed</b> (e.g., data on energy, carbon footprint, efficiency, etc.)	34%	33%	42%	41%	37%
<b>Managing remote/distributed systems</b>	26%	31%	31%	32%	30%
<b>Optimizing energy use</b>	40%	43%	40%	42%	41%
<b>Meeting compliance obligations</b>	25%	27%	31%	31%	29%
<b>Lack of skilled staff</b>	34%	25%	29%	25%	28%
<b>Meeting enterprise sustainability targets</b>	31%	34%	36%	38%	35%
<b>Performance is unsatisfactory</b>	19%	17%	14%	16%	16%
<b>Unclear what to prioritize</b>	16%	13%	12%	8%	13%
<b>Quantifying payback</b>	19%	23%	23%	21%	22%

Q. What are the greatest challenges for your organization when trying to address environmental sustainability? (Please select up to three)

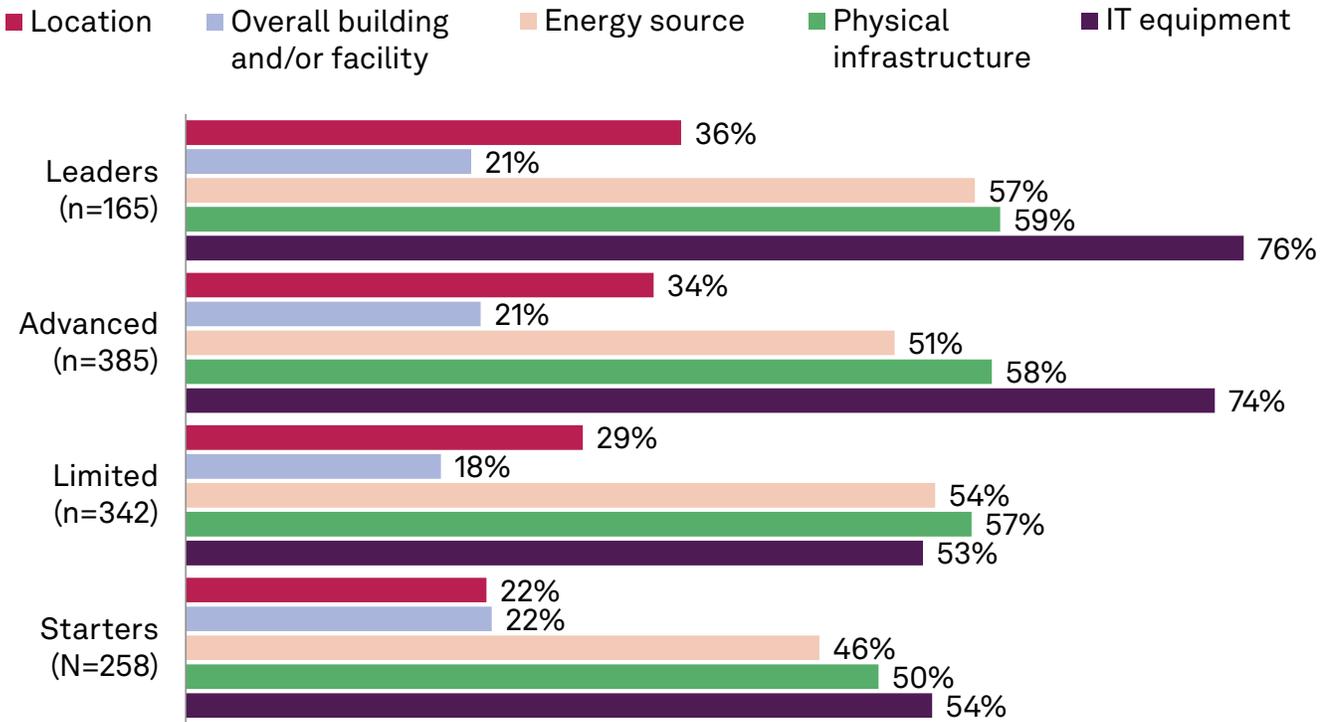
Note – darker rose color represents most chosen, lighter color represents second-most chosen

Base: All respondents

Source: 451 Research custom survey, 2022

Among the factors influencing sustainability at distributed IT locations, IT equipment was the top choice, most notably among the Advanced and Leader companies. Physical infrastructure and energy source were widely cited as well.

**Figure 8: Factors Impacting Sustainability at Distributed IT Locations**



Q. What has the most impact on sustainability at your distributed IT locations (outside the core datacenter and/or at the edge)?

Base: All respondents

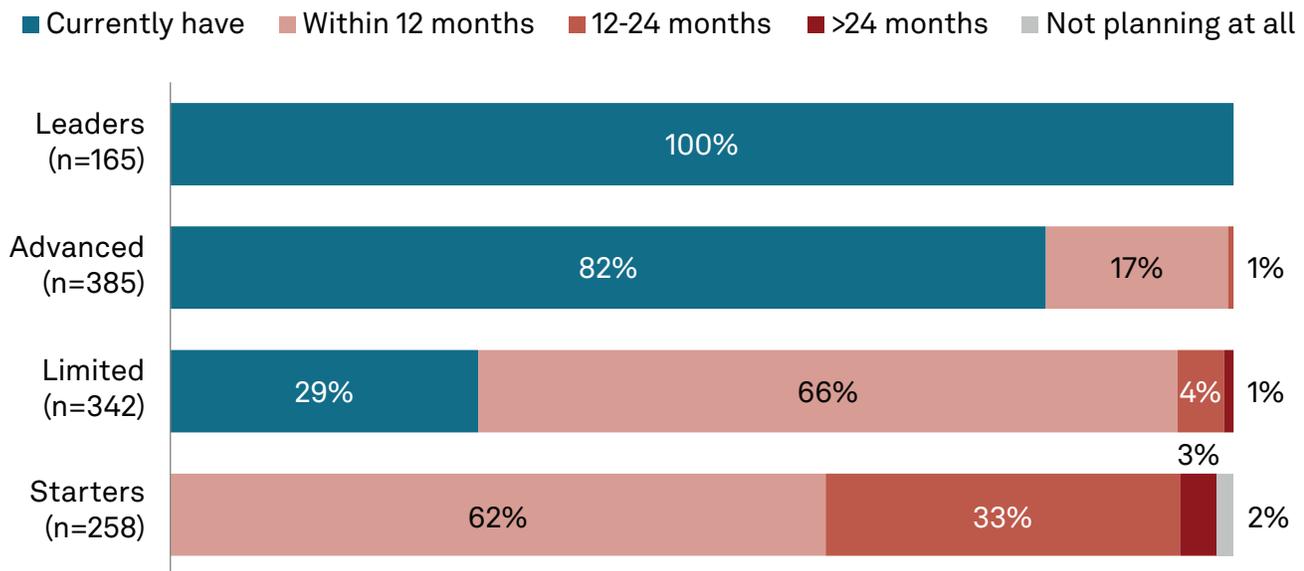
Source: 451 Research custom survey, 2022

## Sustainability Programs for IT Infrastructure

We started this survey by asking whether firms had sustainability programs in place for their core datacenter and/or for their distributed IT. Our assumption was that many firms would not have a program in place yet. We were, therefore, surprised when 47% of respondents with a core datacenter said they have a program in place for it now, and another 41% plan to have a program within 12 months. In addition, 51% of respondents said they have a program in place for improving the sustainability of their distributed IT infrastructure, and another 39% plan to have a program in 12 months. We expected that it would be more common for companies to start by setting up a sustainability program for core datacenters, then add one for distributed IT. Instead, it seems that enterprises are either tackling both together – looking at all their infrastructure holistically – or in some cases starting with the distributed IT.

Thus, more than 80% of respondents either have a sustainability program for core or distributed IT or expect to in the next 12 months. Those that consider themselves the most mature are the most likely to have a program in place for both core and distributed IT (see Figure 9). Even for Starters, for which sustainability is not necessarily a priority, a majority (62%) plan to have a program in place within 12 months. Note that having a program does not mean it is comprehensive in terms of what is being tracked, or that it has led to tangible sustainability improvements. Still, having a program shows that firms are aware that sustainability is important and that they are starting to look at what to do about it. There may be some wishful thinking that having a program will lead to action – giving up investments in other things in order to improve sustainability is different than simply thinking about it. However, these responses show that firms are ready to consider options.

**Figure 9: Sustainability Programs for Distributed IT – by Maturity Level**



Q. For your distributed IT infrastructure, does your organization currently have sustainability programs in place, or plans to add them? This can include sustainability considerations when designing, building, operating, managing or servicing IT infrastructure.

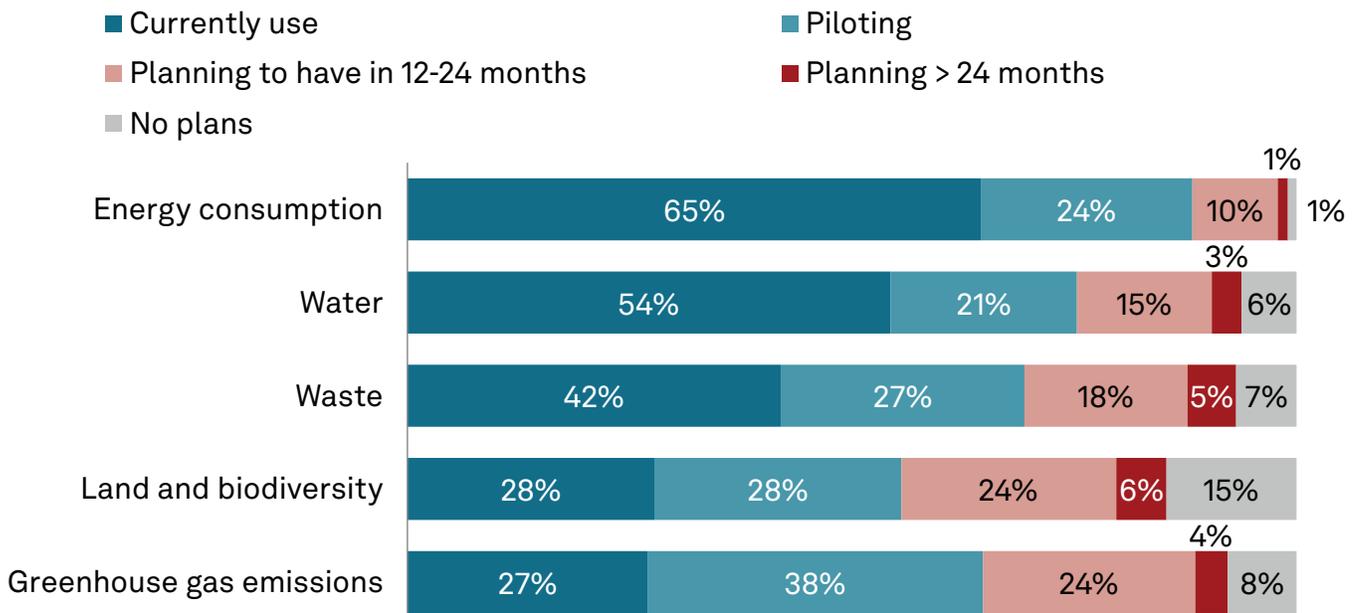
Base: All respondents

Source: 451 Research custom survey, 2022

## Metrics

A sustainability “program” can mean different things, so we wanted to know what metrics organizations are tracking to try to understand what areas companies are hoping to understand and improve. Given that the most-cited challenge for companies was optimizing energy use, it is not surprising that the top metric tracked is energy consumption, cited by 65% of firms (see Figure 10). This is a logical metric to start with because most firms are aware of nominal server faceplate power usage (which is somewhat theoretical but gives an idea of potential power used), and many also have taken steps to track actual power used by equipment. The global rise in energy prices over the past 18 months may have boosted companies’ willingness to measure and reduce consumption.

**Figure 10: Sustainability Metrics Tracked**



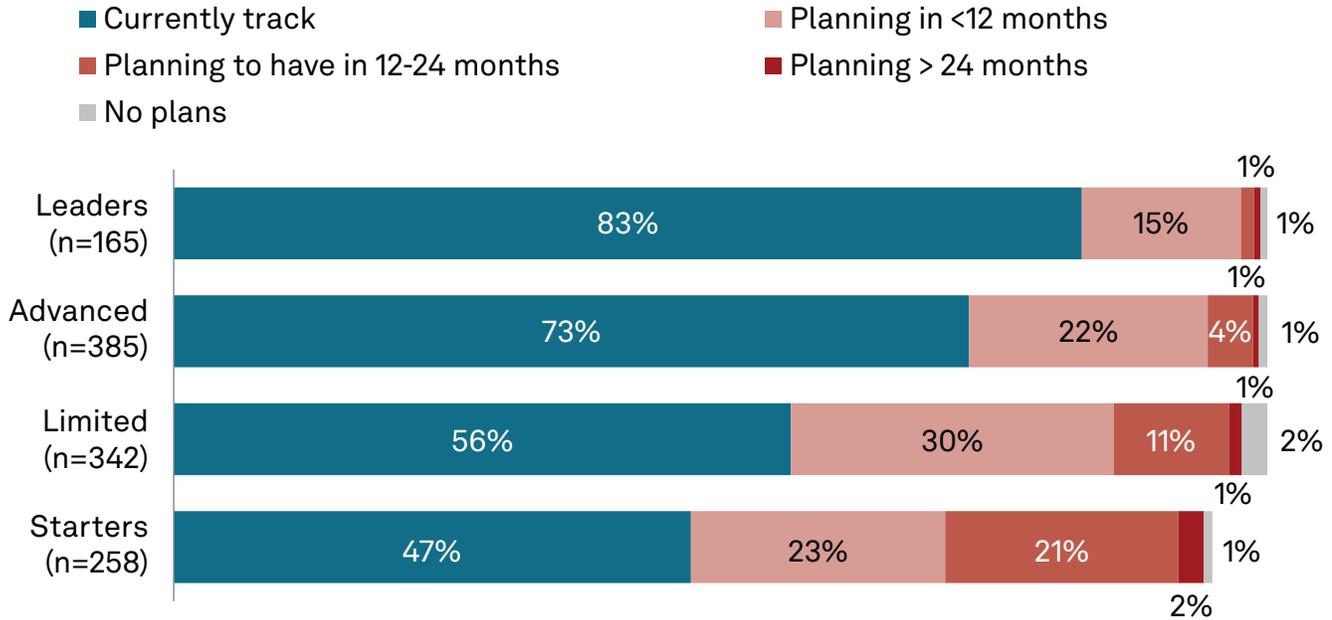
Q. For your distributed IT, which of the following sustainability metrics do you track?

Base: All respondents (n=1,134)

Source: 451 Research custom survey, 2022

Of the Leaders, 83% are tracking energy consumption for distributed IT (see Figure 11). In all cases, a majority of firms plan to track energy consumption within a year. Fewer than half of Starters are tracking it currently, but most plan to within two years.

**Figure 11: Sustainability Metrics for Distributed IT – Energy Consumption**



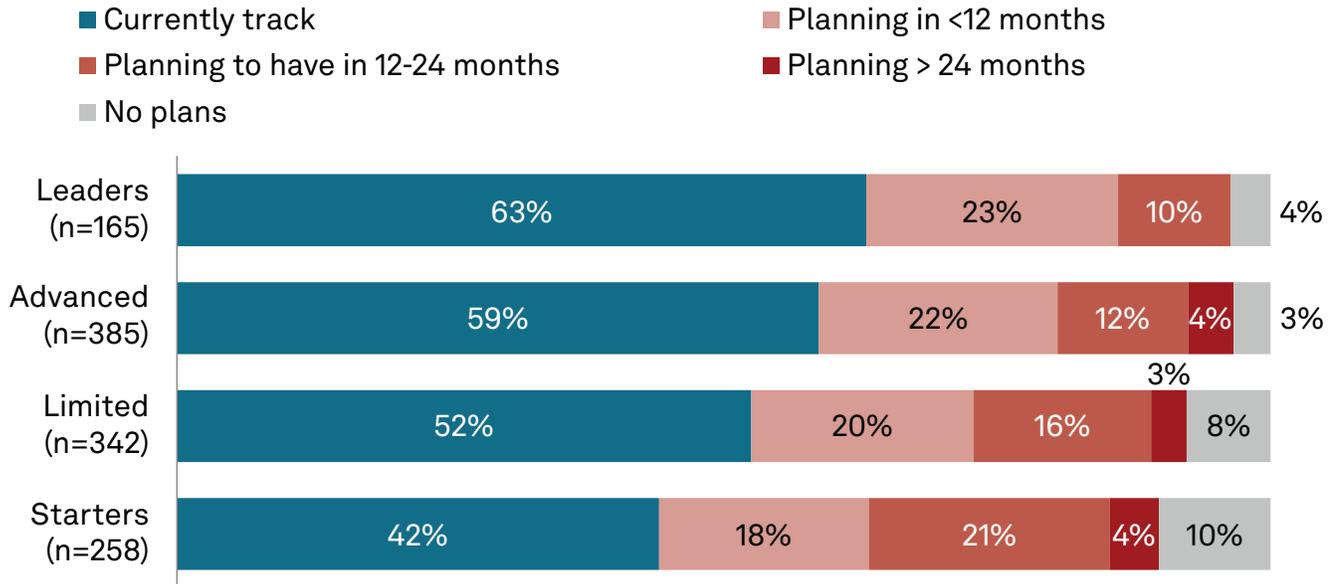
Q. For your distributed IT, which of the following sustainability metrics do you track? – Energy consumption

Base: All respondents

Source: 451 Research custom survey, 2022

Almost two-thirds (63%) of the most mature companies track water use, with 23% planning to in the next 12 months (see Figure 12). Even for Starters, 42% said they track water use. Many distributed IT resources should be small enough that they are not using water for cooling, so we suspect that respondents track all water used at each location, regardless of whether it is used for cooling or human consumption.

Figure 12: Sustainability Metrics for Distributed IT – Water



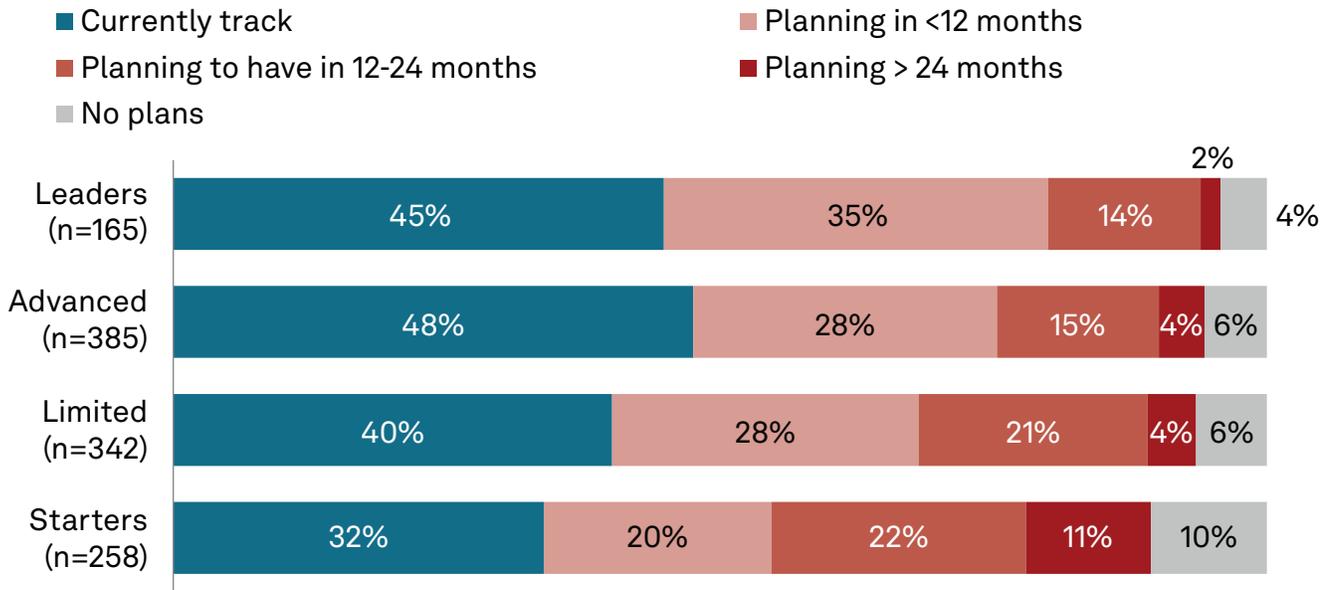
Q. For your distributed IT, which of the following sustainability metrics do you track? – Water

Base: All respondents

Source: 451 Research custom survey, 2022

We were surprised that nearly half of those that are Leaders and Advanced are tracking waste, with another 28%-35% planning to track waste in the next 12 months (see Figure 13). This can include tracking total waste, tracking just the waste sent to landfill or tracking just the waste diverted/recycled. This becomes important as part of understanding greenhouse gas emissions produced during the life cycle of equipment. Waste disposal may also be something firms are paying for, at least in part. In the U.S., for example, firms may have to pay tipping fees for waste going to a landfill.

**Figure 13: Sustainability Metrics Tracked for Distributed IT – Waste**



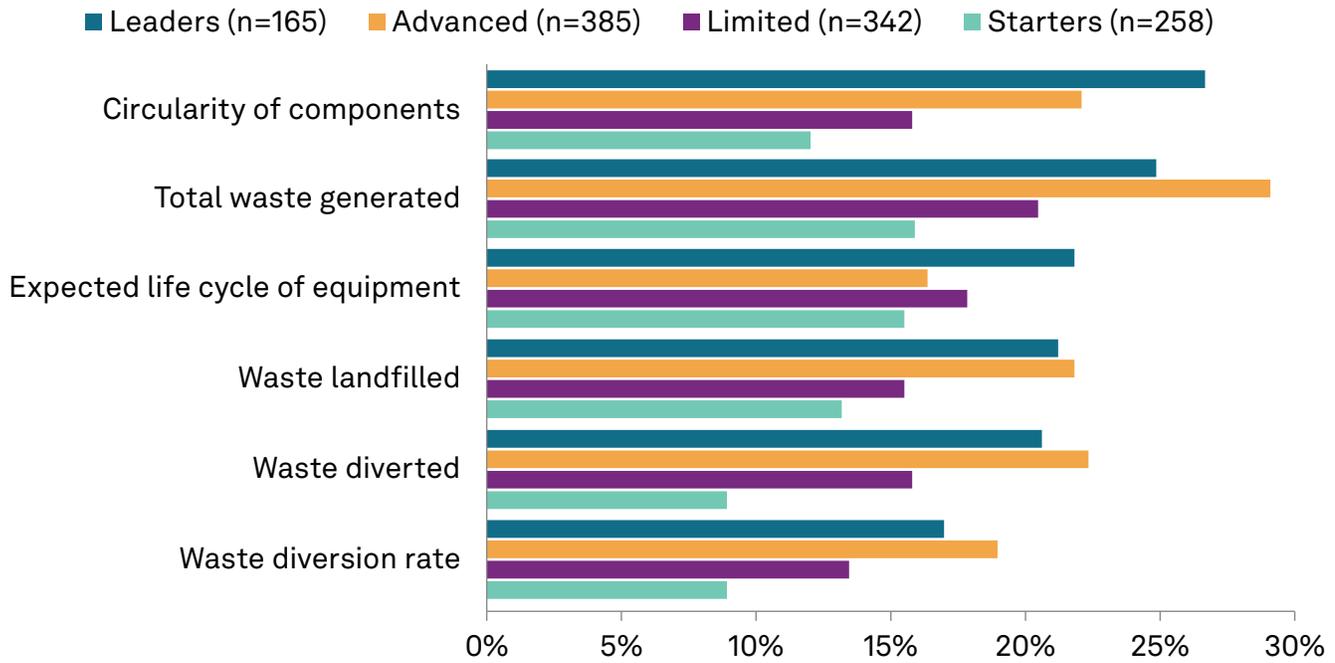
Q. For your distributed IT, which of the following sustainability metrics do you track? – Waste

Base: All respondents

Source: 451 Research custom survey, 2022

In a follow-up question, circularity of components was a top metric for Leaders, with more than 25% of them tracking it (see Figure 14). In fact, the higher the maturity level of the company, the more likely the firm was to track circularity. Tracking the expected life cycle of equipment is also a key metric for Starters and Limited firms and is one of the top metrics tracked by Advanced firms when it comes to waste.

Figure 14: Waste Metrics Tracked for Distributed IT



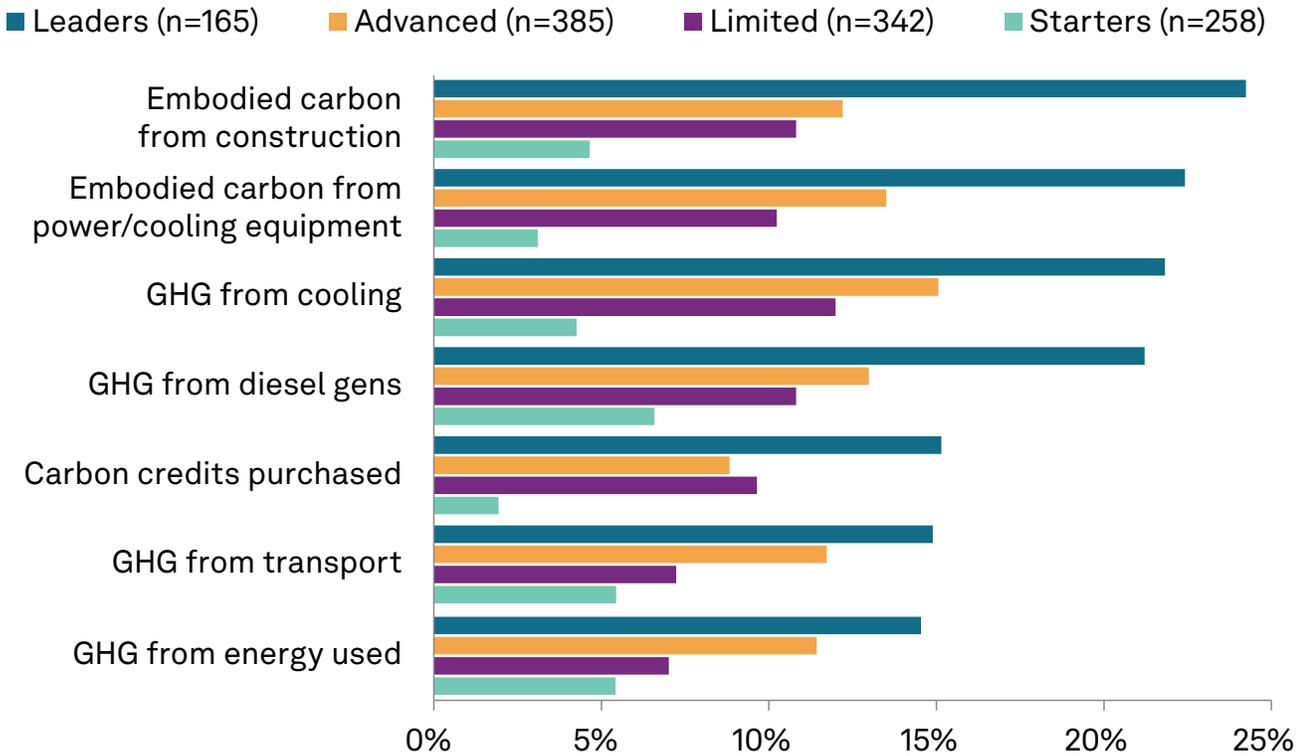
Q. What metrics do you track NOW around waste? Please select all that apply for each column.

Base: All respondents

Source: 451 Research custom survey, 2022

We also asked specifically about greenhouse gas emissions. These are difficult to estimate, and we saw major differences here between Leaders and Starters, with 42% of Leaders tracking greenhouse gases but only 10% of Starters. Still, when including programs that firms expect to have over the next 12 months, nearly 40% of Starters are working to track greenhouse gases, while a majority of those in the other categories are either tracking these or hope to within the year (62% of Limited, 76% of Advanced and 77% of Leaders). Embodied carbon is the most common element tracked by Leaders, both that used for construction of a facility and that created in the manufacturing/installation of power and cooling equipment, followed by greenhouse gases produced from use of cooling and diesel generators (see Figure 15).

**Figure 15: Sustainability Metrics Tracked for Distributed IT – Greenhouse Gas Emissions**



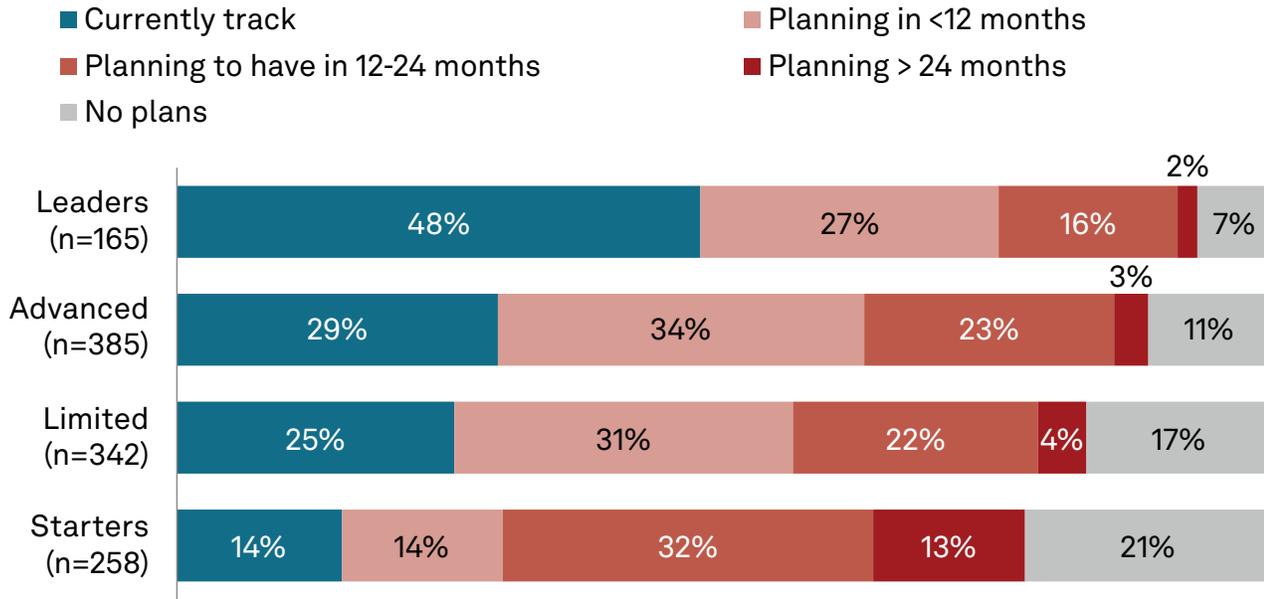
Q. What metrics do you track NOW around greenhouse emissions? Please select all that apply for each column.

Base: All respondents

Source: 451 Research custom survey, 2022

Finally, land and biodiversity is tracked relatively little overall, perhaps because it is particularly difficult to measure. Still, it is highly correlated with maturity, and nearly 50% of Leaders are tracking it in some way, compared to 29% of Advanced, 25% of Limited and 14% of Starters. As programs to improve biodiversity launch in the industry, this may become a more common metric to track. One example is “DCs for bees”<sup>1</sup> in Dublin that provides datacenters with a list of 42 actions to help the local bee population.

Figure 16: Sustainability Metrics Tracked for Distributed IT – Land and Biodiversity



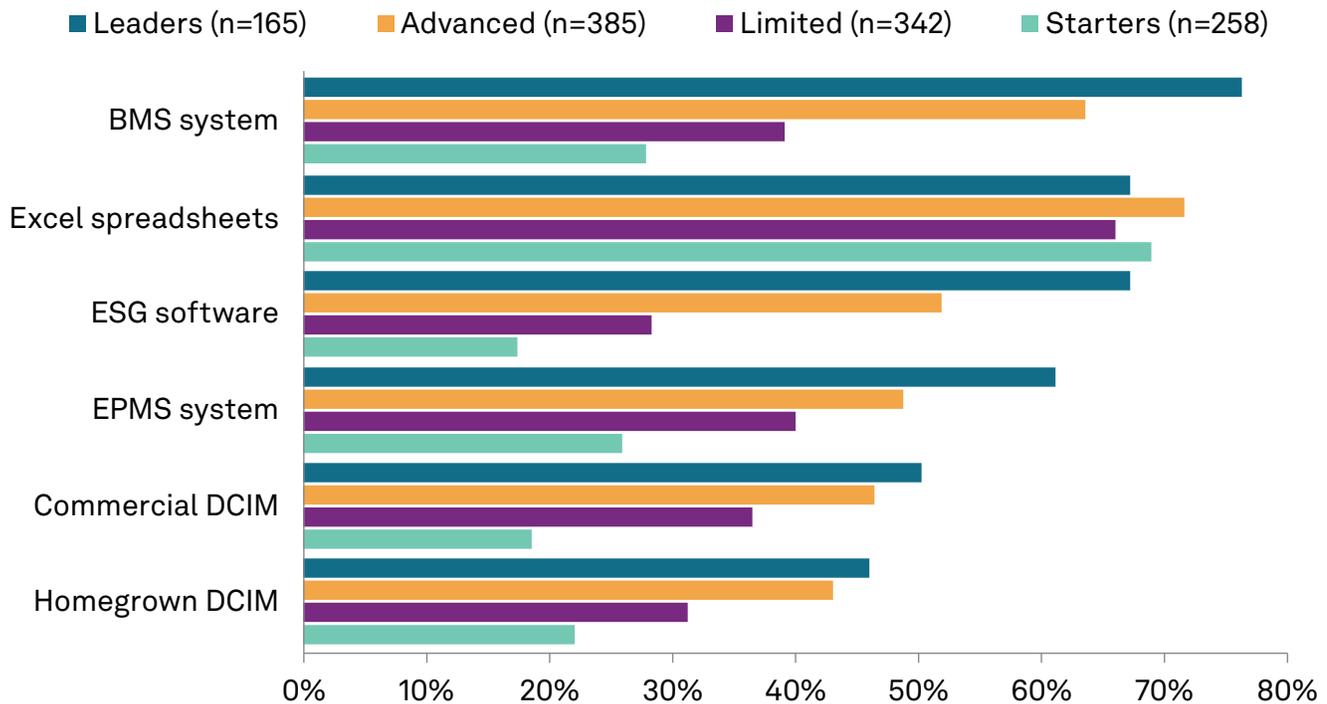
Q. For your distributed IT, which of the following sustainability metrics do you track? – Land and biodiversity  
 Base: All respondents  
 Source: 451 Research custom survey, 2022

1. <https://www.hostinireland.com/dc-s-for-bees>

## Tools, Vendors and Budget

When looking at what tools firms use to monitor and measure sustainability for distributed IT, it is not surprising that firms with more mature sustainability programs tend to use more tools (see Figure 17). This was particularly true for ESG/environmental sustainability management software and commercial datacenter infrastructure management (DCIM) packages. This makes sense because firms with more complete programs are measuring and monitoring more systems and gathering more data. Analyzing this data using spreadsheets becomes increasingly difficult (though a majority of all firms are still using spreadsheets), particularly for multiple sites. Using ESG software combined with DCIM software that tracks and reports datacenter/IT energy use, power usage effectiveness (PUE), and carbon footprint across the entire portfolio of sites can start to dramatically improve data collection, reporting and attainment of corporate sustainability goals.

Figure 17: Tools Currently In Use



Q. As it relates to sustainability of distributed IT, which of the following software tools do you currently use or plan to use to measure, monitor and manage sustainability improvements?

Note: The graph shows the percentage of respondents in each category that used each tool, so the bars add up to more than 100%.

Base: All respondents

Source: 451 Research custom survey, 2022

Regarding vendors, we asked what criteria are most important when selecting distributed IT equipment and full solutions (including hardware, software and services). For Starters, Limited and Advanced respondents, reliability was the key criteria, with 35%-40% choosing it. Energy efficiency was the second choice. This was reversed for Leaders, with energy efficiency the top criteria for 45%, and reliability second at 30%. Safety was the third choice for all. When asked what was important for vendors to offer, nearly 45% of respondents selected “solutions to improve operational efficiency,” 40% said “product environmental data,” and another 35% said “tools to monitor and manage energy consumption of the product” (respondents could select multiple options). So firms are clearly looking for more data and information on what they are buying.

Regarding budgets, 55% of the Leaders reported having a central, dedicated sustainability budget, and even 28% of the Starters had such a budget (along with 33% of Limited and 39% of Advanced). When it comes to paying a premium for a product manufactured in a more sustainable way as well as solutions to support sustainability goals, a whopping 83% of Leaders and 82% of Advanced firms said they would pay. Even 69% of Limited and 59% of Starters said they would. It may all depend on how much, of course, but the willingness to pay for sustainability improvements is there, in theory.

## Implications

- **Leaders and Advanced firms** have sustainability programs in place for distributed IT and/or core datacenters. Having programs is just the start, however. Obtaining data is essential to determine what steps to take to improve and to see whether those steps produce results. These firms will need to integrate data from multiple (in the cases of large firms, possibly hundreds) of sites, analyze it, perhaps find a third party that can certify it and eventually make decisions based on it. Many will want to keep an eye out for additional data that equipment vendors and construction firms are starting to make available and combine this data with information on public cloud sustainability for deployments they may have there. Specialized software packages and possibly consulting services could be key to deepening analysis in order to drive decision-making.
- **Limited yet progressing firms** have limited programs for distributed IT and/or core datacenters. Thinking of IT resources holistically and launching or expanding a program so that both distributed IT and centralized/core datacenters are included will be essential to understand the current status. Taking sustainability programs to the next level will involve integrating data from multiple locations, adding new areas of coverage beyond energy consumption (such as water, waste and embodied carbon), calculating greenhouse gas emissions – which specialized software or consultants and partners can help with – and making a case to management for steps that will lead to improvements.
- **Starters** will find it essential to launch a sustainability program, ideally in conjunction with an inventory of equipment that is sustainable by design. A program can provide initial metrics for estimated energy use and can be used to gather information from equipment vendor sites regarding embodied carbon, the life cycle of the equipment and other sustainability metrics. Hiring a specialized consultant and working with full solution vendors and certified partners (or service providers) may help to offset the lack of ESG-specialized staff.

# Conclusion

Sustainability is increasingly important for companies of all sizes. However, it is challenging to determine what to measure, to obtain data and to take the necessary steps to make improvements. Setting up an actionable strategy and programs is key. It is encouraging how many firms are launching programs that look holistically at core and distributed IT. Still, perception does not always match reality, and some companies may overestimate where they are on their sustainability journey. Many of them need help to close the gap, particularly smaller firms that do not have specialized sustainability staff and are lacking the tools and solutions. Vendors and service providers are increasingly seeking to provide that help. We hope in future surveys to learn more about concrete actions firms are taking to improve sustainability at their core datacenters, distributed IT sites and edge datacenters, and which are the most effective to address the sustainability gap and progress toward net-zero operations.

## Methodology

Our study focused on enterprise views concerning sustainability in the core datacenter and in distributed IT resources outside that core datacenter. Our analysis is based on primary research that included a field survey of datacenter professionals with a sample size of 1,150 enterprises from 11 countries conducted in April/May 2022. Respondents came from U.S. companies with more than 500 employees and companies outside the U.S. with more than 100 employees. We also used existing data from previous surveys and interviews with technology vendors and customers carried out as part of our standard research.

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## Reaching Net-Zero Together! How Schneider Electric can Help Enterprises achieve Sustainability Goals

In the face of global warming, businesses across all geographies are accelerating their transition to net-zero. Schneider Electric supports these efforts by designing, manufacturing, and delivering sustainable products, services and solutions. Today, 78% of Schneider Electric's nearly €29 billion in revenue is generated through the sale of Green Premium products. To help customers achieve their sustainability goals, Schneider Electric focuses on three important areas:

### 1. Solutions for Data Center, Hybrid IT and Edge that Deliver Sustainable Performance by Design

According to the recent 451 Research survey, "business value", "sustainability concern and social responsibility", and "operational resiliency" are the three main drivers for sustainable distributed IT infrastructure.

Schneider Electric supports these efforts with its EcoDesign Way™, a program that embeds sustainable performance at the root of the design process. Products that have high environmental performance are recognized by the Green Premium™ label.

Green Premium products are designed for circularity (as opposed to full replacement), offer sustainable performance, and help users track their CO2 emissions. With the Green Premium label and EcoDesign Way program, Schneider Electric improves the performance of its products, services, and solutions while reducing its own and its customers' end-to-end environmental footprint. This reduction then flows through the entire product lifecycle.

### 2. Modern Datacenter Infrastructure Management (DCIM) Portfolio for Sustainability

The 451 Research survey goes on to identify "obtaining data and metrics" and "optimizing energy use" as some of the greatest sustainability challenges that survey respondents face. Smart monitoring systems allow quick wins in carbon reduction and energy savings to be achieved.

Schneider Electric offers EcoStruxure IT, a comprehensive software and services portfolio for data center, hybrid IT and edge computing infrastructure, that enables secure remote monitoring and management, planning, and modeling.

The modernized EcoStruxure IT portfolio supports sustainability goals through dashboards and reports that improve visibility to energy consumption and CO2 emissions metrics. It also delivers actionable insights and predictive capabilities to further improve efficiency, helping operators achieve energy savings and emissions reduction targets.

### 3. Driving Sustainability through Partnership for the Future

For some organizations, especially those early in their sustainability journey, "lack of skilled staff" was identified as a critical challenge in the 451 survey.

Schneider Electric has recognized the importance of providing a collaborative, integrated partner ecosystem. The new mySchneider IT Partner Program was further established to focus on unique business models and specializations, allowing partners to certify in new areas that help drive sustainability. Enterprise customers can leverage this partner ecosystem to augment their sustainability capabilities.

Schneider Electric further recognizes partners who embrace sustainability via Sustainability Impact Awards. That means improved collaboration among colleagues and customers to deploy the latest technology solutions.

To learn more about Schneider Electric's commitment to sustainability and how it can support enterprises in their sustainability journey, explore <https://www.se.com/us/en/about-us/sustainability/>

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