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# Reimagine Colocation Strategy With Sustainability Front Of Mind

A FORRESTER CONSULTING THOUGHT LEADERSHIP PAPER COMMISSIONED BY SCHNEIDER ELECTRIC, SEPTEMBER 2022

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## Executive Summary

As the demand for data continues to increase, so does the need for data centers. But the infrastructure required to run and maintain equipment at these sites is incredibly energy intensive. In 2020, data centers accounted for between 1% to 2% of total global electricity consumption.<sup>1</sup> Colocation providers are in the unique position to improve sustainability at their sites. In fact, as customers, vendor partners, and prospective employees seek to work with sustainable companies, being sustainability-minded is a requirement for these organizations, else they risk losing business and top talent.

In April 2022, Schneider Electric commissioned Forrester Consulting to understand the drivers behind sustainability efforts in the colocation provider industry. Forrester conducted an online survey with 1,033 global sustainability decision-makers at colocation providers to explore this topic.

Our study found that leaders in the colocation space recognize the growing importance of sustainability and are motivated to push these initiatives by their customers, investors, and employees. Seventy-five percent of respondents say they have lost business and/or investments due to not having sustainability programs in place and 83% say they use sustainability as a way to attract new business. But sustainability efforts are not equal across the board. Our study explored the differences between companies at varying sustainability maturity levels. We found that companies that have built comprehensive sustainability programs are seeing their investments bear fruit.

## Key Findings



**Sustainability is a top business priority for colocation providers.** Today, 65% of survey respondents recognize the importance of sustainability, compared to only 36% three years ago. Internal and external stakeholders drive shifting sentiments around sustainability as companies respond to increasing pressure from customers, investors, and employees.



**Most organizations are still early in their sustainability journey.** Though attitudes towards implementing sustainability practices are largely positive, many organizations lack a comprehensive strategy for a robust sustainability program. Only 33% indicate their organizations have a strategic sustainability plan. Even with a plan in place, organizations can struggle to act due to insufficient resources, as 70% cite lacking budget for sustainability initiatives.



**Sustainability is driving business.** A full 75% of respondents report their firms have lost business and/or investments due to not having a sustainability program in place.

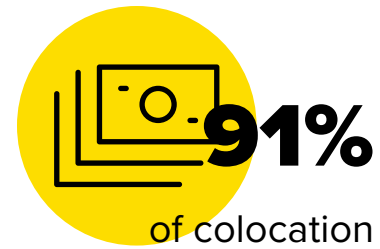


**Advanced initiatives pay off.** Forrester compared the efforts and benefits of organizations with higher- and lower-maturity sustainability programs. High-maturity firms have done more to support sustainability initiatives, from establishing KPIs to installing software to track and manage sustainability initiatives, to working with strategic partners. These efforts pay off in a big way, as high-maturity organizations yield far greater business and environmental benefits than their low-maturity peers.

## Sustainability Is A Business Imperative For Colocation Providers

In the wake of accelerating climate change, the environmental, social, and governance (ESG) movement has prompted senior executives to incorporate sustainability measures into their organizations' business practices. While this is felt across nearly all industries, leaders in the colocation space understand the environmental impact of their facilities and look to build out their sustainability programs to meet the demands of stakeholders and protect business continuity. In surveying 1,033 sustainability decision-makers at colocation providers, we found that:

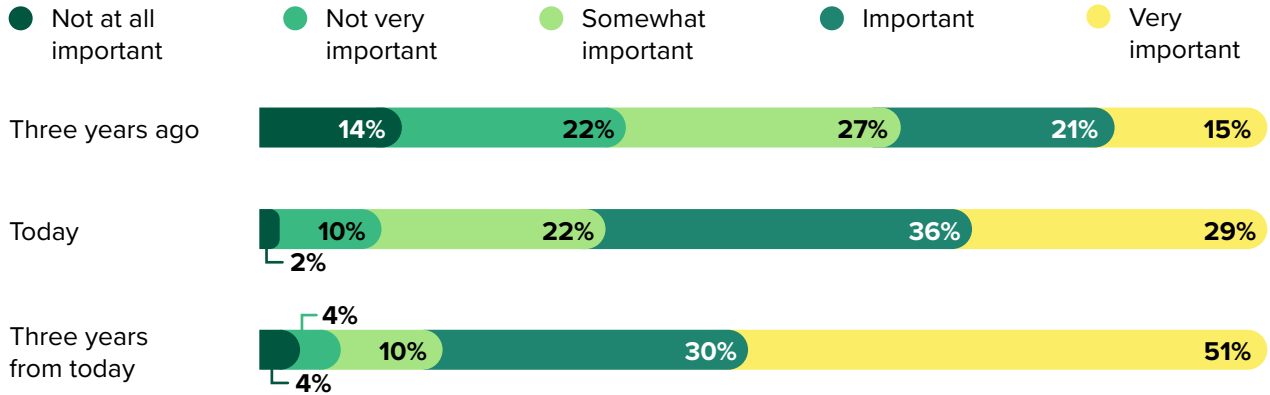
- **Sustainability is rapidly growing in importance and has become a top business priority.** The percentage of decision-makers at colocation providers who said sustainability was "Very important" to their organizations has doubled in the past three years — and is expected to nearly double again over the next three (see Figure 1). In fact, decision-makers rated implementing and maturing sustainability initiatives as their organizations' second-highest priority over the next 12 months, behind only improving profitability. This is not just talk either — 91% say that their organizations' sustainability budgets have increased significantly over the past three years and 90% expect it to increase significantly over the next three.
- **Internal and external factors are the driving forces.** A variety of factors is driving demand for sustainability, including internal demand from employees and external demand from tenants and investors (see Figure 2). Sixty-one percent of survey respondents cite the ability to attract or retain employees who make employment decisions based on corporate sustainability initiatives as the top driver for their organizations' sustainability initiatives today, and over half of respondents report tenant and investor requirements as motivators.



of colocation organizations have significantly increased their sustainability budget over the past three years.

**Figure 1**

**The Importance Of Sustainability To Organizations**



Base: 1,033 global sustainability decision-makers at colocation providers  
 Note: Percentages may not total 100 due to rounding.  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

**Figure 2**

**“What are the greatest drivers for your organization’s sustainability initiatives today?”**



Base: 1,033 global sustainability decision-makers at colocation providers  
 Note: Respondents ranked top 5 answers with 1 being the most impactful driver.  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

- **Demand for sustainability from customers is starting to become the norm.** Over the past three years, expectations around sustainability from colocation customers have increased substantially. Most customers are now including specifics on environmental, governance, and social sustainability during the sales process (see Figure 3). This has significant consequences for providers; 75% say they have lost business and/or investments due to not having sustainability programs in place. And, conversely, 83% say they use sustainability as a way to attract new business.

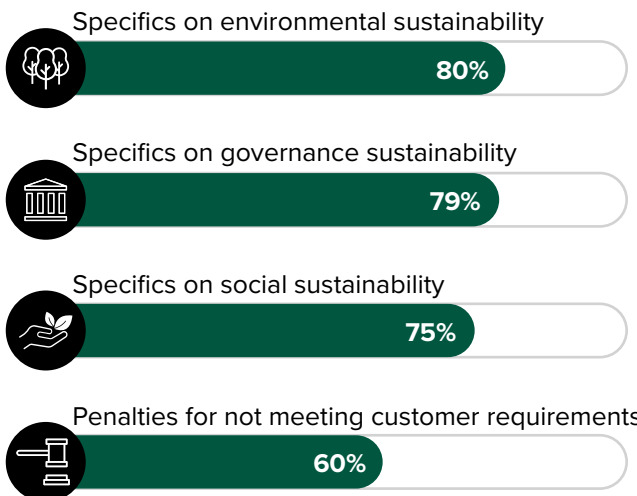


75% of respondents say they have lost business and/or investments due to not having sustainability programs in place.

**Figure 3**

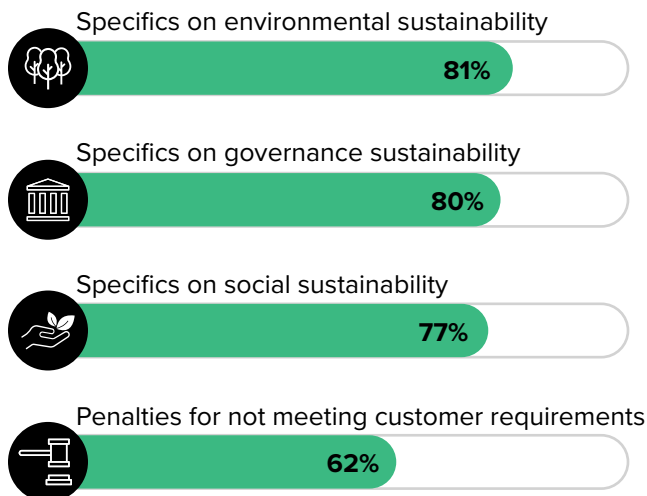
**“How often do you see each of the following during the bid/RFP/sales process with your clients?”**

● Most/All of the time



**“How common are each of the following during the bid/RFP/sales process with your clients compared to three years ago?”**

● Somewhat/Much more common today



Base: 1,033 global sustainability decision-makers at colocation providers

Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

**83%** of respondents say they use sustainability as a way to attract new business.

# Organizations Are At The Start Of Their Sustainability Journeys

While sustainability has certainly become more important, there is still significant room for growth. Seventy-two percent of decision-makers say their organizations are at the beginning of their sustainability journey. We found that colocation providers:

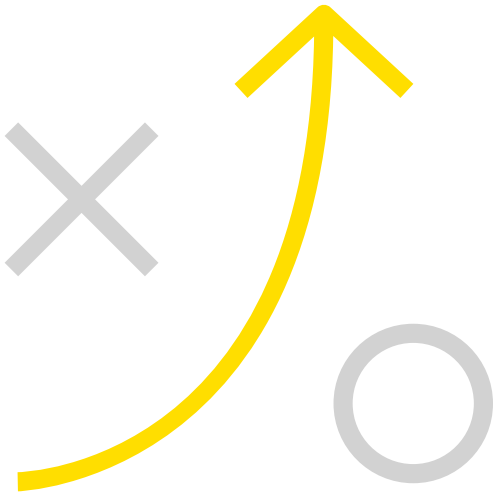
- **Face challenges across all areas of sustainability.** Over half of survey respondents cite issues across all different areas of sustainability, including procurement, operations, and end-of-lifecycle sustainability (see Figure 4). This points toward a clear need for more holistic support for sustainability, rather than just addressing individual components on an ad hoc basis. Even more worrying, organizations lack a strong comprehensive strategy for the sustainability programs; only 33% say their organizations have created a strategic sustainability plan.
- **Fail to keep up with sustainability goals.** Colocation providers recognize what's at stake if they are unable to improve their sustainability. Respondents cite higher energy costs, falling behind their competitors, losing out on customers, loss of potential investors, and employee attraction/retention issues as major concerns (see Figure 5).



of decision-makers say their organizations are at the beginning of their sustainability journey.

**Just 33%**

say their organizations have created a strategic sustainability plan.



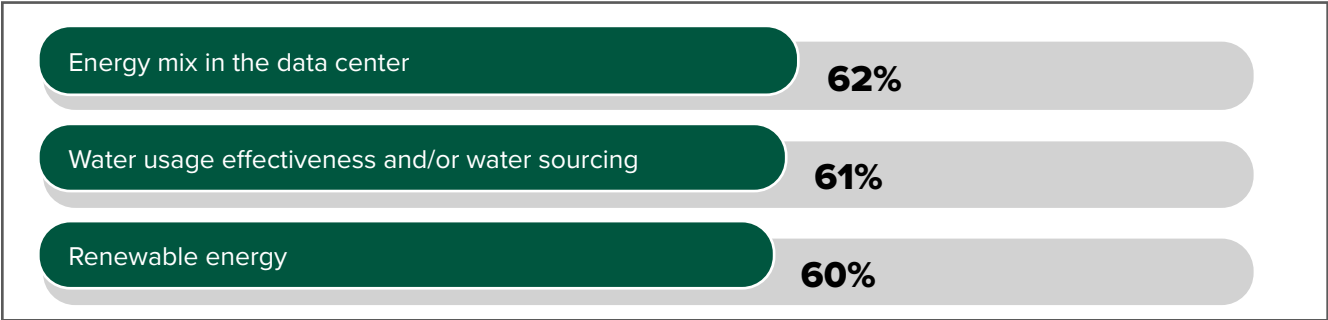


**Figure 4**

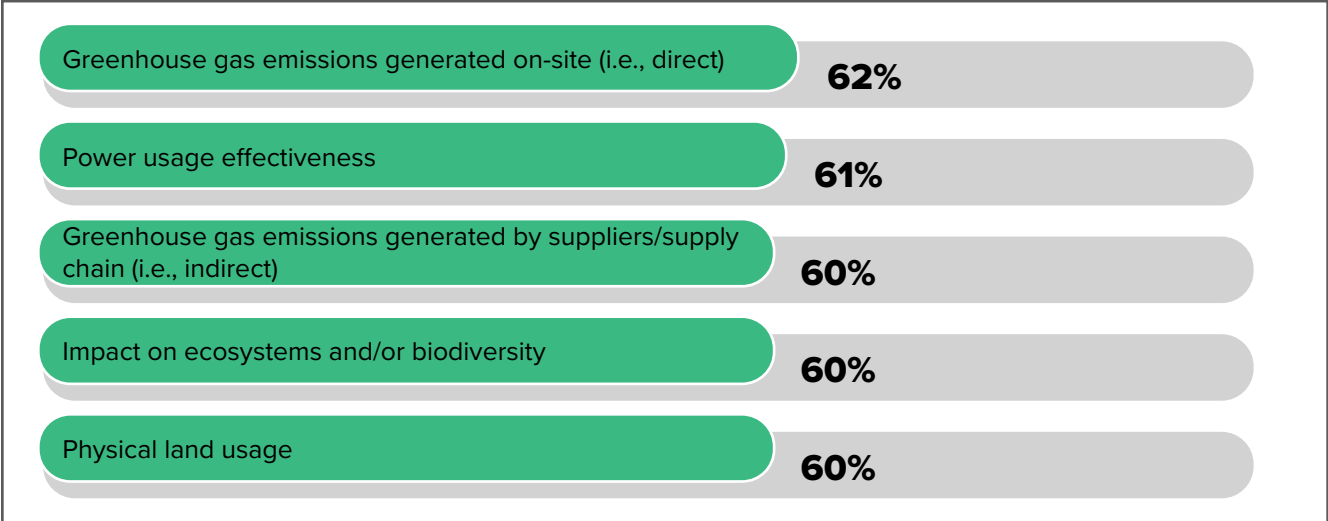
**“How challenging has it been to achieve and maintain each of the following types of sustainability for your organization?”**

(Showing “Challenging” and “Very challenging”)

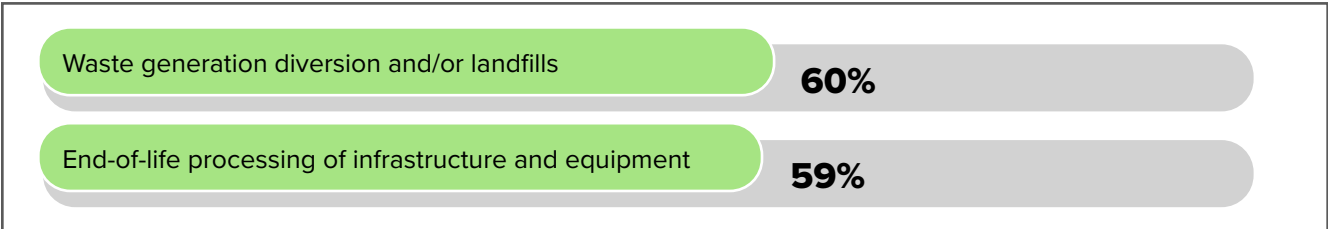
**PROCUREMENT**



**OPERATIONS**



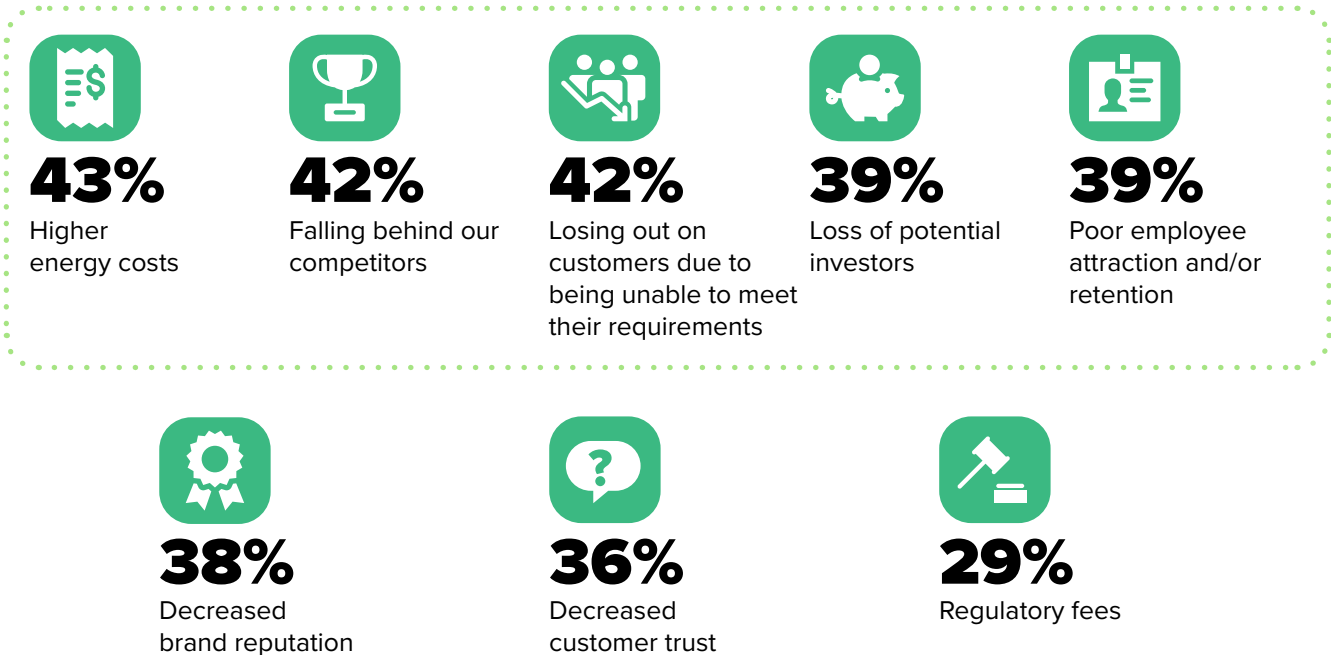
**END OF LIFECYCLE**



Base: 1,033 global sustainability decision-makers at colocation providers  
Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

**Figure 5**

**“What consequences does your organization face if it is not able to improve its sustainability?”**



Base: 1,033 global sustainability decision-makers at colocation providers

Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

## **FIRMS STRUGGLE TO MEASURE THE IMPACT OF THEIR SUSTAINABILITY INITIATIVES**

Measurement and reporting are a particular challenge for colocation providers. Respondents indicate that measurement levels today are still quite low, and 79% say they struggle to accurately measure their organizations’ total environmental impact (see Figure 6). This results in the inability to prove the value of sustainability to executives, as 79% struggle to make the business case for sustainability initiatives, making it hard to secure the budget they need. Seventy percent say they do not have as much budget as they need for their sustainability initiatives.

Lacking the ability to track the right metrics prevents organizations from iterating and improving their sustainability practices, leaving them susceptible to falling behind the competition. Decision-makers indicate that they know their organizations are losing business due to not having

sustainability initiatives in place but, without metrics, they can't prove this to those who allocate budget. Seventy-seven percent say they struggle to communicate their strategy and progress to key stakeholders. In addition, a lack of metrics makes it harder to prove an organization's sustainability capabilities to prospective and current clients; 77% say they struggle to prove to customers that they help them lower their environmental footprint.

**Figure 6**  
**Potential Challenges With Sustainability Initiatives**

● Somewhat/Completely agree



Base: 1,033 global sustainability decision-makers at colocation providers  
 Note: Showing top 10 responses  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

## DEEPER INVESTMENTS AND COMMITMENTS LEAD TO MORE MATURE, EFFECTIVE SUSTAINABILITY PROGRAMS

To better examine what successful colocation providers are doing in terms of sustainability, Forrester created a sustainability maturity model based on three key pillars of sustainability:

- **Internal operations and corporate responsibility.** Organizations that scored highly in this category place high importance on signaling their corporate sustainability initiatives internally and externally, and work with partners that align with their values to action on their sustainability goals.
- **Commitment to sustainability.** Organizations that scored highly in this category think more strategically about positioning themselves as leaders in the sustainability space on a longer-term scale. These companies build sustainability measures into their product design and are mindful of meeting sustainability-focused regulatory requirements to ensure longevity of success.
- **Measurement of environmental impact.** Organizations that scored highly in this category utilize a variety of metrics to measure their environmental impact across five functions: energy, GHG emissions, water, waste, and land and biodiversity.

The model segmented survey respondents into maturity buckets based on their capabilities across each pillar. For the purposes of this study, we focus our analysis on comparing high- and low-maturity organizations to see where the greatest differences lie.

- **High-maturity organizations** have mature initiatives in place internally, commit to sustainability, and measure their initiatives at a high level to continue to iterate and improve.
- **Low-maturity organizations** do not have internal initiatives in place, do not have significant commitment to sustainability, and do not measure performance in a thorough manner (see Figure 7).

Figure 7

## Sustainability Maturity Is Based On Three Key Pillars

### Internal operations and corporate responsibility **1**

- High transparency of corporate sustainability initiatives and related performance
- Corporate social sustainability practices
- Audit of partners and suppliers to ensure they meet sustainability practices
- Screening potential partners and suppliers for sustainability performance
- Distance from partners/suppliers that do not meet sustainability standards
- Working with renewable energy suppliers and/or utilities partners to increase our use of renewable energy
- Incorporate sustainability requirements into supplier relationships
- Enterprisewide sustainability tracking software used to track and report metrics related to sustainability

### Commitment to sustainability **2**

- Implementation of carbon reduction goals and active work to reduce them
- Use of carbon credits to reduce carbon impact today and for the long term
- Sustainable product design
- Improved energy efficiency in buildings/infrastructure
- Plan to increase the use of renewable energy
- Ability to meet the majority of current (sustainability-related) regulatory requirements
- Strategies in place to meet most future (sustainability-related) regulatory requirements
- Implement sustainability-related measures in all new planned data center builds (i.e., greenfield projects)

### Measurement of environmental impact **3**

- **Energy metrics**
  - Total energy consumption
  - Power usage effectiveness (PUE)
  - Total renewable energy consumption
  - Renewable energy factor (REF)
  - Energy reuse factor (ERF)
- **GHG emissions metrics**
  - GHG emissions (Scope 1)
  - Location-based GHG emissions (Scope 2)
  - Market-based GHG emissions (Scope 2)
  - GHG emissions (Scope 3)
  - Location-based carbon intensity (Scope 1 and 2)
  - Market-based carbon intensity (Scope 1 and 2)
  - Carbon usage effectiveness (CUE)
  - Total carbon offsets
  - Hour-by-hour supply and consumption matching
- **Water metrics**
  - Total site water usage
  - Total source energy water usage
  - Water usage effectiveness (WUE)
  - Total water use in supply chain
- **Waste metrics**
  - Total waste generated
  - Total waste landfilled
  - Total waste diverted
  - Waste diversion rate
- **Land and biodiversity metrics**
  - Mean species abundance (MSA)

Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

Mature sustainability programs don't happen overnight — they take true organizational commitment. We found that high-maturity organizations have prioritized sustainability for longer and plan to continue to place greater importance on it going forward (see Figure 8). Moreover, these organizations are actioning on their commitment monetarily; 96% of respondents at high-maturity organizations report that their sustainability budgets have significantly increased over the past three years, and that same proportion expect those budgets to increase over the next three years (see Figure 9). As we'll discuss in the next section, this investment is already paying off for the business in a significant way.

**Figure 8**  
**Low Maturity Vs. High Maturity: How Important Is Sustainability?**

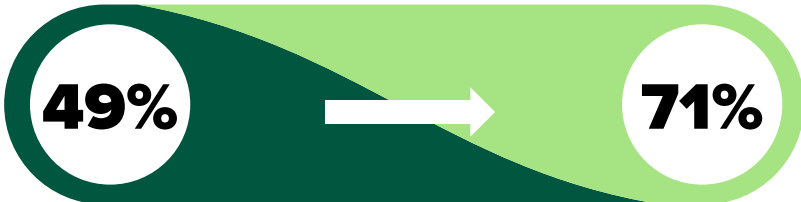
(Showing “High importance” and “Very high importance”)

● Low maturity    ● High maturity

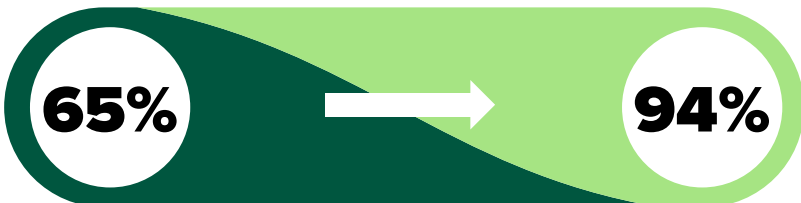
Three years ago



Today



Three years from today



Base: 1,033 global sustainability decision-makers at colocation providers  
Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

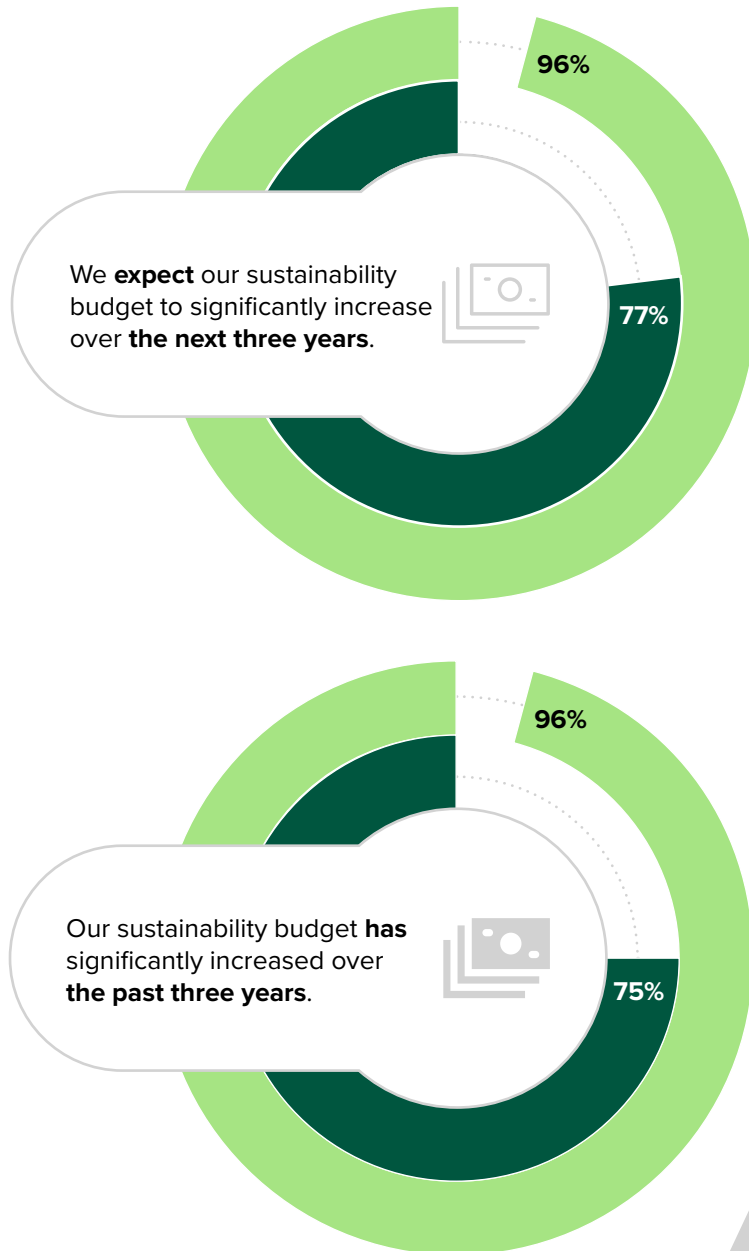


**Figure 9**

**“To what extent do you agree with each of the following statements related to sustainability budget at your organization?”**

(Showing “Agree” and “Completely agree”)

● Low maturity    ● High maturity



Base: 1,033 global sustainability decision-makers at colocation providers

Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

# Achieving Mature Sustainability Practices Is A Major Differentiator

In spite of the numerous barriers to achieve sustainability success, organizations are committed to elevating their sustainability practices by focusing on improving their measurement and reporting capabilities and increasing the level of sustainability expertise for their organization. We found:

- **Organizations committed to sustainability are seeing the fruits of their labor.** Sustainability initiatives are already leading to substantial benefits for colocation providers today. Over 80% of respondents report their organizations are seeing significant benefits from their sustainability programs like improved brand reputation, lowered energy costs, improved employee retention, and higher revenue as a result of their sustainability efforts (see Figure 10).
- **Mature organizations reap the greatest rewards.** High-maturity organizations, those who are truly dedicating to sustainability, see far greater benefits from their initiatives compared to their low-maturity peers (see Figure 11). While six in 10 low-maturity organizations experience business benefits, that number jumps up to nearly nine for high-maturity organizations.

## Over 80%

of respondents see significant benefits like improved brand reputation, lowered energy costs, improved employee retention, and higher revenue as a result of their sustainability efforts.

Figure 10

“To what extent has your organization received each of the following benefits as a result of its sustainability initiatives?”

● Significant/Transformational benefit



84%

Improved brand reputation



84%

Lower energy costs



83%

Improved employee recruitment and/or retention



82%

Increased competitive advantage



82%

Improved customer acquisition and/or loyalty



82%

Increased revenue



80%

Improved regulatory compliance

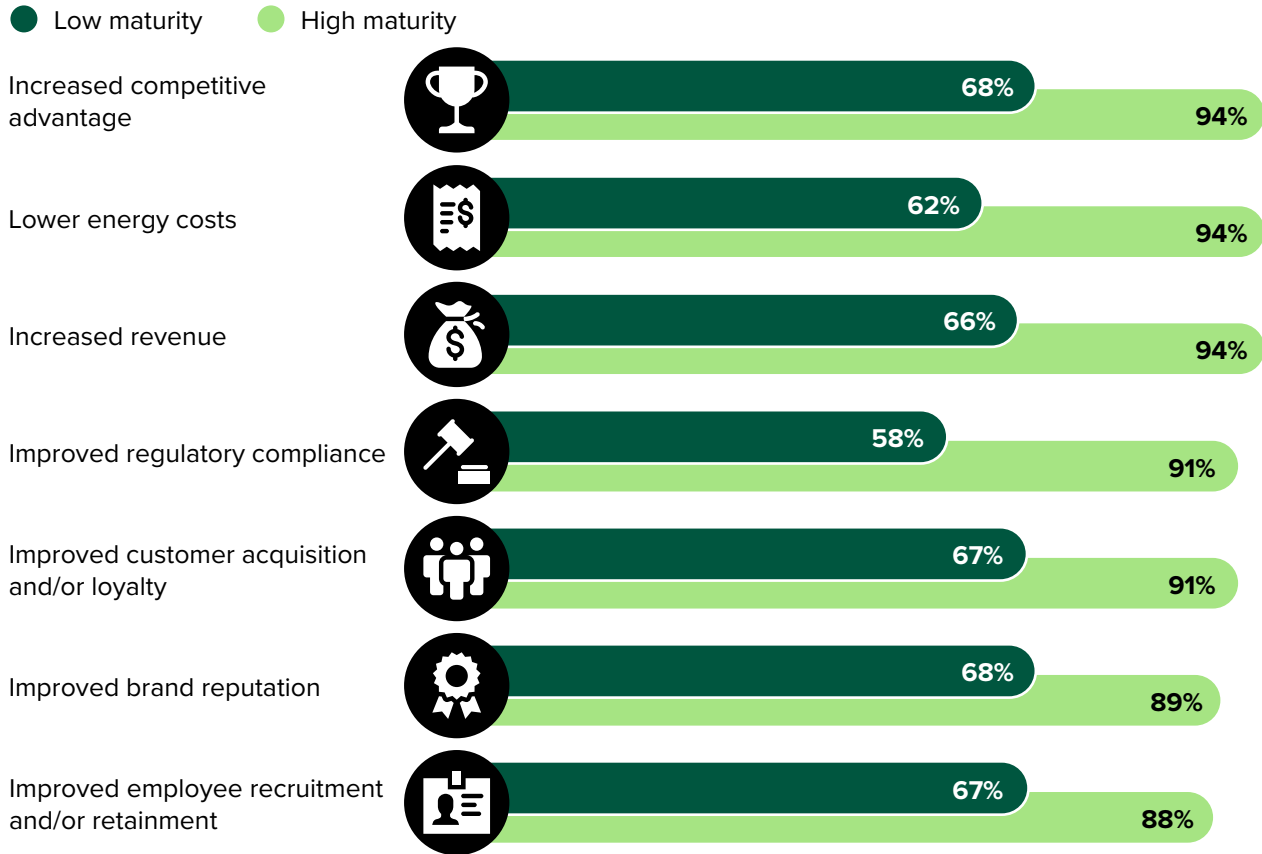
Base: 1,033 global sustainability decision-makers at colocation providers  
Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022



**Figure 11**

**“To what extent has your organization received each of the following benefits as a result of its sustainability initiatives?”**

(Showing “Significant benefit” and “Transformational benefit”)



Base: 1,033 global sustainability decision-makers at colocation providers

Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

## **SUSTAINABILITY SUCCESS REQUIRES A COORDINATED EFFORT ACROSS MULTIPLE DISCIPLINES**

Going forward, what will the keys to success be for colocation providers when it comes to sustainability? Our study found that organizations with a tenable sustainability strategy:

- **Find trusted partners aligned with their sustainability plan.** As organizations continue to navigate their sustainability journeys, a key piece of sustainability success is finding the right partner to help them

along the way. High-maturity organizations seem to already understand this as 96% of decision-makers at high-maturity organizations say having trusted sustainability partners is essential in achieving sustainability success. Conversely, the two greatest challenges that decision-makers at low-maturity organizations report are their sustainability partners not being strategic enough and lacking the right partners to achieve their sustainability goals (see Figure 12). We found that organizations that hired an outside sustainability consulting firm as part of their sustainability initiatives are 33% more likely to be high maturity.



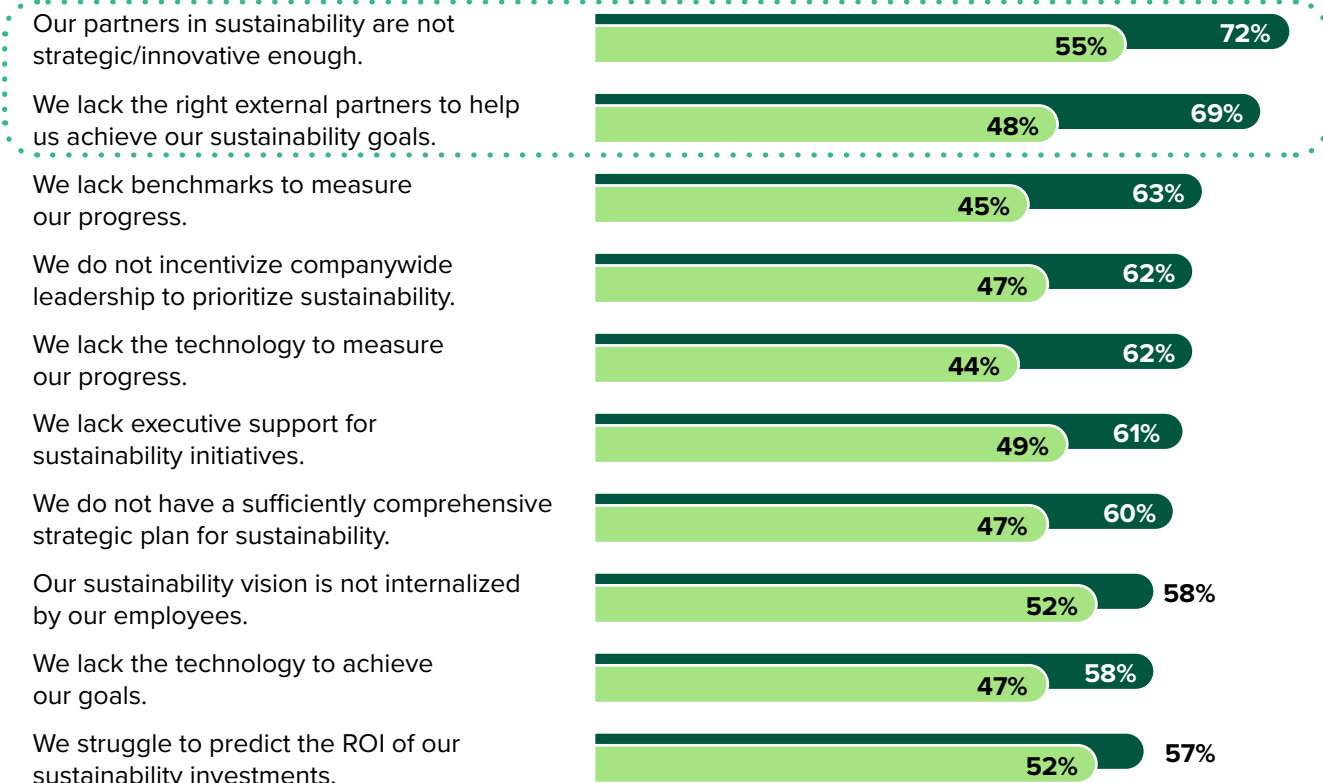
96% of decision-makers at high-maturity organizations say having trusted sustainability partners is essential in achieving sustainability success.

**Figure 12**

**Challenges With Sustainability Initiatives**

(Showing “Agree” and “Completely agree”)

- Low maturity
- High maturity



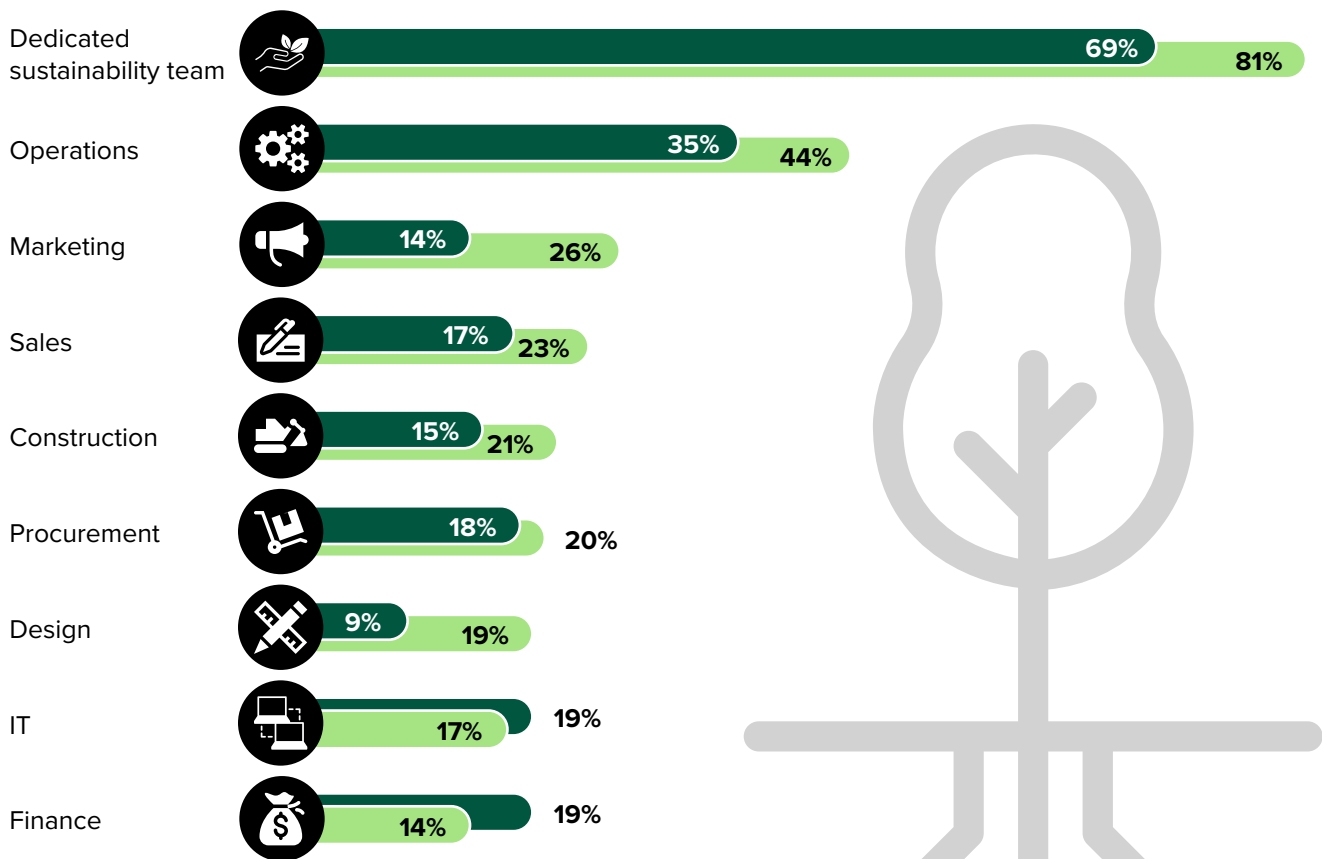
Base: 1,033 global sustainability decision-makers at colocation providers  
 Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

- **Digitize infrastructure.** Decision-makers at high-maturity organizations rank increasing digitalization of infrastructure to facilitate the tracking of sustainability initiatives and/or enable better decision-making as their top sustainability priority over the next 12 months. Digitization includes automating and using software tools for environmental monitoring and using emerging technologies to optimize data centers, among other initiatives.
- **Build the right decision-making team.** To successfully disseminate sustainability across the organization, organizations must take a holistic approach. In addition to having a dedicated sustainability team, sustainability efforts should involve multiple departments, including operations, procurement, and design. High-maturity organizations are more likely to have both (see Figure 13).

**Figure 13**

**“Which of the following teams are involved in sustainability initiatives today?”**

● Low maturity  
● High maturity



Base: 1,033 global sustainability decision-makers at colocation providers

Source: A commissioned study conducted by Forrester Consulting on behalf of Schneider Electric, April 2022

## Key Recommendations

Data centers are in the spotlight for sustainability initiatives for three reasons: 1) they are an essential part of the functioning of almost every organization in the modern world; 2) they constitute a major emission source for an organization's scope 1, 2 and 3 emissions; and 3) they host a variety of carbon emission reduction opportunities. In our survey, we found that the data center market has recognized this challenge and opportunity.

Forrester's in-depth survey of sustainability decision-makers and colocation service providers yielded several important recommendations:

### **Data center sustainability is a business opportunity.**

Sustainability is synonymous with optimization and efficiency in the IT stack. Data center efficiencies can be directly linked to business bottom line since it results in direct cost savings. After other actions related to regulatory compliance are addressed, the higher up in maturity an organization becomes, the more critical data centers become in the overall carbon footprint reduction strategy. Look for optimization opportunities across your IT stack — especially in the data center — as a clear first step.

### **Invest in emerging technologies and digitization.**

Digitization is a powerful ally in sustainability. Emerging technologies, such as automation and AI-driven predictive energy modeling, enable active measures to reduce carbon emissions in the data center. Investments into software environmental monitoring tools help data center tenants, as well as operators, measure, report, and act on the largest emission sources.

### **Look for strategic sustainability partners across the value chain.**

A variety of decision factors across various corporate functions influence an organization's sustainability. While the leadership may set goals, each individual service line or product line may need to find their own solutions to aid towards carbon reduction goals. This means that the internal technology leadership, especially data center operations and infrastructure decision-makers, need to work hand in hand with overall ESG leadership to make sure the right partners are identified, the right IT investments are made, and the right transformations are undertaken.

## Appendix A: Methodology

In this study, Forrester conducted an online survey of 1,033 decision-makers at colocation organizations in North America, South America, Europe, Asia, the Middle East, and Africa to evaluate the state of sustainability in colocation providers. Survey participants included decision-makers in sustainability roles. Questions provided to the participants asked about the current state of their organizations' sustainability initiatives, what motivated them to adopt these initiatives, challenges they face, and benefits the initiatives have yielded. Respondents were offered a small incentive as a thank-you for time spent on the survey. The study began in March 2022 and was completed in April 2022.

## Appendix B: Demographics

ORGANIZATION HEADQUARTERS	
North America	19%
Latin America	10%
UK/Ireland	15%
Nordics	5%
Western Europe	21%
Middle East/Africa	5%
Asia Pacific	25%

COLOCATION SERVICE TYPE	
Retail colocation only	30%
Wholesale colocation only	18%
Both retail and wholesale colocation	52%

RESPONDENT DEPARTMENT	
Sustainability	48%
Facility management	19%
Operations	16%
Governance, risk, and compliance	15%
Executive office	2%

EMPLOYEE COUNT	
2 to 99	1%
100 to 499	17%
500 to 999	34%
1,000 to 4,999	33%
5,000 to 19,999	9%
20,000 or more	5%

RESPONDENT LEVEL	
C-level executive	30%
Vice president	43%
Director	27%

SUSTAINABILITY DECISION-MAKING LEVEL	
Final decision-maker	85%
Part of decision-making team	15%

Note: Percentages may not total 100 due to rounding.

## Appendix C: Maturity Definition

Commitment to sustainability + internal operations and corporate responsibility

		Low Effectiveness	Medium Effectiveness	High Effectiveness
Measurement level	High			High maturity <b>(n=139)</b>
	Medium		Medium maturity <b>(n=764)</b>	
	Low	Low maturity <b>(n=130)</b>		

## Appendix D: Endnotes

<sup>1</sup> Source: Clarissa Garcia, “The Real Amount of Energy A Data Center Uses,” AKCP, February 2022.



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