FORRESTER°

The Race To Decarbonization: A Spotlight On Energy, Utilities, And Waste Management

Results From The November 2021 Thought Leadership Paper, "The Race To Decarbonization"

Executive Summary

Energy and utilities companies have been at the forefront of the sustainability movement, and for good reason. Government regulations mandate these industries reduce carbon emissions; consumers and investors are pressuring firms to focus on sustainable practices and renewable energy sources (e.g., wind, solar, thermal); and the cost of renewable energy is decreasing due to the installation of various renewable energy sources. In waste management, sustainability initiatives often focus on achieving energy efficiency, as well as reducing environmental impact on landfills and driving the reuse and recycling of building materials.

Forrester Consulting conducted a thought leadership study commissioned by and developed in collaboration with Johnson Controls to evaluate the progress that sustainability-focused organizations have made in pursuing their sustainability goals.

To explore this topic, Forrester conducted a series of interviews and fielded an online survey with 2,348 global sustainability strategy leaders in late 2021. Respondents represented organizations in 25 countries and across 19 industries. Forrester then created a maturity model based on levels of people, process, and technology investments to uncover best practices and benefits that sustainability leaders realize.

For this spotlight, Forrester focused on a subset of 137 global sustainability strategy leaders at energy, utilities, and waste management companies.

We found that the organizational benefits of investing in sustainability are immense. At the same time, because scaled sustainability is a relatively new concept, most energy companies have room to grow in navigating the complexities of measuring and reporting on their progress.



Key Findings



Investing in sustainability is the top priority for energy companies. Respondents ranked sustainability as a top organizational priority today, and it's the priority that has grown the most in importance over the last two years. Attracting customers and addressing investor demand were two of the most impactful drivers leading energy and utilities companies to prioritize sustainability.



Sustainable transformation leads to organizational benefits. Decision-makers report benefits across the organization as a result of undertaking a sustainable transformation. Benefits include improved regulatory compliance, improved employee recruitment and/or retention, and reduced costs and waste.



Prioritizing sustainability requires strategic

commitment. Sustainability has become a greater focus for energy and utilities companies and with that has come lofty goals for reducing carbon emissions. Most leaders still struggle with measurement and complexity. Failing to improve on these reporting goals threatens to derail their efforts. Decision-makers understand that making sustainability a business priority is not just a compliance requirement — it's a competitive differentiator for their business. In surveying 137 leaders at energy, utilities, and waste management companies, we found that:

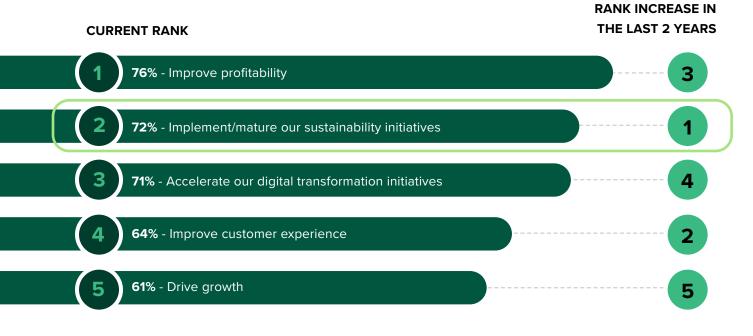
- Sustainability is a top organizational priority today. Implementing or maturing sustainability practices ranks as a top priority in the next 12 months, and the priority that has grown the most in importance over the last two years (see Figure 1).
- Customer and investor demands are driving the priority on sustainability. Attracting customers who make purchasing decisions based on sustainable corporate values (74%), integrating sustainable value propositions into the corporate brand (64%), and addressing investor demand for climate risk disclosures and better sustainability management (52%) were the top drivers behind the sustainability organization priority. Comparatively, just 39% of respondents indicate addressing industry or government regulatory requirements was a driver for their organizations to implement or mature their sustainability practices.

Decision-makers are almost 2x as likely to indicate attracting customers who make decisions based on sustainable corporate values is driving them to prioritize sustainability compared to just addressing regulatory requirements.

Figure 1

"What are your organization's top business priorities in the next 12 months?"

(Rank from 1 to 5, with 1 being most important.)



Base: 137 global data center sustainability decision-makers at organizations that prioritize sustainability Source: A commissioned study conducted by Forrester Consulting on behalf of Johnson Controls, September 2021

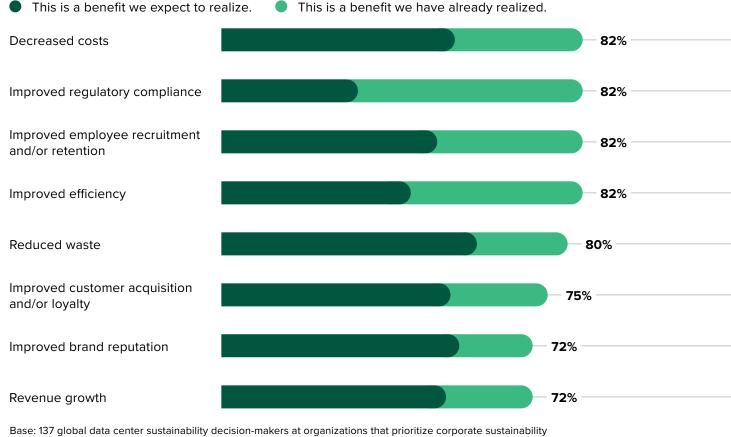
Sustainable Transformation Leads To Organizational Benefits

Undertaking a successful sustainable transformation drives competitive advantage and benefits for all stakeholders. While many energy, utilities, and waste management companies are in the midst of a sustainable transformation, respondents have realized or expect to realize benefits across many areas of their business.

Top reported benefits include decreased costs (e.g., cost of energy production and/or energy consumption) (82%), improved regulatory compliance (82%), improved employee recruitment and/or retention (82%), and improved customer acquisition and/or loyalty (75%) (see Figure 2).

Figure 2

"Which of the following benefits have you already realized, or do you expect to realize, from pursuing your sustainability goals?"



Note: Showing top 8 responses

Source: A commissioned study conducted by Forrester Consulting on behalf of Johnson Controls, September 2021

Prioritizing Sustainability Requires Strategic Commitment

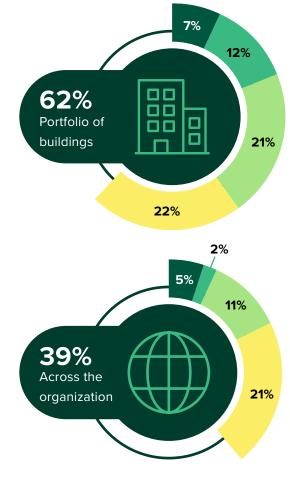
While sustainability initiatives have grown in importance for energy, utilities, and waste management companies, so too has the importance of executing upon sustainability goals. Decision-makers report facing many challenges that threaten to derail their efforts.

- Companies have been setting lofty sustainability goals. Thirty-nine percent of respondents indicate they plan to reduce energy consumption across their entire organization by at least 50% (see Figure 3). Yet the average reported target date for meeting these sustainability goals is 2024.
- Most struggle with measurement. Sixty-four percent of decision-makers indicate they are not using ESG reporting software today.
 Forty-four percent are struggling with internal alignment on how and what to track, while having siloed data (42%) and a lack of data from all company-owned spaces (31%) are other common pain points.
- Complexity makes scaling difficult. Respondents report managing multiple parties involved in executing their plans (35%) and scaling sustainability initiatives (34%) as the top obstacles hindering their ability to achieve sustainability goals. One-third indicate they lack external partners to help them with these pain points.
- Failing to deliver on goals threatens to derail sustainability efforts. The top reported risks associated with failing to improve sustainability

Figure 3

Long-Term Goals For Reducing Carbon Emissions/ Energy Consumption

- Carbon negative
- Net zero
- Greater than 75%
- 51% to 75%

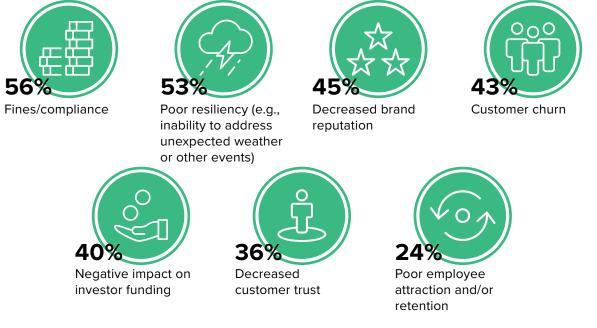


Base: 137 global data center sustainability decision-makers at organizations that prioritize sustainability

Source: A commissioned study conducted by Forrester Consulting on behalf of Johnson Controls, September 2021 are fines/compliance (56%), poor resiliency (53%), decreased brand reputation (45%), and customer churn (43%) (see Figure 4). Poor resiliency responses are particularly high in energy and utilities firms. Addressing resiliency is important in these sectors because extreme weather, floods, droughts, and wildfires can damage utility infrastructure, which causes power disruptions, disrupts customer service, reduces productivity, and increases repair costs.

Figure 4

"Which of the following are risks associated with failing to improve sustainability at your company?"



Base: 137 global data center sustainability decision-makers at organizations that prioritize sustainability Note: Showing top 7 responses

Source: A commissioned study conducted by Forrester Consulting on behalf of Johnson Controls, September 2021



of energy, utilities, and waste management decisionmakers have committed to cutting their carbon emissions by at least half by 2024, yet many still struggle to measure their efforts with just 36% using ESG reporting software today.

Key Recommendations

Sustainability initiatives are important priorities for decision-makers at energy, utilities, and waste management firms. Energy and utilities firms often focus on carbon emission reduction to begin their sustainability journey, and extend to integrating sustainable operational practices and renewable energy sources. In the waste management sector, pressure to enhance energy efficiency and reduce environmental impacts on landfills are key priorities. To address these diverse priorities and initiatives, sustainability stakeholders should:

Address mounting pressure from many stakeholders to prioritize sustainability activities.

Stakeholders spanning many roles are driving sustainability initiatives among energy, utilities, and waste management organizations. Facility or building owners, architects, and engineers should collaborate to identify waste reduction goals, as well as work with regulatory and compliance personnel to assess and address specific regulatory and certification requirements at an individual site, as well as at a regional or global level.

Assess your organization's sustainability priorities to align with regulatory and organizational initiatives.

A comprehensive sustainability assessment requires you to consider your organization's contribution to sustainability across a wide array of initiatives. Key initiatives will align with managing factors impacting sustainability, including electricity consumption, greenhouse gas emissions, renewable energy usage, recyclable materials, and waste disposal. Engage organizational stakeholders to set sustainability priorities, create convenient recycling programs, and identify ways to engage occupant participation in sustainability programs.

Measure the benefits and impacts of sustainability activities.

Identify metrics and methods to assess the impact of sustainability initiatives. Factors to measure include reduced operating costs from efficiently using energy, power, lighting, and water, as well as contributions to corporate recycling programs. It is important to identify opportunities to use renewable energy, reduce carbon emissions, or expand recycling programs. Assess opportunities to leverage certified and trusted sustainable partners that meet stakeholders' specific requirements to measure contributions toward sustainability goals, capture renewable energy usage, track corporate energy efficiency, and assess use of sustainable technologies, products, and recyclable materials.



Appendix A: Methodology

This study was commissioned by Johnson Controls and conducted by Forrester Consulting. Johnson Controls collaborated on the survey questions and design, but Forrester retained final editorial control. For this study, Forrester conducted an online survey with 137 global sustainability strategy leaders to evaluate the progress that sustainability-minded organizations have made in achieving their goals. Survey respondents included directors, vice presidents, and C-level executives in IT, operations, sustainability, governance, risk, compliance, facility management, and commercial real estate roles who work at energy, waste management, and/or utilities companies. The study began in August 2021 and was completed in September 2021. To read the full results of this study, including best practices from sustainably engaged organizations, please refer to the Thought Leadership Paper commissioned by Johnson Controls titled, "The Race To Decarbonization."

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Contributing Research:

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Appendix B: Demographics

NUMBER OF EMPLOYEES

500 to 999 (15%)	15%
1,000 to 4,999 (40%)	40%
5,000 or more (45%)	45%

RESPONDENT LEVEL

Director	51%
Vice president	40%
C-level executive	9 %

RESPONDENT CORPORATE SUSTAINABILITY RESPONSIBILITY

l am the final decision-maker in this area.	71%
I influence decisions in this area as a primary part of my job.	29%

INDUSTRY

Energy, utilities, and/or waste	100%
management	100 /0

RESPONDENT DEPARTMENT

IT	23%
Operations	35%
Sustainability	15%
Facility management	12 %
Governance, risk, and compliance	7 %
Commercial real estate	8%

LEVEL OF SUSTAINABILITY IMPORTANCE

Very important	54%
Important	36%
Somewhat important	9 %

GEOGRAPHY

Australia	3%
Brazil	4%
Canada	1%
China	16%
France	3%
Germany	1%
Hong Kong	4%
India	4%
Indonesia	4%
Ireland	2%
Italy	3%
Japan	12%

Note: Percentages may not total 100 because of rounding.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

"Guide Your Sustainability Program With The Forrester Sustainability Maturity Model," Forrester Research, Inc., October 27, 2021.

"Embrace The Green Business Opportunity," Forrester Research, Inc., March 30, 2021.

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Malaysia

Mexico	4%
The Netherlands	1 %
New Zealand	4 %
Qatar	1 %
Singapore	7 %
South Korea	7 %
Switzerland	3%
Thailand	4 %
United Arab Nations (UAE)	4 %
United Kingdom	2%
United States	1%

4%

GEOGRAPHY CONTINUED