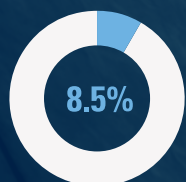


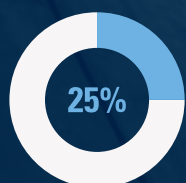
# The Health Care Leader's Guide to

---

# Sustainability and Environmental Stewardship

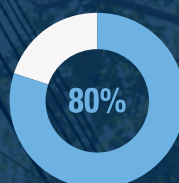


The U.S. health care sector is responsible for 8.5% of U.S. emissions.



Notably, the U.S. health care sector is responsible for 25% of global health care emissions.

Global actions to reduce emissions increases the focus on the U.S. health care system's actions.



80% of emissions in U.S. health care are from goods and services in the supply chain.

## Mission Readiness

Hospitals are encouraged to view resiliency as a means for protecting human health. Sustainability and Environmental Stewardship aligns with health care mission to serve hospitals' communities by providing a pathway to take action and plan for environmental risks.

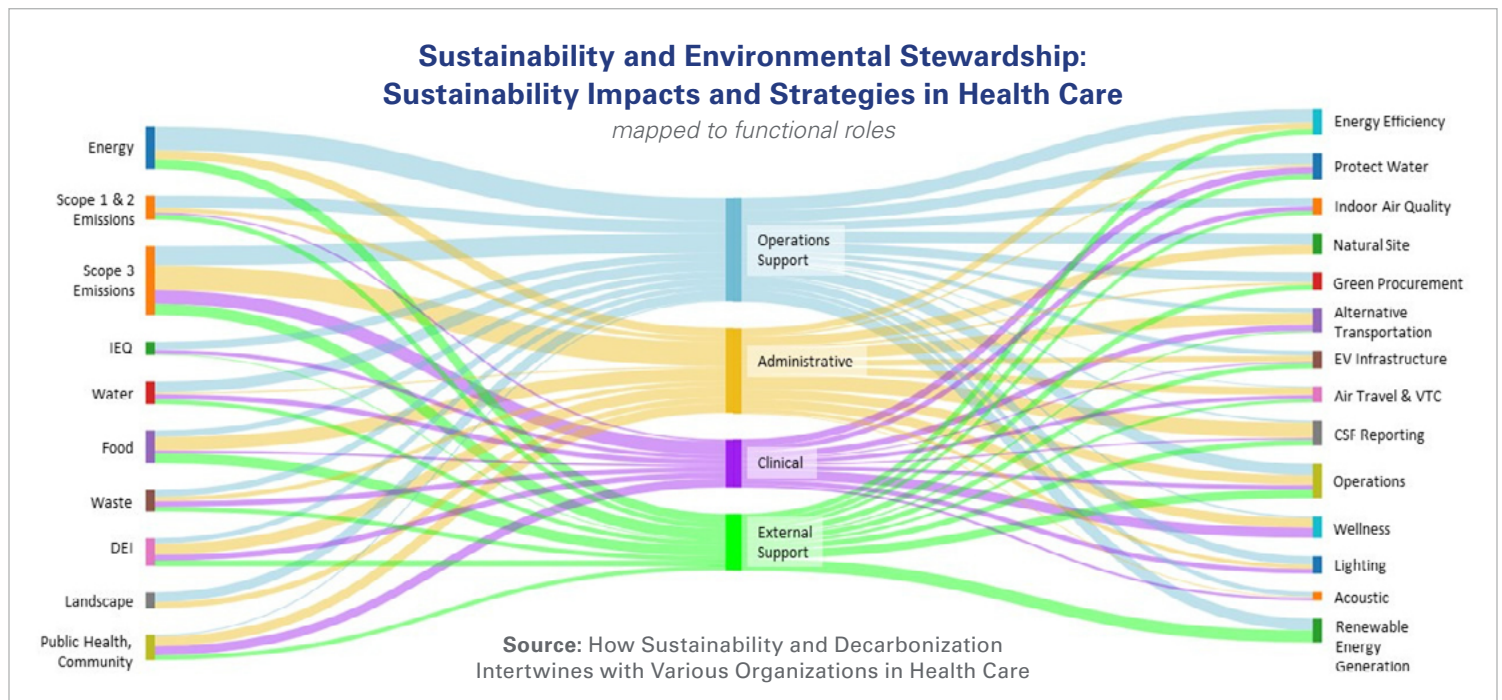
# Create Value

Aligning the organization to empower all employees to improve sustainability can:

- ♦ Build new relationships among internal functions to reduce waste and increase value.
- ♦ Boost employee motivation and improve retention and recruitment.
- ♦ Enhance investment returns by better allocating capital for the long term.

Hospitals and health systems committed to sustainability and environmental stewardship strategies could work with department leaders to:

1. Understand the importance of sustainability in health care.
2. Commit to seeking out opportunities to change current practices.
3. Collaborate with stakeholders to review and assess ongoing performance.



## References:

1. <https://www.statnews.com/2022/10/27/health-care-hospitals-climate-pollution/>
2. <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/five-ways-that-esg-creates-value>
3. [https://practicegreenhealth.org/sites/default/files/upload-files/practicegreenhealth\\_ghg\\_toolkit.pdf](https://practicegreenhealth.org/sites/default/files/upload-files/practicegreenhealth_ghg_toolkit.pdf)

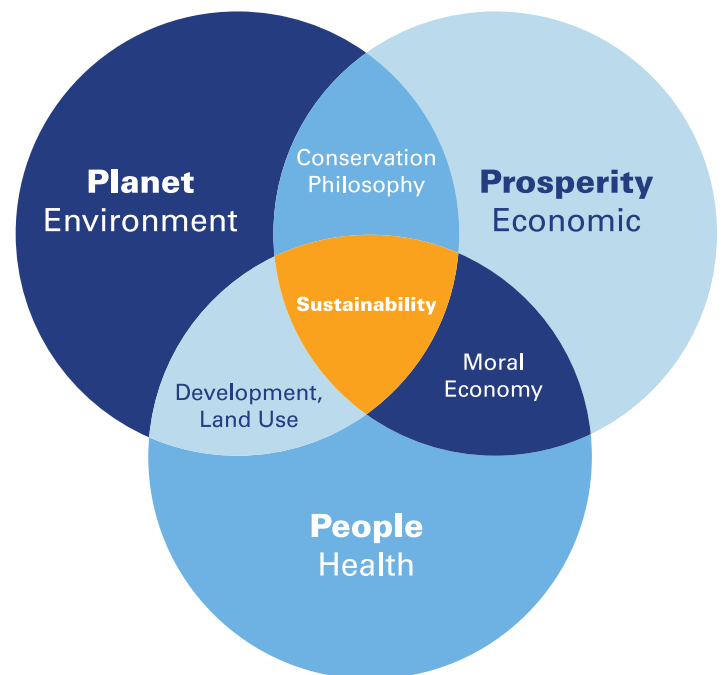




# Key Terms and Definitions

## Sustainability

- In health care, refers to the integration of environmental stewardship and fiduciary responsibility in health care organizations to support healthy and resilient environments and communities maintained over time.
- Meeting the needs of the present, without compromising the ability for future generations to lead healthy lives.
- Based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment.
- To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in productive harmony to support present and future generations.



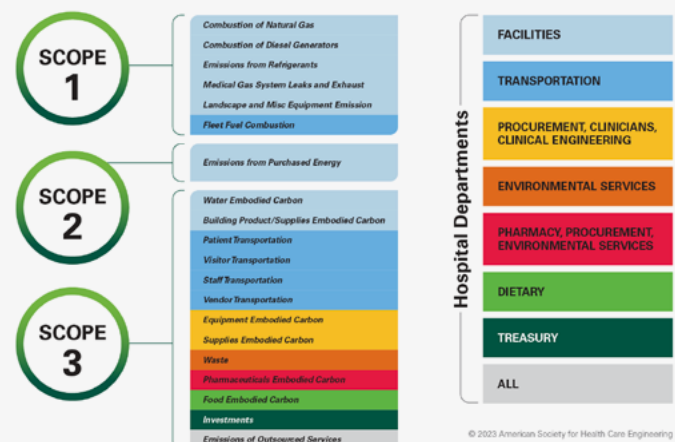
## Decarbonization

- The act of reducing greenhouse gas emissions.

## Greenhouse Gas Protocol

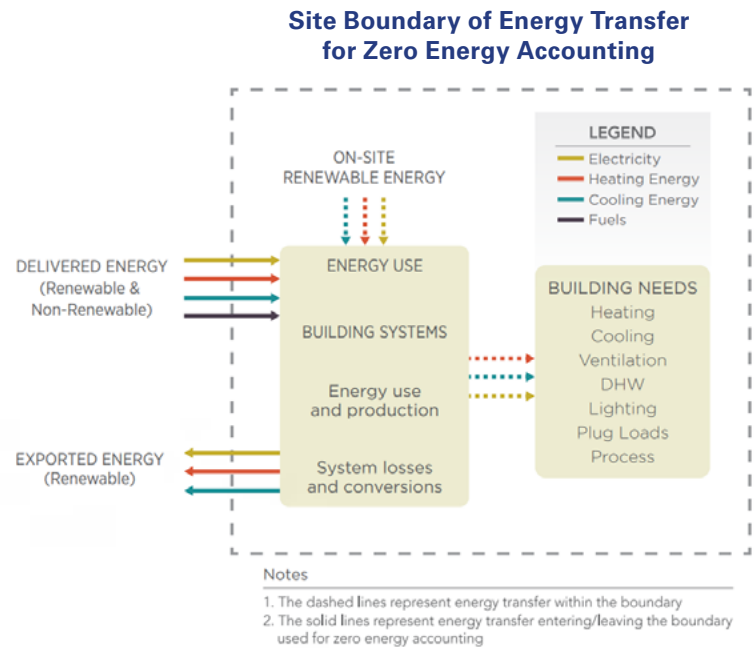
- Scope 1: Direct emissions
- Scope 2: Indirect emissions
- Scope 3: Purchased goods and services

## Hospital GHG Emissions Impact by Category



## Net-zero Energy

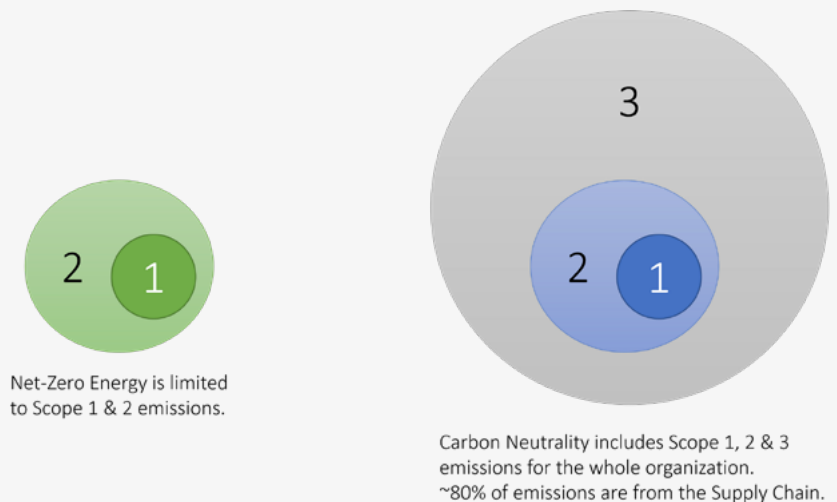
- On an annual basis, uses equivalent energy from the utility grid that is provided by onsite renewable energy sources.
- Not the same as “carbon neutral.”



## Carbon-neutral

- In addition to energy consumption (scope 1 and 2 emissions), carbon neutrality “includes emissions beyond the entity’s direct control (scope 3 emissions).”

Reference: IPCC AR6 WGIII



## Embodied Carbon

- The greenhouse gas emissions associated with the manufacturing, transportation, installation, maintenance and disposal of purchased products/materials. For example:
  - Medical supplies and equipment
  - Pharmaceuticals
  - Food
  - Construction materials

## Operational Carbon

- The greenhouse gas emissions associated with daily operations. For example:
  - Building energy consumption
  - Anesthetic gases
  - Refrigerants onsite
  - Staff commuting
  - Business travel

### References:

- IPCC AR6 WGIII | <https://www.ipcc.ch/report/sixth-assessment-report-working-group-3/>
- [https://www.ipcc.ch/report/ar6/wg3/downloads/faqs/IPCC\\_AR6\\_WGIII\\_FAQ\\_Chapter\\_01.pdf](https://www.ipcc.ch/report/ar6/wg3/downloads/faqs/IPCC_AR6_WGIII_FAQ_Chapter_01.pdf)



# Carbon in Health Care

Emissions are categorized as scope 1, 2 and 3, but can also be analyzed in functional roles:

- **Operations**

- › Energy consumption (scope 1 and 2)
- › Refrigerants (scope 1)
- › Construction (scopes 1-3)
- › Water (scope 3)
- › Food (scope 3)
- › Waste (scope 3)
- › Information and computer technology (scope 3)

- **Clinical**

- › Anesthetic gases (scope 1)
- › Medical waste (scope 3)
- › Testing and research (scope 3)
- › Pharmaceuticals (scope 3)
- › Purchased goods and services (scope 3), including medical devices and supplies

- **Administrative (all scope 3)**

- › Business travel
- › Lending, banking, investments and insurance

**Note:** The figure to the right represents global health care emissions. Scope 3 for U.S. health care is calculated to be 80% of the total carbon emissions.

Carbon and greenhouse gas (GHG) emissions are often used interchangeably. This is because GHG emissions are measured in carbon dioxide equivalent (CO<sub>2</sub>e), often abbreviated as “carbon.”

Relationship of GHGP categories to WIOD emissions sources

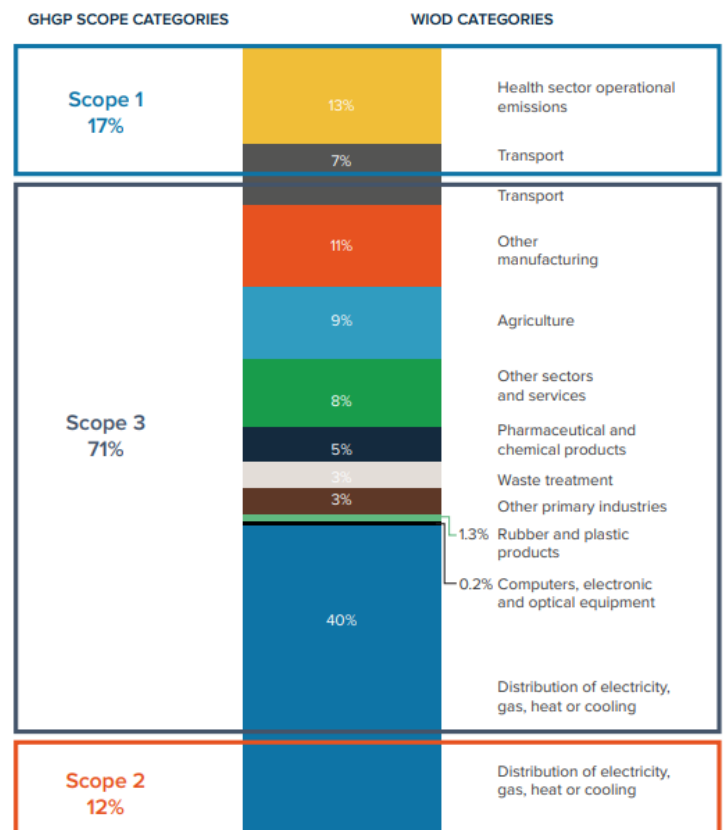


Figure 6a shows the proportion of WIOD emissions sources attributable to GHGP Scopes 1, 2 and 3.

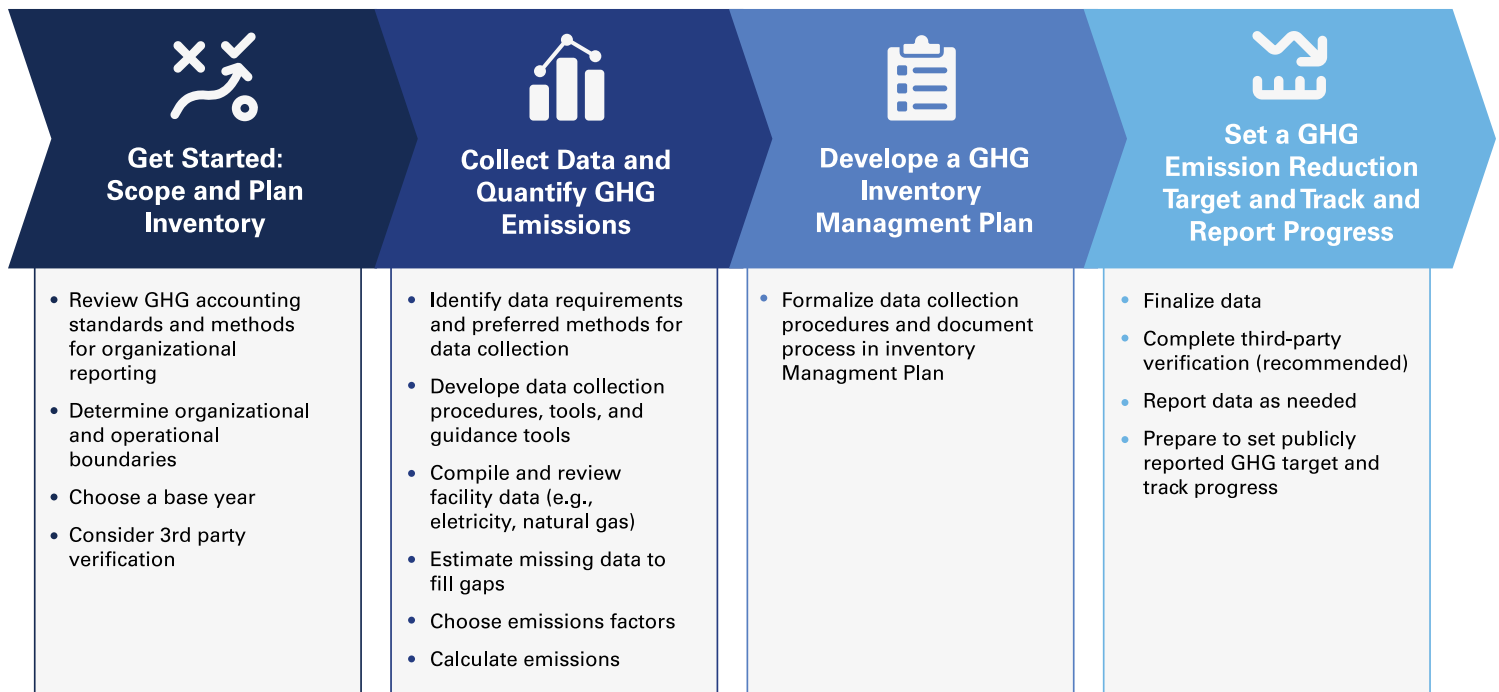
Image: Health Care without Harm (2019) Health Care's Climate Footprint



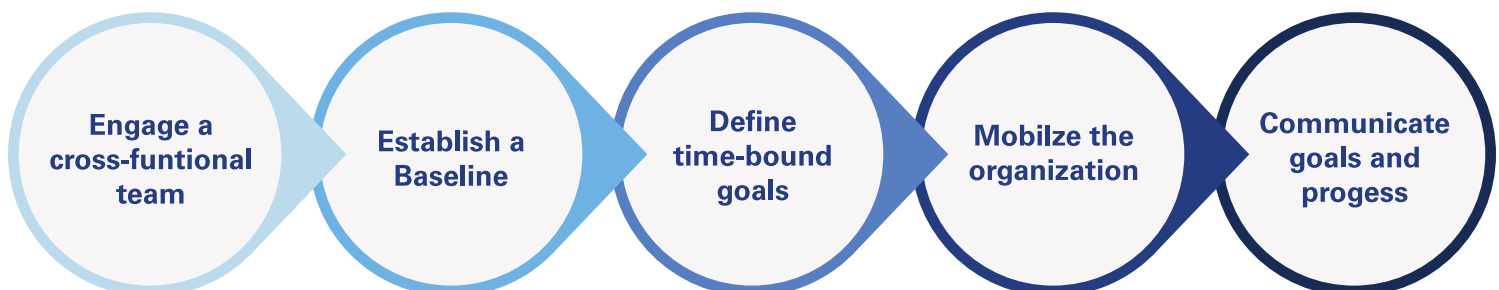
Over **3,500** health care facilities are tracking emissions associated with facility energy consumption in Energy to Care, the American Society for Health Care Engineering's (ASHE's) award-winning sustainability program for health care facility management professionals who want to add value to their organizations via an environmental sustainability focus.

The majority of scope 1 and 2 emissions for health care organizations can be tracked in the Energy to Care dashboard, a free tool provided by ASHE.

## Measuring Carbon in Your Organization



## Communicating Carbon Goals and Actions



# Thoughts for the Sustainability Team

As members of the sustainability team, you have the passion to share your knowledge of sustainability with your colleagues, the responsibility to build relationships with all functional roles, and the power to inspire all stakeholders to advance sustainability (contractors, visitors, the community, the sector).

You are curious — seeking to understand existing systems and operational practices, and learn from other experts. Building trust will open doors to identifying opportunities that improve sustainability.

You are empowered to be leaders in your organization — speak up when you need resources and be clear about the value of sustainability initiatives in support of the executive strategy. Remember to prepare your coworkers (the functional leaders in your organization) to celebrate achievements. Achieving a sustainability goal is not a win for only the chief sustainability officer or the sustainability team, it is a win for the organization.

## Articulate Your Why

Share a consistent, persuasive message for sustainability and environmental stewardship in your organization and with various stakeholders. This Cleveland Clinic figure provides a few examples, but it is most impactful to work with your internal leaders and craft a message that speaks directly to the context of your operations, considering location and community.

### Cleveland Clinic Environmental Stewardship Pitch Summary

Sustainability “hook”	Sample message for the leader
Mitigation	Save \$50 million+
Engagement	Attract the best
Resilience	Adjust to the future
Relationships	Build partnerships
Population health	Impact regional health
Societal transformation	Change the nexus
Transpersonalism	Be the change
Moral obligation	Do the right thing
Leadership	Lead the sector

**Source:** Presented by Jon Utech and Jessica Wolf during CleanMed 2018, “Demystifying Greenhouse Gas and Goal-setting in Health Care”



## Recommendations for the Experts

Consider these suggestions, but review the context for your organization and take the time to build support and consensus at all levels (top-down and bottom-up).

1. Support the CEO to make sustainability a transformational program for the entire organization:
  - ♦ Articulate the sustainability vision for the organization and repeat often.
  - ♦ Connect sustainability to the mission and vision of the organization.
  - ♦ Engage the board of directors and show the value of sustainability.
  - ♦ Be clear that this is an executive priority. Transformational initiatives require leaders at all levels (bottom-up), but also require C-suite leadership (top-down).
  - ♦ Create a plan with metrics and milestones, report progress and celebrate achievements.
  - ♦ Identify high-impact areas (materiality assessment) and define strategy to include relevant internal functions and external/third parties.
2. Work with the chief operating officer (COO) to realign internal processes to support sustainability. Create key performance indicators (KPIs) that will measure progress towards sustainability goals.
  - ♦ Identify internal leaders and allocate the resources needed for success.
  - ♦ Frame the sustainability agenda in a “growth mindset,” encouraging leaders to embrace the challenges of sustainability by seeking opportunities to innovate.
3. Communicate initiatives and progress externally to your community and the sector.
  - ♦ Be transparent about ambitions, current performance and value created from sustainability initiatives.
  - ♦ To achieve meaningful improvements, one health system cannot change the field alone. Collaborating with other community organizations and across the health care sector can help to share successes and overcome obstacles.

### References:

1. <https://www.ashe.org/sustainabilityguide>
2. <https://www.hfmmagazine.com/articles/topic/144-sustainability>
3. <http://www.sustainabilityroadmap.org/>
4. <https://www.statnews.com/2022/10/27/health-care-hospitals-climate-pollution/>

# The CEO's Guide to Environmental Stewardship

Sustainability, which was once characterized in health care as an optional “add-on” to hospital operations and health care delivery, is now becoming an operations priority. Today, we recognize that health care has a great impact on the economy and the environment, and health care operations directly affect the health and wellness of patients and communities.

Nationally, some health care systems are showing the value from integrating sustainability into functions of the organization. Organizations with a plan can more quickly respond to opportunities for partnerships and participation in incentive programs.

Success stories are shared in every region and for organizations of every size. There is no shortage of educational resources on sustainability, but it can be hard to know where to start. This resource collects current best practices (as of 2022) and identifies action steps to jumpstart your sustainability journey.



## Use a “transformational change” approach for sustainability and environmental stewardship

No single person or department can make health care sustainable: meaningful change will require all functions to find new ways of delivering better outcomes. The complexities of the health care system require top-down leadership and creative problem-solving from the bottom-up to increase value. Outside of health care, some organizations have found a corporate commitment to sustainability boosts employee motivation and improves retention and recruitment.

## Reinforce the Mission

**The imperative:** the environment affects parts of health and health care delivery, and some hospitals are dealing with the impacts today. Reducing green house gas emissions and air pollution can protect the health of patients, employees and communities.

**Mission alignment:** Health care's global carbon footprint is significant, hospitals can take meaningful actions to improve the health of all people and the environment in which they live — by setting a sustainable course for the future.

**Operational benefits:** Reducing GHG emissions leads to cost savings and can contribute to hospitals' resiliency when faced with extreme weather events.

## Recommendations for the Health Care CEO

1. Make sustainability a transformational program for the organization:
  - ♦ CEOs can acknowledge that sustainable hospitals offer unique benefits to their surrounding communities.
  - ♦ Engage the board of directors and show the value of sustainability.
  - ♦ Be clear that this is an executive priority and long-term commitment.
2. Identify internal leaders and allocate the resources needed for success:
  - ♦ Frame sustainability in a growth mindset to embrace the challenges of sustainability by seeking innovations.
3. Communicate initiatives and progress regularly to your community and the sector:
  - ♦ Show the value.
  - ♦ Recognize the functional roles for leadership and innovation.
  - ♦ Collaborate with other CEOs to share successes and overcome obstacles.

### References:

1. [https://www.splunk.com/en\\_us/blog/tips-and-tricks/deliver-lasting-business-transformation-kotter-s-8-steps.html](https://www.splunk.com/en_us/blog/tips-and-tricks/deliver-lasting-business-transformation-kotter-s-8-steps.html)
2. <https://info.microsoft.com/rs/157-GQE-382/images/EN-CNTNT-Other-ExecutivePlaybook.pdf>
3. Roadmap for Integrated Sustainability | UN Global Compact | <https://unglobalcompact.org/take-action/leadership/integrate-sustainability/roadmap>



# The COO's Guide to Sustainability and Environmental Stewardship

As the leader responsible for health care operations, the chief operating officer's actions can effectively accelerate environmental stewardship initiatives. Conversely, without COO support, meaningful improvements in environmental stewardship are unlikely. The COO need not be an expert in sustainability but must actively strive to integrate sustainability into business processes.

The Institute for Healthcare Improvement (IHI) uses the triple aim as a framework to optimize health system performance, which can also be applied to environmental stewardship.

The triple aim seeks improvements in health care by optimizing practices that:

- ♦ Improve the patient experience.
- ♦ Improve population health.
- ♦ Reduce per capita costs of care.

The IHI says it recognizes that improvements happen when teams have the will, which unlocks ideas that are supported for implementation.

Tapping into this familiar thought process, organizations can seek out improvements for environmental stewardship. The COO can recognize that all functional roles impact sustainability in health care and empower individuals to participate in problem-solving to help with employee recruitment and retention. Framing sustainability as a growth mindset helps to identify areas for improvement, promote cross-functional teamwork and stimulate solutions — many likely to come from the supply chain.

Any strategic initiative must have leadership. While sustainability teams can be a great way to start, too often they are composed of only volunteers. Environmental stewardship could be included in job descriptions for supervisors to support the initiative. When individuals have clear support for these efforts, they give it the time it needs.

## Leading Toward Sustainability

Improving sustainability within health care organizations requires all departments (and truly, all employees and contractors) to:

1. Understand the importance of improving sustainability (connect to mission).
2. Commit to seeking out opportunities to change current practice in a way that improves key performance indicators.
3. Collaborate with other stakeholders to review and assess ongoing performance.

The complexity of health care facility operations and sourcing requires sustainability and decarbonization to be a strategic priority to achieve meaningful change in KPIs like carbon emissions.

# Recommendations for the Health Care COO

1. Build a cross-functional team of leaders to drive strategy.
  - ♦ Allocate time and incorporate sustainability in job descriptions.
  - ♦ Instruct the team of leaders to work with all departments to implement initiatives.
  - ♦ Ask team to provide regular updates, such as monthly operations meetings.
2. Establish a management system for environmental stewardship.
  - ♦ Track KPIs that will measure real progress alongside patient outcomes.
  - ♦ Incorporate sustainability KPIs into department-level goals.
  - ♦ Realign internal processes to support sustainability.
3. Encourage a growth mindset by supporting education for sustainability.
  - ♦ Host learning sessions with local experts.
  - ♦ Sponsor focused training for employees to become experts.
  - ♦ Share your own successes with other organizations.

## References:

1. [https://www.accenture.com/\\_acnmedia/PDF-145/Accenture-CFO-Now-Research-2021-FullReport.pdf#zoom=40](https://www.accenture.com/_acnmedia/PDF-145/Accenture-CFO-Now-Research-2021-FullReport.pdf#zoom=40)
2. <https://info.microsoft.com/rs/157-GQE-382/images/EN-CNTNT-Other-ExecutivePlaybook.pdf>
3. Roadmap for Integrated Sustainability | UN Global Compact | <https://unglobalcompact.org/take-action/leadership/integrate-sustainability/roadmap>



# The CFO's Guide to Sustainability and Environmental Stewardship

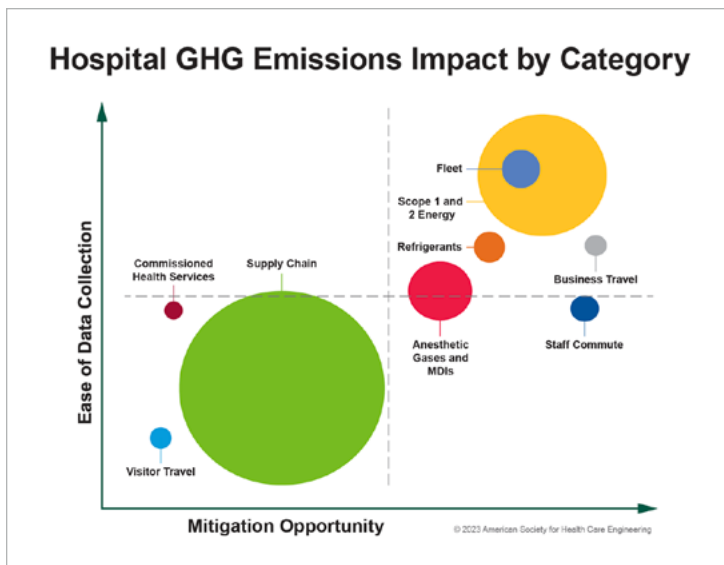
Sustainability initiatives in health care organizations should include operational practices and focused projects — both of which require funding. As a key voice in the financial analysis for these projects and initiatives, the chief financial officer and finance team can support the value proposition by helping to define expected outcomes. Finance teams also have the skills to support internal measurement and tracking to monitor progress towards sustainability goals.

KPIs for sustainability and decarbonization may include:

- ♦ Energy consumption and associated emissions.
- ♦ Fuel consumption in owned and leased vehicles and calculated emissions.
- ♦ Emissions from business travel.
- ♦ Emissions from anesthetics.

Because 80% of health care emissions are from purchased goods and services:

- ♦ Track spending to analyze scope 3 emissions within the organization.
- ♦ Work with operations and procurement to identify suppliers that can reduce scope 3 emissions.



**Jamie Dimon, CEO of JPMorgan Chase,**  
“We have a goal to reduce the carbon intensity of our financing portfolio... and we are minimizing the environmental impact of our physical operations.”

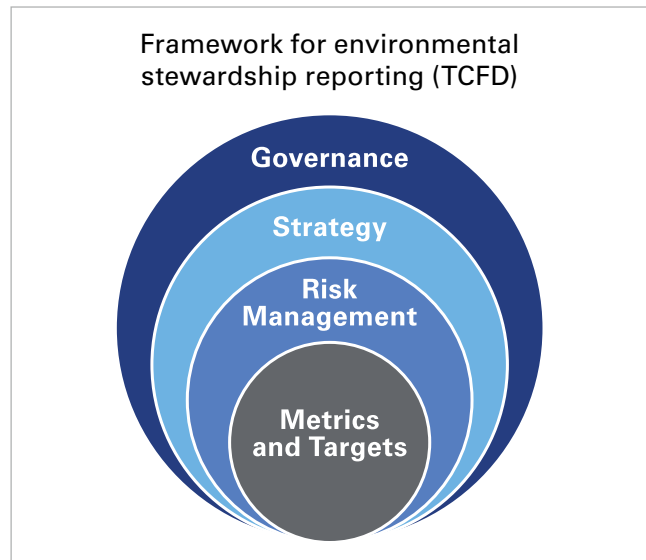
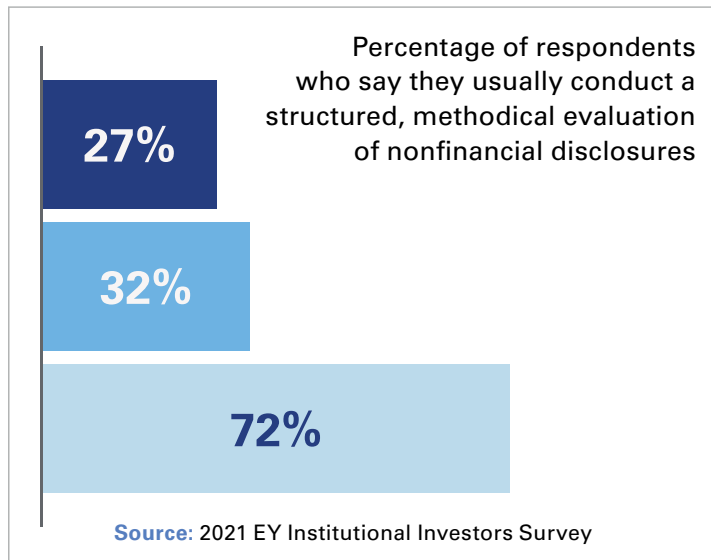


## Benchmarking Outside of Health Care

Some chief financial officers (CFOs) are treating non-financial KPIs and targets with the same prudence as traditional financial targets and linking sustainability to value drivers.

68% of CFOs globally take responsibility for their organization's environmental stewardship performance.

73% of investors surveyed say they will devote considerable time and attention to evaluating the physical risk implications from the environment when they make asset allocation and selection decisions (see figure).



## Recommendations for the Health Care CFO

1. Review financial analysis practices to recognize environmental impacts. For example:
  - ♦ Assess risk to disruption in operations.
2. Inquire with financing, banking and insurance providers about environmental stewardship practices:
  - ♦ Competition in the marketplace creates incentives for providers to innovate in environmental stewardship, if they understand the organization values it.
  - ♦ How do partners incorporate sustainability in the services they offer?
3. Recognize sustainability in non-financial reporting for your organization:
  - ♦ Annual environmental stewardship report

### References:

1. [https://www.accenture.com/\\_acnmedia/PDF-145/Accenture-CFO-Now-Research-2021-FullReport.pdf#zoom=40](https://www.accenture.com/_acnmedia/PDF-145/Accenture-CFO-Now-Research-2021-FullReport.pdf#zoom=40)
2. <https://info.microsoft.com/rs/157-GQE-382/images/EN-CNTNT-Other-ExecutivePlaybook.pdf>
3. Roadmap for Integrated Sustainability | UN Global Compact
4. <https://www.fsb-tcfd.org/about/>
5. <https://www.linkedin.com/pulse/jpmorgan-chase-releases-2021-esg-report-detailing-efforts-jamie-dimon/>
6. <https://www.blackrock.com/dk/formidler/2022-larry-fink-ceo-letter>

# The Board's Guide to Environmental Stewardship

Environmental stewardship should now be considered a supporting element of the health care mission to heal and promote well-being. The field is encouraged to recognize and acknowledge community expectations regarding environmental stewardship, along with the risks the environment poses to hospitals' physical assets. As such, the sector's actions merit support for creating a new avenue for financial savings through the reduction of energy, water, and carbon emissions, with health care organizations considering environmental stewardship among its strategic initiatives. As such, the sector's actions merit support for worldwide reductions in carbon emissions, with health care organization considering the inclusion of sustainability and decarbonization among its strategic initiatives.

The board of directors is uniquely positioned to consider both the opportunities and risks the environment presents to the organization. Charged with maximizing the value of the organization and acting in the organization's best interest, the board of directors recognizes the savings opportunities, environmental risks, and environmental awareness of the community.

## The Board's Responsibility

While the board's duty is to oversee the organization, the words and actions of individual board members can elevate strategic initiatives and strengthen the culture of the organization. Board members are ambassadors for the organization and have a responsibility to help the CEO be successful.

The board often acts as stewards for the long term, and helps to evaluate the impact the environment has on business performance. The board can oversee a materiality assessment to understand priority areas and inform long-term strategy. Organizations might formalize the board's role by including references to environmental stewardship in the board's charters and annual training.

If sustainability and environmental stewardship are new concepts to the board of directors, there are resources available on the Sustainability Roadmap that provide insights and resources for the health care enterprise, including operations, procurement, purchasing, maintenance, and new models of care.

U.S. health care systems are beginning to make structural changes to support the strategic initiative of sustainability as a transformational program for their organizations.

Organizations that learn from other leaders will celebrate achievements along the way, garnering support from stakeholders and positioning the organization to maximize value.

# Recommendations for the Board of Directors

1. Become familiar with and learn about the principles of environmental stewardship.
2. Review/oversee a materiality assessment to understand the impact the environment plays on business performance.
3. Consider formalizing the board's role by including environmental stewardship and sustainability as priorities in the board manual, charters, and annual training.
4. Plan regular board trainings on sustainability and environmental stewardship in health care.
5. Support and oversee management efforts to track progress towards the plan.
6. Create a board committee or include environmental stewardship discussions in an existing board committee.
7. Board members, in their roles as ambassadors, could consider reinforcing the importance of environmental stewardship in the community.

## References:

1. Harvard Law School Forum on Corporate Governance, "The Board and ESG" | <https://corpgov.law.harvard.edu/2019/02/25/the-board-and-esg/>
2. U.S. Department of Health and Human Services, "Corporate Responsibility and Health Care Quality: A Resource for Health Care Boards of Directors" | [https://oig.hhs.gov/documents/compliance-guidance/813/CorporateResponsibilityFinal\\_9-4-07.pdf](https://oig.hhs.gov/documents/compliance-guidance/813/CorporateResponsibilityFinal_9-4-07.pdf)
3. [https://oig.hhs.gov/documents/compliance-guidance/813/CorporateResponsibilityFinal\\_9-4-07.pdf](https://oig.hhs.gov/documents/compliance-guidance/813/CorporateResponsibilityFinal_9-4-07.pdf)
4. Roadmap for Integrated Sustainability | UN Global Compact | <https://unglobalcompact.org/take-action/leadership/integrate-sustainability/roadmap>





# The Business Case

Sustainability and environmental stewardship are transformational for each health care organization — and the sector as a whole. The business concepts “Create Value” and “Reinforce the Mission” help to show the importance of sustainability and decarbonization. Adapting these examples to your own organization and community will make an even more compelling case.

## Create Value

**A strong environmental stewardship proposition links to value creation in five essential ways.**

	<b>Strong environmental stewardship proposition</b> (examples)	<b>Weak environmental stewardship proposition</b> (examples)
Top-line growth	Attract B2B and B2C customers with more sustainable products Achieve better access to resources through stronger community and government relations	Lose customers through poor sustainability practices (eg, human rights, supply chain) or a perception of unsustainable/unsafe products Lose access to resources (including from operational shutdowns) as a result of poor community and labor relations
Cost reductions	Lower energy consumption Reduce water intake	Generate unnecessary waste and pay correspondingly higher waste-disposal costs Expend more in packaging costs
Regulatory and legal interventions	Achieve greater strategic freedom through deregulation Earn subsidies and government support	Suffer restrictions on advertising and point of sale Incur fines, penalties, and enforcement actions
Productivity uplift	Boost employee motivation Attract talent through greater social credibility	Deal with “social stigma,” which restricts talent pool Lose talent as a result of weak purpose
Investment and asset optimization	Enhance investment returns by better allocating capital for the long term (eg, more sustainable plant and equipment) Avoid investments that may not pay off because of longer-term environmental issues	Suffer stranded assets as a result of premature write-downs Fall behind competitors that have invested to be less “energy hungry”

Recognizing that health care is competitive in most markets, the value proposition to patients is higher quality care at lower cost with an organization that is promoting wellness in their community and mitigating harmful environmental effects.

## Reinforce the Mission

**The imperative:** environmental factors can affect health and health care delivery, and hospitals deal with these types of impacts frequently. Reducing GHG emissions can help protect the health of patients, employees, and communities.

**Mission alignment:** Health care's energy intensity and carbon footprint are significant, and hospitals can benefit from reducing the impact.

**Operational benefits:** Reducing energy and GHG emissions leads to cost savings and makes hospitals more resilient in the face of extreme weather events.

### Cleveland Clinic Environmental Stewardship Pitch Summary

Sustainability "hook"	Sample message for the leader
Mitigation	Save \$50 million+
Engagement	Attract the best
Resilience	Adjust to the future
Relationships	Build partnerships
Population health	Impact regional health
Societal transformation	Change the nexus
Transpersonalism	Be the change
Moral obligation	Do the right thing
Leadership	Lead the sector

**Source:** Presented by Jon Utech and Jessica Wolf during CleanMed 2018, "Demystifying Greenhouse Gas and Goal-setting in Health Care"

### University of Alabama Birmingham (UAB) commits to carbon reductions and clean energy for hospitals

"As UAB is a leading academic research institution, healthcare facility and the largest single employer in the state — effective and sustainable operations are essential to UAB's mission"

**Ray Watts, President,**  
University of Alabama Birmingham

### Health Partners approaches Sustainability and Triple Aim simultaneously

"The Future of Health and the Future of Sustainability are bound Together"

**Andrea Walsh, CEO, Health Partners**

# Environmental Risks to Hospitals

The harmful effects of the environment are experienced across the U.S., ranging from flooding to wild fires, and extreme temperatures that stress our infrastructure systems beyond their capabilities.

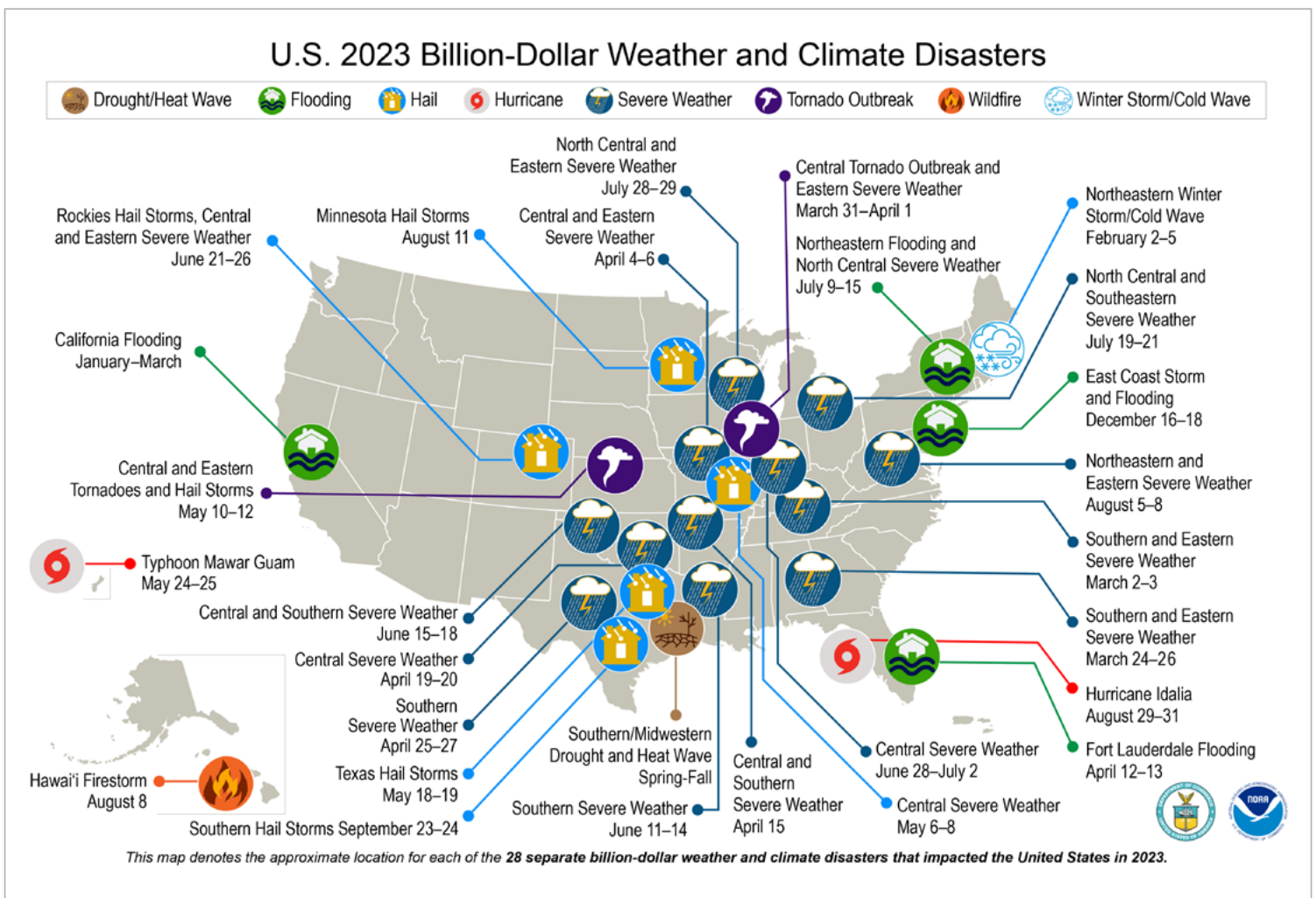
In 2020 alone, 22 environmental related disasters caused over \$111 billion in losses. Over the last five years, a total of 86 billion-dollar events have totaled \$451 billion.

Hospitals have emergency response plans for these events, and might recognize the connections between the environment and carbon emissions.

These shocks and stressors add to the cost of care, disrupt operations that can prevent timely care, and present significant risks to the health care sector's ability to serve the community.

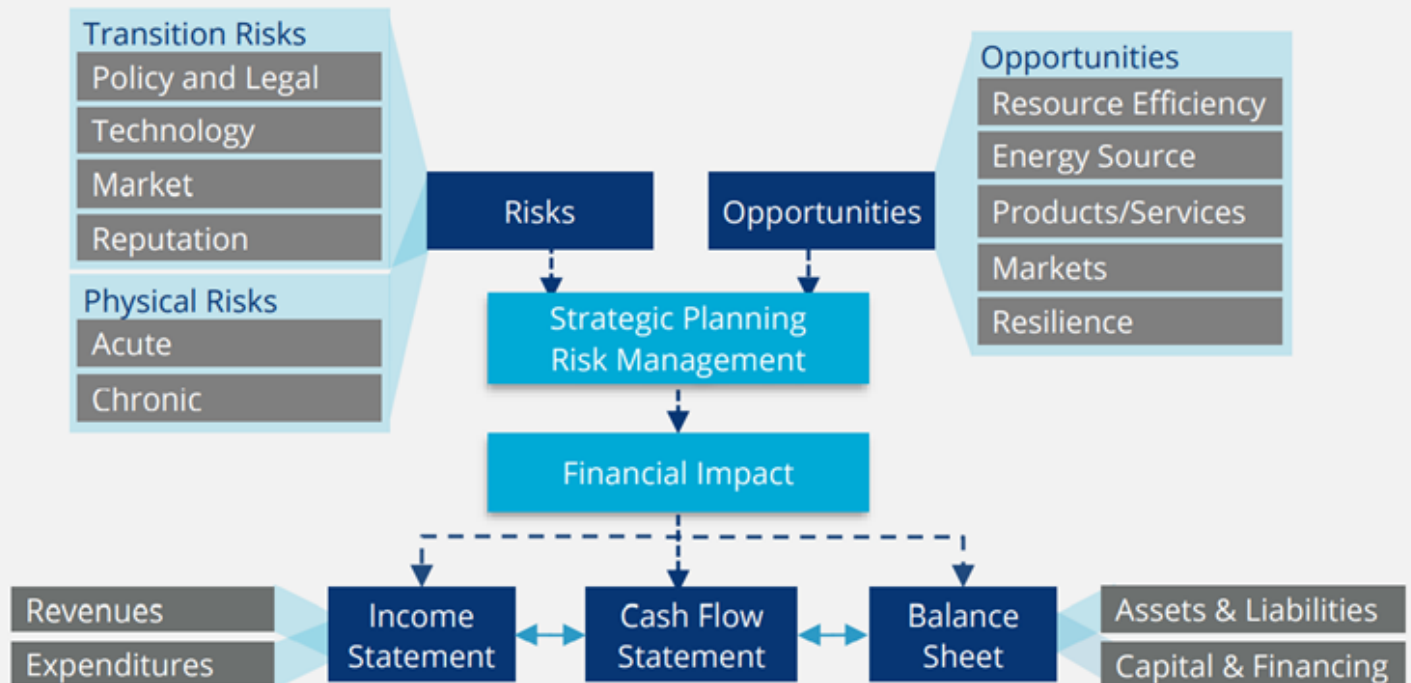
In underserved communities, these shocks and stressors disproportionately affect people who are least able to prepare for and recover from heat waves, poor air quality, flooding and other impacts.

Environmental awareness can help to improve hospital resilience and the community's ability to absorb and recover from weather and environmental risks.



# Recognize the Risks and Quantify the Impact

## Risks, Opportunities, and Financial Impact



Identifying the near-future environmental risks to operations and quantifying the financial impact of an event allows leadership to incorporate risk management into strategic planning.

Environmental stewardship and sustainability projects may reduce the risk, which can be operationalized and support the business case.

Keeping the hospital open during weather events will be increasingly challenging, but environmental planning can position for success.





## Immediate Action Steps

Health care executives and emergency planners have a responsibility to ensure their facilities are safe for staff, patients and visitors.

1. Identify priority environmental impacts specific to your operations/facilities.
2. Conduct/update hazard vulnerability assessment (HVA) to include these impacts.
3. Update system/facility-level surge plans.
4. Incorporate weather events into system/facility-level utility outage plans and alternative sources.
5. Work with supply chain partners to plan for emergency supplies to sustain operations.
6. Prepare all functions with clear, concise messaging to anticipate operational practices during expected events.

### Questions to discuss the tangible impacts of weather and environment:

- ♦ What are the new risks we are encountering related to the environment?
- ♦ Will virus related changes affect the response?
- ♦ Can building systems continue to meet temperature and humidity requirements?

#### Additional resources:

1. <https://files.asprtracie.hhs.gov/documents/aspr-tracie-climate-change-resilience-and-healthcare-system-considerations-508.pdf>
2. <https://toolkit.climate.gov/topics/human-health/building-climate-resilience-health-sector>

#### References:

1. <https://www.climate.gov/disasters2020?ftag=MSFd61514f>
2. <https://publichealthmaps.org/motw-2021/2021/4/22/22-april-2021-how-our-health-is-harmed-by-climate-change>
3. <https://asprtracie.hhs.gov/technical-resources/158/climate-change-and-healthcare-system-considerations/0>

## Financial Sustainability

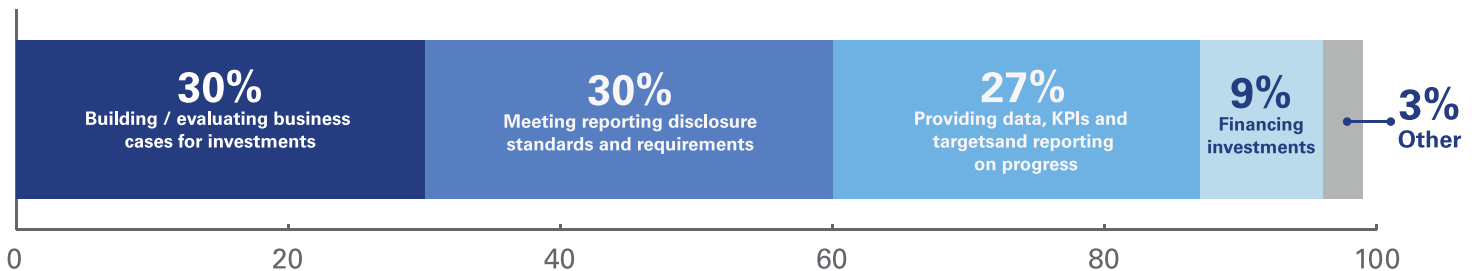
A 2022 Deloitte survey shows CFOs see their contributions as:

- ♦ Supporting the business case for investments.
- ♦ Meeting reporting disclosure standards and requirements.
- ♦ Tracking progress with KPIs.

**Investments, banking, and lending can have significant scope 3 emissions. CFOs are recognizing this and taking action.**

### Finance's expected impact

Looking ahead, what do you believe will likely have been the most impactful change that you and/or your finance organization will have made to address sustainability? (N=53)



## Investments and the Foundation

Investments can represent 20 to 30% of scope 3 emissions in health care operations, depending on investment strategies. The financial sector has recognized an interest in organizations wishing to build sustainable investments by offering some mechanisms for sustainable investing.

In addition, some health care foundations seek investments that actively support projects to help communities adapt to environmental factors and also have a desirable return on investment.

# The Power of Asking the Question

## Can you transform the marketplace by asking a question?

A free market economy self regulates with supply and demand. Innovations can reduce costs and give suppliers an edge. Customers can also drive innovation, but customers need to inform the marketplace of their interests. Asking suppliers if they can meet environmental stewardship and sustainability targets is a great place to start.

In the case of health care, medical supplies and equipment need to be cost-effective and meet specific criteria for their clinical use. Quality cannot be compromised in the interest of sustainability — and this is where opportunities exist for innovation.

The construction industry has a great example of transforming the marketplace by encouraging innovation with a clear goal: to reduce volatile organic compounds (VOCs) in paint. Glidden Company developed the first VOC-free coatings in 1992, but they had significantly higher cost. In the 2000s, the Leadership in Energy and Environmental Design (LEED) rating system incentivized construction projects to use low-VOC paint, so architects and contractors began asking the question, “Can you meet this target?”

Innovations to reduce carbon and improve sustainability are possible in health care. Health care systems should ask the question to inform and incentivize the market.

---

**Banking, lending, insurance** all have associated scope 3 emissions in health care. At your next opportunity, ask these partners:

- ♦ How is their business addressing environmental stewardship through their internal operations?
- ♦ Can their business offer any programs that promote environmental stewardship?
- ♦ How is their business addressing environmental stewardship in their investments?

### References:

1. <https://www.fsb-tcfd.org/about/>
2. [https://www.ey.com/en\\_fi/sustainability-financial-services/how-sustainable-finance-can-help-decarbonize-the-real-economy](https://www.ey.com/en_fi/sustainability-financial-services/how-sustainable-finance-can-help-decarbonize-the-real-economy)
3. [https://www.researchgate.net/publication/283017719\\_Market\\_Transformation\\_The\\_Green\\_Building\\_Story](https://www.researchgate.net/publication/283017719_Market_Transformation_The_Green_Building_Story)
4. <https://www.buildinggreen.com/product-review/gliddens-zero-voc-paints>

# The Health Care Leader's Guide to **Sustainability and Decarbonization**

