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Decarbonizing the Health Care System

The following content was developed based on guidance available as of January 2024

A Note from the Authors

This document is part of a series of related resources for health care leadership released by the Commonwealth Fund. **This document is an introductory guide for health care organizations to understand the process and strategies of decarbonizing the health care system, the current regulatory landscape, and future trends and implications.**

Decarbonizing the Health Care System

FOCUS OF THIS DOCUMENT

IRA Activation – Sustainability Tax Incentives

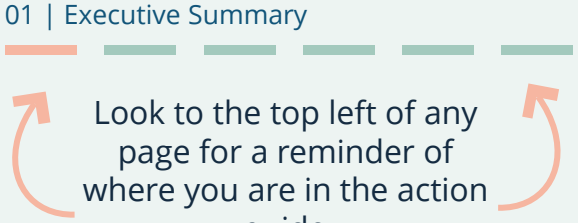
The creation of this action guide was a collaborative effort from Deloitte and the Commonwealth Fund. For more information on the authors, please refer to the Appendix.

How to Use this Document

Click this button on section dividers to return to the table of contents

NAVIGATION TIPS

Click on any section title in the table of contents to jump to that section



If you have 15 minutes

Skim sections 1, 2, 3, and 4 to understand how the health care sector can decarbonize and how tax incentives can help support that goal

If you have 45 minutes

Review all sections, focusing on sections 3 and 4 for areas of opportunities and how tax incentives can inform decarbonization strategy

If you have 90 minutes

Read the end-to-end action guide to understand the details and logistics on using tax incentives to decarbonize and key players and their responsibilities

Table of Contents

Executive Summary

The health care sector has played a significant role in the ongoing climate crisis, contributing **~8.5%** of total U.S.-based greenhouse gases (GHGs) that are responsible for climate change.(1)

This guide will draw references from the Decarbonization Action Guide published by BDHEA, the Commonwealth Fund, and Deloitte. Find the guide here for more information.

The Health Care Sector Can Address Its Role in the Climate Crisis

The U.S. health care sector is a material contributor to GHG emissions due to its high standard of care, energy demands, waste generation, and complex supply chain. It is increasingly important for health care leadership to:

- Understand emissions footprint
- Define emissions target
- **Identify & activate strategies**
- Build workforce capacity & competency
- Measure and report progress

Common Decarbonization Strategies

- **ENERGY EFFICIENCY**
- **CLINICAL INNOVATION**
- **RENEWABLE ENERGY**
- **LOW-CARBON MEDICINES**
- **TRANSPORTATION EFFICIENCY**
- **SUPPLY CHAIN OPTIMIZATION**

Source: (1) Decarbonizing the U.S. Health Sector — A Call to Action; (2) Treasury Announces Guidance on Inflation Reduction Act's Strong Labor Protections; (3) Elective Pay and Transferability

The *Inflation Reduction Act of 2022* provides incentives to accelerate decarbonization across the economy, including the health care system, and help offset the cost of sustainable investments.

With **$369 billion** in climate and clean energy investments, the IRA is one of the most significant climate legislation ever passed by Congress.(2)

While previous tax incentives left out tax-exempt entities, the IRA offers a cash payment equal to the full value of certain tax credits in the form of **Direct Pay**.(3)

The future of decarbonization in the health care sector can bring about a more sustainable, environmentally conscious, and resilient health care system. The implications could extend beyond reducing carbon emissions, impacting various aspects of health care operations, patient care, and community well-being.

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State of the Health Care System

The health care sector plays an important role in the effort to address the climate crisis and achieve decarbonization. Its position as a critical service and its impact on public health make it an important player in the effort to decarbonize and mitigate the effects of the climate crisis.

We are in the midst of a climate crisis driven by economic activity

Economic activity – powered by the combustion of fossil fuels – has resulted in a rapid increase in the concentration of greenhouse gases (GHGs) in our atmosphere; the impacts on our planet, its people, and its biodiversity are happening now

ABOUT GREENHOUSE GASES(1)

- GHGs in the earth's atmosphere **trap heat and regulate the earth's temperature**
- GHGs are emitted into the atmosphere by **both natural processes and human activities**
- Human activities increase GHG concentrations by **adding carbon dioxide** and other gases into the atmosphere and **reducing the ability of natural "sinks" to store carbon**
- An excess of GHGs can **trap too much heat** in the atmosphere and **cause the planet to warm**

THE SCIENCE SHOWS(2)

3.2°C GHG concentrations are their highest in two million years; global temperature rise is projected to reach **3.2°C in this century**

1.5°C To limit the worst climate impacts, the **Intergovernmental Panel on Climate Change** states that global temperature rise needs to be limited to **no more than 1.5°C**...

50% *by 2030* ...which will require **cutting global GHG emissions in half by 2030** (from 2010 levels) and reaching **net-zero emissions by 2050**

Sources: (1) Overview of Greenhouse Gases; (2) Global Warming of 1.5 ºC. This slide was previously published in the Decarbonization Action Guide

The U.S. health care sector is a material contributor to GHG emissions

The U.S. health care sector contributes ~8.5% of total U.S.-based GHG emissions[1] and approximately 25% of global health care sector emissions,[2] driven by a few underlying factors within an interconnected ecosystem

High Standard Of Care

Many health care facilities (e.g., hospitals, manufacturing plants) **operate continuously,** and all should comply with the highest standards of **hygiene, safety, and quality**

Redundant processes play an important role in safeguarding against provider error, but can also generate substantial system waste

Source: Health information exchanges reduce redundant medical procedures

Energy Demands

Lifesaving medical equipment, manufacturing processes, heating and cooling, and **cold storage** drive high rates of energy use and are often powered by fossil fuels

Hospitals tend to have a high energy use intensity, nearly three times the average commercial building energy use

Source: Integrating Health and Energy Efficiency in Healthcare Facilities

Waste Generation

Health care and life sciences operations tend to generate substantial amount of **wastewater** and **solid waste** that generally require emissions-heavy processing

U.S. hospitals generate 3.4B lb. of solid waste annually; e.g., a single hysterectomy, the second most common major surgery for women in the U.S., can produce 20 lb. of waste

Source: Environmental Impacts of Surgical Procedures

Reliance on Transportation

Patient and staff **commuting**, **patient transfers**, and the **transportation of goods and supplies** all can contribute to the sector's carbon footprint

Health care organizations might face some challenges in calculating and controlling transportation emissions due to their multiple and heterogenous sources

Source: Reducing Healthcare Carbon Emissions

Medical Overuse

Overdiagnosis and overtreatment in the health care space can be a health threat with serious ethical implications and a contributor to the sector's carbon footprint

Hospital care and clinical service sectors contribute the most carbon dioxide within the U.S. health care industry

Source: Carbon Emissions from Overuse of U.S. Health Care: Medical and Ethical Problems

Sources: (1) Decarbonizing the U.S. Health Sector — A Call to Action; (2) Health Care Pollution And Public Health Damage In The United States: An Update. This slide was previously published in the Decarbonization Action Guide

Health ecosystem stakeholders increasingly expect companies to help mitigate emissions-driven climate change

Communities are...

Expecting health care organizations, even as part of their mission, **to promote environmental health** as a core driver of health and health equity

65% of 10,000 individuals surveyed say it is important that health care organizations engage on climate change to earn or keep their trust[1]

Employees are...

Recognizing climate change as a leading public health risk and increasingly demanding purposeful employer action

Organizations representing the interests of 46M health care workers have named the climate crisis "the greatest threat to humanity"[2]

Payers are...

Increasingly recognizing climate change as a business risk that will put upward pressure on the total cost of health care

Air pollution and climate change already generate more than $800B health-related costs annually in the U.S.[3]

Government Agencies are...

Moving toward mandatory climate risk disclosures and developing frameworks to manage and incentivize decarbonization

The SEC has considered requiring large public health care companies to report on climate risks,[4] *and CMS is examining how climate impacts health equity*[5]

Accreditation Bodies are...

Incorporating sustainability into evaluation frameworks that could influence accreditation processes

The Joint Commission, which accredits 80% of U.S. hospitals, is offering new accreditation standards addressing climate change[6]

Investors and Donors are...

Incentivizing sustainable ESG strategies with favorable financing terms and the rise of "green" funding vehicles

70% of non-institutional investors surveyed believe that more socially and environmentally responsible investments present a higher financial return[7]

Sources: (1) Edelman Trust Barometer 2022; (2) Letter From 46 Million Health Workers Calling for Global Climate Action Delivered to COP26 & COP27 Presidencies; (3) Why climate resilience is key to building the health care organization of the future, Report: Health Costs from Climate Change and Fossil Fuel Pollution Tops $820 Billion a Year; (4) SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors; 5) CMS Framework for Health Equity 2022-2032; (6) Sustainable Healthcare Certification'; (7) Report: Retail Investors Show Strong and Growing Interest in ESG. This slide was previously published in the Decarbonization Action Guide.

In response to these pressures, public and private actors across the health ecosystem are mobilizing to meet this moment

The public sector and other multilateral institutions continue to create frameworks to drive climate action…

- **(2015) Paris Agreement:** *International treaty adopted by 196 Parties at COP 21 in Paris with the goal to limit warming*[1]
- **(2021) UN Race to Zero:** *Commitment by 40+ global health care institutions to halve emissions by 2030 and achieve net zero by 2050*[2]
- **(2022) HHS Health Sector Climate Pledge:** *Historic commitment by over 100 U.S. health care organizations to halve emissions by 2030*[3]
- **(2023) WEF Zero Health Gaps Pledge:** *First-in-kind global pledge to mobilize executive leadership to prioritize health equity*[4]

…and private sector stakeholders are responding with their own commitments to decarbonize[5]

Work remains to be done; the sections that follow provide actionable guidance for health care leaders to think about their emissions footprint, implications for human health and health equity, and strategies to decarbonize

Sources: (1) The Paris Agreement; (2) Health Institutions Join the United Nations Race to Zero Campaign; (3) Health Sector Commitments to Emissions Reduction and Resilience; (4) 39 Organizations Pledge to Close Gaps on Global Health Equity; (5) Healthcare Innovation, Environmental Leader, Boston Globe, CommonSpirit, Pfizer, CVS Health, and South Charlotte Weekly. This slide was previously published in the Decarbonization Action Guide.

Implementing a comprehensive decarbonization strategy involves five key steps – each with distinct considerations for health care leaders

	UNDERSTAND EMISSIONS FOOTPRINT	DEFINE EMISSIONS TARGET	IDENTIFY & ACTIVATE STRATEGIES	BUILD WORKFORCE CAPACITY & COMPETENCY	MEASURE AND REPORT PROGRESS
Key Steps	Collect and aggregate data, focusing on suppliers, to understand current and future emissions footprint	Define short and long-term emissions targets by considering organizational and stakeholder priorities	Prioritize decarbonization strategies based on clear criteria (e.g., ROI, impact, equity) and define the activation strategy	Inform and educate health care workers on how to incorporate decarbonization into daily practices	Summarize the impact of decarbonization strategies and communicate to key stakeholders
Considerations for leaders	• How sophisticated is our emissions data management strategy / architecture? • What tools can be used to create an initial assessment of our carbon footprint to enable evidence-based decarbonization? • What are our emissions "hotspots"? What communities are we disproportionately affecting? • How will strategic growth aspirations impact our emissions footprint?	• What do emerging regulatory frameworks require of us? • How aggressive do we need to be in our decarbonization strategy to address stakeholder needs? • Do we understand the costs of inaction or insufficient action (e.g., reputational risk, regulatory risk, litigation)? • Do we understand the costs of missing our GHG emissions targets?	• **What abatement strategies do we need to meet our emissions targets?** • **Could decarbonization strategies support other ongoing organizational and strategic priorities?** • **How could we use decarbonization efforts to promote more equitable and resilient communities?**	• What are the social, environmental, and economic cost of the current use-and-throw practices? • How do we train health care professionals to evaluate the environmental impact along the lifecycle of medical supplies and resources? • How do we instill the most sustainable practices in care delivery as the default state?	• What level of disclosure is mandatory vs. voluntary for our sector? • How will the market and / or other stakeholders react to our progress? • Can we meet (or exceed) reporting requirements in a way that builds goodwill or brand equity?

The following section will identify specific decarbonization strategies

Note: The use of the term "decarbonization" in this case is synonymous with emissions reduction or abatement – the process of curbing emissions in order to reduce the concentration of certain gases in the environment that contribute to planetary warming and climate change. This slide was previously published in the Decarbonization Action Guide.

03

Decarbonization Strategies

Decarbonizing the health care sector involves implementing strategies to reduce greenhouse gas emissions, improve energy efficiency, and transition to renewable energy to make meaningful progress toward a more sustainable and resilient health care system.

Health care organizations can reduce their emissions footprint through these common decarbonization strategies

ENERGY EFFICIENCY

Design infrastructure and facility footprint to optimize for resource efficiency and introduce green, energy-efficient tech into operations

e.g., green building technology, all-electric building construction, HVAC system and lighting modifications

RENEWABLE ENERGY

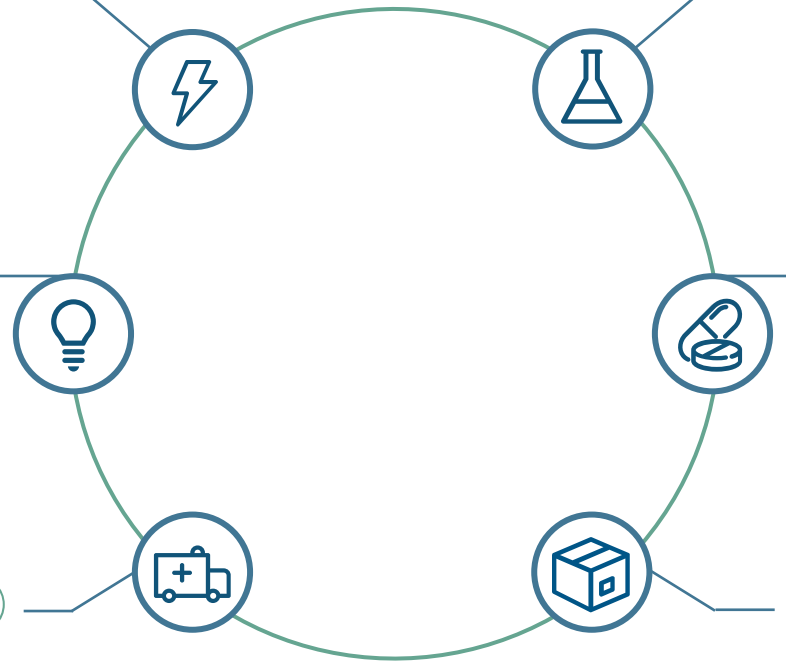
Power operations through renewable energy sources through on-site energy generation or green purchase power agreements

e.g., on-site electric microgrids or solar panels, green purchase power agreements

TRANSPORTATION EFFICIENCY

Limit transportation-related emissions via zero-emission fleets, active travel and public transport, and hybrid health care strategies

e.g., EV charging stations, zero-emission shuttle fleets, efficient mobile health centers



Incentivized by the IRA

CLINICAL INNOVATION

Improve overall system effectiveness, eliminate unnecessary care, support preventative care, and introduce new processes that limit the volume and toxicity of waste

e.g., reduced single-use items, on-site waste treatment, prevention efforts, expansion of telehealth and virtual services

LOW-CARBON MEDICINES (1)

Substitute high-emission products with more climate friendly alternatives, and incentivize the production of climate-smart medication

e.g., low fresh gas flows, regional anesthesia techniques, alternative medicine delivery mechanisms, green R&D and chemistry

SUPPLY CHAIN OPTIMIZATION (1)

Reduce reliance on disposable and single-use supplies and incorporate local, sustainable, and circular principles in procurement

e.g., supplier sustainability scorecards, procurement from community-based agriculture, food waste reduction strategies

Source: (1) In some cases, health care organizations may be able to apply for IRA benefits across certain aspects of their supply and delivery chains. This slide was previously published in the Decarbonization Action Guide.

Decarbonization strategies can be prioritized via a set of clear criteria

Aligning on a prioritization criteria, and how to weight each criteria, will require strategic alignment across functions

EXAMPLE PRIORITIZATION CRITERIA

Abatement Potential	What is the **magnitude** of expected emissions reduction? What is the **expected timeline** for realizing emissions reduction?
Business Value	Is this abatement strategy likely to generate **new revenue** or **reduce costs**? Could it reduce certain **organizational risks?**
Feasibility	What is the expected **cost of implementation**? What level of business transformation (assets, tech) would it require?
Quality Impacts	What is the expected outcome on **employee processes, quality of care, or patient perceptions**?
Health Equity & Justice	Who is **impacted by the emissions** that the abatement solution aims to reduce? How would these populations be **impacted?**

This slide was previously published in the Decarbonization Action Guide. *Scenario is illustrative; abatement potential, business value, feasibility, and quality / equity impacts will vary based on specifics

EXAMPLE SCENARIO*

Consider two abatement strategies that a company may choose to pursue:

- **Initiative 1:** Transition to net-zero suppliers
- **Initiative 2:** Implement a hybrid working model

	INITIATIVE 1	INITIATIVE 2
Abatement Potential	**High;** 29,500 MTCO2e	**Low;** 6,700 MTCO2e
Business Value	**Medium**	**Medium-High**
Feasibility	**Low**; $26.4M and 2 years	**High;** $6.8M and 1 year
Quality Impacts	**Low-Medium**	**Medium**
Health Equity & Justice	**Low**	**High**

Prioritizing decarbonization can lead to the following organizational benefits

	Example Proof Points
Equitable Health & Well-being: Advance health equity, reduce chronic disease burden, and improve climate resilience in communities of operation	Reducing global greenhouse gas (GHG) emissions could **prevent 4.5M premature deaths** over the next 50 years[1]
Risk Mitigation: Future-proof the business against long-term risks including environmental, regulatory, and compliance risks	Extreme weather events **cost health systems anywhere from $22,000 to $22M** in damages, closures, evacuations, etc.[2]
Trust & Reputation: Build reputational equity and improve brand sentiment across key stakeholders including employees, patients, and customers	**More than 70% of employees** are more likely to choose to work at a company with a focus on sustainability[3]
Financial Incentives: Take advantage of incentives such as emerging "green" financing mechanisms, tax credits, and stronger performance in equity markets	**The Inflation Reduction Act of 2022** is investing **$369 billion** in a greener economy[4]
Operational Efficiency: Improve overall business performance and protect margins through optimization of resource use and reduced system waste	Reducing **waste** and cutting **energy usage** in U.S. health care facilities can save an estimated **$15 billion over ten years**[5]
Supply Chain Resilience: Protect against supply chain vulnerabilities such as price surges, changes in long-term costs, or shortages of key supplies	Among companies with sustainability programs, two thirds achieved **lower logistics and supply chain costs**[6]

Sources: (1) Co-benefits of mitigating global greenhouse gas emissions for future air quality and human health; (2) Climate Change Jeopardizes Health Care Services, Report Says; (3) Most millennials would take a pay cut to work at a environmentally responsible company; (4) Treasury Announces Guidance on Inflation Reduction Act's Strong Labor Protections; (5) Can Sustainable Hospitals Help Bend the Health Care Cost Curve?; (6) The path to product sustainability. This slide was previously published in the Decarbonization Action Guide.

Beyond emissions reduction, decarbonization strategies can enable health organizations to improve overall business resilience

KEY OPPORTUNITIES

Transform Patient Experience	Enable a Leading Talent Experience	Enable Agile Operations	Modernize Data Management	Advance New Alliances	Reimagine the Supply Chain
ALIGNED DECARBONIZATION STRATEGIES					
▪ **Increase access to virtual appointments** and hybrid health care (e.g., telehealth) ▪ **Enable remote diagnostics** and chronic care management ▪ **Support community-based care models** that increase equitable access and proximity to care	▪ **Implement hybrid work models** that reduce commute times and limit business travel ▪ **Subsidize public transit** and offer incentivizes for active travel (e.g., biking) ▪ **Incentivize employees** to implement sustainable practices into their workflows	▪ **Design adaptive and modular facilities** that can adapt to changes in patient demand ▪ **Promote energy efficiency** through retrofit projects and facility modifications ▪ **Implement product packaging standards** that are lower weight and lower cost	▪ **Shift data storage from on premise** to lower-emission cloud providers ▪ **Use real-time data** enabled by the Internet of Things (IoT) to optimize demand planning ▪ **Leverage advanced analytics** to understand and forecast emissions and impacts on health	▪ **Forge partnership with local businesses** that improve supply chain resilience and lower distribution costs ▪ **Co-invest with suppliers to design and fund new sustainability programs** and strengthen institutional and community relationships	▪ **Invest in local manufacturing and sourcing** to shorten distribution distance ▪ **Re-shore capabilities of strategic importance** to improve supply chain reliance ▪ **Invest in energy efficient processes** such as continuous manufacturing

This slide was previously published in the Decarbonization Action Guide.

04

Current Tax Incentives For Activation

The U.S. has implemented several tax incentives to encourage decarbonization efforts and promote the adoption of clean energy technologies, such as through the Inflation Reduction Act.

The current legislative landscape provides several funding opportunities to jumpstart the decarbonization process, with the IRA providing the biggest direct potential for health care

Inflation Reduction Act (IRA)[1]

The IRA is U.S. federal legislation, signed into law in August 2022, that invests $**369B** [2] into sustainability to reduce pollution, expand clean energy production, and address health inequities with bonus credits for special census tracts, among other investments.

The IRA creates **opportunities for health care organizations to work towards a zero emissions future.** While previous incentives were inaccessible to tax-exempt entities, the **IRA opens the door for nonprofits through direct pay provisions**.

New Markets Tax Credit (NMTC) Program[3]

The NMTC Program incentivizes community development and economic growth through the use of tax credits that **attract private investment to distressed communities**.

Although not specific to the health care sector, this program can **incentivize health systems to address health inequities** by building up the resiliency of under-resourced communities that are already **disproportionately impacted by climate-related risks**.

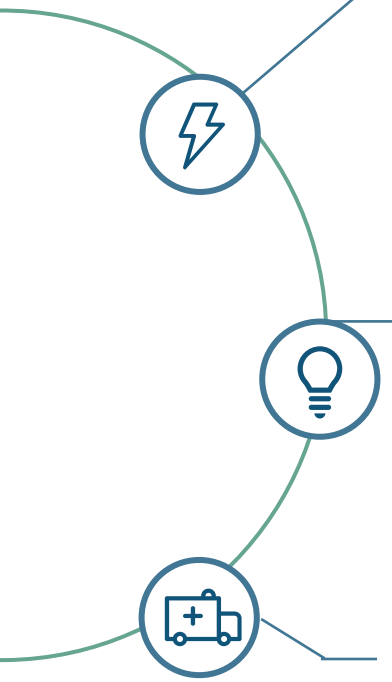
CHIPS and Science Act[1]

The **Creating Helpful Incentives to Produce Semiconductors** (CHIPS) and Science Act is a federal statute enacted in August 2022 that appropriates $53B to spur the US semiconductor industry.

The legislation incentivizes semiconductor manufacturing and research, which can improve the supply chain through **green technologies like smart upgrades** and **renewable energy systems**.

Source: (1) Congress's Climate Triple Whammy: Innovation, Investment, and Industrial Policy – RMI; (2) Treasury Announces Guidance on Inflation Reduction Act's Strong Labor Protections; (3) New Markets Tax Credit Program

Organizations advancing their decarbonization ambition through efficiency and renewables can benefit from IRA incentives and achieve greater resilience, savings, and community value



	IRA INCENTIVES	VALUE DRIVERS
ENERGY EFFICIENCY Design infrastructure and facility footprint to optimize for resource efficiency and introduce green, energy-efficient tech into operations *e.g., green building technology, all-electric building construction, HVAC system and lighting modifications*	• Energy Efficient Commercial Buildings Deduction[1]	• Resiliency • Cost Savings
RENEWABLE ENERGY Power operations through renewable energy sources through on-site energy generation or green purchase power agreements *e.g., on-site electric microgrids or solar panels, green purchase power agreements*	• Investment Tax Credit (ITC)[2] • Renewable Energy Production Tax Credit (PTC)[3]	• Resiliency • Cost Savings • Community Impact
TRANSPORTATION EFFICIENCY Limit transportation-related emissions via zero-emission fleets, active travel and public transport, and hybrid health care strategies *e.g., EV charging stations, zero-emission shuttle fleets, efficient mobile health centers*	• Qualified Commercial Clean Vehicle Credit[4] • Alternative Fuel Vehicle Refueling Property Credit[5]	• Cost Savings • Community Impact

Specific I.R.C. provision number: (1) §179D; (2) §48/ §48E; (3) §45/ §45Y; (4) §45W; (5) §30C

Activating the IRA will require collective effort from various key players within a health care organization, each with a unique perspective and responsibility

	How the IRA can empower you	How you can help activate the IRA
Board & Board Chair	• Promote long-term organizational resilience and mitigate climate-related risks, embedding them into quality oversight • Strengthen relationships with donors and partners through community engagement • Position the organization strategically among peers	• Review and oversee the strategic planning and consider long-term implications and risks
Chief Executive Officer	• Provide resources to achieve sustainability goals and other enhancement projects for organizational development • Enable workforce upskilling on sustainability topics • Fulfill organizational mission and mandate to promote human health through greater climate resiliency	• Ensure cross-functional alignment and support and outline sustainability goals to be achieved with the IRA • Collaborate with community leaders and fellow health care organizations to maximize collective effort in creating a positive impact on the community
Chief Tax Officer	• Support broader organizational resiliency, cost reduction, and sustainability goals by taking advantage of available credits • Demonstrate industry leadership on tax policy and incentives	• Understand the eligibility qualifications and adders and determine the subsequent amount of credits available
Chief Financial Officer	• Transform high investment costs and uncertain ROI into financially viable investments • Establish proof points to build the business case for investment in sustainability and equity efforts	• Account for the credit amount into the financial planning and showing how the tax incentives affect the bottom line through cost savings
Chief Strategist	• Promote long-term organizational resilience • Accelerate existing strategic priorities • Facilitate strategic planning of business model to spark innovation • Build brand differentiation among health care peers	• Champion the exploration and adoption of innovative practices that can be incentivized by the IRA
Facilities Operations Lead	• Accelerate facility sustainability and cost savings goals • Capitalize on IRA incentives to free up resources, which can provide financial and operational flexibility	• Identify opportunities under the IRA that can be integrated into the operations of the organization • Oversee the construction process and manage supplier and contractual relationships
Chief Sustainability Officer	• Promote long-term organizational resilience • Accelerate progress against enterprise sustainability goals (e.g., net zero, energy usage intensity goals) • Enhance the organization's reputation by demonstrating commitment to sustainability	• Build a business case to achieve organizational buy-in and support from the C-Suite and Operations Lead • Deep understanding of the current landscape towards decarbonization and identifying areas of opportunities

Health care organizations can act now **to benefit from IRA incentives, many of which took effect in January 2023**

HOW CAN I GET STARTED?

1 Identify relevant provisions

- Learn more about the credits, grants, and loans that are applicable to your specific organization
- Check eligibility criteria such as location and labor requirements
- Talk to external specialists to validate research and fill in knowledge gaps

2 Engage stakeholders

- Connect with Finance, Procurement, Tax, and Government Relations to gain buy-in and build the business case
- Discuss with internal management to better understand organizational needs and how to qualify for the benefits of the IRA

3 Move quickly

- Lock in domestic, low-emission suppliers to access IRA credit adders tied to geography, wages, apprenticeship, and more
- Start preparing now to be able to meet incentive caps for grant programs and capitalize on first mover advantages

Overview of Timeline for Sample IRA Provisions

Credit	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Description & Highlights
§45, §48: Production & Investment Credits	Previous legislation extended												The existing PTC/ITC regime will be replaced by technology neutral, emissions-based credits in 2025. The new credits phase out in 2032 or when emissions targets are reached
§45Y/§48E: Clean Electricity Production & Investment Tax Credits				IRA provision in effect									
§45W, §30C: Commercial Clean Vehicle & Alt. Charging Credits		IRA provision in effect											Credit covers electric/fuel cell vehicles (e.g., EV, fuel cell, etc.)

Sources: Deloitte Analysis, H.R.5376 - Inflation Reduction Act of 2022

05

Anticipated Outcomes of Decarbonization

As stakeholders in the health care sector increasingly prioritize decarbonization, we can expect to see a shift towards greener, more sustainable practices and a greater integration of environmental considerations into health care organizational policies and operations.

The future of health care is likely to see a growing emphasis on environmental stewardship, social responsibility, and economic efficiency

			MOVING FORWARD
1	**Link between public health and climate**	As the sector begins to acknowledge the inherent link between health and climate-related risks, it can consider integrating sustainability into its operating model to help align with its values of improving public health	Leaders of health care organizations can embed climate considerations into strategic planning in a way that informs the decision-making process
2	**Emphasis on collective resilience**	Community leaders and health care organizations are rallying around building resilience through collective effort, creating hubs of mutual aid and support in the face of climate-related risks (1)	Collaboration with community leaders, local legislation, and peer organizations can be encouraged to find the optimal solution for all stakeholders
3	**Decreasing cost of climate action**	The increase in accessibility to renewable energy and innovative technology is driving down costs and positioning sustainability as an inevitable, financially viable, long-term transition (2)	Health care organizations can frame the benefits of decarbonization as a business imperative and understand how to take advantage of key drivers

Sources: (1) Together New Orleans Launches Community Lighthouse Project; (2) Renewable Energy Costs Have Dropped Much Faster Than Expected, But There's A Catch.

06

Appendix

For additional support activating the IRA's climate provisions in health care, check out the following resources

Health Care IRA Resources

How Health Care Organizations Can Use the Inflation Reduction Act to Reduce Costs, Enhance Resilience, and Lower Their Environmental Footprint - National Academy of Medicine (nam.edu)

The Office of Climate Change and Health Equity (OCCHE) Quickfinder for Leveraging the Inflation Reduction Act for the Health Sector | HHS.gov

Inflation Reduction Act of 2022 | U.S. Department of Energy

Catalytic Program on Utilizing the IRA | OCCHE

General IRA Resources

WH IRA Guidebook

Includes overview, description, and funding details for each IRA funded incentive

BGA IRA User Guide

Provides overview of IRA incentives by sector and explains funding mechanisms

IRS Credits and Deductions under the IRA

Resources, forms and descriptions of IRA tax credits and deductions

About the Authors

The creation of this action guide was a collaborative effort from Deloitte and the Commonwealth Fund

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The mission of the Commonwealth Fund is to promote a high-performing, equitable health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including people of color, people with low income, and those who are uninsured. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy.

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Contact Us

Want to act on topics discussed in this Activation Guide? Need help?

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Send us **your thoughts** on how to improve this version of the Activation Guide and on what you'd like to see next.

Have a story, example, or resource to share with the development team?

Help us continue **amplifying the topics of decarbonization and health equity** and by sharing your learnings with us.

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