

THE HEALTHCARE SYSTEM'S NEW IMPERATIVE:

MARKET DEMANDS FOR CLIMATE RISKS AND
EMISSIONS MANAGEMENT



BLX 



orrick 

CPE and MCLE Credits

- Responses to polling questions will be utilized to verify attendance
- You must respond to all 4 polling questions to be eligible for credits
 - One question to indicate what credits you are requesting
 - 3 additional questions
- **FOR MCLE ONLY**
 - An attendance sheet will be sent to you via email, please include code **HYWK7549**

A hand holding a compass over a desert landscape. The hand is wearing a light green long-sleeved shirt. The compass is a standard analog compass with a white face and black markings. The background shows a desert landscape with a dirt road and sand dunes under a clear sky.

Question 1

Working with
healthcare systems to
reduce emissions in
ways that have a
measurable ROI

LEADING ON CLIMATE CHANGE

How Healthcare Leaders Stop Global Warming



Roadmap

- Reasons why health systems are working to reduce emissions
- Climate change creates new financial risks to health systems
- How to achieve rapid emissions reductions

It is getting hot

The megadrought in the American Southwest has become so severe that it's now the driest two decades in the region in at least 1,200 years

Lake Powell: Powers the Glen Canyon Dam Generation Station



July 2022

Lake Mead: Powers the Hoover Dam Generation Station

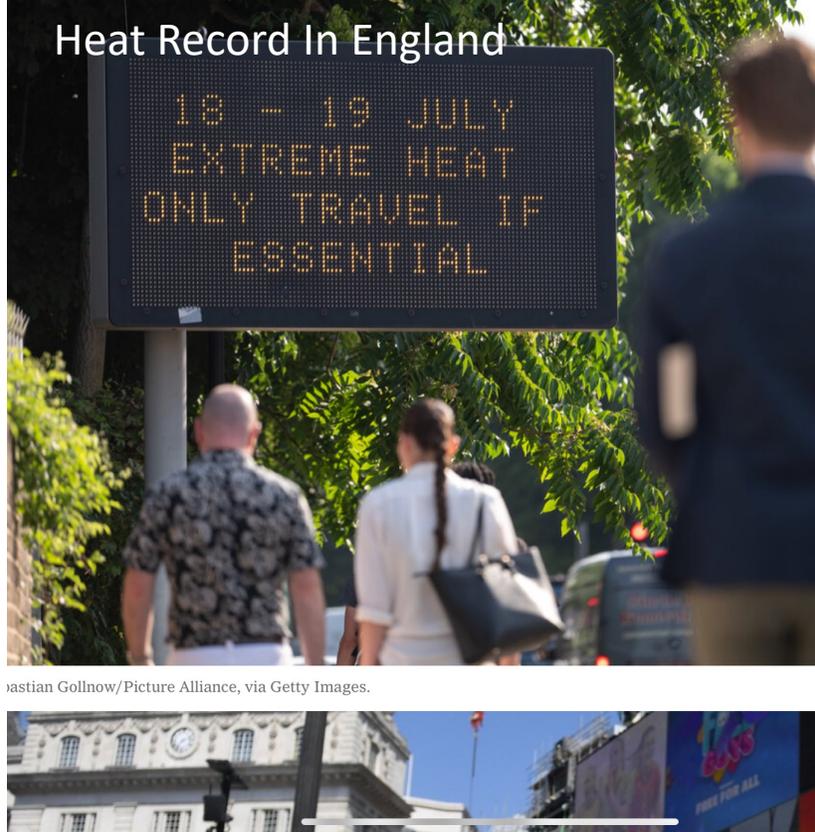


July 2022

Dead Cattle in Kansas



Heat Record In England



astian Gollnow/Picture Alliance, via Getty Images.

Fires In New Mexico



Climate Change is a Health Problem Today

- Climate change is aiding the spread of pathogens including Lyme disease and malaria.
- One of the more regionally specific illnesses is Valley Fever or coccidioidomycosis, a deadly fungal infection contracted by inhaling spores from soil and dirt.
- Drought in the southwest has increase the number of diagnoses 800% since 2000.

Burning Fossil Fuels Has Created A Health Crisis

- Premature death in people with heart or lung disease
- Nonfatal heart attacks
- Irregular heartbeat
- Aggravated asthma
- Decreased lung function
- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

Getting oil out of the ground produces three barrels of toxic wastewater for every barrel of oil.

- 98.6 percent of children living in an oil production zone exceeded the safe limits for the cancer-causing heavy metal cadmium in their blood.

Particulate emissions kill 9 million people worldwide each year.

- 350,000 Americans



Health System Mission

To improve the health of the community



Mission:

Who We Are

Bassett's mission is improving the health of our patients and the well-being of our communities.

HHS Climate Pledge:

Reduce greenhouse gas emissions by 50% by 2030

- Providence Health
- HealthPartners
- Kedren Health
- Common Spirit
- University Medical Center of El Paso
- NYC Health and Hospitals
- Boston Medical Center
- Baystate Health
- Stanford Children's Health
- Stanford Health Care
- Atrium Health
- Cherokee Health Systems
- University of California Health
- Northwell Health
- Rush University System for Health
- Northern Arizona Healthcare
- Hackensack Meridian Health
- UW Medicine
- RWJ Barnabas Health
- Sun River Health
- NYU Langone Health
- Ascension
- Henry Ford Health
- Mass General Brigham
- Boston Children's Hospital
- Tufts Medicine
- Southcoast Health
- Children's National Hospital
- Mount Sinai Health System
- Kaiser Permanente
- Keck Medicine of USC
- Beth Israel Deaconess Medical Center
- DaVita
- Montefiore
- Seattle Children's
- Valley Children's Healthcare
- University of Nebraska Medical Center and Nebraska Medicine
- Advocate Aurora Health
- Gillette Children's
- University of Utah Health
- Steward Health Care System

No Margin, No Mission

9 Reasons Why Health Systems Need to Work on Climate Change Now

Health systems contribute about **10%** of the greenhouse gas emissions of the United States.

REASON ONE:
To Improve the Health of the Community
Emissions particulates lead to over **100,000 deaths** annually

REASON TWO:
Because Sustainability Can Lower Costs
Embracing efficiency and shifting to renewable energy sources lead to savings

REASON THREE:
To Maintain and Improve Access to Capital
S&P and Moodys plan to move to include environmental performance metrics in their analyses

REASON FOUR:
To Enhance Employee Recruitment and Retention
84% of Millennials look at a firm's sustainability commitments when deciding where to work

REASON FIVE:
To Protect Your Brand and Grow Your Market Share
4 out of 5 consumers

REASON SIX:
Because Eliminating Health System Emissions Will Be Challenging

REASON SEVEN:
To Improve Social Equity and Tackle Social Determinants of Disease

REASON EIGHT:
Because Health Systems Are Community Leaders
Health systems are often

REASON NINE:
To Leave a Healthy Climate for Our Children and Grandchildren

Roadmap

- Reasons why health systems are working to reduce emissions
- Climate change creates new financial risks to health systems
- How to achieve rapid emissions reductions



Financial Magic Sauce of Health Systems: Arbitrage

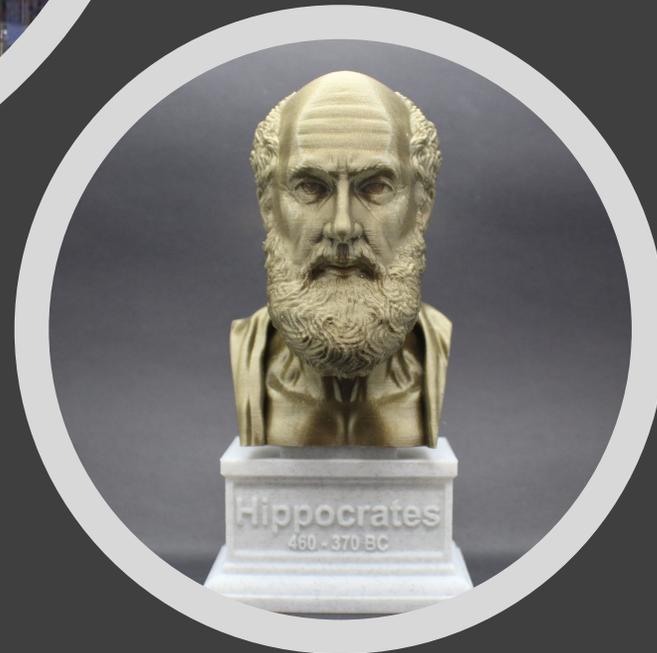
- Operating Income
- Investment Income
- Cash
- Bonds

ESG Investing

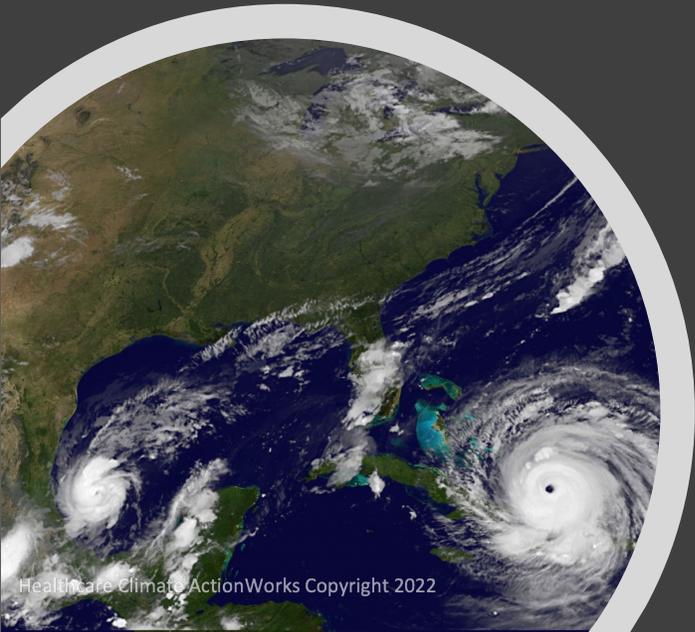
- In 2021 More money flowed into ESG than into any other type of investment
- Two largest holders of bond debt – Blackrock and CALpers – have made large bets on ESG
- A record \$649 billion poured into ESG-focused funds worldwide through Nov. 30, 2021, up from the \$542 billion and \$285 billion that flowed into these funds in 2020 and 2019, respectively (Refinitiv Lipper)
- ESG funds now account for 10% of worldwide fund assets.

Environmental	Social	Governance
<ul style="list-style-type: none"> • Carbon emissions. • Air and water pollution. • Deforestation. • Green energy initiatives. • Waste management. • Water usage. 	<ul style="list-style-type: none"> • Employee gender and diversity. • Data security. • Customer satisfaction. • Company sexual harassment policies. • Human rights at home and abroad. • Fair labor practices. 	<ul style="list-style-type: none"> • Diversity of board members. • Political contributions. • Executive pay. • Large-scale lawsuits. • Internal corruption. • Lobbying.

Bond Investors see a trilogy of risks for the health system



- Hippocratic Risk
- Climate Risk
- Transition Risk



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Question 2

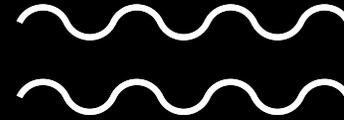
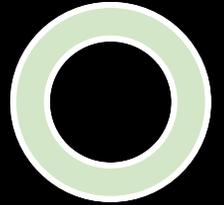
Nancy Kummer on ESG
Marc Bauer on SEC



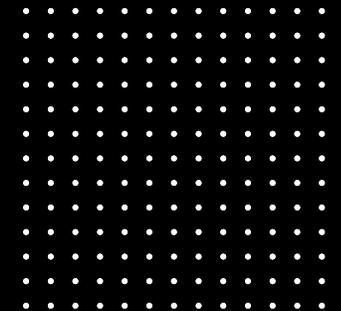
ESG Program for Healthcare Borrowers

- 1- Education**
- 2- Greenhouse Gas Emissions Reporting**
- 3- Climate and Social Risks Assessment**
- 4- Program and Policy Development**
[Voluntary Disclosure / Transparency]
- 5- Social, Green or Sustainability Bond Designations**

Leading Bond Designation Frameworks



- **ICMA’s “Green” and “Social” Bond Principles:** Second Party Opinions (SPOs) are prepared pursuant to the International Capital Market Association (ICMA)’s voluntary process guidelines for issuing “Green”, “Social”, or “Sustainable” bonds and address the following four pillars: (1) Use of Proceeds, (2) Process for Project Evaluation and Selection, (3) Management of Proceeds, and (4) Reporting.
- **Climate Bonds Initiative’s Taxonomy:** Verifier’s Reports are prepared by 3rd parties approved by the Climate Bonds Initiative (CBI). In addition to meeting the four ICMA pillars, a project must contribute to a low carbon and climate resilient economy pursuant to the Paris Agreement.
- *[Options include programmatic and debt-specific verification.]*



ICMA “GREEN” BOND CATEGORIES

- **Renewable energy** (including production, transmission, appliances and products)
- **Energy efficiency** (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products)
- **Pollution prevention and control** (including reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, waste recycling and energy/emission-efficient waste to energy)
- **Environmentally sustainable management of living natural resources and land use** (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes)
- **Terrestrial and aquatic biodiversity conservation** (including the protection of coastal, marine and watershed environments)

ICMA “GREEN” BOND CATEGORIES (CONT.)

- **Clean transportation** (such as electric, hybrid, public, rail, non-motorized, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions)
- **Sustainable water and wastewater management** (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation)
- **Climate change adaptation** (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems)
- **Eco-efficient and/or circular economy adapted products, production technologies and processes** (such as the design and introduction of reusable, recyclable and refurbished materials, components and products; circular tools and services)
- **Green buildings** (that meet regional, national or internationally recognized standards or certifications for environmental performance)

ICMA “SOCIAL” BOND CATEGORIES

- **Affordable basic infrastructure** (e.g., clean drinking water, sewers, sanitation, transport, energy)
- **Access to essential services** (e.g., health, education and vocational training, healthcare, financing and financial services)
- **Affordable housing**
- **Employment generation, and programs designed to prevent and/or alleviate unemployment** stemming from socioeconomic crises, including through the potential effect of SME financing and microfinance
- **Food security and sustainable food systems** (e.g., physical, social, and economic access to safe, nutritious, and sufficient food that meets dietary needs and requirements; resilient agricultural practices; reduction of food loss and waste; and improved productivity of small-scale producers)





ICMA “SOCIAL” BOND CATEGORIES (CONT.)

- **Socioeconomic advancement and empowerment** (e.g., equitable access to and control over assets, services, resources, and opportunities; equitable participation and integration into the market and society, including reduction of income inequality)
- Examples of target populations for “Social” projects:
 - Living below the poverty line
 - Excluded and/or marginalized populations and/or communities
 - Vulnerable youth, Aging populations, and People with disabilities
 - Migrants, displaced persons, other vulnerable groups (e.g., as a result of natural disasters)
 - Unemployed, Undereducated or **Underserved** (owing to a **lack of quality access to essential goods and services**)

SEC Actions

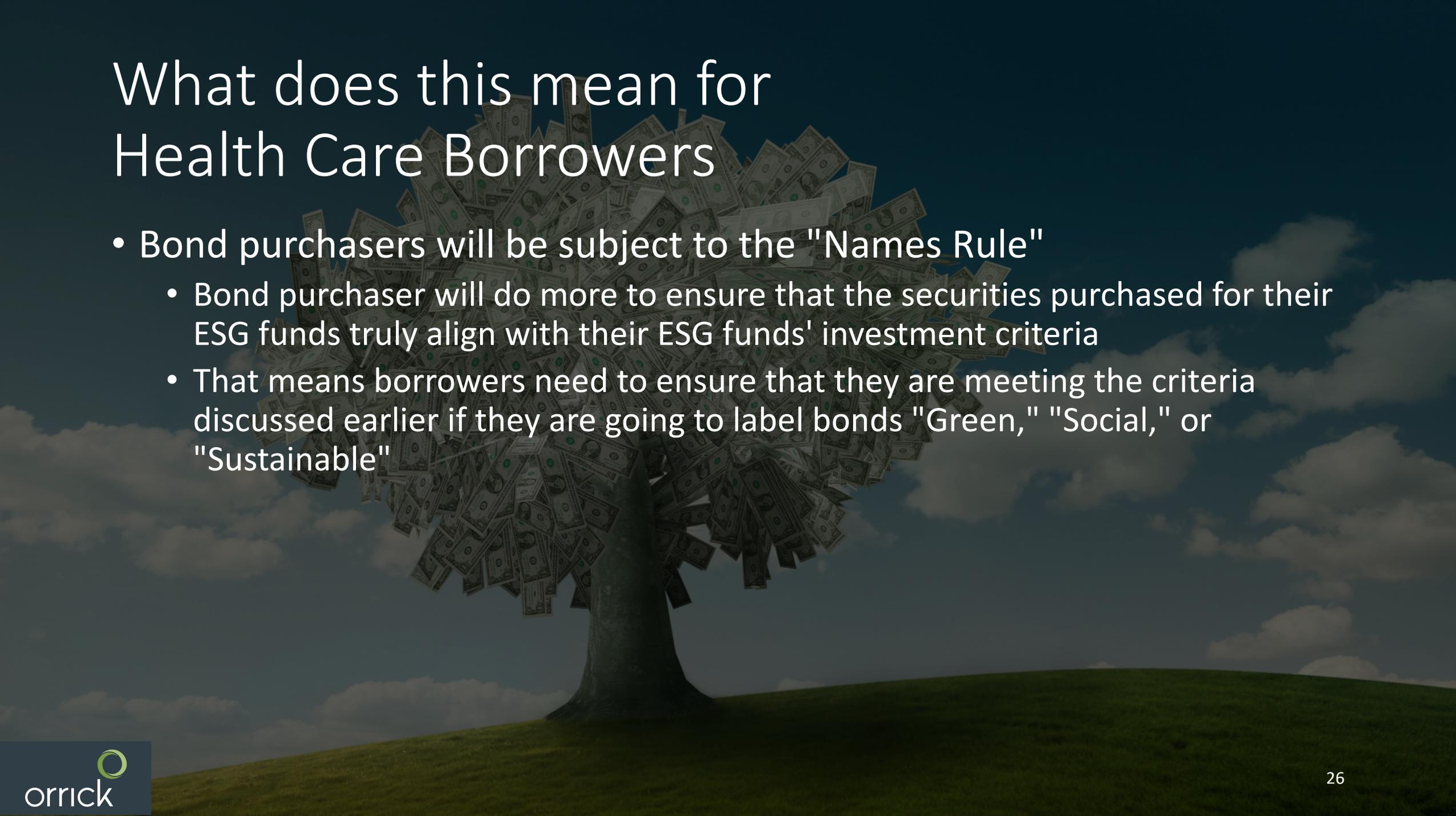


- March 2022 – Proposed Rules on Climate-related disclosures in corporate securities disclosures
 - Disclose climate-related risks that are reasonably likely to have a material impact on issuer/borrower business, results of operations, or financial condition
 - Add climate-related financial statement metrics in a note to the financial statements
- May 2022 – Proposed amendments to the "Names Rule"
 - Ensure that funds that use ESG terms (i.e. sustainable, green, or social) have investment decisions that truly align with ESG
- The SEC's ESG Rules **DO NOT** apply to municipal or nonprofit bond issuers or borrowers

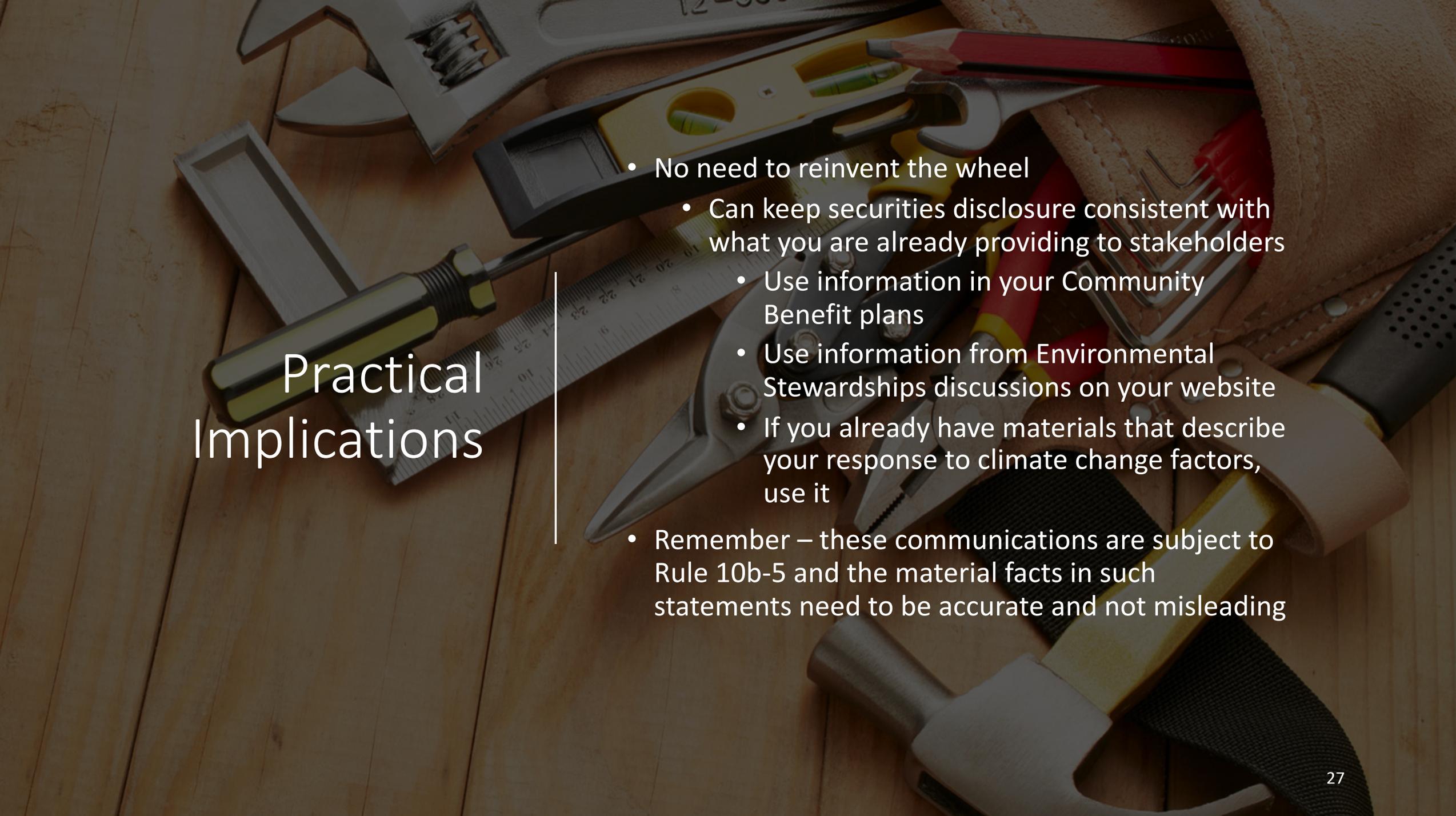
What does this mean for Health Care Borrowers

- Rule 10b-5 always applies
 - It is unlawful "to make any untrue statement of a *material* fact or to omit to state a *material* fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading"
 - "*Material*" is based on what would be material to the investment decision of a reasonable investor, not to the issuer
- Think about what a reasonable investor in your health system's 30-year bonds would want to know with respect to managing risks related to climate change
 - With rising energy costs, how are you mitigating this rising expense?
 - Western US – do you have a satisfactory wildfire contingency plan?
 - Eastern US – do you have plans in the event of stronger hurricanes and flooding?

What does this mean for Health Care Borrowers



- Bond purchasers will be subject to the "Names Rule"
 - Bond purchaser will do more to ensure that the securities purchased for their ESG funds truly align with their ESG funds' investment criteria
 - That means borrowers need to ensure that they are meeting the criteria discussed earlier if they are going to label bonds "Green," "Social," or "Sustainable"



Practical Implications

- No need to reinvent the wheel
 - Can keep securities disclosure consistent with what you are already providing to stakeholders
 - Use information in your Community Benefit plans
 - Use information from Environmental Stewardships discussions on your website
 - If you already have materials that describe your response to climate change factors, use it
- Remember – these communications are subject to Rule 10b-5 and the material facts in such statements need to be accurate and not misleading

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Question 3

Roadmap

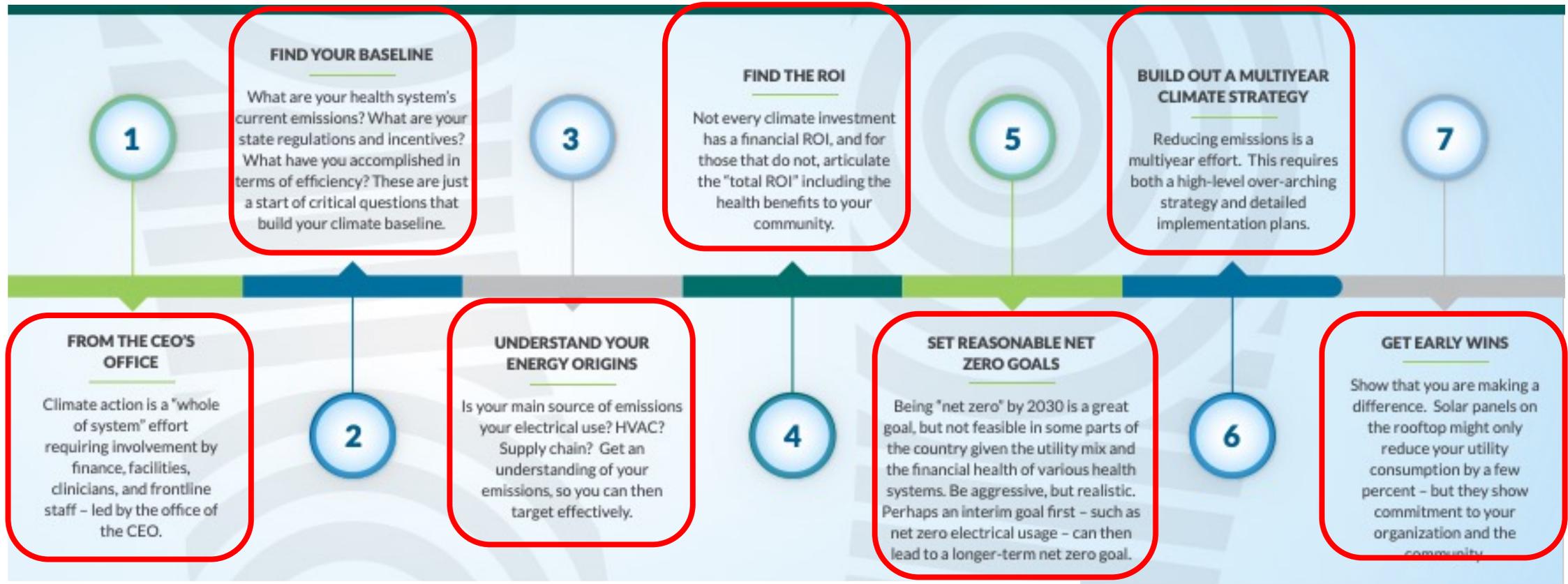
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HHS Climate Pledge:

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How Health Systems Start



Scope 1



Scope 2



Scope 3

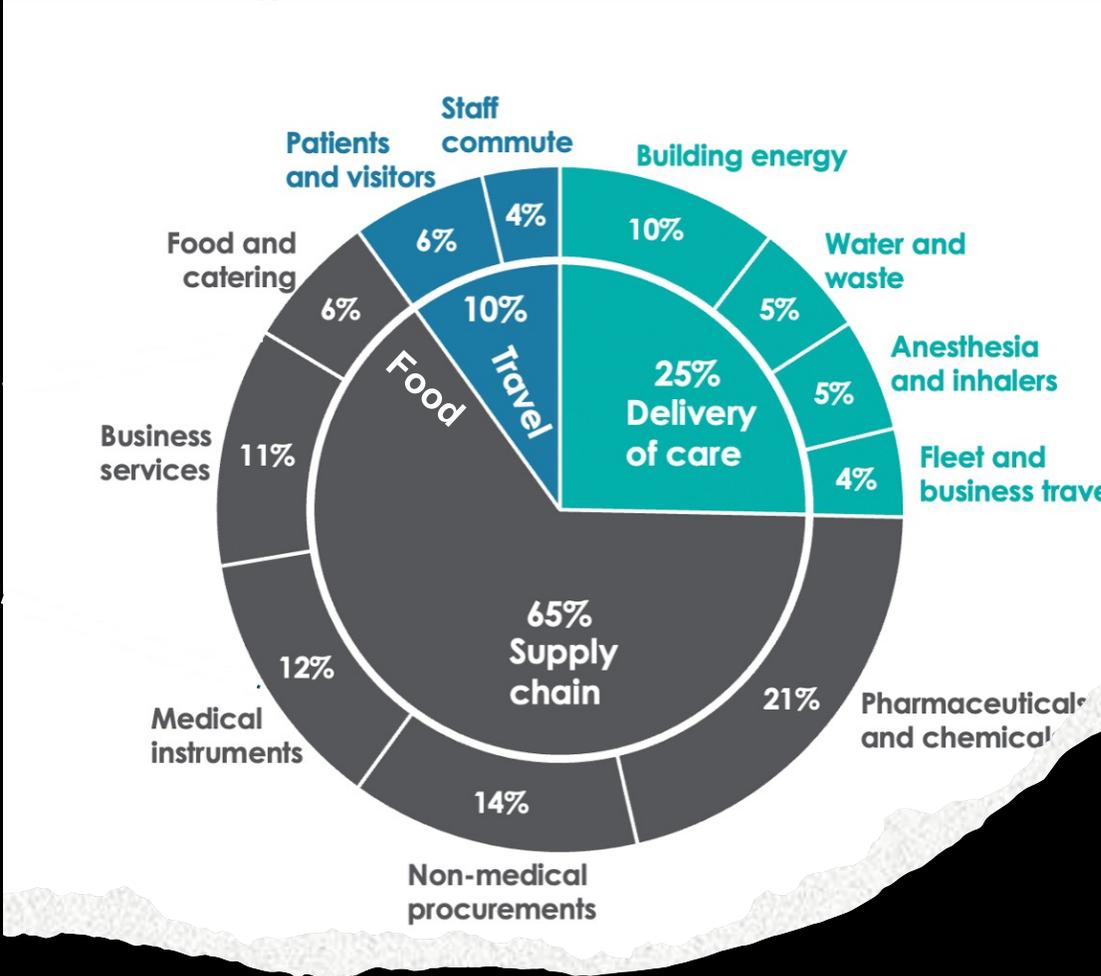


What Makes Up Your GHG Footprint

Scopes of Emissions

US Health System Emissions

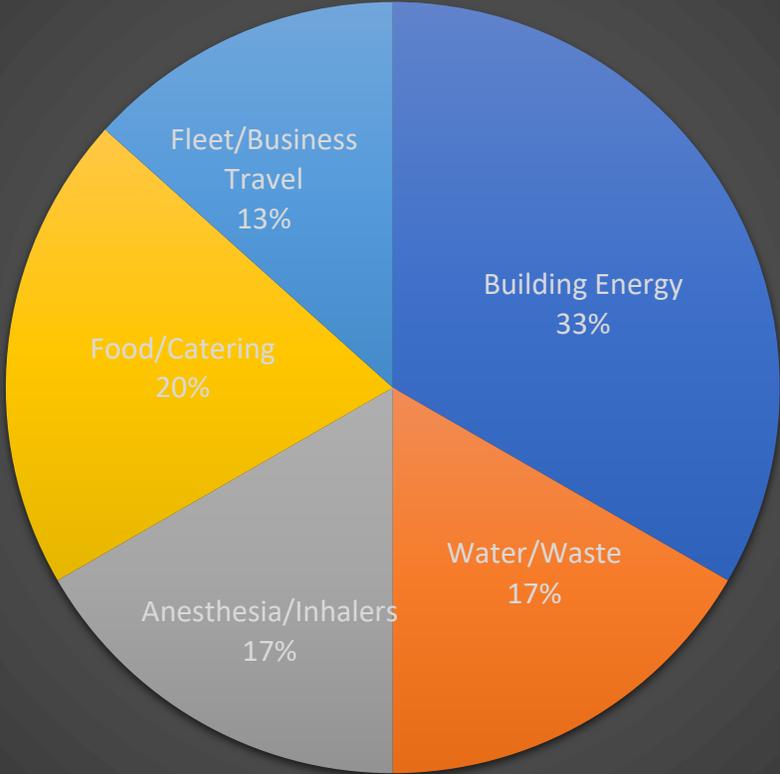
(admittedly academic)



Inside the Health System:

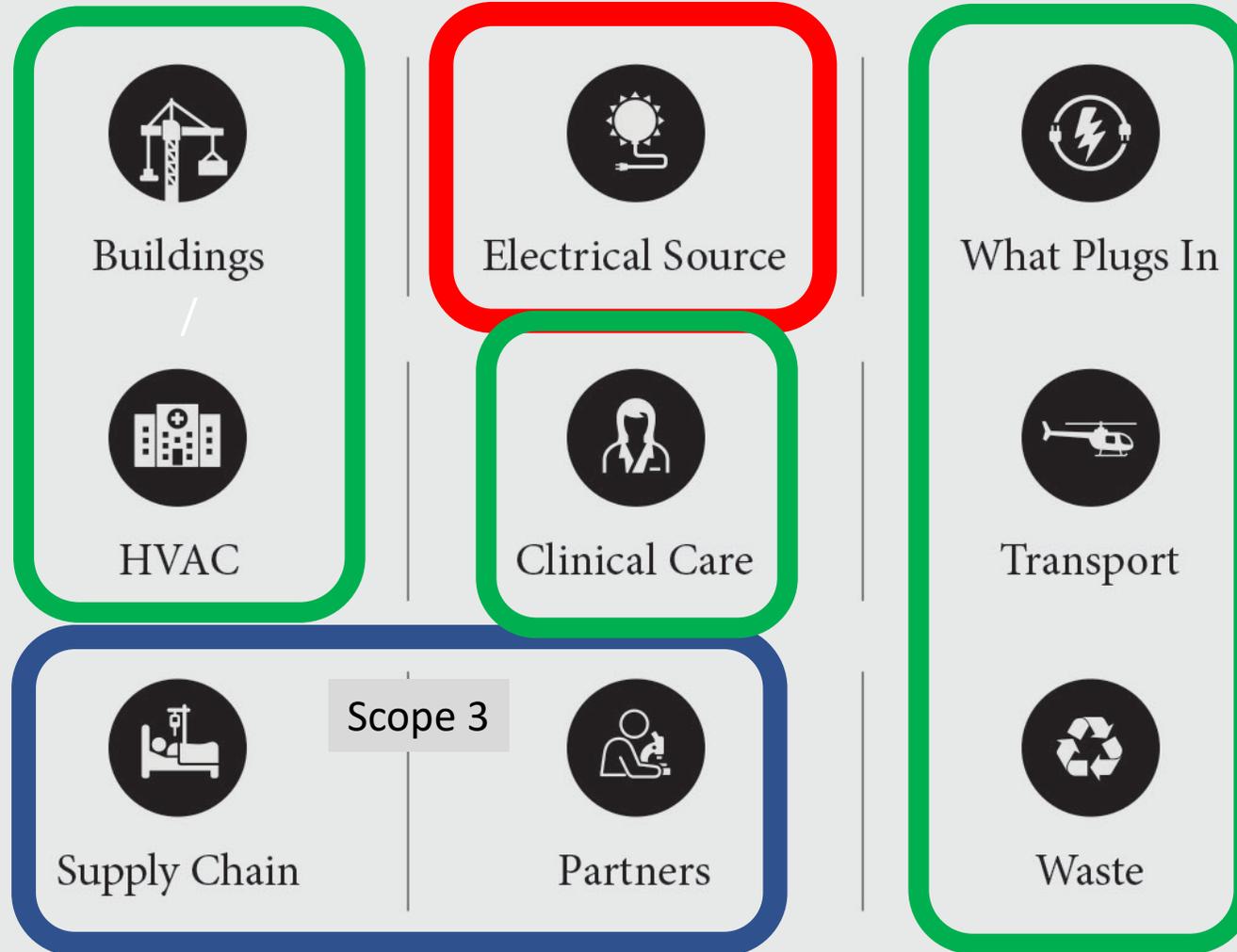
Scope 1 and 2

Non Supply Chain Health System Emissions



- Building Energy
- Water/Waste
- Anesthesia/Inhalers
- Food/Catering
- Fleet/Business Travel

9 Areas of Focus for a Net Zero Plan

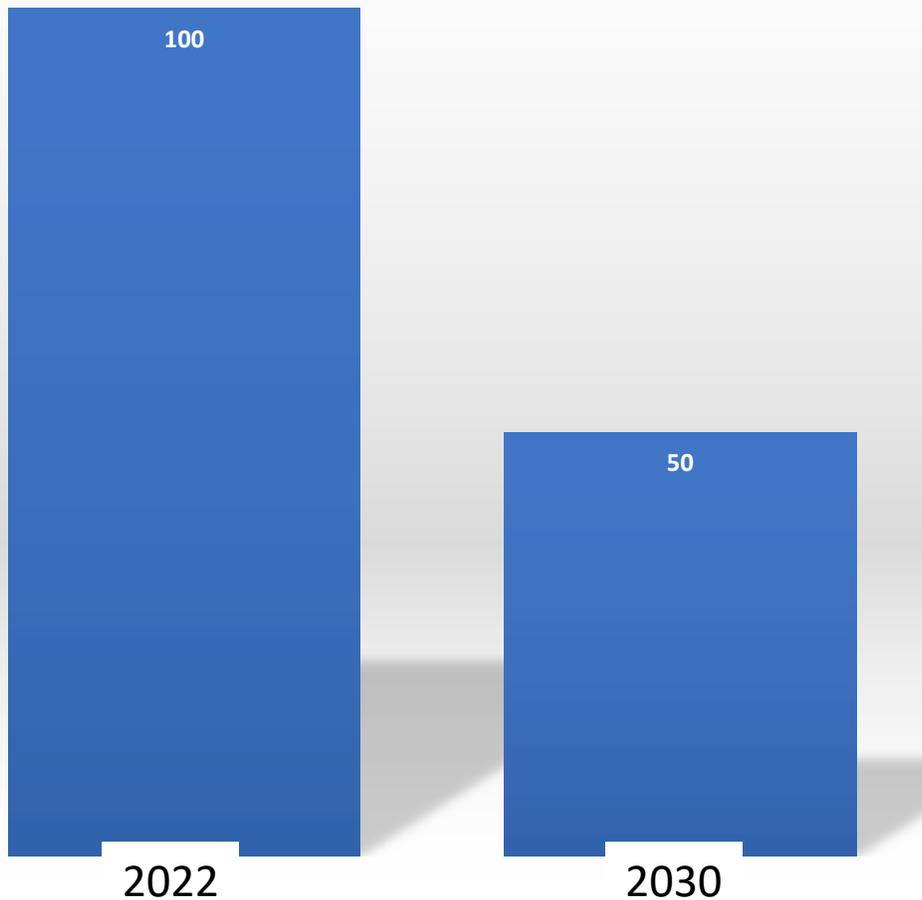


Scope 1:
“A thousand projects”

Scope 2:
Flipping a Switch

Scope 3:
“A thousand contracts”

Achieving 50% Reductions



Achieving 50% Reductions in Emissions by 2030

- McKinnon Health System
- Scope 1: 15% of Emissions
- Scope 2: 10% of Emissions
- Scope 3: 75% of Emissions

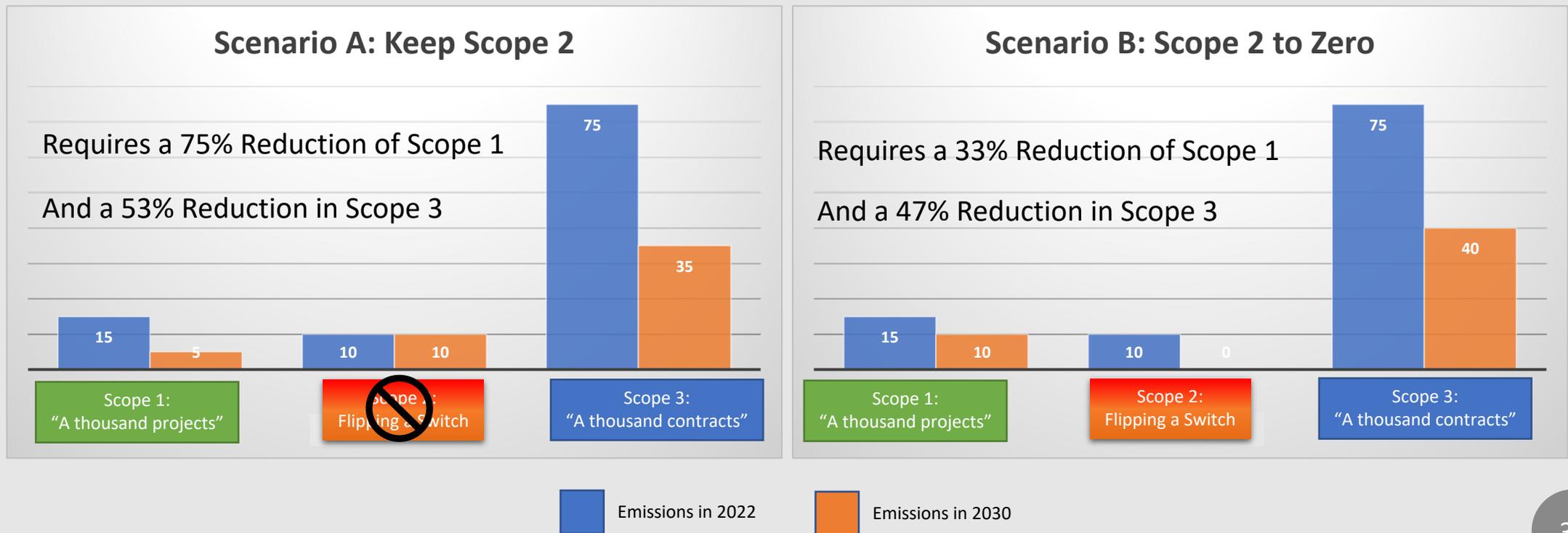
Scope 1:
“A thousand projects”

Scope 2:
Flipping a Switch

Scope 3:
“A thousand contracts”

Where do we reduce emissions?

Does anyone believe you can get to a 50% reduction in emissions in 7 years without eliminating scope 2?



Eliminating Scope 2 Emissions



HONDA



Power Purchase Agreements (PPAs)

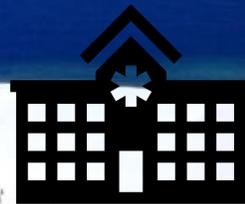
Renewable Energy Certificates (RECs)

The Electrical Grid is Like a Lake of Electrons



I don't understand how health systems are going to get a 50% admissions reduction by 2030 without doing a PPA.

Bob Biggio
SVP Facilities, Boston Medical Center
Used a PPA to build a solar farm in North Carolina





Bringing scaled renewable energy solutions to America's health systems



Partnership with NEXtera Energy

Health System
Diagnostic and
Recommendation

Scope 1 Emissions Accounting

- Gas, Diesel, Gasoline Accounting
- Anesthesia/Inhaler Accounting
- Food/Water/Waste Assessment

Scope 2 Emissions Accounting

- Meter by Meter Evaluation
- Emissions Determination
- Renewable Electrical Need

Health System Readiness Assessment

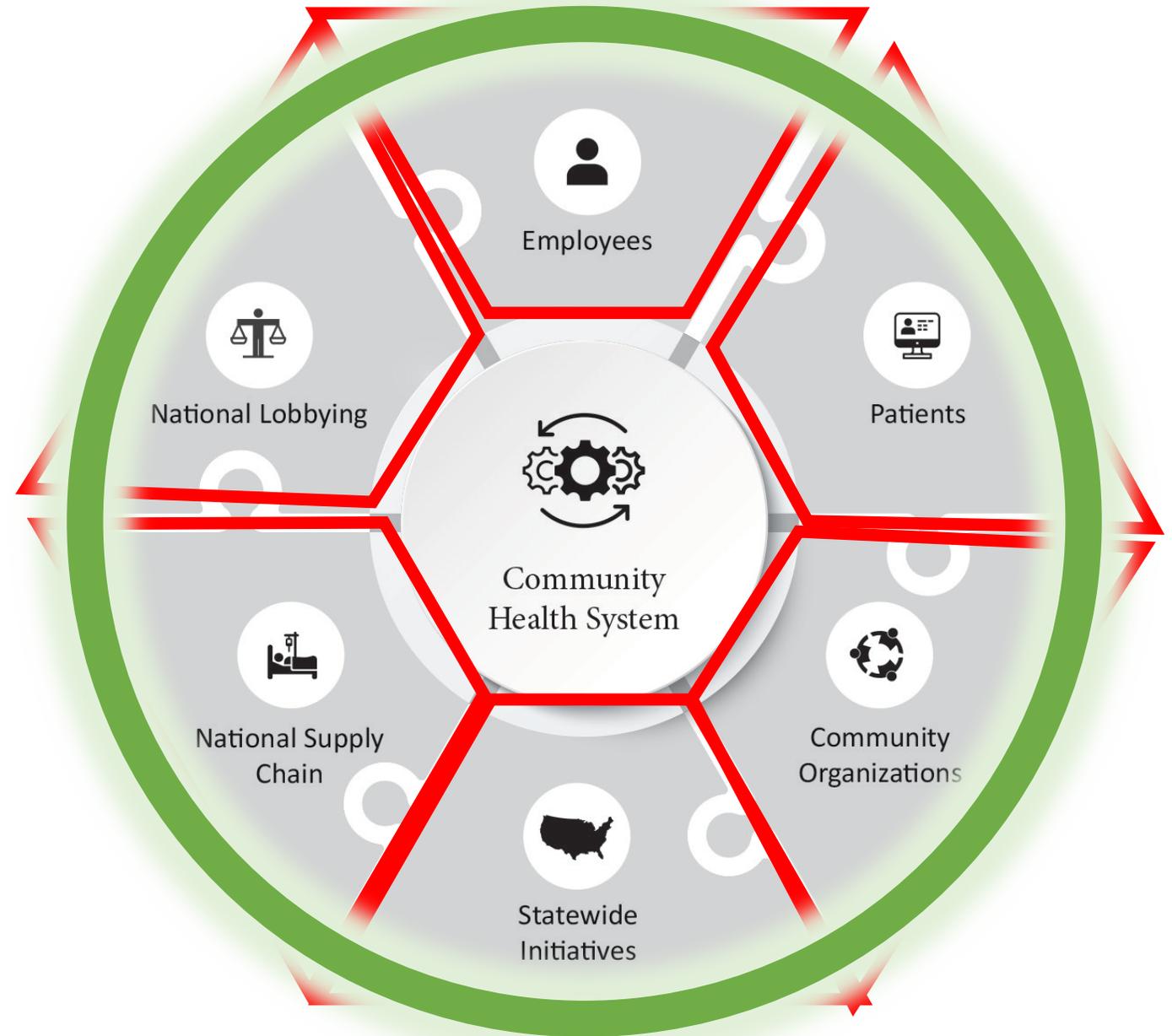
- Board/Executive Readiness
- System Culture
- State(s) incentives
- Grid capabilities

Recommended Approach

- Appropriate path to Scope 2 renewables
- Virtual PPA, RECs, Battery Generators, Campus Management



The Health System as Community Leader on Climate Action



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Question 4



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