



Children's Health and Climate: Children's Hospital Perspective

Creating Health Virtual Learning Series
August 15, 2024

On Demand Webinar

[Children's Health and Climate:
A Federal Perspective \(childrenshospitals.org\)](#)



Today's Presenters



Ratan Milevoj

Vice President of Innovation,
Marketing, Communications, and
Assistant Chief Strategy Officer,
Valley Children's Healthcare



Mollie Grow, MD, MPH

Associate Program Director,
Seattle Children's; Professor of
Pediatrics, University of
Washington



Srini Pendikatla

Sustainability Director, Seattle
Children's



Valley
Children's
HEALTHCARE

SECURING A SUSTAINABLE FUTURE FOR CHILDREN OF CENTRAL CALIFORNIA

Valley Children's Energy Strategy



WHO ARE WE



Agnes Crockett



Gail Goodwin



Helen Maupin



Patty Randall



Carolyn Peck

1949, Valley Children's founding mothers announced their vision to establish a dedicated pediatric hospital in the Central Valley.

Providing Highly Specialized, Quality Care for Children



358-bed

regional pediatric provider

Cancer and Blood Disorders Center, Level II Pediatric Trauma Center, Level IV Epilepsy Center, Level IV Neonatal Intensive Care Unit and The Willson Heart Center

670
physicians



3,500
staff

One of the San Joaquin Valley's five largest private sector employers¹

Educating the Pediatric Workforce of the Future

A significant portion of Valley Children's service area is classified as a health professional shortage area for primary care, mental health care, and dental care³

Trained in
2021-2022

60 medical school
students

280 resident
physicians



500+ clinical students

OUR WHY

Valley Children's Patients

75% are covered by Medi-Cal

77% are an ethnicity other than Caucasian



Children of the San Joaquin Valley

1 out of 3 

live in poverty with many living in deep poverty²

More than **40%** are overweight or obese²

Up to **25%** lack access to a regular, dependable food source²



Healthcare disparities disproportionately affect children of color²

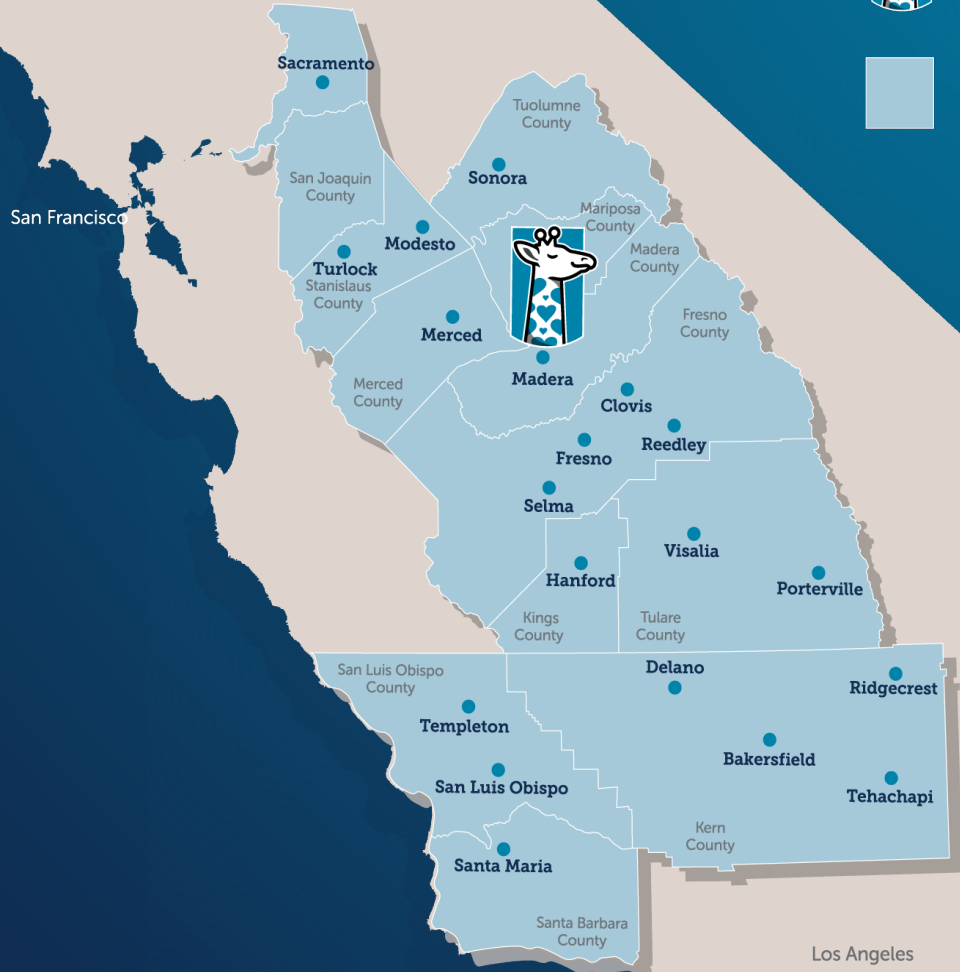
Access to care closer to home for **1.3 million** children



Valley Children's Hospital



Valley Children's Healthcare Network



OUR NEED TO THINK OF ENERGY AS A STRATEGY



Aging Infrastructure



Rising Energy Prices



Public Safety Power Shutoff Events



Financial Incentives for Non-Profits

Risks and Opportunities

Risks

- Aging Infrastructure
- Wildfires
- Utility Power Interruption
- Air Quality
- Utility Costs
- Climate Change

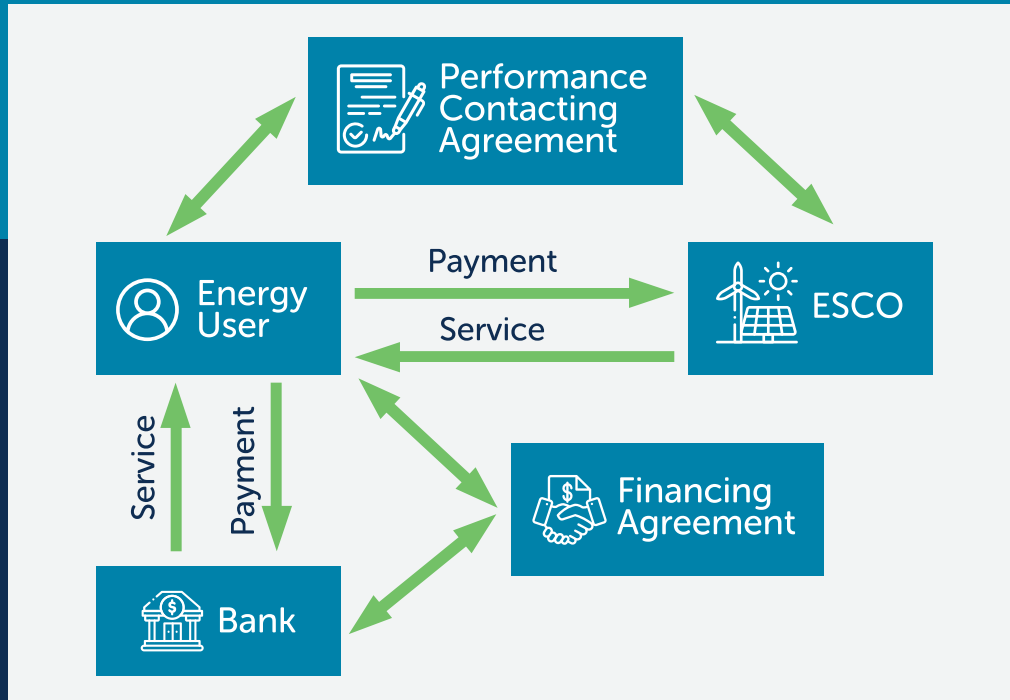
Risks

Opportunities

Opportunities

- Upgrade Infrastructure
- Add Resilience
- Energy Storage
- Reduce emissions /Decarbonization
- Long term cost control, efficiency

OUR RESOURCES ARE USED IN SERVICE OF OUR MISSION



Pre-IRA

Complex Financial Model for Tax Exempt Entities



Post-IRA

Tax-exempt entities can now do "direct pay" and qualify for investment tax credits, simplifying the structure and overall cost

ENERGY STRATEGY PILLARS:

RESILIENCE, EFFICIENCY, AND SUSTAINABILITY



Operational Resilience

Mitigate against any planned or unplanned power interruptions

Scalable solutions for current and future needs



Financial Efficiency

Optimize use of our non-profit capital and operating dollars

Cost-effective



Environmental Sustainability

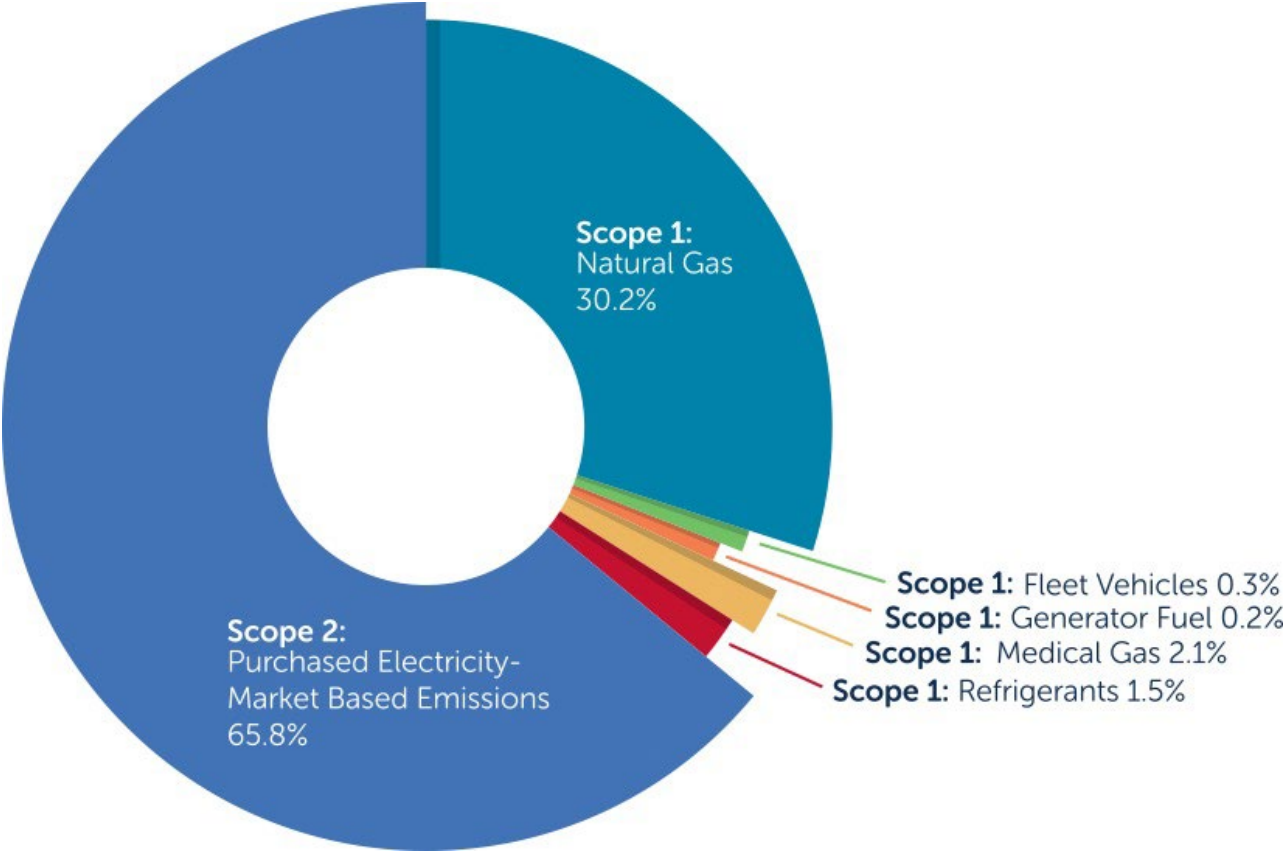
Reduce energy use through improved efficiency

Decarbonize

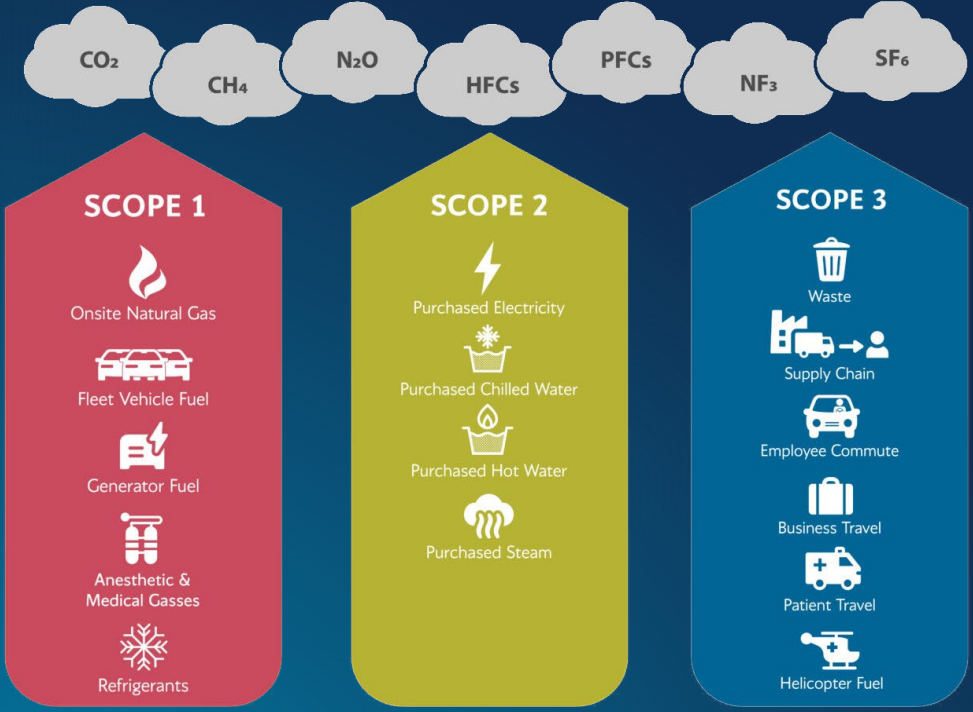


Valley Children's was amongst the first to sign the Office of Climate Change and Health Equity (OCCHE): Hospital Climate Pledge in June 2022

VALLEY CHILDREN'S SCOPE 1 & 2 BASELINE EMISSIONS BY CATEGORY

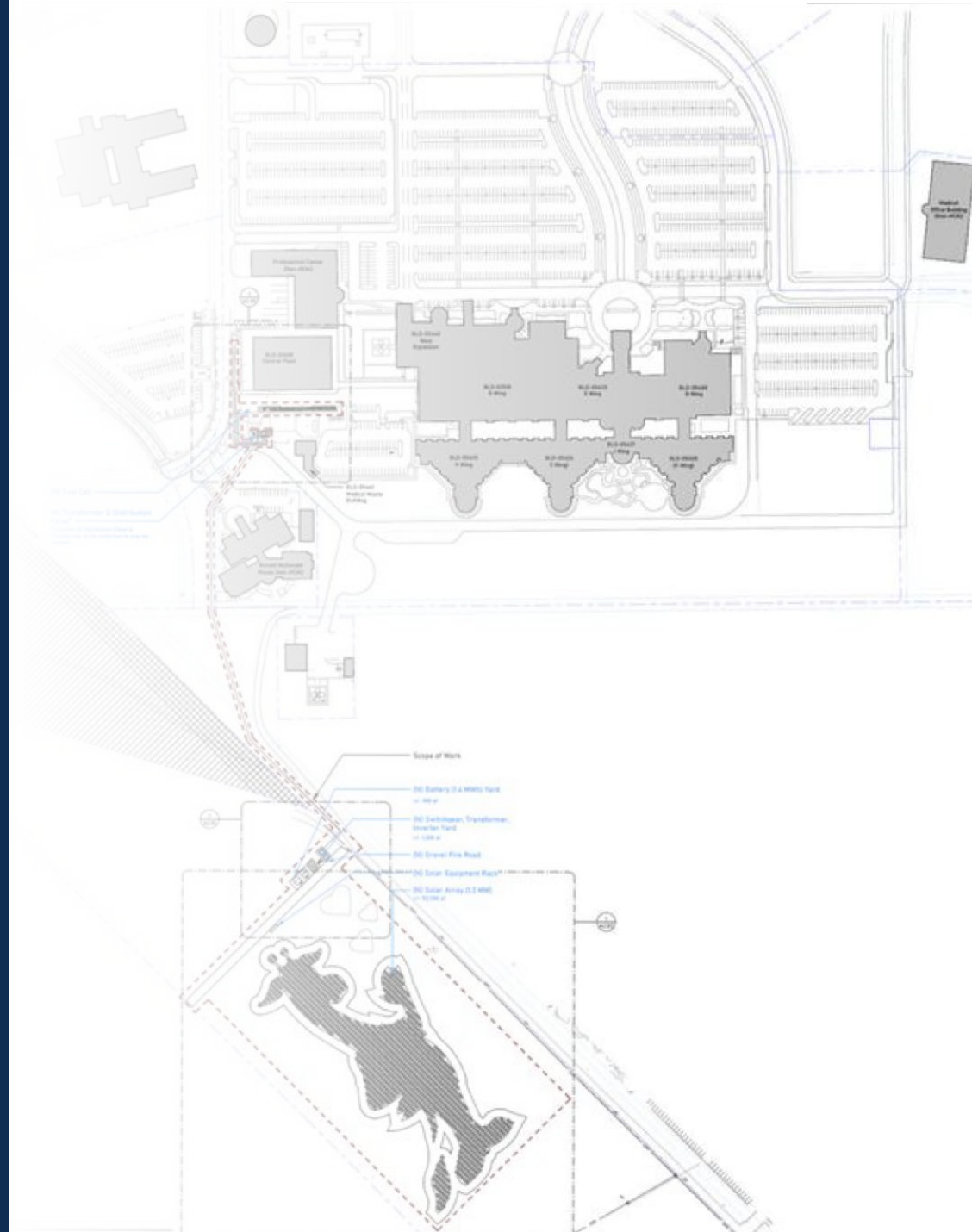


BASELINE YEAR 2021

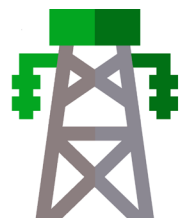


IMPLEMENTING A RENEWABLE ENERGY MICROGRID

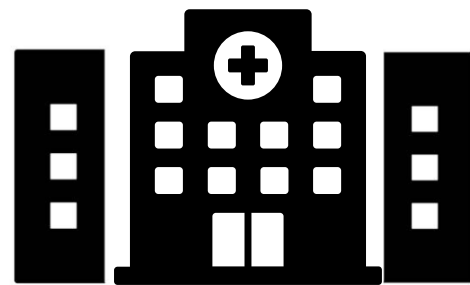
- Solar PV - 1.32 MW
- Fuel Cell - 2.2 MW
- Battery - 1.4 MWH



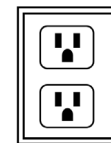
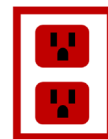
Normal Power



Substation
Transformer



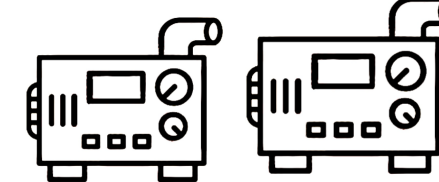
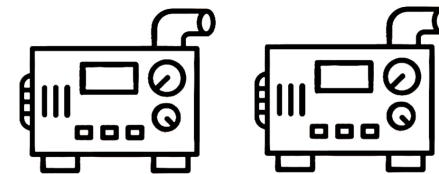
Main Hospital



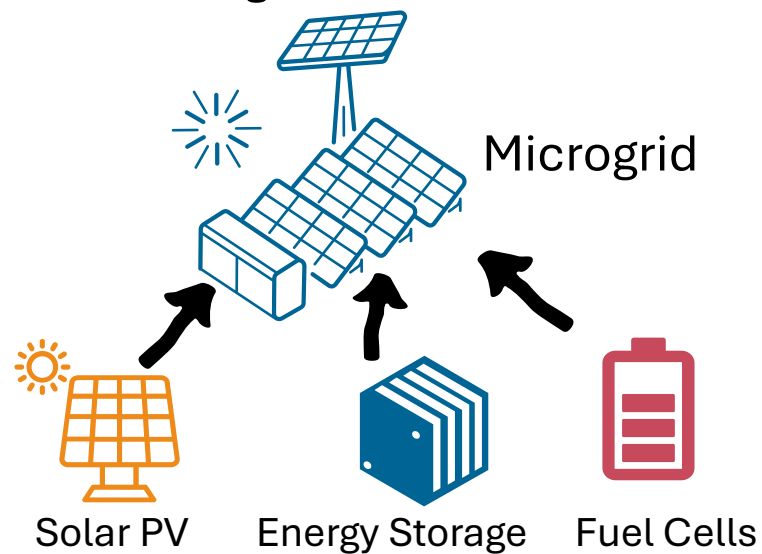
Normal
& Emergency Power Outlets



Emergency Power



Diesel Generators

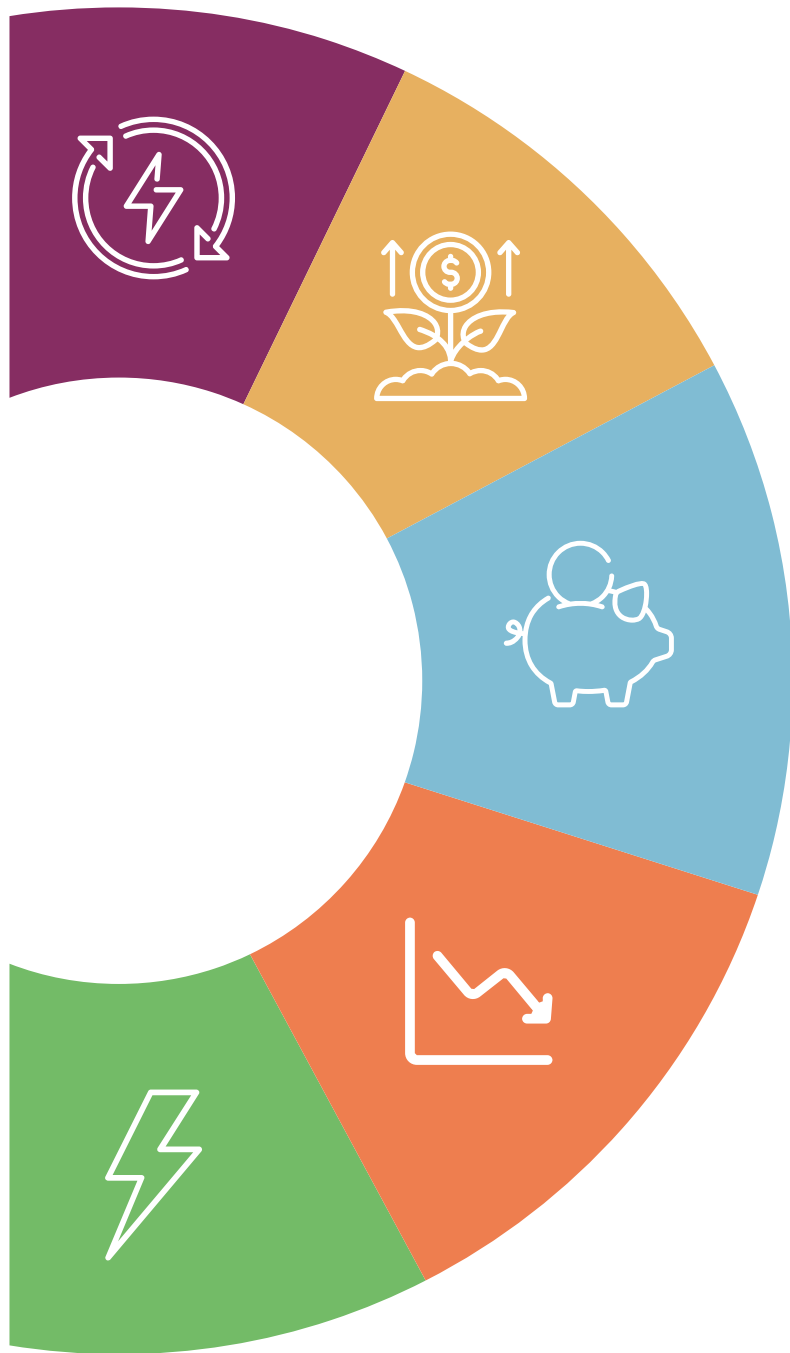


Solar PV

Energy Storage

Fuel Cells

MICROGRID IN NUMBERS



Meets 80% of energy needs for current services



Capital Investment: ~\$30.5 million



Operating Income savings over 25 years: ~\$13 million



ITC from Inflation Reduction Act: ~\$13 million



**Reduction of our Green House Gas (GHG) inventory:
50.5 % (~ 7,970 mtCO₂) from baseline**

PROCESS AND KEY ROLES



Mission Alignment and Strategy:

Identified need for energy resilience linking challenges with opportunities and aligning with long-term organizational goals.



Patience and Time:

Conceptualization to approval took approximately 2 years.



Financial Analysis:

Conducted comprehensive financial analysis, pre-IRA and post-IRA tax credit savings, including long-term savings and ROI.



Feasibility:

Collaborated with the Facilities team to assess technical feasibility.



Stakeholder Engagement:

Engaged key stakeholders early to align with organizational goals.

CEO: Project champion.

Strategy Lead (my role): Led with strategy, coordinated cross-departmental efforts, and ensured project alignment with broader organizational goals.

CFO: Engaged early and key in securing funding and ensuring cost-effectiveness.

Facilities Team: Essential in assessing technical feasibility and planning implementation.

Board of Directors: Gave final approval for funding and ensured alignment with the organization's mission and goals.

OUR SUSTAINABILITY WORK BEYOND THE MICROGRID

- Energy audit of our facility to address opportunities
- Replacement of aging fleet of vehicles
- Food waste to reduce environmental impact
- Water management plan
- Anesthetic gases
- “Green Team” Stewardship Program



'FUTURE IS WORTH FIGHTING FOR!'

“

This is about more than being on the cutting edge of the clean and renewable energy movement. This is really about making sure Valley Children's is insulated from any threat that might disrupt our ability to care for kids and to continue to innovate. The work here is sacred and children are our number one priority.

”

Todd Suntrapak,
CEO, Valley Children's Healthcare



UW Peds Climate Change CARE Committee

Mollie Grow MD MPH, Srin Pendikarla August 15, 2024



Speaker Disclosures

- We have no actual or potential conflict of interest in relation to this program/presentation.

Our Climate Story

- How we have come together
- Why this effort is important
- What we have done so far and hope to do next



Our committee begins with Dr. Alee Perkins, then pediatric resident at UW / SCH, launching Pediatricians for Climate Action Summer 2020



**PEDIATRICIANS
FOR CLIMATE
ACTION**



Dr. Perkins had vision for a new organization to address climate change in pediatrics

Recruits other pediatric residents and faculty mentors

Begins monthly meetings to design curricula, research, and advocate



Pediatric Residency Efforts

- National needs assessment survey for residency climate curricula
- Yearly 4-session curriculum for residents
- National abstracts, workshops
- Research on wildfire smoke exposure
- Advocacy at 3 state legislative sessions
- 6+ ecological restoration events (at 2 sites)



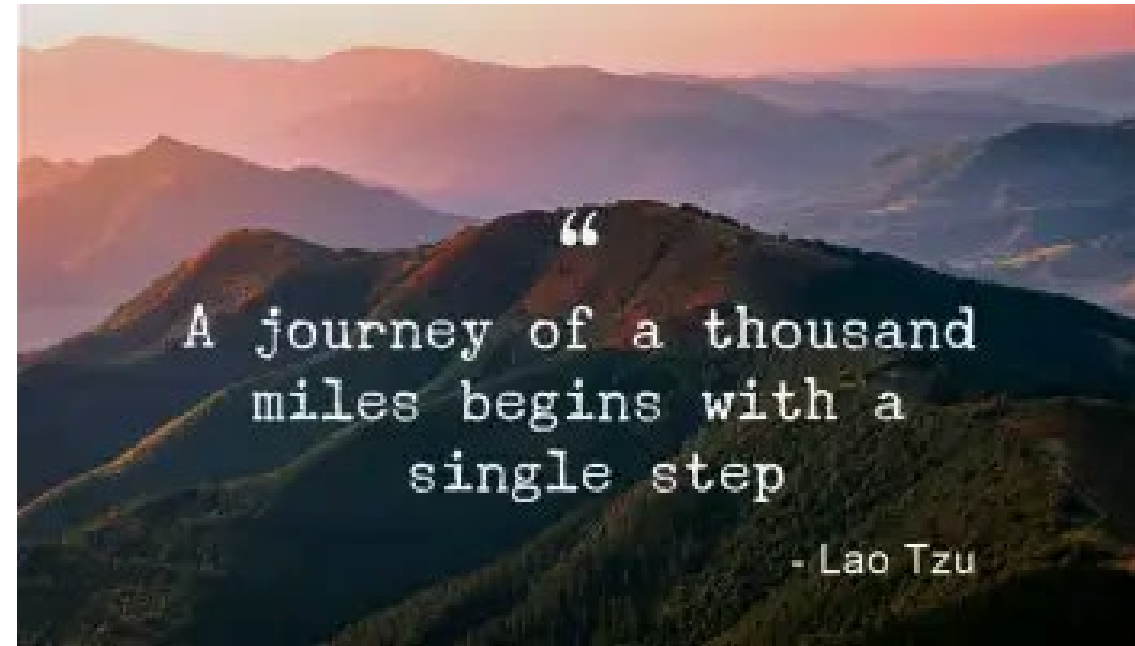
Birthing the UW Peds Climate Change CARE Committee

CARE = Clinical, Advocacy, Research,
Education



Why the CARE Committee was Formed

- Children's health = planetary health
- Transformative leadership from residents like Dr. Perkins compelled us forward (and then they graduated!)
- We needed to continue the journey to integrate across systems: Peds Dept, residency, clinical sites at Seattle Children's and UW



Source: Global Viewpoint

Proposal: why we need a formal climate change committee

to galvanize work across the Department of Pediatrics

- Climate change is critical equity-related area for children's health
- Many intersecting parts of climate change work
- The Department brings people together across all areas of Pediatrics: faculty, staff, trainees
- Can collaboratively propose initiatives and have backing
- Can widen our pool of people —to do the work!

How We Formed Our Committee

1. Faculty met and outlined our requests, discussed idea for a Committee
2. Asked for meeting with Dr. Leslie Walker-Harding, Department Chair
3. Dr. Walker-Harding reviewed and supported the idea for a Committee
4. Faculty leads developed the formal proposal, refined with further input from Dr. Walker-Harding and McKenna Pho, administrative lead
5. Committee given approval, granted funds

Climate Change CARE Committee's Leadership

Steering Committee



Mollie Grow
MD MPH, Gen Peds,
Committee Chair



Pooja
Tandon MD
MPH
Gen Peds



McKenna
Pho MA,
Executive
Leadership



Markus Boos
MD
Dermatology



Richard
Shugerman MD,
Vice Chair
Sponsor



Jon Cogen
MD
Pulmonary

Partners/ Affiliates



Srini Pendikatla
Seattle Children's
Sustainability
Director



CARE Committee's Mission

The mission of the Department of Pediatrics Climate Change CARE Committee is to foster collaborative efforts in developing a systematic Department-wide response to climate change and pediatric care encompassing clinical, advocacy, research, and education (CARE) efforts.



CARE Committee Operational Structure

- Regularly scheduled meetings
- Protected time for committee chair (10% FTE) and administrative support
- Consensus for decision making
 - Voting for decisions when needed
- Established goals / objectives
 - Actionable early wins, long-term bigger initiatives
- Annual reporting, opportunities to revise



CARE Committee Priorities

Clinical - Decarbonization / divestment from fossil fuels in health care settings, decreasing waste, changing systems

Advocacy - Policy changes, collective action, ecological restoration

Research - Regular opportunities to share, collaborate, engage; maintain a faculty database

Education - Educating everyone on things we can do at home and at work
- being actionable in both places

Committee Meeting Structure

- Hellos and Hoorays
- Action opportunity, wins, updates from prior mtgs
- Main topic/Guest speaker
- Discussion/break outs
- Recap

Take action Opportunity- Reducing Hospital Emissions

For the first time, the Centers for Medicare and Medicaid Services (CMS) has proposed collecting, monitoring, assessing, and addressing hospital emissions. It's a pivotal move towards regulating greenhouse gas production in healthcare, an industry responsible for approximately 8.5% of US emissions.

Advance low-emissions, resilient health care across the U.S. **Health professionals are critical in communicating to CMS that this Initiative is a necessary step toward improving patient outcomes, reducing emissions, and building climate-resilient hospitals.**



Outcomes of the Committee work this year

- 10 monthly meetings, 10 collective actions taken
- 4 Sustainability Topics in PedsNews
- 4 research collaborations / pubs
- 2 Guest speakers - AAP Climate Advocates, Climate Action Families
- 2 Restoration Events with residents
- 2 applications submitted for educational opportunities
- 1 Clinical Symposium
- 1 Grand Rounds



UW Symposium Climate Change & Clinical Practice

- Flash Talks (4 of 6 speakers)
 - Catherine Karr, Indi Trehan, Dept of Peds
 - Sara Greenberg, Peds Surgery
 - McKenna Parnes, Peds Psychology
- Panelist
 - Liz Hansen, Peds Anesthesia
- Afternoon breakout sessions
 - Jon Cogen, Mary Crocker, Mollie Grow, Catherine Karr, McKenna Parnes, Pooja Tandon
- Organizing Committee
 - Mollie Grow



Advocacy - Restoration, Legislation



House Bill No. 1924



Our ongoing work and what comes next

Keeping the momentum going
Integrating with other initiatives



Clinical: Develop, share best practices

- Emissions and waste reductions approaches / guidelines
- Clinical educational tools
- Collaborating on proposals
 - Medical/Clinical Director of Sustainability



Clinical: Integration w/Mitigation

- Establish bench (clinical champion team)
- Clinical partnerships – establish working groups to support operational changes



Education

- National curriculum for pediatric residents
- Maintenance of Certification (MOC) Part 4 for Children's Hospitals (building off AAP)



The screenshot shows the website for healthychildren.org, which is powered by pediatricians and trusted by parents from the American Academy of Pediatrics. The page is titled "Climate Change & Children's Health: AAP Policy Explained" and is categorized under "Safety & Prevention". The article is written by Samantha Ahdoot, MD, FAAP. The page includes a search bar, navigation links for various topics, and social media sharing options (Share, Pin, Email, Print). A photograph of a young girl holding a small plant is visible on the right side of the page.

healthychildren.org
Powered by pediatricians. Trusted by parents.
from the American Academy of Pediatrics

Search for safety, tips, illness, etc.

Ages & Stages Healthy Living **Safety & Prevention** Family Life Health Issues News Tips & Tools Our Mission shopAAP

Healthy Children > Safety & Prevention > All Around > Climate Change & Children's Health: AAP Policy Explained

Safety & Prevention

SAFETY & PREVENTION

Immunizations

● All Around

Recent

At Home

At Play

On The Go

Share Pin Email Print

Climate Change & Children's Health: AAP Policy Explained

By: Samantha Ahdoot, MD, FAAP

Every day, pediatricians see the **effects** of climate change on children's physical and mental health. When we talk with parents about what's good for their



Please join the club!

www.peds.uw.edu/about/climate-care



“The most common way people give up their power is by thinking they don't have any.” -Alice Walker

UW Pediatrics

CLINICAL CARE • EDUCATION • RESEARCH • ADVOCACY

