Funding Pathways for School Energy Upgrades

About the Division of Energy Resources

The Division of Energy Resources (DER) within the Department of Commerce is the State Energy Office for Minnesota. **The DER provides funding, guidance and technical assistance for local governments, business, industry, and individuals.** We manage energy programs and projects and provide regulatory oversight for the energy sector.

Direct Pay Support

Tax Consultation with Deloitte

- Contracted with State of MN - no-cost for MN-based tax-exempt entities with tax experts
  - local govt, co-ops, municipal utilities, Tribal govt, schools, nonprofits, etc.
- 1-on-1 technical assistance for MN entities filing for Direct Pay tax credits
- Assistance can include:
  - Consultation on project eligibility
  - Advice on filing procedures
  - General Q&A on Direct Pay
- Webinars for interested municipalities – scan QR below to register or click link:
  - September 4 – 2:00-4:00 p.m.
  - October 2 – 2:00-4:00 p.m.
  - November 3 – 9:00-11:00 a.m.

Request for Info – joint Commerce & MnCIFA survey: to understand the impact of the new requirements in federal law (H.R. 1) for certain clean energy projects and facilities to secure federal investment tax credits.

- Comments will be used to help MnCIFA and Commerce to review policies and procedures in light of changing federal requirements.
- Questions particularly focused on Foreign Entity of Concern (FEOC) and beginning construction requirements

Who should respond: developers, contractors, project owners, equipment suppliers, manufacturers and other interested parties

Response Deadline: Friday, September 12 at 1:00 p.m. CT

Current Funding Opportunities for Public Entities

Electric School Bus Equipment Grants

← *Scan for program website*

Funds the purchase of up to 3 electric school buses and associated charging infrastructure

- Eligible entities: School Districts and Tribal Contract Schools, as well as bus contractors or utilities working with them
- Available funding: 80-90% cost of bus, 65-95% of other costs
- Important dates: Application deadline Oct. 7, 2025

Solar for Schools

← *Scan for program website*

Grants for solar energy systems installation on MN schools & integrates renewable energy into curricula

- Eligible entities: Public K-12 Schools (Independent, Co-op, & Special School Districts, & Tribal Contract schools) and MN State Colleges/Universities
- Available funding: grants up to 40-70% of the cost to purchase and install a solar energy system
  - District maximum of $500,000 (outside Xcel) or $675,000 (inside Xcel)
- Important dates: December 1 - Full Applications Due
  - Restricted to applicants who already submitted for prescreening; future rounds possible

mn.gov/commerce/energy

SolarAPP+ Permitting Incentive

← *Scan for program website*

Provides financial incentives & technical support for local governments adopting the SolarApp+ online permitting platform developed by NREL, streamlining residential solar permitting process

- Eligible entities: Local governments
- Available funding: Up to $20,000 - $2mil total
  - $1.5mil for political subdivisions within Xcel territory
  - $500,000 outside Xcel territory
- Important dates: June 30, 2028, or until fully expended
  - First-come, first-serve; reviewed on a monthly basis

K-12 Energy Enhancement Program

NASEO Building Summit-ABC's of Energy Affordability

September 9, 2025

What is the K-12 Energy Enhancement Program?

- **Program Objective:** ***Complete energy reducing retrofits in a cost-effective manner that will yield long-term benefits for the rural K-12 public school community, reducing energy and tax burdens, increasing energy resiliency and increasing energy savings.***

K-12 Energy Enhancement Program

- 15 subawards
- Each project must be under $200,000
- Projects include the following:
  - Lighting retrofits
  - HVAC upgrades
  - Weatherization measures

*Photo: courtesy of Damon Woods, University of Idaho Integrated Design Lab

Programs/Reports that Inspired K-12 Energy Enhancement Program

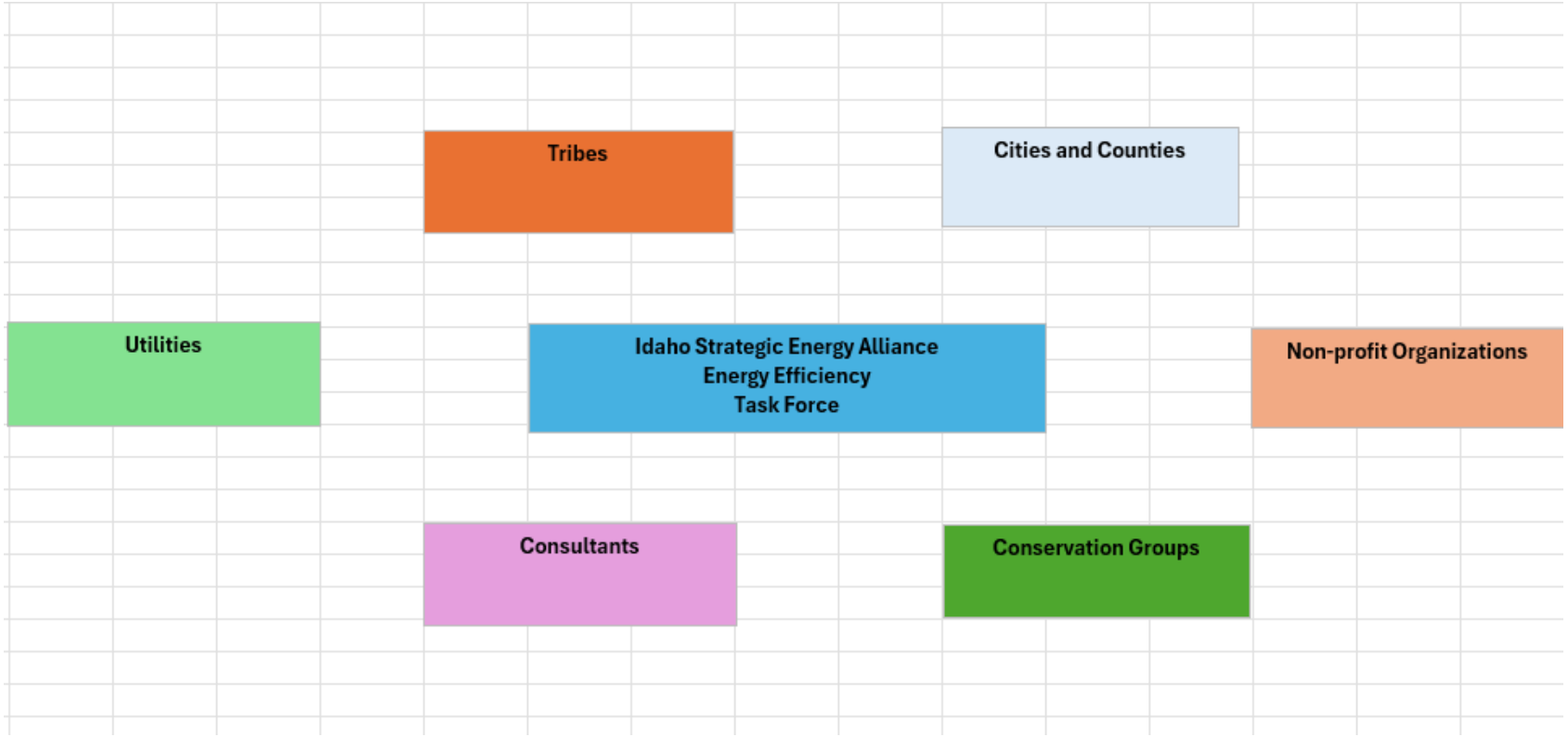
- K-12 Energy Efficiency Program under the American Recovery and Reinvestment Act
- ISEA Task Force + Stakeholders
- Office of Performance Evaluations
- Idaho Power School Cohort Program
- News Publications describing Idaho Public School Facilities Conditions
- Section 33-356: School Building Design and Energy Efficiency Legislation

K-12 Energy Efficiency Program (ARRA)

- Provided funding opportunities to complete energy efficient audits and retrofits in public K-12 educational facilities.
- Two phase approach:
  - First phase: 894 schools were audited and 836 schools received HVAC control system tune-ups. Estimated cost: $7,000,000. Estimated savings: $3,900,000
  - Second phase: 146 buildings received lighting retrofits and 26 buildings received HVAC retrofits. Estimated savings: $500,000

ISEA Task Force

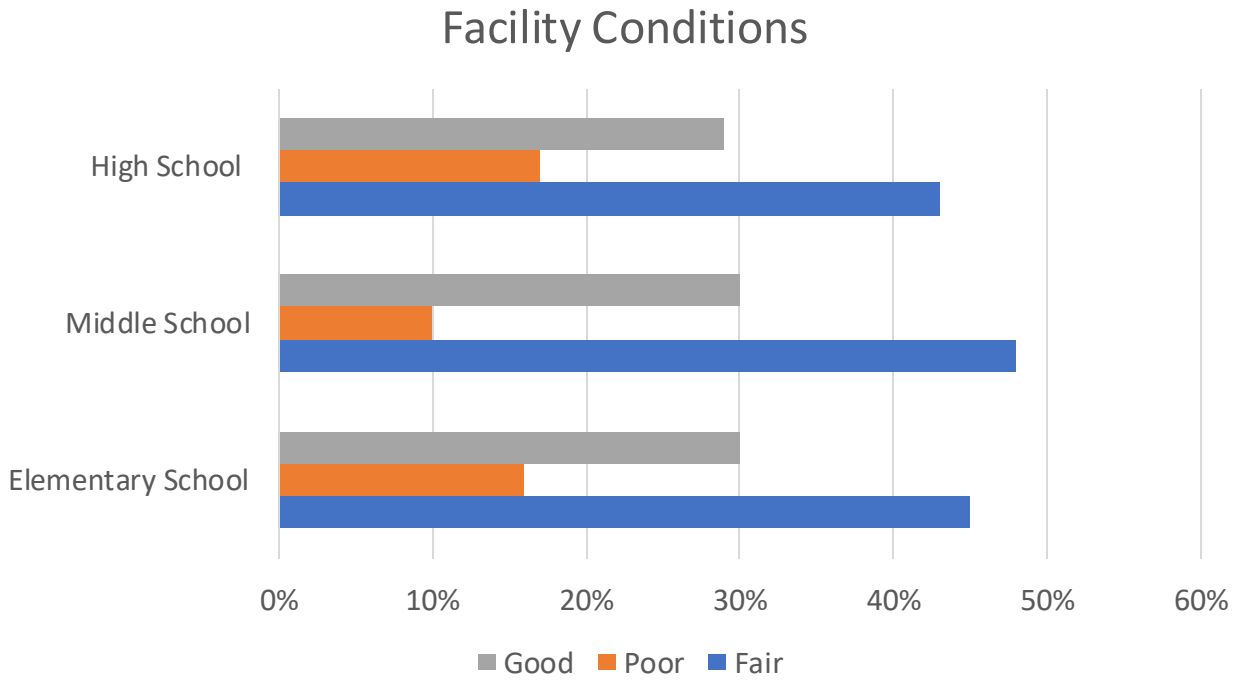
- Made up of representatives from different industries:



Office of Performance Evaluations

- Identified that majority of schools are in “poor” or “fair” condition, due to lack of available funding to make the necessary improvements.

Source: Office of Performance Evaluations’ district survey



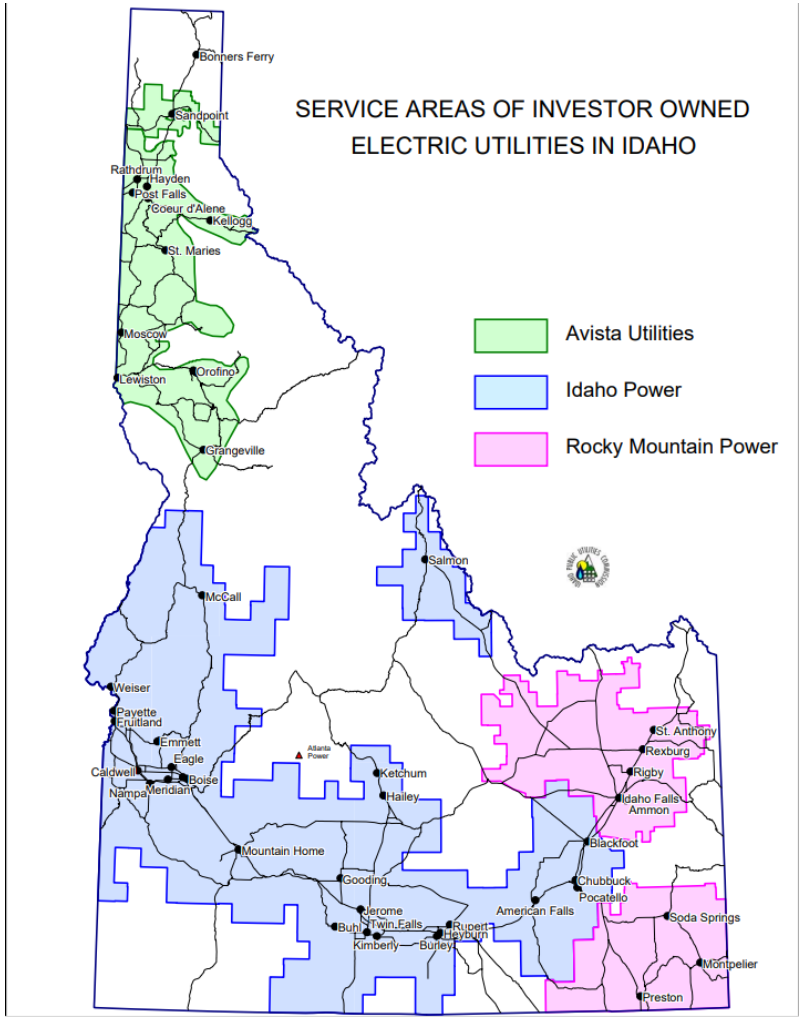
Idaho Funding Resources

- **How does the Idaho State Department of Education decide how much funds a public school receives?**
- Districts receive funds per support unit, where funding distributions are structured around the ratio of staffing to the students.

Rural School District	Urban School District
19 students / ~$71,000	39,000 students / ~$141,000,000

Idaho Power School Cohort

- Idaho's largest Investor-Owned Utility company offers additional funding incentives to select schools to offset material costs associated with improvements.



Source: Idaho Public Utilities Commission

Section 33-356- School Building Design and Energy Efficiency

- **Allows for school districts to implement the processes of integrated design and fundamental commissioning to ensure optimal performance of building systems and energy savings are available.**

Speaker

Braydi Goetz, EIT

Project Manager, CMTA Energy Solutions

Let’s Connect

01

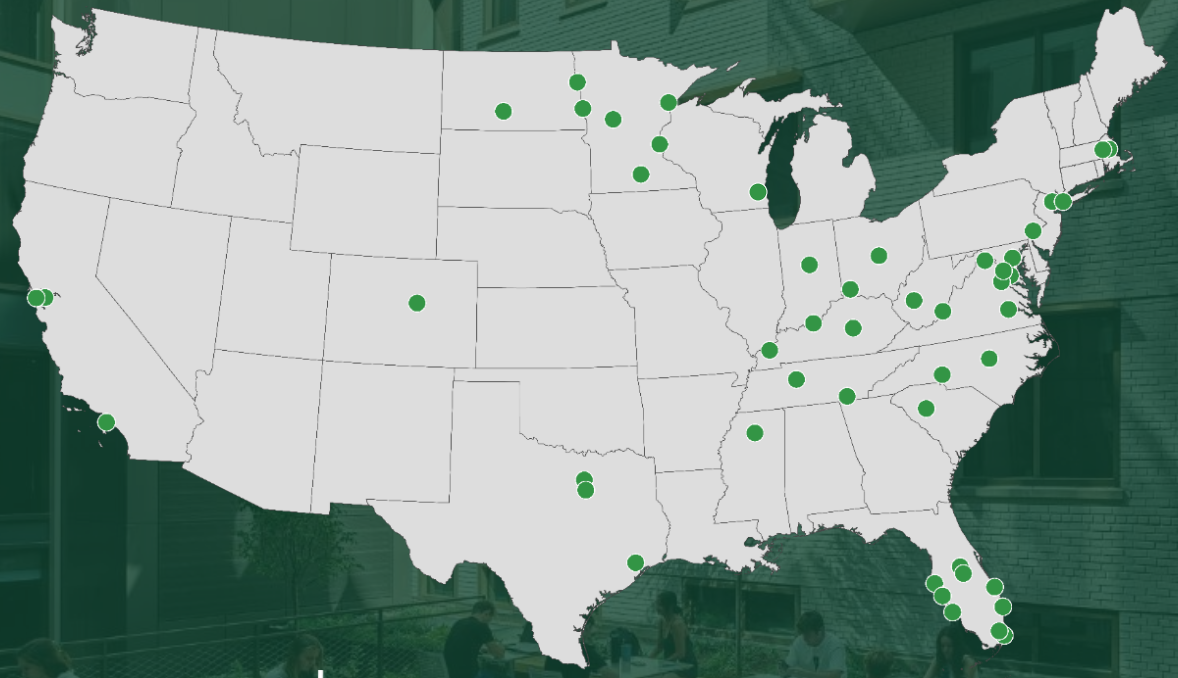
Introduction + About CMTA

Overview

MEP Design | Performance Contracting | Zero Energy | Technology | Commissioning

National Leader in High Performance Facilities

Top 20 Nationally



1,280
Employees

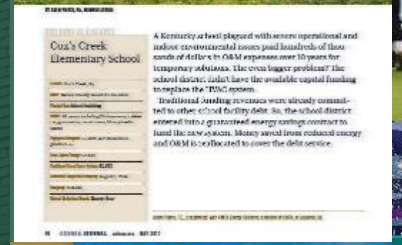
50
Offices Nationwide

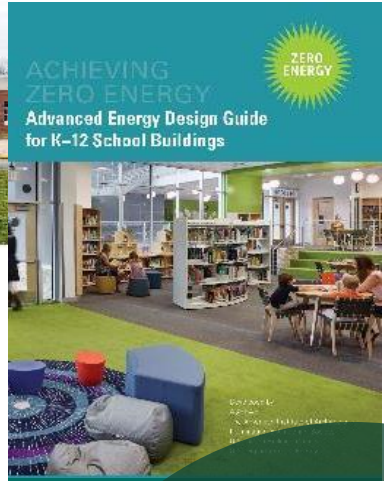
260
Professional Engineers

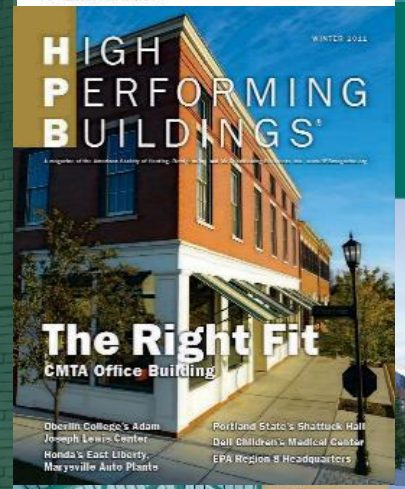
57
Years of Service

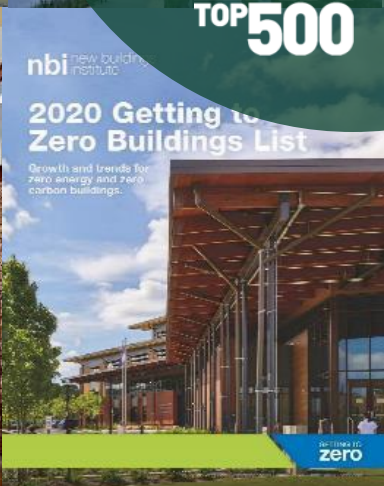
ASHRAE
Most Technology Awarded Firm Globally

NAESCO
National Association of Energy Service Companies









K-12

National Overview

200M Square Feet Designed

$35B Construction Completed

1st Zero Energy School in 10 States + DC

1st WELL Certified Public School

Investment Tax Credits (ITC)

Investment Tax Credits

Geothermal HVAC

Solar

Energy Storage

Low Income Community

Bonus 10% incentive

Direct-Payment to Not-for-Profit Owners

Energy Community

Bonus 10% incentive

30% Base Tax Credit

Installed efficiency / generation

Domestic Manufacturing

Bonus 10% incentive

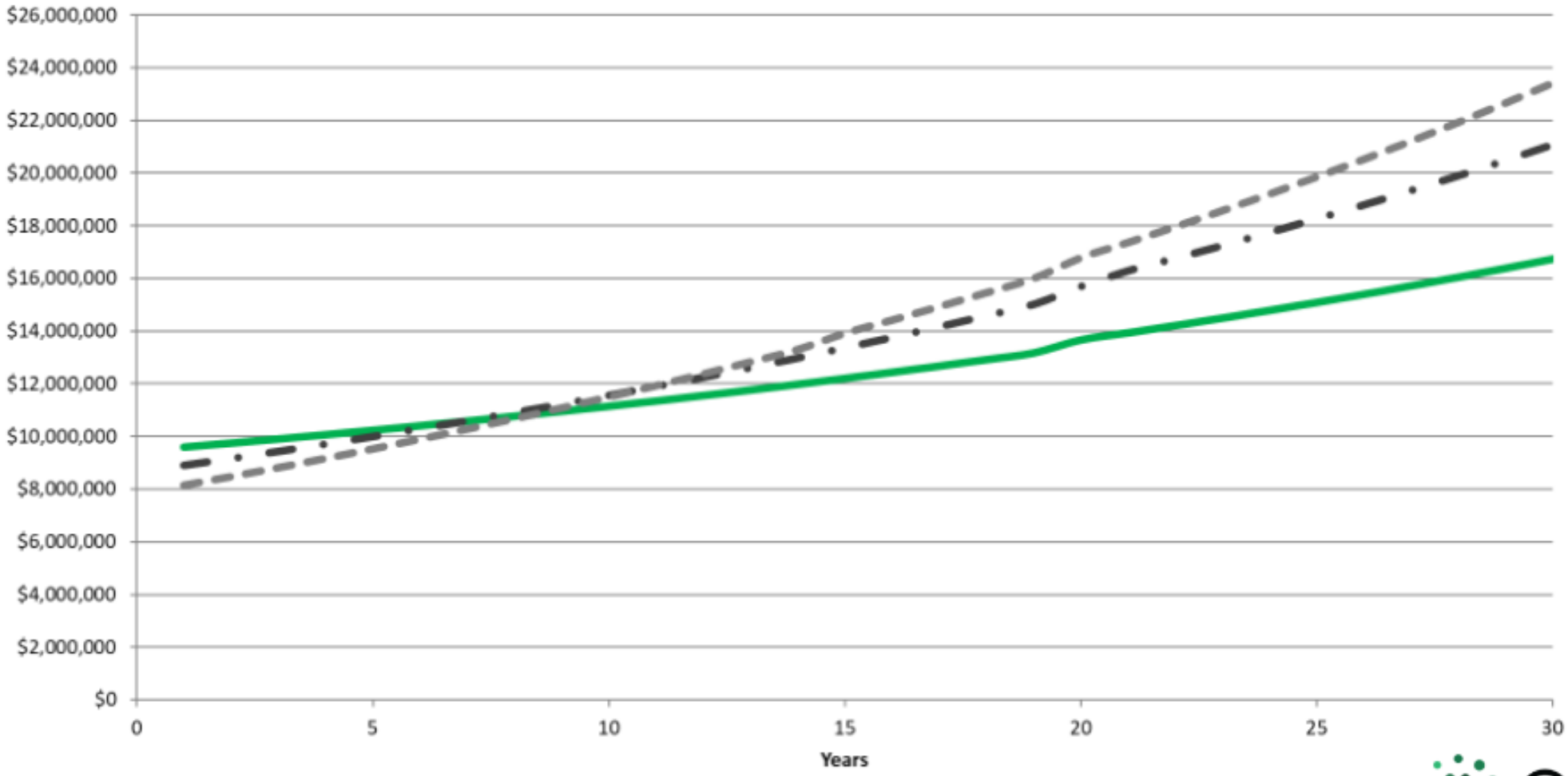
ITC Changes

An Update on Energy Tax Provisions for Schools — UndauntedK12

UNDAUNTEDK12

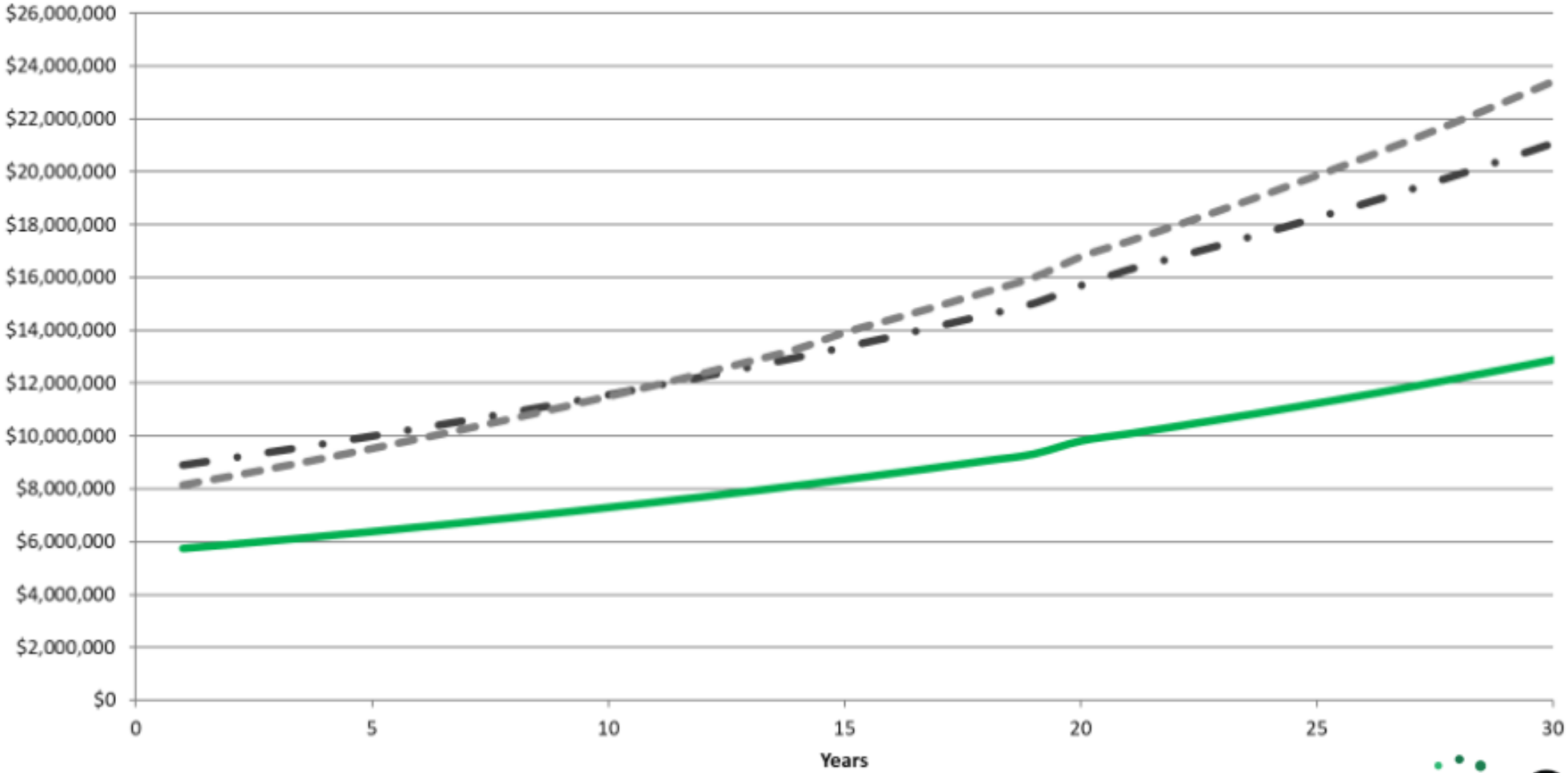
Tax Provision	Energy Equipment	Changes included in H.R. 1 as signed into law on July 4, 2025
Sec. 48	**Ground-Source Heat Pumps** **(AKA Geothermal Heat Pumps)**	No material changes to current law. Credit available for projects that commence construction before Jan 1, 2035. Unlike the tax credit for geothermal energy production (Sec. 48E), the tax credit for ground-source heat pumps (Sec. 48) is not subject to any of the new Prohibited Foreign Entity (PFE) rules*. Law removes a barrier to leasing of ground-source heat pumps. **Learn more: UndauntedK12 | Tax Credits for Ground-Source Heat Pumps**
Sec. 48E	**Solar Energy**	Phase-out schedule: Solar projects that commence construction by Jul 3, 2026 have 4 years to complete the project and receive full credit. Those that commence after Jul 3, 2026 must be placed into service by Dec 31, 2027. In general, solar projects must be placed into service by Dec 31, 2027 to be eligible for a tax credit. New Restrictions: Solar projects are subject to new Prohibited Foreign Entity (PFE) rules*. These provisions address not only the sourcing of materials used in the solar project but other transactions to which school districts are a party (e.g. municipal debt issuances, licensing agreements). **Bottom line: Schools that commence construction before Dec 31, 2025 and place systems into service before June 30, 2026 (assuming a July 1 - June 30 fiscal year) can receive full credit and avoid many of the new rules. However, any solar or storage projects commencing after Jan 1, 2025 should be prepared to navigate the new "payments" rule.** **Learn more: UndauntedK12 | Tax Credits for Solar Energy Projects**
Sec. 48E	**Energy Storage Thermal Storage**	Phase-out schedule: No changes to current energy & thermal storage phaseout schedule. Energy storage and thermal storage projects must be begin construction by December 31, 2035 to be eligible for a tax credit. • 100% of credit amount is available through CY2033 • 75% of credit amount is available in CY2034 • 50% of credit amount is available in CY2035 • 0% of credit amount is available in CY2036 New Restrictions: Storage projects are subject to new Prohibited Foreign Entity (PFE) rules*. These provisions address not only the sourcing o materials used in the storage project but other transactions to which school districts are a party (e.g. municipal debt issuances, licensing agreements)

LCCA: Geothermal vs. Traditional



CMTA
A LEGENCE Company

LCCA: Geothermal vs. Traditional



CMTA
A LEGENCE Company

Alternative Funding

Achieved for Clients

$300M

Project Funding & Grants
Awarded to Clients

$200M

Targeted Client
Investment Tax Credits
FY 2025-2026

Breathing Easy: IAQ & Energy Use in the Classroom

Air Ventilation for Schools Pilot Grant Program

Reduce the energy and financial burden of public schools through more efficient HVAC systems while improving indoor air quality

- Eligible entities: Public and Tribal K-12 schools
- Available funding: 50% of project cost
  - Maximum grant of $50,000 for each school
- Important dates: Applications funded continuously until all money is committed or December 31, 2025 (whichever comes first)

Scan for program website →

mn.gov/commerce/energy

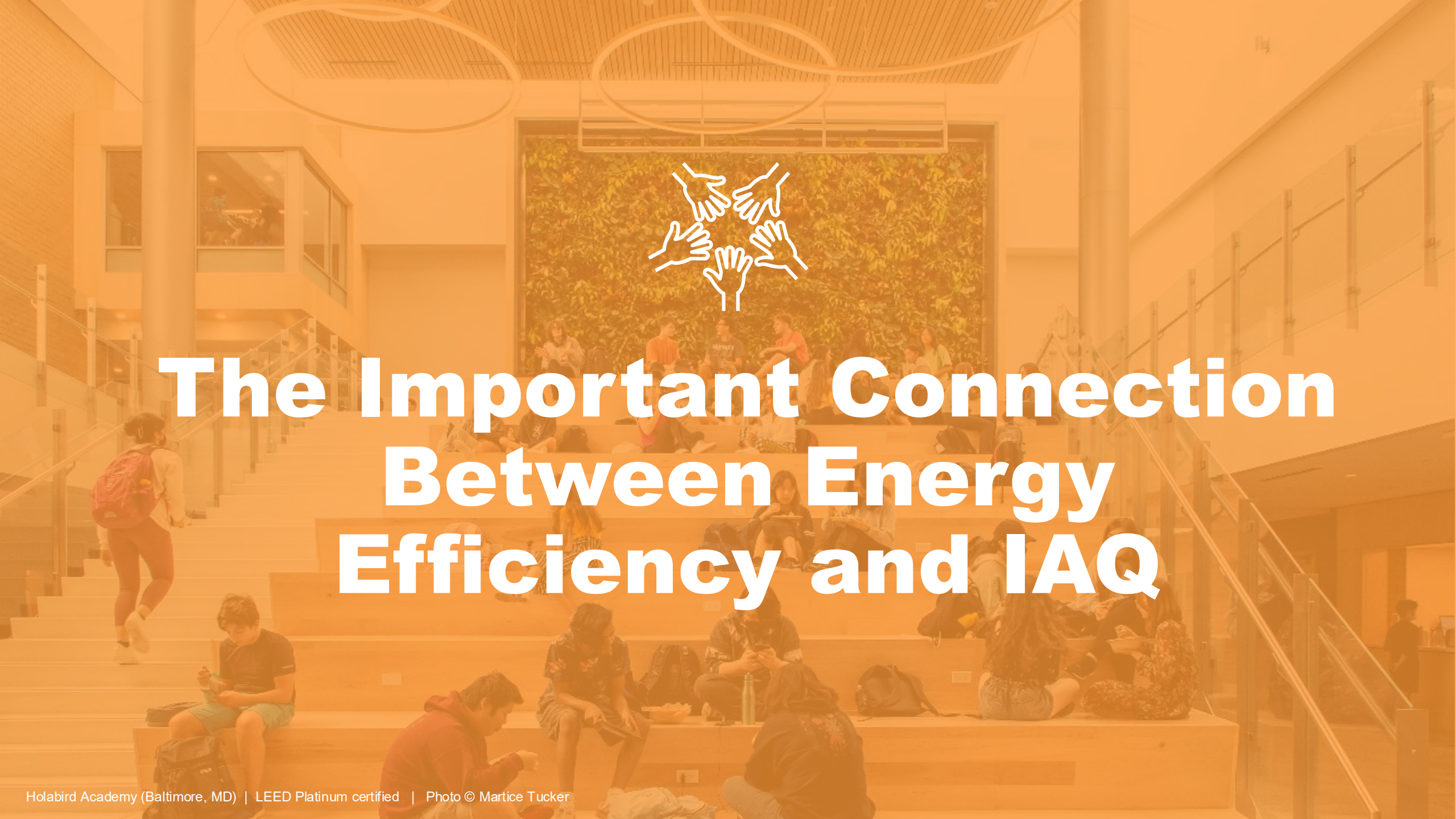

Center for Green Schools
at the U.S. Green Building Council
centerforgreenschools.org

WHO WE ARE: Global leader in advancing green schools, providing school districts and education leaders with resources and training to create sustainable, healthy, resilient and equitable learning environments.

WHAT WE DO: We support and train those implementing sustainability within school systems to be the most effective change agents they can be, through professional development, peer networks, research, and advocacy.

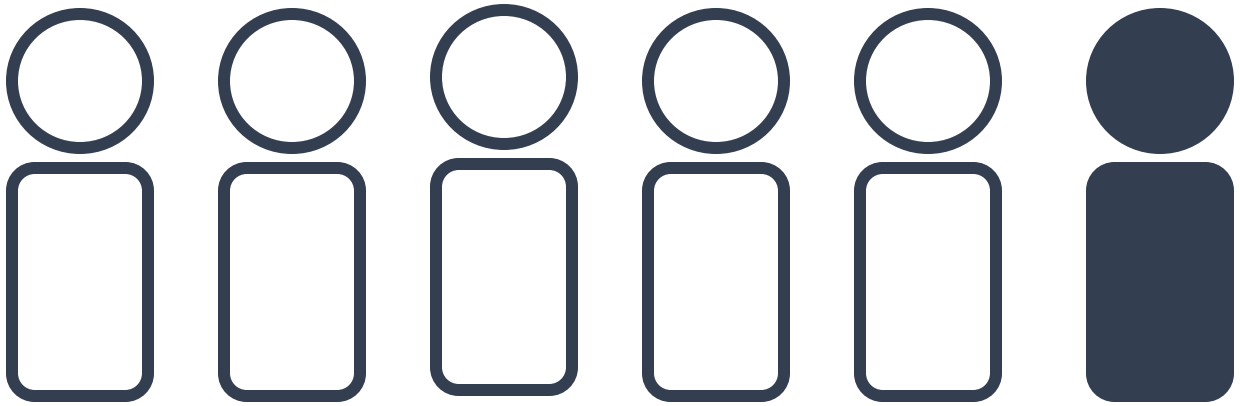






The Important Connection Between Energy Efficiency and IAQ

Holabird Academy (Baltimore, MD) | LEED Platinum certified | Photo © Martice Tucker



1 in 6 Americans

set foot in a school each day

98,000+

existing U.S. K-12 public schools

D+ Grade

ASCE's 2025 Report Card for America's Infrastructure assessed schools with a D+

$270 Billion the estimated annual deferred maintenance for K-12 school buildings

54%

of public school districts need to update or replace multiple building systems in their schools

FEELING WELL

BIOLOGICAL AND PHYSICAL HEALTH

THINKING WELL

SHORT-TERM COGNITIVE AND MENTAL WELL-BEING

PERFORMING WELL

LONG-TERM ACADEMIC SUCCESS AND ACHIEVEMENT

Making the Case: Energy Cost Savings

$8 billion

is spent by U.S. K-12 schools on energy each year, making it the second highest expense behind staff salaries

25%

of energy used in U.S schools is wasted based on estimates from the U.S. EPA, and could be saved through simple retrofits and behavior change

Building improvements that improve IAQ often significantly improve energy performance including envelope sealing, equipment and controls upgrades, and behavior change strategies

Making the Case: Students & Staff Health

14 million

school days per year are missed by U.S. students due to asthma

10%

of 500 teachers surveyed in New York reported negative impacts on their ability to teach due to headaches, drowsiness, eye and throat irritation. A study from the American Federation of Teachers, found that poor building conditions were cited as one reason teachers chose to leave their positions.

Improving indoor air quality has proven impacts to reducing student and staff absenteeism due to asthma, respiratory infections, and staff turnover.

Why a comprehensive, *written* EE IAQ management plan?

Every dollar spent on preventive maintenance yields $4 in savings by avoiding the costs of future repair or replacement of building systems.

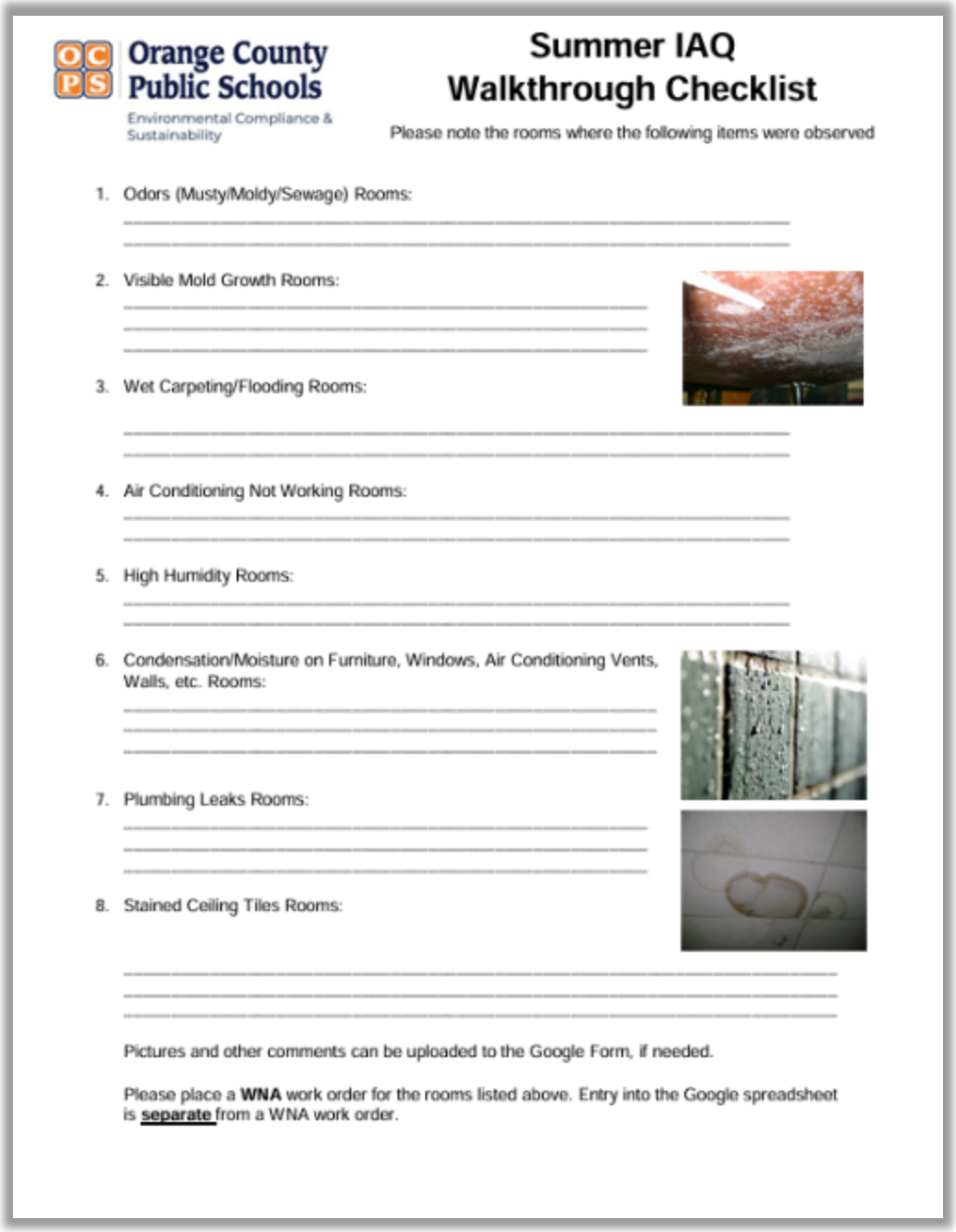
http://www.cgcs.org/cms/lib/DC00001581/Centricity/Domain/87/FacilitiesReport2014.pdf

Orange County Public Schools (FL)

- During the summer months, average relative humidity is 58–91% in Orlando.
- The facilities department has historically been inundated with reports of mold growth after students and staff return for the start of school.

- ECSD implemented a summer inspection program in 2015. School administrative staff are required to complete weekly walkthroughs of their facility throughout the summer vacation period to identify odors, signs of mold growth or moisture problems.
- The administrative staff member is responsible for entering the data into the ECSD's IEQ tracking spreadsheet and submitting work orders, if necessary.

- Orange County's summer inspection program reduced the number of reported IEQ concerns overall and resulted in a **100% reduction** in major adverse IEQ events.



Orange County Public Schools
Environmental Compliance & Sustainability

Summer IAQ Walkthrough Checklist

Please note the rooms where the following items were observed

1. Odors (Musty/Moldy/Sewage) Rooms:
2. Visible Mold Growth Rooms:
3. Wet Carpeting/Flooding Rooms:
4. Air Conditioning Not Working Rooms:
5. High Humidity Rooms:
6. Condensation/Moisture on Furniture, Windows, Air Conditioning Vents, Walls, etc. Rooms:
7. Plumbing Leaks Rooms:
8. Stained Ceiling Tiles Rooms:

Pictures and other comments can be uploaded to the Google Form, if needed.

Please place a **WNA** work order for the rooms listed above. Entry into the Google spreadsheet is **separate** from a WNA work order.

BOSTON Public Schools
Focus on Children

An Indoor Air Quality Monitoring System
for Boston Public Schools

Dear BPS Community:

The Boston Public Schools launched in **January 2022** an **Indoor Air Quality (IAQ) Monitoring System** across the district to measure the schools' indoor air quality, with the goals of improving **IAQ** and thermal comfort, promoting health, and supporting optimal learning and teaching for our students and teachers. **BPS** has installed **over 4,400 IAQ sensors** in classrooms, nurses' offices, and main offices. Furthermore, we have installed **118 rooftop Outdoor Air Quality sensors** across all **121 BPS schools.** These sensors are all linked to a public dashboard which can be found online. The information collected from these sensors helps us identify, review, and respond to indoor air quality and temperature issues in real-time. We are so excited to share information about this tool with you all! The goal of this and future newsletters is to educate the BPS community about this system, explain how we are using the IAQ data, and provide practical information so the entire BPS community can benefit from this tool.

-BPS Sustainability, Energy, and Environment Program

121 Schools

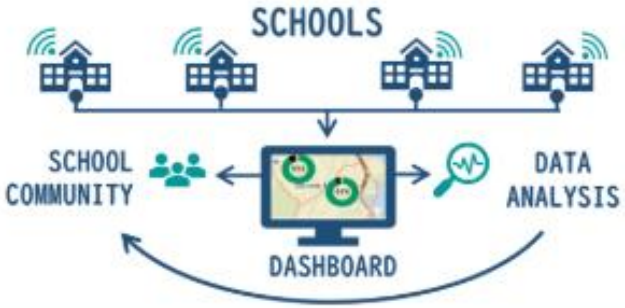
~4,400 IAQ sensors

118 OAQ sensors

1 Data Dashboard

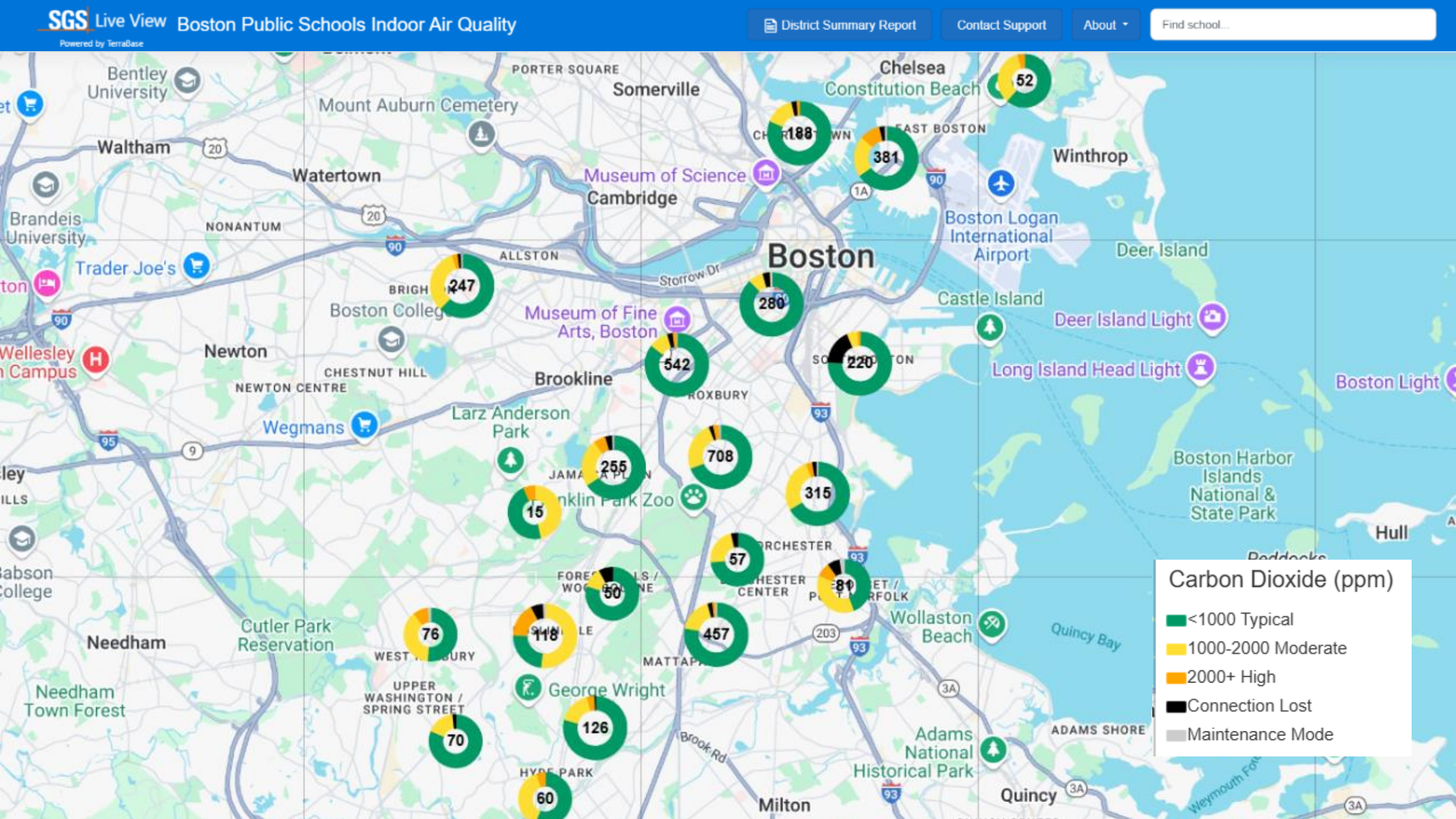
1 What is an Indoor Air Quality Monitoring System?

An Indoor Air Quality Monitoring (**IAQ**) system is a network of sensors that collects information about **air pollutants** and **thermal quality** from individual rooms in a building. BPS has installed sensors in a variety of locations, as well as on the roofs of all schools. The sensors send real-time information to a cloud database, which publishes the data publicly through the BPS IAQ dashboard, which anyone can access.



2 Why is it important to measure IAQ in our schools?

"Good IAQ contributes to a favorable environment for students, performance of teachers and staff, and a sense of comfort, health, and well-being. These elements combine to assist a school in its core mission — educating children." U.S. EPA . Because school-aged children and teachers spend 6-10 hours a day inside schools, having good indoor air quality and a comfortable temperature in our buildings is key to ensuring the health and well-being of our students and educators, and to promoting optimal teaching and learning. (1,2) ***Our goal at BPS is to continuously improve IAQ in our schools, but we can't improve what we don't measure!***


SGS Live View
Powered by TerraBase
Boston Public Schools Indoor Air Quality
District Summary Report
Contact Support
About
Find school...
Bentley University
Mount Auburn Cemetery
PORTER SQUARE
Somerville
Chelsea
Constitution Beach
52
188
381
EAST BOSTON
Winthrop
Waltham
Watertown
Museum of Science
Cambridge
Brandeis University
NONANTUM
Boston Logan International Airport
Deer Island
Trader Joe's
ALLSTON
247
Storrow Dr
Boston
280
Castle Island
Deer Island Light
Museum of Fine Arts, Boston
Boston College
Wellesley Campus
Newton
542
220
Long Island Head Light
Boston Light
CHESTNUT HILL
NEWTON CENTRE
Brookline
ROXBURY
Wegmans
Larz Anderson Park
255
708
315
Boston Harbor Islands National & State Park
Franklin Park Zoo
15
57
Hull
Babson College
50
81
Wollaston Beach
Quincy Bay
Cutler Park Reservation
Needham
76
118
457
George Wright
Needham Town Forest
UPPER WASHINGTON / SPRING STREET
70
126
Brook Rd
Adams National Historical Park
ADAMS SHORE
HYDE PARK
60
Milton
Quincy
Carbon Dioxide (ppm)
<1000 Typical
1000-2000 Moderate
2000+ High
Connection Lost
Maintenance Mode

New toolkit just released!

EPA Grant to Address Indoor Air Pollution at Schools

$34 M awarded October 2024 to five organizations, including the **CENTER FOR GREEN SCHOOLS**

Grantees will assist K-12 schools in low-income, disadvantaged, and Tribal communities in the **development and adoption of comprehensive indoor air quality (IAQ) management plans to address air pollution and energy efficiency** consistent with EPA's recommended best practices.

Photo © Lauren K Davis for Feinknopf Photography
Brancroft Elementary School (Washington, DC)
LEED Gold certified

Center for Green Schools
at the U.S. Green Building Council

OUTPUTS (5 years, Oct 2024 – Oct 2029):

- 5 Regional Program Managers established
- 1,000 district-level staff trained
- 150 fellows
- 25,000 enrolled in virtual trainings
- 400 district-level Energy Efficient IAQ Management Plans
- 10K/ 1M+ views/impressions of public-facing resources & media

Estimated student impact, 2 million

Gretchen Pflueger
Bellingham, WA
West/ Northwest

Lisa Greenfield
Ankeny, IA
Midwest

Medea Villeré
Westfield, NJ
Northeast + Middle Atlantic

Brie Reed
Phoenix, AZ
West/ Southwest

Hilary Roath
Atlanta, GA
Southeast

Last updated: 10/7/24

1st

WELL Certified U.S. School (14 EUI)

1st

WELL Certified University Laboratory Building (145 EUI)

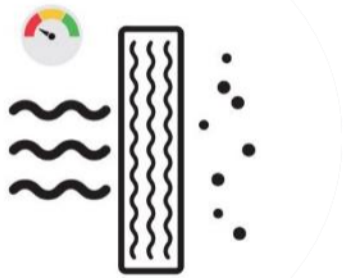
1st

WELL Certified and Zero Energy Building (2020)

HEALTH + WELLNESS EXPERT

High-Performance Buildings

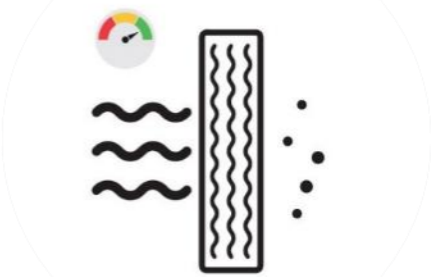
Indoor Air Quality – Design Strategies for Optimal Filtration & Ventilation



MERV 8

Bipolar Ionization

MERV 13



ENVERID

Code Minimum

Air Change Rates

Pandemic Resiliency

Eliminate Infiltration

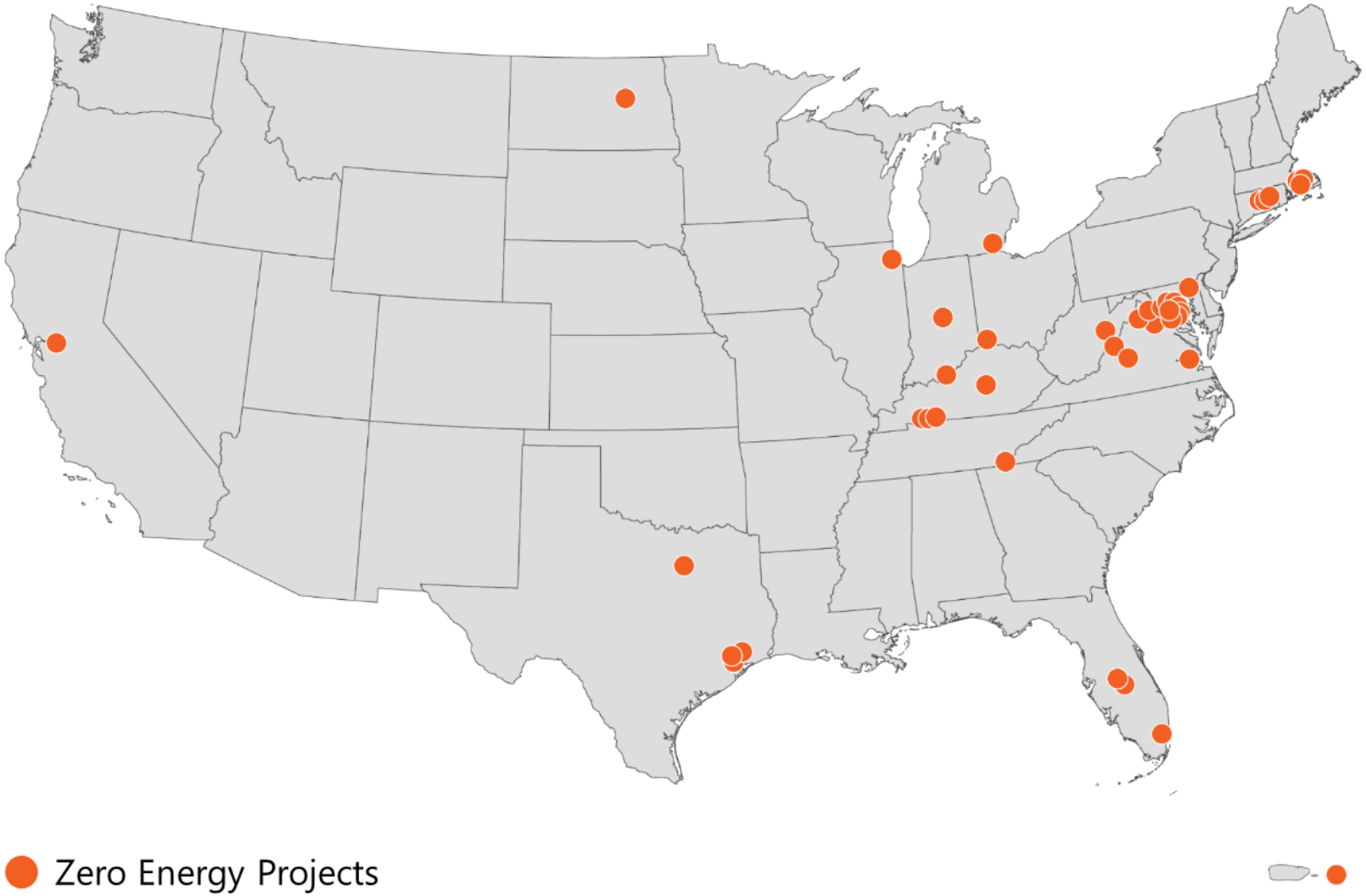
Positive Pressure

1000 ppm CO_2 Max

04

The Path to Zero

Operational Zero Energy K12



56

Projects in Operation

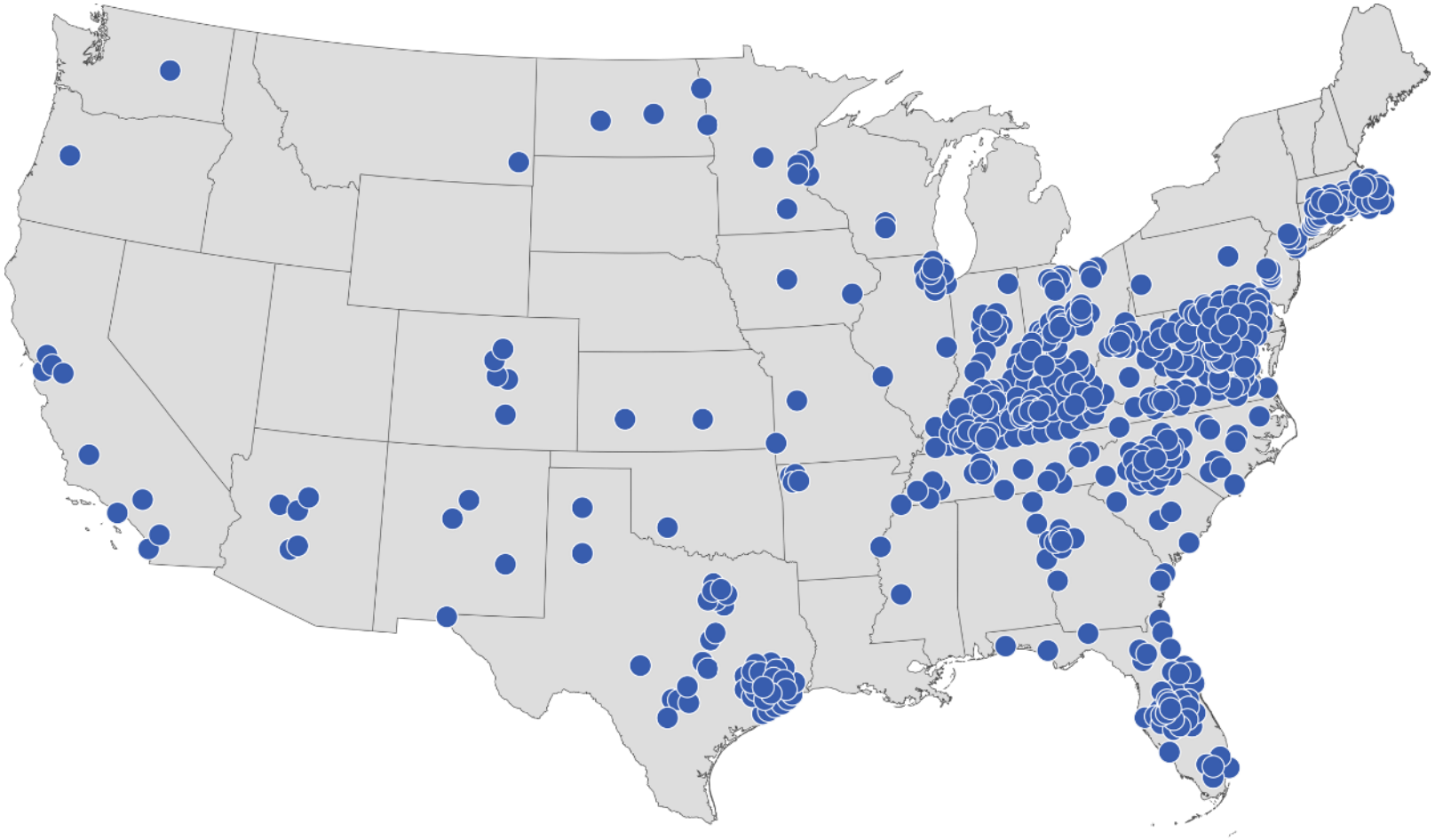
6M

Square Feet

#1

Energy Efficient K12 Firm:
Preschool, Elementary, Middle, High School, Career/Technical Education

Operational Zero Energy Ready Projects



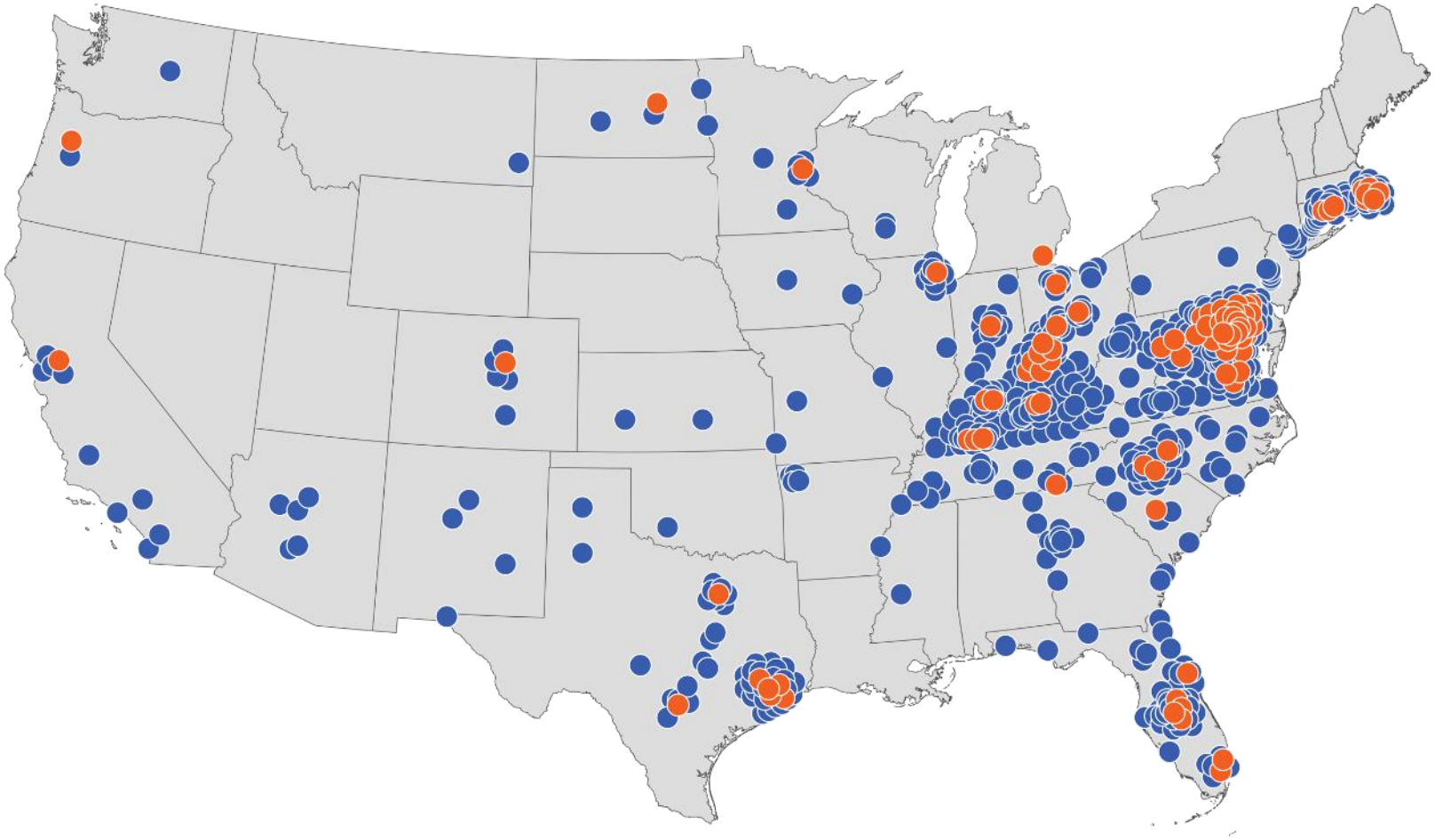
600+
Projects

45M SF
Zero Energy Ready Facilities

< 30 EUI
Operational kBtu/ft^2/year

Zero Energy Projects

Operational Zero Energy & Ready Projects



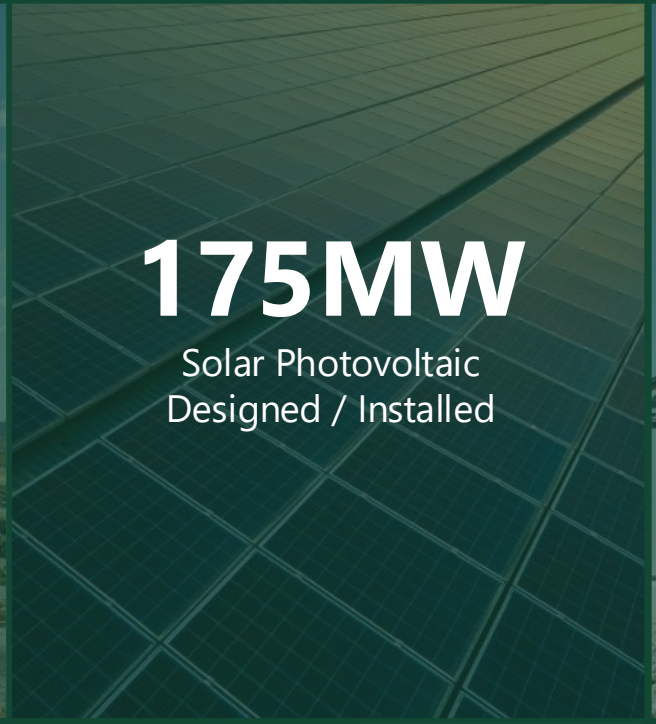
700+
Projects

10M SF
Zero Energy Facilities

45M SF
Operational Zero Energy Ready

Zero Energy Projects

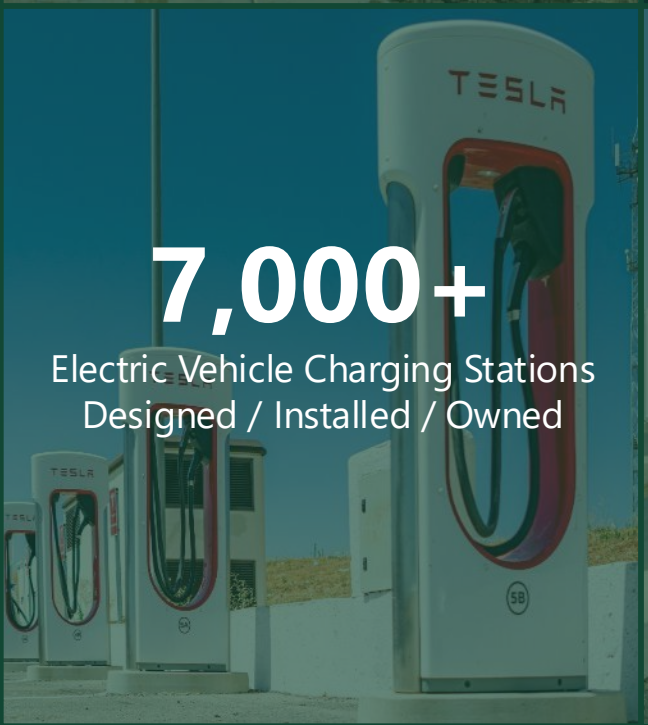
6,750+
Miles of Geothermal Piping
Designed / Installed



175MW
Solar Photovoltaic
Designed / Installed

15,000,000
Gallons of Thermal Energy Storage
Designed / Installed

500MW
Onsite Power Generation
Designed / Installed / Commissioned



7,000+
Electric Vehicle Charging Stations
Designed / Installed / Owned

16MWh
Battery Energy Storage Systems
Designed / Installed / Commissioned

10,000,000
Gallons of Water Harvesting
Designed / Installed

$300M
Project Funding/Grants
Awarded to Clients
($180M Targeted FY24-26)


Let’s Connect.
CMTA
A LEGENCE Company

Energy –Specific Funding Opportunities

Powering Tomorrow:

Energy Project Resource Summit for Schools

Funding and partnership opportunities for improved energy efficiency, indoor air quality, and educational outcomes in schools and other educational facilities.

August 5, 2025

This in-person summit is the nexus between highly efficient educational facilities and improved learning environments.

Participants will **learn ways to effectively finance school and campus energy projects**, reduce overall energy costs and provide an improved learning experience. Participants will learn best practices to support holistic school quality, establish helpful relationships and access technical assistance. Additionally, learn about funding opportunities, and gain access to the latest on energy savings performance contracting and participation in revolving loan funds.

Register Here

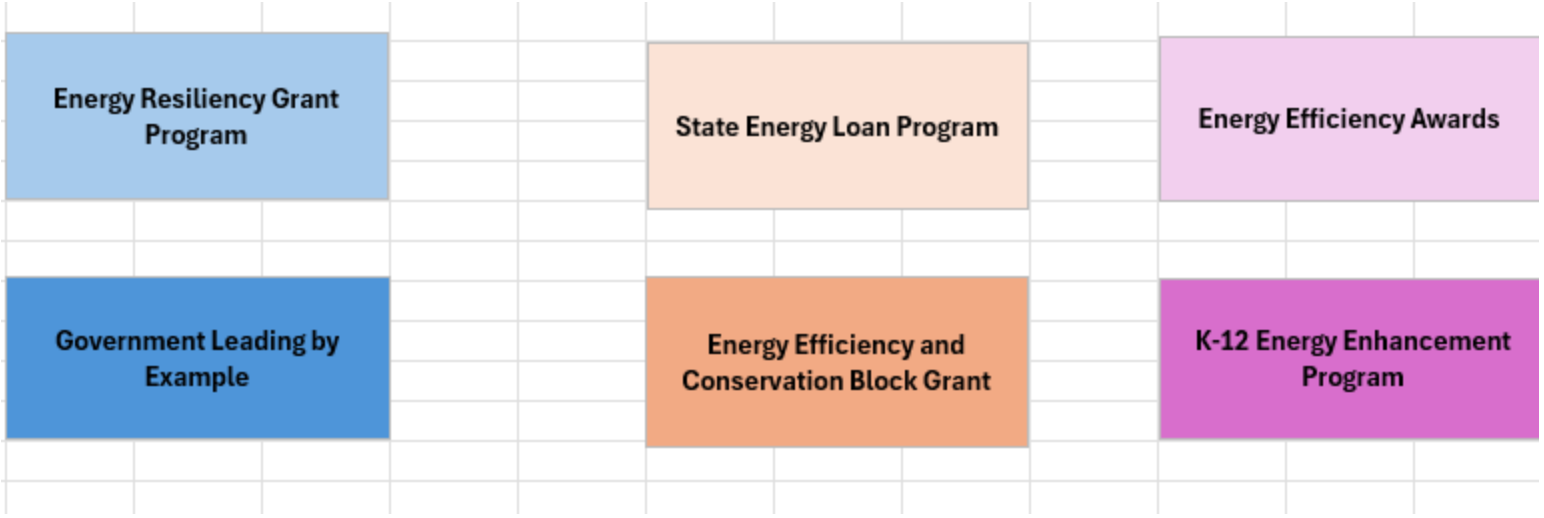
Who should attend?
School district leaders, facility managers, K-12 public school stakeholders, fleet and transportation officials, and higher education representatives with responsibility for budget decisions on energy use, indoor air quality, facilities, transportation, and overall comfort and safety of students and staff.

October 28, 2025 from **8:30am-5pm, CT**
Eddie Manderville Chalet, Theodore Wirth Park
1301 Theodore Wirth Pkwy,
Golden Valley, MN 55422

Registration is required and free. Space is limited.

Resiliency Efforts

- One of OEMRs objectives with its programs is to enhance resiliency efforts throughout the state for both public and private sectors.



Underinvested and Under-resourced School Districts in Rural Areas

- A large portion of rural schools have been deemed to be in poor or fair condition. Facility conditions can include:
  - Buckets hanging in ceilings to collect water from leaking pipes.
  - Students going to school in snowsuits during winter months due to inadequate heating throughout the facility.
- State action has been made to address these under-resourced school districts:
  - Legislation was passed in 2024, (H.521) that provides $2 billion in funds to schools to improve their facilities.
  - Governor Little mentioned in his 2025 State of the State Address that he wants to adding funding to address public schools' needs.

K-12 Energy Enhancement Program Projects

- Approved projects under the K-12 Energy Enhancement Program are estimated to result in the following cumulative savings:

Estimated kWh Saved	Estimated Annual Financial Savings
7,240,848	$112,929

- Replacing outdated equipment in facilities with new equipment or new energy resources
  - Efficiency between modern and dated equipment can vary approximately 30%
  - Some projects result in energy savings ranging approximately 75%
  - Some projects are estimated to save approximately $5,000-$20,000 annually in operating costs

Staffing

District staff dedicated to sustainability and env health can drive change!

Managing Sustainability & Indoor Air Quality in School Districts:

A Profile of Staff in the K-12 Sector

The 2023 report builds on 2015 and 2019 survey data about school sustainability staff to showcase changes in the professional role over time

Answers key questions:

1. Who are school district sustainability and environmental health professionals?
2. What are the primary responsibilities, capabilities, and accomplishments for these two different professional roles?
3. What are the primary challenges facing these professionals?

Survey findings provide a compelling case for the importance of these professional roles and how best to support staff in these roles to be successful.

Sustainability Staff Results: Job Responsibilities

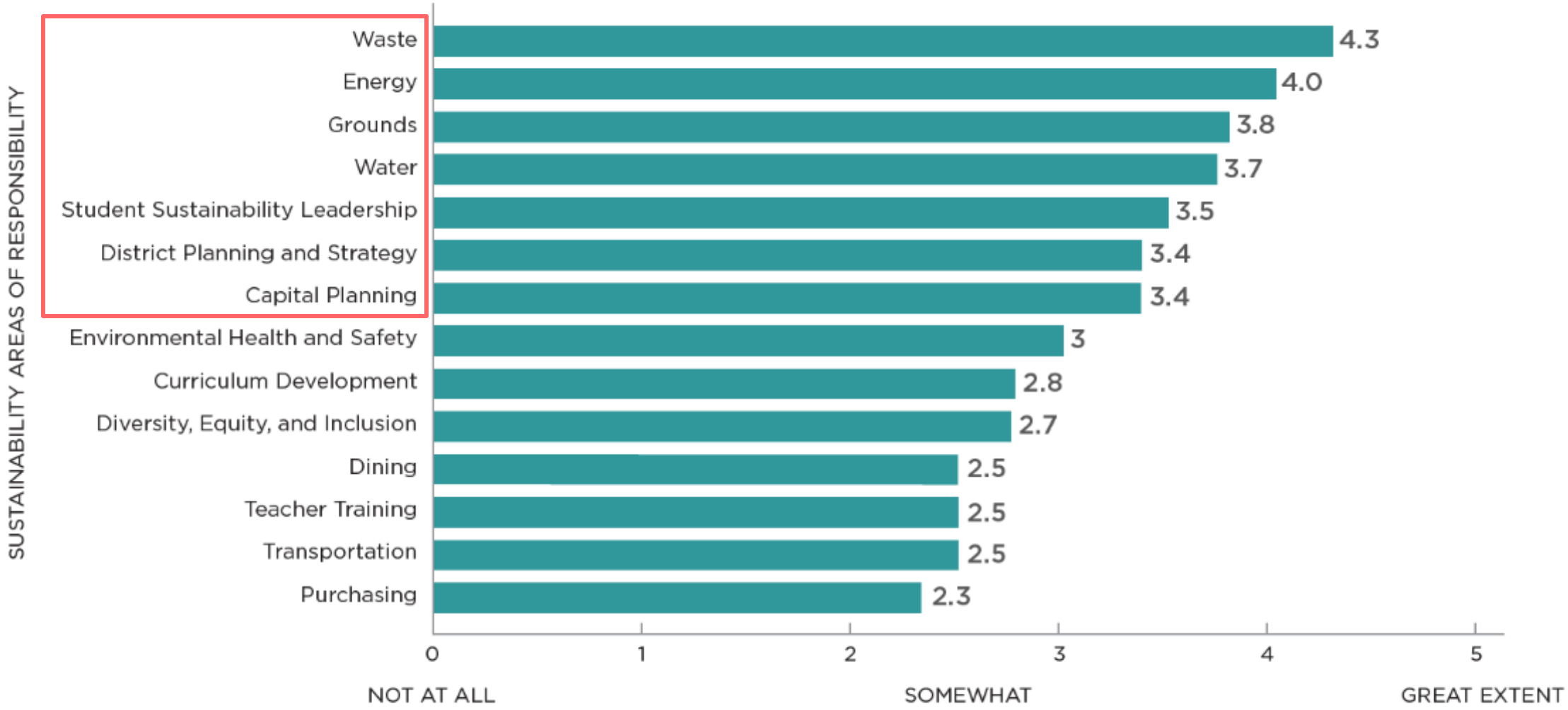


Figure 13. Areas of Responsibility Mean Response (n=59)

On average, sustainability staff achieve annual savings of $1 million, equating to ten times their salary!

Environmental Compliance & Sustainability Timeline

Lincoln Public Schools Sustainability Department Timeline

1998 — Part-time Recycling Coordinator role created

2001 — Recycling Program established district-wide

Jan 2016 — Full-time Sustainability Coordinator role created

Sept 2016 — First Sustainability Intern hired

2019 — Board approves Sustainability Policy

2021 — Assistant Sustainability Coordinator role created

2022 — First School Gardens & Outdoor Learning Intern hired

2007 - Keep America Beautiful Award

2016 Greenbuild - School District Scholarship Cohort

2016 Outreach Booth - First Intern

2023 Team Waste Setup

Lincoln Public Schools SUSTAINABILITY

Professional Development & Peer Networks

The Center for Green Schools convenes professionals working toward sustainability at the system level at schools around the world. Join for free to learn best practices from your peers and from experts.

- **Regional & Local Programming:** Free, convenient, locally relevant training, coaching, and resources to school system staff who want to achieve greener, healthier K - 12 schools. A particular emphasis on indoor air quality management that also prioritize energy efficiency (Energy Efficient Indoor Air Quality).

- **National Sustainability Leaders Network:** Provide a special peer group for K-12 staff that spend 50% + of their time on sustainability topics, such as resource use, waste, and green building.

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USGBC


ECOLOGICAL CONSERVATION & RESTORATION
QUALITY OF LIFE
DECARBONIZATION
IMPACT
AREAS

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