



*National Association of  
State Energy Officials*

# Empowering Local Education Agencies: The Role of State and Territory Energy Offices in School Energy Upgrades

Welcome! We'll begin shortly.

November 4, 2024



# Agenda

## **Empowering Local Education Agencies:** The Role of State and Territory Energy Offices in School Energy Upgrades

*3:00 – 4:00 p.m. EST*

- Welcome and Introductions
- Overview of NASEO Report: [\*Energy Efficient and Healthy K-12 Public School Facilities: Opportunities for State Energy Offices and State Education Agencies to Collaborate\*](#)
- Additional NASEO and Partner Resources
- Roundtable discussion and Q&A
- Next steps and adjourn

# About NASEO

- The only national non-profit association for the governor-designated energy officials from each of the 56 states and territories
- Serves as a resource for and about the State Energy Offices through topical committees, regional dialogues, and informational events that facilitate peer learning, best practice sharing, and consensus building
- Advances the interests of the State and Territory Energy Offices before Congress and the Administration
- Learn more at [www.naseo.org](http://www.naseo.org)

## NASEO Board of Directors

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# NASEO Programs and Priorities



Buildings



Electricity



Climate



Financing



Workforce



Resilience



Equity



Planning



Innovation



Transportation



Solar



Policy



Security

# Energy Efficiency in Schools

NASEO aims to bring State Energy Offices together with education stakeholders to:

- Identify shared priorities and strengthen relationships to enable energy improvements for and modernization of school facilities.
- Leverage public-private partnerships and federal funding for energy efficiency and indoor air quality improvements to under resourced school districts.
- Explore best practices and examples around data management, policy, and long-term capital planning between State Energy Offices and school districts and practitioners.



**Energy Efficient and  
Healthy K-12 Public  
School Facilities:**  
**Opportunities for State  
Energy Offices and  
State Education  
Agencies to  
Collaborate**

*This material is based upon work supported by the U.S. Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy under the Building Technologies Office, Award Number DE-EE0009458.*



**Energy Efficient and Healthy  
K-12 Public School Facilities:**

**Opportunities for State Energy Offices and  
State Education Agencies to Collaborate**

**2024**



## K-12 Public School Facilities Infrastructure Overview - FY2020 (in round numbers)

- 56 million student and staff occupants
- 8.1 billion square feet of facilities
- 100,000 schools
- 19,238 Local Education Agencies (regular school districts and charter LEAs)

# Why schools?

### Energy Use and Scale:

- The K-12 education sector ranks as **third largest in total floor space** among all U.S. commercial building sectors.
- The K-12 education sector ranks as **the second largest consumer of electricity** and **the largest consumer of natural gas** among commercial buildings.
- School facilities represent **the second largest sector** in public infrastructure spending.

### Facility Quality and Conditions

- School facilities earned a **D+** on the 2021 Report Card for America's infrastructure.
- A 2020 report found that **36%** of the nation's public schools needed HVAC system replacements or upgrades.
- **4/10** schools do not have a long-term facility plan.
- The average school building is **50 years old**.

# State Energy Offices and State Education Agencies

- The [56 State and Territory Energy Offices](#) advance practical energy policies, informing regulatory processes, and supporting energy technology research, demonstration, and deployment. State Energy Offices' work is generally under the direction of the governors or legislatures, and is funded by both state and federal appropriations, such as the U.S. State Energy Program (SEP). State Energy Directors and their offices are deeply involved in energy efficiency and renewable energy programs and allocate or oversee efficiency funds derived from ratepayers and state appropriations each year.
- The [56 State and Territory Education Agencies](#) are the state boards of education or other agency or officer primarily responsible for the State supervision of public elementary schools and secondary schools, as designated by the governor or state law.

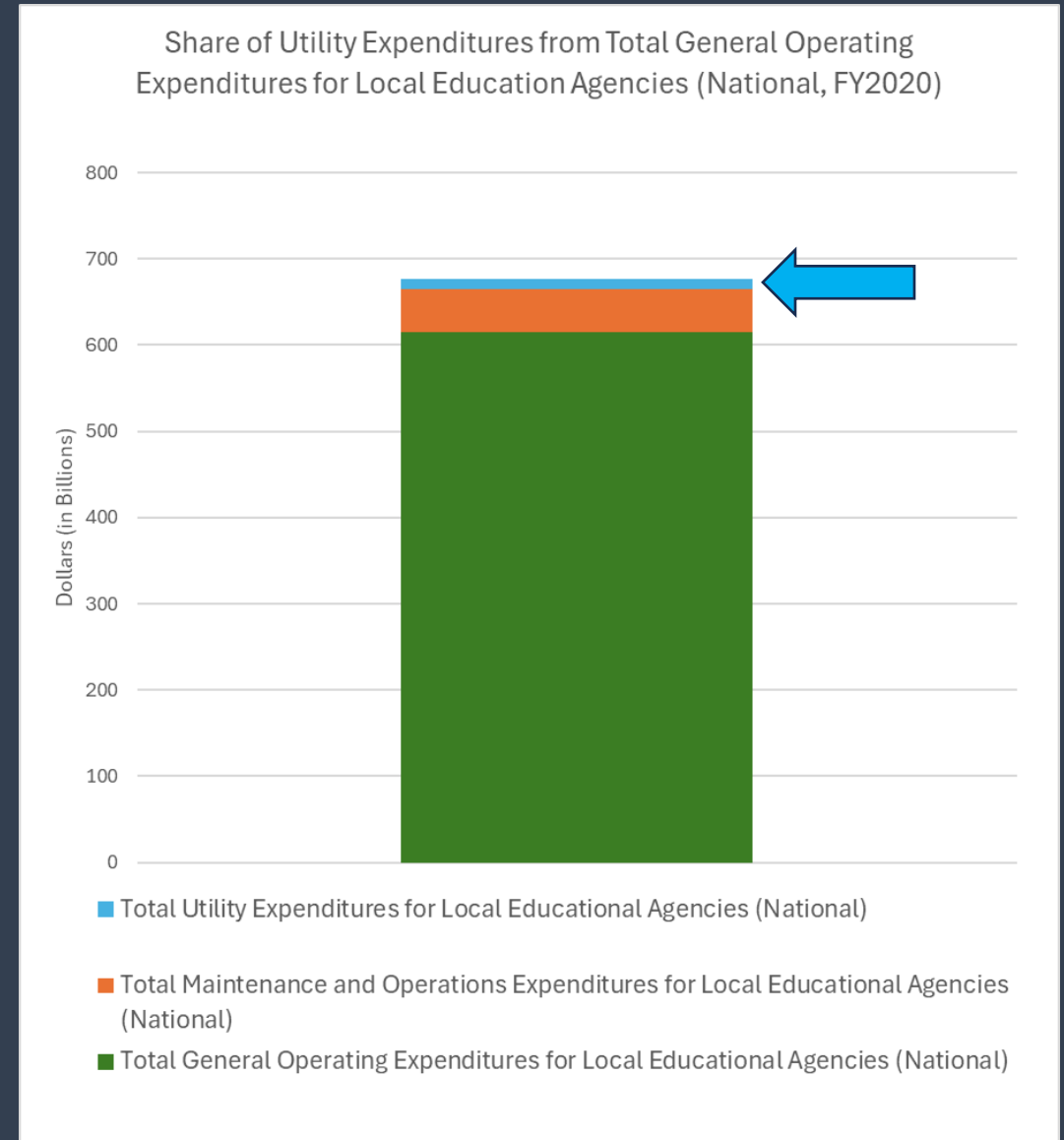


# School Maintenance and Operations

Total general operating expenditures across the nation's local educational agencies in FY2020: \$677 Billion.

Total utility expenditures in FY2020 were just under 2% of total general operating expenditures for local educational agencies nationwide, or \$11 billion per year.

*Source: The U.S. Census Bureau and the National Center for Education Statistics, Common Core of Data School District Finance Survey (FY2020)*



A nighttime photograph of the Texas State Capitol building, illuminated by warm lights. The building's iconic dome is the central focus, with an American flag flying from a tall pole in front of it. The scene is framed by dark silhouettes of trees and streetlights in the foreground, creating a dramatic and atmospheric setting. The text is overlaid in the center of the image.

Recommendations for  
Building State – Level K-12  
Facilities Capacity

# Recommended Actions for State Energy Offices and State Education Agencies

1. **Elevate Facility Energy Issues** – Elevate K-12 public school facilities in state governance and decision-making on education, health, energy, and the environment.
2. **Access to Data** – On the state-level, develop school facilities energy-related data and information systems to support energy management.
3. **Planning Assistance** – Develop cross agency state-level coordinated plans to support public school districts as they modernize their school facilities and efficiently use energy.
4. **Supplemental Funding** – Leverage state and federal funds, along with private-sector financing, to address facility improvement needs.
5. **Management Support** – Support school district leaders and facility managers with technical assistance and training.
6. **Accountability** – Conduct facilities evaluations and establish state systems for facilities accountability.



Governance &  
Decision Making



Data &  
Information



Planning



Funding

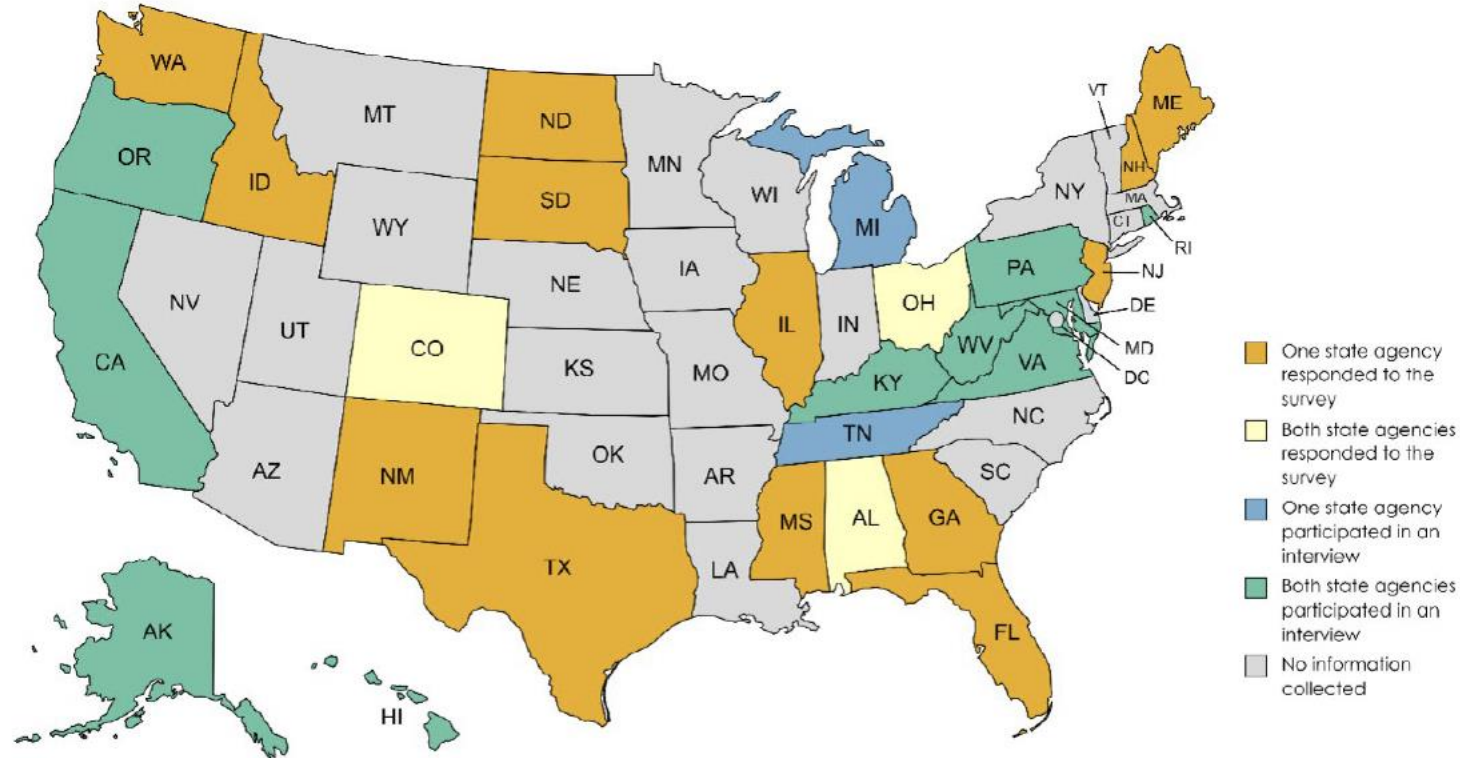


Management



Accountability

# How the recommendations were developed



*Figure 4. Summary of surveys and interviews conducted between 2022 and 2023 with representatives from State Education Agencies and/or State Energy Offices to inform this report.*



Governance &  
Decision Making

# 1. Elevate Facility Energy Issues –

Elevate K-12 public school facilities in state governance and decision-making on education, health, energy, and the environment.

**Goal:** Create support resources for district school facility managers and other decision makers.

**Actions:**

- Identify the groups that have decision making authority and share information between agencies.
- Identify relevant policies that impact decision making.
- Set up state task forces.
- Create interagency collaborations.
- Educate stakeholders on benefits of energy efficiency in schools.



Data &  
Information

## 2. Access to Data –

On the state-level, develop school facilities energy-related data and information systems to support energy management.

**Need:** Standardized data and information systems for school facility energy management.

**Strategies:**

- Standardize data collection.
- Establish data sharing agreements and communicate guidelines
- Use tools like ENERGY STAR Portfolio Manager for benchmarking.
- Budget for data collection



Planning

### 3. Planning Assistance –

Develop cross agency state-level coordinated plans to support public school districts as they modernize their school facilities and efficiently use energy.

**Goal:** Align school facilities with energy efficiency and resilience goals.

**Recommendations:**

- Propose specific language to plan to advance healthy, safe, energy efficient, and equitable school facilities.
- Involve diverse stakeholders in planning, and provide opportunities for exchange during plan development.
- Support long-term planning to keep facilities aligned with state energy and climate goals.



Funding

## 4. Supplemental Funding –

Leverage state and federal funds, along with private-sector financing, to address facility improvement needs.

**Solution:** Utilize state, federal, and private funds.

### **Mechanisms:**

- Leverage tax credits (e.g., 48E, 45W, 179D).
- Implement public private partnerships such as Energy Savings Performance Contracts (ESPC) to cover costs through savings.
- Increase funding to assist low-wealth districts.





Management

## 5. Management Support –

Support school district leaders and facility managers with technical assistance and training.

**Support Needed:** Training and technical support for facility managers.

### **Technical assistance and training**

- Shared energy management initiatives.
- Energy efficiency and maintenance training for school staff.
- Procurement support and templates
- Recognition and awards
- Pre-qualification of vendors



Accountability

## 6. Evaluations and Accountability –

Conduct facilities evaluations and establish state systems for facilities accountability.

- Provide facility assessment tools
- Adopt industry standards for new construction and renovations.
- Use benchmarking tools and facility assessments to evaluate energy efficiency and indoor air quality.
- Use existing building standards and design guidance (e.g. ASHRAE Standard 90.1, ASHRAE Standard 100)
- Encourage participation in programs like the Green Ribbon Schools Awards.

# Federal Opportunities

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# Federal Funding Opportunities

Program Name	Enabling Legislation	State Agency Role	Eligible Uses
<b>Elementary and Secondary School Emergency Relief Program (ESSER)</b>	Coronavirus Aid Relief, and Economic Security Act, Coronavirus Response and Relief Supplemental Appropriations Act, and American Rescue Plan (ARP) Act	Three tranches of ESSER funding, totaling \$176 billion, were awarded as emergency relief grants to State Educational Agencies for the purpose of providing local educational agencies with funds to address the impacts of COVID-19 on learning and student and staff safety.	Facilities improvements, including testing, inspection, maintenance, or upgrade projects to improve indoor air quality are eligible uses of ESSER funds. <sup>28</sup>
<b>Renew America's Schools Grant</b>	Infrastructure Investment and Jobs Act (IIJA), Section 40541	The Renew America's Schools program offers \$500 million over five years in federal grant funding through the U.S. DOE, encouraging partnered applications between local educational agencies and nonprofit, community, or state partners.	Energy efficiency, indoor air quality, renewable energy, and alternative fuel vehicle projects for local education agencies. Efficiency projects may include insulation, windows, doors, and other measures to address the envelope of a building.
<b>Clean Energy Tax Provisions for Public Buildings</b>	Inflation Reduction Act Sections 13102, 13303, and 13403	The IRA expands or establishes tax incentives for the decarbonization and increased efficiency of buildings in the public sector, including tax-exempt organizations like school districts. State Energy Offices have a large role administering and maximizing the use of IRA funds and can offer technical assistance on using federal funds to leverage state, local, and private funds, such as financing through ESPC, state green banks, and revolving loan funds (RLF).	Broaden access to financing and funding for capital improvement projects across K-12 schools through direct-pay clean energy and energy efficiency tax credits. This funding can be stacked with federal and state grants and low-interest loans from state green banks and newly capitalized revolving loan funds.
<b>Supporting American School Infrastructure Grants</b>	Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Bill, 2023, H.R. 117-403	This program awarded \$37 million on a competitive basis to eight State Education Agencies through the U.S. Department of Education, to increase the capacity of states to support high-need LEAs in leveraging federal, state, and local resources to improve facility quality.	Help State Education Agencies build capacity to assist their high-need and low-wealth school districts with their facilities, primarily through technical assistance and training. <sup>29</sup>



An official website of the United States government [Here's how you know](#) ▾

🔍 **EPA** MENU

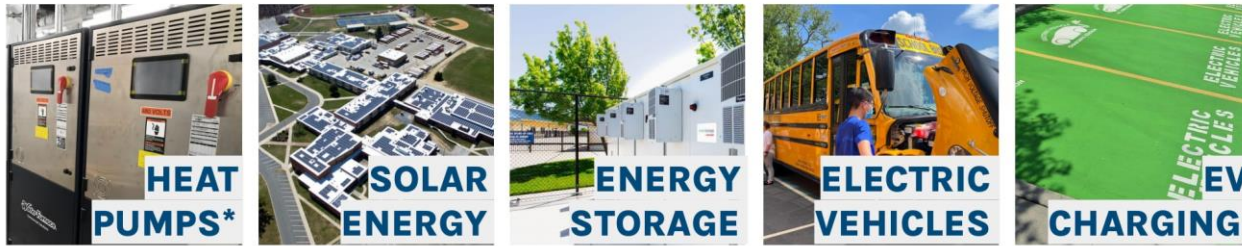
☰ | **Indoor Air Quality in Schools**

## Grant Funding to Address Indoor Air Pollution at Schools

On this page:

- [Overview of Grant Program](#)
- [Background](#)
- [Grant Recipients](#)
- [Important Dates](#)
- [Grant Documents](#)

These non-competitive, unlimited tax credits are available today to all schools



Sec 48:  
Investment  
Tax Credit

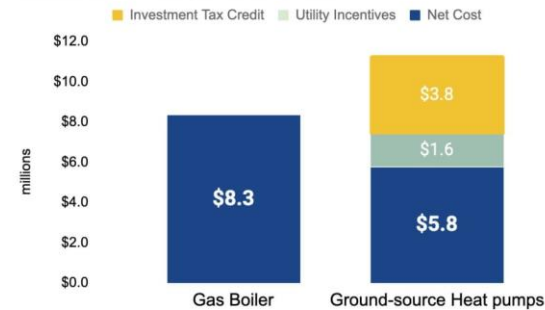
Sec 45W:  
Commercial  
Clean Vehicle  
Tax Credit

Sec 30C:  
Alternative  
Fuel Refueling  
Property

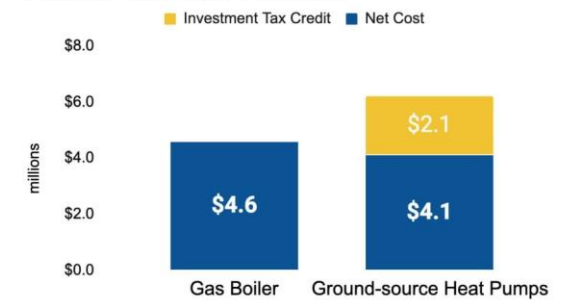
\*Just ground-source heat pumps, not air-source

Tax credits can make clean energy the most affordable option

Massachusetts - New School Construction



Wisconsin - New School Construction



Notes: See [Amherst Fort River case study](#), a new construction project in Massachusetts.

Presentation by Sara Ross, UnDauntedK12 (August 13, 2024) – Inflation Reduction Act & Schools: New Federal Funding for Healthy, Sustainable, Cost-Effective Schools

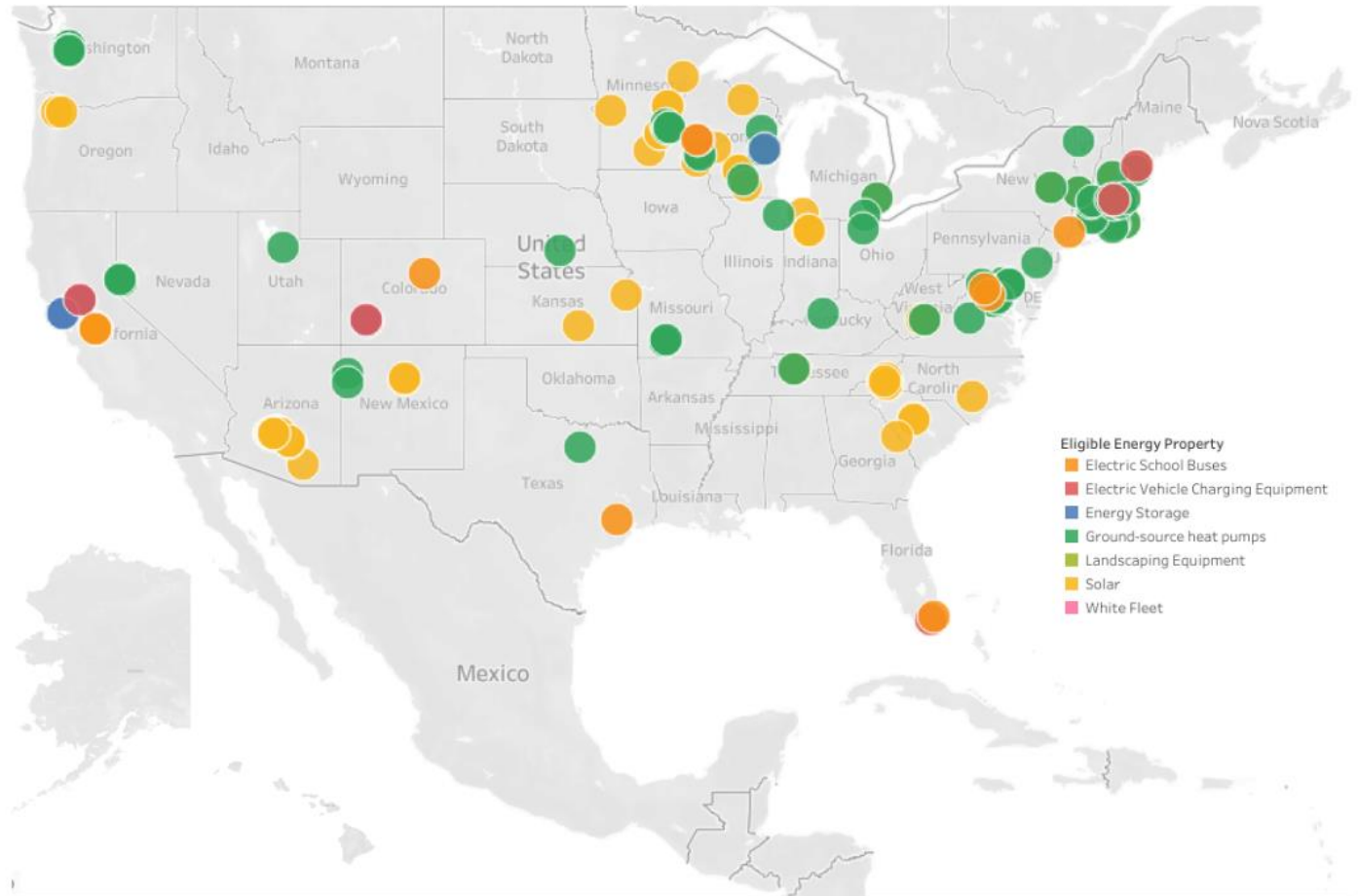
# UnDauntedK12: IRA Tax Credit Project Map

[Map: School Investments in Clean Energy with the Inflation Reduction Act](#)

**Upcoming Deadline:**  
November 15, 2024 – for calendar year 2023 filers to claim elective pay for clean energy projects.

- Pre-file now ([IRS guidance](#))

## SCHOOL INVESTMENTS IN CLEAN ENERGY WITH THE INFLATION REDUCTION ACT



LEARN MORE ABOUT THESE PROJECTS AT [UNDAUNTEDK12.ORG/IRAPROJECTS](https://undauntedk12.org/iraprojects)

**UNDAUNTEDK12**

# UnDauntedK12: State Factsheets

- [Arizona Fact Sheet](#)
- [California Fact Sheet](#)
- [Michigan Fact Sheet](#)
- [Minnesota Fact Sheet](#)
- [Pennsylvania Fact Sheet](#)
- [Wisconsin Fact Sheet](#)



## Arizona School Districts Leading on the Inflation Reduction Act

Thanks to the Inflation Reduction Act, clean energy is increasingly irresistible. And with clean energy comes the opportunity for Arizona schools to be healthier, more resilient, and more efficient to operate.



The Inflation Reduction Act offers school districts substantial reimbursements for these clean energy technologies:



Here are some of the Arizona districts that are taking advantage of these new non-competitive, uncapped federal funds.

### Alhambra Elementary School District

After a district-wide survey demonstrated overwhelming community support for solar on schools, Alhambra Elementary School District board members [approved plans](#) to install solar panels at 12 schools throughout the district in 2023. The projects are expected to generate nearly [\\$3.4 million in federal reimbursements](#) upon completion. As many [Arizona schools grapple](#) with keeping students safe during increasingly frequent and severe heat waves, these solar arrays will provide shaded spaces to reduce surface temperatures and [protect students from the heat](#) during recess and sports.

### Creighton Elementary School District

In 2023, the [Creighton Elementary School District](#) began installing solar panels across eight schools, including the [new Larry C. Kennedy School](#). The school opened in 2024 and integrates sustainability into both its building design and curriculum. Solar canopies and other shade structures will reduce surface temperatures outside, providing a comfortable outdoor learning environment for students on days when indoor classroom temperatures are high. Creighton Elementary School District expects over \$3 million as a federal reimbursement for the solar projects installed throughout the district.



### Litchfield Elementary School District

In 2024, the Litchfield Elementary School District Governing Board [decided to install solar panels](#) across 14 schools and one district building as part of a broad facilities upgrade plan. The district will leverage an [Energy Savings Performance Contract](#) to lower upfront costs. When completed, the projects are expected to generate approximately [\\$3.7 million in federal reimbursements](#), and significant annual savings on the district's electric bills.

### Tolleson Union High School District

In 2024, Tolleson Union High School District board members [approved plans](#) to install solar panels on a warehouse and add more panels to six schools already equipped with solar. The district initially planned to add solar only to the warehouse, but with the new federal reimbursement opportunities, the project was substantially expanded. Once complete, the solar panels are [expected to generate nearly \\$3 million](#) as a federal reimbursement, and over \$36 million in savings over 40 years.

### Elective Pay

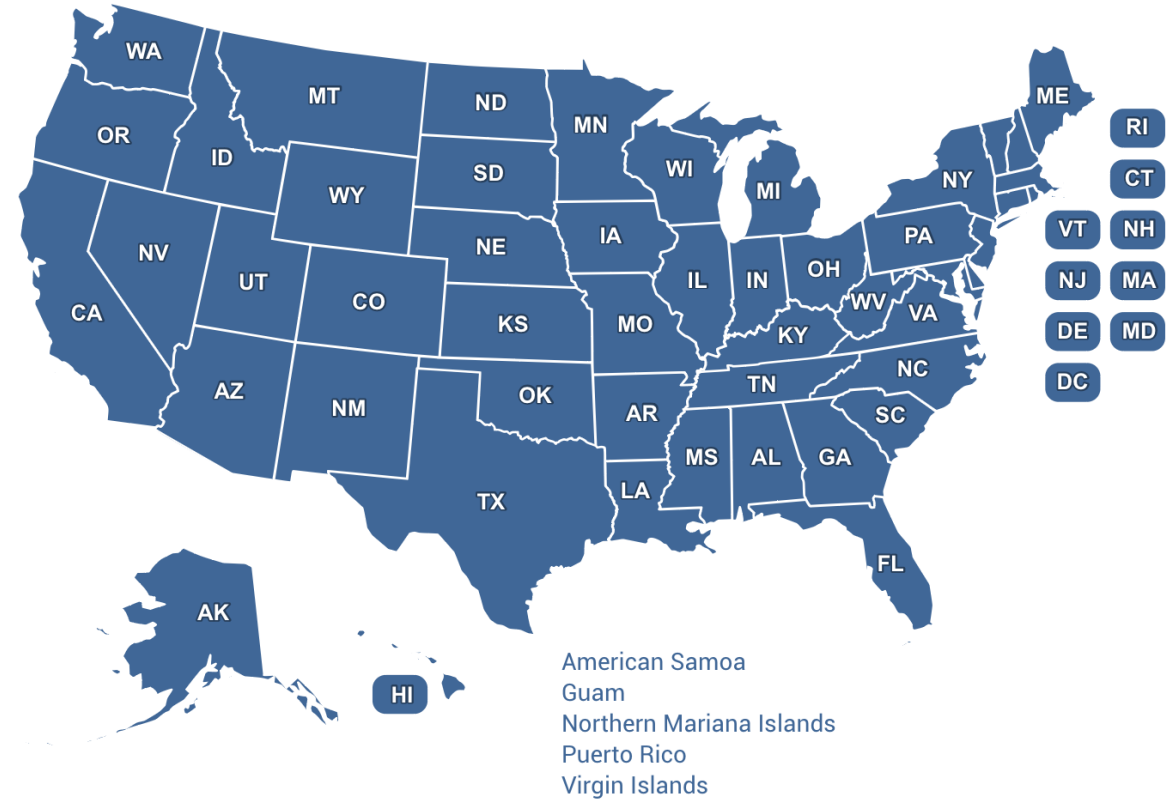
These projects are expected to receive funding through the federal Inflation Reduction Act's new Elective Pay provision. This new law converts tax credits for clean energy technologies into [cash reimbursement for school districts](#) and other public sector and nonprofit entities.

### Get Involved

Learn more about clean energy projects in schools nationwide [here](#). Know about a clean energy project at a Arizona school? [Tell us about it!](#) Learn more about IRA opportunities for schools on our [online resource hub](#).

# NASEO Resources

- [NASEO State Energy Program Map](#)
- [NASEO Kentucky Shared Energy Managers Case study](#)
- [NASEO Shared Energy Manager Program-in-a-Box](#)
- [NASEO Energy Savings Performance Contracting and Related Models](#)



# Partners and Resources

- [Efficient and Healthy Schools Program](#)
- [Energy CLASS 2024 - 2025](#)
- [DOE ESPC Campaign](#)
- [U.S. Department of Education Green Ribbon Schools Campaign](#)
- [ENERGY STAR for K-12 Schools](#)
- [Collaborative for High Performance Schools](#)
- [U.S. Green Building Council Center for Green Schools](#)



# Roundtable Discussion

**Overarching question:** How can State Energy Offices, State Education agencies, and other key stakeholders work together to support modern, energy efficient, and healthy school buildings for under-resourced K-12 school districts?

- **Public-private partnerships**

- What can state agencies do to support school districts with managing the complexities capital projects and long-term facilities planning?
- What are the best practices and pitfalls for implementing energy savings performance contracting programs and other programs that involve third-party entities?

- **Decision-maker buy-in**

- What strategies can be implemented to shift attitudes towards facilities investments among decision-makers in K-12 public schools?

# Roundtable Discussion

- **Stretching federal investment opportunities**
  - What can states do to help minimize barriers for school districts to accessing federal funding?
- **Up-skilling facility managers on building energy management and clean energy systems**
  - What specific barriers might facility managers face in having the technical expertise or resources to manage and operate advanced building energy systems?
  - Are there partners/stakeholders that could help bridge the gap?
- **Standards and accountability**
  - What accountability systems might be effective to ensure sustained interest and prioritization of energy management?

# Thank you!

## NASEO Contacts

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# Appendix

# 1. Elevate Facility Energy Issues –

Elevate K-12 public school facilities in state governance and decision-making on education, health, energy, and the environment.



Governance & Decision Making

To include K-12 public school facility representatives in state governance and decision-making, State Education Agencies and State Energy Offices can work collaboratively to:

- A.1** Identify which state level agencies, government task forces, commissions, and public authorities have the authority to affect the planning, siting, design, construction, operations, maintenance, or financing of public school facilities.
- A.2** Identify state education policies that affect school facilities planning, siting, design, construction, operations, maintenance, or financing and share them with State Energy Offices and their facilities staff.
- A.3** Identify state energy and/or environmental policies that affect public school facilities planning, siting, design, construction, operations, maintenance, or financing, and share them with State Education Agencies and their facilities staff.
- A.4** Create a state task force or committee to identify the strengths and shortcomings of the state policy and program environment for efficient and healthy K-12 facilities, including state and local education representatives; health, environmental, and energy officials; and civic, industry, and labor stakeholders with interests in education, the environment, social justice, and health.
- A.5** Hold regular meetings among state agency representatives with responsibilities for and decision-making power over K-12 public school facilities.
- A.6** Create interagency memoranda of understanding or joint powers agreements to institutionalize the agency collaborations.
- A.7** Collaborate to create an informational campaign to educate local school board members, school facility managers, and administrators on the benefits of energy efficiency, energy education, climate mitigation, and climate resilience measures and their relationship to healthy and educationally appropriate school facilities.
- A.8** Help educators make use of resources from State Energy Offices, DOE, and EPA on using the building and grounds as educational tools in their curricula.

**Kentucky School Energy Managers Project Case Study**

December 2018

**Background**

In 2008, the Kentucky General Assembly passed legislation (KRS 160.325) which mandates that boards of education adopt energy management policies.<sup>2</sup> In response to this legislation, the Kentucky School Board Association (KSBA) partnered with the Kentucky Department for Energy Development and Independence (DEDI) to create the School Energy Managers Project (SEMP) with \$5 million in funding provided by the U.S. State Energy Program (SEP) funds from Kentucky.<sup>3</sup> SEMP was launched in the 2010-2011 school year with 49 energy managers serving a total of 144 of the 173 school districts.<sup>4</sup>

Bullitt County Public Schools reported that in the 2013-2014 school year, the cost of the school district's energy management plan was approximately \$78,000 for the salary and budget for the energy manager. In the same year, the district avoided energy costs of approximately \$90,000. Taking into account that the district budgeted \$60,000 for repayment of an energy service performance contract, the net savings from the SEMP program in Bullitt County Schools was approximately \$218,000.<sup>5</sup>

These energy managers partnered with local boards of education to adopt energy policies and formed 121 district energy advisory teams to help implement energy management plans. Each energy manager worked with two to seven districts, depending on their size.<sup>6</sup> SEMP funding covered 75% of the energy managers' first-year salary and benefits, and 50% of the second-year costs.<sup>7</sup>

The SEMP funds expired in April 2012. Recognizing that energy efficiency is also valued by energy providers, SEMP administrators then turned to that sector and in 2013 were successful in facilitating a first-of-its-kind partnership with Louisville Gas & Electric and Kentucky Utilities Company to provide funding for local energy managers. Beginning in July 2014, a similar program was initiated for schools in the Kentucky Power Company service territory. These partnerships continued through June 2018.

The partnerships established between KSBA-SEMP and utility companies provided a means for SEMP to maintain a major presence within 97 of 173 school districts in Kentucky and provide funding for 59 local school energy managers to provide direct services to schools in the utilities' service territory. In addition to the funding for the 97 districts, SEMP provided professional development, technical support, reporting, and recognition for all 173 school districts' energy efficiency successes. The statewide focus on best practices in energy efficiency and waste reduction enabled schools to capture and transfer significant monetary savings into the classroom, which produced an estimated \$225 million in cumulative avoided costs.

**Strategies for Savings**

The SEMP program utilized a uniform structure for all energy management projects while allowing energy managers to apply different types of energy management strategies to meet the needs of each individual district. School energy managers used the ENERGY

<sup>1</sup> Bullitt County Public Schools, Energy Management Program, 2013/2014 Year End Report. <https://www.bullitt.k12.ky.us/wordpress/wp-content/uploads/2014/03/2013-2014-EM-Report-14.pdf> Accessed August 28, 2018.

<sup>2</sup> KRS 160.325. <http://www.ky.gov/energy/energy-efficiency/energy-efficiency-legislation> Accessed August 28, 2018.

<sup>3</sup> Winkler, David. Kentucky Schools a National Leader in Energy Efficiency. October 3, 2017. <https://www.kentucky.com/story/news/education/2017/10/03/kentucky-schools-energy-efficiency/> Accessed August 8, 2018.

<sup>4</sup> Kentucky Department for Energy Development and Independence, 2017 Annual Summary, 2017, pg. 18.

<sup>5</sup> 173 districts had four or more buildings, with another 73 had between five and eight buildings. Roofgate, Nancy. Lights out: Students learn valuable lesson about saving energy. Kentucky Teacher, February 10, 2012. <http://www.kentuckyteacher.com/2012/02/10/lights-out-students-learn-valuable-lesson-about-saving-energy/> Accessed August 27, 2018.

<sup>6</sup> U.S. Department of Energy, Kentucky Launches State-Wide School Energy Manager Program, August 17, 2010. <https://www.energy.gov/sites/default/files/2010/08/17/DOE-Kentucky-School-Energy-Managers-Program> Accessed August 8, 2018.

<sup>7</sup> EPA, United States Environmental Protection Agency



## Data & Information

# 2. Access to Data –

On the state-level, develop school facilities energy-related data and information systems to support energy management.

To develop state school facilities data and information systems that include energy use data, State Education Agencies and State Energy Offices can work collaboratively to:

**B.1** Identify which state agencies have data on public school facilities, what data is collected, the data definitions used in the collection, and schedule and quality control protocols for data collection. States can also coordinate data requests to reduce the reporting burden on local education agencies.

**B.2** Assign standardized state level data identifiers to use to track K-12 public school facilities data.

**B.3** Use the following common references to evaluate state level facilities data management and align with emerging national data definitions:

- National Center for Education Statistics;<sup>38</sup>
- Common Education Data Standards;<sup>39</sup> and
- ENERGY STAR Guidance for Energy Management in K-12 Schools.<sup>40</sup>

**B.4** Review the strategy for K-12 educational facilities data management at the state level and develop a plan to make certain facilities data publicly available for increased building performance transparency and accountability.

**B.5** Enter into data sharing agreements between State Education Agencies and State Energy Offices on standardizing metric definitions, sharing data sets, and collecting new data.

**B.6** Direct information technology staff to recommend a plan for sharing and analyzing currently collected state school facilities data, perhaps through the use of GIS tools and other data management tools.

**B.7** Establish and fund state and local capacity to track and publish data on school facility conditions.

**B.8** Communicate with school districts about state guidelines on facilities data collection, definitions, and protocols.

**B.9** Budget for information technology capabilities to advance state-level data collection, management, and analysis activities for educational facilities.



## Planning

# 3. Planning Assistance –

Develop cross agency state-level coordinated plans to support public school districts as they modernize their school facilities and efficiently use energy.

To develop state plans that support public school districts' efforts to modernize their school facilities and efficiently use energy, State Education Agencies and State Energy Offices can work collaboratively to:

- C.1** Propose specific language for statewide energy plans on advancing healthy, safe, and environmentally sustainable and equitable public school facilities.
- C.2** Partner with civic and community-based organizations to advance a vision for public school facilities quality and equity.
- C.3** Provide opportunities for State Energy Offices to comment during the process of reviewing and approving educational facility master plans, capital plans, education specifics, and/or school specific designs by State Education Agencies.
- C.4** Provide opportunities for State Education Agencies to weigh in on the development of relevant parts of statewide energy plans typically led by State Energy Offices.



## Funding

# 4. Supplemental Funding –

Leverage state and federal funds, along with private-sector financing, to address facility improvement needs.

To leverage state and federal funds, along with private-sector financing to address energy-related facility improvement needs, State Education Agencies and State Energy Offices can work collaboratively to:

D.1 Access or appropriate funding to increase State Education Agency capacity to support local districts on school facilities.

D.2 Designate or hire state-level staff to pursue facilities-related federal funding opportunities, starting with ESSER funding.

D.3 Help local school districts access and utilize infrastructure related federal funding opportunities, including:

- Section 48 elective pay investment tax credits for the installation of on-site solar, energy storage, and ground-source heat pumps; the Section 179D tax deduction for energy efficiency measures; and the Section 45W tax credit for the purchase of all-electric or hybrid plug-in electric school buses (IRA, Sec.13102, 13403, and 13303).
- Broad flexibility to use ESSER funding for facility improvements —anything permitted per Impact Aid eligible uses for school construction.
- Broad flexibility to use American Rescue Plan Funding allocated to state and local governments for school infrastructure.
- K-12 school bus electrification opportunities from the IIJA.
- Retrofitting schools for health and energy efficiency from the IIJA.
- Hazard mitigation funds for public facilities from FEMA.
- Public sector eligibility for climate change modifications to public buildings from the IRA.
- Public sector eligibility for climate change planning and implementation grants (IRA, Sec.60114).
- Matching funds through Greenhouse Gas Reduction Fund (IRA, Sec.60103).
- Revolving loan funds allocated to State Energy Offices by the IIJA.





## Funding

# 4. Supplemental Funding (Cont.)–

Leverage state and federal funds, along with private-sector financing, to address facility improvement needs.

To leverage state and federal funds, along with private-sector financing to address energy-related facility improvement needs, State Education Agencies and State Energy Offices can work collaboratively to:

- D.4** Understand which districts and schools serve the lowest wealth communities and have the greatest education needs to target outreach and support to these districts.
- D.5** Document cases of State Education and State Energy Agency collaboration that target low-wealth and high-need schools and districts to determine best practices and lessons learned.
- D.6** Leverage expertise from State Energy Offices to offer best practices for measurement and verification of savings and benefits from facility quality and energy efficiency improvement programs.
- D.7** Leverage expertise from State Energy Offices to assist local districts with energy savings performance contracting, contractor screening, and procurement and financial assistance to hire third-party services.
- D.8** Offer funding or low-cost financing to cover the marginal cost of room-level IAQ monitoring equipment, high efficiency new HVAC equipment, and other equipment.



## Management

# 5. Management Support –

Support school district leaders and facility managers with technical assistance and training.

To support school district leaders and facility managers with technical assistance and training, State Education Agencies and State Energy Offices can work collaboratively to:

- E.1** Identify interest among school districts in participating in net zero energy or net zero energy-ready facilities pilot projects.
- E.2** Work with each other, the U.S. Department of Energy, and U.S. Environmental Protection Agency to develop curriculum on energy management, the impacts of extreme weather on schools and communities, opportunities for schools to support clean air, and healthy environments. The curricula would be for diverse audiences, including facility managers, school staff, students, and school leaders.
- E.3** Develop pre-qualified vendor or service provider lists and template procurement documents for school districts that do not have dedicated facilities management staff. This can help school districts with limited capacity to navigate the marketplace of third-party facility managers, energy services companies, owners' representatives, and product vendors.
- E.4** Offer trainings to facility managers, school staff, and school leaders about energy use, facility resilience, and environmental safety, and their impact on school and district budgets.
- E.5** Provide recognition and awards for facility managers for demonstrated improvements in energy performance.



## Management

# 5. Management Support (Cont.)–

Support school district leaders and facility managers with technical assistance and training.

To support school district leaders and facility managers with technical assistance and training, State Education Agencies and State Energy Offices can work collaboratively to:

- E.6** Offer and fund building operator certification trainings for facility managers to pursue particular credentials and continued education.
- E.7** Train school district facilities staff on ENERGY STAR Portfolio Manager to encourage facilities benchmarking and data management.
- E.8** Sponsor training for school administrators and staff on EPA’s Tools for Schools to encourage the implementation of indoor air quality best practices.
- E.9** Identify NGOs that can develop case studies of effective practices piloted by local school districts, with a focus on low-wealth and high-need districts, on:
  - a. Net-zero and carbon neutral schools
  - b. Strategies for building electrification in existing buildings
  - c. Adoption of renewable energy sources including electric school buses and energy storage
  - d. School infrastructure and energy profiles as educational tools
  - e. Green schoolyards in urban heat islands
- E.10** Implement policies that allow schools to retain a portion of utility bill savings for reinvestment in school and facility energy management programs versus returning 100 percent of funds to their districts.



## Accountability

# 6. Accountability –

Conduct facilities evaluations and establish state systems for facilities accountability.

To support facilities evaluations and state systems for facilities accountability, State Education Agencies and State Energy Offices can work collaboratively to:

**F.1** Ensure that school facilities meet existing standards for academic adequacy, safety, energy efficiency, indoor environments, and other standards as appropriate and required by relevant statutes.

**F.2** Ensure that new buildings are constructed to meet up-to-date building codes and standards such as those published by ASHRAE, the International Code Council, and other standard setting bodies.

**F.3** Use a collaborative process with stakeholders and technical experts to identify standards for meeting the desired outcomes for:

- healthy school environments
- educationally suitable facilities
- energy efficient buildings
- carbon neutral buildings
- school facilities that are resilient to human and natural threats
- school facilities that support a range of community activities

**F.4** Help schools comply with new policies or goals that may require all-electric new construction and/or disallow new fossil fuel infrastructure.



## Accountability

# 6. Accountability (Cont.)–

Conduct facilities evaluations and establish state systems for facilities accountability.

To support facilities evaluations and state systems for facilities accountability, State Education Agencies and State Energy Offices can work collaboratively to:

**F.5** Examine facility certification systems or programs to determine their role in assessment and accountability for their states.

**F.6** Identify tools to evaluate school facilities for:

- healthy school environments
- educational suitability
- energy efficiency (e.g., ENERGY STAR Portfolio Manager)
- carbon neutrality
- resilience to human and natural threats
- viability for renewable energy systems, such as geothermal heat pumps or photovoltaic panels (e.g., the PVWatts Calculator developed by the National Renewable Energy Laboratory)
- viability for use of ESPC
- eligibility for funding through state revolving loan funds or green banks



## Accountability

# 6. Accountability (Cont.)–

Conduct facilities evaluations and establish state systems for facilities accountability.

To support facilities evaluations and state systems for facilities accountability, State Education Agencies and State Energy Offices can work collaboratively to:

- F.7** Identify sources of funding that districts and states can use for conducting assessments and implementing retrofits, and establish communication plans to ensure Local Education Agencies are aware of such programs.
- F.8** Partner with local school districts to set energy use targets based on energy use and expenditure data.
- F.9** Develop technical assistance and training for school districts on using various types of facilities assessments.
- F.10** Offer technical assistance and examples of energy assessment and greenhouse gas emissions accounting tools to evaluate energy efficiency and progress toward carbon neutrality.
- F.11** Establish protocols for transparency of data collected in assessments and its comparison to standards.
- F.12** Provide support and encourage districts to participate in the Green Ribbon Schools Awards Program of the U.S. Department of Education.