Efficient and Healthy Schools Campaign Recognition Kick Off Webinar

November 8, 2022
Today’s Presenters

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RENEW AMERICA’S SCHOOLS PROGRAM
Invest in More Efficient, Energy-Saving School Buildings: The Department of Energy (DOE) is launching a $500 million grant program spread across FY22-26 through President Biden’s Bipartisan Infrastructure Law (BIL) to make public schools more energy efficient.

https://eere-exchange.energy.gov/
Renew America’s Schools - Need

Schools are the second largest public infrastructure sector and have minimal historic federal investment.

$85 billion annual shortfall in maintenance and capital funding needed for school facilities.

Capital improvement needs are greatest in rural, high-poverty schools.

At least one-third of US schools need updated HVAC systems.

Poor IEQ reduces student learning and health.

Utility costs reduce $$ for classrooms.

Estimated percentage of public school districts in which at least half the schools need updates or replacements of selected school building systems and features.

Thin bars in the chart display the 95 percent confidence interval for each estimate.

Data Source: GAO analysis of August to October 2019 school district survey data. GAO-20-494.
Renew America’s Schools – Grants Overview

**Funding**
$500M (over FY22-26), competitive grant

**Qualifying Energy Improvements**
- Improvements, repairs, or renovations that:
  - reduce energy costs or lead to improved teacher and student health and achieve energy savings;
  - installation of renewable energy;
  - installation of alternative fueled vehicle (AFV) infrastructure; and
  - purchases or leases of AFV.

**Eligible Entities**
- Consortium of (a) one LEA and (b) one or more schools; nonprofit organizations that have the knowledge and capacity to partner and assist with energy improvements; for-profit organizations that have the knowledge and capacity to partner and assist with energy improvements; or community partners that have the knowledge and capacity to partner and assist with energy improvements.

**Prioritization**
- Schools that:
  - Demonstrate funding needs;
  - Serve a high percentage of students who are eligible for a free or reduced-price lunch;
  - Located in a locale code of 41, 42, or 43 as determined by NCES; and
  - Proposal leverages private sector investment through energy-related performance contracting.
Renew America’s Schools – Goals

Facilitate substantial additional investment
Prioritize schools with high needs
Minimize administrative burden
Build enduring capacity in LEAs to maximize impact equitably
Renew America’s Schools – Topic Areas

**Topic Area 1**
High-Impact Energy Efficiency and Health Improvements

**Topic Area 2**
Innovative Energy Technology Packages
Renew America’s Schools – Innovation

- Replicable and scalable impacts
- Create innovation, sustaining partnerships
- Leverage funding and economies of scale
- Target disadvantaged communities
- Improve occupancy health
- Enrich learning and growth
- Schools as community assets
Energy CLASS Prize

**Application**

Opens in November 2022, submissions due by February 2023

- Up to 25 local educational agencies (LEAs) selected
- $100,000 in cash prizes to each selected LEA to support energy management professionals-in-training in Phase 2

**Skills Development and Coaching**

May 2023 – May 2024

- Courses and 1:1 support over a 12-month period
- Chance to win a $50,000 bonus prize upon completion

[www.herox.com/energy-class](http://www.herox.com/energy-class)
### Renew America’s Schools – Maximizing Impact

- **Section 40541 Funding**
  - $500M in competitive grants for EE, RE, and EV improvements
  - Complementary school funds and eligibility for EV school buses ($5B), EV infrastructure ($25B), lead remediation ($200M), broadband ($42B), etc.
  - Other complementary BIL provisions (SEP $500M, EECBG $550M, RLF $250M)
  - Other complementary relief funds (ESSER $176B, State and Local Fiscal Recovery Funds $350B)
  - Existing regular appropriations (SEP, REAP)
  - Loan programs and guarantees

- **Other Federal Programs**
  - Federal Tax Incentives
    - Schools can form public-private partnerships to leverage existing federal tax incentives
  - State Incentives
    - Many states provide funds for facilities improvements (e.g. TN $7.3M Energy Efficient Schools Initiative)
  - Utility Incentive Programs
    - Schools can combine funds with utility incentive programs
  - Performance Contracting
    - Leverage private sector funding through ESCOs and ESPCs

*Applicants should thoroughly review cost share types and allowability if an applicant plans to combine federal funding from multiple programs and agencies.*
Call to Action

Read the NOI – “Renew America’s Schools FOA”
www.eere-exchange.energy.gov

Sign-up for updates for about the Grants for Energy Improvements at Public School Facilities Program
https://www.energy.gov/bil/grants-energy-improvements-public-school-facilities

SCEP is compiling a “teaming” partner list to facilitate widespread participation in this initiative. Email SchoolsFOA@doe.gov to be added to the teeming list. (Refer to the NOI for specific instructions.)

Visit the Energy CLASS Prize website and “Follow Challenge”
www.herox.com/energy-class

PLEASE EMAIL QUESTIONS TO SCHOOLSFOA@DOE.GOV
Efficient and Healthy Schools Campaign
Efficient and Healthy Schools Campaign

The Campaign...

- aims to improve energy performance, reduce carbon emissions, and promote a healthy learning environment in schools.
- engages K-12 schools especially those serving low-income student populations and in rural areas.
- is led by the U.S. Department of Energy with technical support from Lawrence Berkeley National Laboratory. Organizing partners:
Become a Participant or Supporter

**Participant**

As participants, schools and districts will:

- Access technical assistance and resources on best practices, guidance, case studies, and webinars.
- Receive recognition for their efforts to improve energy performance, health, emission reductions, and resilience.
- Engage in peer-to-peer learning.
- Participate in the development of technical resources to simplify and scale solutions that improve energy performance and indoor air quality.

**Supporter**

- The campaign engages supporters such as designers, engineers, consultants, program implementers, and others that work with schools. As supporters, organizations will:
  - Help DOE share the benefits of efficient and healthy school buildings.
  - Partner with the Campaign team to promote improvements in K-12 Title I schools.
  - Receive public recognition for your support.
The campaign will recognize exemplary implemented solutions and planning efforts by K-12 schools and districts in the following categories:

**Energy Efficiency Plus Health**
To recognize schools and districts that have implemented retrofits improving energy efficiency and indoor environmental quality (IEQ: indoor air quality, lighting, thermal comfort, and/or acoustics), or have performed building assessments and planning in preparation for retrofits with the goal to provide an energy efficient and healthy learning environment.

**Emissions Reduction and Resilience**
To recognize schools and districts that have implemented strategies to reduce carbon emissions and taken actions to improve resilience or have identified pathways and planned activities with the goal of reducing carbon emissions and improving resilience.

https://efficienthealthyschools.lbl.gov/20222023-recognition
Efficient and Healthy Schools

Energy Efficiency

Energy retrofits may employ one or more energy-efficiency measures (EEMs) to maximize occupant comfort and reduce building energy use. EEMs that are frequently implemented in schools include:

- Improving insulation
- Upgrading heating, ventilation, and air conditioning (HVAC) systems
- Reducing air leakage through air sealing
- Installing energy-efficient windows
- Upgrading to energy-efficient lighting
- Adding occupancy- or daylight-sensing lighting controls
- Installing advanced controls and fault diagnostic systems
- Changing building operation protocols

Below are links to helpful Better Buildings Resources on EEMs:

- Better Buildings K-12 Lighting Tool Kit
- Better Buildings K-12 Solutions for Buildings Energy Excellence
- Better Buildings Decision Guides for Plug and Process Load Controls
- Better Buildings Webinar on Fault Detection and Diagnostics in the Age of COVID-19
- Better Buildings Toolkit on Incentivizing Advanced RTU Control Retrofits
- Energy Case Study: Henderson County Public Schools
- Low Carbon Technology Strategies for Primary Schools
- Low Carbon Technology Strategies for Secondary Schools

DOE’s Existing Work with K-12

- Better Buildings Challenge
- Zero Energy Schools Accelerator
- Resources for high-performance
- Efficient and Healthy Schools Campaign
- Case Studies
Technical Assistance for K-12 Schools

Prioritize schools serving low-income student populations and in rural areas
Join the Campaign to access direct technical assistance

- Listen and discuss opportunities to improve energy efficiency, reduce carbon emissions, and support healthier learning environments
- Connect with subject experts for targeted technical assistance on HVAC, indoor air quality, lighting, energy analytics, low-carbon technologies, and more
- Talk through strategies to meeting the Clean Air in Buildings Challenge
- Connect with other programs from partnering agencies:
  - Department of Education’s Green Ribbon Schools, EPA IAQ Tools for Schools, ENERGYSTAR Portfolio Manager

To learn more, please visit efficienthealthyschools.lbl.gov or contact us at EHS@lbl.gov
1st Year Campaign Statistics (2020-2021)

- School district participants = 42
- Needs assessment meetings/technical consulting provided = 23
- Supporters:
  - State/regional agencies = 18
  - Industry organizations = 16
  - Consultant/manufacturer/vendors = 51
  - Early education/PTA = 4
  - Research/academia = 4
- Webinars held = 4
- Webinar engagement = 857 sign-ups
- Distribution list = 966 contacts
- Email open rate (newsletter, webinar, announcements) = 43%
Recognition Program

2022/23 Second Round - Accepting submissions now!
Sign Up – Planning Track

The **Planning Track** recognizes efforts by schools and districts to assess their facilities and plan improvements in the categories below.

**Energy Efficiency Plus Health** - To recognize schools and districts for improving energy efficiency and indoor environmental quality (IEQ: indoor air quality, lighting, thermal comfort, acoustics)

**Emissions Reductions and Resilience** - To recognize schools and districts for reducing carbon emissions and improving resilience
interested schools and districts will participate in a webinar series between January and March 2023.

Preparation
Schools and districts will prepare their materials for the final submission.

Final Submission
Schools and districts will complete a final submission by May 1, 2023 to summarize key learnings and describe how tools or approaches can be applied in their school facilities.

Announcement
Schools and districts receiving recognition will be invited to attend an in-person celebration in June 2023.
# Planning Track – Webinar Series

<table>
<thead>
<tr>
<th>Webinar 1</th>
<th>Jan 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy Efficiency Plus Health</strong></td>
<td>What’s in Your Kit? Tools to Save Energy and Improve Indoor Environmental Quality in Schools</td>
</tr>
<tr>
<td><strong>Emissions Reduction and Resilience</strong></td>
<td>Carbon Reduction and Electrification Readiness for School Districts</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Webinar 2</th>
<th>Feb 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy Efficiency Plus Health</strong></td>
<td>Understanding Your Building Stock: Energy Benchmarking and Indoor Environmental Quality (IEQ) Assessments for Schools</td>
</tr>
<tr>
<td><strong>Emissions Reduction and Resilience</strong></td>
<td>Understanding Greenhouse Gas Tracking and Reporting in School Districts</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Webinar 3</th>
<th>Mar 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Energy Efficiency Plus Health</strong></td>
<td>Building Assessment Tools for School Energy Retrofits</td>
</tr>
<tr>
<td><strong>Emissions Reduction and Resilience</strong></td>
<td>Take Action on Climate! Planning for Climate Vulnerability and Resiliency in Schools</td>
</tr>
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[efficienthealthyschools.lbl.gov]
Register Now for the Planning Track Webinar Series!

Energy Efficiency Plus Health


Emissions Reduction and Resilience

Apply for Recognition – Implementation Track

The Implementation Track recognizes completed projects in the categories below.

**Energy Efficiency Plus Health** – To recognize schools and districts for improving energy efficiency and indoor environmental quality (IEQ: indoor air quality, lighting, thermal comfort, acoustics)

**Emissions Reductions and Resilience** – To recognize schools and districts for reducing carbon emissions and improving resilience

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### Implementation Track

- **Describe project approach**
- **Provide documented outcomes**
- **Complete application form**
Preparation
Interested schools and districts will fill out a recognition application and request assistance from the Campaign if needed.

Final Submission
Schools and districts will complete and send application together with supporting materials by March 1, 2023.

Announcement
Schools and districts receiving recognition will be invited to attend an in-person celebration in June 2023.
Recognition Program

Review of 2021/22
To support and uplift schools and districts undertaking this critical work, the Administration is announcing the first round of honorees as part of the Efficient and Healthy Schools Campaign, which provides technical assistance to school districts seeking to implement high-impact indoor air quality and efficiency improvements that will reduce energy bills and improve student and teacher health. This innovative campaign has a goal of reaching 5,000 schools by the end of 2022. To date, 26 school districts across 16 states have joined or are prepared to join the campaign—representing over 1,500,000 students in 2,600 individual schools—more than half way toward the campaign’s goal.

Today, the Campaign announced its first round of awards to eight school districts for their best-in-class efforts across four categories: Efficient HVAC Technologies, Inspection & maintenance; Ongoing Monitoring & Analytics, and Team Approach to Support Strategic Investments. The inaugural honorees include:

- Adams 12 Five Star Schools, CO
- Boulder Valley School District, CO
- Charleston County School District, SC
- Columbia Public Schools, MO
- Davis School District, UT
- Greenville County Schools, SC
- Mariposa County Unified School District, CA
- Newark Board of Education, NJ

https://www.whitehouse.gov/briefing-room/statements-releases/2022/04/04/fact-sheet-the-biden-harris-action-plan-for-building-better-school-infrastructure
2021/22 Recognition

Columbia Public Schools, MO

- Set requirements for minimum OA ventilation, filtration efficiency, and equipment noise
- Utilize technical specifications for HVAC retrofits following ASHRAE best practices
- Always require testing and balancing to verify minimum OA ventilation following HVAC retrofits
- Always monitor for CO2 when installing new HVAC equipment, including spot checks of CO2 during occupied hours, and analyze time trends of CO2 values
2021/22 Recognition

Columbia Public Schools, MO

- Link to presentation given by Richard:
  https://tinyurl.com/Efficient-and-Healthy-Schools
Thank you!

For more information, please email EHSC@lbl.gov