

Green Building Upgrades for Childcare Centers

*Lowering expenses via building energy
upgrades and available incentives.*

Presented by Claire Kokoska
Senior Account Executive, RISE



Presented to BOCA, RI (Business Owners in Childcare Association)



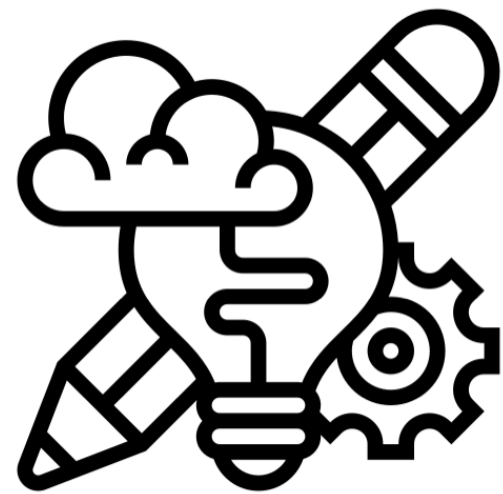
About RISE

Since 1978

Based in Rhode Island

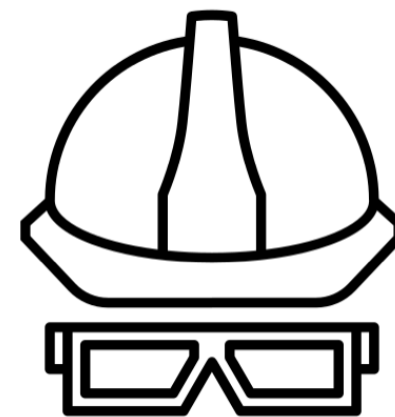


Our Process



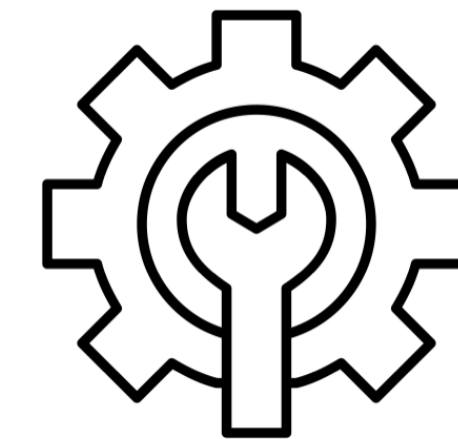
1. Consult & Design

Explore the energy measures and funding available. Our engineers will develop the designs.



2. Build & Manage

Our team of engineers, electricians, and other technical craftsman will implement your project vision.



3. Ongoing Maintenance

We provide ongoing maintenance services, extending buildings and system effectiveness and lifespan.

Our Energy Services



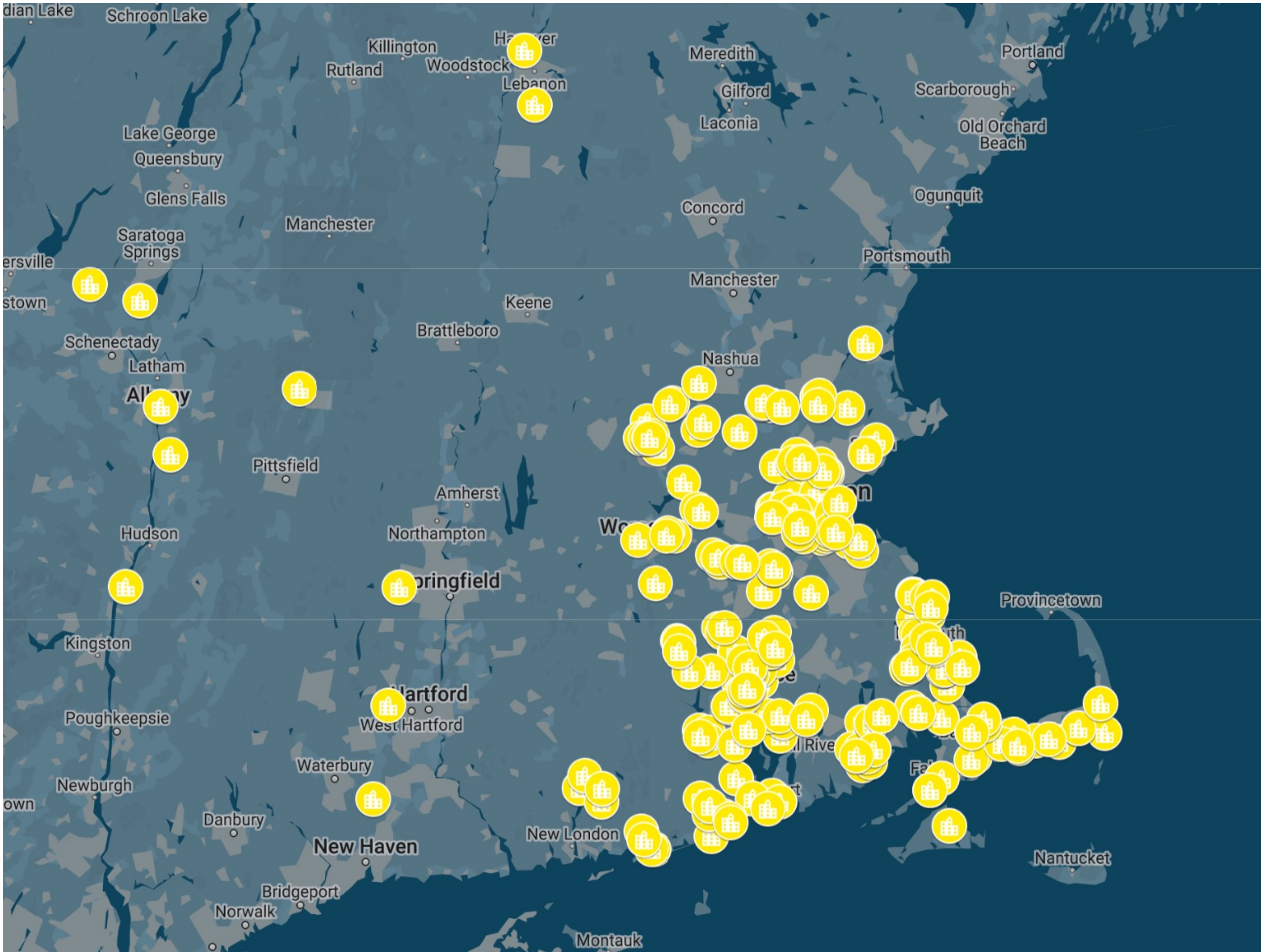
**Renewable Energy and
Electrification**



**Heating & Cooling,
Ventilation**

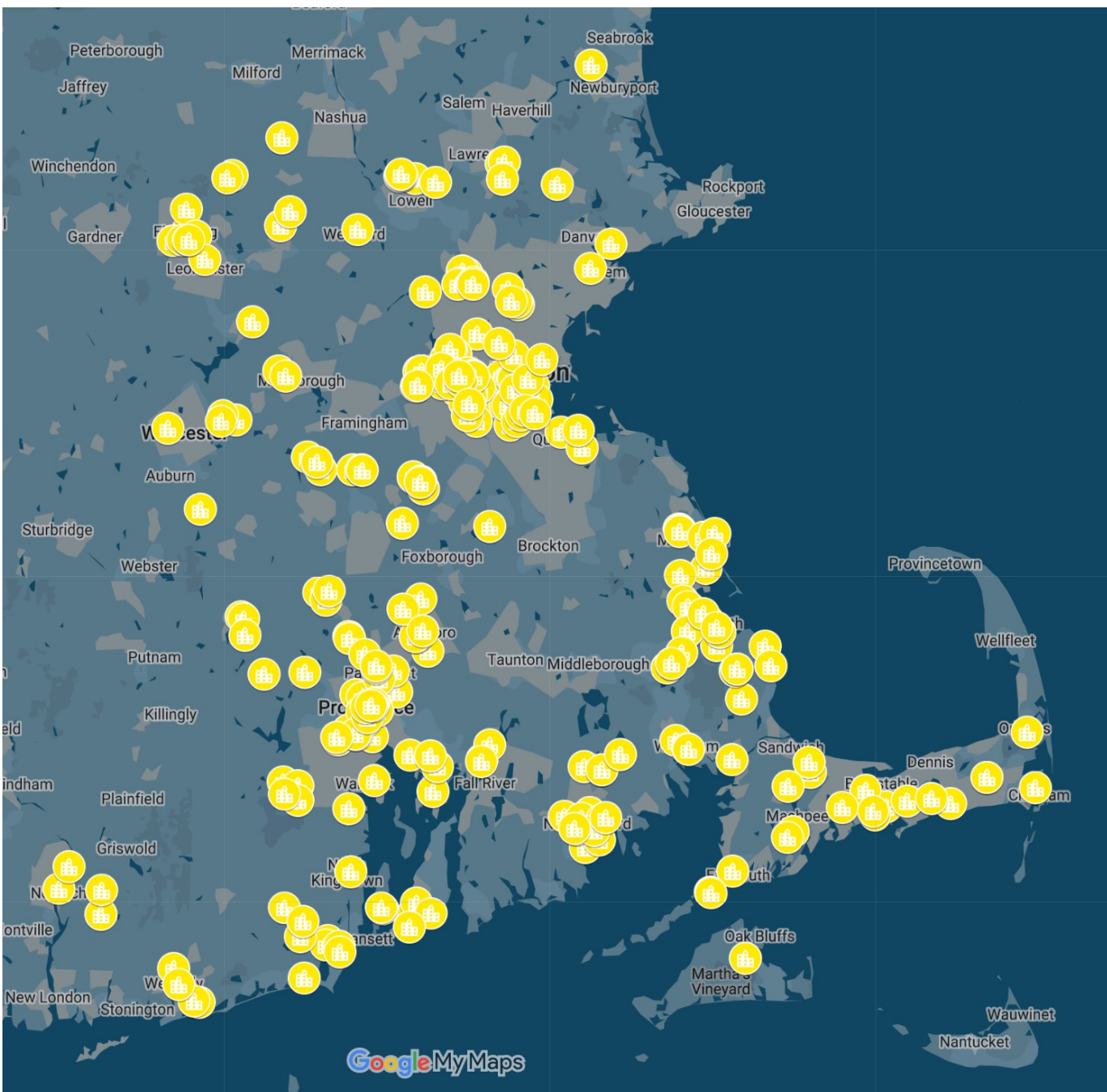


**Weatherization
& Energy Efficiency**



RISE

AN EMPLOYEE-OWNED COMPANY



RISE has worked with hundreds of K-12 schools across the Northeast, primarily in RI and eastern MA.

280+ Schools for all ages, public and private

Energy Upgrades



Comprehensive Energy Upgrades

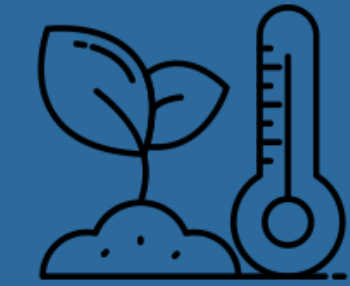
Comprehensive energy upgrades for your facilities to reduce energy use and ongoing costs, while improving employee comfort and system performance.



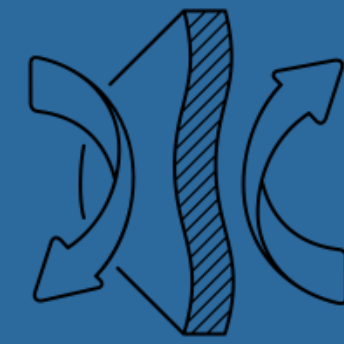
Solar



Energy Storage



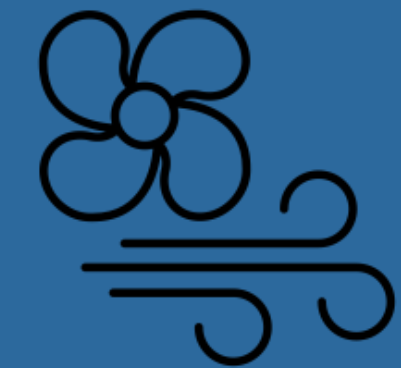
Heating & Cooling



Insulation



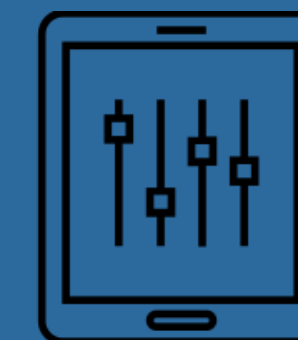
Lighting



Ventilation



EV Charging



Building Controls



Turnkey

Insulation

Insulation is one of the most basic energy efficiency measures in that it keeps your facilities envelope secure and prevents air and temperature leakage.

1. Save up to 20% on heating and cooling costs.
2. Save up to 10% on energy costs.
3. Improve staff comfort in indoor environment.



- Air sealing
- Duct insulation

Lighting

Update less efficient lighting with safer and less energy intensive lighting.

1. Quick payback period.
2. LEDs last up to 25x longer than traditional lights.
3. LEDs use 75% less energy than typical lights.
4. Upgraded lighting emits almost no heat.



- LED replacement of CFLs and incandescent bulbs
- Improved lighting design and layout

Heating & Cooling

Heating and cooling equipment regulates indoor air and water temperatures and is critical to maintain.

1. Higher-efficiency technology can reduce energy usage by 50% for electric heating units and 10% for a gas furnace heating system.
2. Reduce staff time and O&M costs on repairs.
3. Save 10 – 30% energy costs per year.

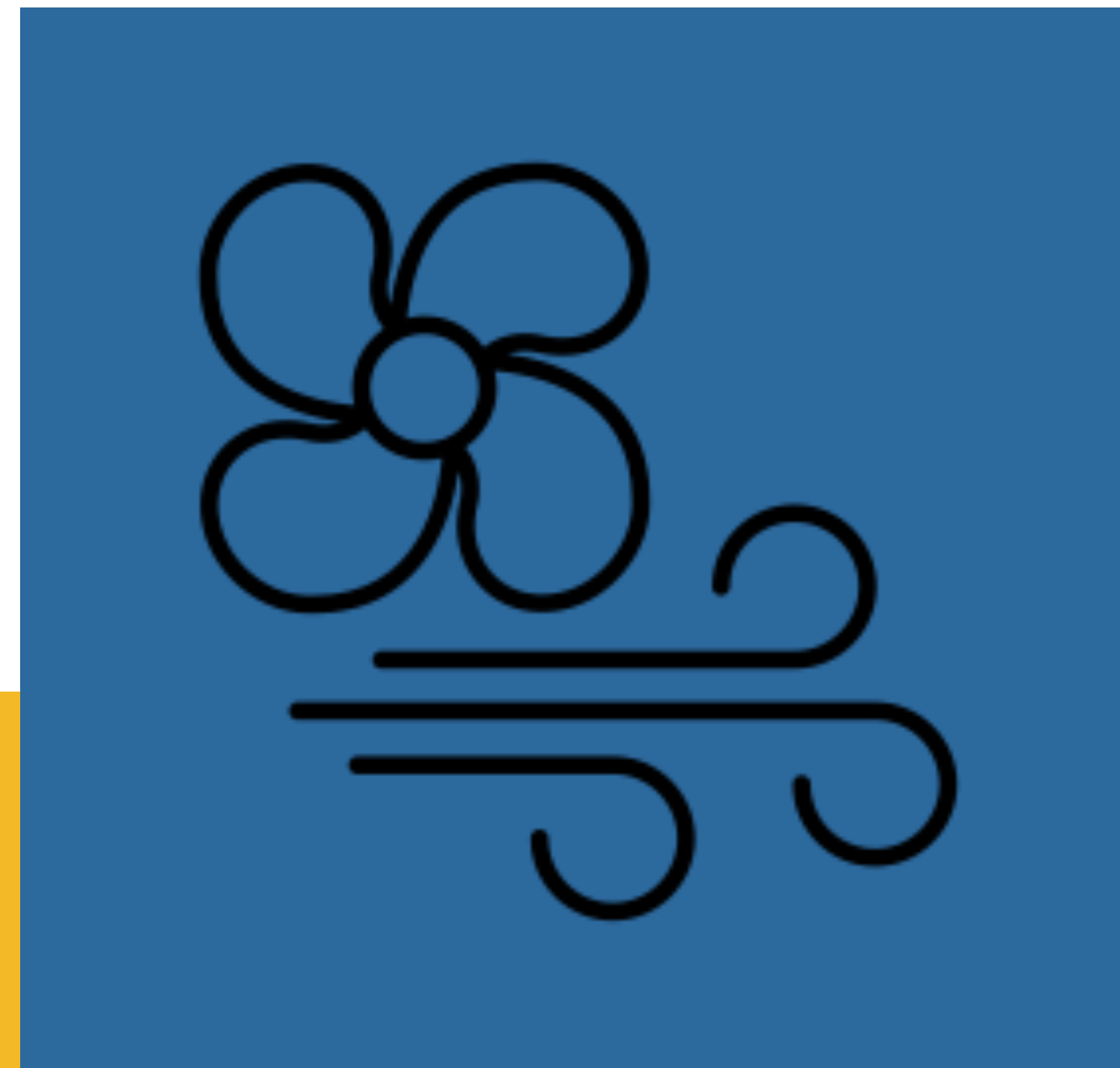


- Heat Pumps (ASHP and GSHP)
- Ductless Mini-splits
- High Efficiency Boilers & Chillers
- Co-generation

Ventilation

Proper ventilation is critical to improving productivity, reducing energy use and cost in your facilities.

1. Improve staff health and productivity.
2. Maintain better conditions for your manufacturing equipment (reduce particulate matter in air).
3. Improves air flow, humidity, and temperature regulation.

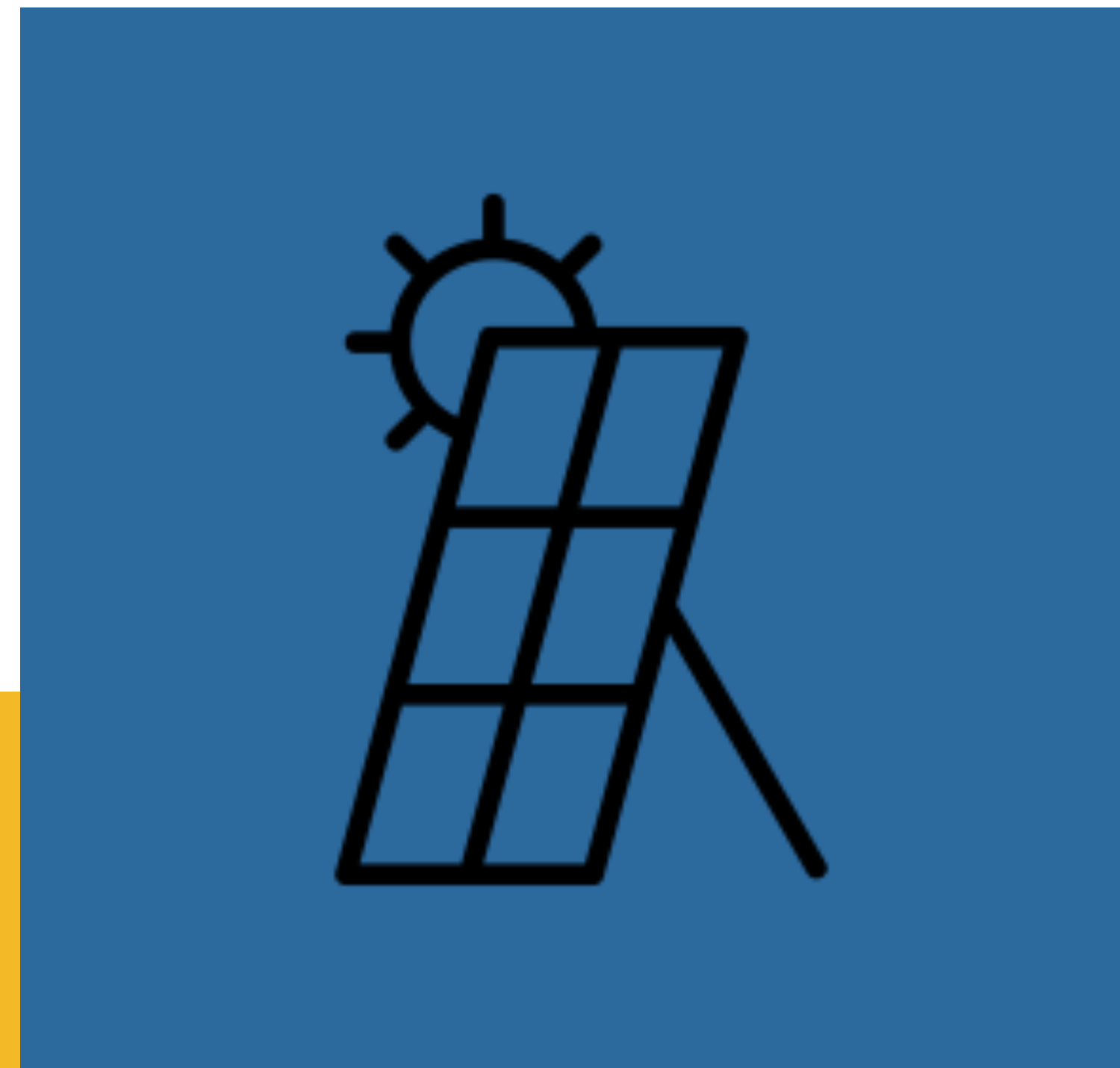


- Variable Frequency Drive (VFD)
- Fans and Blowers

Solar

Installing solar panels generate renewable, clean energy from the sun.

1. Generate clean energy, on-site that dramatically lower electricity use and cost.
2. Payback period of approx. 3-6 years.
3. Protect against future hikes in electricity.



- Rooftop solar
- Carport solar
- Ground-mounted solar

Building Controls

Installing or upgrading building controls that automate, regulate, and monitor processes reduce wasted energy and staff time.

1. Reduces energy use by approx. 30%.
2. Centralize data on mobile & desktop devices.
3. Use insights to create greater efficiencies.



- Building Management Systems
- Energy Management Systems
- Lighting Automation & Controls
- Variable Frequency Drives (VFDs)

Energy Storage

An energy storage system (battery) can reduce energy cost and store energy generated on site.

1. Reduce electric demand charges and save.
2. Resilient power supply in an emergency.
3. Ideal for facilities that use a great deal of electricity during high peak times.



- Standalone energy storage
- Solar + storage

Electric Vehicle (EV) Charging

With the increasing number of EV's, the demand for charging stations is increasing rapidly.

1. By 2030, half (50%) of cars will be EVs.
2. EV charging will become an added value for staff .
3. Could potentially add revenue as people use chargers.



- Level II EV charging stations
- Level III EV charging stations

Funding Sources



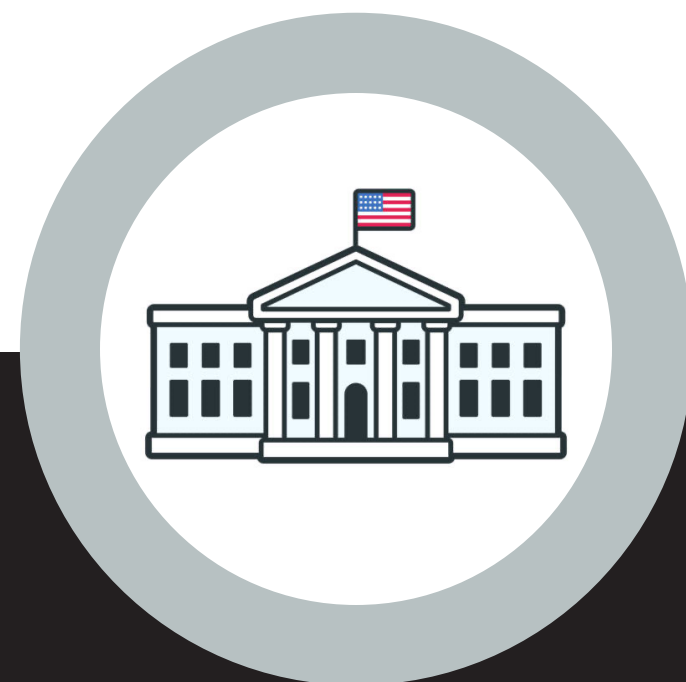
\$\$\$ No shortage of funding

Funding Sources

Here are several sources of funding at various levels for energy upgrades that reduce energy use and ongoing costs.

Federal

IRA



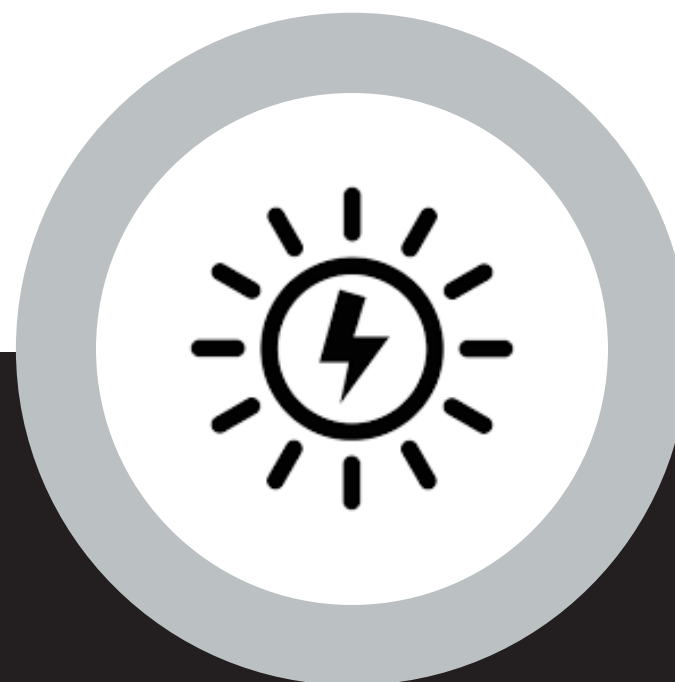
State

RI State



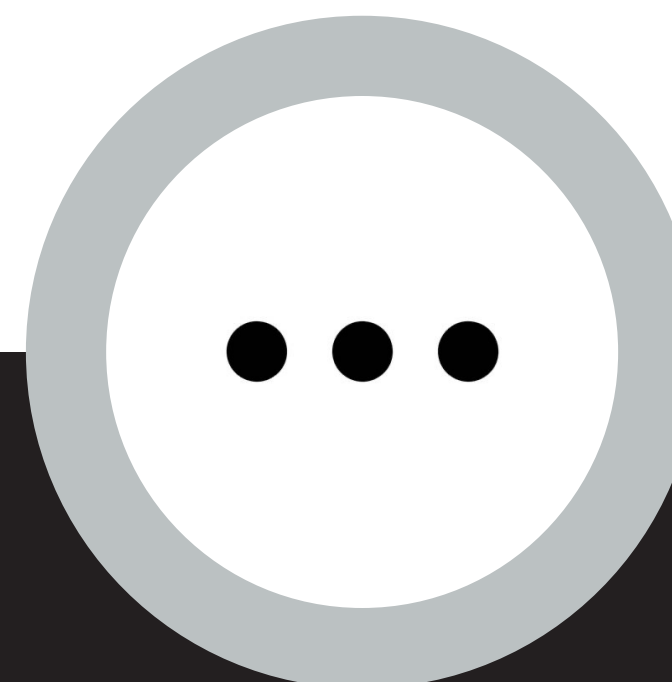
Utility

RI Energy



Other

C-PACE, etc.



Inflation Reduction Act (IRA)

\$369B

CLEAN ENERGY FUNDING

Key Incentives*

The IRS and Secretary of Treasury are continually issuing clarifications on incentive guidelines.

48E & 45Y: Clean Energy Credits (Solar, battery energy storage, etc.)

CHOOSE EITHER OF THE FOLLOWING:

48E - Investment Tax Credit: 30% off for solar, storage (3kWh+)

45Y - Production Tax Credit: 2.6 cents / kWh

- Bonus Credits (for ITC or PTC):
 - 10% for using domestic-manufactured content
 - 10% for siting in a fossil-fuel dependent "Energy Community"
 - 10-20% for siting in a low-income community

45W: Commercial Clean Vehicle Credit (plug-in electric and fuel cell vehicles)

- Smaller Vehicles (below 14,000 lbs)
 - Up to \$7500 for each vehicle
- Buses and Heavy-Duty Vehicles
 - Up to \$40,000 for each vehicle

30C: Alternative Fuel Refueling Property (EV charging stations)

- Up to \$100,000 per EV Charging unit (**must** be sited in low-income area)

179D: Commercial Buildings Energy-Efficiency Tax Deduction (interior lighting, building envelope, HVAC, hot-water systems)

- New or Existing Buildings that reduce energy use by up to 50%:
- 50% energy reduction: Up to \$5.00 per sq. ft.
 - 25% energy reduction: Up to \$2.50 per sq. ft.

**Incentives may be subject to prevailing wage requirements.*

Other Grant & Incentive Programs

Program	Details
Utility EV Programs	Utilities are expected soon to replenish EV incentives.
OER Rebates	Rebates for prescriptive and custom HVAC, and energy efficiency projects.
Utility Rebates	Rebates for prescriptive and custom HVAC, and energy efficiency projects.
RI High Efficiency Heat Pump Program	RI is issuing a new heat pump program in 2023 to lower the cost of installing new heat pumps.
RI Rebounds Ventilation Grant	Up to \$10,000 for indoor air quality upgrades (*restrictions apply).

Other grants and incentives may be available in addition to those listed.



STAY IN TOUCH

Thank you!

Reach out, anytime to chat about the needs of your facilities.

Contact Claire Kokoska

ckokoska@RISEengineering.com

o. (401) 467 - 6454 x 6148

c. (401) 451-1263

Our Address

1341 Elmwood Avenue
Cranston, RI 02910

Contact RISE

(401) 784-3700

Questions?

