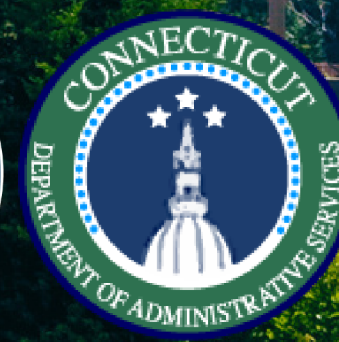




GREENERGOV CT

STEERING COMMITTEE MEETING



Welcome!

From the Co-Chairs



**COMMISSIONER
KATIE S. DYKES
DEEP**



**SECRETARY JEFF BECKHAM
OPM**



**COMMISSIONER
MICHELLE GILMAN
DAS**

GREENERGOV CT





AGENDA

WELCOME AND INTRODUCTIONS

**GREENERGOV CONTEXT,
STRUCTURE AND GOVERNANCE**

**SENIOR SUSTAINABILITY OFFICER
ROLE AND RESOURCES**

NEXT STEPS AND DISCUSSION

GREENERGOV CT STEERING COMMITTEE

JANUARY 30, 2024



CONTEXT, STRUCTURE AND GOVERNANCE

GREENERGOV CT

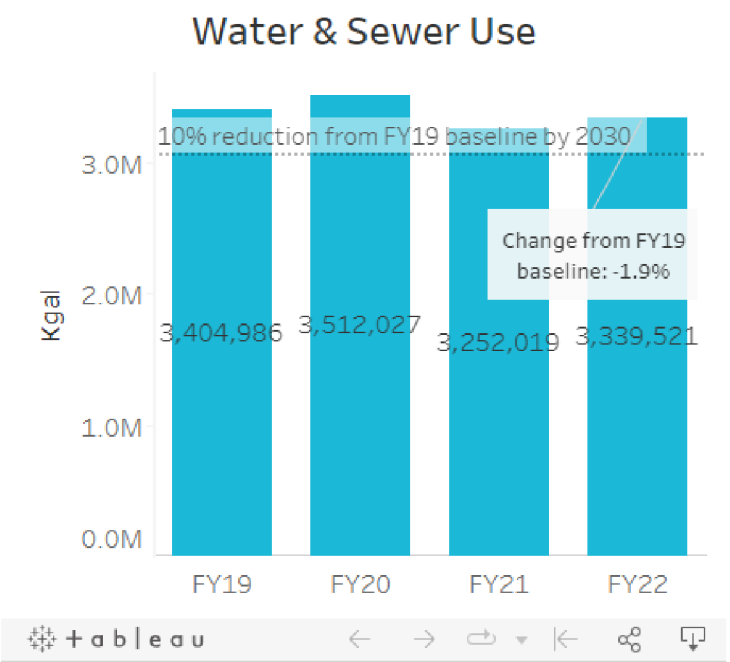
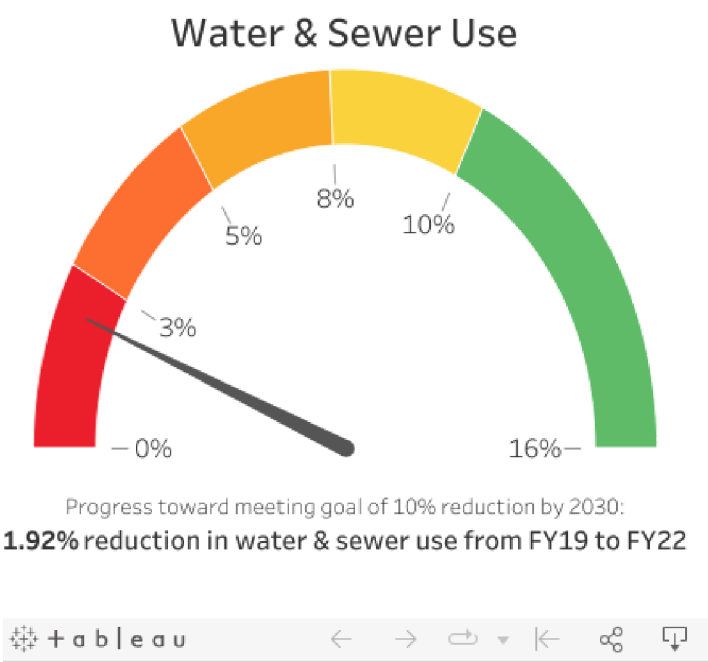
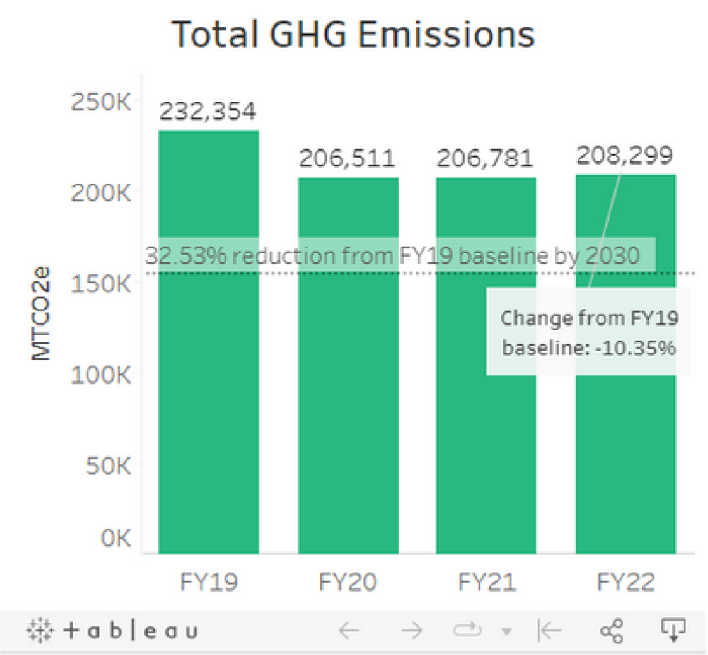
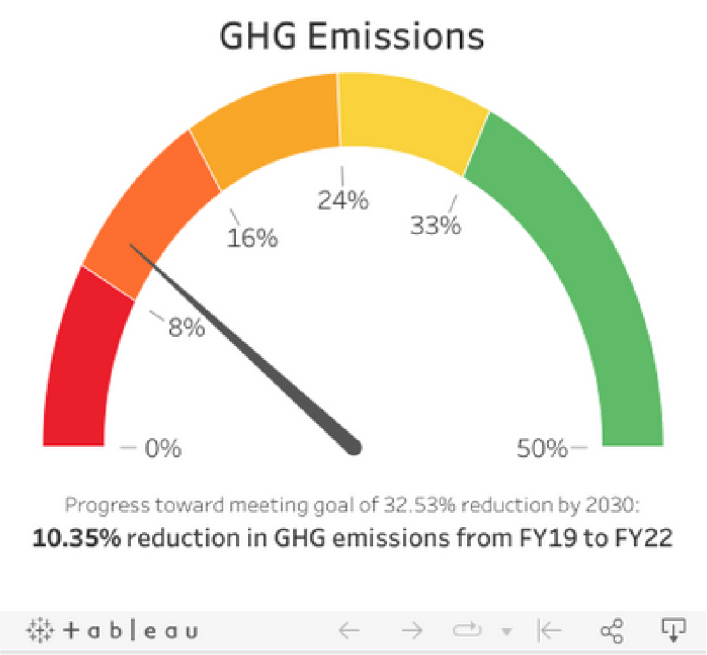


Executive Order 21-3	
Organics & food waste program	2024
Plan for zero GHG for new construction & renovations	
1% divest of state buildings	2030
Electricity purchased 100% zero carbon	
Leased state vehicles zero emissions	
Plan to heating & cooling systems	
Solar capacity increase of 10,000kWDC	

TARGETS

Executive Order 1
Reduce GHG by 45% below 2001 levels by 2030
Reduce 25% waste by 2030 from a 2020 baseline
Reduce 10% water consumption by 2030 from a 2020 baseline

PROGRESS TO DATE

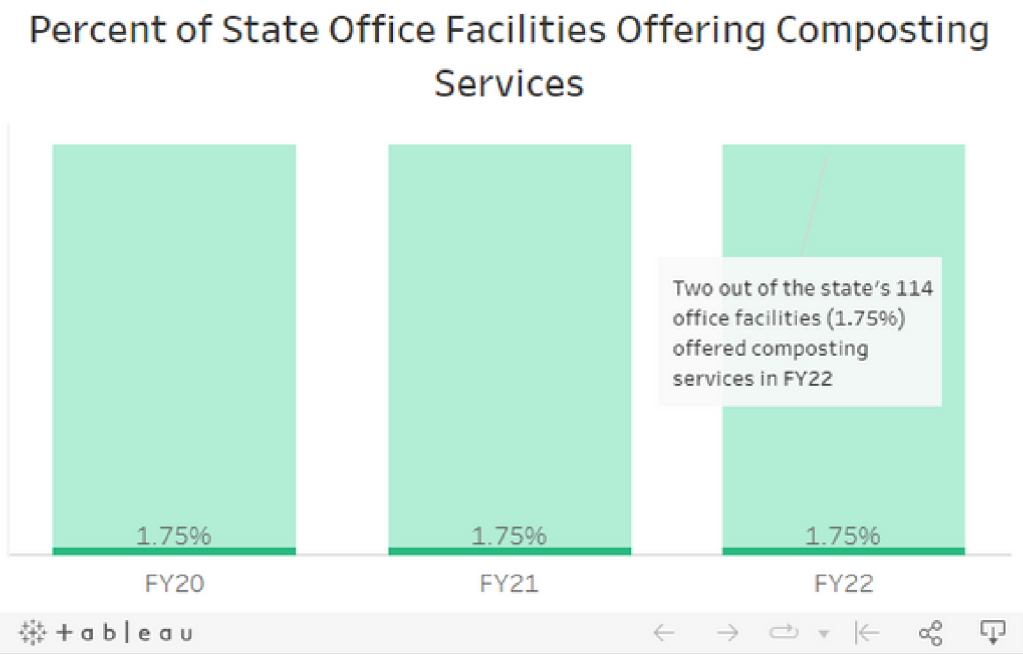


The charts below highlight progress towards meeting the goals established in EO 21-3.

Organics and Food Waste Diversion

By 2024, all Executive Branch agency facilities, to the extent practicable, shall implement an organics and food waste diversion program.

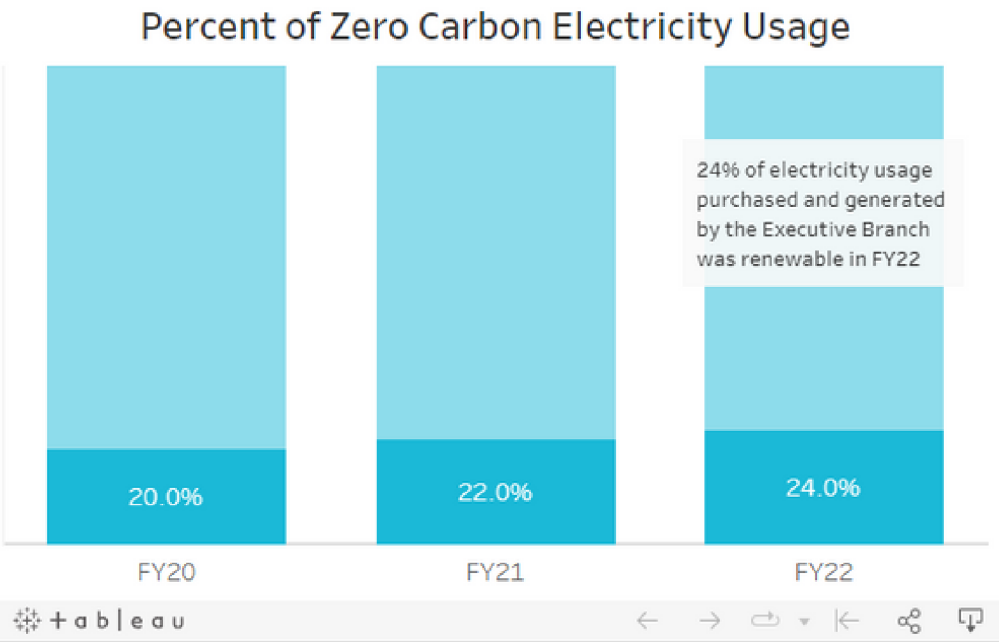
As of FY22 two out of the state's 114 office facilities (or 1.75%) offered composting services.



Zero Carbon Electricity

By 2030, all electricity purchased and generated by Executive Branch will be **100% zero carbon**.

This goal is measured by the percent of renewable electricity usage purchased and generated by the Executive Branch.

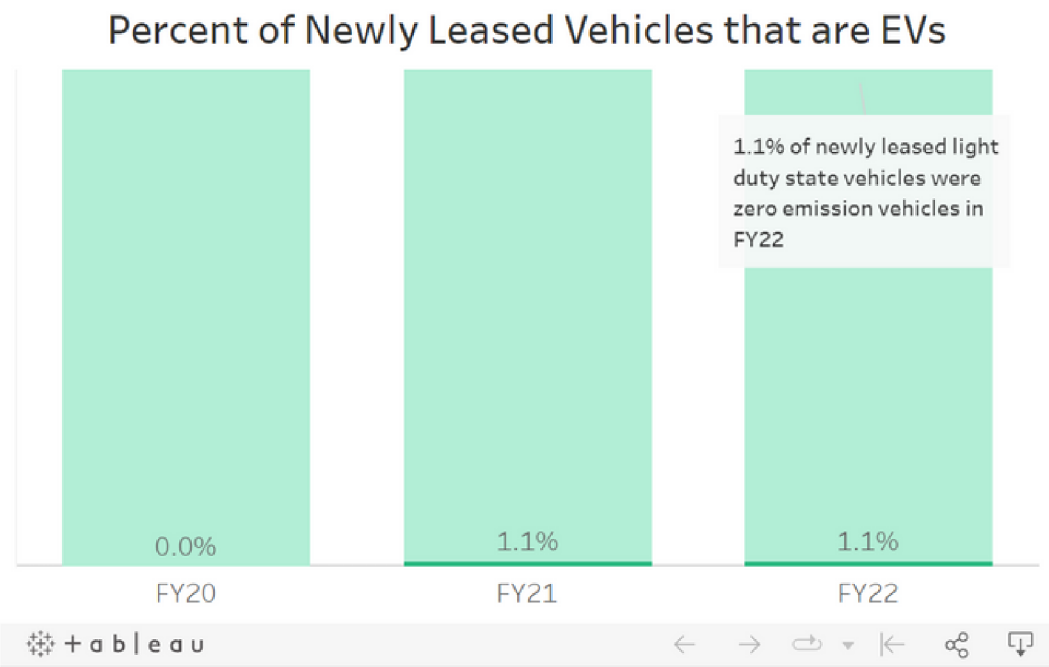


PROGRESS TO DATE

Zero Emission Vehicles

By 2030, all newly leased light duty state vehicles shall be zero emission vehicles.

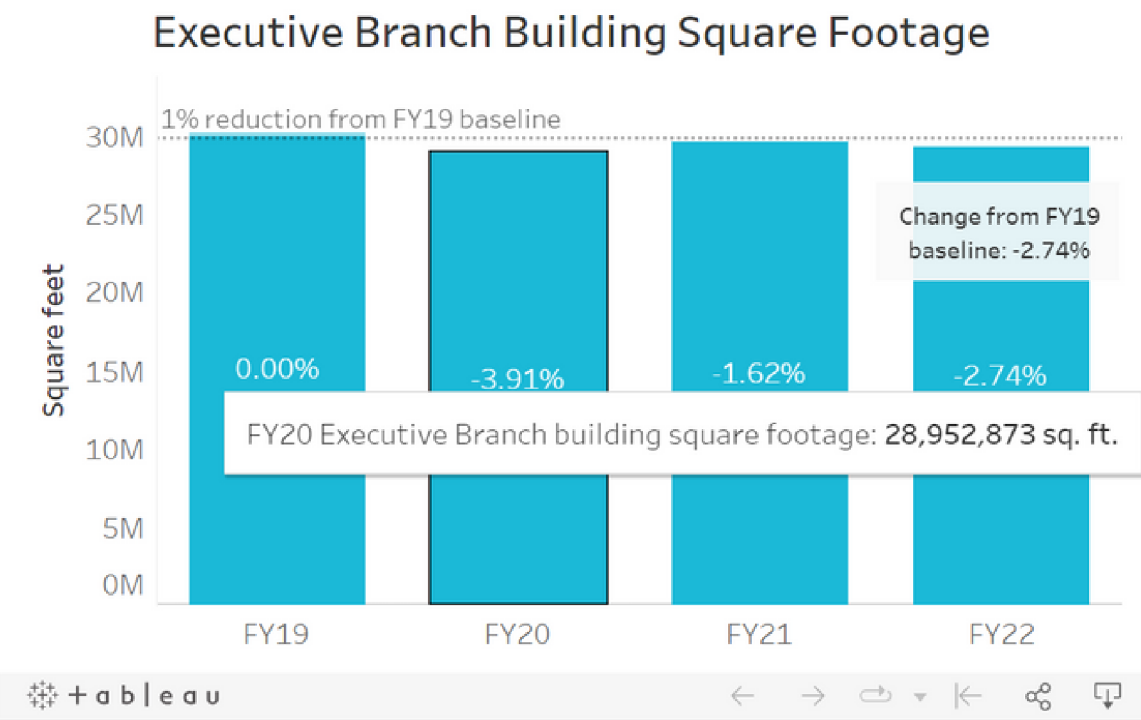
This goal is measured by the percentage of newly leased vehicles that are electric vehicles (EVs).



Building Square Footage

By 2024, the State shall divest 1% of all Executive Branch building square footage, and an additional 2% by 2028.

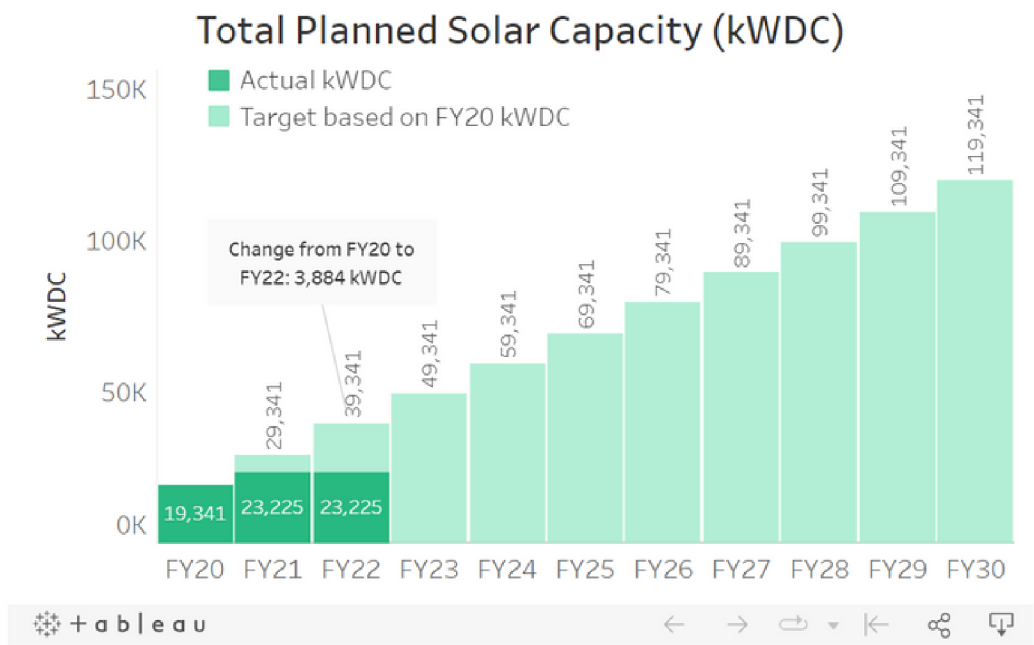
This goal is measured by the change in Executive Branch square footage from a FY19 baseline.



Solar Capacity

The State shall deploy an average of 10,000 kWDC of new solar capacity annually for the next 10 years.

This goal is measured by the total planned solar capacity (kWDC) each year from FY20 through FY30.

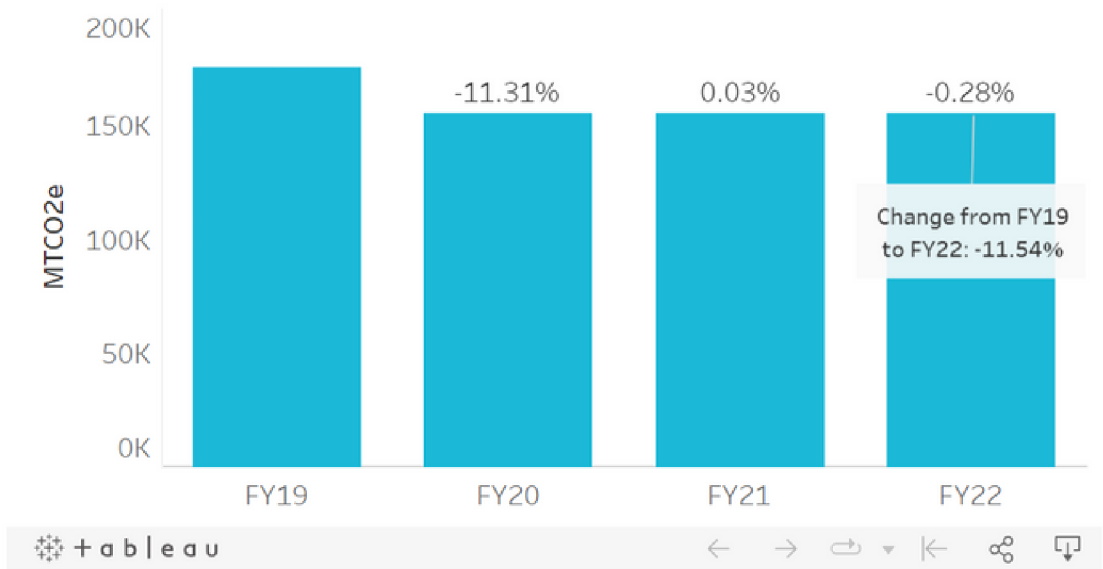


GHG Emissions from Building Energy Use

The state shall commit to reducing Executive Branch building GHG emissions by at least 1% annually.

This goal is tracked by measuring the GHG emissions (MTCO2e) from Executive Branch agency buildings over time.

Annual Change in GHG Emissions from Building Energy Use



DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
Katie Dykes, Commissioner

OFFICE OF POLICY AND MANAGEMENT
Jeffrey Beckham, Secretary

DEPARTMENT OF ADMINISTRATIVE SERVICES
Michelle Gilman, Commissioner

STEERING COMMITTEE

IMPACT SUBCOMMITTEES

Renewable Energy

Energy Efficiency

Sustainable Materials Management

Sustainable Water Use

Clean and Efficient Transportation

SYSTEM SUBCOMMITTEES

Process Improvement

Reporting

Public Engagement

Sustainability in Leased Spaces

40 Agencies



29 Directed



11 Voluntary

QUINEBAUG VALLEY STATE FISH HATCHERY



QUINEBAUG PROJECT



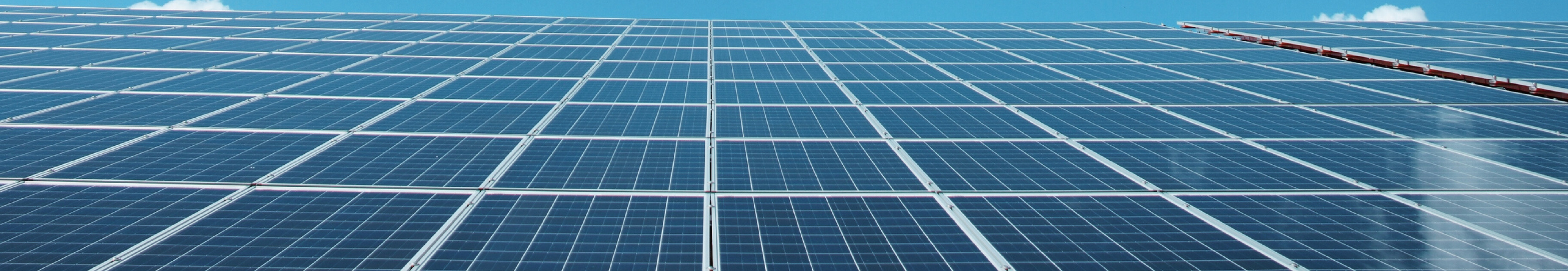
QUINEBAUG PROJECT



A photograph of a rooftop HVAC system. Several large, light-colored outdoor air conditioning units are mounted on concrete blocks. The units are arranged in a row, receding into the distance. Each unit has a large circular fan grille. To the left of the units, there are electrical control boxes and some piping. The background shows a clear blue sky and a portion of a building's roof.

HVAC DECARBONIZATION PLANNING

SOLAR POWER PURCHASE AGREEMENTS



DOC PROJECT



**SENIOR
SUSTAINABILITY
OFFICER
ROLE AND
RESOURCES**

GREENERGOV CT



SSO RESPONSIBILITIES

Lead		Represent	Report
Lead agency efforts to comply with E.O.1		Represent the agency on the Steering Committee	Report quarterly to the head of the agency & the Steering Committee

RECOGNITION

AWARDS CEREMONY CATEGORIES

AGENCY CHANGEMAKER

Individuals striving to transform their state agency.

Measurable improvements in the energy, water & waste sectors.

Up to two individuals per state entity.

MOST IMPACTFUL PROJECT

Significant & measurable improvements.

Energy, water conservation, or waste management.

INNOVATION AWARD

Exceptional public sector sustainability innovation.

Up to two individuals of a state entity.

RESOURCES

Return to the Office Greener



We are encouraging agencies to use the Return to the Office as an opportunity to refresh staff practices and habits, and take on some new initiatives.

Water GHG Waste Cross-Sector



1 Identify agency vehicles which could be transitioned to electric models

Engage G&E Fleet and DEEP to identify potential vehicles/facilities to transition to electric models with charging infrastructure support. Email usabilityexample@ct.gov and Stephen.Miller@ct.gov to get started.



2 Have a Re-Coast Retro Commissioning scoping study

For properties above 100k square feet and a data system, work with the utilities to conduct a scoping study and identify HVAC improvement and controls opportunities. Email usabilityexample@ct.gov to get started.



3 Sign up a building to participate in Enversource's Strategic Energy Management program.

For properties above 5 million kWh annual usage, the utilities can provide energy usage/shell engagement/technical change coaching. Email usabilityexample@ct.gov to get started.



4 Have a free building energy audit performed

Most for-profit energy audit of every agency that hasn't already been audited in the last 5 years. This should identify basic opportunities to upgrade lighting or weatherization. Fill out a [Project Request Form](#) to get started.

Water GHG Waste Cross-Sector



5 Perform a water audit

Conduct a water audit in your facility to identify opportunities for future improvements or conservation actions. Email usabilityexample@ct.gov to get started.



6 Check for water leaks

Have facility staff inspect for leaks using the [Pin-A-Leak Checklist](#).



7 Assess the feasibility of hosting solar on your buildings or property

Contact the Green Team to perform a feasibility assessment of one of your agency's properties. Email usabilityexample@ct.gov to get started.



8 Optimize your dumpster size and pickup schedule

Adjust your bin size/schedule and usage to make sure you have the right sized dumpster for the waste you're generating.



9 Start an organic diversion/collection program

Implement organic collection for your foodservice facilities with education about compost. Email usabilityexample@ct.gov to learn more about technical assistance that's available for setting and managing food waste.



10 Regularly educate and remind employees to recycle (e.g., email from commissioner, lunch and learn or presentation by green team, break room and conference room signs, and internal announcements). Include this information at new employee orientation and give to seasonal workers.

How to Recycle at Your Agency

Office Sustainability Checklist

Everyone in Connecticut is required to recycle - individuals, businesses, schools, and government - it's the law. Recycling reduces trash disposal costs, saves energy, and reduces greenhouse gas emissions.

Before we start, check your Agency can take to start or improve a recycling program. Starting a [Green Team](#) at your agency is the best way to make things and keep the momentum going.

Of Mandated Recyclables Found in Office Buildings

- Plastic containers PET & HDPE (91 & 95)
- Corrugated cardboard & cardboard
- Glass & metal food & beverage containers
- Newspapers & magazines
- High grade white & colored office paper
- No. 10 magazines & food with storage containers

Are you all in, go to [RecycleRightRecycleMainPage.html](#)

Recycle Right	Not Action Needed	In Progress	Completed
Ask your building manager about current services provided by waste/recycling hauler. Most Agencies collect recyclables in one bin, known as mixed recycling, that are then sorted at the recycling facility. Make sure the loading dock can accommodate pickup of recyclables.	0	0	0
Work with your building manager and agency's Support Services to ensure they have arranged for recycling services for all the mandated items (see list above). Building manager should communicate to cleaning staff where recyclables and trash are to be collected for the building.	0	0	0
Get everyone on board - including your Commissioner. It is important for employees to be encouraged to recycle from top management.	0	0	0
Set up clearly marked containers for recycling with signs that specify the appropriate recyclable materials. Place recycling bins next to trash bins in easily accessible common areas for sorting (e.g., restrooms, including areas that the public would pass through (near elevator), conference rooms, etc.)	0	0	0
Each employee should have a desk recycling container. Many offices no longer have trash bins in each cubicle since most of what is generated should be recycled. Before buying new recycling bins, consider repurposing containers you have and adding bold signage or check CT Fed Surplus or the RecycleRightRecycleMainPage.html for used containers.	0	0	0
Find out what recyclables are in the trash by looking in break room and office trash containers. Target educational efforts based on your findings.	0	0	0
Regularly educate and remind employees to recycle (e.g., email from commissioner, lunch and learn or presentation by green team, break room and conference room signs, and internal announcements). Include this information at new employee orientation and give to seasonal workers.	0	0	0

How to Recycle at Your Agency

Office Sustainability Checklist

Example of common area recycling and trash bins

Example of workspace recycling and trash containers

Next Steps

- Regularly check if recyclables and up in the trash. Are bins in the best locations for easy access? Is signage adequate?
- If you are in a building that is shared by other Agencies, work with building manager to get everyone included in the program.
- Ask cleaning staff that pick up recyclables to record numbers of containers that are paper, bottles and cans, cardboard. Ask your hauler for reports.
- Share your success, let employees know how the program is going.

Going Above and Beyond

- Recycle additional items like printer/toner cartridges, Tyvek envelopes, batteries, CDs and cell phones.
- Reduce paper waste by setting defaults on copiers and printers to double sided and remind employees to avoid printing e-mails and documents.
- Encourage the use of reusable coffee mugs, dishes, and lunch bags.
- Have a place where employees can bring unwanted office supplies for others to use. See DEEP's [Link to RecycleRightRecycleMainPage.html](#) for more information.

For more information, contact the DEEP Recycling Office at (860) 426-5366 or visit [DEEP's Recycling Page](#)



Fight Leaks and Water Waste in your Facility with WaterSense

Did You Know?

A constant stream of water can waste up to 100 gallons of water each day within a facility. Leaks and continuously running water may not always be visible, but they can add up quickly and become a major cost in water and energy bills.

Most plumbing fixtures and water-using equipment have physical components including valves, flappers, and gaskets that can break down over time. Broken parts may not always stop the water from flowing, but they can reduce efficiency or cause leaks. Equipment manufacturers can advise water to run continuously instead of shutting off. Other types of leaks "go undetected" for long periods because they are not causing any damage or disruption to daily operations.

Other types of leaks may seem insignificant, but can cause damage inside walls, under floors, and ceilings for a long time before they are discovered. All leaks add up fast, so water use needs to be periodically verified at the end of use to make sure the fixture is still performing correctly. Get a handle on your facility's water use to identify and fix leaks before they become a big problem.



Start by Gathering Information

- Track your water and energy usage**
Compare your water and energy bills from at least the last 12 months. Compare readings to previous ones to spot trends or inconsistencies. (See [EPA's "How to Read Your Water and Energy Bills"](#) for more information.)
If both a Portfolio Manager or another utility management system to track water and energy use time. (Note: Portfolio Manager also provides users the ability to track waste and materials.)
- Don't wait for the bill to see you have a problem**
Inspect your water meter and submeters to identify problems and usage spikes. Read water meters during off-peak hours when water use is lower. If the meter continues to show high use, there may be a leak. Submeters and temporary flow meters can identify water specific areas or pieces of equipment to detect problems quickly.
NOTE: Submeters and temporary flow meters do NOT need to be on separate utility accounts. They can just be used internally to pinpoint issues.
- Set up alerts**
Install leak detection and before alarm devices on all major water using equipment such as cooling towers and boiler systems. Before alarm devices sense if equipment is malfunctioning or potentially leaking by detecting abnormal increases in water flow. The devices can alert staff if a leak is detected or automatically turn off the water supply.
- Add leak detection to daily facility rounds**
Listen and look for unexpected water use indicators and outliers, such as running water, unexplained discharge to floor drains, or wet walls and pooling water on floors or on the grounds. Find up signs in restrooms, kitchens, and other high traffic areas where water is used by visitors, employees, tenants, and visitors to report leaks to maintenance staff for repair.
Give kids your water use by walking around your facility with the checklist on the next page to see if you can check down any other water wastefulness.

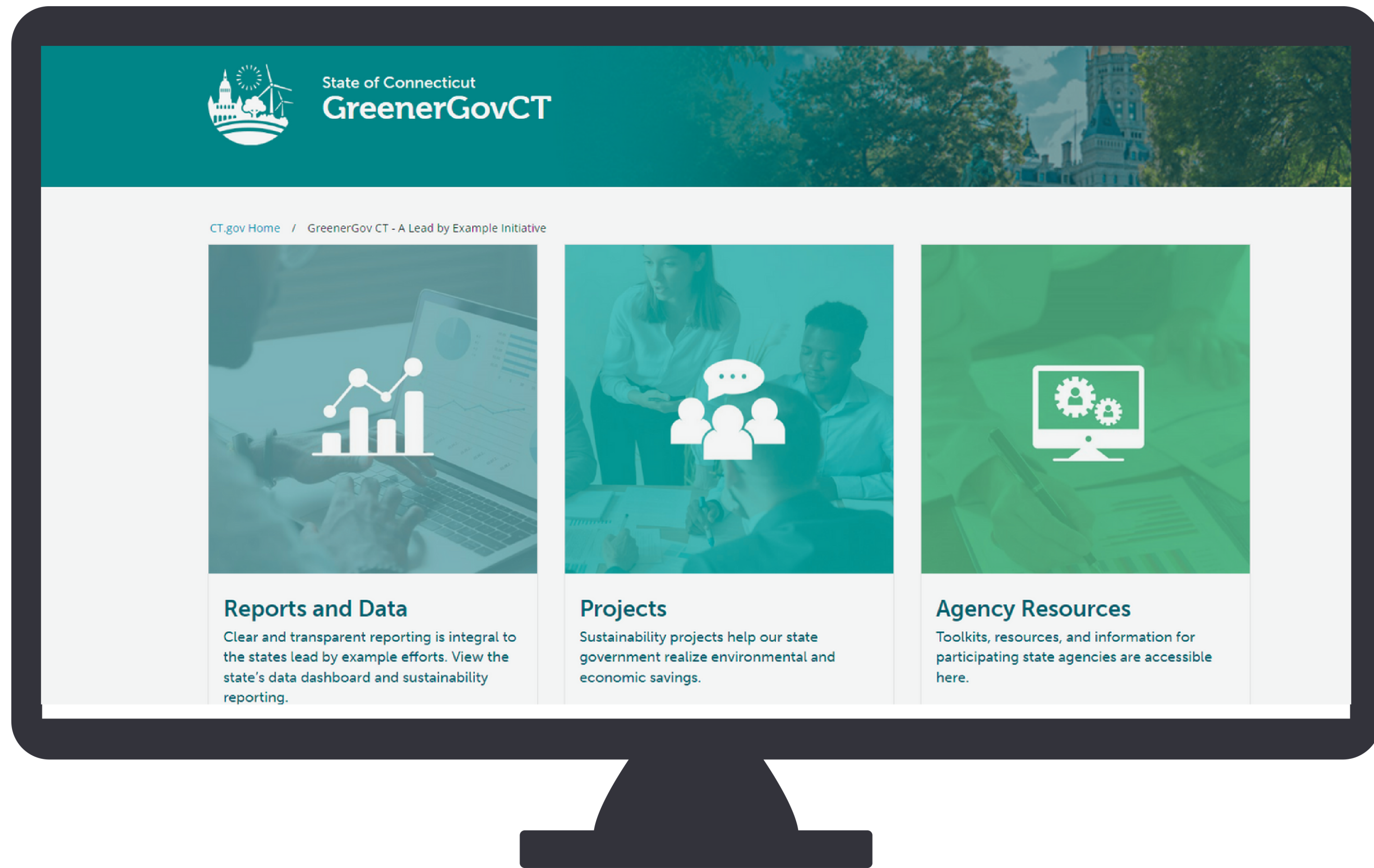
Checklist for Spotting Water Waste

Here are some of the places leaks may be hiding in your facility. Some leaks require a simple fix like tightening a loose connection, but other equipment malfunctions may require a licensed plumber or facility maintenance professional. Take a quick inventory of potential water waste in your facility.

Throughout the facility:	In the restrooms:
☐ Check for dripping water, rust, or other signs of leakage under pipe connections and near floor drains. Look for signs of moisture or water on your walls, ceilings, or floors. ☐ Regularly check equipment cooling water lines for leaks and corrosion. ☐ Inspect shut-off valves and ensure to ensure they stop continuously running water. ☐ Encourage employees to report leaks and maintenance staff.	☐ Submeters/leakage: Check and adjust sensors regularly to avoid double counting or continuously running water. ☐ Toilet and urinal: Listen for running water and time the flush cycle. Regularly inspect and replace worn flappers or piston valves. Test backflow valves for worn flappers and other leaks without running. ☐ Faucets: Check for drips and verify that faucet sensors are all properly installed. ☐ Broadband: Look for leaks or areas where signs of water buildup or other malfunctions indicating flow.
In the mechanical spaces:	Outdoors:
☐ Equipment oil leaks: Check system specifications to see the minimum water flow rate required for cooling. Regularly check external sensors to make sure water is only flowing when needed. ☐ Boilers and steam systems: Regularly check steam traps and steam and hot water lines for leaks. ☐ Cooling towers: Check the condenser water and the make-up and treatment flow meters regularly during readings. Check the water up and treatment valves to make sure they cut off the flow of water clearly.	☐ Check for leaks: Inspect the landscape for water pooling or puddling to prevent damage to landscapes and surrounding plants. ☐ Irrigation systems: Report broken system heads and nozzles spraying in the wrong direction. Contact an irrigation contractor to inspect and replace broken system heads or nozzles. ☐ Pools and fountains: Check water levels. A loss of more than 2" per week in the water level may mean a leak.
In the kitchen:	
☐ All equipment: Shut down or use standby mode for all continuous flow equipment between uses. Report staff who refuse to make sure they are working properly. ☐ Dishwashers: Check for leaks: Check openings at handles for smooth gaps. If an employee is also doing it, change only when necessary. ☐ Garbage disposals: If malfunctions should clean completely after the work area is full. Report and repair valves and hose malfunctions. ☐ Dishwashers: Report and replace gaskets and tighten hinges on doors to stop food or steam. ☐ Food disposal systems: Turn off water to disposals during idle periods. Train users to manually scrape as much food waste as possible first.	For more information about water efficient best practices, tools and case studies on the WaterSense website: https://www.epa.gov/watersense/watersense-basics Remember to look for the WaterSense label when purchasing plumbing products. WaterSense labeled products are independently certified to use at least 20 percent less water and perform as well as or better than standard models. Posting rules at your workplace is important, but so is being able to see your water bill. For more information on being able to see your water bill, visit https://www.epa.gov/watersense/water-bills.



GREENERGOV CT PORTAL





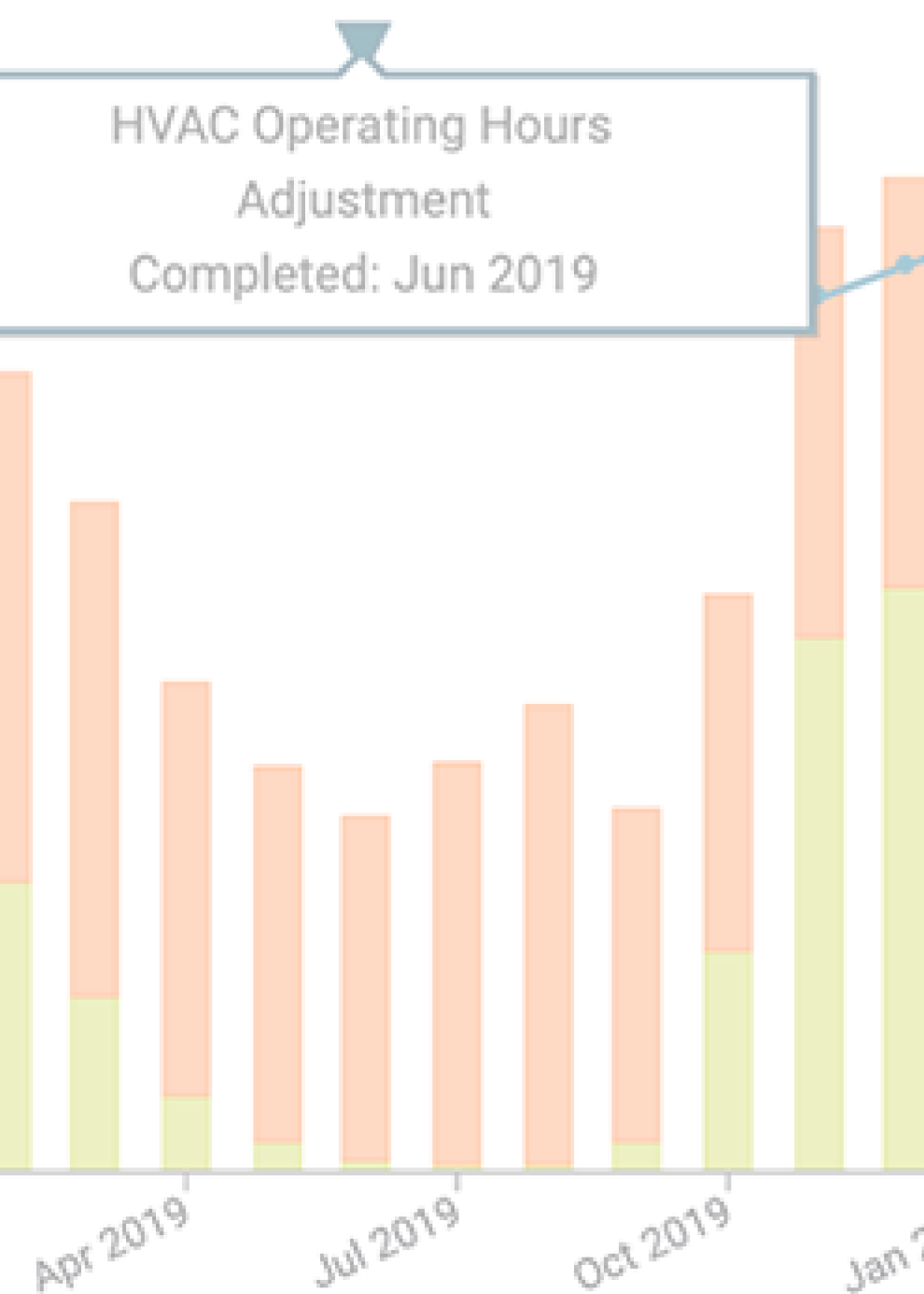
ENERGY OPPORTUNITIES FOR STATE AGENCIES

Contacts:

**Dana Mowry, Eversource
dana.mowry@eversource.com**

**Jim Beatrice, UI
jbeatrice@uinet.com**

Intensity



ENERGYCAP[®]

Edit Energy Project

View Energy Project Details

View Energy Project Summary

HVAC Operating Hours A

View Energy Project Details

5/24/2019



NEXT STEPS AND DISCUSSION

GREENERGOV CT



Thank
you!

REACH OUT TO US AT:
DEEP.LEADBYEXAMPLE@CT.GOV

GREENERGOV CT

