

EXECUTIVE ORDER 1 KICK-OFF MEETING

JUNE 28, 2019

GINA MCCARTHY AUDITORIUM



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A Lead by Example Initiative

HOUSEKEEPING

Restrooms through the glass doors then straight ahead

Questions welcome throughout and **Q&A session** at the end

Please **silence your phones**

MEET THE CO-CHAIRS

DEPARTMENT OF ADMINISTRATIVE
SERVICES

**Josh
Geballe**

Commissioner



DEPARTMENT OF ENERGY AND
ENVIRONMENTAL PROTECTION

**Katie
Dykes**

Commissioner



OFFICE OF POLICY AND MANAGEMENT

**Melissa
McCaw**

Secretary



WHAT'S ON THE AGENDA

WELCOME BY CO-CHAIRS

INTRODUCTION OF AGENCY HEADS AND SSOs

OVERVIEW OF EXECUTIVE ORDER 1

HIGHLIGHTING SUCCESS STORIES

GETTING INVOLVED

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MEET THE SENIOR SUSTAINABILITY OFFICERS (SSOs)

Michael Last
Frank Calvi
Noel Petra
David Barry
Peter Zelez
Jason Cohen
Scott McWilliams
Susan Shellard
Dennis Thibodeau
Stephen DiPietro
Angelo Cavaliere
Nathan Wilson
Jacqueline Shirley
Steve Link
Rebecca French
Josh Herchman
Patrick Tallarita
Michelle Provost
Suzanne Donlon
Robert Bell
Chukwuma Amechi

Agriculture Experiment Station
CT State Library
Department of Administrative Services
Department of Children and Families
Division of Criminal Justice
Department of Consumer Protection
Department of Developmental Services
Department of Economic & Community Development
Department of Energy & Environmental Protection
Department Mental Health and Addiction Services
Department of Motor Vehicles
Department of Agriculture
Department of Banking
Department of Correction
Department of Housing
Department of Insurance
Department of Labor
Department of Rehabilitation Services
Department of Transportation
Department of Transportation
Department of Public Health

Theresa Peterson
Michael Gilbert
Joseph Danao
Robert Cody
Roger Persson
Chris Lyddy
Paul Hinsch
Jen Loo
Keith Norton
Elizabeth Graham
Eric Connery
Maura Martin
Eric Shrago
Barbara Petano
Holly King
Cynthia Petruzello
Andy Agwunobi
Joseph Geremia
Michael Jednak
Rich Miller
Keith Epstein

Department of Revenue Services
Department of Social Services
Department of Veterans Affairs
Emergency Services & Public Protection
Military Department
Office of Early Childhood
Office of Policy & Management
Public Defender Services
State Department of Education
Judicial Branch
CT General Assembly
Connecticut Housing Finance Authority
CT Green Bank
CT Lottery
State Education Resource Center
CT Innovations
UCONN Health
Capital Region Development Authority
UCONN
UCONN
CT State Colleges & Universities

WHY EXECUTIVE ORDER 1?

SAVINGS



To save taxpayers money by reducing operating costs to the state and streamlining processes

COLLABORATION



To leverage the synergistic benefits of agencies collaborating towards a common goal



IMPACT

To lessen state agency energy, waste, and water footprints and enhance public health

LEAD BY EXAMPLE



To expand a culture shift by serving as an example to municipalities, businesses, and other entities

HOW CAN THIS BENEFIT MY AGENCY?

OPERATIONAL SAVINGS

Save time, money, and effort required to achieve state goals

CONSUMPTION DATA

Streamline data entry such as pairing CORE to work more efficiently with EnergyCAP, catch more billing errors

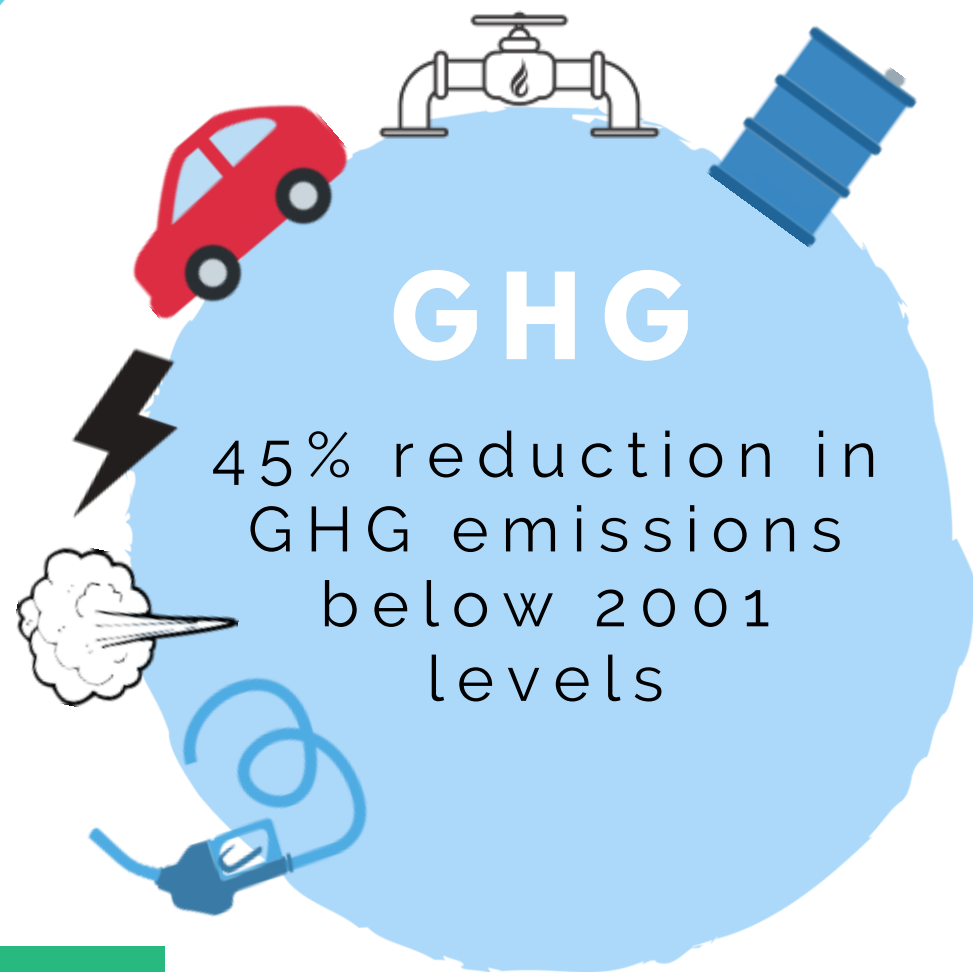
OPPORTUNITY

Institutionalize best practices across agencies

LEVERAGE

Leverage inter-agency resources to bolster efficiencies

2030 ENVIRONMENTAL TARGETS



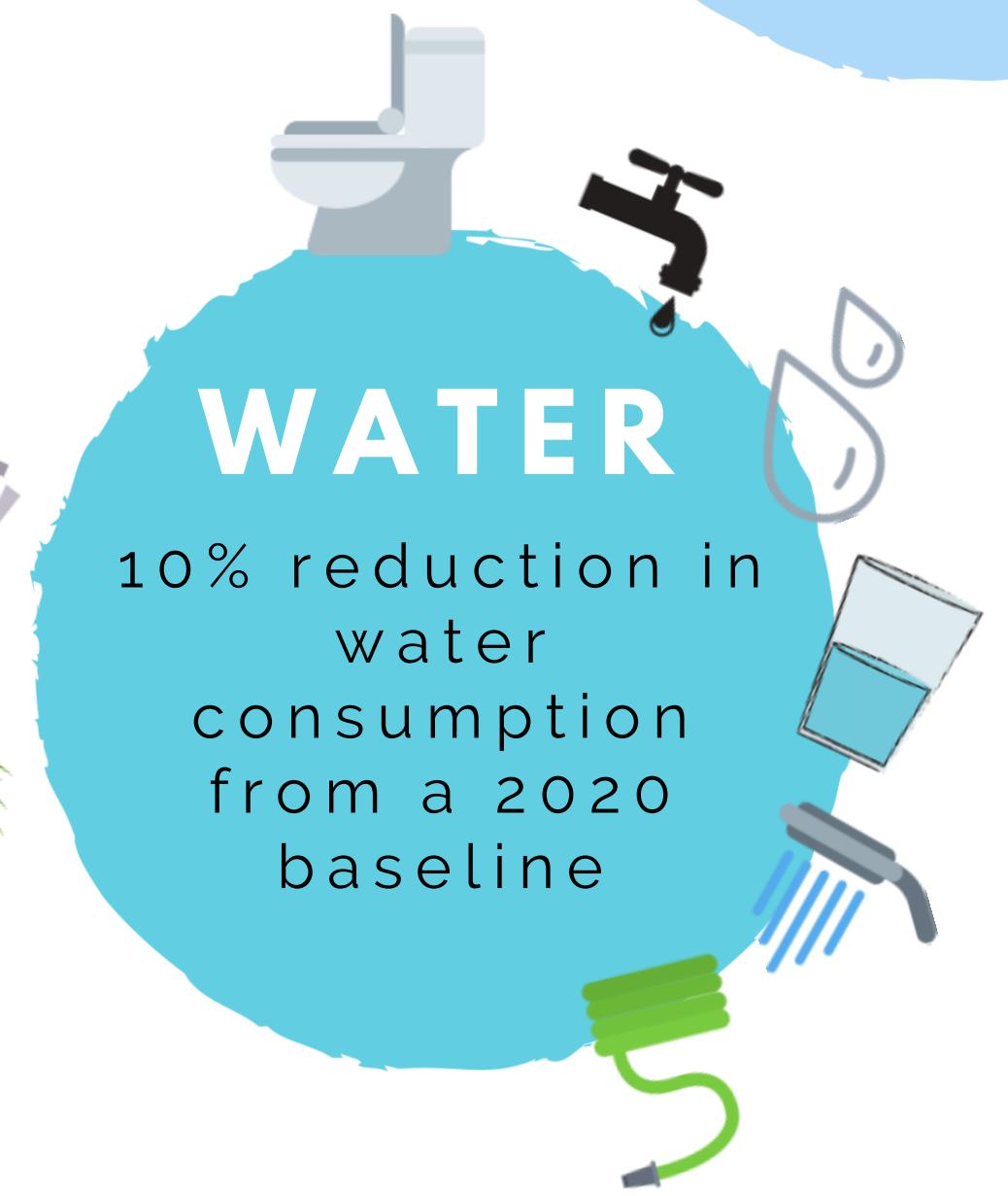
GHG
45% reduction in GHG emissions below 2001 levels

This graphic features a light blue circular background with the text 'GHG' and '45% reduction in GHG emissions below 2001 levels'. It is surrounded by icons representing various sources of greenhouse gas emissions: a red car, a lightning bolt, a cloud with a pencil, a blue power plug, a water tap, and a blue barrel.



WASTE
25% reduction in waste disposal from a 2020 baseline

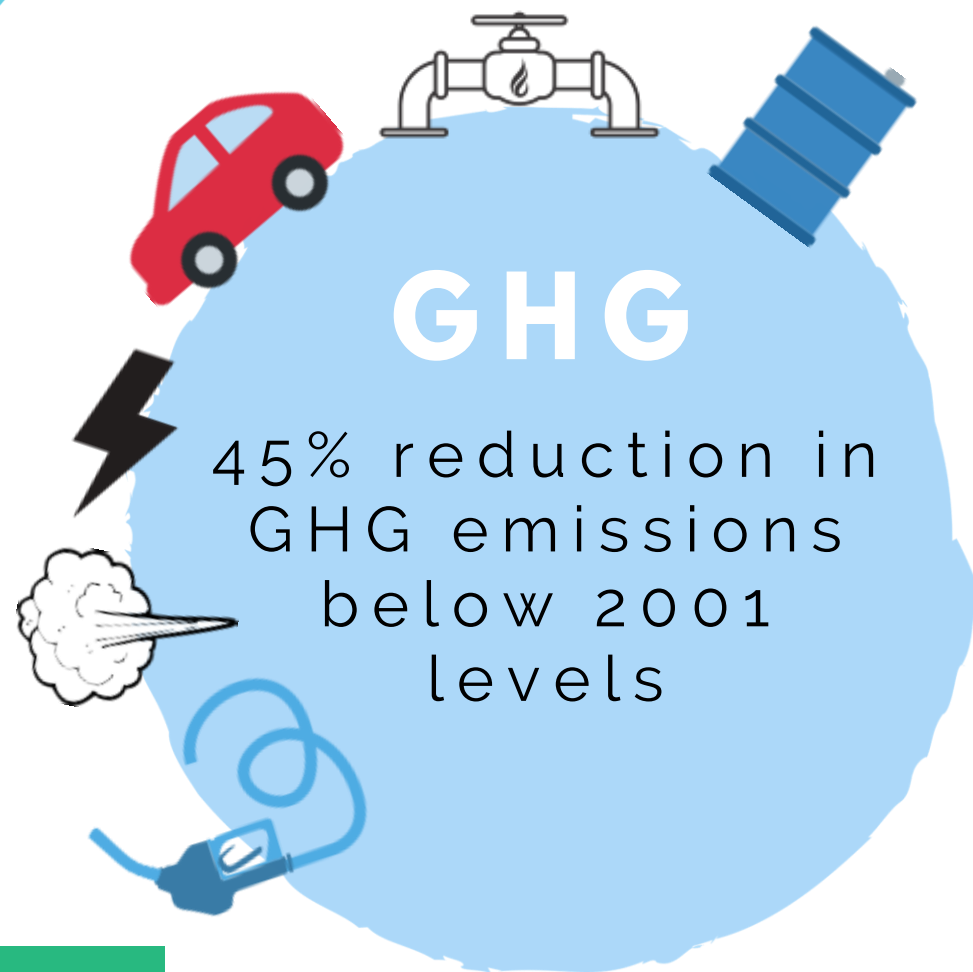
This graphic features a light green circular background with the text 'WASTE' and '25% reduction in waste disposal from a 2020 baseline'. It is surrounded by icons representing different types of waste: a green recycling bin, a banana peel, a white trash can, a black coffee cup, a stack of papers, and a green plant.



WATER
10% reduction in water consumption from a 2020 baseline

This graphic features a light blue circular background with the text 'WATER' and '10% reduction in water consumption from a 2020 baseline'. It is surrounded by icons representing water-related items: a toilet, a faucet, a water drop, a glass of water, a showerhead, and a green energy-efficient light bulb.

ACHIEVING THE GHG TARGET



DEVELOPING A BASELINE

We are close. Scanning utility energy invoices and tracking vehicle fuel use.

ACHIEVING TARGETS

Improving building and vehicle efficiency to reduce use fossil fuel use. Switching to low-carbon or carbon free energy.

ACHIEVING THE WASTE TARGET

DEVELOPING A BASELINE

Statewide baseline will be established by **focusing on large state office buildings**



ACHIEVING TARGETS

Standardize trash and recycling bins with proper signage, **reduce paper use**, and **compost food scraps** along with **implementation of other best practices**

ACHIEVING THE WATER TARGET

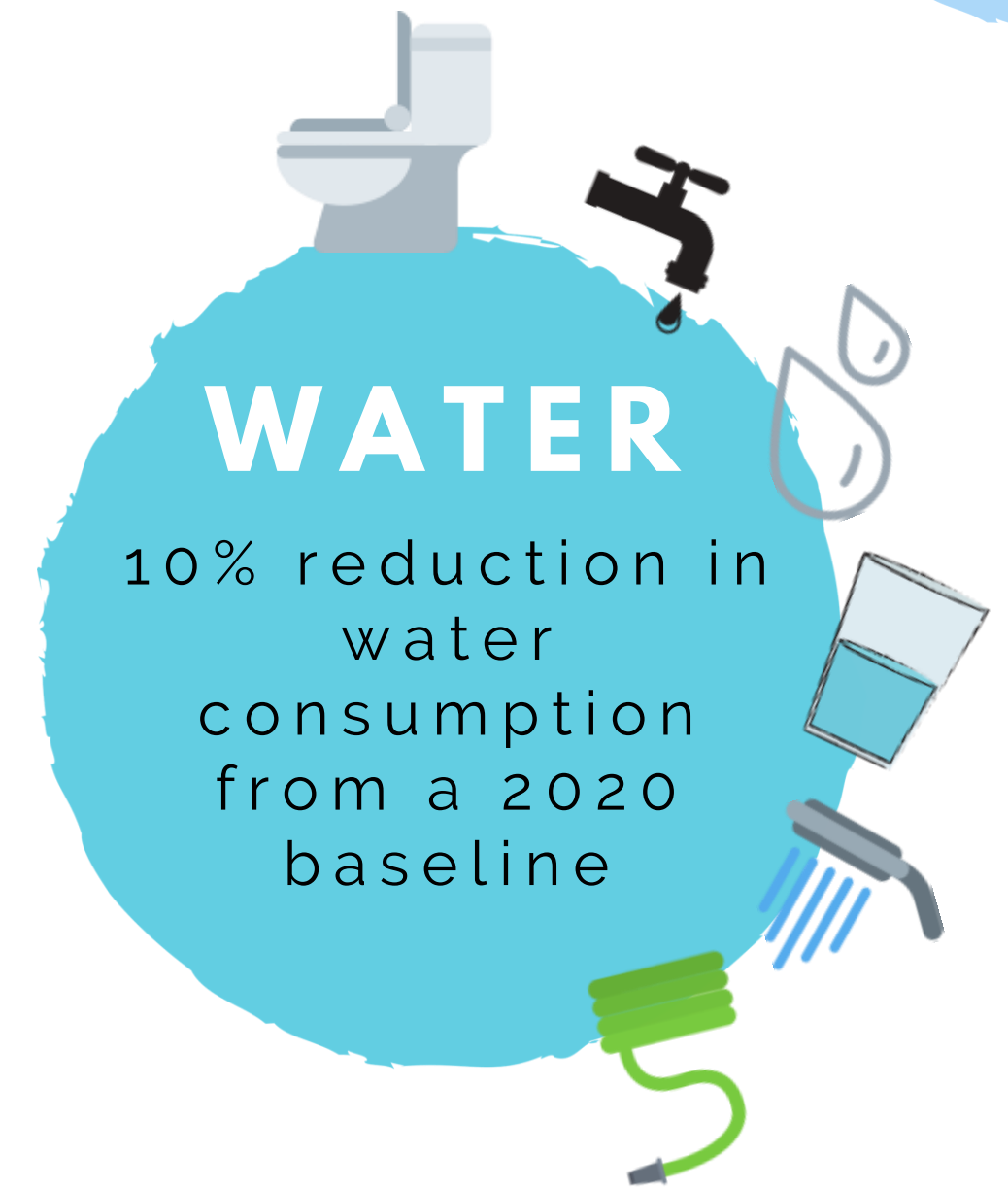
DEVELOPING A BASELINE

Water utility billing
uploaded to EnergyCAP

*Alternative quantifying methodologies for facilities on private water systems will be assessed on a case-by-case basis

ACHIEVING TARGETS

Majority of reduction expected to come from **plumbing retrofits and leak repair**



REPORTING ON PROGRESS

WHAT DO I REPORT ANNUALLY IN MY PERFORMANCE PLAN?

All agencies will report something.

Data will be 'coded' in different categories so when we roll up everyone's report, **we avoid double counting or missing key activities**

DOES EVERY AGENCY HAVE THE SAME ENVIRONMENTAL TARGET?

We recognize agencies have different sizes and assets. That's why the **goals of EO 1 are aggregate goals**. Some agency goals may be more behavioral while some more quantitative. Either way, we move **closer to a more sustainable government**.

FINANCING IT ALL



PAST

On-bill financing through the Small Business Energy Advantage (SBEA) ~**150 SBEA projects** and **76 bond funded projects**

PRESENT

SBEA loans through utilities (0% on-bill financing) up to \$100k per project, utility program contractor list aligns with state list. **Limited bond funding** available.

FUTURE

Financing solutions that tackle all environmental targets (energy efficiency in facilities, water conservation, electric vehicles and charging infra, renewable energy and materials management)

A BRIEF TIMELINE OF

EXECUTIVE ORDER #1

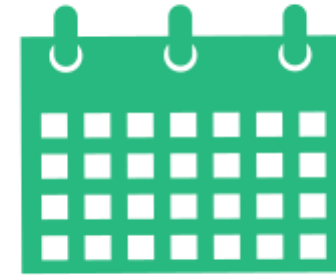
This timeline illustrates the upcoming steps to achieve objectives of Executive Order (EO) 1



Monthly steering committee meetings on the 1st Thursday of every month, beginning in August

MARK YOUR CALENDARS

UPCOMING SUSTAINABILITY STEERING COMMITTEE MEETINGS



THURSDAY, AUGUST 1
12PM-2PM
LOCATION TBD



THURSDAY, SEPTEMBER 5
12PM-2PM
LOCATION TBD



THURSDAY, OCTOBER 3
12PM-2PM
LOCATION TBD

AGENCY NEXT STEPS

★ BY JULY 23 2019



FILL OUT CONTACTS SURVEY

Survey will arrive in a **follow-up email** to SSOs and will prompt you **to provide needed contacts**.



JOIN A PROJECT TEAM

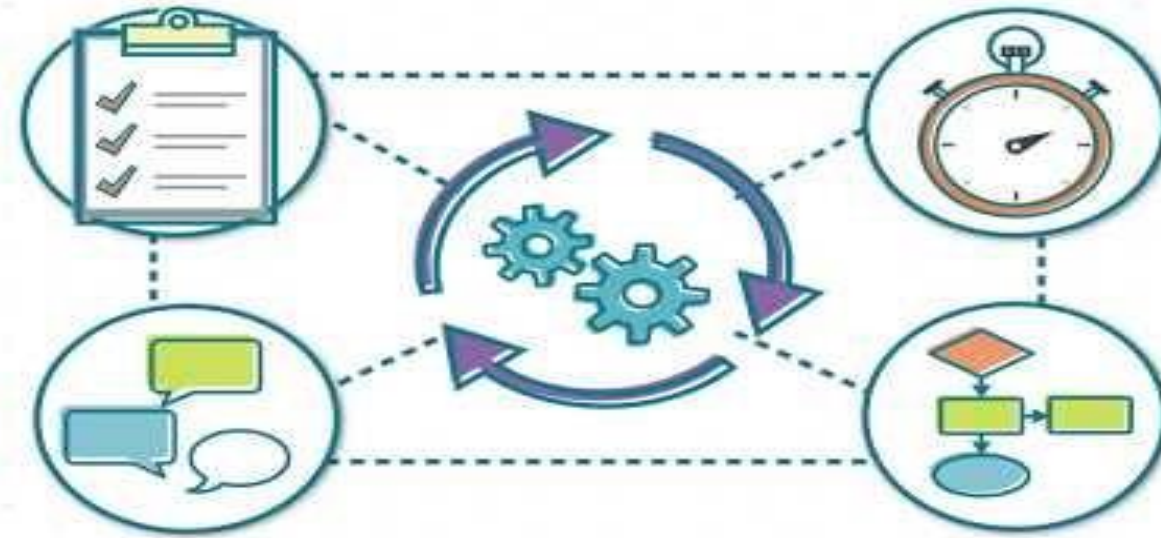
Rank the top 3 project teams your agency would prefer to serve on **or provide suggestions for additional project teams**. This will be in the **same survey**.



ATTEND BASELINE TRAINING

Training webinar will be held **Wednesday, July 10 at 12pm**. **Send a delegate** if you cannot attend!

WHAT IS ENERGYCAP?

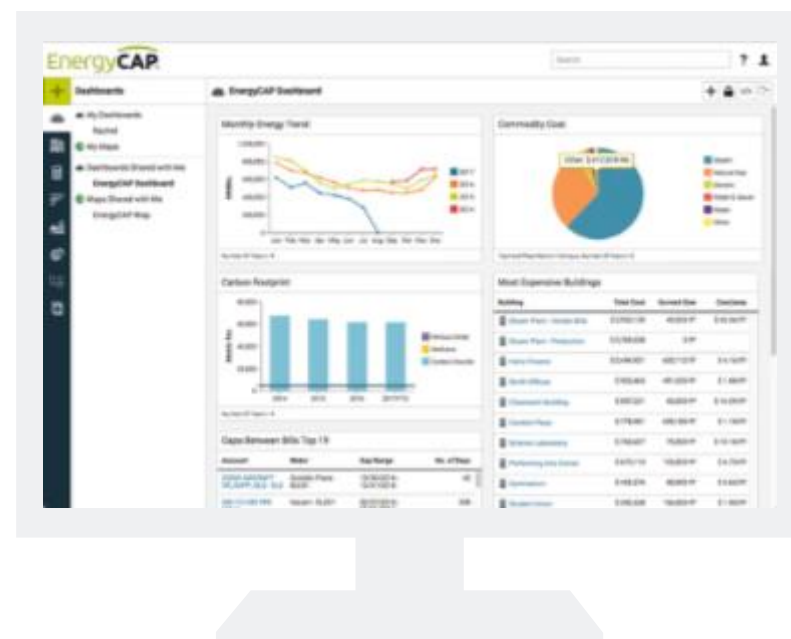


<https://www.youtube.com/watch?v=hAyzE4zS1Es>

WEBINAR JULY 10

OVERVIEW OF ENERGYCAP

EnergyCAP as a tool to help agencies implement Executive Order 1 and how to upload invoices and track agency energy use



OVERVIEW OF BASELINE DATA

Review and Q&A related to how agencies will provide 2020 baseline data

BRANDING & MARKETING



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PUBLIC FACING WEBSITE

serve as an example for Connecticut residents, organizations and businesses

INTER-AGENCY TEAMWORK

"free-agent" web domain for greener government actions

TOOLKITS

access resources for implementing cost-saving and sustainable actions

INCREASED TRANSPARENCY

dashboard display of agency energy use with water/waste in the future



SUCCESS STORIES

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Food Diversion @ DEEP

METHODS

79 Elm Street Building Management **contracts with Blue Earth Compost**

10 Franklin Square uses volunteers to turn a **70 gallon outdoor composter**

Employees are educated to place food scraps in **special containers** in employee break rooms

Standardized trash & recycling bins and **signage** in common areas, labeled for easy sorting

IMPACT

Reduces trash and **frequency of collection** services and **creates compost**

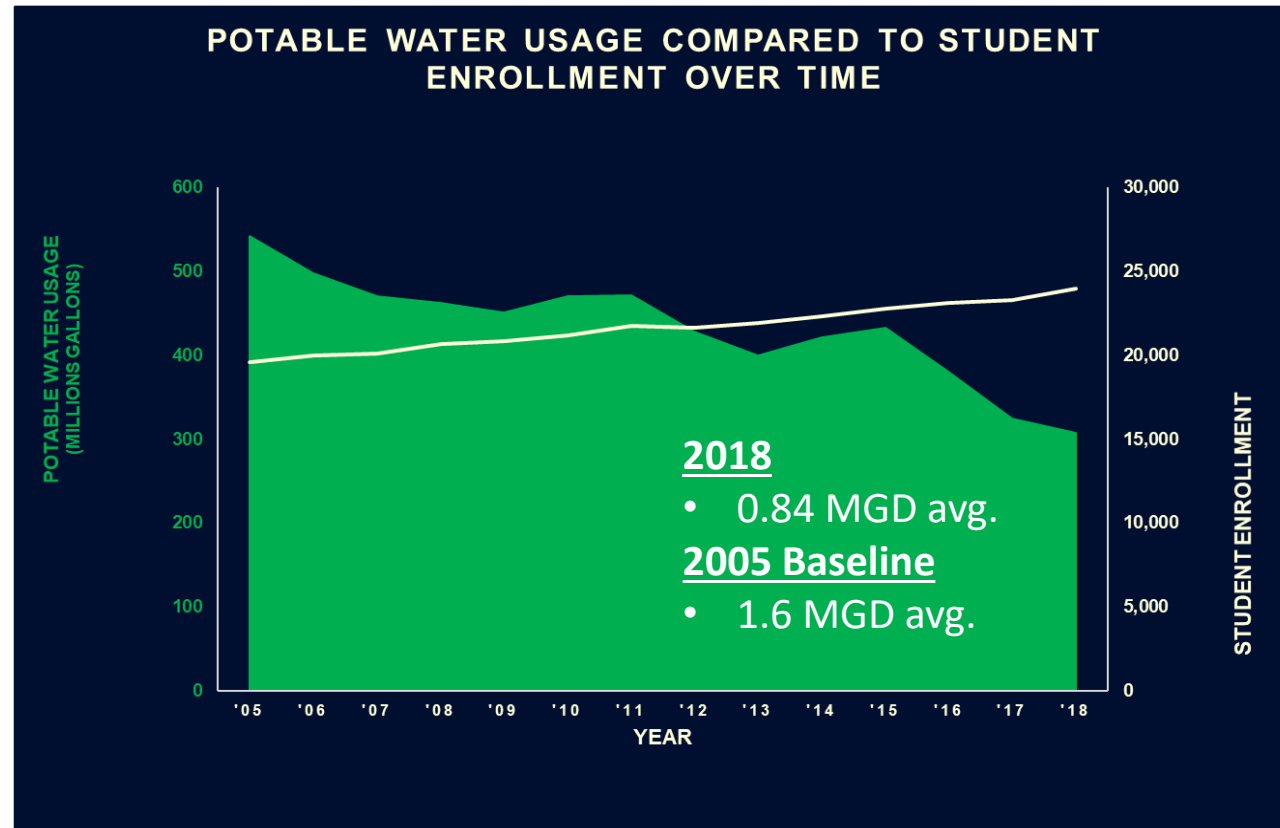
LBE Projects @ DOC

DEEP Lead by Example Projects

2012 to Present

Date Signed	Facility	Project	DEEP #	DEEP Energy Database #	Project Cost	Estimated Cost Savings (Annual)
02/09/12	Will/Cyb	Rooftop Units (16)	12156AA		\$150,690.00	\$ 16,029.00
09/05/12	Robinson CI	Rooftop HVAC	2013-39	37	\$403,108.33	\$ 90,562.00
06/19/13	Corrigan CI	Outdoor Lighting Upgrade	2013-13247	48	\$47,548.00	\$ 11,725.00
06/19/13	Garner CI	Chillers & Outside Lighting Upgrade	2013-13246	49	\$577,300.55	\$ 66,578.00
07/17/14	Brooklyn CI	Chiller	2014-15010	163	\$171,800.00	\$ 31,493.00
09/11/14	Corr/Rad	Chiller	2014-15038	167	\$95,300.00	\$ 9,446.00
06/01/15	Robinson CI	LED Lighting	2015-15262	178	\$28,280.37	\$ 14,885.00
10/15/15	Hartford CC	Roof Top Unit Replacement	2016-16055	180	\$338,509.00	\$ 45,905.00
07/30/15	Hartford CC	Boiler Room Pump Replacement	2016-16003	181	\$44,117.94	\$ 13,348.00
11/20/15	Robinson CI	Laundry Consolidation and Upgrade	2016-16089	183	\$294,368.05	\$ 135,390.00
10/27/15	Robinson CI	Roof Top Unit Replacement	2016-16079	187	\$294,252.67	\$ 31,957.00
10/15/15	Cheshire CI	A & B Dining Areas Roof Top Unit Replacement	2016-16071	188	\$59,832.91	\$ 7,989.00
11/20/15	Radgowski CI	Kitchen Hood Controls	2016-16091	190	\$23,367.00	\$ 7,221.00
11/20/15	York CI	Laundry Ozone	2016-16090	195	\$38,090.00	\$ 27,528.00
11/28/16	Robinson CI	Exterior Lighting Upgrade	2017-111	199	\$171,996.00	\$ 39,777.00
01/11/17	Osborn/Enfield	Steam Trap Replacement	2017-149	200	\$53,739.00	\$ 59,825.00
3/14/19	OCI/NCI/M-W	Chiller/Boiler Project	2019-108		10,992,435.00	TBD
				Total	\$13,784,734.82	\$ 609,658.00

Water Conservation @ UConn



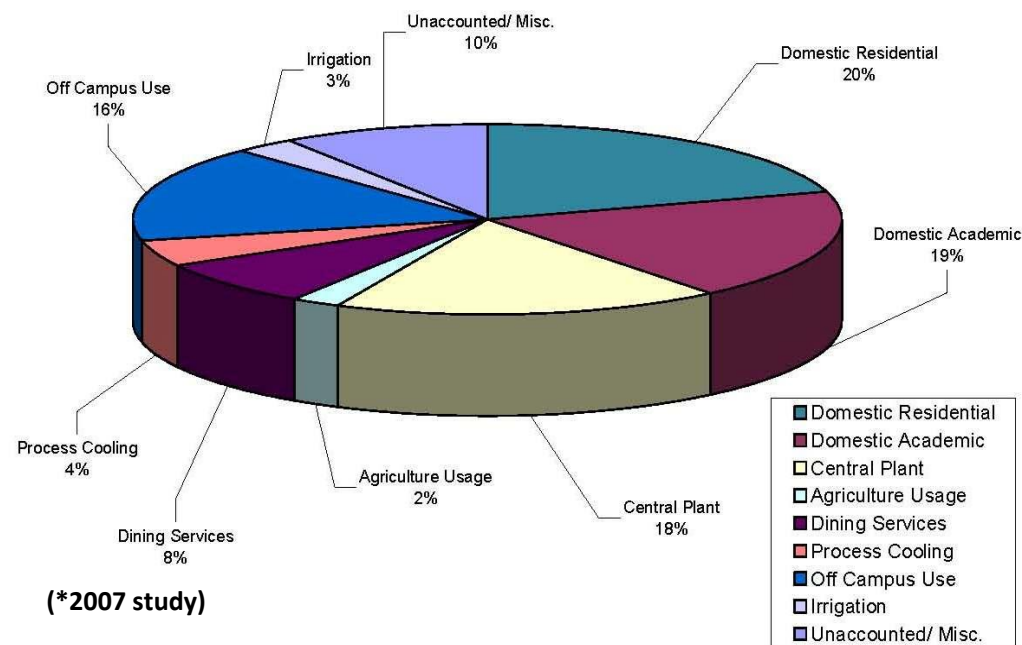
Study Completed in 2007
(WMI with Amy Vickers)

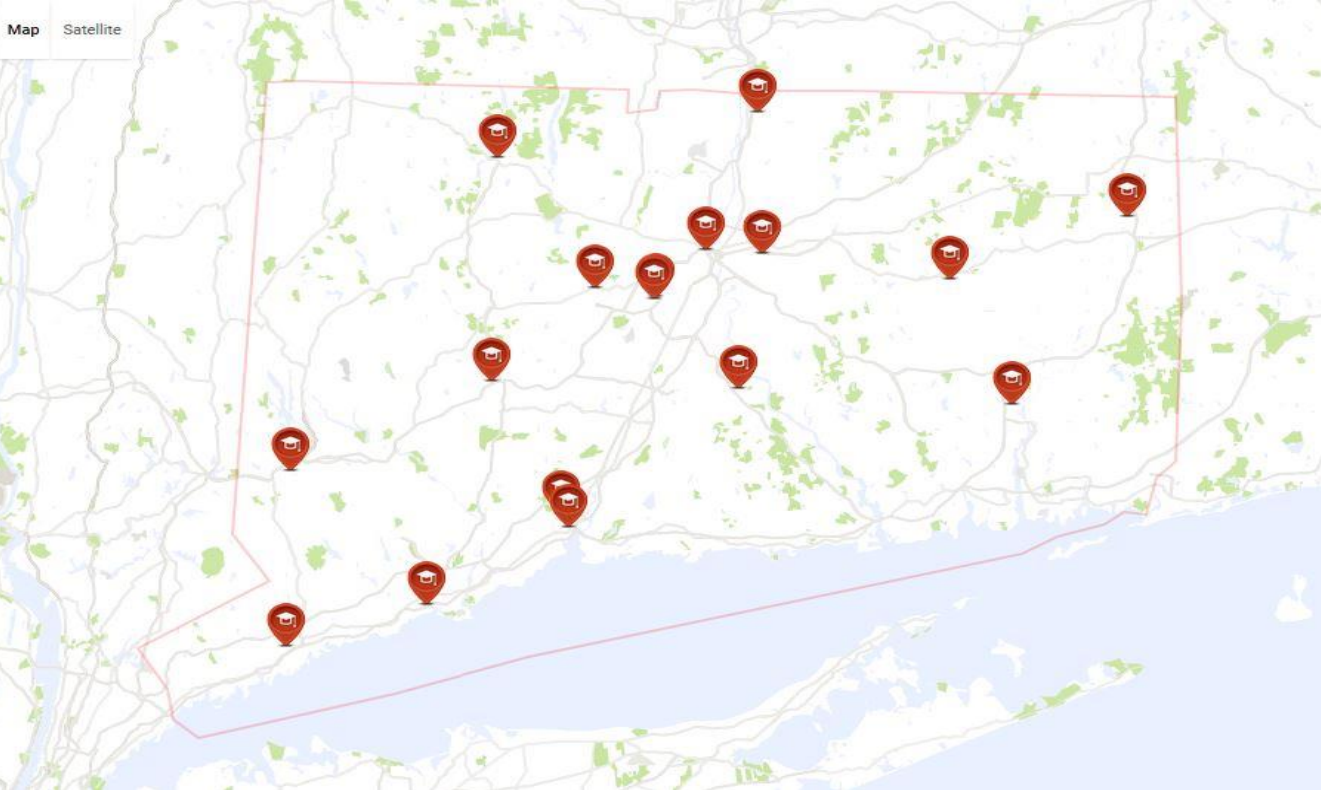


Implemented Recommendations:

- Steam system repair & replacement
- Low-flow devices
 - Faucets, toilets/urinals, showerheads
- Flow restrictions
 - Dishwashers
- Soil- or weather-based irrigation controls
- Rainwater harvesting
- Air-cooled and closed-loop cooling systems

Calculated Water Uses





Energy Management @ CSCU

Who we are:

17 Institutions- 12 Community Colleges, 4 Universities, 1 Online College occupying 13,500,000 GSF with 82,000 Students

Initiatives

Energy Master Plan, External/Consultant Partnerships
Electricity Reverse Auction, PV Solar PPA Program, Fuel Cell PPA Program, Virtual Net Metering Program, Energy Conservation Program (Lighting Upgrades + Retro-Cx Existing Buildings), Net Zero Building Construction, EV Charging Stations, 20+ LEED (Equiv) Bldgs





**GET INVOLVED
&
SHARE YOUR
STRENGTHS**



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GETTING INVOLVED

What do these working groups do?

Whatever is needed to make EO implementation easy and replicable. The goal is collective success!

What will be my responsibilities?

Attending meetings on occasion and helping prepare needed deliverables.

What makes someone great for a project team?

You have experience implementing similar projects at your agency, have technical expertise in one of these categories, or your agency is interested in this area.

Can I assign a delegate?

Yes, find the right individual at your agency and write them under “delegate” on the survey you receive.

PROJECT TEAMS

Renewable Energy – Develop plan for piloting solar projects on state buildings, solar project SOPs

Energy Efficiency - Work with utilities to develop incentives and auditing buildings, develop plan for implementing widespread efficiency projects

Sustainable Water Use – Develop a template water system audit form/process, research innovative/cutting edge water saving methodologies, track project implementation and progress

Sustainable Materials Management - Develop purchasing and recycling SOPs, develop metrics for waste collection, plan pilot projects

Clean and Efficient Transportation – Develop EV deployment plans and fine-tune GHG baseline data

Process improvement - Apply LEAN ideals to streamline EO 1 implementation

Reporting - Write templates for reporting requirements

Marketing - Identify previous/ongoing success stories, communicate progress, host an award ceremony, PR

Leased Spaces – Develop materials and plans for how agencies can be sustainable in a leased space, optimize communication between landlords + lessees regarding sustainability

Any suggestions?



QUESTIONS?

WANT TO WRITE US
INSTEAD?

EMAIL:
LEADBYEXAMPLE@CT.GOV



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