LBE 101: Setting Statewide Targets & Implementation

Introduction:

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Speakers:

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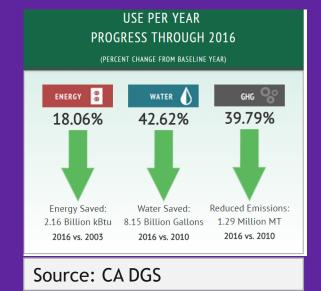
LBE 101: Setting Statewide Targets & Implementation

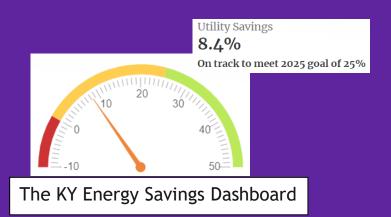
- As of 2018, 33 states either have an energy savings target in place committing state government facilities to a specific energy reduction goal or require state buildings to exceed the statewide energy code or meet a green building mandate such as LEED.
- State and local governments are beginning to move toward zero energy building (ZEB) goals defined by DOE as "an energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy."



LBE 101: Setting Statewide Targets & Implementation

- Targets are typically a percentage reduction below a baseline level of energy consumption for state buildings by a certain future year.
- Target Considerations:
 - Other measurement metrics: total energy, electricity, utility bills, energy intensity, emissions
 - Framing the goal: percentage or total reduction
 - Timeline, including interim goals
 - Baseline options: most recent year with data, year of peak consumption, etc.
 - Buildings to include: new and existing, based on square footage, owned vs. leased, etc.







LBE 101: Examples of State Targets

- Maryland, June 2019: Governor Hogan signed the "Maryland Leads by Example" EO setting a goal to reduce energy consumption in state-owned buildings by 10% by 2029 compared to a fiscal year 2018 baseline.
- Rhode Island, December 2015: Governor Gina Raimondo issued EO 15-17 that sets a goal that state government agencies should procure 100% of their electricity consumption from renewable resources by 2025 and sets a target for state agencies of reducing energy use by at least <u>10% below 2014</u> levels by the end of 2019.



LBE 101: Examples of State Targets

- Colorado, series of LBE Executive Order starting in 2003; most recent goals established in 2015:
 - EO D 2015-013 sets the following goals:
 - 1) Reduce energy consumption by 2% annually and at least 12% by FY 2020, from a baseline of FY 2015
 - 2) Absolute reduction of energy consumption of 5% by 2020



Executive Order 1 2030 ENVIRONMENTAL TARGETS



GHG [%] reduction

45% reduction in GHG emissions helow 2001 levels

WASTE

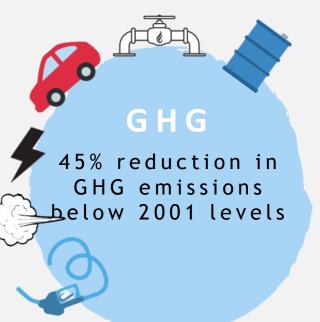
25% reduction in waste disposal from a 2020 baseline

WATER

10% reduction in water consumption from a 2020 baseline



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 lowcarbon or carbon free energy.



ACHIEVING THE WASTE TARGET

DEVELOPING A BASELINE

Statewide baseline will be established by focusing on large state office buildings WASTE 25% reduction in waste disposal from a 2020 baseline

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

ACHIEVING TARGETS

Water utility billing uploaded to EnergyCAP

*Alternative quantifying methodologies for facilities on private water systems will be assessed on a case-by-case basis Majority of reduction expected to come from plumbing retrofits and leak repair

WATER

10% reduction in water consumption from a 2020 baseline



WHY EXECUTIVE ORDER

SAVINGS



1?

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

IMPACT

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

COLLABORATION

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



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

OPPORTUNITY

Institutionalize best practices across agencies

CONSUMPTION DATA

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

LEVERAGE

Leverage inter-agency resources to bolster efficiencies

> greenergov CT A Lead by Example Initiative

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)

BRANDING & Public Engagement



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