

# 2019

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## [REDUCING COMMERCIAL SECTOR EMISSIONS]

A compilation of research, case studies, and analyses of strategies for collaboratively achieving sustainability goals for the Town of Concord, Massachusetts

# STRATEGIES FOR REDUCING COMMERCIAL GREENHOUSE GAS EMISSIONS

In this document, there are several strategies that have been identified through extensive research of cutting edge practices and interviews with municipalities leading the way with climate action. Each strategy has a description, its intended impact, case studies of its use in other municipalities, and resource materials for further reading. Some strategies may have pertinent notes at the bottom of the document. Each strategy is intended to help Concord meet its greenhouse gas reduction goals of 80% by 2050.

The below summary is comprised of comparative, qualitative indicators gathered through research and interview feedback other municipalities. The symbols are not indicative of exact amounts or measurements and are only an educated guess informed by extensive research and experiences of other municipal leaders spoken to over the course of the summer.

Strategy	Time to Implement	Cost to Town	Administrative Burden	Environmental Impact
Recognition Program				
Commercial Sustainability Engagement Campaign				
Strengthen Utility Incentives				
Expand Market and Development Incentives				
Guidance for Site Plan Review				
Property Assessed Clean Energy Financing				
Benchmarking Ordinance				

**Symbol Key:** ● Modest    ●● Moderate    ●●● Significant

There is an expectation that each sequential strategy may take more time and resources to enact. The strategies are organized into three categories, respectively: partnerships, incentives, and policy. The strongest approach for reducing commercial emissions will include elements of each for a multifaceted approach to helping Concord achieve its ambitious sustainability goals.

# Green Recognition Program

Summary	Intent
<p>A green recognition program is a way to reward businesses for implementing sustainability initiatives. It can be valuable to a business in that it can serve as a marketing tactic, promotes friendly competition and awareness with other businesses, and enriches the culture of sustainability in Town.<sup>1</sup></p>	<p><b>Businesses in Concord have expressed interest in recognition for their efforts in sustainability. There is currently a plaque available to businesses that use the HELP incentive through CMLP, but the recognition should be broadened to other sustainability efforts and more highly publicized.</b></p> <ol style="list-style-type: none"> <li>1. Creates incentive for participation in initiatives through increased visibility and marketing that <b>enhance the reputation</b> of the business to customers and talent</li> <li>2. <b>Promotes culture of environmental stewardship.</b> The symbolism of a plaque or window logo creates partnership, pride, and a <b>sense of belonging</b> though a common theme of responsibility.</li> </ol>
<h3>Case Studies</h3>	
<p><b><a href="#">Portland, Oregon - Sustainability At Work Program</a></b>            A popular opt-in program focusing on building and behavioral sustainability, Portland’s program consists of regular engagement with business e-newsletters featuring sustainability news and events, classes and trainings, and currently certified businesses. “Success” is measured by the number of businesses engaged on a regular basis, not so much amount of improvements or GHGs saved. The recognition program features checklists by type of business to achieve sustainability goals.</p> <p><b><a href="#">Austin, Texas - Green Business Leaders Program</a></b>            Austin adapted scorecards from other leading municipalities to fit Austin’s small-medium business culture. Their integrated municipal and commercial launch was effective because of substantial buy-in fostered through business engagement through program development process. According to City officials, the program incentivizes businesses through free promotion, saving money, networking events for participants, and friendly competition between businesses for “Green Cup”.</p> <p><b><a href="#">Newton/Needham Regional Chamber Green Business Awards</a></b>            The Chamber’s Green Business Award ceremony attracts businesses, government officials, and leaders near and far to commemorate the progress of the area’s business community. Their website also shares green leaders publicly to promote businesses who are leading the charge.</p>	
<h3>IMPACT AND TIMELINE</h3>	
<p><b>Indicator</b></p>	<p><b>Performance</b></p>
<p><b>Cost</b></p>	<p>Low</p>
<p><b>Administrative burden</b></p>	<p>Medium</p>
<p><b>GHG reduction potential</b></p>	<p>Low</p>
<p><b>Time to implement</b></p>	<p>Short</p>
<p><b>Affected parties</b></p>	<p>Concord Sustainability Division, Concord’s businesses, businesses outside of Concord, customers and investors</p>

**Resources for Further Reading:**

[Green Business Recognition - Commercial Energy Policy Toolkit – Fact Sheet for Local Governments](#)

## [25 Legit Green Business Certifications](#)

### Notes

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- Many interviewed businesses and the Concord Chamber were interested in the idea of recognition programs for area green leaders.
- Concord may consider adapting popular certification programs to fit Town culture, then instating personalized standards by which to certify local businesses
- Recognized businesses should be promoted through media channels (social media, Concord Journal, newsletters, website, etc.)
- Free marketing is a huge driver for businesses to take part in a recognition program. Concord could consider marketing materials, such as plaques, window logos, stickers, or flyers for participants.
- Many municipalities have shout-outs or awards for its green leaders. Concord could consider an award ceremony or special call-out for businesses leading the charge.
- Different entities can run the program: In Portland and Austin, the City runs the Sustainability at Work program, but in other instances, it is run by the local Chamber or a non-profit.

### References

1. Green Business Recognition - Commercial Energy Policy Toolkit – Fact Sheet for Local Governments. Imt.org. [https://www.imt.org/wp-content/uploads/2018/02/Commercial\\_Energy\\_Policy\\_Fact\\_Sheet\\_-\\_Green\\_Business\\_Recognition.pdf](https://www.imt.org/wp-content/uploads/2018/02/Commercial_Energy_Policy_Fact_Sheet_-_Green_Business_Recognition.pdf). Published 2019. Accessed July 19, 2019.



# Commercial Sustainability Engagement Campaign

SUMMARY	INTENT
<p>Concord’s commercial sector has expressed interest in regular engagement with sustainability in Town. Using a combination of strategies popularly used across the nation, a commercial engagement campaign can spark dialogue about environmental responsibility, share strategies and best practices, and promote lasting, mutually beneficial relationships between the Town and its commercial sector.</p> <p>An engagement campaign could include:</p> <ul style="list-style-type: none"> <li>• A regular Sustainable Business Newsletter and/or sustainability messages in a current newsletter</li> <li>• Sustainability gatherings in Concord (quarterly breakfast, coffee hour, etc.)</li> <li>• Collaboration with the Concord Business Partnership and Chamber of Commerce for events, workshops, and networking</li> <li>• Yearly face-to-face meetings with Sustainability Division to identify opportunities and challenges</li> <li>• Revamp of Sustainability webpage to promote easy navigation</li> </ul>	<p><b>A Commercial Sustainability Engagement Campaign intends to promote, incentivize, and normalize commercial environmental responsibility.</b></p> <ol style="list-style-type: none"> <li>1. A regular newsletter would <b>remind</b> busy business owners to take advantage of rebates and incentives, while also giving frequent <b>exposure to sustainability</b> topics. Using other Town newsletters for sustainability messages would prove effective in reaching many audiences through <b>multiple points of contact</b>.</li> <li>2. Gatherings of business owners in Concord and surrounding towns would provide an environment for <b>collaborating and sharing</b> information, tips, advice for sustainability.</li> <li>3. <b>Integration</b> of sustainability topics in business environments normalizes environmental sustainability. Chambers and business partnerships understand the unique needs of businesses and provide <b>credibility and trust</b> for wary businesses.</li> <li>4. Regular engagement promotes learning, identifies opportunities and barriers, helps businesses save money, and <b>generates enthusiasm</b> for Town sustainability goals.</li> <li>5. Updated and streamlined webpages that are easy to navigate and understand would address difficulties for Concord’s commercial sector.</li> </ol>
<h2>CASE STUDIES</h2>	
<p><b><a href="#">Newton/Needham Chamber, Massachusetts</a></b>  Annual Sustainability Breakfast and Green Business Awards attract a crowd of local businesses, community leaders, and government officials who gather to promote commercial sustainability. The Chamber also creates personalized marketing materials to engage with their business community.</p> <p><b><a href="#">Gresham, Oregon</a></b>  Gresham’s Green Business Program includes a newsletter, well-attended monthly Coffee Hour gatherings, and a certification program that is personalized to the individual capacity of each business. Its website promotes certified participants with breakdowns by industry, effectively showing that energy efficiency can be implemented in any sector. In its November Coffee Hours, they have an award ceremony for high performing businesses. Program administrators have indicated that the scheduling, measurement, and certification process is a medium administrative burden for their City, but well worth the effort in engagement progress.</p>	

### **Odenton, MD Chamber, Maryland**

This Chamber creates programming small business energy efficiency in Anne Arundel County through promotion, education, and workshops. It works as a networking resource, connecting businesses to trustworthy lenders, energy service providers, and contractors. To date, it has saved 150 local businesses 10 million kilowatt hours of energy savings annually, or \$300,000 per year, with an average energy reduction of 20% per business.

#### **IMPACT AND TIMELINE**

<b>Indicator</b>	<b>Performance</b>
<b>Cost</b>	Low
<b>Administrative burden</b>	Medium
<b>GHG reduction potential</b>	Low-Medium
<b>Time to implement</b>	Short-Medium
<b>Affected party</b>	Commercial sector, surrounding towns, Chamber of Commerce, Concord Business Partnership

#### **Resources for Further Learning**

[Can companies become cities' sustainability savior?](#)

[Transforming Chambers of Commerce into Energy Efficiency Champions](#)

[Institute for Market Transformation Green Business Recognition Fact Sheet](#)

[Innovative City-Business Collaboration](#)

[Kotter's 8 Steps to Leading Change](#)

#### **Notes**

- This strategy combines a number of ideas from other municipalities: Gatherings, newsletters, partnerships, direct engagement, and online media, all of which have proven to successfully engage businesses around the nation [see outreach tracker].
- While some businesses love the idea of a newsletter, others have expressed that they get too many e-mails already. Piggy-backing sustainability messages on another newsletter might be worthy of consideration. Consider engaging headlines for newsletters so that sustainability messages get across even if the e-mail is not opened and read.
- With limited time for searching, streamlining incentives online, parsing them out by type or size of business, may prove an effective engagement tactic.
- Other municipalities have suggested breaking gatherings up by businesses and property owner to directly address pertinent topics. Others have suggested working with local Chambers or organizations to host, being sure to leave time for networking, which is valuable to participants.
- Other recognition programs are available through Energy Star, but they require third-party verification. There is a list of partners certified to verify businesses on the Energy Star website – some cost money and others are free. There are low cost and free [options](#) near Concord.
- Face-to-face meetings have been identified as valuable and effective means of engagement by Concord businesses and other municipal leaders.

# Strengthened Utility Incentives

## SUMMARY

While some businesses in Concord are already taking advantage of incentives through CMLP, many businesses are not eligible, cannot afford upfront costs even with the incentives, or need technical support through the incentive process. Some others have expressed that taking advantage of current audits and incentives is not thorough or personalized enough to translate into actions in their businesses. More financial incentives and technical assistance, as well as more thorough and personalized interaction would enable more businesses in Concord to reduce energy.

## INTENT

**More robust and personalized financial incentives for commercial sector in Concord can empower businesses to pursue impactful energy projects, promote electrification, and help the Town meet sustainability goals.**

1. Businesses in Concord have expressed a need for clearer, stronger, and more accessible financial incentives for clean energy, efficiency, and electric vehicle projects. They also expressed a need for incentives to be expanded to more types of businesses. Fulfilling the needs of the commercial sector is crucial for their involvement in Town goals.
2. More options available for commercial sector, especially if broken out by the size and capacity of the business, would encourage commercial uptake and reduction of energy usage and community GHGs.
3. Technical assistance would encourage small and medium businesses with limited capacity to take on energy-reducing and renewable energy projects. Personalized attention, preferably face-to-face, is seen as highly motivational and valuable to Concord's businesses.
4. Businesses would save money, become more resilient, and more competitive through reputational benefit and reduced operational costs.

## CASE STUDIES

### [Burlington Electric Department, Vermont](#)

A municipal utility that contracts with Efficiency Vermont to offer a multitude of rebates and incentives for commercial clients on the front page of an easy-to-navigate website, with diverse options like electric vehicles, electric vehicle service equipment, renewables, usage tracking, and energy coaching.

### [Hawai'i Energy, Hawaii](#)

Hawaii offers incentives for sub-metering up to 50% project cost per unit, encouraging direct interaction between energy user and usage. Result is between 3% and 25% energy reduction cost.

### [New York City, Retrofit Accelerator](#)

This resource provides an easy-to-navigate platform to find rebates, incentives, technical assistance, and emphasized personalized guidance reduce implementation barriers for commercial energy projects.

## IMPACT AND TIMELINE

Indicator	Performance
Cost	Low to Town, but might mean increased rates
Administrative burden	Medium
GHG reduction potential	Medium
Timeframe	Medium (2-5 years)
Affected party	Concord Municipal Light Plant, ratepayers, commercial sector, Sustainability Division

## Resources for Further Reading:

[Too big to save: why commercial buildings resist energy efficiency](#)

[Overview of Different Types of Utility Incentives](#)

[Municipal Light Plants in Massachusetts: Spotlight on Clean Energy Initiatives](#)

[Four steps for utilities to improve engagement with small and medium businesses](#)

[DSIRE Clean Energy Program List](#)

[National Grid Demand Response Program – DPU Evaluation Reports](#)

## Notes

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- Decarbonizing through electrification is an important step in meeting climate goals. The local utility could encourage the switch from natural gas equipment to electric and renewable systems, such as geothermal, solar thermal water heaters, electric boiler replacements, and air source heat pumps for all sizes of businesses.
- Some businesses have complex business needs that make audits difficult to interpret and CMLP incentives inaccessible. These businesses may need personalized guidance and a concierge service to lead them through the upgrade process.
- High need: Many businesses have limited funds and capacity for projects and have expressed a need for expanded incentives as well as help and guidance to find and use appropriate incentives.
- Local businesses have expressed desire for workplace charging incentives.
- A demand response program uses market cues to incentivize a community-wide shift of energy usage. By incentivizing off-peak energy use with financial savings, participants can actively participate in a more modern and sustainable energy system, while also saving the Town money.
- CMLP has touched upon many of these needs in its Strategic Plan.
- CMLP may be open to co-championing [Green Leases](#), perhaps offering incentives.
- Specific barriers for businesses:
  - Do not know of the incentives at all
  - Limited time, finances, and overall capacity to identify and manage projects
  - Complicated process of MassSave in combination with CMLP incentives
  - Audits are not satisfying or actionable for the unique needs of the business
  - Current incentives do not make larger projects cost-effective
  - Limited options for solar, and no battery storage incentives to make it easier
  - No options for non-profits
- Ideas for business incentives:
  - More detailed audits
  - Weatherization
  - Technical assistance
  - Heat pumps for larger businesses
  - Battery storage and expanded solar incentives
  - Sub-metering incentives
  - Electric vehicle service equipment
  - Geothermal projects

# Expand Market and Development Incentives

SUMMARY	INTENT
<p>While many municipalities have adopted the state’s building energy stretch code, ambitious environmental goals require that new buildings are constructed to a higher standard. One way to circumvent limitations of the building code is to instate market and development incentives and policies that encourage green building through financial means such as abatements, rebates, subsidies. Another option is to instate fees for buildings that produce higher than a determined level of emissions. Such strategies boost energy and resource efficiency in new commercial developments.</p>	<p><b>Incentives seek to drive innovation, increase cost effectiveness, and encourage sustainable practices.</b></p> <ol style="list-style-type: none"> <li>1. Market incentives, such as property tax abatements, subsidies, and rebates, <b>create opportunities</b> for building owners to save money initially or over a period of time if they meet efficiency standards.</li> <li>2. Development incentives, such as an expedited permitting process, fee waivers, reduced permitting fees, and more lenient requirements for efficient buildings, can <b>make green building more economically attractive</b> for developers.</li> <li>3. Fees in place for underperforming buildings of certain sizes and resources, while unpopular, help <b>to offset the cost of future damages</b> of climate change exacerbated by inefficient buildings.</li> </ol>
<h2>CASE STUDIES</h2>	
<p><b><a href="#">Devens, Massachusetts</a></b>            Recognizing the long term costs of business-as-usual development, Devens instated Green Infrastructure Guidelines, containing development incentives such as expedited permitting, relaxed frontage requirements for energy and water efficiency, renewable and electrical permit fee reductions, financial incentives for LEED projects, and more.</p> <p><b><a href="#">Arlington, Virginia</a></b>            The city prioritized building measures from LEED criteria and offered increased floor area density development incentives based on a tiered version of said criteria. The more efficient the space, the more lenient the development requirements. This is a part of a county-wide initiative to incentivize building efficiency through an update of its <a href="#">Green Building Incentive Program</a>.</p> <p><b><a href="#">Cambridge, Massachusetts</a></b>            Sustainable building requirements include green building standards for large development, zoning to encourage green roofs and energy efficiency, and renewable energy systems. By requiring a certain energy performance instead of specific measures, the City is able to promote building requirements that perform above state code. This will help the City achieve its goal of becoming a <a href="#">net-zero community</a>.</p>	
<h2>IMPACT AND TIMELINE</h2>	
<p><b>Indicator</b></p>	<p><b>Performance</b></p>
<p><b>Cost</b></p>	<p>Medium</p>
<p><b>Administrative burden</b></p>	<p>Medium</p>
<p><b>GHG reduction potential</b></p>	<p>Medium</p>
<p><b>Time to implement</b></p>	<p>Medium</p>
<p><b>Affected party</b></p>	<p>Commercial sector, developers, Tax Assessors Office, Planning Department</p>

## Resources for Further Reading:

[MassAudubon Bylaw Review: Encouraging Nature-Based Solutions](#)

[Market Based Incentives for Net Zero New Construction: Encouraging Increased Building Energy Performance for New Construction in Cambridge, MA](#)

[City of Fort Collins 2018-2022 Green Building Program](#)

[Sustainable Incentives Best Practices: A review of national sustainable incentive programs and policies](#)

[The ZERO Code Passes Through a Critical IECC Committee](#)

## Notes

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- The Planning Department would like to incorporate holistic sustainability standards in the A-H sub-division rules and regulations for Site Plan Review in Concord.
- Concord's Planning Department has indicated that their permitting process is already going as quickly as it can. This may indicate an option to slow down business-as-usual permitting processes to give priority to those adhering to green standards.
- Multi-pathway options allow development lenience while adhering to Town sustainability goals
- Providing green building education to building owners, operators, and contractors may prove effective for making the case for building energy efficiency. One of the biggest obstacles to change is a lack of understanding of higher motives. Explaining the importance and benefits of green building may eliminate any obstacles or misgivings about sustainable buildings.

# Sustainability Guidance for Site Plan Review

SUMMARY	INTENT
<p>Concord’s Planning Department and commercial sector have expressed interest in sustainability standards in Town site plan review rules and regulations. Including such standards early in the development process increases the likelihood of sustainable development practices in new construction that would help the town meet its environmental goals. It also signals to developers that Concord and other towns care about sustainable, responsible development practices. Integrating Low Impact Development (LID) and green building practices into the planning process not only makes communities more resilient, but cuts emissions and costs down the line.</p>	<p><b>Inclusion of sustainability standards in the site plan review process signals to developers to be mindful of environmental impacts in Concord and beyond.</b></p> <p>According to Mass Audubon’s Best Practices for Bylaw Review for LID &amp; Climate-Smart, Nature-Based Solutions, the goals of this recommendation are as follows:</p> <ol style="list-style-type: none"> <li>1. To <b>protect natural resources</b> and open space</li> <li>2. Promote efficient, compact development designs</li> <li>3. Reduce impervious surfaces</li> <li>4. Promote <b>stormwater management</b></li> <li>5. Efficient parking management</li> <li>6. Use of native, pollinator-friendly foliage</li> </ol> <p>Expansion of the current site plan review process would guide and encourage development to be “responsive to the environment and actively contribute to the development of a more <b>sustainable community</b>,” as Concord’s A-H Site Plan criteria currently requests.</p>
<h2>CASE STUDIES</h2>	
<p><b><u><a href="#">Devens, Massachusetts</a></u></b></p> <p>Devens has a commitment to sustainable development, defining sustainability as "the thoughtful and careful redevelopment of the base for the purpose of promoting economic development, social welfare, environmental protection, and natural resources." The Devens Eco-Efficiency Center incorporates these strategies in all redevelopment in Town, protecting its natural resources.</p> <p><b><u><a href="#">Austin, Texas – Carbon Impact Statement</a></u></b></p> <p>The Carbon Impact Statement scorecard is completed by developers and reviewed by the Office of Sustainability and included as part of the backup materials submitted to relevant Boards, Commissions, and City Council for consideration. It is intended to be more of a set of guidelines than hard requirements, but mandates developers to consider City environmental goals beforehand.</p>	
<h2>IMPACT AND TIMELINE</h2>	
<p><b>Indicator</b></p>	<p><b>Performance</b></p>
<p><b>Cost</b></p>	<p>Low</p>
<p><b>Administrative burden</b></p>	<p>Low</p>
<p><b>GHG reduction potential</b></p>	<p>High</p>
<p><b>Time to implement</b></p>	<p>Short</p>
<p><b>Affected party</b></p>	<p>Commercial sector, Planning Department and Board, developers</p>

### Resources for Further Reading:

[Smart Growth / Smart Energy Toolkit Modules - Low Impact Development \(LID\)](#)

[Six Sustainable Site Planning Fundamentals](#)

[Sustainable Sites Initiative Checklist and Credit System](#)

[Energy Star Sustainable Buildings Checklist](#)

### Notes

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- The Planning Board would like to incorporate holistic sustainability standards in the A-H subdivision rules and regulations for Site Plan Review in Concord, with special mention of stormwater management strategies.
- Best when paired with development incentives (see Market and Development Process Approach)

# Commercial Property Assessed Clean Energy (C-PACE) Financing

SUMMARY	INTENT
<p>PACE is a financing mechanism that allows for businesses, industrial, and multi-family (5+ units) properties to borrow capital for clean energy and energy efficiency projects. Borrowed funds are repaid over time through a tax assessment attached to the property. At sale, the lien stays with the property and is transferred to subsequent property owners. Administered by MassDevelopment and the Massachusetts Department of Energy Resources (DOER) must be adopted by the local government through an ordinance.</p>	<p><b>C-PACE creates opportunities for businesses to invest in comprehensive energy projects.</b></p> <ol style="list-style-type: none"> <li>1. Provides <b>up-front capital</b> for projects that would otherwise be too expensive, with a <b>simple payback mechanism</b>.</li> <li>2. This mechanism allows for <b>energy upgrades with longer payback periods</b> of up to 20 years (traditional commercial loans are usually up to 10 years).</li> <li>3. Since it is attached to the property, it <b>incentivizes upgrades</b> even if the owner plans to sell it.</li> <li>4. Capital improvements could reduce operating costs and increase property values.</li> <li>5. Promotes job creation, business growth, and <b>environmental benefits</b> associated with reducing energy consumption.</li> </ol>
<h3>CASE STUDIES</h3>	
<p>Local PACE ordinances have been adopted in 15 Massachusetts municipalities, with funding to become available later in 2019.</p> <p><a href="#">Milwaukee, Wisconsin</a> Passed in 2013, the City’s PACE program has helped businesses finance energy retrofits that cut annual operating costs, accounting for a \$60,000 annual savings (a 30% reduction) for the City’s first deal with University Club of Milwaukee.</p> <p><a href="#">State of Connecticut</a> While the average project size is financed at \$534,000, the smallest green energy project is only \$30,000. In Connecticut, PACE is used primarily for renewable energy, but also on energy efficiency projects. About 16% of projects combine the two. The state has 133 participating municipalities. The majority of funding goes to offices, industrial, and retail buildings, but can cover many more including non-profits. Since being passed in 2011, 654,265 tons of GHG emissions have been eliminated, resulting in an energy savings of \$234.6 million.</p>	
<h3>IMPACT AND TIMELINE</h3>	
<p><b>Indicator</b></p>	<p><b>Performance</b></p>
<p>Cost</p>	<p>Low</p>
<p>Administrative burden</p>	<p>Low</p>
<p>GHG reduction potential</p>	<p>Medium</p>
<p>Time to implement</p>	<p>Medium</p>
<p>Affected party</p>	<p>Property owners, tax assessor’s office, MassDevelopment, Department of Energy Resources</p>

## Resources for Further Reading:

[Mass Development Site for MA C-PACE program](#)

[Property Assessed Clean Energy Programs](#)

[PACE Market Data](#)

[The Benefits of PACE Financing for Commercial Real Estate Companies](#)

## Notes

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- While PACE was approved in Massachusetts as part of Charlie Baker's energy legislation in 2016, financing is set to begin in 2019. So far, Amesbury, Randolph, Rockland, Lexington, Acton, Gardner, Yarmouth, Northampton, North Adams, Pittsfield, Greenfield, Wendell, Devens, Agawam and West Springfield have enacted PACE by local ordinance. There will be an official launch of the Massachusetts PACE program in 2019.
- Through interviews with PACE program administrators, it is not seen as difficult to sell properties after a PACE lien is attached to the property.
- Concord's larger energy consumers have indicated difficulties in pursuing projects with longer payback periods, as they must have such projects approved by their board. PACE helps make the case for projects with payback periods up to 20 years.
- Wendy O'Malley of MassDevelopment indicated that non-profits are eligible for PACE only if there is a payment in lieu of taxes [\(PILOT\) agreement](#) with the municipality.



# Benchmarking Ordinance

SUMMARY	INTENT
<p>A building energy use disclosure or “benchmarking” ordinance is a policy that requires buildings of certain uses and sizes to disclose their energy consumption to the municipality, usually through Energy Star’s Portfolio Manager. The municipality then collects the data and publicly reports it with the intention of increased awareness of energy use, informed energy management, and public transparency.</p>	<p><b>Measurement enables energy management, transparency, and support for community sustainability goals.</b></p> <ol style="list-style-type: none"> <li>1. Disclosure promotes <b>awareness</b> of energy usage and results in a continually-growing 2 to 3 percent annual <b>energy savings</b>, the payback of which can fund future project ideas <sup>1</sup>.</li> <li>2. Benchmarking promotes <b>transparency</b> of “...building energy consumption data to real estate consumers, such as tenants, investors and lenders, who may be affected by buying, leasing or financing properties with lower energy costs. With more available energy consumption data, building consumers can begin to factor energy efficiency and costs into their purchasing decisions.” – Institute for Market Transformation <sup>2</sup></li> <li>3. Measuring and evaluating building energy use patterns helps to identify effective ways to <b>reduce energy use</b> in a municipality’s building stock. Benchmarking and energy use disclosure can also <b>reduce informational gaps</b> that limit investment in energy efficiency improvements. <sup>3</sup></li> </ol>

## CASE STUDIES

### Cambridge, Massachusetts

Cambridge enacted their Building Energy Use Disclosure Ordinance (BEUDO) in 2014 with the intention of having a better understanding of energy use, the invisible nature of which makes it difficult to manage without measurement. With the information publicized, prospective buyers, tenants, realtors, energy service providers, and others can use the data and to help create and share value for higher energy performing properties. The data will also aid the City and others in planning for higher energy performance in our building stock.

The ordinance requires disclosure from the following buildings:

- Parcels with non-residential buildings singly or together contain 25,000 S. F. or greater
- Parcels with residential buildings singly or together contain 50 or more units
- Municipal buildings 10,000 S. F. or greater

### South Portland, Maine

South Portland enacted the ordinance in 2017 as part of a pilot in their Mill Creek Small Business & Commercial District. A smaller city, South Portland focused on 27 buildings to measure energy and water use. Program administrator, Lucy Brennan, recommends a launch for single-occupant buildings above 10,000 SF, with focus groups conducted to decide on whether or not to incorporate renters, capital funding for assistance, or incentives. She also recommends significant outreach with businesses to learn and understand the reporting software.

The current ordinance applies to the following buildings:

- Non-residential buildings with 5,000 square feet or more of gross floor area located in the Village Extension, Broadway Corridor, and Mill Creek Core zoning districts
- Residential buildings with 10 or more dwelling units located in the Village Extension, Broadway Corridor, and Mill Creek Core zoning districts

- Residential apartment complexes with 10 or more units located in the Village Extension, Broadway Corridor, and Mill Creek zoning districts
- Municipal or school building with 5,000 square feet or more of gross floor area

**Aspen, CO**

As a strategy outlined in their 2017 GHG Reduction Toolkit, Aspen is in the design phase for their ordinance, which will be unprecedented for such a small community (6,000 residents). They anticipate a heavy seasonal administrative burden and plan to propose a full-time addition to their staff who can work on it during the reporting deadline period. There is consideration of sharing the costs of CRM software with surrounding towns in order to more effectively interpret the data from Portfolio Manager.

- Aspen will propose 5,000 square feet increments and stop at about 20,000 square feet
- Focus on multi-unit residential, small business, and commercial properties

**IMPACT AND TIMELINE**

Indicator	Performance
Cost	Low
Administrative burden	Medium-High (seasonal)
GHG reduction potential	High
Time to implement	Medium (2-5 years)
Affected party	Owners and tenants of buildings over a certain size

**Resources for Further Reading:**

[Institute for Market Transformation: The Benefits of Benchmarking Building Performance](#)

[Workplan & Checklist for Developing a Benchmarking Ordinance](#)

[Benchmarking Starter Kit for Portfolio Manager](#)

[City Energy Project \(Joint effort of IMT & NRDC\) Resource Library for Benchmarking Energy Use](#)

[Draft Legislative Text for Commercial/Institutional Benchmarking Ordinance](#)

**Notes**

Encouraging benchmarking often necessitates a subset of strategies to encourage reporting compliance. Such strategies include sub-metering, using existing business license renewal and fees to encourage compliance, and offering technical support to the commercial sector during the implementation phase. Different types of benchmarking pathways present multiple options for implementation:

- Optional/opt-in
- Phase in/Pilot area
- Omit rented space
- Select districts
- Energy and/or water
- Disclosure or non-disclosure over certain amount of years
- Technical assistance or funding

## References

1. City Energy Project. Institute for Market Transformation. <https://www.imt.org/how-we-drive-demand/building-policies-and-programs/cityenergyproject/>. Published 2019. Accessed July 31, 2019.
2. Pogue D. Guide to State and Local Energy Performance Regulations. Imt.org. [https://www.imt.org/wp-content/uploads/2018/02/Guide\\_GuidetoStateandLocalEnergyPerformanceRegulations.pdf](https://www.imt.org/wp-content/uploads/2018/02/Guide_GuidetoStateandLocalEnergyPerformanceRegulations.pdf). Published 2013. Accessed July 16, 2019.
3. Building Benchmarking, Rating, & Transparency. Database.aceee.org. <https://database.aceee.org/city/benchmarking-disclosure>. Published 2019. Accessed July 16, 2019.

# OTHER CONSIDERATIONS

## PROCUREMENT PROCESS FOR VETTED VENDORS

Some commercial entities have expressed that they would prefer to work with Town-vetted contractors, vendors, and installers. The Town gone through a similar process in the past with CMLP, and could potentially do so again through the RFP process. The RFP would request vendors to provide specific services and contract vendors to be listed as “preferred” by the Town, for a determined duration of time.

This poses a certain amount of risk to the Town if the services are not satisfactory. Nevertheless, it would address concerns in the commercial community and encourage progress on energy projects by providing a list of quality companies to work with through the process. The language may resemble [MassCEC](#)’s RFP documents for their [Heat Smart program](#), which was a request for vetted vendors to work in various municipalities in the state.

Current state-approved competitive suppliers:

- [Mass.Gov List of Licensed Suppliers and Brokers](#)
- [National Grid Supplier Network](#)

Case Study: [MassCEC Request for Proposals HeatSmart Mass Installers](#)

## BENCHMARKING FOR WATER USAGE

Often paired with energy benchmarking ordinances, water benchmarking tracks, monitors, and discloses water usage for more-efficient management.

Case Studies: [Evanston, IL](#), [South Portland, ME](#)

## MORE INFORMATION

- [Energy Star: Water Benchmarking](#)
- [WaterSense: Commercial Buildings](#)

## REVOLVING ENERGY EFFICIENCY FUND

A green revolving fund entails a seed money investment that goes towards energy efficiency projects in Town. The financial savings generated from the projects then funnels back to replenish the fund.

Case Study: [See attached - Case Study: Philadelphia Greenworks Loan Fund Financing energy efficiency in commercial buildings]

## MORE INFORMATION

- [Better Buildings Initiative: Green Revolving Funds](#)
- [Revolving Loan Funds](#)
- [Are Green Revolving Funds the Next Frontier in Corporate Energy Efficiency?](#)
- [USDN: List of Municipal Internal Revolving Loan Funds for Sustainability](#)

## BEHAVIORAL SUSTAINABILITY CAMPAIGN

Fostering behavioral sustainability through community outreach, workshops, and competitions encourage the community to be less wasteful. This may underscore the dual environmental and financial benefits to energy efficiency through outreach to commercial entities (business events, site visits, focus groups, town events, tabling, providing informational handouts, social media, etc).

Case Studies: [CaliforniaCool Competition](#), [Boston's Website for Reducing GHGs](#)

## HISTORIC DISTRICT GUIDANCE FOR ENERGY IMPROVEMENTS

Concord's Historic Districts Guidelines preserve the aesthetic and feel of the Town, which is important to residents and visitors alike. However, interviews with Concord's commercial partners have indicated that these Guidelines can be difficult to navigate when making building improvements. Providing guidance for energy efficiency and renewable projects within Concord's historic districts would be valuable to Town business and residents.

Case Studies: [Boston's Resilient, Historic Buildings Design Guide](#), [Sustainable Historic Homes](#), [Tucson AZ: A Guide for Retrofitting Historic Homes](#), [City of Boulder: Historic Building Energy Efficiency Guide](#)

## GREEN LEASE PROMOTIONAL CAMPAIGN

A green lease balances the responsibilities between landlords and tenants in writing to make environmental building improvements fair and mutually-beneficial. It eliminates the notorious split-incentive through cooperation and collaboration, working together for greener infrastructure.

Case Studies: [Cleveland, OH Resources for Green Leasing](#), [Cleveland, OH Case IMT Study](#), [Green Lease Case Study: Pyramid Companies](#)

## MORE INFORMATION

- [\*Reducing Energy Waste through Municipally Led Behavior Change Programs\*](#)
- [\*Behavior Change and Energy Efficiency\*](#)
- [\*National Grid Sustainability Hub\*](#)

## MORE INFORMATION

- [\*The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings\*](#)
- [\*Smart Growth and Preservation of Existing and Historic Buildings – EPA Resources\*](#)

## MORE INFORMATION

- [\*Green Lease Library\*](#)
- [\*Energy Efficiency Coordinator Green Lease News and Resources\*](#)
- [\*DoE and IMT Build a New Green Lease Recognition Program\*](#)
- [\*A Better City: Green Leasing as an Effective Tenant/Landlord Strategy for Energy Efficiency\*](#)

# CONCLUSIONS

With respect to the identified strategies in this project, I would like to share what I believe to be the top 3 priority recommendations for the Town of Concord.

## PACE FINANCING

PACE is a new program in Massachusetts. Since it has not officially “launched,” Concord could prioritize enabling this mechanism and still be ahead of the curve of interest that will likely surge once the program secures a funding source in the next couple of months. With this policy being virtually no cost to the town, limited administrative burden, and massively beneficial to businesses and non-profits in need of commercial-friendly financing, this policy would easily make the top of my recommendations.

## COMMERCIAL ENGAGEMENT CAMPAIGN

The ideas outlined in the Commercial Engagement Campaign would be my next recommendation. Raising awareness is often the first step to enacting change, and this campaign would be a low-cost way of doing it. Newsletters, gatherings, and updated web content are effective at creating a sustainability buzz in Town while also directly addressing needs expressed by the commercial sector this summer.

## BENCHMARKING ORDINANCE

Concord has a reputation for being a sustainable Town and a leader in environmental action. I think that Concord should maintain this reputation and be one of the first Towns to enact a Benchmarking Ordinance. It would be unprecedented for a Town as small as Concord to enact this policy, but that’s the point – all eyes would be on Concord as the shining example of how small Towns can do it too.

We have plenty of resources available to us and local case studies from Cambridge, Boston, and South Portland to look for, for guidance. While it would be a hefty administrative burden, Concord only has about 200 businesses. If focusing only on larger commercial and industrial buildings (over 10,000 SF) then that number drops to under 50. I believe this could be manageable for Concord’s Sustainability Division, but it could be encompassing during disclosure and reporting season. I would recommend another team member to be hired for the Sustainability Division to assist in technical assistance, accounting, reporting for the commercial sector, and perhaps conducting the very important work of commercial engagement and outreach other times of the year.

Overall, most sustainability teams in municipalities across the nation have more staff-people to devote to projects in Town, resulting in more robust progress towards Town goals (not just the sustainability ones). Doing so could help Concord maintain the lead in environmental advancement in the state and beyond. Since people look to Concord for direction, guidance, and inspiration, this is a significant opportunity for our Town.

~\*~

# SUPPLEMENTAL MATERIALS

Below are referenced supplemental materials to inform identified strategies.

## WHAT IS THE SPLIT INCENTIVE?

The split incentive refers to attitudes of a building's landlord and tenants with respect to building efficiency upgrades. The tenants pay the price for energy costs. But, without rights to the property, they lack the agency necessary to update the building infrastructure.

Meanwhile, the landlords, who do not pay for energy bills, lack the incentive of upgrading the property when they cannot reap financial benefits of saved energy. Even more challenging is if a lease makes the landlord responsible for the energy costs of the entire building and all of its tenants – in this case, tenants have no incentive to reduce energy since they receive a flat rate for energy.

### *A challenging obstacle to meeting community greenhouse gas reduction goals*

- Delayed or lack of crucial energy efficiency upgrade to buildings
- Outdated, inefficient energy efficiency that is costlier for tenants
- Knowledge gaps in unaccounted-for costs in renting and purchasing decisions

### HOW DOES IT MANIFEST IN OUR COMMERCIAL COMMUNITY?

Multi-unit rented buildings are difficult for tenants who either want to reduce energy costs beyond simple behavioral and lighting efficiency, and for those who may not plan to lease for the long-term.

### WHAT ARE CURRENT STRATEGIES FOR OVERCOMING IT?

According to Boulder, CO there are three strategies to overcome the split incentive: “tenant and owner engagement and collaboration, lease term considerations and agreements, and utilizing available incentives (rebates and financing).”<sup>1</sup>

### OTHER IDENTIFIED STRATEGIES INCLUDE

#### GREEN LEASING

A green lease balances the responsibilities between landlords and tenants to make improvements fair and mutually-beneficial.

#### SUB-METERING

Sub-metering for tenants allows tenants in multi-unit buildings to measure and manage and pay for their personal energy use.

#### COMMERCIAL ENERGY DISCLOSURE

When disclosure of energy usage is mandated through a benchmarking ordinance, it engages property owners with their building's energy use, thus encouraging measurement and management. Public disclosure also puts pressure on building owners to comply with environmental goals.

#### PROPERTY ASSESSED CLEAN ENERGY (PACE)

With flexible payment options for large projects, PACE allows for affordable energy upgrades, the costs of which could even be divided among tenants.

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## RESOURCES

- [Guidance for Overcoming Split Incentives](#)
- [Green Lease Library](#)
- [Model Green Lease Clause Language](#)
- [The Not-So-Hidden Benefits of Submetering Buildings](#)
- [Pace Handout for Property Owners](#)
- [Commercial Building Energy Benchmarking and Disclosure Policies in the United States](#)

---

## REFERENCE

1. Overcoming Split Incentives. Environment.gov.au.  
<https://www.environment.gov.au/system/files/energy/files/hvac-factsheet-split-incentives.pdf>. Published 2013.  
Accessed July 22, 2019.

# COMMERCIAL ENGAGEMENT CAMPAIGN COMPONENTS AND DETAILS



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Green Newsletter .....2

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Partnerships with Concord Business Partnership and Concord Chamber .....5

Outreach .....6

Concierge Service .....7

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## GREEN NEWSLETTER

**Purpose:** To regularly engage commercial sector with sustainability, remind busy business owners of opportunities, and to normalize the sustainability message

**Ideas:** Incentives, grants, news and progress of sustainability initiatives in Town, testimonies from other businesses, articles about commercial sustainability, national sustainability news, events, shout-outs for green leaders

- Subscription should be opt-out. Businesses are not likely to opt-in.
- Subscription can be signed up for on Town Sustainability Page, social media, and business network pages

## EXAMPLES

The screenshot shows the top of a newsletter titled "Energy Solutions Professional News" with the National Grid logo. Below the header, it lists "December Featured Articles". The main article is "Economizers Improve Boiler Efficiency", featuring a photo of industrial equipment and a "Read More" link. To the right, there is a "Webinar: Office Worker Performance and the Indoor Environment" section with "RECORDING" and "PRESENTATION" buttons, and contact information for National Grid's Energy Professional Network. Below the main article, there are three smaller article teasers: "5 Strategies for Combustion Control", "Evaluating the Potential of Combined Heat and Power", and "Fact or Fable? Thomas Edison Invented the Light Bulb".

The screenshot shows the top of a newsletter titled "UPM Communication Papers" with the UPM logo and the tagline "The Biofore Company". Below the header, there is a large image of a woodpecker on a tree trunk. The main section is an "Editorial" addressed to "Dear reader", discussing the business case for sustainability and UPM's commitment. It includes contact information for John Sanderson and Tarja Sammalkorpi, and a link to "www.upmpaper.com". At the bottom, it highlights that UPM is listed as the industry leader in the global Dow Jones Sustainability Index, with a "MEMBER OF Dow Jones Sustainability Indices" logo.



February 2019  
Newsletter  
Vol.1

**Kick off 2019 with More Money in Your Pocket and Help Your Small Business Save!**

- Electric and Gas Supply** – If you are currently paying anything more than **\$0.07-\$0.08 per kWh** or **\$0.50 per therm**, you are paying above market rate.
- Demand Response** – Did you know that you can Earn money through State and Utility programs? We pay customers quarterly in the form of a physical check for customers that can reduce electric demand during utility peak hours. Last year our customers earned over \$75,000!
 


- LED Lighting** – Old lighting is costing you money. We provide everything you need to start and finish a successful lighting upgrade. Full service includes auditing, proposals, rebates, and great ROI's. The best thing about this service is that we will audit your facility for free.
 


- HVAC Services** – We combine traditional HVAC contractor services with the best and newest technologies. HVAC is a big factor in energy and one of the least focused on.
 



**New Bill Auditing Service Available!**



Let's face it, Utilities send us our bills and we pay them, no questions asked. Those bills are at times full of errors that cost you money. Let our experts look at your last 5 years of bills and see if we can help you recoup unnecessary charges and save tons going forward. About 50% of the time we find major discrepancies and can obtain customers thousands to hundreds of thousands of dollars back in the form of credits.

**Westchester Management Companies Save Big \$\$\$**

Recent Project Highlights:	
LED Upgrades	Upgraded over 8,000 fixtures & bulbs
Energy Saved:	130.3 kW
Annual Electric Savings:	\$70,722 kWh
Total Rebate Earned:	\$88,800



March 2010  
Issue 1  
www.weber.edu/environment

Pertinent Environmental Information from the WSU Environmental Issues Committee

**events**

**Tom Zeller Jr.**  
New York Times Environmental Editor

Climate Change & Environmental Responsibility

Wednesday, Feb. 24th  
11:00am - 12:30 pm  
Wildcat Theater  
Weber State University

[find out more \(click\)](#)

**green tip**

**Commute Smart!**

Following a few simple steps will help to conserve energy, keep the air and environment cleaner, and promote better health and well being.

- step 1 -Carpool often.
- step 2 -Use mass transit.
- step 3 -Consolidate trips when driving.
- step 4 -Check tire pressure often.
- step 5 -Bike or walk.



[find out more \(click\)](#)

**wsu campus**

**WSU Bookstore Offers Recycled Paper**

Benefits of buying recycled paper :

- Uses 50% fewer trees than 20lb. Bond Paper.
- Fewer chemicals and less bleaching in manufacture.
- Pulp produced by grinding vs. chemical processes.
- Reduction of Fossil Fuel Emissions by 76%.
- Reduced costs for the consumer.



[find out more \(click\)](#)

**around the town**

**Homo Recycling Made Easier**

With a few simple steps, recycling can be an easy and rewarding activity.

- step 1 -Find a convenient place to collect recyclables.
- step 2 -Designate a box, bin, or bag per each type of material, aluminum, steel, paper, plastic, etc.
- step 3 -Find the nearest recycling center, or drop off location, and deliver recyclables regularly.
- step 4 -Revel in your increased awareness of environmental stewardship!



[find out more \(click\)](#)

**eic informed**

**EIC Mission Statement:**

The Environmental Issues Committee shall help facilitate the integration of environmental initiatives into academic affairs, student affairs, and facilities management. The committee shall serve as a local and statewide source for scientifically based information and for leadership on environmental issues affecting Utah, the Wasatch Front, and WSU Campus Committees.

[find out more \(click\)](#)

## COMMON THEMES

- Personalized message
- Quick tips
- News in Town and in US economy
- Efficient tech info
- Events and webinars
- Green business leaders
- Informational articles
- Multimedia, visual theme
- Incentives and contact information
- Examples of savings

## INCENTIVE PROMOTION IDEAS

Measurement promotes effective management. Understanding your business' energy usage can help you to better manage operating costs. Concord Municipal Light Plant and National Grid offer personalized facility audits, complete with recommended projects and incentives to help you save energy and go green.

There are dozens of rebates available for modern, efficient, and cost-saving technology for your restaurant. Check out the National Grid website for hundreds of dollars of incentives to upgrade your natural gas equipment, including new stoves, ovens, fryers and more.

National Grid and CMLP have funding available to help your business implement cost-saving energy efficiency projects. Click here to find out how much your business is eligible for.

Concord needs you to help the community reach its environmental goals. With nearly half of building emissions coming from the commercial sector, businesses must take the lead to champion environmental efforts in Town. Click here to find out how CMLP and National Grid offer funding to help you implement cost-effective measures in your business that help us meet our goals.

Going green means gaining green! Businesses everywhere are saving money on energy costs with energy efficiency and renewable energy projects. And, studies show that businesses that adopt environmental measures enjoy growths of profitability, reputation, quality talent, and customers [link]. With the market quickly adapting, don't get left behind. CMLP and National Grid have funding available to your business.

Concord's community cares about the environment. In fact, \_\_% of people are more likely to shop at environmentally-conscious businesses. Put those two facts together – energy efficiency can increase the success of your business. Take advantage of numerous utility incentives available exclusively to Town businesses here.

Saving energy is better for your business. CMLP and National Grid offer numerous incentives to help your bottom line. Find funding available to your business here, and enjoy cost savings, reliability, and improved efficiency.

Quick Energy Saving Tips: Shut off monitors, lights, and AC/heat before in unoccupied spaces, use natural light where possible, lower brightness settings on monitors, dark screen savers, install motion sensor lights, install smart thermostats, etc.

## BUSINESS TIPS TO SAVE ENERGY

If you work in the hospitality or food service industries, there are many ways you can improve your bottom line through energy efficiency. Looking for ideas? Check out National Grid's [food service and hospitality tips](#) to learn more.

Saving energy can be easy. Check out [National Grid's tips](#) for businesses to save money on operations, lighting, heating and cooling, and more.

Check out these [12 Small Business Energy Saving Tips](#) to try some simple ways you can cut energy, save money, and help the environment.

Collaboration is key. [Engaging Employees](#) in business sustainability easily translates to money saved. Find out how to make it a team effort!

The majority of energy consumption in food service comes from food preparation. [Click here](#) to learn more about options for your restaurant to save money with Energy Star equipment. [Special funding for natural gas food service equipment](#) is available through the Mass Save program.

## GATHERINGS

**Purpose:** To provide an environment to talk about sustainability initiatives through informative networking events.

**Ideas:**

- Attend other sorts of meetings (Chamber meeting, Concord Business Partnership meetings, etc.) once or twice a year.
  - Bring presentation on business case for sustainability and overview of current incentives. Use real business case study as an example. Q&A to follow. Contact info and handouts as resources.
- Organize a Town-sponsored formal gathering event, such as a Sustainability Breakfast, Coffee Hour, or Luncheon regularly (recommended quarterly).

- Introductions & ice breaker, news updates, presentation or tour of host facility, Q&A, networking and discussion
- 1.5 hours total: 1 hour for Information, ½ hour for networking (it can be optional)
- Once a year, Town can host as a way to recognize efforts of businesses in Town

**INVITE LIST:** Chamber e-mail list, CBP e-mail list, e-mails of businesses from the bottle ban. Personalized invitations for those who do not RSVP gets responses. RSVP link via EventBrite or other method. Begin outreach 6 months prior to first meeting. Send updates for 15, 25, 30 sign-ups to generate enthusiasm. Encourage formal RSVP to gauge attendance. Important to track attendance!

**FOOD:** Keep light (water, coffee, tea, pastries). Provide for 60% of total sign-ups. Hosts should provide their own food unless a very small business or nonprofit. Keep as light as possible to reduce budget.

**HOSTS:** First meeting can gauge interest. Sign-up sheet after to find potential hosts.

**ADMINISTRATIVE BURDEN:** 1 hour set-up, 1.5 hour event, 1 hour clean-up = 3.5 hours + ~1 hour a week with outreach

## PARTNERSHIPS WITH CONCORD BUSINESS PARTNERSHIP AND CONCORD CHAMBER

**Purpose:** To leverage the networks of different business associations in Town to benefit sustainability goals, enabling multi-sectoral dialogue about objectives, policy, and governance.

POSITIVE AND NEGATIVE PARTNERSHIP OUTCOMES BY SECTOR					
	BUSINESS	NGOs	GOVERNMENT	COMMUNITY	ENVIRONMENT
<b>Positive</b>	Improve CSR reputation; ensure licence to operate	Greater focus on efficiency and accountability	Improved project designs	Greater voice in policymaking	Environmental advocacy
	Supply chain improvements		Greater transparency and acceptance of plans	Improved quality of life	Deal with complexity
	Innovative products	Enhanced reputation	More efficient resource usage	Gain models that can be used for other projects	Institutionalized attention to problem
	New markets	Achieve needed funding	Strengthen data management		Environmental conditions improved
	Attractiveness to employees		Meet sustainability targets	Integrated service delivery	
	Gain critical competencies		Garner greater public accountability	Retain control of lives	
	Integrate sustainability in core business practices		Insight into economic and demographic trends	Gain culturally suitable products and outputs	
	De facto rules for regulating industries		Improve interagency coordination	Build networks for self-reliance	
<b>Negative</b>	Perceptions of greenwashing	Suffer tainted reputation	Need to deal with conflict	Inequitable outcomes	Continued degradation
		Cooptation	Less thorough study of research	Need to balance subgroup vs. greater public interest	Replacement of nature with human-produced products
	Reduced funds				

Source: Sustainability through Partnerships: Capitalizing on Collaboration

## Ideas:

- Create a team or coalition between Town, business associations, and commercial sector that organizes or co-hosts meetings together.
- Public Private Partnerships help create an [inclusive and integrated model](#) for municipal projects.
- From the Network for Business Sustainability Report, *Sustainability through Partnerships: Capitalizing on Collaboration*, ideal partnerships should...
  - Focus on the problem, not individual businesses.
  - Be inclusive – make sure all have representation.
  - Center learning and relationship building. Nobody knows everything, but together we know a lot.

## OUTREACH

**Purpose:** To proactively engage commercial entities with sustainability messages with the intention of creating a personalized interaction with Town goals.

## Ideas:

- Maintain a single point of contact (or narrow set) personalized outreach
- Consider including a small photo in the signature to put a face to the text
- Personalized messages from leaders at the light plant may make them seem more approachable for questions, comments, concerns by commercial sector
- Try both types of outreach (below) to maximize engagement with sustainability messages
- Use trusted sources to help amplify messages. Cosponsor messages or have other entities (Chamber, Light Plant, Business Partnership, etc.) send out sustainability messages in their media outlets.
- Stay down-to-earth. Many commercial entities simply do not know much about sustainability. Framing the messages in simple and easy-to-understand terms is key, especially at first.
- Frame all messages in terms of the business case. Other persuasive measures include making audience feel like leaders (people usually want to champion the cause), and fear of missing out (urgency spurs action).

## TYPES OF OUTREACH:

- **Passive:** Casts a wide net for optional participation by the target entity
  - Newsletters
  - Social media posts
  - Flyers
  - Tabling
  - Events
- **Active (preferred):** Personalized interaction that usually necessitates response
  - Phone calls
  - In-person meetings
  - Direct e-mails
  - Individualized messaging

Active outreach is generally more effective in gaining responses. Some commercial entities in Concord have mentioned a preference for active outreach by the Town. This helps to forge strong relationships between the Town and its commercial sector through continued, personalized communication. Active outreach puts the topic at hand on the radar rather than putting out bait and hoping for a bite. In Gresham, OR, the organizer of the monthly

sustainability gatherings emphasized individualized invitations and in-person meetings as effective tools for engaging the commercial sector.

## ENERGY CONCIERGE SERVICE

**Purpose:** To measure, evaluate, and follow-up with commercial entities on their post-energy audit progress with the intention of helping eliminate barriers to implementation.

### BARRIERS TO IMPLEMENTATION

Commercial entities in Concord have expressed challenges with audits either not being actionable or personalized enough to work with. A concierge service would help businesses to interpret the audit and work on next steps, preferably with a trusted individual without a vested financial interest.

According to one study in Massachusetts, a barrier to implementation is a lack of information about energy efficiency programs, how to participate in them, and what to expect. Business owners are often juggling multiple commitments and responsibilities, and have limited resources as it is. Without expertise on energy efficiency and sustainability in a business setting, it's difficult to implement changes in a risk-free, informed way.

### OVERCOMING THESE BARRIERS WILL NEED A FEW THINGS:

- An expert on local energy efficiency programs who can help businesses interpret the process
- A trusted source without ulterior motives or financial interest in the client
- A single person to refer to with questions and concerns
- The process outlined in the audit, with reference to the concierge service

#### Ideas:

- A concierge might help schedule audits, identify and choose valuable project to peruse, direct the client to specific financing options, rebates, and incentives, check in on the progress of projects, answer any questions, and measure progress and impact.
- Active outreach to businesses that have completed energy audits to ask for feedback, questions, and barriers that we can help them overcome to complete the recommended measures.
- Scheduled phone calls and meetings one month, three months, six months, and a year after the audits
- Tracking of which projects get implemented, common barriers and challenges, common questions, and commonly-used incentives
- Post audit e-mail with a thank-you, encouragement to reach out with questions, links to resources, etc.
- Ensure a single point of contact to complete retrofits – this simplifies the process, making it more personalized and less intimidating.

New York recently launched a public-private partnership with a third party vendor, [Domino](#), who gives free concierge services to clients.

## COMMERCIAL SUSTAINABILITY WEBPAGE

**Purpose:** To simplify and create a more personalized web experience for commercial entities to discover incentives and benefits for their businesses.

**Ideas:**

- Energy efficiency front and center on MLP homepage
- Industry-by-industry breakdowns with incentives, tips, case studies, resources, and best practices available to them and their businesses.
- Check-off menu to narrow down options
- Images of types of retrofits available (big visual icons and layout)

## EXAMPLES

Customer Service: (802) 855-7300  
Monday-Friday 9am-5pm

Home My Account Efficiency Safety & Reporting About Us

# DEFEAT the PEAK

SAVE ENERGY HELP LOCAL NONPROFITS

LED LIGHTING MOVING? ELECTRIC VEHICLES

REBATES HOT WATER HEATERS GO SOLAR

FIXTURES USAGE TRACKER ENERGY COACHING

**NYC Retrofit Accelerator**  
MAKING ENERGY EFFICIENCY EASIER

HOME ABOUT RESOURCES FAQs CONTACT

## Resources

Ways to Save Incentives Financing Education and Training Building Energy Local Laws

### NYC Incentive Map

Use the NYC Incentive Map to find programs available in New York City to help retrofits your building. Contact one of our Efficiency Advisors for a free one-on-one meeting to understand which offerings are right for you.

Note: The NYC Incentive Map only contains programs applicable to buildings in NYC, and for residential programs, only for buildings larger than 4 units.  
Updated January 2016. Measures and incentive amounts listed below are subject to change.

Key:  
Enhanced Incentives for Affordable Housing  
Requires Program-Certified Contractors

#### Building Type

- Multifamily
- Commercial
- Industrial

#### Opportunity

- Whole Building/Custom
- Technical Assistance
- Heating
- Cooling
- Domestic Hot Water
- Lighting
- Building Management Systems
- Envelope/Air Sealing

### Con Edison - Instant Lighting Incentive Program

Con Edison's Instant Lighting Program allows participants to receive incentives on qualifying LEDs at the time of purchase from participating distributors.

**Energy Type:** Electricity      **Opportunity:** Lighting

**Measures:** In-unit LEDs, LED Lamps      **Incentives:** Con Edison offers instant incentives on energy-efficient LED lighting through participating distributors

**conEdison** Visit Program Website

Learn Which Program is Right for You, Contact the NYC Retrofit Accelerator

FOR HOMES & BUSINESSES

Efficiency Vermont

ABOUT NEWS & BLOG EVENTS CONTACT

REBATES SERVICES PRODUCTS & TECHNOLOGIES TIPS & TOOLS FIND A CONTRACTOR OR RETAILER

## Available Rebates

Showing All Products & Services rebates for Business. [Search Again.](#)

**FOR RESIDENTIAL & BUSINESS**

**Air-to-Water Heat Pumps**

**\$1,000** per ton cash back

[Details](#)

**FOR BUSINESS**

**Building Performance**

Up to **\$5,000** custom incentive

[Details](#)

**FOR BUSINESS**

**...**

[Details](#)

**BELMONT LIGHT**  
POWERING YOUR COMMUNITY SINCE 1898

011-993-2000

ABOUT US ENERGY SOLUTIONS CUSTOMER SERVICE NEWS & EVENTS

## COMMERCIAL & MUNICIPAL SOLUTIONS

### ENERGY SOLUTIONS

Free Home Energy Assessments  
Heat Pump Rebates  
HeatSmart Belmont  
ENERGY STAR® Appliance Rebate Program  
Emission-Free Renewable Distributed Generation  
Green Choice Program

### Commercial & Municipal Solutions

Commercial Lighting Retrofit Rebate Program  
Commercial Energy Assessments  
Emission-Free Renewable Distributed Generation  
Green Choice Program

### Electric Vehicles

Solar Options  
Solar Rebate Program

### COMMERCIAL & MUNICIPAL SOLUTIONS

Belmont Light is committed to providing our commercial and municipal customers with energy efficiency and distributed generation solutions that will reduce your energy and demand costs without sacrificing performance. Learn more here about the solutions we currently offer, and be sure to check back for new programs and projects.

- Commercial Lighting Retrofit Rebate Program
- Commercial Energy Assessments
- Emission-Free Renewable Distributed Generation
- Green Choice Program

## PROGRAMS AND REBATES

» For My Business

### FILTER BY

- Residential Programs
- Commercial Programs

### EQUIPMENT

Search...

- Select All
- ECM Evaporator Fan Motors
- Evaporator Fan Controls
- Freezer/Cooler LEDs
- High Efficiency Air Compressors
- HVAC - Heat Pump Systems

#### 2019 Commercial Lighting Rebate Pro...

The Lighting Retrofit Program is for commercial, industrial, and municipal customers who reduce energy consumption within their facilities by install...

[Apply](#)

#### 2019 Commercial Renewable Energy Re...

Customers who install solar panels, wind generators or other renewable energy systems in their business may be eligible for RMLD rebates. Certain rest...

[Apply](#)

#### 2019 Commercial EV Charger Rebate P...

Reading Municipal Light Department is offering a Plug-in Electric Vehicle Charger Rebate to customers who install a Level 2 (240 volt) plug-in electri...

[Apply](#)

#### 2019 Commercial Energy Initiative R...

The Energy Initiative Rebate Program is for commercial and industrial customers who reduce energy consumption by replacing large high-energy consuming...

[Apply](#)

# UTILITY INCENTIVES BY INDUSTRY

## OUTLINE DESIGN IDEAS

Concord's business sector has expressed a need for a streamlined process for finding and applying for utility incentives and rebates. Personalizing the experience by dividing incentives up by industry is an effective way for many different types of businesses to see how much of an impact energy efficiency and renewables can have for them to better meet objectives in a cost-effective way. Widely-known programs such as Mass Save and Energy Star use this strategy as a way to connect with different audiences in the commercial sector, as well. This communication strategy works well for wary audiences that need more persuasion. The individual details and local case study take longer to absorb, but provide compelling evidence of the efficacy of energy efficiency.

**Sectors of interest in Concord: Grocery stores, hospitality, healthcare, retail, food service, property management**

## OUTLINE OF A DETAILED HANDOUT/WEBPAGE

Type of business/sector

*Modeled after [Mass Save's Industry Solutions](#)*

Benefits: List industry priorities and how the incentive helps them to meet objectives

Incentives available: Briefly explains how incentives make upgrades more affordable in the long-run.

- Includes a local case study
- Lists incentives with links to application webpage

Other resources: (trainings, technical assistance, non-municipal incentives, tips, etc.)

Being able to communicate incentives quickly and easily will be important during commercial outreach. A general design for a handout or webpage will attract the busy business owner who wants to see the value right away, with few details.

**OUTLINE OF A GENERAL HANDOUT/WEBPAGE**

**Energy incentives available for most types of commercial buildings, and can help cut costs, increase customer satisfaction, and enhance the reputation of your businesses.**

**CMLP Electric Incentives**

**Mass Save Gas Incentives**

Incentive Name

Incentive Name

- Amount
- Link here or hyperlinked in name

- Amount
- Link

**More incentives are available for businesses with appliances and kitchen equipment, cutting energy costs for businesses in the food service, healthcare, and hospitality industries.**

**CMLP**

**Mass Save**

Incentive Name

Incentive Name

- Amount
- Link here or hyperlinked in name

- Amount
- Link

**Building a new property in Concord, or renovating a building? Consider these energy incentives to reduce lifecycle costs in your building, attract tenants and customers, and increase property value.**

New Construction + Major Renovation

**CMLP**

**Mass Save**

Incentive Name

Incentive Name

- Amount
- Link here or hyperlinked in name

- Amount
- Link

## BUSINESS SECTOR PRIORITIES AND ENERGY EFFICIENCY

All sectors care about reputation, competitiveness, and reducing costs where possible.

### GROCERY STORES

**Priorities:** Customer service, customer loyalty, keeping food fresh, reducing operating costs

Energy efficient technologies such as LED lighting, heat pumps, and appliance efficiency upgrades can attract customers, provide well-lit and energy efficient appearance and performance of the store, and reduce the costs of energy. With millennial attitudes changing towards healthy, environmentally-friendly, and socially responsible food, shifting to energy efficiency can make a store more competitive.

### HOSPITALITY

**Priorities:** Customer service, guest experience, reducing operating costs, attracting millennials

With building operations at the core of their business, hotels are adapting to reduce costs through energy efficiency and renewables. This presents a mutually beneficial solution that not only reduces energy costs, but can make the building much more comfortable for guests. With more control over temperatures and lighting, many of the available technology can be personalized to fit the needs of the business.

### HEALTHCARE

**Priorities:** Patient safety, employee safety, comfort, meeting regulations

In the healthcare industry, patient safety comes first. Energy efficiency and renewables can not only make the building more comfortable for inhabitants, but safer with well-lit hallways, fewer equipment failures, and a reduced likelihood for power outages. Investments in battery storage can also make buildings more resilient in the wake of oncoming climate disasters.

### RETAIL

**Priorities:** Customer service, reducing operating costs, competitiveness

In the retail industry, product quality, customer loyalty, and reducing operating costs are priorities. Through increasing the quality and efficiency of technology in your building, you can enjoy fewer disruptions in operations, reduced energy costs, and retained customers who care increasingly more about corporate sustainability. Employees and customers may also experience safer and more comfortable environments within your building.

### FOOD SERVICE

**Priorities:** Customer health and sanitation, service quality, customer service, reducing operating costs,

In the food service industry, customer satisfaction is key to the sustainability of your business. With energy efficient measures and appliances, you will be able to deliver superior results for a reduced cost. Efficient appliance rebates are available to help you reach a cost-effective way to better serve customers, become more

competitive, and save on energy bills all the while. Newer technologies generally require less maintenance over the life of the product, meaning saved dollars down the line.

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## PROPERTY MANAGEMENT

**Priorities: Tenant safety, tenant reliability, meeting regulations, increasing property value**

As a property manager, tenant safety, meeting code, and increasing the value of your property are important aspects for long-term success. Energy efficiency can make meeting those needs easier. With increased comfort and safety in your building, as well as lowered utility costs, property managers can attract quality tenants, increase the safety of the inhabitants and infrastructure, and make the property worth more. With incentives available for renewables, solar may be an attractive option as well.

## COMMERCIAL UTILITY INCENTIVES AVAILABLE IN CONCORD, MA

Any gas-electric hybrid project is eligible for up to 70% project cost incentives through National Grid – [More information for custom and prescriptive incentives here.](#)

### NATURAL GAS INCENTIVES AVAILABLE THROUGH MASS SAVE

#### **Facility Energy Audit**

Cost free energy audit of your facility to identify gaps in performance and opportunities for natural gas or natural gas/electric hybrid technology upgrades with easy installation and costs covered up to 70% by National Grid through Mass Save.

#### **Natural Gas Heating Equipment**

If your business heats with natural gas, your business may be eligible for high efficiency gas heating equipment, smart thermostats, steam traps, shower heads, efficient faucets, or boiler controls that can improve efficiency and comfort.

#### **Water Heaters**

Save up to \$2.00/Mbtuh on high-efficiency water heaters, saving thousands of dollars in energy bill savings and lowered water and sewage costs.

#### **Natural Gas Appliances and Kitchen Equipment**

Ideal for the food service, healthcare, and hospitality industries, Mass Save offers a multitude of rebates for energy efficient ovens, steamers, fryers, griddles, and pre-rinse spray valves. Save between \$50 and \$1,000 per unit on the [Energy Star](#) and/or [Fishnick](#) Qualifying Products List.

### ELECTRIC INCENTIVES AVAILABLE THROUGH CMLP

**Audits:** Depending on your needs and the size of your facility, there are two options available:

- Cost free lighting ONLY audit
- 50% coverage by CMLP for preliminary and full-scale facility audits (if your building heats with any fuel other than natural gas) with the cost depending on the size of the building footprint.

**LED Lighting:** Reduce operating costs, increase safety, and comfort in your facility

- The High Efficiency Lighting Program (HELP) provides up to \$50,000 in rebates or up to \$1,000 per kilowatt (kW) of reduced demand, whichever is less, up to a maximum of \$50,000 per customer during any 3 year period.
- Annual rebate of \$3 per light bulb (or price of bulb if less than \$3) on up to 60 bulbs per year.

**Heat Pumps:** Increase heating and cooling efficiency for smaller businesses with ground source heat pump (GSHP) projects (rated heating capacity no greater than 10 tons or 120 kBTU/hr).

- \$625 per 12,000 BTU/hr with a maximum rebate of \$6,250 per project site address. Customers may apply for more than one GSHP rebate over the life of the GSHP rebate program. However, a customer may receive only one GSHP rebate within a twelve month period.

**Solar Energy:** With renewable energy, a business can greatly reduce its energy costs. Rebates available make the payback appealing for businesses in Concord.

- CMLP Solar PV Rebate: One-time incentive of \$1,200 per kW DC of solar photovoltaic (PV) capacity installed, capped at 50% of system cost or \$30,000, whichever is less. Commercial arrays of 25 kW DC or less installed by customers in good standing are eligible.
- MLP Solar Program Rebate: One-time rebate of \$625 per kW DC of installed solar PV generation capacity, capped at \$3,125 per account, for any size installation.

# SUSTAINABLE COMMUNITY DEVELOPMENT

Sustainability is a common theme in the Envision Concord 2030 Plan, particularly in section 4.4 (Land Use) where one of the goals listed is to “Require development/redevelopment to meet or exceed environmental sustainability and resilience criteria”. Meeting this goal will mean taking a closer look at the process by which community development occurs, and aligning it with Town goals and commitments. Weaving sustainability into planning and zoning for development is nothing new – many other municipalities have incorporated the concept into processes like site plan review, ordinances, zoning, and energy plans. Doing so is a way to build sustainability into the process, thus redefining business as usual development practices to include strategies that preserve and nourish the natural environment, character, and economic vitality of the Town.

## SITE PLAN REVIEW

*“Site Plan Review is meant to establish design standards for a development - not the use on a site. For example, site plan approval may establish landscape, stormwater management, parking, and noise level standards for a commercial development. These are clear and fair standards that the developer will address when proposing a project.” - Mass.Gov*

There are many site plan review standards available to model in our process that could address environmental sustainability and resilience. Including these as questions in the site plan review process, or perhaps including a point scoring mechanism to evaluate project proposals, would show to developers the importance of climate action in Town and our commitment to these values in the long range planning of Concord.

Some municipalities use the Site Plan Review process to incorporate sustainability in the construction of new buildings as well as large retrofits. For instance, Watertown MA is discussing an ordinance that would require all new development in need of Site Plan Review to achieve LEED Silver Certification for projects in commercial, mixed-use and industrial zones.

[Zoning Ordinance Amendment for LEED Silver](#)

## MORE RESOURCES:

- [Understanding Commercial Site Plan Review](#)
- [Smart Growth / Smart Energy Toolkit Modules - Zoning Decisions](#)
- [SITES Rating System – Sustainability Focused Framework for New Development](#)

## ORDINANCES

The Site Plan Review process is a conduit for enacting environmental standards, but not so much building standards. Cities like Cambridge have implemented prescriptive ordinances for sustainable construction that circumvent the building energy performance limitations of the State Building Base and Stretch Codes. Cambridge

passed a Sustainable Design and Development ordinance, which included climate initiatives like green roofs, specific measurements for insulation, renewables, and more.

[Article 22: Sustainable Design and Development Ordinance](#)

## ZONING

Many zoning bylaws are older and did not account for sustainability. Through reviewing municipal zoning bylaws, new guidelines and standards can more easily enable progressive climate action through development practices and permitted uses of land in Town.

Boston Zoning Code Article 37, Green Buildings, and the Climate Resiliency Update work to incorporate environmental impact, natural resource conservation, resiliency, and sustainability in all new major buildings.

Article 37 requires all projects achieve at minimum the ‘certifiable’ level of LEED building design credits. The Climate Resiliency Update “requires that all projects consider present and future climate conditions in assessing project environmental impacts, including carbon emissions, extreme precipitation, extreme heat, and sea level rise. Projects must identify building strategies that eliminate, reduce, and mitigate adverse impacts including those due to changing climate conditions.”

- These zoning policies bring all new development in the City in line with Boston’s climate objectives, making for more cost-effective, environmentally-friendly, and resilient infrastructure.  
[Boston Zoning Code Article 37 Green Buildings and Climate Resiliency Review Procedures and Submittal Requirements](#)
- Seattle, Washington offers a multi-pathway point system for certain projects to meet zoning requirements for sustainable landscaping. Such requirements include a menu of options, such as green roofs, rain gardens, vegetated walls, foliage, gardens, and more.  
[Seattle Green Factor](#)
- There are many ways to make zoning more sustainable outside of building energy use, as well. Some sustainable zoning approaches are included in the bylaw review tool below:  
[Mass Audubon: Zoning Bylaw Review Tool](#)

## NET ZERO ACTION PLANNING

Cambridge also is implementing a [Net Zero Action Plan](#) to apply to new construction, setting a timeline for when new construction will need to be designed to meet net zero emissions (through on-site design measures for efficiency, off-site measure to secure low carbon energy, and possibly purchase of allowable types of offsets for any remaining emissions). Also focusing on existing buildings, which comprise the bulk of emissions, the Net Zero Action Plan works in tandem with the Building Energy Use Disclosure Ordinance, where they are discussing building in energy performance requirements that mandate commercial properties to cut energy use annually.

[Getting to Net Zero Action Plan 2018 Progress Report](#)

# STEP BY STEP FOR ENACTING PACE

## FOR CONCORD

1. Sustainability Director schedules a meeting and presentation with [Wendy O'Malley](#)
2. Process described to tax collector/town assessor to gain buy-in and discuss integration with current town processes
3. Sustainability Division gathers support from key stakeholders including Select Board, Climate Action Advisory Board, Planning Board, etc.
4. Determine which entity gets article on warrant for Town Meeting – may be proposed by the Town itself.
4. Town Meeting votes to pass PACE
5. PACE mechanism is announced and explained to commercial sector in Concord
6. PACE payments are sent out with same software as property taxes
  - [How to Start a Commercial PACE Program - The Implementation Guide](#)

## FOR ELIGIBLE COMMERCIAL ENTITIES:

(\*For non-profits: Must sign a Payment in Lieu of Taxes PILOT Agreement to secure fund collection mechanism)

1. Identify a project >\$250,000 with a 20 year payback
2. Identify a participating contractor
3. Apply for PACE, provided concordance with Mass Development criteria
4. MA DOER walks them through the technical review process
5. Payments collected through property tax assessment similarly to a betterment clause
  - [PACE in 90 Seconds](#)
  - [Why Should Property Owners Use PACE?](#)
  - [PACE for Nonprofit-owned Buildings \[Webinar\]](#)

# BENCHMARKING PROCESS FOR CONCORD

Benchmarking has numerous benefits for the Town and its commercial sector. Concord’s commercial and industrial building inventories, based on GIS data, account for nearly 200 buildings (194 to be exact) with breakdowns below.

	Total	100 to 500 SF	500 to 1,000 SF	1,000 to 5,000 SF	5,000 to 10,000 SF	10,000 to 20,000 SF	20,000 to 50,000 SF	50,000 SF and above
<b>Commercial</b>	174	23	11	82	23	14	15	6
<b>Industrial</b>	20	1	1	3	6	7	1	0
<b>Total</b>	194	24	12	85	29	21	16	6

After research of currently enacted benchmarking ordinances, I would recommend the following for Concord:

- One year pilot with municipal buildings and optional participation from businesses
- One year of non-disclosure after mandatory participation is enacted
- Verification every 5 years by professional engineer

Ordinance could apply to the following:

- **Non-residential buildings with 10,000SF or higher**
- Residential buildings with x or more units (need data)
- All municipal buildings (need data)

**Breakdown Suggestion:**

- Non-residential buildings ≥ 10,000 → Disclosure due date (Month, year)
- Non-residential buildings ≥ 20,000 → Disclosure due date (Month+1, year)

Month should be a time of the year that can fit a heavier workload for both businesses and municipality. Larger sized buildings typically have a month or two more to submit to the deadline, but the deadline can be the same, too. These breakdowns evenly distribute the number of buildings, which may make it easier to manage. Larger buildings usually use more energy, and thus will be the most impactful to target.

**STEP BY STEP (TAKEN FROM BENCHMARKING CHECKLIST FOR CITIES)**

*(Checklist available in Benchmarking folder under “Resources”. Copied here with hyperlinks)*

**BUILD CAPACITY FOR ENERGY BENCHMARKING IN THE REGION**

1. **Conduct Rating and Reporting Pilot Programs**
  - a. Benchmark Municipal Facilities in Portfolio Manager (PM)

- b. Support voluntary benchmarking programs (e.g. [BOMA Kilowatt Crackdown](#))
- 2. [Research data on public and private building stock](#)
  - a. List of Building Stock by Type, Size, Owners (Government, Private, Out-of-State)
  - b. Obtain Energy Star Portfolio Manager Report on buildings already benchmarked
  - c. Research best practices from other Cities
  - d. Meet with staff of the [Institute of Market Transformation](#) (IMT.org)
  - e. Identify possible scope of ordinance: Sectors, Energy, Water, Waste Benchmarking
  - f. Meet with Legal department to verify authority to implement ordinance
- 3. [Work for legislative changes to facilitate data access](#)
  - a. Get support from utilities for training in PM and transition to automated data exchange with PM in the future

#### PUBLIC ENGAGEMENT ON BENCHMARKING

- 4. [Develop strategy on communicating with Select Board](#)
  - a. Provide overview & [benefits](#) to Board prior to commercial engagement
  - b. Identify industry benefits of benchmarking ordinance
- 5. [Stakeholder Engagement \(building owners, property managers, associations, etc\)](#)
  - a. Form internal city team to give input and possible representation on the rating and reporting stakeholder group work and key stakeholders
  - b. Hold one-on-one meetings with Stakeholders/possible champions
  - c. Establish Policy Advisory Group to inform policy development
  - d. Build Local Coalition of support USGBC, Sierra Club, ACEEE, NRDC, IMT)
  - e. Develop model of energy and cost savings for building owners over time
  - f. Develop model of jobs created and economic development
  - g. [Engage Utilities](#) early in the process
  - h. Broader outreach to building owners & tenants to get feedback on proposed options
  - i. Engage opposition groups later in the process
  - j. Evaluate options for upgrades or performance requirements to include in ordinance (re-commissioning, lighting)
  - k. Identify upgrades that will defer disclosure (Energy audits, building upgrades)

#### DEVELOP BENCHMARKING ORDINANCE

- 6. [Draft Ordinance](#)
  - a. Assess options for ordinance: possible trigger points, requirements for disclosure, enforcement options, and any rules and exceptions
  - b. Assess options for efficiency standards: measures, phase in dates, enforcement options, and any rules and exceptions
  - c. Define Sectors Affected and Scope of Ordinance: Energy Water, Waste
  - d. Develop draft options for Ordinance, considering stakeholder feedback
  - e. Internal Review and revision
  - f. Finalize options for Ordinance for Legal Review
- 7. [Prepare Select Board Report and Ordinance for Select Board Input](#)
  - a. Gather List of support letters and speakers to present to Select Board
  - b. Estimate the time, money and staff resources needed to implement a benchmarking ordinance to provide to Select Board

- c. Present options and recommendations to council for approval.
- d. Complete ordinance language based on Board Direction
- e. Internal Review and revision
- f. Finalize Proposed Ordinance

## IMPLEMENT BENCHMARKING ORDINANCE

### 8. Create Project and Implementation Plans

- a. Identify Project Manager for Implementation to create Implementation Plan
- b. Map Revised Business Processes for Communication, Compliance and Enforcement
- c. Identify lead in IT to MAP and create benchmarking data management plan
- d. Plan and create website information leveraging other City case studies and examples

### 9. Implement Project Plans

- a. Identify Source for list of "covered properties" (from Tax Assessor Data?)
- b. Import, organize, merge and match building data from data sources into SEED
- c. Develop test procedures and test using civic data
- d. Develop Communication and training materials
- e. Create Website with training data and list of covered properties
- f. Implement Communication Plan, Community Outreach and Education
- g. Send ordinance letters to owners in advance of effective date with training dates
- h. Develop System for Fines and Enforcement
- i. Set aside staff capacity for time surrounding effective date for inquiries
- j. Set aside staff capacity for developing first round of reports

# Commercial Benchmarking Benefits

## Capitalize on Better Energy Management

*You can't manage what you don't measure.*

Effective energy management is regularly measured and evaluated. Businesses across the nation are capitalizing on energy management strategies that help them understand their building's energy usage and substantially **reduce operating costs**. Studies show that buildings using benchmarking practices reduce their energy bills by 2.4% annually and triple the amount of energy efficiency measures in their building, which can accumulate to **thousands of dollars of savings** <sup>1</sup>.

## Spur the Local Economy and Become More Competitive

*Benchmarking benefits businesses, the community, and the economy.*

Benchmarking also helps to **stimulate the local economy** by enabling informed decision making, creating jobs, and raising the value of building stock. Energy usage is typically a substantial operating cost and is difficult to predict prior to renting and purchasing decisions. Accounting for energy costs before operating in a building can be **valuable information** to prospective buyers and tenants <sup>2</sup>.

Further, investments in energy conservation measures not only promote job creation in a growing field, but also raise property value with **cost-effective** energy upgrades that attract lasting occupants and tenants.

Lastly, businesses that implement energy efficiency **become more competitive, attract talent, drive productivity**, and cater the evolving demands of an increasingly environmentally-conscious market <sup>3</sup>.

## Concord's Sustainability Commitments

**Concord has committed to a town-wide goal of reducing greenhouse gas (GHG) emissions 80% by 2050.**

With nearly 30% of Concord's GHG emissions coming from the commercial buildings, collaboration between everyone in our commercial community is crucial. There are many strategies to simultaneously reduce emissions, cut costs, and help Concord achieve its goals, available on [Concord's Commercial Sustainability Webpage](#). We work better when we work together to take responsibly for our community.

More information:

- [Office of Energy Efficiency & Renewable Energy: Building Energy Use Benchmarking](#)
- [Pro-Benchmarking is Pro-Business AND HERE'S WHY](#)
- [Energy Benchmarking: What Is It And Why Does Your Business Need It?](#)

## REFERENCES

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