

Starter Kit: Cambridge Net Zero Task Force Working Groups

Task Force Vision

The Cambridge Net Zero Task Force (NZTF) is charged with developing a vision and a plan to guide the City of Cambridge toward meeting the objective of Net Zero emissions buildings community-wide. Comprised of 13 representatives selected by Cambridge’s City Manager, the NZTF will meet monthly over the course of the 2014 calendar year to articulate the plan.

In addition to monthly meetings, NZTF members will participate in one or more working group(s). Each working group is charged with completing a particular set of tasks over the course of the year to complement and support the development of a net zero plan for Cambridge. Working groups will comprise both NZTF members and other community representatives with specific subject matter expertise. Working groups will meet in the interim between Task Force meetings, and will report back on their progress to the City and other Task Force members at the monthly NZTF meetings.

Working Group Categories

Working group themes are assembled around clusters of key tools that will be incorporated into a comprehensive action plan. The four categories and associated tasks for each are described below.



Engagement & Behavior Change

This group will develop an approach to both raising awareness about the Net Zero target, and engaging stakeholders to take action where applicable. The target audience for education and engagement comprises a broad representation of Cambridge residents, ranging from the level of the individual, to

industry groups and the business and academic communities. This group's tasks include, but are not limited to developing strategies for the following objectives:

- (1) raising awareness among the general public as to 'what is net zero?'; broadly improving literacy in energy efficiency, renewable energy, climate change, and related impacts of each;
- (2) educating the construction, design and development industry in best practices in energy efficient retrofits, design and construction (may include identifying gaps in local expertise and proposing training programs to build capacity in specific areas);
- (3) developing an engagement approach for building managers and operators to address 'low hanging fruit' opportunities to optimize building performance;
- (4) exploring tools such as building energy benchmarking, reporting and labeling programs, with a view to developing strategies for how the City will make use of the data once collected;
- (5) exploring strategies to engage homeowners, tenants and landlords to impact their behaviour and purchasing decisions.

Financing Tools & Incentives

This working group is focused on identifying building sectors that offer the most opportunities for energy savings or renewable energy generation, but for which the greatest barriers to action exist. While energy efficiency retrofits and low carbon construction result in energy savings and financial paybacks in the near and long term, financing tools and incentives are used to offset the issues around upfront costs of implementing these practices. This group's work will be informed by both the Cambridge Building Energy Primer, which offers a review of current and historical building energy use in Cambridge and an analysis of past policies and programs, and the Best Practices Guide, which reveals trends as to which building types or groups of stakeholders are likely to be motivated by incentives or financing tools.

This group will develop a series of recommendations for how financing tools and/or could be most effectively introduced to motivate action among building owners. The group can identify specific program models, target audiences (or customers), delivery methods and potential partnerships or opportunities to leverage existing programs.

Regulation & Planning Approaches

This group will explore the use of regulatory and other policy tools in driving a variety of actions supporting low carbon construction, energy retrofits and uptake of renewable energy. Regulatory tools can influence market transformation at the building level, and at the neighborhood and community scales. Regulations and policies requiring or encouraging, for example, passive design, energy efficiency improvements to buildings, audits, commissioning and minimum thresholds for renewable energy technologies will help move the dial toward deep emission reductions from buildings.

The Best Practices Guide offers a range of examples of tools introduced in other jurisdictions for the purpose of achieving emission reduction objectives. The regulation and planning approaches working group will assess best practices, and recognizing the local municipal and state policy context, will

recommend a set of regulatory tools and approaches determined to be most effective in the Cambridge context.

Energy Supply & Offsets

The focus of this group is to explore the range of possibilities for increasing the supply of renewable energy to buildings in Cambridge, and, more broadly, making the shift away from carbon intensive fuels. This group's work will be informed by the Cambridge Building Energy Primer, a report that outlines the current state of energy supply in Cambridge, characterizes the city's building stock, and sketches out what is currently known about energy consumption across the building stock in Cambridge. The group will explore all scales of renewable and low carbon energy supply, from building level, to neighborhood or district, to mass production energy 'farms'. Additionally the group will examine Cambridge's existing energy assets, such as district heating systems, and explore the opportunity to optimize these toward supporting the net zero goal.

This group will also explore whether and how carbon offsets will be incorporated as part of the net zero strategy, as a supplement to address any gap remaining following implementation of actions around energy efficiency, retrofits and renewable energy supply. Issues to explore include: type of eligible offset projects, associated standards and cost per tonne, parameters (e.g. geographical) of eligible offsets. The group will recommend parameters under which the City of Cambridge can consider offsets as part of the net zero energy strategy.

Working Groups: Process and Objectives

The NZTF was created in order to devise a path toward Cambridge's future of a net zero community, the "desired outcome." The ultimate goal of the working groups, a subset of the NTZF, is to deep-dive into specific components of what will eventually inform the action plan.

The City will provide the Best Practices Guide and the Building Energy Primer to the working groups to provide context and help define the current state. Armed with an understanding of Cambridge's current and desired future state, the working groups are poised to apply their experience and subject matter expertise to develop a set of objectives to set the city on the path to achieve its goals.

As described above, the NZTF will meet monthly and working groups will meet intermittently between NZTF meetings. Each working group will follow a roadmap and similar process that will be provided by the consultants. Group members will set their meeting schedules independently. A member of the consultant group will participate in the working groups to facilitate communication across the groups and facilitate consistent progress.

The working groups will review and conduct, as needed, research and analysis to formulate preliminary recommendations within their respective subject areas. At the monthly NZTF meetings, working groups will report back on their findings and preliminary recommendations. NZTF members will provide feedback and ultimately make determine which recommendations should be included in the plan.

Proposed Work Plan

