

Energy Sources & Offsets Working Group Recommendations to NZ Task Force

1.0 Go beyond rooftop solar; exploit all available renewable resources to the fullest extent

1.1 Identify all opportunities: Build on and refine the existing solar map to max out rooftop solar and then expand targeted areas beyond roofs to identify renewable resources of all kinds that offer a worthwhile potential for generation. These include solar, (solar ports/parking lots, open spaces, bridges and other infrastructure, hydro (watershed related property from Waltham to Belmont to Cambridge), anaerobic digesters, hydro (?), solar thermal hot water, cogen, fuel cells, etc. Where appropriate partner with property owners to encourage adoption (MBTA, DOT, Retailers, etc).

- 1.1.1 **Explore adequate energy storage** to support maximum build out of renewables and incentivize and support their development.
- 1.1.2 **Identify locations for storage;** assess locations that are appropriate for storage (*plan was submitted to the state already identifying potential locations*)
- 1.1.3 **Explore electric vehicle infrastructure:** Complete study (partner w university) to assess and define a path forward to develop EV infrastructure which would provide a technology platform for energy storage connected to the grid
- 1.1.4 **Promote battery leasing with NSTAR:** Promote the strategy with NSTAR that they lease batteries / inverter stack to small buildings to create a two-way grid and back up power in an outage. Modular units can be connected in a series and scale up as needed.

1.2. Promote fuel switching: Target home heating oil and other uses that are appropriate to switch to natural gas or renewable options.

1.3 Develop city-owned solar projects: Cambridge to lead the development of projects on city owned property (parking garages, watershed areas, etc). Consider purchasing land/property contiguous to Cambridge for the purposes of developing clean energy projects, or entering into land-lease agreements (example: Farrington nonprofit with acres of land).

2.0 Position Cambridge to be a test bed for microgrids and grid modernization

2.1 Identify future potential: (*tied to regulation/planning WG*) Assess feasibility, map out areas or projects conducive to microgrids and district energy projects, either through redevelopment or new development areas and promote development through regulatory and permitting process.

2.2 Early adopter for grid modernization: Advocate for being early adopter in DPU's grid modernization initiative. (*Worcester has done this and is an early adopter*)

2.3 Promote (and advocate for) smart metering: Promote smart metering when engaging with developers in the permitting process (*tie to regulatory WG*)

NOTE: MassCEC is creating a microgrid challenge.

3.0 Provide alternatives for residents to participate in local solar projects

3.1 Community Solar: Third party program to be launched in Cambridge that allows residents who can't put solar on their property to buy into community solar projects.

3.1 Create a new fund: City creates a portfolio of investment opportunities for community projects (to be further defined). See Incentives work group. *(A Kennedy School Study was done)*. (Connects to 1.3 above, City owned projects)

4.0 Accelerate the adoption of new technologies to market

4.1 New technology pilots: Partner with MACEC and NECEC to promote new technologies in Cambridge. Sponsor an X Prize together with these partners, NSTAR and others such as MIT's Climate CoLab.

5.0 Develop parameters for what is considered acceptable offsets

5.1 Allowable offsets: Develop a list of, or criteria for, acceptable and allowable offsets as an option for projects that can not achieve net zero on their own.