

# Regulation & Planning Working Group Recommendations to NZ Task Force

## **1.0 REGULATIONS DRIVE MAXIMUM ENGAGEMENT IN ENERGY EFFICIENCY AND RENEWABLES ACROSS ALL SECTORS**

**1.1 Pass building disclosure ordinance:** Done.

**1.2. Advocate for new stretch code:** City staff will actively engage with the state to advocate for the new stretch code and Cambridge's adoption of it.

**1.3 Energy Management Planning (EMP):** new ordinance, based on PTDM model, that requires property owners (Xsf and above) to submit (once every 3 years?) a plan showing how they are going to reduce/manage their energy consumption, increase renewables ("manage" is included because some buildings have energy profiles that go up and down over time based on tenant activity, so focus is on achieving best possible efficiency). There would be a fine for noncompliance (not submitting a plan) and potentially an incentive for over-achieving. An audit would be part of the EMP and they would show that they have pursued all opportunities identified in the audit, or why not (ties to 1.4). Similar to Federal Gov., owners set their own targets.

### **1.4 Beyond Incentives – drive energy efficiency beyond voluntary levels of participation**

**1.4.1: Residential energy budget:** set threshold limit (below 200 amp) for how much power each home can have. If exceeded, building/owner is subject to a fine, which goes to the proposed new Fund to support clean energy projects.

**1.4.2: Study and evaluate the ability of City to pass a carbon tax,** similar to Boulder, CO (<https://www-static.bouldercolorado.gov/docs/community-takes-charge-boulders-carbon-tax-1-201305081136.pdf>) *(See Incentives WG 1.0)*

**1.4.3: Rental property registration and inspection:** Expand on the existing requirement for owners of multifamily units to have periodic inspections (every 3 years). Inspections become safety and efficiency. Inspection identifies efficiency opportunities, equipment upgrade options as well as recording energy consumption information.

**1.5 Energy Audits and Retro-commissioning:** (similar to NYC Local Law 87) Require that buildings over 50,000 gross square feet undergo periodic energy audit and retro-commissioning measures. *(This would be part of 1.3 or independent if 1.3 is not acted on).*

**1.6 Lighting and Sub-metering:** (similar to NYC Local Law 88) Require large non-residential buildings to upgrade lighting to meet specific standards and to install electrical sub-meters for each non-residential tenant space to be able to provide monthly energy statements.

**1.7 Solar ready requirement:** All new construction and significant renovation ensures that property maximizes solar potential and requires buildings to plan infrastructure to allow for PV

installation. *(This could be expanded, another item could be added related to non-solar opportunities such as cogen, solar thermal, etc.)*

### **1.8 Roofs: Green / White / Future solar**

1.8.1: Any new roof construction permit triggers requirement for solar-ready

1.8.2: White roofs required on flat-roofed buildings

1.8.3: Green roofs where applicable *(detail needed)*

**1.9 Non-roof solar /Solar Ports:** encourage installation in large areas such as parking areas and green spaces as applicable. *(third party eligible to own/install, not limited to property owner)*

**1.10 LEED requirement:** new requirement for private development to meet LEED v for all buildings above Xsf. *(This is energy efficiency but in new buildings + 1.7) (LEED requires commissioning so adoption of this would address that “unresolved” item at the end of this document.)* (Tie to 1.10, City owned projects)

**1.10.1: Achieve or fee:** Cambridge “LEED” to require specific energy target (toward NZ) and if owner/developer can not meet target, they are required to pay fee into the proposed new Fund (“meeting target” may include alternative approved offset). *(Incentive group tie-in)*

**1.11 City owned projects:** City property should be required to collectively achieve net zero by the year 20X0.

**1.12 Permitting process deliverables:** revise existing permitting process to require specific documentation related to OPR, energy modeling, and POE template.

## **2.0 NEW DISTRICTS OR OVERLAYS ARE CREATED, DEDICATED FOR SPECIFIC CLEAN ENERGY USES**

**2.1 Renewable Masterplan:** Planning areas are identified that are conducive to specific uses: renewables, storage, micro-grids, cogen, district energy etc and are built into expectation of future redevelopment areas or zones so that infrastructure planning and development are aligned to create maximum economic potential.

## **3.0 TENANT PERFORMANCE**

**3.1 Tenant guides:** tenant fit out guides are required and are tied to the building permit *(Cert of Occ. too late)*. When plan is submitted to get a permit, tenant must show how they will achieve targets and a plan for energy management. (These guides may target LPD, heat recovery, etc.)

## **4.0 LEVERAGE FUNDING SOURCES TO REQUIRE NEW ELEMENTS**

**4.1 Affordable housing trust, Community preservation act:** tie new requirements to the use of these funds. *(incentives group)*

**4.2 New funding sources:** Create new fund that has requirements (if using fund for PV project, energy efficiency must be maxed out) (*ties to incentives group*)

***Unresolved:***

- *Solar is mentioned explicitly but not wind, ground source heat pumps, solar thermal HW – would anyone want to add anything specific about strategies beyond solar?*
- Transfer of ownership – intervention – require audit w upgrades
- OPR and POE documentation added to permitting process