

Champlain Housing Trust Energy Initiative

Capital Improvements. All capital improvement efforts for Property Management will be occurring at three levels. Level 1 are actions which can be described as low cost no cost and have an immediate impact. Level 2 are actions which cost more but have a relatively short pay back. Level 3 are actions which will require greater analysis. For existing housing, goal is to reduce energy load by 20%. VEIC will provide free bulbs and aerators. When appropriate, we will utilize reserves for other efficiency measures.

Level 1:

- Switch to CFL light bulbs.
- Install low flow shower heads.
- Caulk, foam and seal any exterior cracks and openings in the building envelope.
- Set water heater temperatures to 120 degrees where applicable.
- Service all heating systems to insure operating efficiency.
- Wrap hot water pipes.
- Change outside set temperatures for boiler operation; limit downward outside temps at which heat can be provided from 70 now to a lower number.
- Assess and upgrade heating controls.
- Install alternative thermostats. Consider Max-set-point thermostats.
- Eyeball assessment for Level 2 opportunities.
- When applicable: Install Energy star appliances.

Level 2:

- Blower-door guided airsealing.
- Insulate basement.
- Add insulation in attic, walls.
- Replace boilers and heaters.
- Replace doors and windows.
- Install solar hot water system.

Level 3:

- Install wood chip pellet heaters.
- Install wind generators.
- Install solar photovoltaic.
- Install heat pumps and alt water heater technology.

All Turnover routines should include weatherization upgrade, but all units will receive a Level 1 makeover in the next 160 days, with an initial focus on properties with highest energy use per unit. We will move towards establishing an energy use index. Once oil, gas, and electricity usage has been identified, we will calculate a total MMBtu/building, then calculating an MMBtu/ sq foot / per building.

We will establish a list for and with CVOEO's weatherization that prioritizes new construction, properties undergoing major rehab, minor rehab and rental properties that are energy hogs.

Management. A major opportunity to save energy costs is to educate residents in order to influence and change behavior. Activities will include:

- We will use signs, labels, notices in areas, fixtures, venues where that might work to reduce waste.
 - At heat controls
 - At windows, doors
- We will create of a fact sheet for residents (an energy literacy program).
- Residents who pay their own utilities will be provided with information about LIHEAP.
- We will pre-purchase oil and propane at lower prices.
- We will promote several groups that focus on “kitchen table” carbon diet activities.
- We will train tenants as part of lease-ups in heat system control and operation.
- We will investigate heat-flow metering (flows, not cost metering), to ID and quantify use.

Information

A major opportunity to save energy costs is to educate residents in order to influence and change behavior. Activities will include:

- Creation of a fact sheet for residents (an energy literacy program), e.g. how to program your thermostat, etc.
- Information about LIHEAP.
- We will promote several groups that focus on “kitchen table” carbon diet activities.

Shared Equity

CHT will establish a goal to have all CHT homes energy rated prior to resale to a new CHT homeowner.

Development Recommended Actions

Development has undertaken efforts to be LEED certified in new developments and energy efficient. Several goals are:

- For new housing, reduce typical energy load by 20%.
- Development will continue to look at alternative fuel options for new projects.
- All existing projects that are being refinanced or converted to condos comply with energy star rating to the greatest extent possible.
- We will establish a purchasing standard, aligning CHT's capitol purchasing with its energy goals. This will ensure that staff is purchasing Energy Star labeled appliances, windows, lighting, heating and cooling equipment, etc.