Safe and Warm: Before, After, and During the Storm

Margaret Song, Cape Light Compact
Goals for Today

- The Basics about Cape Light Compact
- Test Your Energy Efficiency Knowledge
- Opportunities for Improvement
The Basics of Cape Light Compact

Who are we?
• Public Entity formed in 1997 to advance the interests in consumers in the newly restructured electric industry

• Serves the 21 towns and 2 counties encompassing Cape Cod and Martha’s Vineyard

• Governing Board comprised of appointed individuals who represent each member town’s interests

• Serves 200,000+ consumers on Cape Cod and Martha’s Vineyard

• Office Located in the Superior Courthouse in Barnstable Village

• Administers $100+ million annual power supply contract (Since 2003)

• Operations funded through a ‘mil adder’ incorporated into our customers electric bill (formerly by Barnstable County)

• Deliver a Comprehensive Approach to Energy Services
Comprehensive Approach to Energy Services

- Competitive Power Supply with Green Option
- Effective Consumer Advocacy
- Energy Efficiency Programs and Education

Cape Light Compact
Key Acts for the Compact

• The MA Electricity Restructuring Act of 1997 enables towns and cities to establish municipal aggregators like Cape Light Compact, that could:
  1. Purchase power on behalf of all customers in the municipality
  2. Implement the rate payer funded energy efficiency programs instead of the local electric utility

• The MA Green Communities Act of 2008 established a new statewide energy efficiency planning process, impacts municipal aggregators:
  1. Three-year MA Department of Public Utilities (DPU) approved Energy Efficiency Plan
  2. Significant funding increases for “all cost-effective measures”
  3. Energy Efficiency Advisory Council, Statewide Working Groups
Who’s Paying for All of This?

Ratepayer funding of Cape Light Compact Energy Efficiency Programs
Test Your Energy Efficiency Knowledge
What’s wrong with your picture?
What's Wrong Here…

Un-Insulated, Un-Covered Attic Access
Air Gap in Bulkhead Door
What’s Wrong Here…

Air Gap Around Ceiling Penetrations
Bath Fan Vented Directly Into Attic

What’s Wrong Here...
What’s Wrong Here…

Before…
Chimney chase open to basement

After…
What's Wrong Here…

Non-continuous Insulation

No Contact between Insulation and Floor

Evidence of bulk moisture and mold
Un-insulated rim and band joist located above insulated foundation walls.
What’s Wrong Here…

Insulation removed from Kraft facing
What’s Wrong Here…

Nothing!

Except for this incandescent light bulb
What's Wrong Here…

Kinked supply ducts
Duct connecting Supply and Return

What’s Wrong Here…
What’s Wrong Here…

Water Heater starting to deteriorate
What's Wrong Here…

Poorly Insulated Roof Structure

Skylight Framing

Recessed Ceiling Lights?
What’s Wrong Here…

Cold Ceiling (poorly insulated attic) collects moisture and any particles in the air, staining ceilings.
Poorly insulated and air sealed home creating Ice dams
Ice dams

http://www.thisoldhouse.com/toh/photos/0,,20557572_21099321,00.html
Permanent Fixes for Ice Dams

Getting rid of ice dams for good is simple, in principle: Just keep the entire roof the same temperature as the eaves. You do that by increasing ventilation, adding insulation, and sealing off every possible air leak that might warm the underside of the roof.

1. **Ventilate Eaves And Ridge.** A ridge vent paired with continuous soffit vents circulates cold air under the entire roof. Both ridge and soffit vents should have the same size openings and provide at least 1 square foot of opening for every 300 square feet of attic floor. Place baffles at the eaves to maintain a clear path for the airflow from the soffit vents.

2. **Cap the Hatch.** An unsealed attic hatch or whole-house fan is a massive opening for heat to escape. Cover them with weatherstripped caps made from foil-faced foam board held together with aluminum tape.

3. **Exhaust to the Outside.** Make sure that the ducts connected to the kitchen, bathroom, and dryer vents all lead outdoors through either the roof or walls, but never through the soffit.

4. **Add Insulation.** More insulation on the attic floor keeps the heat where it belongs. To find how much insulation your attic needs, check with your local building department.

5. **Install Sealed Can Lights.** Old-style recessed lights give off great plumes of heat and can't be insulated without creating a fire hazard. Replace them with sealed "IC" fixtures, which can be covered with insulation.

6. **Flash Around Chimneys.** Bridge the gap between chimney and house framing with L-shaped steel flashing held in place with unbroken beads of a fire-stop sealant. Using canned spray foam or insulation isn't fire safe.

7. **Seal and Insulate Ducts.** Spread fiber-reinforced mastic on the joints of HVAC ducts and exhaust ducts. Cover them entirely with R-5 or R-6 foil-faced fiberglass.

8. **Caulk Penetrations.** Seal around electrical cables and vent pipes with a fire-stop sealant. Also, look for any spots where light shines up from below or the insulation is stained black by the dirt from passing air.

http://www.thisoldhouse.com/toh/photos/0,,20557572_21099321,00.html
Cape Light Compact Free Energy Assessment
Call 1-800-797-6699  www.capelightcompact.org

A qualified Energy Analyst performs an energy audit on your home using a “Whole-House” approach which includes:

- Analysis of historical energy consumption using utility bills
- Comprehensive Assessment Identifying Energy Efficiency Opportunities
- Combustion Appliance Testing (checking for safety and efficiency)
- Replacing Incandescent light bulbs with Installation of Energy Efficient Lighting
- Identification of Cost-Effective Energy Efficiency Opportunities
- Home Energy Action Plan- Providing Recommendations and energy savings projections
- Generous Incentives for recommended measures
0% Interest HEAT Loan Program

Up to $25,000 with Repayment Terms up to 7 Years for Eligible Measures Including:

*Loan eligibility is determined by the lender. Must receive Energy Assessment

- Air Sealing, Insulation and Duct Improvements
- Domestic Hot Water Systems
- Heating Systems and Thermostat Controls
- Central Air Conditioning Systems
- Pre-Weatherization Barrier Remediation

Finance your 25% co-payment for weatherization measures

Get rid of that old inefficient heating system without breaking the bank!

Replace your old AC system or Install one for the first time

Now Available for Condo Owners!
1. Chimney Balloon
$35 rebate A removable, reusable, and durable device that helps to stop airflow, odor, and debris from flowing through your chimney.

2. Heating Systems, Controls, & Water Heaters
$100-1200 rebate* for oil & propane heating systems.

3. Central Air Conditioning
$250-500 rebate for central cooling and minisplit heat pump systems.

4. Efficient Thermostats*
limit 2 per customer (oil & propane)
$25 rebate for 7-day programmable thermostat.
Up to $100 rebate for Wi-Fi thermostat with Wi-Fi Connection enabled.

5. Heat Pump Water Heaters
$750 rebate for qualified electric hot water replacements.

Cape Light Compact’s Home Energy Assessment
Includes Free energy efficient light bulbs, Free air sealing, and will cover 75% of the cost up to $4,000 to install recommended insulation for eligible homes. Please call (800) 797-6699 to schedule your free home energy assessment today!
Additional benefits for income qualified customers.

Mass Save® HEAT Loan Program
The HEAT Loan Program provides loans up to $25,000 with 0% interest and terms up to 7 years for approved measures.** To apply for the loan you must own a one to four-family home and have a home energy assessment. To view eligibility requirements, please visit www.capelightcompact.org/heat.

6. Solar Domestic Hot Water
$500-1500 rebate for solar domestic hot water heating systems. Rebate amount depends on number of household members. Pre-approval required and must replace electric hot water heater.

7. Appliances
$50 rebate for recycling your second refrigerator or freezer.
$50 rebate for a new ENERGY STAR® Most Efficient qualified refrigerator.
$20 rebate for a new ENERGY STAR® qualified freezer.
$40 rebate for an ENERGY STAR® Room Air Cleaner.

8. Dehumidifier
$30 rebate on ENERGY STAR® certified dehumidifiers.

9. Clothes Dryer
$50 rebate for ENERGY STAR® certified electric clothes dryers.

*Natural gas equipment related rebates are available through GasNetworks at www.gasnetworks.com.

**Subject to lender approval.

www.capelightcompact.org/ResRebates
Thank you!

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