

# The Cape Light Compact Energy Efficiency Plan

Overview and Current Status

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Tim Woolf  
Synapse Energy Economics

## Similarities With MA Utilities' Plans

- Program goals:
  - Achieve cost-effective energy savings.
  - Support low-income customers.
  - Equitable allocation of funds.
  - Adequate support for capturing lost opportunities.
  - Due emphasis to market transformation.
  - Facilitate the competitive market for efficiency products & services.
- Program designs -- based primarily on collaborative programs.
- Low-income program -- designed by low-income advocates.
- NEEP programs -- Compact will adopt NEEP programs.
- New construction -- Compact will adopt Energy Star Home.
- C/I programs -- Based on those of MA utilities.

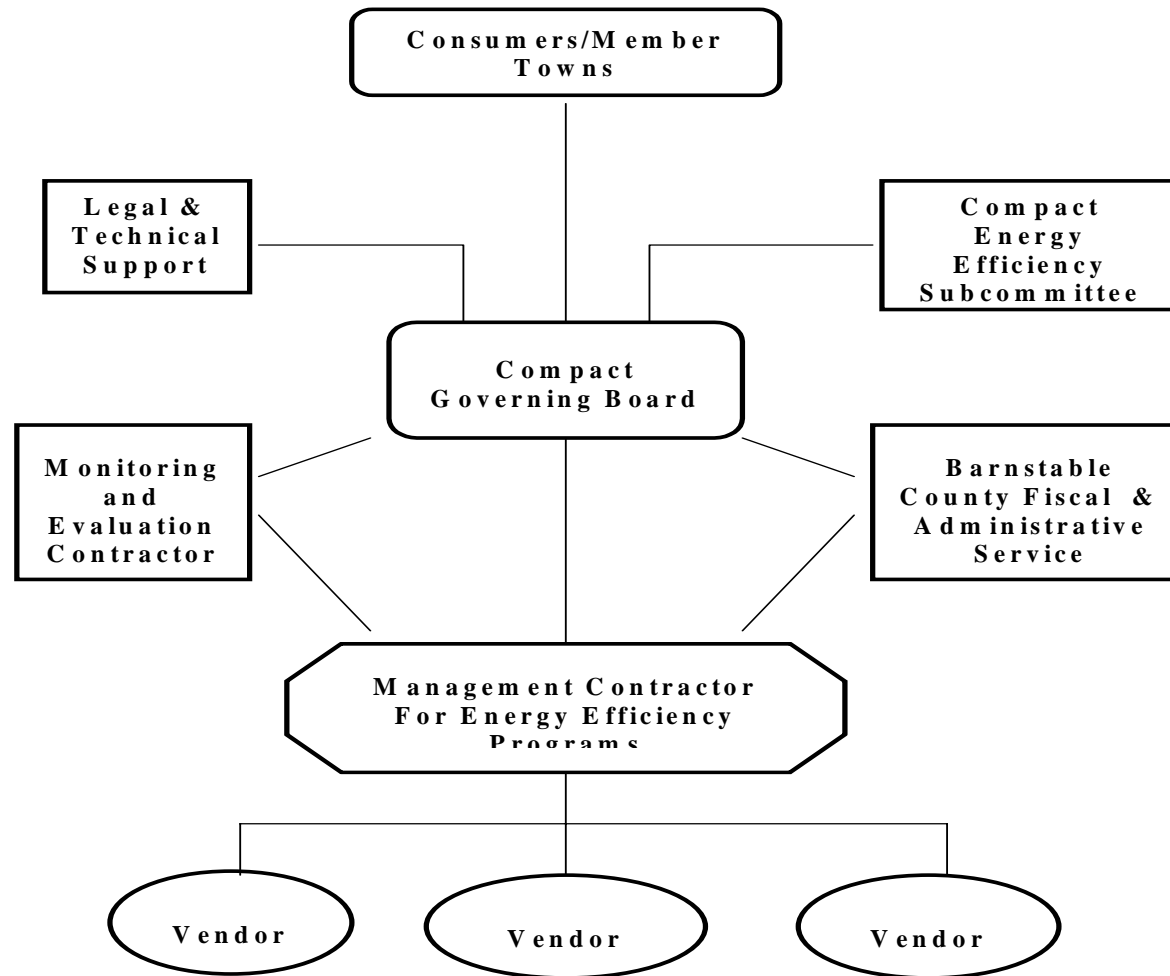
## Differences With MA Utilities' Plans

- Consistency with organizational mission. Promoting efficiency and lowering bills is one of the central goals of the Compact.
- Program marketing. The Compact will exploit its extensive network of local contacts to promote the program.
- Shareholder incentives. The Compact is not seeking incentives. This frees up as much as 10% to 12% of the program budget.
- Fuel choice. For space heating and water heating, customers will be offered choice of efficient electric, efficient gas, heat pumps, or solar water heaters.
- Customer representation. The Compact offers many avenues for customer input to the programs.
- The Compact allocates funds to towns based on contribution.

# Energy Efficiency Program Administration

- Consumers and town governments provide local input, primarily through Selectmen and other representatives.
- The Compact Governing Board provides policy and budget guidance, as well as general oversight.
- The Energy Efficiency Subcommittee of the Board provides technical and policy advice.
- Barnstable County staff will provide fiscal management and administrative support.
- Program Management Contractor will provide day-to-day management, including management of program vendors.
- Program vendors will be hired to deliver energy efficiency products and services to customers.

# Structure of Program Administration



# List of Efficiency Programs Offered

- Residential Programs
  - Low-Income Single-Family
  - Low-Income Multifamily
  - Low-Income New Construction
  - Residential New Construction
  - Residential Appliances
  - Residential High Use
- Commercial/Industrial Programs
  - New Construction and Rehabilitation
  - Medium and Large C/I Customers
  - Small C/I Customers
  - Government Agencies

# Summary of Low-Income Programs

- Low-Income Single Family:
  - Space heat -- building shell, thermostat.
  - Water heat -- Appliance Maintenance Program
  - Lighting -- AMP.
  - Refrigeration -- AMP.
- Low-Income Multi-Family:
  - Lighting.
  - Refrigeration.
- Low-Income New Construction:
  - Energy Star Rating
  - Space Heat -- building shell, thermostat.
  - Appliances -- Energy Star.
  - Lighting -- NEEP.

# Summary of Other Residential Programs

- Residential New Construction:
  - Energy Star Rating.
  - Space Heat -- Fuel Choice (electric, Heat Pump, gas).
  - Appliances -- Energy Star.
  - Lighting -- NEEP.
- Lighting and Appliances:
  - Compact Fluorescent Lightbulbs and Fixtures -- NEEP.
  - Clothes Washers -- NEEP.
  - Water Heat -- Fuel Choice (electric, Heat Pump, gas, solar).
- High Use Customers:
  - Space Heat -- Fuel Choice (electric, Heat Pump, gas).
  - Water Heat -- Through Lighting & Appliances Program.
  - Lighting, Clothes Washers, Refrigerators -- Through Lighting and Appliances Program.



# Summary of Commercial & Industrial Programs

- New Construction and Rehabilitation.
  - Based on MECO's Design 2000 Program.
- Medium and Large C/I.
  - Based on MECO's Energy Initiative Program.
- Small C/I.
  - Majority of Compact's C/I customers.
- Government Agencies.
  - Services similar to three programs above.
  - Marketed through Compact's network of local, municipal agencies.
- NEEP Motors.
  - Marketed through all other C/I programs.

## Program Budget Assumptions

- Sales in Compact territory in 1997 were 1,580 GWh, roughly 44% of Com/Electric's sales.
- Estimated sales for 2000 times the 2.85 \$/MWh efficiency surcharge leads to a total annual Compact budget of \$4.7 million.
- Roughly \$1.2 million in funds have been set aside for Com/Electric IRM payments and ECS costs.
- Marketing and administration budgets are loosely based on those of MA utilities.
- Funds are allocated to Residential and C/I programs based on sales to those customers.
- Funds are allocated to low-income customers based on the 0.25 \$/MWh amount required by legislation.

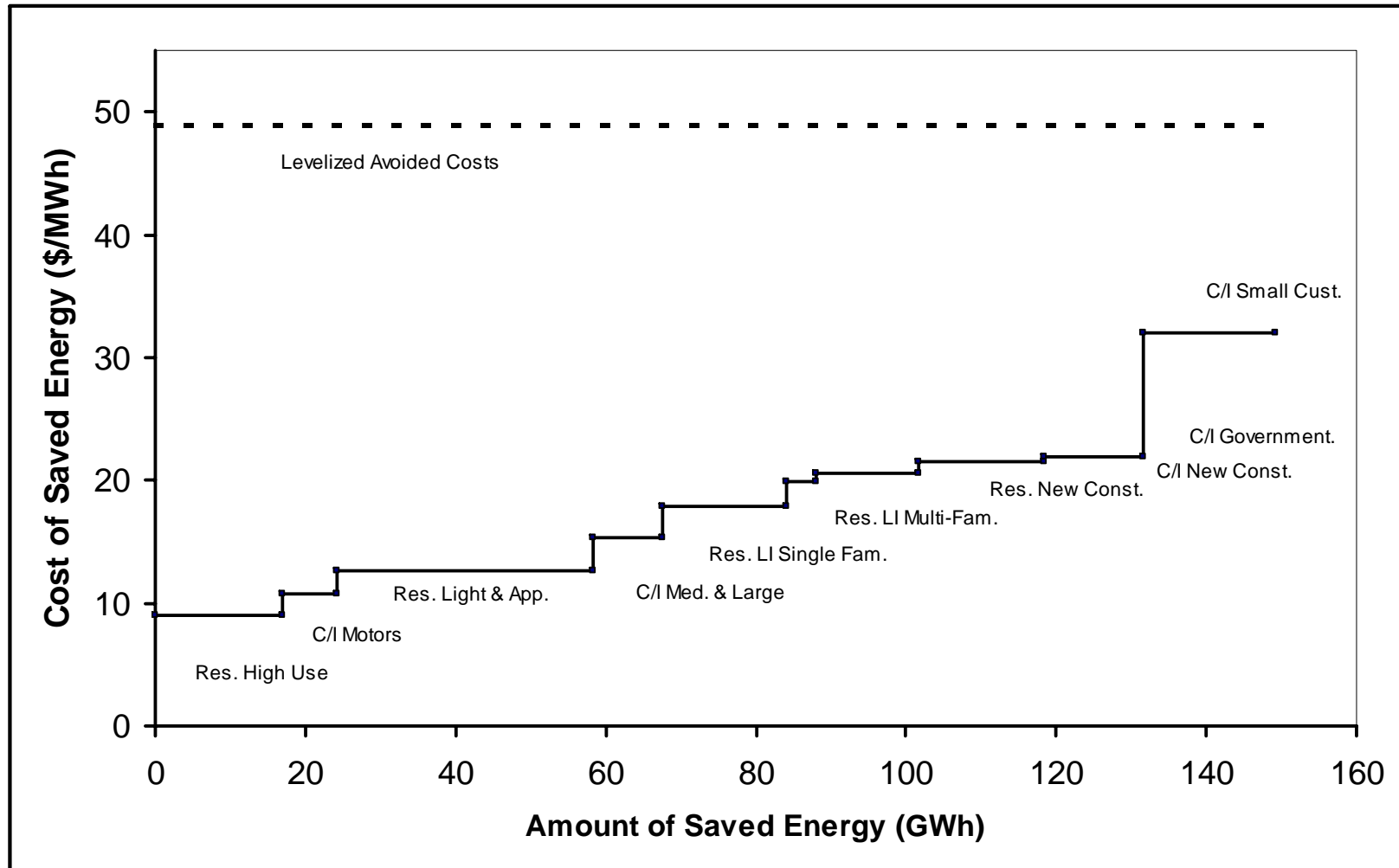
# Summary of Program Budget

	<b>Program/Expenditure</b>	<b>Total Costs</b>	<b>Percent of Program</b>	<b>Percent of Type</b>
	<b>Residential Programs</b>			
	Low-Income Single Family	292	9%	70%
	Low-Income Multi-Family	81	3%	20%
	Low-Income New Construction	41	1%	10%
	<u>Total Low-Income</u>	<u>415</u>	<u>13%</u>	<u>100%</u>
	New Construction	311	10%	23%
	Lighting and Appliances	538	17%	40%
	High Use	490	15%	37%
	<u>Total Non Low-Income</u>	<u>1,340</u>	<u>42%</u>	<u>100%</u>
	<u>Total Residential</u>	<u>1,754</u>	<u>55%</u>	<u>na</u>
	<b>Commercial &amp; Industrial Programs</b>			
	New Construction	361	11%	25%
	Medium and Large Customers	143	4%	10%
	Small Customers	561	18%	39%
	Government Agencies	289	9%	20%
	NEEP Motors	76	2%	5%
	<u>Total Commercial &amp; Industrial</u>	<u>1,430</u>	<u>45%</u>	<u>100%</u>
	<b>Total Program Costs</b>	<b>3,184</b>	100%	90%
	Public Education & Marketing Campaign	100	na	3%
	Compact Technical Support	94	na	3%
	Evaluation and Monitoring	141	na	4%
	<b>Total Costs of Efficiency Plan</b>	<b>3,519</b>	na	100%
	Funds Set Aside for Com/Elec DSM	1,183	na	na
	<b>Total Efficiency Funds Available</b>	<b>4,702</b>	na	na

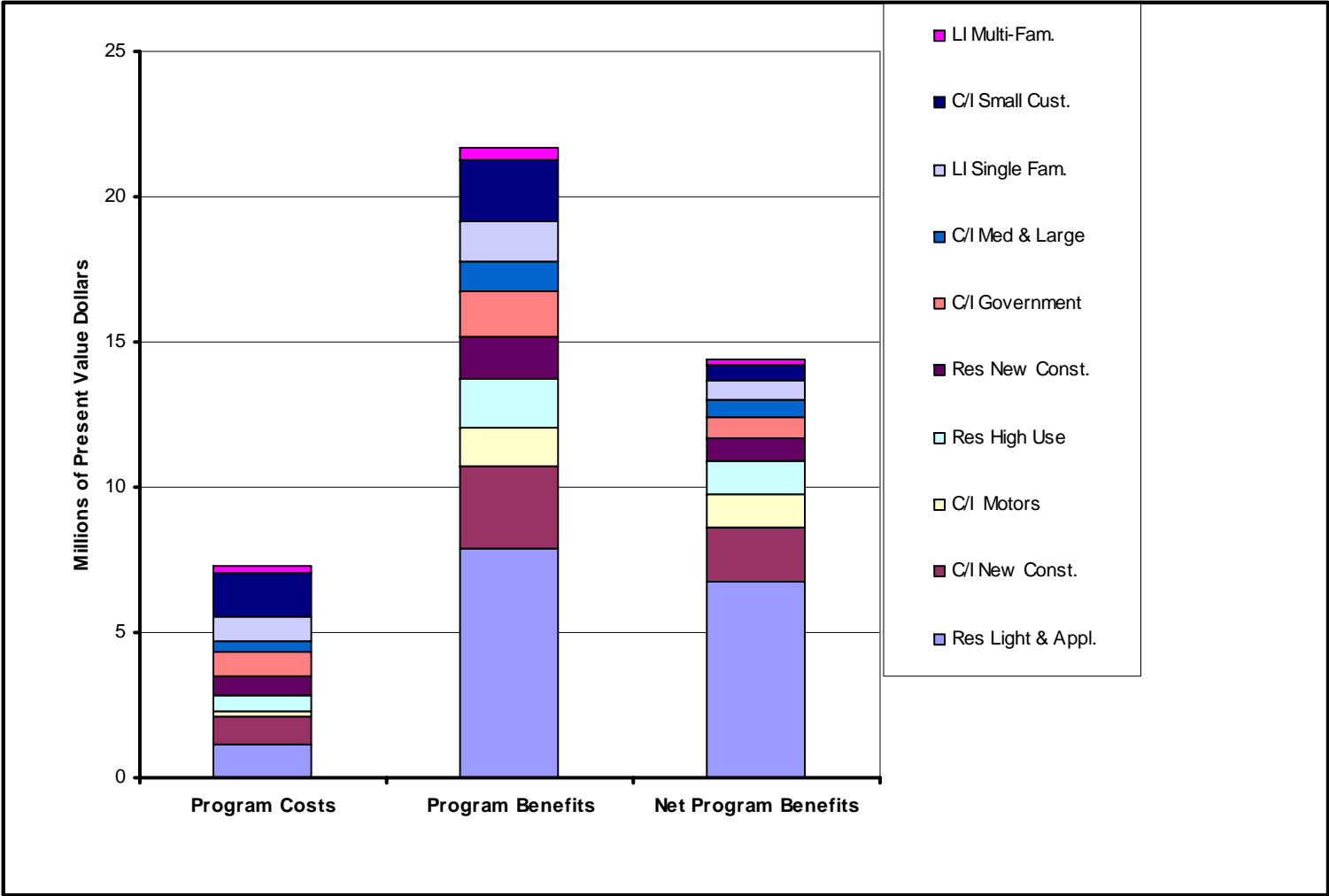
# Program Cost-Effectiveness Results

<b>Program</b>	<b>Energy System Test</b>	<b>Societal Test</b>
Residential Programs:		
Low-Income Single-Family	1.8	2.9
Low-Income Multi-Family	1.8	3.1
Low-Income New Construction	na	na
<b>Total Low-Income</b>	<b>1.8</b>	<b>3.0</b>
Residential New Construction	2.1	1.6
Residential Lighting and Appliances	7.0	1.9
Residential High-Use Customers	3.4	1.4
<b>Total Non-Low-Income Residential</b>	<b>4.8</b>	<b>1.7</b>
<b>Total Residential Programs</b>	<b>3.8</b>	<b>1.9</b>
Commercial and Industrial Programs:		
C/I New Construction	2.8	1.6
C/I Medium and Large Customer	2.6	1.8
C/I Small Customers	1.4	1.3
Government Agencies	1.9	1.7
NEEP Motors Initiative	7.0	3.1
<b>Total Commercial and Industrial Programs</b>	<b>2.2</b>	<b>1.7</b>
<b>Total Compact Programs</b>	<b>3.0</b>	<b>1.8</b>

# Energy Savings and Costs, by Program



# Cumulative Present Value Costs and Benefits



## Schedule for Implementing the Compact Plan

- Draft plan was completed in August 1998.
- Compact has held a series of meetings with towns, DOER, Com/Electric and other interested parties. Comments have been reflected in the current draft.
- Compact issued RFP for Management Contractor in February 1999, and received proposals from 3 highly-qualified bidders.
- Compact will submit final plan to DTE as soon as the power supply negotiations have been completed.
- Compact will develop administrative infrastructure and begin marketing the programs in the third and fourth quarter of 1999.
- Programs will be operational by the beginning of 2000.