Typical Annual Direct Energy Costs for Large New England Household ($ per year)

For 12,000 kWh electricity, 168 MMBtu gas&oil, and 2 cars driving 12,000 miles per year at 22 mpg and current prices

Total Direct Energy Cost:
$5,980 per household per year

Sources: http://www.eia.doe.gov, http://northeastgas.org, analysis by Sam Newell
**Annual Savings Achievable for Typical Large New England Household ($ per year)**

*Combined Annual Savings of $2,290* (38% reduction) excluding initial installation costs

For most households, these measures save money even counting initial costs

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**Driving:** replace cars with more efficient models, e.g., 35 mpg instead of 22

- $486

**Driving:** carpool/train to cut mileage of second car by 60%

- $393

**Driving:** eliminate/consolidate two 15 mile trips per week per car

- $170

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**Space Heating:** weather stripping, insulation retrofit, storm windows/doors

- $470

**Space Heating:** turn down thermostat by 4° on average

- $207

**Water Heating:** use less; set heater to 115°; buy Energy Star dishwasher and washer (front loader)

- $107

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**Refrigeration:** buy Energy Star & discard old extra fridge

- $253

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**Lighting:** replace 2/3 of incandescents with compact fluorescents

- $162

**Other Appliances:** turn off appliances when not in use

- $160

**A/C:** install Energy Star (highest EER) & avoid over-air conditioning

- $141

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*Note: total savings is less than the sum of components because of overlap among components*
Typical Annual Direct CO\textsubscript{2} Emissions for Large New England Household \textit{(tons CO\textsubscript{2} per year)}

\textit{For 12,000 kWh electricity, 168 MMBtu gas, and 2 cars driving 12,000 miles per year at 22 mpg}

Total Direct CO\textsubscript{2} Emissions: \textbf{29 tons} per household per year

Not including indirect emissions associated with goods and services, which are slightly larger than direct residential emissions.

* Note: assumes only gas is used for space heating, dryer, and cooking. CO\textsubscript{2} emissions are 3 tons higher if space heating with oil.

Sources: http://www.eia.doe.gov, http://northeastgas.org, analysis by Sam Newell
Annual Savings Achievable for Typical Large New England Household *(tons CO$_2$ per year)*

**Combined Annual Savings of **18 tons**(57% reduction)** *

- **Driving:** replace cars with more efficient models, e.g., 35 mpg instead of 22
- **Driving:** carpool/train to cut mileage of second car by 60%
- **Driving:** eliminate/consolidate two 15 mile trips per week per car
- **Space Heating:** replace oil furnace with gas
- **Space Heating:** use woodchip stove for 50% heating needs
- **Space Heating:** weather stripping, insulation retrofit, storm windows/doors
- **Space Heating:** turn down thermostat by 4º on average
- **Water Heating:** use less; set heater to 115º; buy Energy Star dishwasher and washer (front loader)
- **Refrigeration:** buy Energy Star & discard old extra fridge
- **Lighting:** replace 2/3 of incandescents with compact fluorescents
- **Other Appliances:** turn off appliances when not in use
- **A/C:** install Energy Star (highest EER) & avoid over-air conditioning

*Notes: total is less than the sum of components because of overlap among components; savings for gas-heated homes is only 15 tons (-53%)*