

EESE Board Goals Work Group Goals and Targets for the Building Sector

EESE Board Meeting

9 April 2010

A decorative graphic consisting of several sets of concentric circles, resembling ripples in water, located in the bottom right corner of the slide.

EESE Board Goals Work Group

Group's Charge:

- Identify the overarching goal and key sector-based milestones, that if successfully reached, will achieve the EESE Board's Vision 2025 and support the NH Climate Action Plan.

Goals and Targets Revisions

Baseline Change:

- The goals and targets have been revised from the Climate Action Plan to use 2005 NH GHG emission levels as the baseline.
- Revised to use 2005 as this benchmark is more relevant to the various audiences to which these goals will be communicated.

Goals and Targets Revisions

Language of Building Goals and Targets:

- Restated metrics as “BTUs” and “emissions” rather than “efficiency” to ensure measurability as well as imply all strategies.
- Framed 2 goals on a per building basis rather than as an aggregate to allow greater flexibility.
- Reductions from a 2005 average building use.

Goals and Targets Revisions

Alignment of Targets:

- The interim targets have been modified so that the phase-in rates for retrofit are expressed as percentages and are the same for each sector.
- No change in background assumptions or net annual fossil fuel use/emission reductions.
- Greater flexibility in implementation in early years.

Overarching Goal

Economy-Wide Goal (CAP)

- By 2025, New Hampshire will reduce its *Total* greenhouse gas emissions by 44% below 2005 levels, equivalent to a 20% reduction below 1990 emission levels.

Building Sector Goal (EESE Board)

- By 2025, New Hampshire will reduce its *Building Sector* greenhouse gas emissions by 55% below its 2005 emissions (i.e., 50% reduction in fossil fuel BTUs usage).

Buildings Sector

Goals and Targets

1. By 2020, all new Residential and Commercial buildings constructed will consume zero net energy from fossil fuel energy sources, equivalent to zero net CO₂e emissions.
2. By 2025, all Residential buildings constructed prior to 2011 will consume *on average* 60% fewer BTUs from fossil fuel energy sources than an average home in 2005, equivalent to *an average* reduction in CO₂e emissions of 60% below 2005 levels.
3. By 2025, all Commercial, Industrial, and Municipal buildings constructed prior to 2011 will consume *on average* 50% fewer BTUs/sq ft. from fossil fuel energy sources than an average C&I and M structure in 2005, equivalent to *an average* reduction in CO₂e emissions/sq ft. of 50% below 2005 levels.

New Construction

By 2020, all new Residential and Commercial buildings constructed will consume zero net energy from fossil fuel energy sources, equivalent to zero net CO₂e emissions (RCI 1.1).

- From 2010-2014, all new buildings constructed will *on average* consume 30% less BTUs from fossil fuel energy sources than an average building in 2005, equivalent to *an average* reduction in CO₂e emissions of 30% below 2005 levels.
- From 2015-2019, all new buildings constructed will *on average* consume 70% less BTUs from fossil fuel energy sources than an average building in 2005, equivalent to *an average* reduction in CO₂e emissions of 70% below 2005 levels.
- By 2020, all new buildings constructed will consume zero net energy from fossil fuel energy sources, equivalent to *an average* reduction in CO₂e emissions of 100% below 2005 levels.

Residential Retrofit

By 2025, all Residential buildings constructed prior to 2011 will consume *on average* 60% fewer BTUs from fossil fuel energy sources than an average home in 2005, equivalent to *an average* reduction in CO₂e emissions of 60% below 2005 levels (RCI 1.2).

- By 2015, 25% of Residential buildings will achieve this goal.
- By 2019, 50% of Residential buildings will achieve this goal.
- By 2022, 75% of Residential buildings will achieve this goal.
- By 2025, 100% of Residential buildings will achieve this goal.

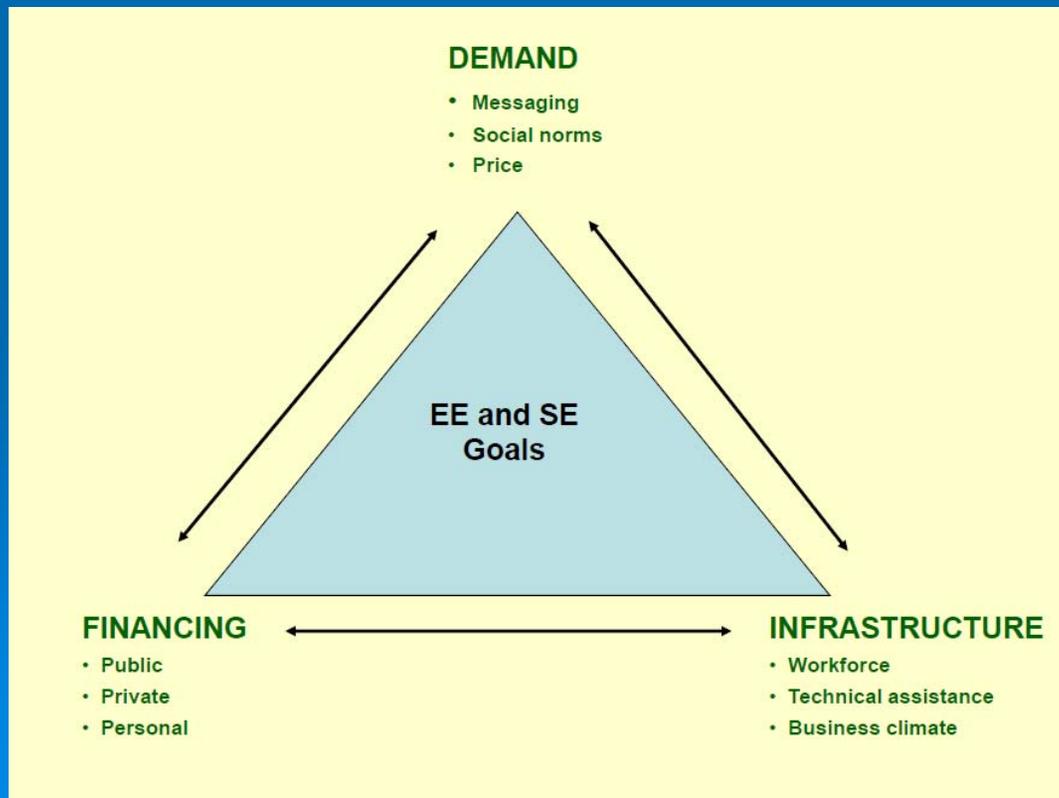
Commercial, Industrial & Municipal Retrofit

By 2025, all Commercial, Industrial, & Municipal buildings constructed prior to 2011 will consume *on average* 50% fewer BTUs/sq ft. from fossil fuel energy sources than an average C&M and I structure in 2005, equivalent to *an average* reduction in CO₂e emissions of 50% below 2005 levels (RCI 1.3).

- By 2015, 25% of Commercial, Industrial, and Municipal buildings will achieve this goal.
- By 2019, 50% of Commercial, Industrial, and Municipal buildings will achieve this goal.
- By 2022, 75% of Commercial, Industrial, and Municipal buildings will achieve this goal.
- By 2025, 100% of Commercial, Industrial, and Municipal buildings will achieve this goal.

Issues/Next Steps

- Define electric sector generation targets (if appropriate).
- “Drill down” all actions to include milestones, resource requirements, and supporting actions.



Questions

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