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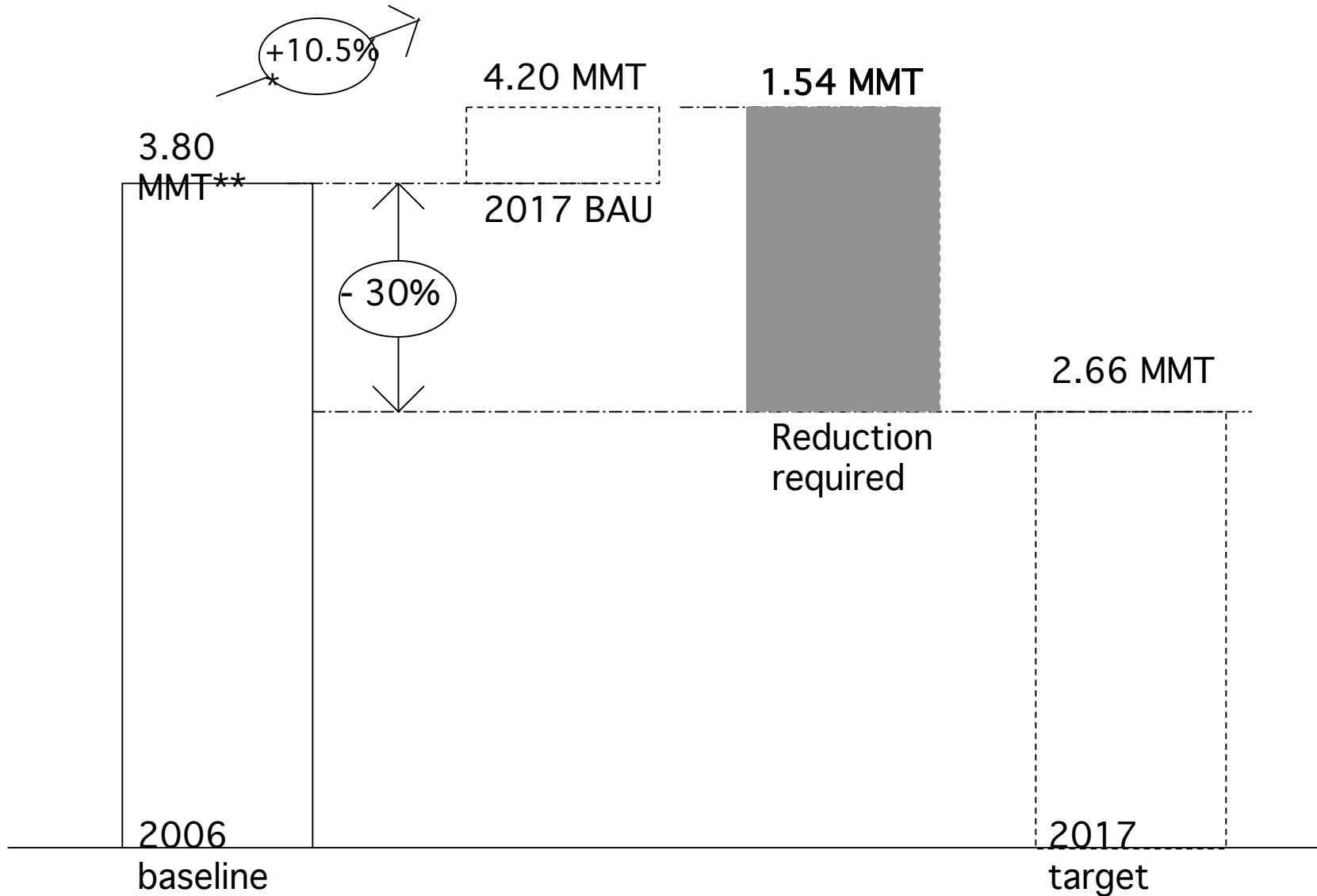
NYC Municipal CO₂ Reduction Strategy

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- Introduction
- Executive Order 109
 - ✓ Short-term action plan
 - ✓ Long-term action plan
- Greenhouse gas emission reduction potential
- Upcoming

Executive Order 109 calls for absolute reduction of 30% by 2017 -- approximately 1.54 MMTons.



* Estimated increase at 1% per year (average for NYC) for 10 years = 10.5% increase; may be higher because of new DEP facilities coming on line.

**MMT = Million Metric Tons

Release of action plan

- December 5, 2007

Allocation of resources

- 10% of energy budget = \$80 million
- Creation of Energy Efficiency Steering Committee
- 132 projects
 - Projected cost of \$67 million
 - Projected GHG reduction of 34,000 tons annually
- Pilot programs and studies
 - Projected cost of \$8 million
 - Balance (\$5 million) for contingency

132
Projects

- Interior lighting and lighting controls
- HVAC system and chilled water systems upgrades
- Cogeneration at Rikers Island
- Street and highway lighting

Pilot
Projects

- Baseline energy audits
- Round 2 of fleet study
- LEED EB
- Hybrid vehicles and vehicle pilot projects

Systemic Studies

- Operations and maintenance study
- Metering/monitoring and energy management systems
- Energy database development with benchmarking

Other Studies

- Assessment of potential for DG

Release of action plan

- To be released June 30, 3008

Comprehensive ten-year plan

- Criteria for energy and methane reduction measures
- Criteria for building energy audits, retrofits, retrocommissioning
- Measurement and verification protocols
- Proposals for pilot projects
- Accountability rules
- Organizational needs

Integration of results of planning efforts

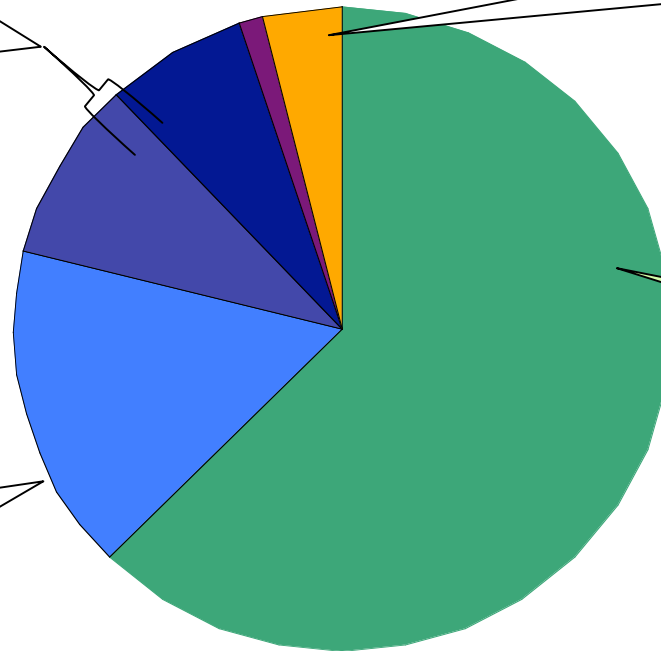
- Database to track building energy use
- Operations and maintenance study
- Energy monitoring and peak load management opportunities
- Vehicle upgrade/emissions reduction program

Energy used in buildings accounts for 64% of municipal CO₂ emissions ...



Transportation:
17% of municipal emissions
(Fleet: .34 MMT;
Long-haul trucks: .29 MMT;
School buses .03 MMT)

Streetlights and signals:
4% of municipal emissions: 0.14 MMT



Buildings: 64% of municipal emissions: 2.44 MMT

Water and Sewer:
17% of municipal emissions: 0.65 MMT
(Operations: .49 MMT;
Methane: .16 MMT)

... and increased efficiency in buildings will be responsible for 50% to 60% of the CO₂ emissions reductions required*.

* 4% to 5% more if efficiency upgrades to DEP facilities are included

- Long-term action plan release – late June
- Greenhouse gas inventory update – September
- Sustainability and energy indicators launch – September

- Questions?