

DRAFT REPORT OVERVIEW

**ENERGY FUTURE TASK FORCE
TOWN OF CONCORD, MA
FEBRUARY 1, 2017 PUBLIC MEETING**

ENERGY FUTURE TASK FORCE

FIND THE DRAFT REPORT on the Energy Future Task Force web page under important documents.

The web page can be accessed at

<http://concordma.gov/1098/Energy-Future-Task-Force>

SEND COMMENTS on the draft report to the Energy Future Task Force email address:

energyfutures@concordma.gov

OUR WORK IS GUIDED BY:

- 1. International commitments for greenhouse gas reduction expressed in the 2015 Paris Agreement on climate change and Massachusetts' goals for greenhouse gas reduction expressed in the 2008 Massachusetts Global Warming Solutions Act.**
- 2. A commitment to bold approaches and actions to achieve greenhouse gas reduction consistent with the urgency of the current global anthropogenic climate crisis, and with Concord's long history of leadership and of stewardship of our natural world.**
- 3. A recognition that Concord is part of, and should actively contribute to, the fast-paced global, national, state, and municipal transformation from an economy powered by fossil fuels to an economy powered by clean energy.**
- 4. A commitment to Concord's sustainability principles.**

GOALS & RECOMMENDED IMMEDIATE NEXT STEPS

GOALS

25% reduction in greenhouse gases by 2020

80% reduction in greenhouse gases by 2050

These are town-wide goals and are applicable to all sectors. The baseline is 2008.

RECOMMENDED IMMEDIATE NEXT STEPS

- 1. Issue a policy statement to establish decreasing emissions as a criterion in all Town decisions.**
- 2. Hire a Director of Energy [or other title] and a consultant to assist the Director to guide the Town in designing and implementing a sustainable energy future consistent with the recommendations in this Report.**
- 3. Appoint a new advisory group to assist the Town Manager, the Energy Director, and the consultant.**

BASELINE DATA

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CONCORD'S CARBON FOOTPRINT

227,949 Tons of CO₂ in 2015
which is equivalent to the
weight of the Sears Tower.
(minimum value)

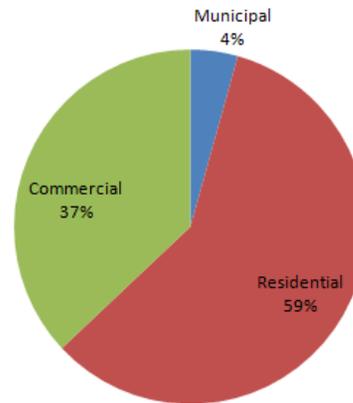
Concord's full GHG Footprint
is estimated to be 3 times
greater when:

- All GHGs (CH₄, N₂O, F-gases)
- Propane Purchases
- Fugitive Methane Leaks
- Products and Services we buy are considered

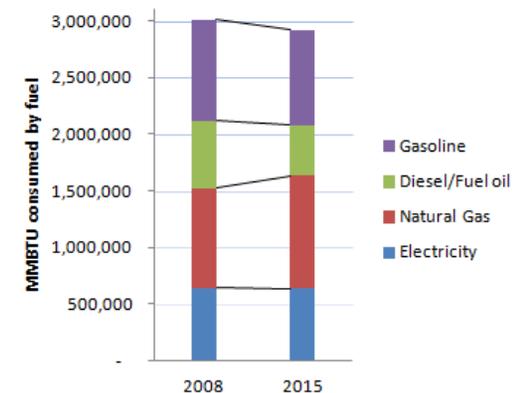
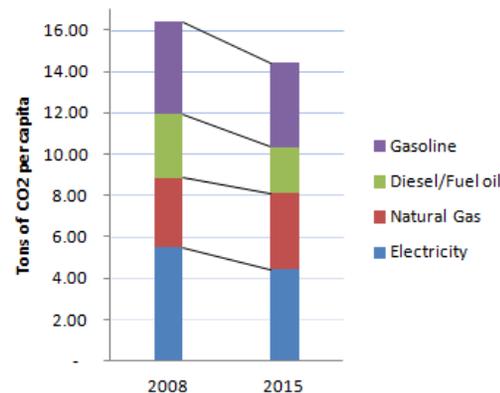
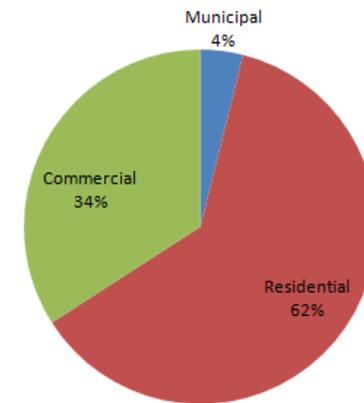
Over 7 years Concord has

- Switched Oil to Natural Gas
- Reduced CO₂ by 9.9%

2008 - 250,852 Tons of CO₂



2015 - 227,949 Tons of CO₂

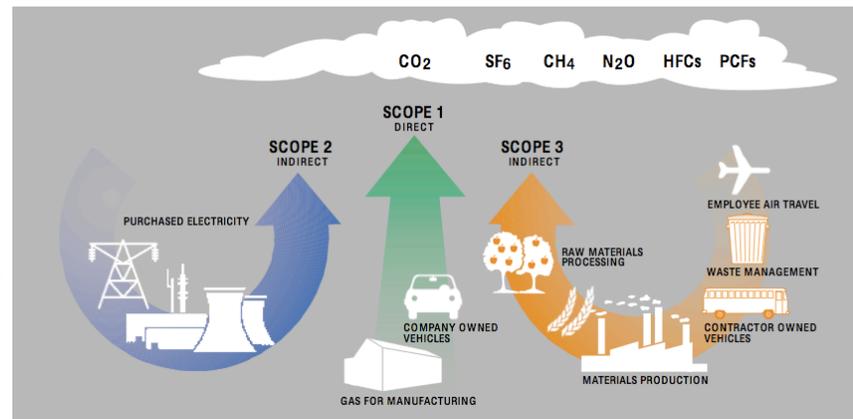


Source: The Comprehensive Sustainable Energy Committee (CSEC)
 Restated 2011 Concord Master Energy Plan.

GREENHOUSE GASES (GHG) DATA MEASUREMENT

Where do GHG come from?

- Direct Fuel Purchases(Scope 1)
- Energy Indirect Purchases(Scope 2)
- Other Indirect Purchases(Scope 3)



How are they measured?

An internationally recognized, comprehensive methodology for tracking town wide GHG emissions is needed.

- ICLEI, US Community Protocol for Accounting and Reporting GHG
- Massachusetts GHG Emissions Reporting Program (Mass Energy Insight)

How do we ensure accurate, comprehensive and continuous measurement?

- A director level Town staff position focused on GHG emission reduction
- A database to track all direct fuel and electricity purchases made in Town

CONCORD MUNICIPAL LIGHT PLANT

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TOWN OWNERSHIP OF CMLP CREATES OPPORTUNITIES

CMLP is a valuable asset for the Town

Electric utilities offer close relationships with customers and serve as important advisors on major energy decisions

The supply procurement decisions have a profound impact on GHG emissions

The EFTF worked closely with CMLP, meeting with Dave Wood and CMLP staff. Laura Scott participated in EFTF meetings as CMLP liaison.

PROPOSED RECOMMENDATIONS REGARDING CMLP

Consider alternatives to reduce barriers for adopting energy efficiency measures [including eliminating the practice of having separate energy audits from Massachusetts investor-owned utilities]

Develop a comprehensive set of cost-effective energy efficiency incentives and measures that meet or exceed those offered by Massachusetts investor-owned utilities

Consider retiring Class I RECs from renewable energy purchases or purchase Class I RECs to allow CMLP to achieve the Massachusetts RPS goals that apply to suppliers of the customers of Massachusetts investor-owned utilities

PROPOSED RECOMMENDATIONS REGARDING CMLP

Convert CMLP's electricity supply to non-emitting resources with RECs or certificates for associated environmental attributes retired with a target of achieving 100% from non-emitting resources by 2030

Employ smart meters town wide and adopt a Time of Use rate structure

Shift to revenue decoupled approach to rate-setting

Consider Distributed Energy Resources and battery storage to assist the Town in achieving its GHG emissions reduction goals

Develop incentives to encourage users to switch from fossil fuels to electricity for heating and transportation

BEST PRACTICES

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CONCORD'S SUSTAINABILITY PRINCIPLES

ADOPTED JULY 25, 2011

GOAL: promote a sustainable future and meet current needs without compromising the ability of future generations to meet their needs.

- 1) reduce dependence upon fossil fuels, underground metals, and minerals;**
- 2) reduce dependence upon synthetic chemicals and other manufactured substances;**
- 3) reduce encroachment upon nature; and**
- 4) meet human needs fairly and efficiently.**

WHAT CONCORD IS ALREADY DOING

MUNICIPAL SUSTAINABILITY PLANNING

ENERGY CONSERVATION

CONCORD PUBLIC SCHOOLS

**CONCORD SUSTAINABLE ENERGY COMMITTEE
(CSEC)**

GREEN COMMUNITIES DESIGNATION

**REGIONAL SUSTAINABILITY PLANNING WITH
MAPC, MAGIC, HATS**

COMMUNITY ENGAGEMENT

STRATEGIES AND TACTICS FROM OTHER CITIES AND TOWNS

**LENGTHY PUBLIC PROCESS FOR COMPREHENSIVE
AND RESILIENCY PLANNING**

CONSIDER CLIMATE CHANGE IN ALL TOWN DECISIONS

GHG EMISSIONS REDUCTION TARGETS

**NET ZERO ENERGY OR CARBON NEUTRAL TARGETS
FOR NEW CONSTRUCTION**

FOCUS ON BETTER BUILDINGS, ENERGY AND WATER

REDUCE WASTE

LOCAL FOOD SOURCES

ATTENTION TO ALL SECTORS

FUNDING

LEGISLATION AND REGULATION

CONCORD'S OTHER SECTORS

RESIDENTIAL / COMMERCIAL / INDUSTRIAL

BUILT ENVIRONMENT

WATER MANAGEMENT

WASTE MANAGEMENT

HABITAT

MOBILITY

LAND USE PLANNING INCLUDING ZONING, SMART GROWTH, SAFE STREETS

AFFORDABLE HOUSING

SAFETY, HEALTH AND WELFARE

LOCAL FOOD SOURCES

MUNICIPAL PROCUREMENT

COMMUNITY ENGAGEMENT

EDUCATION AND RESOURCES FOR RESIDENTS

FUNDING

PUBLIC OUTREACH

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THE PUBLIC

- A. At public meetings**
- B. In the on-line survey**
- C. Through emails**
- D. At task force meetings**
- E. Concord's Townwide Survey**

STAKEHOLDER INTERVIEWS

- A. Dave Wood and CMLP Staff**
- B. Chris Whelan and Kate Hodges and
Senior Management Team**
- C. John Flaherty and Brian Schlegel – CPS, CCRHS**
- D. Concord Business Partnership**
- E. Ed Stastny – VP Operations, Emerson Hospital**
- F. Brad Hubbard-Nelson - CSEC Chair**
- G. Jane Obbagy - Concord Chamber of Commerce**

SUMMARY

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A CLEAN ENERGY STRATEGY CORE ELEMENTS

Through education and raising public awareness, incentivize customers to move to electricity and away from fossil fuel use in heating systems and transportation.

Invest in renewable sources for electricity available in our region, and in Concord through photovoltaic installations, to reduce greenhouse gas emissions within the community at large.

Increase energy efficiency and reduce energy use with incentives and through community commitment and education.

PUBLIC COMMENT

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