

Energy Future Task Force Energy & Emissions Inventory Working Group Work Plan

What: Investigate how best to measure and track Concord's energy use and GHG emissions.

Process/Approach:

- Give direction on how best to measure Concord's energy use and GHG emissions going forward
- What do we do today and how is it organized?
- What energy and emissions data is required by state or federal programs currently?
- Review past efforts at identifying Concord's energy use
- Review how Green Communities program inventories energy and emissions
- Review the states RPS & APS programs and renewable energy certificates (RECs) Also investigate how Concord's businesses and residents could participate
- Document how Concord energy consumption data is sources and the methods of collection, so it can be repeated in the future
- Identify the different units of measure related to energy and emissions (Native fuel units, BTU, GHG, GWP, REC ...) i.e. a glossary
- Identify Green House Gases (GHG) and their qualitative impact Global Warming Potential (GWP, Also known as CO₂e)
- Identify Concord's direct energy consumption (for example, electricity use, home heating and transportation fuels)
- Discuss indirect energy consumption, such as the things we purchase and services we hire and its impact on energy consumption and GWP.
- Discuss green certification programs, such as Energy Star, USGBC LEED, FSC, vehicle MPGe, Green Business certification, EPA WasteWise, and others (i.e. how to avoid green washing)
- Identify existing data collection and tracking products (EnergyInsight, ICLEI ...)
- Consider adding water use and energy cost data to energy inventory database

Reference Materials: Concord Energy Master Plan 2011, Concord Residential Heating System v6.0, Municipal Energy Use Reduction Plan, Municipal Carbon Footprints 2008-2010, MA DOER RPS & APS programs, EnergyInsight, ICLEI, Green Communities, IPCC, EIA, Concord Light, National Grid, NE-ISO, MA RMV, Rocky Mountain Institute, MIT Energy Initiative, Climate-XChange.org

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Milestones:

July 28: finalize Energy and Emissions inventory work plan

September 15: First draft of report. Identify issues

October 15: Second draft of report with issues hopefully addressed

Additional Resource needs: None

Issues:

- Discussing indirect energy consumption is extremely complex and for the most part not fully measurable. We hope to capture a good general understanding of the impact related to the things we purchase and services we hire.
- Debates over the accuracy of calculation values used to quantify fuels are valid but in order to move the discussions forward widely agreed upon calculation values will be used and sources documented. i.e. IPCC and EIA values will not be modified to adjust for things like recent fugitive methane studies showing the EIA is under representing the GWP of Natural Gas.