

Alternative Fuels

CAC Workgroup

Meeting #4

July 13, 2022



Agenda

Housekeeping

GHG Emissions Inventory and Accounting for Alternative Fuels

Discussion: Assessment Criteria

GHG Emissions Inventory

Main Sources Of Greenhouse Gases in NYS

New York must reduce GHG emissions 85% by 2050



BUILDINGS

32%



TRANSPORTATION

28%



ELECTRICITY

13%



WASTE

12%



INDUSTRY

9%



AGRICULTURE

6%

GHG Accounting: Impact to Fuels

- > Under the prior IPCC accounting, renewable fuels acted as net-zero replacements of fossil equivalents. Under CLCPA, biofuels avoid 20%-40% of a fossil fuel's emissions by avoiding out-of-state leakage.

	Pre-CLCPA GHG Accounting	CLCPA Statewide Emissions Report
	(Non-Biogenic CO ₂ + CH ₄ and N ₂ O from Combustion) in lbs/mmbtu CO ₂ e GWP100	(All Combustion + Out-of-state leakage for imported fossil fuels) in lbs/mmbtu CO ₂ e GWP 20
Natural Gas	117	210
<i>Renewable Natural Gas</i>	~0	117
Distillate Fuel	164	221
<i>Renewable Diesel</i>	~0	165
<i>Biodiesel</i>	~0	165
Gasoline	156	223
<i>Renewable Gasoline</i>	~0	156
<i>Ethanol</i>	~0	152
Jet Fuel	161	203
<i>Renewable Jet Fuel</i>	~0	161

Notes on Natural gas and RNG:

An estimation of methane leakage within the state from gas transmission and distribution systems results in an emission factor of 3.8lbs/mmbtu in GWP 100 and 12.6 in GWP20. This is derived from the physical size and construction of the system divided by instate consumption. This value will change as the GHG report is updated over time and will represent the best estimate of leakage relative to the consumption of RNG or natural gas. Decisions that support or avoid the use of natural gas or RNG will impact this emission factor and the future disposition of the gas transmission and distribution system.

Although CO₂ emissions from biogenic fuels were counted as 0 in prior analysis, emissions were near-zero on a CO₂e basis due to small direct impacts from CH₄ and N₂O

Draft Assessment Criteria

Discuss suggested revisions

Example: Hydrogen Fuel Cells in trucks, buses, and non-road equipment

Invest in ZEV charging or fueling infrastructure: Similar to LDV infrastructure, the State should provide rebates or direct investment in EV charging stations and [hydrogen filling stations](#), where market support is needed. Preference for investments would be provided to fleets adversely impacting LMI communities that have been disproportionately burdened by the impacts of air pollution. DPS should continue to work with the utilities to plan for expected service levels needed to support the electrification of MHD fleets, especially in Disadvantaged Communities where such depots tend to cluster. (Transportation Chapter, page 106)

Next Steps