Appendix C – Table Comparing Emissions Sources in the Sector-Based Greenhouse Gas Emissions Inventory and the Land-based Net Carbon Inventory

The table in this appendix will provide guidance as to which GHG-emitting activities are included in ODOE's Land-based Net Carbon Inventory (LCI) or DEQ's Sector-Based GHG Emissions Inventory (SBI).

Table 1: Comparison of emission source categories included in the LCI and SBI. C refers to carbon; CO₂ refers to carbon dioxide; CH₄ refers to methane; N₂O refers to nitrous oxide; GWP refers to other greenhouse gases besides carbon dioxide, methane, or nitrous oxide that are only reported for the SBI.

Emission Source	Emission Sub-category	LCI	SBI
Burning	Biomass burning on Forest Land and Grassland (wildfires and prescribed burns) Gas(es): CH ₄ , N ₂ O	YES	NO
Agriculture	Residue burning on agricultural fields Gas(es): CH_4 , N_2O	NO	YES
Agriculture	N fertilizer applied on cropland Gas(es): N ₂ O	NO	YES
Agriculture	Urea fertilization Gas(es): CO ₂	NO	YES
Agriculture	Liming application Gas(es): CO ₂	NO	YES
Agriculture	Enteric Fermentation Gas(es): CH ₄	NO	YES
Cropland	Mineral soil C Fluxes on Cropland remaining Cropland Gas(es): CO ₂	YES	NO
Cropland	Biomass C fluxes from perennial crops in Cropland remaining Cropland Gas(es): CO ₂	YES	NO
Cropland	Emissions from drained organic soils in Cropland remaining Cropland Gas(es): CO ₂ , CH ₄ , N ₂ O	YES	NO
Cropland	Biomass C fluxes from land converted to Cropland Gas(es): CO ₂	YES	NO
Cropland	Emissions from drained organic soils in land converted to Cropland Gas(es): CO ₂ , CH ₄ , N ₂ O	YES	NO
Forest Land	Synthetic N fertilizer applied on commercial forests Gas(es): N ₂ O	YES	NO
Forest Land	Changes in forest carbon stocks in Forest Land remaining Forest Land Gas(es): CO ₂	YES	NO
Forest Land	Harvested wood products	YES	NO

Emission Source	Emission Sub-category	LCI	SBI
Forest Land	Changes in forest carbon stocks in land converted to Forest Land Gas(es): CO ₂	YES	NO
Developed Land	Changes in urban tree carbon stocks (biomass) in Developed Land remaining Developed Land Gas(es): CO ₂	YES	NO
Developed Land	Emissions from drained organic soils in Developed Land remaining Developed Land Gas(es): CO ₂ , CH ₄ , N ₂ O	YES	NO
Developed Land	Changes in carbon stocks (biomass) in land converted to Developed Land Gas(es): CO ₂	YES	NO
Developed Land	Emissions from drained organic soils in land converted to Developed Land Gas(es): CO ₂ , CH ₄ , N ₂ O	YES	NO
Industrial	Ammonia production Gas(es): CO ₂	NO	YES
Industrial	Byproducts of combustion Gas(es): CH ₄ , N ₂ O	NO	YES
Industrial	Cement manufacture Gas(es): CO ₂	NO	YES
Industrial	Coal combustion Gas(es): CO ₂	NO	YES
Industrial	Electricity Use Gas(es): CO ₂	NO	YES
Industrial	Food processing wastewater Gas(es): CH ₄	NO	YES
Industrial	Industrial landfills Gas(es): CH ₄	NO	YES
Industrial	Iron and Steel Production Gas(es): CO ₂	NO	YES
Industrial	Lime manufacture Gas(es): CO ₂	NO	YES
Industrial	Limestone and dolomite use Gas(es): CO ₂	NO	YES
Industrial	Natural gas combustion Gas(es): CO ₂	NO	YES
Industrial	Natural gas distribution (sector share) Gas(es): CO ₂	NO	YES
Industrial	Nitric acid production Gas(es): N₂O	NO	YES
Industrial	Petroleum Combustion Gas(es): CO ₂	NO	YES
Industrial	Pulp and paper wastewater Gas(es): CO ₂	NO	YES

Emission Source	Emission Sub-category	LCI	SBI
Industrial	Refrigerants, aerosols, fire protection, foam Gas(es): High GWP	NO	YES
Industrial	Semiconductor manufacturing Gas(es): High GWP	NO	YES
Industrial	Soda ash production and consumption Gas(es): CO ₂	NO	YES
Industrial	Waste incineration Gas(es): CO ₂ , CH ₄ , N ₂ O	NO	YES
Residential & Commercial	Byproducts of combustion Gas(es): CH ₄ , N ₂ O	NO	YES
Residential & Commercial	Coal combustion Gas(es): CO ₂	NO	YES
Residential & Commercial	Compost Gas(es): CH ₄ , N ₂ O	NO	YES
Residential & Commercial	Electricity Use Gas(es): CO ₂	NO	YES
Residential & Commercial	Fertilization of landscaped areas Gas(es): N ₂ O	NO	YES
Residential & Commercial	Municipal solid waste landfills Gas(es): CH ₄	NO	YES
Residential & Commercial	Municipal wastewater Gas(es): CH ₄ , N ₂ O	NO	YES
Residential & Commercial	Natural gas combustion Gas(es): CO ₂	NO	YES
Residential & Commercial	Natural gas distribution Gas(es): CH ₄	NO	YES
Residential & Commercial	Petroleum combustion Gas(es): CO ₂	NO	YES
Residential & Commercial	Refrigerants, aerosols, fire protection use Gas(es): High GWP	NO	YES
Residential & Commercial	Waste incineration Gas(es): CO ₂ , CH ₄ , N ₂ O	NO	YES
Transportation	Aviation gasoline Gas(es): CO ₂	NO	YES

Emission Source	Emission Sub-category	LCI	SBI
Transportation	Byproduct of vehicle fuel combustion Gas(es): CH_4 , N_2O	NO	YES
Transportation	Distillate fuel Gas(es): CO ₂	NO	YES
Transportation	Electricity use Gas(es): CO ₂	NO	YES
Transportation	Jet fuel, kerosene Gas(es): CO ₂	NO	YES
Transportation	Jet fuel, naphtha	NO	YES
Transportation	LPG Gas(es): CO ₂	NO	YES
Transportation	Lubricants Gas(es): CO ₂	NO	YES
Transportation	Motor gasoline Gas(es): CO ₂	NO	YES
Transportation	Natural gas combustion Gas(es): CO ₂	NO	YES
Transportation	Natural gas distribution Gas(es): CH ₄	NO	YES
Transportation	Refrigerants, aerosols, fire protection use Gas(es): High GWP	NO	YES
Transportation	Residual Fuel Gas(es): CO ₂	NO	YES
Grassland	Changes in mineral soil carbon stocks in Grassland remaining Grassland Gas(es): CO ₂	YES	NO
Grassland	Changes in biomass carbon stocks in Grassland remaining Grassland Gas(es): CO ₂	YES	NO
Grassland	Changes in Grassland carbon stocks (biomass, dead organic matter, soil) in land converted to Grassland Gas(es): CO ₂	YES	NO
Wetlands	Changes in carbon stocks (biomass, dead organic matter, soil) in Wetlands remaining Wetlands Gas(es): CO ₂	YES	NO
Wetlands	Non-CO2 emissions from Wetlands remaining Wetlands Gas(es): CH ₄	YES	NO
Wetlands	Aquaculture production in Wetlands remaining Wetlands Gas(es): N ₂ O	YES	NO

Emission Source	Emission Sub-category	LCI	SBI
Wetlands	Changes in carbon stocks (biomass, dead organic matter, soil) in land converted to Wetlands Gas(es): CO ₂	YES	NO
Wetlands	Non-CO2 emissions from land converted to remaining Wetlands Gas(es): CH ₄	YES	NO