

SCOPE 1

Stationary + Mobile Combustion · Refrigerants

Natural Gas — Stationary Combustion

0.0053 kg CO₂e / therm

Diesel (No. 2 Fuel Oil) — Stationary

10.21 kg CO₂e / gal

Propane (LPG) — Stationary Combustion

5.68 kg CO₂e / gal

Gasoline — Mobile Combustion

8.89 kg CO₂e / gal

Diesel — Mobile / Fleet Vehicles

10.16 kg CO₂e / gal

Compressed Natural Gas (CNG) — Fleet

0.054 kg CO₂e / scf

R-410A Refrigerant Leakage (ACES)

2.088 kg CO₂e / kg

R-134a Refrigerant Leakage

1,430 kg CO₂e / kg

SCOPE 2

Electricity — eGRID Subregion Grid Average

WECC West — Electricity (Grid Average)

0.268 kg CO₂e / kWh

WECC Southwest — Electricity

0.314 kg CO₂e / kWh

WECC Mountain — Electricity

0.434 kg CO₂e / kWh

ERCOT — Electricity

0.356 kg CO₂e / kWh

SERC Midwest — Electricity

0.461 kg CO₂e / kWh

SERC Virginia — Electricity

0.322 kg CO₂e / kWh

RFC Midwest — Electricity

0.480 kg CO₂e / kWh

RFC New York — Electricity

0.209 kg CO₂e / kWh

NPCC New England — Electricity

0.239 kg CO₂e / kWh

SPP — Electricity

0.409 kg CO₂e / kWh

SCOPE 3

Cat 1 Spend · Cat 4 Freight · Cat 6 Travel

Cat 1 — Purchased Goods & Services

Petroleum Bulk Stations (NAICS 4247)

0.661 kg CO₂e / \$

Chemical & Allied Products (NAICS 4246)

0.425 kg CO₂e / \$

Industrial Machinery & Equipment

0.310 kg CO₂e / \$

Electronic Components & Accessories

0.267 kg CO₂e / \$

Plastics Materials & Basic Chemicals

0.450 kg CO₂e / \$

Pharmaceutical Preparation (NAICS 3254)

0.142 kg CO₂e / \$

Fabricated Metal Parts (NAICS 3329)

0.258 kg CO₂e / \$

General Freight / Trucking (NAICS 4841)

0.380 kg CO₂e / \$

Cat 4 — Upstream Transportation

Truck / Long-haul (diesel, per ton-mile)

0.162 kg CO₂e / ton-mile

Truck / Short-haul (diesel, per ton-mile)

0.212 kg CO₂e / ton-mile

Rail / Intermodal (diesel-electric)

0.022 kg CO₂e / ton-mile

Air Freight (domestic, average)

1.760 kg CO₂e / ton-mile

Ocean Freight (container, average)

0.016 kg CO₂e / ton-mile

Cat 6 — Business Travel

Air Travel — Short-haul (<1,500 mi)

0.255 kg CO₂e / passenger-mi

Air Travel — Long-haul (>1,500 mi)

0.147 kg CO₂e / passenger-mi

Rail — Amtrak / Intercity Passenger

0.162 kg CO₂e / passenger-mi

Rental Car — Average (gasoline)

0.411 kg CO₂e / vehicle-mi

Personal Vehicle — Average (US fleet)

0.385 kg CO₂e / vehicle-mi

Hotel Stay — Average US (per room-night)

23.7 kg CO₂e / room-night