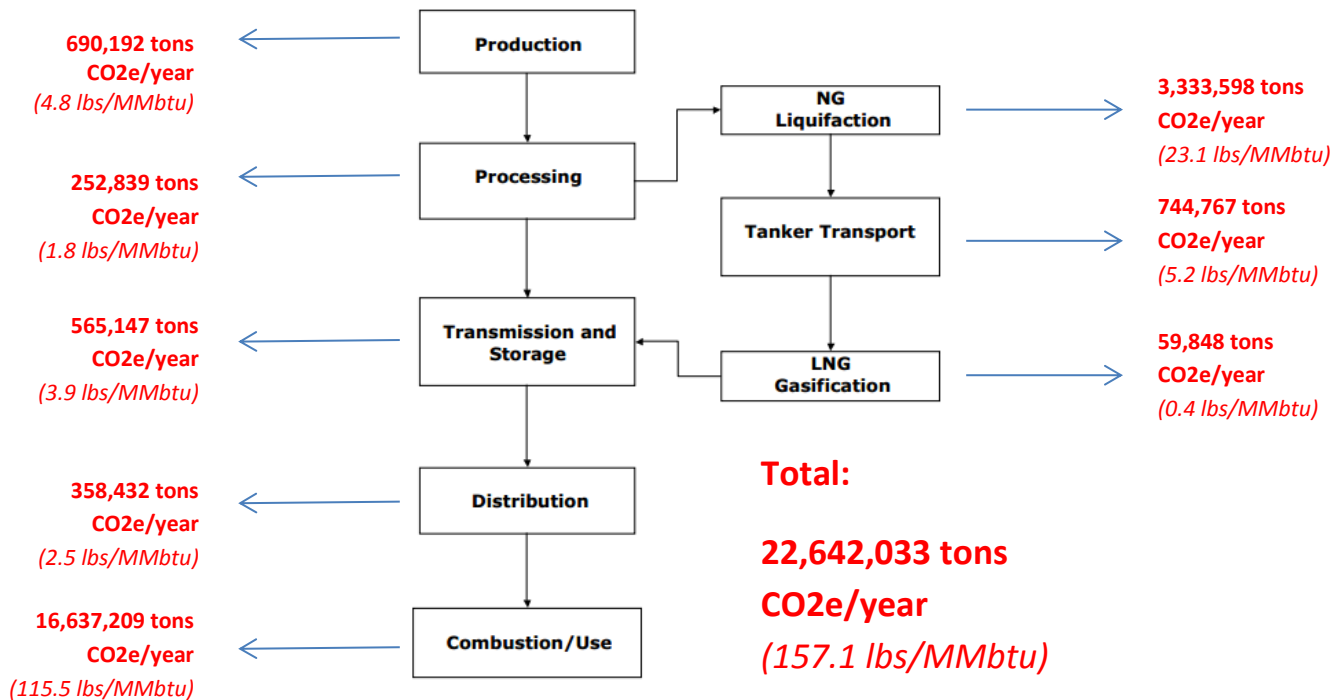# The Proposed Cove Point Liquefied Natural Gas (LNG) Export Facility would be the Largest Lifecycle Climate Polluter in Maryland

The proposed Cove Point Liquefied Natural Gas (LNG) export facility alone would be the fourth biggest climate polluter in Maryland. However, the liquefaction facility is only one part of a much longer natural gas lifecycle. **The full lifecycle greenhouse gas emissions of the LNG that would be exported from Cove Point are equal to the combined life-cycle emissions of Maryland's entire coal-fired power plant fleet.**

Where do lifecycle emissions come from?

690,192 tons CO2e/year *(4.8 lbs/MMbtu)* ← **Production**

252,839 tons CO2e/year *(1.8 lbs/MMbtu)* ← **Processing**

Processing → **NG Liquifaction** → **3,333,598 tons CO2e/year** *(23.1 lbs/MMbtu)*

NG Liquifaction → **Tanker Transport** → **744,767 tons CO2e/year** *(5.2 lbs/MMbtu)*

565,147 tons CO2e/year *(3.9 lbs/MMbtu)* ← **Transmission and Storage**

Tanker Transport → **LNG Gasification** → **59,848 tons CO2e/year** *(0.4 lbs/MMbtu)*

358,432 tons CO2e/year *(2.5 lbs/MMbtu)* ← **Distribution**

16,637,209 tons CO2e/year *(115.5 lbs/MMbtu)* ← **Combustion/Use**

Total:

22,642,033 tons CO2e/year
(157.1 lbs/MMbtu)

Top Lifecycle GHG Emitters in Maryland

1. Cove Point LNG Export Facility 22,642,033 tons

3. Brandon Shores Coal-Fired Power Plant 5,550,438 tons

3. Morgantown Coal-Fired Power Plant 5,440,047 tons

4. Chalk Point Coal-Fired Power Plant 4,381,582 tons

Natural gas is often touted as a "bridge fuel" that can reduce near-term greenhouse gas emissions as the U.S. transitions towards clean energy. However, **the infrastructure involved in exporting natural gas to the rest of the world would make Cove Point the biggest greenhouse gas emitter in Maryland by far.**

Lifecycle Greenhouse Gas Comparison

Maryland's Existing Coal Fleet - 20,637,875 tons/yr.   **Proposed Cove Point Facility** – 22,642,033 tons/yr.

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What's more, 22.6 million tons is a very conservative estimate for Cove Point's lifecycle greenhouse gas emissions. This analysis assumed a very low leakage rate of 1.4% and measured leaked methane emissions over a 100-year timeframe.

If the leakage rate for Cove Point's gas is higher than 1.4%, and if the climate-forcing properties of leaked gas are measured more appropriately over a 20-year timeframe, the emissions profile of Cove Point increases drastically.

Source	Leakage Rate	100-year Timeframe		20-year Timeframe	
		GHG Emissions (tons)	GHG Emissions (lbs/Mmbtu)	GHG Emissions (tons)	GHG Emissions (lbs/Mmbtu)
EPA 2012	1.4%	22,642,033	157	26,151,261	182
Howarth, 2011 - low	1.7%	22,885,044	160	27,067,674	189
EPA 2010	2.4%	23,881,815	164	29,748,288	205
Howarth, 2011 - mid	3.6%	25,350,357	173	34,167,773	234
Howarth, 2011 - mid	6.0%	28,036,125	192	42,587,490	291
Howarth, 2011 - high	7.9%	30,506,121	205	49,701,079	333

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