

FACT SHEET FOR THE GIBBSTOWN-WYALUSING LNG PROJECT: GHG EMISSIONS ANALYSIS

May 2023

WHAT IS THE PROPOSED GIBBSTOWN-WYALUSING PROJECT?

The proposed Gibbstown-Wyalusing Project is an unprecedented fossil fuel project that includes the construction of (1) a natural gas liquefaction facility in Wyalusing, Pennsylvania, (2) a liquefied natural gas (LNG) export terminal in Gibbstown, New Jersey, and (3) transportation for LNG between the two facilities by truck and/or train (see Figure 1). Four associated companies - including New Fortress Energy (parent company of Bradford County Real Estate Partners, LLC); Delaware River Partners, LLC; Energy Transport Solutions, LLC; and Bradford County LNG Marketing, LLC - have each proposed different aspects of this project. This project is unique because the liquefaction and export terminals are not colocated, unlike most LNG terminals in the U.S. By locating the two facilities hundreds of miles apart, the companies are in effect bypassing a comprehensive review of the entire project's emissions and environmental impacts. Due to the fact that the different components of this project are designed as a single operation and will work together to liquefy and export LNG, the environmental impact of all aspects of this project should be analyzed as one. Delaware Riverkeeper Network hired Synapse Energy Economics, Inc to examine the lifecycle emissions impact of the proposed facilities.

Natural Gas via Pipeline Liquefaction Wyalusing, PA Natural Gas Truck & Rail Extraction **Transport** Marcellus Shale Regasification & Combustion End-use Combustion **Export Facility** Gibbstown, NJ Import & Regasification Ireland Transatlantic Import & Regasification Sea Transport Puerto Rico End-use Combustion

Figure 1. Route of natural gas in the proposed Gibbstown-Wyalusing Project lifecycle

Note: The above map is for illustrative purposes only and is not to scale.

WHAT WAS INCLUDED IN SYNAPSE'S GIBBSTOWN-WYALUSING PROJECT LIFECYCLE EMISSIONS ANALYSIS?

Synapse performed a comprehensive calculation of emissions from ten lifecycle steps related to the proposed Gibbstown-Wyalusing Project, from facility construction and wellhead natural gas extraction through end-use gas combustion (see Figure 2).

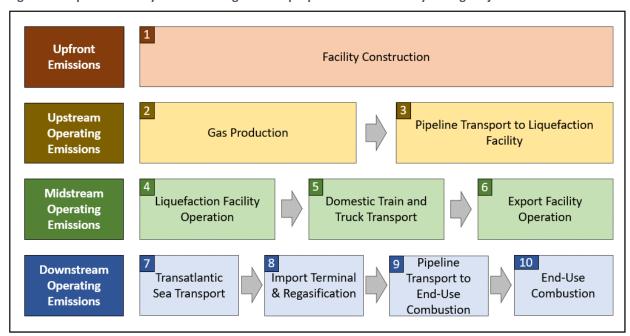


Figure 2. Steps in the lifecycle of natural gas in the proposed Gibbstown-Wyalusing Project

Whenever possible, Synapse used specific emissions from the Gibbstown-Wyalusing Project applications and permits. If the facility data was not available, Synapse estimated the emissions based on similar projects or on national emissions rates.

WHAT DID SYNAPSE FIND FROM THE LIFECYCLE ANALYSIS?

Synapse found that the Gibbstown-Wyalusing Project would emit approximately 211 million metric tons of CO₂e over a 25-year operational life. While the majority of these emissions are from end-use combustion (82 percent), more than two-thirds of the remaining emissions (or 12 percent of the total emissions) are from operating the liquefaction facility (see Table 1).

Table 1. Lifecycle emissions for 25-year operating period

Lifecycle Step	Upfront Emissions	Ongoing Emissions	Total Emissions	Emissions as a Percent of Total
	metric tons CO₂e	metric tons CO₂e	metric tons CO₂e	%
Facility Construction	88,420	0	88,420	0.04%
Gas Production	129,285	46,130	175,415	0.08%
Pipeline and Compressor Station	0	94,231	94,231	0.04%
Liquefaction Facility	0	25,825,765	25,825,765	12.22%
Domestic Transport	0	932,757	932,757	0.44%
Export Facility	0	349,229	349,229	0.17%
Sea Transport	0	6,742,687	6,742,687	3.19%
Regasification	0	2,623,454	2,623,454	1.24%
Foreign Pipeline Transport	0	163,531	163,531	0.08%
End-Use Combustion	0	174,353,929	174,353,929	82.50%
Total	217,706	211,131,711	211,349,417	100.00%

Notes:

The Gibbstown-Wyalusing Project's emissions are equivalent to the emissions from 2 million gasoline cars driven every year for the 25 years of project operation. The social cost of carbon for the Gibbstown-Wyalusing project would be \$53.2 billion (in 2020 dollars) across the project lifetime. This includes emissions from two years of upfront construction and 25 years of project operation.

During construction and the first year of operation, the project would emit 1.2 million metric tons of CO_2e within Pennsylvania and New Jersey. This amounts to 12.9 percent of the 2021 emissions from petroleum and natural gas systems within the two states.

Policymakers should consider the entire lifecycle emissions of the Gibbstown-Wyalusing Project when deciding whether to allow the project to proceed. State agencies should also consider estimating and including health impacts from the project, as well as the climate change impacts, when deciding whether to approve the Gibbstown-Wyalusing Project facilities. Finally, decision-makers reviewing the Gibbstown-Wyalusing Project's various applications and approvals should consider other land-use impacts in order to understand the full environmental impact of the project.

⁽¹⁾ All values in the table and report are presented as 20-year global warming potential values.

⁽²⁾ Emissions associated with the construction of the liquefaction facility and export facility were estimated as a single component, due to a lack of data associated with construction emissions for each component.

⁽³⁾ The gas production lifecycle step includes emissions from both the annual drilling of new wells (upfront emissions) and from the continuous extraction of natural gas from those wells.