

# LNG Market Modeling and Carbon Emissions Mitigation Expertise

The liquefied natural gas (LNG) industry grew 45 percent from 2015 to 2020 and is expected to continue a robust growth trajectory as the world seeks to decarbonize. Amid continued market growth, there is increasing interest across the LNG value chain to proactively address and mitigate greenhouse gas emissions. Carbon neutral LNG deliveries surpassed 2020 totals through the first half of 2021 and FTI Consulting projects continued growth as companies enhance environmental, social and governance programs.

## — KEY SERVICES



### LNG Market Modeling and Forecasting

- Country-level LNG supply, demand, trade flows, and prices using FTI Consulting's Global LNG Trade Model
- Market, economic and environmental impact modeling to support Final Investment Decisions (FID), permitting, and contract negotiations
- Data-driven, scenario-based analysis to provide insight about opportunity and risks



### LNG Carbon Assessment and Mitigation Strategy

- Scope 1, Scope 2, and Scope 3 emissions using FTI Consulting's Carbon Assessment and Regional Analysis Tool (CARAT)
- Fuel switching cost–benefit analysis, including comparative emissions assessments of natural gas versus fuel oil or coal
- Scenario analysis to inform emissions impacts of trade or investment decisions



### Commercial Due Diligence

- Assessment of liquefaction, regasification, and LNG-to-power given market outlook and competitive position
- Contract due diligence to assess long term value of trade contracts based on price and volume outlook
- Expert advisory to banks, financial institutions, and private equity



### Issues Management and Corporate Positioning

- Advisory on economic and commercial impacts of U.S., federal, state, and local permitting and policies
- U.S. Federal Energy Regulatory Commission and Department of Energy regulatory expertise to inform investment decisions on liquefaction, midstream and upstream investments
- Global policy advisory and issues management on impacts of policies and regulatory changes

The emerging hydrogen economy likely increases LNG's growth prospects given its synergies in production, transportation, distribution, and consumption.

FTI Consulting has developed specific modeling tools and carbon emissions expertise to help LNG players navigate the changing commercial, regulatory and policy environment. Proprietary modeling tools and deep industry experience provide clients with insights into how these supply, demand, and policy scenarios will impact market fundamentals and project economics.

FTI Consulting professionals are trusted to identify and navigate opportunities for the LNG business, help clients adapt to new realities, and seize opportunities.



## CASE STUDIES

### Western Cape LNG Import Feasibility Study

Created an integrated decision support model to forecast market demand, project financials, and economic impacts of a regasification facility in Western Cape, South Africa. Demand forecasts were developed through 2050 for the residential, commercial, industrial, transport, and power generation sectors under various scenarios.

### Midstream Company Scope 1, 2, and 3 Emissions Assessment

Undertook a Scope 1–3 emissions assessment for a U.S. midstream natural gas company for year 2020 using FTI Consulting's proprietary CARAT Model.

### Natural Gas Production Policy Assessment

Conducted a study examining how a ban on hydraulic fracturing would impact global oil and gas trade flows and prices along with domestic impacts to the oil, gas, and power markets. Translated market impacts into broader economic impacts to GDP, employment, labor income, and federal, state, and local tax revenues.

### LNG EPC Contractor Due Diligence

Led a due diligence of a leading LNG EPC contractor. Analyzed the target's current and backlogged LNG contracts, focusing on risks such as fixed-price vs. cost-reimbursable, conditions for providing Notice to Proceed, likelihood of schedule slippage, and degree of exposure to LNG and related commodity markets.

### Small Scale Liquefaction Plant Due Diligence

Conducted a market due diligence for a small-scale LNG facility that included regional and sector demand analysis, global and regional LNG bunkering market outlook, and contract review.

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FTI Consulting is an independent global business advisory firm dedicated to helping organizations manage change, mitigate risk and resolve disputes: financial, legal, operational, political & regulatory, reputational and transactional. FTI Consulting professionals, located in all major business centers throughout the world, work closely with clients to anticipate, illuminate and overcome complex business challenges and opportunities. ©2022 FTI Consulting, Inc. All rights reserved. [www.fticonsulting.com](http://www.fticonsulting.com)

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