

LNGnet International Workshop

Fiji George

Sr. Director, Climate & Sustainability

JUNE 2022



Safe Harbor Statements

Forward-Looking Statements

This presentation contains certain statements that are, or may be deemed to be, “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical or present facts or conditions, included or incorporated by reference herein are “forward-looking statements.” Included among “forward-looking statements” are, among other things:

- statements regarding the ability of Cheniere Energy Partners, L.P. to pay or increase distributions to its unitholders or Cheniere Energy, Inc. to pay or increase dividends to its shareholders or participate in share or unit buybacks;
- statements regarding Cheniere Energy, Inc.’s or Cheniere Energy Partners, L.P.’s expected receipt of cash distributions from their respective subsidiaries;
- statements that Cheniere Energy Partners, L.P. expects to commence or complete construction of its proposed liquefied natural gas (“LNG”) terminals, liquefaction facilities, pipeline facilities or other projects, or any expansions or portions thereof, by certain dates or at all;
- statements that Cheniere Energy, Inc. expects to commence or complete construction of its proposed LNG terminals, liquefaction facilities, pipeline facilities or other projects, or any expansions or portions thereof, by certain dates or at all;
- statements regarding future levels of domestic and international natural gas production, supply or consumption or future levels of LNG imports into or exports from North America and other countries worldwide, or purchases of natural gas, regardless of the source of such information, or the transportation or other infrastructure, or demand for and prices related to natural gas, LNG or other hydrocarbon products;
- statements regarding any financing transactions or arrangements, or ability to enter into such transactions;
- statements relating to Cheniere’s capital deployment, including intent, ability, extent, and timing of capital expenditures, debt repayment, dividends, and share repurchases;
- Statements regarding our future sources of liquidity and cash requirements;
- statements relating to the construction of our proposed liquefaction facilities and natural gas liquefaction trains (“Trains”) and the construction of our pipelines, including statements concerning the engagement of any engineering, procurement and construction (“EPC”) contractor or other contractor and the anticipated terms and provisions of any agreement with any EPC or other contractor, and anticipated costs related thereto;
- statements regarding any agreement to be entered into or performed substantially in the future, including any revenues anticipated to be received and the anticipated timing thereof, and statements regarding the amounts of total LNG regasification, natural gas, liquefaction or storage capacities that are, or may become, subject to contracts;
- statements regarding counterparties to our commercial contracts, construction contracts and other contracts;
- statements regarding our planned development and construction of additional Trains or pipelines, including the financing of such Trains or pipelines;

- statements that our Trains, when completed, will have certain characteristics, including amounts of liquefaction capacities;
- statements regarding our business strategy, our strengths, our business and operation plans or any other plans, forecasts, projections or objectives, including anticipated revenues, capital expenditures, maintenance and operating costs, free cash flow, run rate SG&A estimates, cash flows, EBITDA, Consolidated Adjusted EBITDA, distributable cash flow, distributable cash flow per share and unit, deconsolidated debt outstanding, and deconsolidated contracted EBITDA, any or all of which are subject to change;
- statements regarding projections of revenues, expenses, earnings or losses, working capital or other financial items;
- statements regarding legislative, governmental, regulatory, administrative or other public body actions, approvals, requirements, permits, applications, filings, investigations, proceedings or decisions;
- statements regarding our anticipated LNG and natural gas marketing activities; and
- any other statements that relate to non-historical or future information.

These forward-looking statements are often identified by the use of terms and phrases such as “achieve,” “anticipate,” “believe,” “contemplate,” “continue,” “could,” “develop,” “estimate,” “example,” “expect,” “forecast,” “goals,” “guidance,” “intend,” “may,” “opportunities,” “plan,” “potential,” “predict,” “project,” “propose,” “pursue,” “should,” “subject to,” “strategy,” “target,” “will,” and similar terms and phrases, or by use of future tense. Although we believe that the expectations reflected in these forward-looking statements are reasonable, they do involve assumptions, risks and uncertainties, and these expectations may prove to be incorrect. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this presentation. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of a variety of factors, including those discussed in “Risk Factors” in the Cheniere Energy, Inc. and Cheniere Energy Partners, L.P. Annual Reports on Form 10-K filed with the SEC on February 24, 2022, which are incorporated by reference into this presentation. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these “Risk Factors.” These forward-looking statements are made as of the date of this presentation, and other than as required by law, we undertake no obligation to update or revise any forward-looking statement or provide reasons why actual results may differ, whether as a result of new information, future events or otherwise.

Reconciliation to U.S. GAAP Financial Information

The following presentation includes certain “non-GAAP financial measures” as defined in Regulation G under the Securities Exchange Act of 1934, as amended. Schedules are included in the appendix hereto that reconcile the non-GAAP financial measures included in the following presentation to the most directly comparable financial measures calculated and presented in accordance with U.S. GAAP.

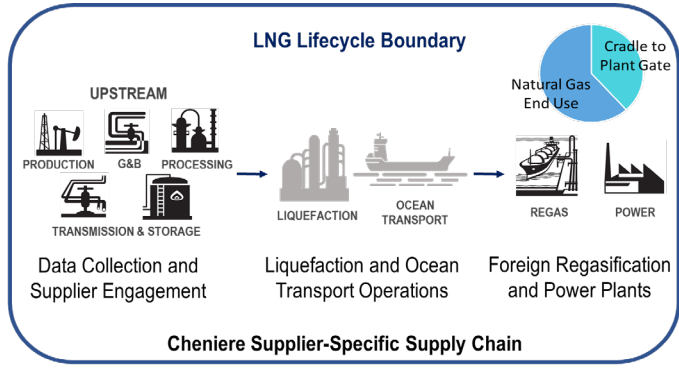
Framework for customized life cycle GHG assessments for LNG supplies

ACS Sustainable Chemistry & Engineering
 pubs.acs.org/journal/ascecg
 Research Article

LNG Supply Chains: A Supplier-Specific Life-Cycle Assessment for Improved Emission Accounting

Selina A. Roman-White, James A. Littlefield, Kaitlyn G. Fleury, David T. Allen, Paul Balcombe, Katherine E. Konschnik, Jackson Ewing, Gregory B. Ross, and Fiji George*

Cite This: <https://doi.org/10.1021/acssuschemeng.1c03307> | Read Online



Co-Authors

TEXAS The University of Texas at Austin | Queen Mary University of London

CHENIERE

KEYLOGIC | Duke University

Key Study Findings

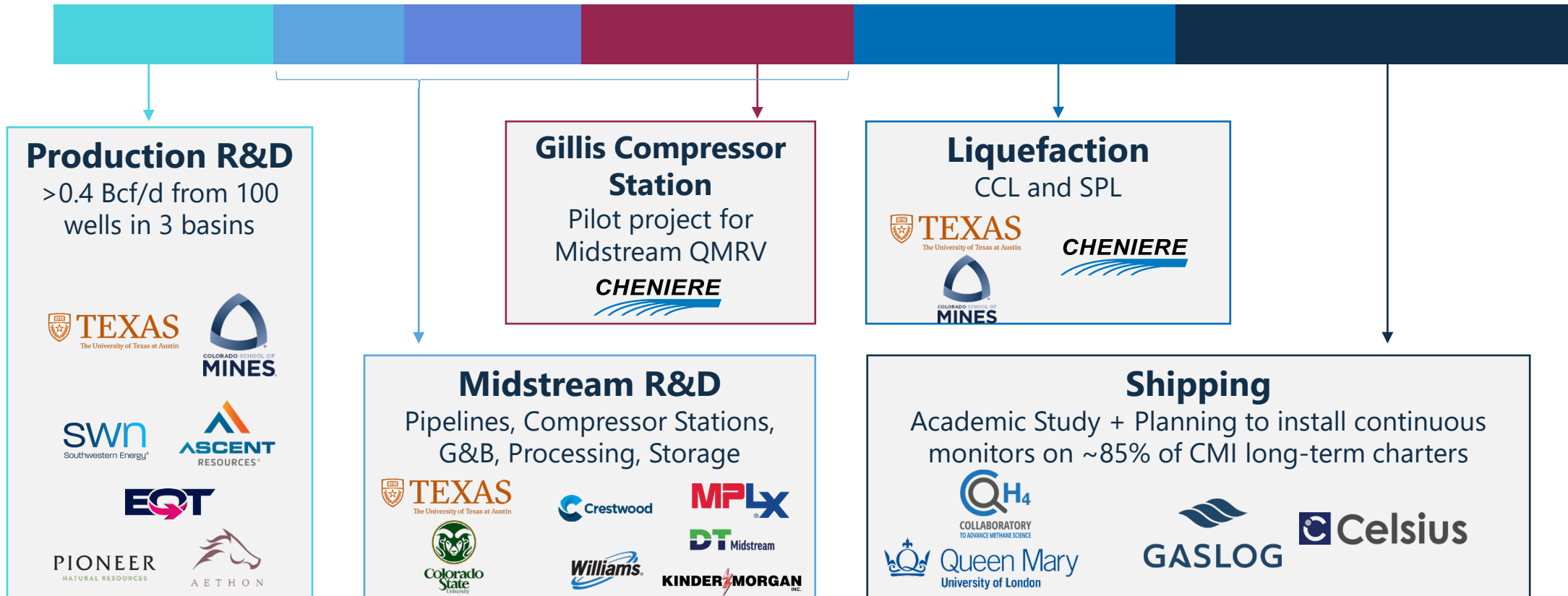
<p>National/regional average supply chains do not accurately represent unique supply chains</p> <ul style="list-style-type: none"> Individual supplier GHG performance varies significantly Our supply-chain specific GHG is 30-43% lower than other studies employing average values to estimate U.S. LNG emissions 	<p>Supply chain emissions upstream of end use are significant</p> <ul style="list-style-type: none"> Upstream (prior to power plant) GHG emissions are > 30% of total GHG emissions on a CO₂e basis Methane emissions matter: ~ 8-18% of the total GHG emissions (100-yr to 20-yr basis) 	<p>Coal supply chains are also variable due to upstream methane emissions</p> <ul style="list-style-type: none"> Characterizing this variability is important for quantifying the benefits of coal to gas switching 	<p>Characterizing the GHG intensity of specific gas supplies via LCAs is critical for informing differentiated gas supply, as well as policy and decision makers looking to develop climate strategies</p> <ul style="list-style-type: none"> Ex: a 50% reduction in methane emissions results in 14-24% reduction in lifecycle emissions from production through liquefaction 	<p>In a case study to quantify coal-to-gas switching benefits, the study estimates Cheniere's LNG exported to China for power generation to be 47-57% less GHG intense than coal power generation on an equivalent MWh basis (100-yr and 20-yr GWP)</p>
---	---	---	--	--

QMRV R&D Program

Consolidated Cheniere Life Cycle Emissions Intensity¹ (production through delivery to China, 100-year GWP)

■ Production ■ Gathering & Boosting ■ Processing ■ Transmission ■ Liquefaction ■ Ocean Transport

Upstream emissions are roughly half of our DES life cycle footprint



QMRV R&D Program goals – improving transparency & reducing emissions

The underlying principles are to *improve* transparency, *verify* accuracy of emissions, and *achieve* verifiable emissions reductions

Three Main Goals:

- 1 Assess the feasibility of achieving a low emissions goal across upstream assets
- 2 Assess robustness and feasibility of monitoring technologies
- 3 Assess the scalability of a QMRV program across the production segment (as well as other segments)

QMRV Program – preliminary study findings

- Baseline measurements and monitoring data reveal daily and intra-day variation in methane emissions
 - Significant emissions variation at the site-level → low frequency, snapshot measurements cannot provide accurate emissions inventory
- Concurrent measurement with multiple technologies demonstrates efficacy of equipment and site-level quantification methods
- Inventory methods based on EPA GHGRP reporting protocols require robust supplemental emissions data to account for temporal variations in emissions and any unaccounted-for sources
- Continuous emissions monitors can be a useful tool to develop better estimates of frequency and duration of emissions, including super-emitters, in particular when linked with high accuracy snapshot measurements.
- Shifting from engineering-based inventories to measurement informed inventories will result in more credible and verifiable estimates of actual emissions

Multi-scale Methane Measurements at Oil and Gas Facilities Reveal Necessary Conditions for Improved Emissions Accounting

Wang, J., Daniels, W., Hammerling, D., Harrison, M., Burmaster, K., George, F., & Ravikumar, A. (2022). *ChemRxiv*. doi:10.26434/chemrxiv-2022-9zh2v
This content is a preprint

Recommendations

High-accuracy “Snapshot” measurements are needed to quantify all methane emission sources at equipment or site-level and to quantitatively link them to high sampling rate technologies

Measurements to develop frequency and duration of intermittent emissions are key to annualize any snapshot measurements; high sampling rate technologies like Continuous emissions monitors will likely be needed to develop these distributions

Detailed record-keeping of O&M supports reconciliation of measurement informed and engineering estimated inventories

Verification by academic experts with development of robust analytical processes and tools is important for credible verification

Thank you

Questions?