U.S. Department of ENERGY | Office of Fossil Energy and Carbon Management

APPENDIX A: GLOBAL ENERGY AND GREENHOUSE GAS IMPLICATIONS OF U.S. LNG EXPORTS

October 7, 2025

On December 20, 2024, DOE published a notice of availability of its study entitled, *2024 LNG Export Study: Energy, Economic, and Environmental Assessment of U.S. LNG Exports* 2024 LNG Export Study (2024 LNG Export Study, *see* 89 Fed. Reg. 104,132 and https://fossil.energy.gov/app/docketindex/docket/index/30). DOE prepared the 2024 LNG Export Study as a comprehensive update of DOE's prior studies evaluating exports of natural gas, including liquefied natural gas (LNG), under section 3 of the Natural Gas Act (NGA), 15 U.S.C. § 717b. Since issuing the 2024 LNG Export Study and the related Response to Comments on May 19, 2025 (*see* 90 Fed. Reg. 21,912), DOE has determined that the environmental analysis in the 2024 LNG Export Study is not required for DOE's decision on applications to export LNG to non-free trade agreement (non-FTA) countries under NGA section 3(a), 15 U.S.C. § 717b(a).

Specifically, DOE found that its review of an export application under the National Environmental Policy Act of 1969 (NEPA)—in particular, under categorical exclusion B5.7, *Export of natural gas and associated transportation by marine vessel*—considers all relevant environmental effects from the proposed export of LNG to non-FTA countries. The environmental portions of the 2024 LNG Export Study were not limited to marine transport effects considered under categorical exclusion B5.7, but rather included the integration of potential upstream and downstream environmental effects, which are not reasonably foreseeable environmental impacts of DOE's export authorizations. Accordingly, on August 4, 2025, in *Venture Global Calcasieu Pass, LLC*, DOE/FECM Order No. 4346-B (Docket No. 15-25-LNG), DOE explained that its discussion of the 2024 LNG Export Study would focus only on the economic analysis in the Study, as well as DOE's related findings on energy security. DOE further explained that this position is informed by and consistent with the Supreme Court's holdings in *Dep't of Transportation v. Public Citizen*, 541 U.S. 752 (2004), and *Seven County Infrastructure Coalition v. Eagle County, Colorado*, 605 U.S. __, 145 S.Ct. 1497 (2025), which make clear that "agencies are not required to analyze the effects of projects over which they do not exercise regulatory authority." *Seven Cnty. Infrastructure Coal.,* 605 U.S. __, 145 S.Ct. at 1516.

DOE thus reiterates that, in pending and future export application proceedings under NGA section 3(a), DOE will not consider the environmental analysis in the 2024 LNG Export Study or the related Response to Comments. For more discussion, *see*, *e.g.*, *Venture Global Calcasieu Pass, LLC*, DOE/FECM Order No. 4346-B, at 12-13, 15-16, 36-38. We note that, on October 3, 2025, in DOE/FECM Order No. 4346-C, DOE denied rehearing of Order No. 4346-B.

December 2024

U.S. Global Modeling Report Appendix

December 2024

Prepared for:

U.S. Department of Energy, Office of Fossil Energy and Carbon Management, Office of Resource Sustainability

Prepared by:

Pacific Northwest National Laboratory

CONTENTS

Foreword ii
Executive Summary 1
Global Energy and Greenhouse Gas Implications of U.S. Liquefied Natural Gas 6
A. Background 6
B. The Global Change Analysis Model (GCAM) 7
C. Study Design 10
Results 17
A. Global market demand for U.S. LNG exports 17
B. Global energy system and GHG emissions impacts of increased U.S. LNG exports 23
1. Comparison of model-resolved exports with 2023 existing/FID export levels 23
2. Comparison of U.S. LNG exports beyond model-resolved levels relative to model-resolved levels 29
Additional sensitivity analyses 34
A. Implications of High and Low U.S. Natural Gas Supply 35
B. Implications of High Middle East Natural Gas Supply 38
Summary 42
A. Summary: Global market demand for U.S. LNG exports 42
B. Summary: Global emissions impacts of increased U.S. LNG exports through 2050 43
Caveats and limitations 45
Appendix A-1: Additional description of GCAM's energy system 47
Appendix A-2: U.S. Policies included under the Defined Policies scenario 50
Appendix A-3: Detailed Data Tables 51

FIGURES

Figure ES- 1. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. 5

Figure 1. Global primary energy consumption (exajoules, EJ) across scenarios with Model Resolved U.S. LNG export levels. 18
Figure 2. Global natural gas consumption by sector (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. 19
Figure 3. Global natural gas consumption (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. 21
Figure 4. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. 22
Figure 5. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Defined Policies: Model Resolved scenario relative to the Defined Policies: Existing/FID Exports scenario. 24

Figure 6. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Commitments (High CCS): Model Resolved scenario relative to the Commitments (High CCS): Existing/FID Exports scenario. 25
Figure 7. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Commitments (Moderate CCS): Model Resolved scenario relative to the Commitments (Moderate CCS): Existing/FID Exports scenario 26
Figure 8. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Net Zero 2050 (High CCS): Model Resolved scenario relative to the Net Zero 2050 (High CCS): Existing/FID Exports scenario 27
Figure 9. Changes in primary energy consumption in scenarios with High Exports assumptions relative to scenarios with Market Resolved assumptions. 32
Figure 10. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios (top row), and changes in global natural gas consumption relative to the Defined Policies: Model Resolved scenario (bottom row). 36
Figure 11. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios. 37
Figure 12. Changes in global primary energy consumption by fuel (EJ) in the DP Low U.S. Supply: Model Resolved and DP High U.S. Supply: Model Resolved scenarios relative to the Defined Policies: Model Resolved scenario. 38
Figure 13. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario (top row) and changes in the Defined Policies High Middle East Supply: Model Resolved sensitivity scenario relative to the Defined Policies: Model Resolved scenario (bottom row). 39
Figure 14. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario. ..40
Figure 15. Changes in global primary energy consumption by fuel (EJ) in the DP High Middle East Supply: Model Resolved scenario relative to the Defined Policies: Model Resolved scenario. ..41

TABLES

Table ES- 1. Scenario design 1
Table ES-2. Additional sensitivity scenarios explored in this study 4

Table 1. Scenario design 11
Table 2. Climate policy assumptions in study scenarios 13
Table 3. Assumptions about climate policy explored in this study and their mapping with IPCC AR6 scenarios. 14
Table 4. Global natural gas consumption (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels 19
Table 5. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels 22
Table 6. Cumulative emissions impacts (including normalized emissions impacts) of increased U.S. LNG exports (Model Resolved – Existing/FID Exports), 2020 to 2050. 28
Table 7. Cumulative emissions impacts (including normalized emissions impacts) of increased U.S. LNG exports (High Exports – Model Resolved), 2020 to 2050. 30
Table 8. Cumulative emissions impacts (including normalized emissions impacts) of increased U.S. LNG exports (High Exports – Existing/FID Exports), 2020 to 2050. 33
Table 9. Additional sensitivity scenarios explored in this study 35
Table 10. Cumulative GHG Emissions in the Defined Policies: Market Resolved scenario and high/low U.S. natural gas resource supply sensitivity scenarios 38

Table 11. Cumulative GHG Emissions in the Defined Policies: Market Resolved and DP High Middle East Supply: Model Resolved scenarios. 41
Table 12. Summary of key results across all scenarios explored in this study. 45

Table A-1.1. Historical natural gas producer prices used for calibration in GCAM 48
Table A-1.2. Pipeline blocs represented in GCAM 49

Table A-2.1. U.S. policies included under the Defined Policies scenario 50

Table A-3.1. Figure 1 Data. Global primary energy consumption by fuel across scenarios with Model Resolved U.S. LNG export levels (exajoules, EJ) 52
Table A-3.2. Figure 1 Data. Total global primary energy consumption across scenarios with Model Resolved U.S. LNG export levels (exajoules, EJ) 53
Table A-3.3. Figure 2 Data. Global natural gas consumption by sector (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels 54
Table A-3.4. Table 4 Data. Global natural gas consumption (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. 56
Table A-3.5. Figure 3 Data. Global natural gas consumption disaggregated by domestic resources, U.S. LNG exports, other LNG exports, and pipeline exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels 57
Table A-3.6. Figure 4 (Table 5) Data. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. 57
Table A-3.7. Figure 5 Data. Changes in the energy system due to increased U.S. LNG exports in the Defined Policies: Model Resolved scenario relative to the Defined Policies: Existing/FID Exports scenario (EJ) 58
Table A-3.8. Figure 6 Data. Changes in the energy system due to increased U.S. LNG exports in the Commitments (High CCS): Model Resolved scenario relative to the Commitments (High CCS): Existing/FID Exports scenario (EJ) 60
Table A-3.9. Figure 7 Data. Changes in the energy system due to increased U.S. LNG exports in the Commitments (Moderate CCS): Model Resolved scenario relative to the Commitments (Moderate CCS): Existing/FID Exports scenario (EJ) 63
Table A-3.10. Figure 8 Data. Changes in the energy system due to increased U.S. LNG exports in the Net Zero 2050 (High CCS): Model Resolved scenario relative to the Commitments (High CCS): Existing/FID Exports scenario (EJ) 66
Table A-3.11. Table 6-8 data. Global FFI CO_2 and GHG Emissions across scenarios ($MtCO_2e$) 70
Table A-3.12. Table 6-8 data. U.S. LNG exports across scenarios (EJ). 72
Table A-3.13. Table 6-8 data. Changes in emissions due to increased U.S. LNG exports (MR-ExFID, Hi Exp-MR, Hi Exp-ExFID) 73
Table A-3.14. Figure 9 Data. Changes in primary energy consumption in scenarios with High Exports assumptions relative to scenarios with Market Resolved assumptions 76
Table A-3.15. Figure 10 Data. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios. 82
Table A-3.16. Figure 11 Data. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios 83
Table A-3.17. Figure 12 Data. Global primary energy consumption by fuel (EJ) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios 83
Table A-3.18. Table 10 Data. GHG Emissions ($MtCO_2e$) in the Defined Policies: Market Resolved scenario and high/low U.S. natural gas resource supply sensitivity scenarios 85
Table A-3.19. Figure 13 Data. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario. 85

Table A-3.20. Figure 14 Data. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario.....86
Table A-3.21. Figure 15 Data. Global primary energy consumption by fuel (EJ) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario 86
Table A-3.22. Table 11 Data. GHG Emissions (MtCO_2e) in the Defined Policies: Market Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario..87
Table A-3.23. Additional Data. Natural gas consumption (Bcf/d) across all 32 GCAM regions and all scenarios.....87
Table A-3.24. Additional Data. Natural gas production (Bcf/d) across all 32 GCAM regions and all scenarios. 108
Table A-3.25. Additional Data. LNG exports (Bcf/d) across all 32 GCAM regions and all scenarios. 127
Table A-3.26. Additional Data. Pipeline exports (Bcf/d) across all 32 GCAM regions and all scenarios. 147
Table A-3.27. Additional Data. LNG Imports (Bcf/d) across all 32 GCAM regions and all scenarios. 166
Table A-3.28. Additional Data. Pipeline imports (Bcf/d) across all 32 GCAM regions and all scenarios. 189
Table A-3.29. Additional Data. Global natural gas consumption, global natural gas production, global LNG exports, global LNG imports, global pipeline exports, global pipeline imports (Bcf/d) across all scenarios.....209

LIST OF ABBREVIATIONS

°C	Degrees Celsius
AEO	Annual Energy Outlook
ANL	Argonne National Laboratory
AR6	Sixth Assessment Report
ATB	Annual Technology Baseline
Bcf, BCF	Billion cubic feet
Bcf/d	Billion cubic feet per day
BECCS	Bioenergy with carbon capture and storage
BIL	Bipartisan Infrastructure Law
Btu	British thermal unit
CCS	Carbon capture and storage
CDR	Carbon dioxide removal
CH_4	Methane
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DAC	Direct air capture
DOE	Department of Energy
EIA	Energy Information Administration
EMF	Energy Modeling Forum
EPA	Environmental Protection Agency
EJ	Exajoule (10^{18} joules)
FECM	Office of Fossil Energy and Carbon Management
FID	Final investment decisions
FTA	Free trade agreement
GCAM	Global Change Analysis Model
GDP	Gross domestic product
GHG	Greenhouse gas
Gt	Gigaton
$GtCO_2$	Gigatons of carbon dioxide
$GtCO_2e$	Gigatons of carbon dioxide equivalent
H_2	Hydrogen
HEIDM	Household Energy Impact Distribution Model
HMM	Hydrogen Market Module
IPCC	Intergovernmental Panel on Climate Change
IRA	Inflation Reduction Act
ITC	Investment tax credit
LNG	Liquefied natural gas
MAM	Macroeconomic Activity Module
Mcf	Million cubic feet
MJ	Megajoule
MMBtu	Million British thermal units
MMT	Million Metric Tons
$MtCO_2$	Million tons of carbon dioxide
$MtCO_2e$	Million tons of carbon dioxide equivalent
NEMS	National Energy Modeling System
NETL	National Energy Technology Laboratory
NREL	National Renewable Energy Laboratory
NG	Natural gas
NGA	Natural Gas Act
NZ	Net Zero
PNNL	Pacific Northwest National Laboratory
Tcf, TCF	Trillion cubic feet
U.S., USA	United States
yr	Year

FOREWORD

This multi-volume study of U.S. LNG exports serves to provide an updated understanding of the potential effects of U.S. LNG exports on the domestic economy, U.S. households and consumers; communities that live near locations where natural gas is produced or exported; domestic and international energy security, including effects on U.S. trading partners; and the environment and climate. Prior to this study, Department of Energy's (DOE's) most recent economic and environmental analyses of U.S. LNG exports were published in 2018 and 2019, respectively. At that time, U.S. LNG exports were just getting underway and our export capacity was 4 billion cubic feet per day (Bcf/d), less than one-third of what it is today. Since then, our world and the global natural gas sector have changed significantly: the U.S. has become the top global exporter of LNG; Russia has invaded Ukraine and used energy as a weapon to undermine European and global security; the impacts and costs of extreme weather and natural disasters fueled by climate change have increased dramatically; and the pace of the energy transition and technological innovation has itself accelerated.

These developments and others factor into a global energy system that is changing rapidly. The pace of change creates inherent uncertainty in projecting the potential pathways for U.S. LNG through 2050. Accordingly, several considerations should be borne in mind when interpreting this study and its results.

- Given the global scope and timeframe examined in this study, there should be recognition of the inherent uncertainty in conclusions, especially given their size relative to the overall global economy and energy system.
- This study is not intended to serve as a forecast of U.S. LNG exports and impacts. Rather, it is an exercise exploring alternative conditional scenarios of future U.S. LNG exports and examining their implications for global and U.S. energy systems, economic systems, and greenhouse gas (GHG) emissions. This type of scenario analysis is a well-established analytical approach for exploring complex relationships across a range of variables.
- The scenarios explored in this study span a range of U.S. LNG export outcomes. Each scenario relies on input assumptions regarding many domestic, international, economic, and non-economic factors, such as future socioeconomic development, technology and resource availability, technological advancement, and institutional change. A full uncertainty analysis encompassing all underlying factors is beyond the scope of this study.
- For the portions of this study that have modeled results, the study does not attach probabilities to any of the scenarios examined.

EXECUTIVE SUMMARY

The U.S. Department of Energy (DOE) is responsible for authorizing exports of domestically produced natural gas, including liquefied natural gas (LNG), to foreign countries under section 3 of the Natural Gas Act (NGA), 15 U.S.C. § 717b. An application to export domestically produced natural gas to countries that have a free trade agreement (FTA) with the United States must be granted without delay or modification and is deemed to be consistent with the public interest by statute. For applications to export domestic natural gas to non-FTA countries, DOE must grant the application unless it finds that the proposed exportation will not be consistent with the public interest.

Since 2012, to inform its public interest determination, DOE's Office of Fossil Energy and Carbon Management (FECM) has commissioned multiple studies to help assess the various facets of the public interest that are affected by U.S. LNG exports. The purpose of the current study is to provide a comprehensive update to our understanding of how varying levels of U.S. LNG exports impact all these facets.

This appendix covers the global analysis and analyzes: i) the global market demand for U.S. LNG exports across a range of scenarios and ii) the global emissions impacts of increased U.S. LNG exports through 2050. This study uses the Global Change Analysis Model (GCAM). GCAM is an open-source community model primarily developed and maintained at the Joint Global Change Research Institute, a partnership between Pacific Northwest National Laboratory (PNNL) and the University of Maryland. Using GCAM, this study explores scenarios with varying assumptions about future climate policy, technology availability, and level of U.S. LNG exports (Table ES- 1).

Table ES- 1. Scenario design

Key Assumptions			Scenario full name	Scenario abbreviation
Global climate policies	**Technology availability[a]**	**U.S. LNG export levels**		
Defined Policies		Model Resolved	*Defined Policies: Model Resolved*	*DP: MR*
		Existing/FID Exports[c]	*Defined Policies: Existing/FID Exports*	*DP: ExFID*
		High Exports	*Defined Policies: High Exports*	*DP: Hi Exp*
Commitments	High Carbon Capture and Storage (CCS)	Model Resolved	*Commitments (High CCS): Model Resolved*	*C (High CCS): MR*
		Existing/FID Exports	*Commitments (High CCS): Existing/FID Exports*	*C (High CCS): ExFID*
		High Exports	*Commitments (High CCS): High Exports*	*C (High CCS): Hi Exp*
	Moderate CCS	Model Resolved	*Commitments (Moderate CCS): Model Resolved*	*C (Mod CCS): MR*
		Existing/FID Exports	*Commitments (Moderate CCS): Existing/FID Exports*	*C (Mod CCS): ExFID*

		High Exports	*Commitments (Moderate CCS): High Exports*	*C (Mod CCS): Hi Exp*
Net Zero 2050	High CCS	Model Resolved	*Net Zero 2050 (High CCS): Model Resolved*	*NZ (High CCS): MR*
		Existing/FID Exports	*Net Zero 2050 (High CCS): Existing/FID Exports*	*NZ (High CCS): ExFID*
		High Exports	*Net Zero 2050 (High CCS): High Exports*	*NZ (High CCS): Hi Exp*
	Moderate CCS[b]	Model Resolved	*Net Zero 2050 (Moderate CCS): Model Resolved*	*NZ (Mod CCS): MR*
		High Exports	*Net Zero 2050 (Moderate CCS): High Exports*	*NZ (Mod CCS): Hi Exp*

[a] Technology availability assumptions (*High CCS* and *Moderate CCS*) are combined only with *Commitments* and *Net Zero 2050* climate policy assumptions.
[b] In the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario, U.S. LNG exports fall below the existing/FID exports level. Thus, a *Net Zero 2050 (Moderate CCS): Existing/FID Exports* scenario would resolve to the same outcomes as the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario, and is therefore not shown.
[c] Existing/FID exports refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that have reached final investment decisions (FID) on their projects, as of December 2023.

This study considers three assumptions about climate policies in the U.S. and rest of the world. The *Defined Policies (DP)* assumption includes explicit representations of various provisions of the Inflation Reduction Act (IRA), the Bipartisan Infrastructure Law (BIL), and the Environmental Protection Agency's (EPA) recently finalized power plant rules based on Section 111 of the Clean Air Act in the U.S. In the rest of the world, emissions policies are modeled consistent with previously published studies using GCAM by imposing regional constraints on CO_2 emissions, with the constraints reflecting emissions impacts of existing policies. The *Commitments (C)* assumption includes countries' emission pledges made during the 26th Conference of the Parties to the United Nations Framework on Climate Change held in Glasgow, Scotland, United Kingdom. These pledges include nationally determined contributions submitted by countries that outline emission reduction plans through 2030, long-term strategies, and net-zero pledges through 2050. In the *Commitments* assumption, the U.S. is assumed to reduce economy-wide net GHG emissions by 51% in 2030 and 100% by 2050, relative to 2005 levels. Countries without pledges are assumed to follow an emissions pathway defined by a minimum decarbonization rate of 8% per year that is indicative of strong mitigation policies and a significant departure from historically observed decarbonization rates.[1, 2] The *Net Zero 2050 (NZ)* assumption includes the same pledges for the U.S. as *Commitments*, and the rest of world is assumed to achieve net-zero CO_2 emissions by 2050.

The study also considers two assumptions about technology availability. The *High CCS* assumption includes all default technology assumptions in GCAM and results in higher

[1] Iyer, G., Ou, Y., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J., Fuhrman, J., Waldhoff, S. and McJeon, H., 2022. Ratcheting of climate pledges needed to limit peak global warming. *Nature Climate Change*, *12*(12), pp.1129-1135.
[2] Ou, Y., Iyer, G., Clarke, L., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J.R., Binsted, M., Cui, R., Fyson, C. and Geiges, A., 2021. Can updated climate pledges limit warming well below 2° C?. *Science*, *374*(6568), pp.693-695.

deployment of CCS technologies compared to the second assumption, *Moderate CCS*. The *Moderate CCS* assumption includes a constraint on the amount of CO_2 captured and stored from the energy system; higher costs for CCS technologies; and accelerated reductions in costs of wind, solar, and grid battery technologies. The *Moderate CCS* assumption results in higher deployment of renewable technologies and lower deployment of CCS technologies compared to *High CCS.*

Finally, the study considers three assumptions about U.S. LNG export levels. The *Model Resolved (MR)* assumption uses GCAM to identify economically driven levels for U.S. LNG exports. The *Existing/FID Exports* assumption limits U.S. LNG exports to a maximum of 23.7 billion cubic feet per day (Bcf/day), which is calculated based on 90 percent utilization of existing U.S. export capacity and the capacity of export facilities under development that reached final investment decision (FID) as of December 2023.[3] The *High Exports* assumption lowers the costs for U.S. LNG exports such that they reach 5 Bcf/d above *MR* levels in 2035, 10 Bcf/d above *MR* levels in 2040, 15 Bcf/d above *MR* levels in 2045, and 20 Bcf/d above *MR* levels in 2050.

A combination of the above assumptions about global climate policy, technology availability, and U.S. LNG export levels results in a broad range of fourteen scenarios (Table ES- 1).

In addition to these fourteen scenarios, we developed six additional sensitivity scenarios to explore the economic competitiveness of U.S. natural gas in the global natural gas market (Table ES-2).

We consider three assumptions related to the economic competitiveness of U.S. natural gas. *High U.S. Supply* assumes a flatter U.S. natural gas supply curve (i.e., lower natural gas prices with higher availability) relative to the original, making U.S. natural gas more competitive relative to other natural gas producers. *Low U.S. Supply* assumes a steeper U.S. natural gas supply curve (i.e., higher natural gas prices with lower availability) relative to the original, making the U.S. less competitive relative to other natural gas producers. *High Middle East Supply* assumes a flatter natural gas supply curve (i.e., lower natural gas prices with higher availability) compared to the original for the Middle East, which is a competing natural gas producing region. This makes the Middle East more competitive relative to the U.S. and other natural gas producers in the global natural gas market. The *Model Resolved* and *Existing/FID Exports* U.S. LNG exports assumptions are combined with the above three assumptions to obtain a total of six sensitivity scenarios, all of which employ the *Defined Policies* climate policy assumption (Figure ES- 1, Table ES-2).

[3] LNG export projects typically seek authority from DOE to be able to export up to their authorized capacities to both free trade agreement (FTA) and non-free trade agreement (non-FTA) countries on a non-additive basis. Given that the majority of LNG demand comes from countries without a free trade agreement with the United States, projects typically cannot obtain financing to go to a final investment decision until they have obtained an authorization from DOE to export to both FTA and non-FTA countries. A list of large-scale LNG export projects with non-FTA export authority from DOE and construction status as of December 2023 is available at: https://www.energy.gov/sites/default/files/2024-01/LNG%20Snapshot%20Dec%2031%2023u.pdf

Table ES-2. Additional sensitivity scenarios explored in this study

Global climate policies	Natural gas resources	U.S. LNG export levels	Sensitivity scenarios full name	Sensitivity scenario abbreviation
Defined Policies	High U.S. Supply	Model Resolved	*DP High U.S. Supply: Model Resolved*	*DP Hi U.S. Sup: MR*
	High U.S. Supply	Existing/FID Exports	*DP High U.S. Supply: Existing/FID Exports*	*DP Hi U.S. Sup: ExFID*
	Low U.S. Supply	Model Resolved	*DP Low U.S. Supply: Model Resolved*	*DP Lo U.S. Sup: MR*
	Low U.S. Supply	Existing/FID Exports	*DP Low U.S. Supply: Existing/FID Exports*	*DP Lo U.S. Sup: ExFID*
	High Middle East Supply	Model Resolved	*DP High Middle East Supply: Model Resolved*	*DP Hi ME Sup: MR*
	High Middle East Supply	Existing/FID Exports	*DP High Middle East Supply: Existing/FID Exports*	*DP Hi ME Sup: ExFID*

Key findings from this Appendix are as follows:

Global market demand for LNG exports:

1. Across all scenarios, U.S. LNG exports in 2050 exceed current estimated operational export levels (approximately 12.9 Bcf/d, assuming 90% utilization of U.S. LNG export capacity, as of December 2023) (Figure ES- 1).
2. In a scenario based on current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*), the model-resolved U.S. LNG exports exceed currently approved levels (approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states, to non-Free Trade Agreement, or non-FTA, countries as of December 2023) by 2045, and reach 56.3 Bcf/d in 2050.
3. In a scenario in which countries are assumed to achieve their current emissions commitments (including the U.S. pledge to reduce economy-wide GHG emissions to net-zero by 2050) along with high deployment of renewables (*Commitments (Moderate CCS): Model Resolved*), U.S. LNG export levels are still projected to exceed 2023 existing/FID export levels (approximately 23.7 Bcf/d) by 2050. U.S. LNG export levels are projected to grow to 28.5 Bcf/d by 2050, which is lower than currently approved levels (approximately 43.6 Bcf/d) and lower than the scenario with current GHG emissions policies (*Defined Policies: Model Resolved*, 56.3 Bcf/d).
4. In a scenario with *Commitments* climate policy assumptions and high deployment of CCS technologies (*Commitments (High CCS*): *Model Resolved)*, U.S. LNG exports are projected to grow to higher levels by 2050 (33.1 Bcf/d by 2050) while still remaining lower than currently approved levels (43.6 Bcf/d).
5. In a scenario with more stringent climate policy assumptions than current commitments in which the U.S. achieves its net-zero pledge and the rest of the world also achieves net-zero CO_2 emissions by 2050, along with high deployment of CCS technologies (*Net Zero 2050 (High CCS*)*: Model Resolved*), U.S. LNG export levels exceed 2023 existing/FID

export levels (23.7 Bcf/d), leveling off after 2045 and reaching 26.8 Bcf/d by 2050, which is still lower than currently approved levels (43.6 Bcf/d). By contrast, in a scenario with more stringent climate policy assumptions along with high deployment of renewables (*Net Zero 2050 (Moderate CCS): Model Resolved*), U.S. LNG exports exceed current operational levels (12.9 Bcf/d) by 2025, but do not exceed 2023 existing/FID levels (23.7 Bcf/d) or approved levels (43.6 Bcf/d), reaching 17.2 Bcf/d in 2050.

6. In a sensitivity scenario with higher availability of U.S. natural gas supply at lower prices (*DP High U.S. Supply: Model Resolved*), U.S. LNG exports exceed currently approved export levels to reach 70.0 Bcf/d by 2050. In this sensitivity scenario, U.S. LNG exports in 2050 are 13.7 Bcf/d higher, compared to the scenario with current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*).
7. In a sensitivity scenario with lower availability of U.S. natural gas supply at higher prices (*DP Low U.S. Supply: Model Resolved*), U.S. LNG exports exceed 2023 existing/FID export levels (23.7 Bcf/d) by 2040. U.S. LNG exports are projected to grow to 31.5 Bcf/d by 2050, which is lower than currently approved levels (43.6 Bcf/d).
8. In a sensitivity scenario with higher availability of natural gas supply in the Middle East at lower prices (*DP High Middle East Supply: Model Resolved*), U.S. LNG exports continue to grow. In this scenario, U.S. LNG exports grow to 51.7 Bcf/d by 2050, which is higher than currently approved levels (43.6 Bcf/d) but lower than the scenario with current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*).

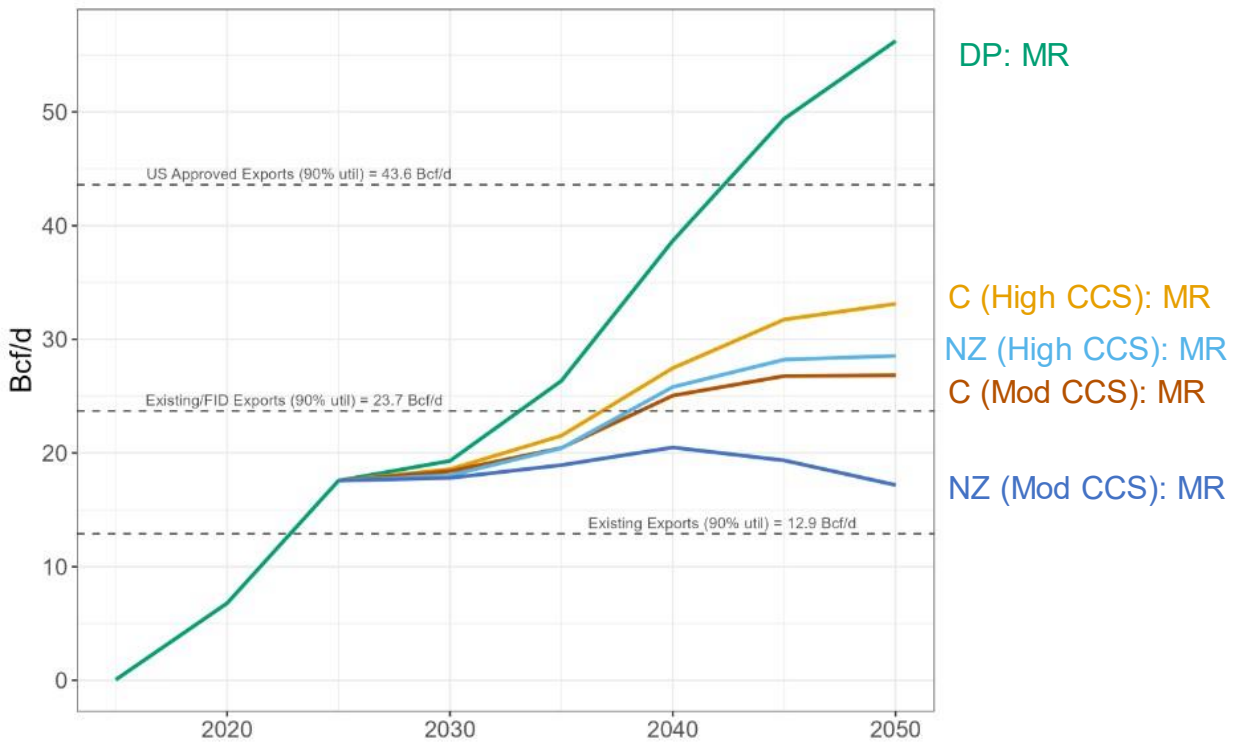

Figure ES- 1. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels.

DP: MR = Defined Policies: Model Resolved; C (High CCS): MR = Commitments (High CCS): Model Resolved; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved. Existing exports are approximately 12.9 Bcf/d, assuming 90% utilization of 2023 U.S. LNG export capacity. Existing/FID exports are 23.7 Bcf/d and refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that

have reached final investment decisions (FID) on their projects, as of December 2023. Current approved levels of LNG exports in the U.S. are approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states to non-FTA countries as of December 2023. Note that the figure shows modeled U.S. LNG export volumes under various assumptions of climate policy and technology availability without regard to the volume of exports approved by DOE. However, this report recognizes that 23.7 Bcf/d is the level of exports eventually expected from the amount of U.S. LNG export capacity currently operating or under construction pursuant to a final investment decision as of December 2023. Note that 1 Bcf/d= 0.36 EJ/y.

Global emissions impacts of increased U.S. LNG exports:

9. In all scenarios with model-resolved U.S. LNG exports, cumulative GHG emissions are higher than the scenarios in which U.S. LNG exports are limited to 2023 existing/FID levels.
10. In a scenario with current GHG emissions policies and model-resolved U.S. LNG exports (*Defined Policies: Model Resolved*), cumulative global GHG emissions (2020-2050) are 708 $MtCO_2e$ higher relative to the scenario in which U.S. LNG exports are limited to 2023 existing/FID levels (*Defined Policies: Existing/FID Exports*). This corresponds to a 0.05% increase in global cumulative emissions. In normalized terms (obtained by dividing the cumulative emissions increase by the cumulative increase in U.S. LNG exports over the same period), this emissions increase corresponds to an increase of 6.25 $MtCO_2e$/EJ of additional U.S. LNG exports.
11. In a scenario with countries' current emission reduction commitments, high deployment of CCS technologies, and model resolved U.S. LNG exports (*Commitments (High CCS): Model Resolved*), cumulative global GHG emissions (2020-2050) increase by 97 $MtCO_2e$ (0.008%, 3.07 $MtCO_2e$/EJ of additional U.S. LNG exports) compared to the scenario's counterpart in which U.S. LNG exports are limited to 2023 existing/FID levels (*Commitments (High CCS): Existing/FID Exports*).
12. In a scenario in which the U.S. achieves its net-zero pledge and the rest of the world is assumed to achieve net-zero CO_2 emissions along with high deployment of CCS technologies and model-resolved U.S. LNG exports (*Net Zero 2050 (High CCS): Model Resolved*), cumulative GHG emissions increase by 21 $MtCO_2e$ (0.002%, 1.21 $MtCO_2e$/EJ of additional U.S. LNG exports) compared to the scenario's counterpart in which U.S. LNG exports are limited to 2023 existing/FID levels (*Net Zero 2050 (High CCS): Existing/FID Exports*).
13. In a scenario with countries' current commitments, high deployment of renewables, and model-resolved U.S. LNG exports (*Commitments (Moderate CCS): Model Resolved*), cumulative global GHG emissions (2020-2050) increase by 67 $MtCO_2e$ (0.006%) compared to a scenario in which U.S. LNG exports are limited to 2023 existing/FID levels (*Commitments (Moderate CCS): Existing/FID Exports*).
14. In all scenarios in which U.S. LNG exports are assumed to exceed model-resolved levels (up to +20 Bcf/d by 2050, corresponding to the *High Exports* assumption for U.S. LNG exports), global cumulative GHG emissions (2020-2050) are 302-953 $MtCO_2e$ (3.99-12.60 $MtCO_2e$/EJ of additional U.S. LNG exports) higher than their counterparts with model-resolved levels of U.S. LNG exports.

GLOBAL ENERGY AND GREENHOUSE GAS IMPLICATIONS OF U.S. LIQUEFIED NATURAL GAS

A. Background

This Appendix analyzes: i) the global market demand for U.S. LNG exports across a range of scenarios, including price sensitivities; and ii) the global emissions impacts of increased U.S. LNG exports through 2050. The global market demand for U.S. LNG exports in the coming decades

will depend on many factors including the global climate policy landscape and the availability of key technologies (e.g., carbon capture and storage). The emissions impacts of increased U.S. LNG exports will depend on the magnitude of the increase in export levels, the type and quantity of the fuels displaced by increased U.S. LNG, and any increases in global energy consumption spurred by the availability of additional natural gas. We therefore conduct our analysis around different assumptions about climate policy, technology availability, and U.S. LNG export levels. The global market demand for U.S. LNG exports and emissions impacts of increased U.S. LNG exports also depend on the competitiveness of U.S. LNG relative to other sources of natural gas. We therefore also explore additional sensitivities with different assumptions about U.S. and international gas resources.

B. The Global Change Analysis Model (GCAM)

We use the Global Change Analysis Model (GCAM) to develop scenarios for this study. GCAM is an open-source community model primarily developed and maintained at the Joint Global Change Research Institute, a partnership between Pacific Northwest National Laboratory (PNNL) and the University of Maryland.

GCAM is an integrated multisector model of global energy, economy, agriculture, land use, water, and climate systems.[4] These systems are represented in 32 geopolitical regions, 384 land subregions, and 235 water basins across the globe. In the version of the model used in this study, modeled outcomes are calibrated to historical International Energy Association (IEA) data through 2015 (i.e., model parameters are adjusted to match historical data) and key model parameters and outcomes are updated to recent historical trends (see discussion in the “Study Design” section below). Beyond 2015, GCAM operates in five-year time-steps by solving for equilibrium prices and quantities in various energy, agricultural, water, land use, and GHG markets in each period and in each region. For this study, the model was run until 2050. Outcomes of GCAM are driven by exogenous assumptions about population growth, labor participation rates, and labor productivity in the 32 geo-political regions, along with representations of resources, technologies, and policy.

GCAM has a long history of being used to conduct global, regional, national, and subnational assessments of energy and climate policies and their long-term (multi-decadal) economic and market implications to inform national and international decision-making. While GCAM studies are extensively published in the scientific peer-reviewed literature, GCAM-based scenario analyses have also formed the backbone of key U.S. government interagency projects and reports, such as the 2021 U.S. Long-term Strategy[5] and the 2016 U.S. Mid-Century Strategy[6] – both of which were official submissions of the U.S. government to the United Nations.

GCAM scenarios are also integral parts of all reports of the Intergovernmental Panel on Climate Change (IPCC) and all major Energy Modeling Forum (EMF) studies to date. Some key peer-reviewed studies over the last decade using GCAM include Iyer and Ou et al. (2022), Ou and Iyer

[4] The full documentation of the model is available at the GCAM documentation page (http://jgcri.github.io/gcam-doc/). The description here and in Additional description of GCAM’s energy system is a summary of the online documentation.

[5] The Long-term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050. Published by the United States Department of State and the United States Executive Office of the President, Washington DC. November 2021. https://www.whitehouse.gov/wp-content/uploads/2021/10/US-Long-Term-Strategy.pdf

[6] United States Mid-Century Strategy For Deep Decarbonization. 2016. https://unfccc.int/files/focus/long-term_strategies/application/pdf/mid_century_strategy_report-final_red.pdf

et al. (2021), Fawcett et al. (2015), and McJeon et al. (2014).[7, 8, 9, 10] The Iyer and Ou et al. (2022) (published in *Nature Climate Change),* the Ou and Iyer et al. (2021) (published in *Science*), and Fawcett et al. (2015) (published in *Science*) studies explored the temperature implications, through this century, of countries' emission reduction pledges. The McJeon et al. (2014) study (published in *Nature*) explored the global emissions and climate implications, through this century, of the global deployment of hydraulic fracturing technologies that enable increased production of shale gas resources.

GCAM's energy system contains representations of fossil fuel resources (coal, oil, and natural gas), uranium and renewable energy sources (wind, solar, geothermal, hydro, biomass, and traditional biomass), along with processes that transform some amount of these resources to final energy carriers (electricity generation, refining, hydrogen (H_2) production, natural gas processing, and district heat), which are ultimately used to deliver goods and services demanded by end use sectors (residential buildings, commercial buildings, transportation, and industry). Natural gas competes with other fuels for share in the electricity generation sector and with both other fuels and electricity in the following sectors: buildings (residential and commercial), industrial (iron and steel, cement, fertilizers, chemicals, aluminum, construction, mining, agriculture, food processing, and other), and transportation (long-distance passenger air travel, other passenger travel, international freight shipping, and other freight). Each of the sectors in GCAM includes technological detail. For example, the electricity generation sector includes three variants of coal generators (integrated gasification combined cycle with and without CCS, and conventional), three variants of gas generators (combined cycle with and without CCS and gas turbines), five variants of solar technologies (solar photovoltaic with and without dedicated storage, concentrated solar power with and without dedicated storage, and rooftop photovoltaic), and three variants of wind technologies (offshore wind, onshore wind with and without dedicated storage), in addition to technologies fueled by other fuels. The full list of technologies in various sectors in GCAM can be found on the GCAM documentation page.[11]

In each sector within GCAM's regions, the model determines the choice of technology depending on market competition. The market share captured by a technology increases as its relative costs decline. However, GCAM avoids a "winner-takes-all" response by using a logit-based model of market competition. This approach is designed to represent decision making among competing options when only some characteristics of the options can be observed. For the purposes of this study, costs and performance assumptions for technologies in the electricity generation sector are based on National Renewable Electricity Laboratory's (NREL) 2023 Annual Technology Baseline (ATB).[12] Costs and performance assumptions for technologies in the transportation

[7] Ou, Y., Iyer, G., Clarke, L., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J.R., Binsted, M., Cui, R., Fyson, C. and Geiges, A., 2021. Can updated climate pledges limit warming well below 2° C?. Science, 374(6568), pp.693-695.
[8] Iyer, G., Ou, Y., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J., Fuhrman, J., Waldhoff, S. and McJeon, H., 2022. Ratcheting of climate pledges needed to limit peak global warming. Nature Climate Change, 12(12), pp.1129-1135.
[9] Fawcett, A.A., Iyer, G.C., Clarke, L.E., Edmonds, J.A., Hultman, N.E., McJeon, H.C., Rogelj, J., Schuler, R., Alsalam, J., Asrar, G.R. and Creason, J., 2015. Can Paris pledges avert severe climate change?. Science, 350(6265), pp.1168-1169.
[10] McJeon, H., Edmonds, J., Bauer, N., Clarke, L., Fisher, B., Flannery, B.P., Hilaire, J., Krey, V., Marangoni, G., Mi, R. and Riahi, K., 2014. Limited impact on decadal-scale climate change from increased use of natural gas. Nature, 514(7523), pp.482-485.
[11] GCAM documentation. http://jgcri.github.io/gcam-doc/
[12] National Renewable Electricity Laboratory. (2023). Annual Technology Baseline. Available at: https://atb.nrel.gov/electricity/2023/data

sector are based on Argonne National Laboratory's (ANL's) Autonomie database.[13] For other sectors in GCAM, detailed sources of costs and performance assumptions are available in the online model documentation.[14]

GCAM uses a "resource-reserve" approach to represent supplies of fossil fuels including natural gas. In this approach, production is assumed to occur out of reserves that can be depleted as well as enhanced. Production out of reserves is assumed to occur over a well or mine lifetime appropriate for each fuel. Additions to reserves depend on regional resource supply curves. The shape of each region's natural gas resource supply curve is based on resource estimates (how much is in the ground) and the cost of extracting those resources, with increasing costs of extraction with resource depletion.[15] GCAM includes exogenous assumptions[16] about the annual rate of technological improvements that reduce resource extraction costs and increase productivity. For the purposes of this project, historical natural gas producer prices are calibrated to recent datasets. Historical natural gas producer prices in the United States are calibrated to the Henry Hub prices from the U.S. Energy Information Administration (EIA)[17]; in Canada, they are calibrated to Alberta market prices from the Energy Institute's Statistical Review of World Energy (formerly the BP Statistical Review of World Energy).[18] For the rest of the world, natural gas producer prices in each GCAM region are based on the cost, insurance, and freight (CIF) prices from S&P Global (see Table A-1.1 in Appendix A-1: Additional description of GCAM's energy system).[19] In a future model year, as demand changes, the change in regional producer prices from the historical calibrated values is calculated endogenously (i.e., within the model) using regional supply curves that represent increasing cost of extraction as cumulative extraction increases.

GCAM includes a representation of natural gas trade that creates price-based competition between domestic and imported natural gas.[20] This representation introduces realistic dynamics in the evolution of trade from current patterns. Natural gas can be imported as LNG or through pipelines. Traded LNG is represented as a single global market. All producers of natural gas can export to a global LNG pool from which importers can import. The price of domestic gas is based on extraction costs derived from the regional resource supply curves. The price of imported LNG includes costs for shipping, liquefaction, and regasification (which are incurred by the importer) in addition to extraction costs (which are incurred by the exporter). Traded pipeline gas is represented in six regional markets. Exporters of pipeline gas export to one of the six regional pipeline blocs from which importers can import (see Table A2 in Appendix A-2 for a detailed list of pipeline blocs and corresponding GCAM regions). Inter-pipeline bloc trade is also allowed to occur. These pipeline trade relationships are calibrated to existing relationships. The price of

---

[13] Argonne National Laboratory. Autonomie database. Available at: https://vms.taps.anl.gov/tools/autonomie/

[14] Supply assumptions are available here: https://jgcri.github.io/gcam-doc/inputs_supply.html and demand assumptions are available here: https://jgcri.github.io/gcam-doc/inputs_demand.html.

[15] Rogner, H.-H. (1997). An Assessment of World Hydrocarbon Resources. https://www.annualreviews.org/content/journals/10.1146/annurev.energy.22.1.217

[16] Exogenous assumptions refer to assumptions that are made outside of the model and affect modeled outcomes but are not affected by those outcomes.

[17] U.S. EIA (2023). Henry Hub Natural Gas Spot Price. Available at: https://www.eia.gov/dnav/ng/hist/rngwhhda.htm

[18] BP (2022). bp Statistical Review of World Energy. 71st edition. Available at: https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf

[19] S&P Global (2023). S&P Global Commodity Insights. Historical and forecasted LNG prices data sheet.

[20] Yarlagadda, B., Iyer, G., Binsted, M., Patel, P., Wise, M. and McLeod, J., 2024. The future evolution of global natural gas trade. *Iscience*, *27*(2).

imported pipeline gas includes the costs of building and operating pipeline infrastructure in addition to resource extraction costs.

Gross exports and imports of LNG and pipeline gas are calibrated to historical data in GCAM's historical calibration year (2015). For the purposes of this study, we updated LNG infrastructure assumptions to capture recent trends, including planned and existing LNG capacity additions in the U.S., the Middle East, Australia, Canada, Southeast Asia, and Africa. Planned and existing LNG capacity additions in the U.S. are based on the DOE's Semi-Annual Reporting Requirements (LNG Exporters) 2010-2024 Dockets.[21] Planned and existing LNG capacity additions in the other regions above are based on the Global Energy Monitor's LNG terminals data, February 2024 release.[22] We also include constraints on Russian pipeline and LNG exports to reflect recent trends (discussed in the subsequent section). GCAM also tracks turnover of trade infrastructure (e.g., liquefaction and regasification units, and pipelines). Pipeline and LNG infrastructure are assumed to have a service life, and the model can track the age of this infrastructure once it enters service. Trade infrastructure can either retire naturally or in response to economic changes (e.g., those driven by an emissions policy). In GCAM's modeled future, trade volumes evolve from historical patterns depending on future demands and prices. In model time, when demand for natural gas increases in a region, domestic natural gas, imported LNG, and imported pipeline natural gas compete for market share to meet the demand that is unmet by existing infrastructure. This competition for market share is based on the relative costs of the different sources of natural gas and is represented mathematically in GCAM using a logit-based model.

In a future model year, the deployment of natural gas in every GCAM region depends on the economic competitiveness of natural gas relative to other fuels in various sectors within GCAM and may vary with energy and climate policy and other economic conditions. The demand for natural gas in each GCAM region can be supplied through domestic resources, imported LNG, or imported pipeline gas. Under a set of policy and economic conditions, the demand for U.S. LNG exports in turn depends on its competitiveness relative to other sources of natural gas such as LNG from other major natural gas producing regions, availability and competitiveness of pipeline gas, and availability and competitiveness of domestic natural gas resources.

GCAM tracks emissions of all greenhouse gases including carbon dioxide (CO_2) from fossil fuels and industry as well as land-use changes, and non-CO_2 gases (methane, nitrous oxide, and fluorinated gases) from energy and agricultural and land-use systems and other processes. A detailed description of emissions modeling in GCAM is available in the model documentation.[23] The emissions results from GCAM presented in this analysis are used as inputs into the Consequential GHG Analysis study conducted by the National Energy Technology Laboratory (NETL). Further details about the methodology and comparison with this analysis are presented in that study.

C. Study Design

Using GCAM, this study explores scenarios[24] with varying assumptions about future climate policy, technology availability, and level of U.S. LNG exports (Table 1). We note that this study

[21] FECM. Semi-Annual Reporting Requirements (LNG Exporters) 2010 – 2024 Dockets. Available at: https://www.energy.gov/fecm/semi-annual-reporting-requirements-lng-exporters-2010-2024-dockets

[22] Global Energy Monitor. Global Gas Infrastructure Tracker (GGIT). Available at: https://globalenergymonitor.org/projects/global-gas-infrastructure-tracker/

[23] Joint Global Change Research Institute (2023). GCAM Documentation (Version 7): Emissions. [Computer software]. Available at: https://jgcri.github.io/gcam-doc/emissions.html

[24] We use the IPCC definition of a "scenario": "*A plausible description of how the future may develop based on a coherent and internally consistent set of assumptions about key driving forces (e.g., rate of*

does not attach probabilities to any of the scenarios, and no inference about the relative likelihood of these scenarios occurring should be implied.

Table 1. Scenario design

Key Assumptions			Scenario full name	Scenario abbreviation
Global Climate policies	**Technology availability[a]**	**U.S. LNG export levels**		
Defined Policies		Model Resolved	*Defined Policies: Model Resolved*	*DP: MR*
		Existing/FID Exports[c]	*Defined Policies: Existing/FID Exports*	*DP: ExFID*
		High Exports	*Defined Policies: High Exports*	*DP: Hi Exp*
Commitments	High Carbon Capture and Storage (CCS)	Model Resolved	*Commitments (High CCS): Model Resolved*	*C (High CCS): MR*
		Existing/FID Exports	*Commitments (High CCS): Existing/FID Exports*	*C (High CCS): ExFID*
		High Exports	*Commitments (High CCS): High Exports*	*C (High CCS): Hi Exp*
	Moderate CCS	Model Resolved	*Commitments (Moderate CCS): Model Resolved*	*C (Mod CCS): MR*
		Existing/FID Exports	*Commitments (Moderate CCS): Existing/FID Exports*	C (Mod CCS): ExFID
		High Exports	*Commitments (Moderate CCS): High Exports*	C (Mod CCS): Hi Exp
Net Zero 2050	High CCS	Model Resolved	*Net Zero 2050 (High CCS): Model Resolved*	*NZ (High CCS): MR*
		Existing/FID Exports	*Net Zero 2050 (High CCS): Existing/FID Exports*	*NZ (High CCS): ExFID*
		High Exports	*Net Zero 2050 (High CCS): High Exports*	*NZ (High CCS): Hi Exp*
	Moderate CCS[b]	Model Resolved	*Net Zero 2050 (Moderate CCS): Model Resolved*	*NZ (Mod CCS): MR*
		High Exports	*Net Zero 2050 (Moderate CCS): High Exports*	*NZ (Mod CCS): Hi Exp*

[a] Technology availability assumptions (*High CCS* and *Moderate CCS*) are combined only with *Commitments* and *Net Zero 2050* climate policy assumptions.

technological change, prices) and relationships. Note that scenarios are neither predictions nor forecasts but are used to provide a view of the implications of developments and actions". IPCC, 2022: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.020.

[b] In the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario, U.S. LNG exports fall below the existing/FID exports level. Thus, a *Net Zero 2050 (Moderate CCS): Existing/FID Exports* scenario would resolve to the same outcomes as the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario and is therefore not shown.
[c] Existing/FID exports refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that have reached final investment decisions (FID) on their projects, as of December 2023.

We consider three assumptions about climate policies in the U.S. and rest of the world (Table 2). The *Defined Policies (DP)* assumption includes explicit representations of various provisions of the Inflation Reduction Act (IRA)[25], the Bipartisan Infrastructure Law (BIL),[26] and the Environmental Protection Agency's (EPA) recently finalized power plant rules based on Section 111 of the Clean Air Act[27] in the U.S. In the rest of the world, emissions policies are modeled consistent with previously published studies using GCAM by imposing regional constraints on CO_2 emissions, with the constraints reflecting emissions impacts of policies.[28,29]

The *Commitments (C)* assumption includes countries' emission pledges as made during the 26th Conference of the Parties to the United Nations Framework on Climate Change held in Glasgow, Scotland, United Kingdom. These pledges include nationally determined contributions submitted by countries that outline emission reduction plans through 2030, long-term strategies, and net-zero pledges through 2050. In the *Commitments* assumption, the U.S. is assumed to reduce economy-wide net GHG emissions by 51% in 2030 and 100% by 2050, relative to 2005 levels. Countries without pledges are assumed to follow an emissions pathway defined by a minimum decarbonization rate of 8% per year that is indicative of strong mitigation policies and a significant departure from historically observed decarbonization rates. These assumptions are based on prior peer-reviewed studies.[28,29] Countries are assumed to achieve their pledges within their geographic boundaries without trading emissions.

The *Net Zero 2050 (NZ)* assumption includes the same pledges for the U.S. as *Commitments*. In addition, the rest of world is assumed to achieve net-zero CO_2 emissions by 2050.

For more context on the three climate policy assumptions, we map them to scenarios in the Sixth Assessment of Report (AR6) of the IPCC (Table 3).[30] In terms of long-term global temperature

[25] Text - H.R.5376 - 117th Congress (2021-2022): Inflation Reduction Act of 2022. (2022, August 16). https://www.congress.gov/bill/117th-congress/house-bill/5376/text
[26] Public Law 117-58 – 117th Congress (2021-2022): Infrastructure Investment and Jobs Act. (201, November 15). https://www.congress.gov/117/plaws/publ58/PLAW-117publ58.pdf
[27] U.S. Environmental Protection Agency, "New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule" (2024); https://www.epa.gov/stationary-sources-air-pollution/greenhouse-gas-standards-and-guidelines-fossil-fuel-fired-power.
[28] Ou, Y., Iyer, G., Clarke, L., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J.R., Binsted, M., Cui, R., Fyson, C. and Geiges, A., 2021. Can updated climate pledges limit warming well below 2° C?. Science, 374(6568), pp.693-695.
[29] Iyer, G., Ou, Y., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J., Fuhrman, J., Waldhoff, S. and McJeon, H., 2022. Ratcheting of climate pledges needed to limit peak global warming. Nature Climate Change, 12(12), pp.1129-1135.
[30] IPCC, 2022: Summary for Policymakers [P.R. Shukla, J. Skea, A. Reisinger, R. Slade, R. Fradera, M. Pathak, A. Al Khourdajie, M. Belkacemi, R. van Diemen, A. Hasija, G. Lisboa, S. Luz, J. Malley, D. McCollum, S. Some, P. Vyas, (eds.)]. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P.R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.001

change outcomes, the *Defined Policies* assumptions, followed by *Commitments*, and *Net Zero 2050* suggest increasing stringency of climate policy.

Table 2. Climate policy assumptions in study scenarios

Climate Policy Assumptions	Descriptions	
	United States	**Rest of World**
Defined Policies	Implements the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA). Implements additional policies including the EPA New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units (see description and Appendix A-2 for details).	Emissions policies are modeled consistent with previous published studies using GCAM by imposing regional caps on CO_2 emissions, with the caps reflecting emissions impacts of current policies (see description for details).
Commitments	In addition to the policies assumed in the *Defined Policies* scenario, the U.S. is assumed to reduce economy-wide greenhouse gas emissions by 51% in 2030 and 100% by 2050 relative to 2005.	Countries without pledges are assumed to follow an emissions pathway defined by a minimum decarbonization rate of 8% per year that is indicative of strong mitigation policies and a significant departure from historically observed decarbonization rates. The emissions pathways for the rest of the world are based on prior peer-reviewed studies. Countries are assumed to achieve their pledges within their geographic boundaries without trading emissions (see description for details).
Net Zero	Same as *Commitments*	The rest of world is assumed to achieve net-zero CO_2 emissions by 2050.

Table 3. Assumptions about climate policy explored in this study and their mapping with IPCC AR6 scenarios

Climate policy assumption	IPCC AR6 scenario category	Global mean temperature change in 2100 with 50% probability (°C)[a]	Likelihood of peak temperature change staying below (%)[b]		
			<1.5°C	<2.0°C	<3.0°C
Defined Policies	C6 [limit warming to 3°C (with >50% probability)]	2.7 [2.4-2.9]	0 [0-0]	8 [2-18]	71 [53-88]
Commitments	C3 [limit warming to 2°C (with >67% probability)]	1.6 [1.5–1.8]	20 [13–41]	76 [68–91]	99 [98–100]
Net Zero 2050	C1b [limit warming to 1.5°C (with greater than 50% probability) with no or limited overshoot] with net-zero CO_2 but not net-zero GHGs before 2100	1.4 [1.3-1.5]	37 [33-56]	89 [87-96]	100 [99-100]

[a] Projected temperature change of scenarios in each category (50% probability across the range of climate uncertainties) in 2100, relative to 1850–1900, for the median value across the scenarios and the 5th–95th percentile interval in square brackets.
[b] Median likelihood that the scenarios in each category stay below a given global warming level, with the 5th–95th percentile interval in square brackets.

Under assumptions about the availability of the full portfolio of technologies, levels of CCS deployment in GCAM are higher than in comparable scenarios in the existing literature and current deployment levels. According to the Global CCS Institute, a total of 0.416 $GtCO_2$/yr of CCS projects are in operation or various stages of development.[31] GCAM's deployment of CCS under assumptions about the availability of the full portfolio of technologies is in large part driven by several model and scenario assumptions. First, GCAM includes representation of an expanded set of CCS applications in the power generation, hydrogen production, refining, and industrial and manufacturing sectors.[32,33,34,35] Second, all three climate policy assumptions include representations of provisions in the Inflation Reduction Act that incentivize CCS deployment in the U.S. (e.g. the 45Q tax credit). In addition, the *Commitments* and *Net Zero* climate policy assumptions include a reduction in economy-wide GHG emissions in the U.S. by 51% in 2030 and 100% by 2050 relative to 2005, that resolved for further deployment of CCS in the U.S. in those scenarios without any limits on technology deployment. Finally, emissions policies outside

[31] https://www.globalccsinstitute.com/wp-content/uploads/2024/11/Global-Status-Report-6-November.pdf
[32] Durga, S., Speizer, S. and Edmonds, J., 2024. The role of the iron and steel sector in achieving net zero US CO2 emissions by 2050. *Energy and Climate Change*, *5*, p.100152.
[33] Muratori, M., Kheshgi, H., Mignone, B., Clarke, L., McJeon, H. and Edmonds, J., 2017. Carbon capture and storage across fuels and sectors in energy system transformation pathways. *International Journal of Greenhouse Gas Control*, *57*, pp.34-41.
[34] Binsted, M., Lochner, E., Edmonds, J., Benitez, J., Bistline, J., Browning, M., De La Chesnaye, F., Fuhrman, J., Göke, L., Iyer, G. and Kennedy, K., 2024. Carbon management technology pathways for reaching a US Economy-Wide net-Zero emissions goal. *Energy and Climate Change*, *5*, p.100154.
[35] Charles, M., Narayan, K.B., Edmonds, J. and Yu, S., 2024. The role of the pulp and paper industry in achieving net zero US CO2 emissions in 2050. *Energy and Climate Change*, *5*, p.100160.

of the U.S. are modeled consistent with previous published studies by imposing regional caps on CO_2 emissions, with the caps reflecting emissions impacts of current policies.[36,37] The emission caps incentivize deployment of CCS outside of the U.S. because the model is selecting for lower cost reduction strategies to meet those caps.

To provide a more comprehensive perspective on the potential global demand for U.S. LNG and its emissions implications, we developed two assumptions about technology availability. The *High CCS* assumption includes all default technology assumptions in GCAM. This includes "Moderate Scenario" assumptions from NREL's ATB for costs of wind, solar, and grid battery technologies, and the NREL ATB "Moderate Scenario" assumptions for costs of CCS technologies in the power sector. The *High CCS* assumptions also include default assumptions about CCS and carbon management alternatives in industrial applications. The full suite of technology assumptions in GCAM is available in the online documentation.[38] Bioenergy is constrained to 200 exajoules (EJ) per year globally to limit unintended consequences of bioenergy expansion for food prices and ecosystems.[39]

By contrast, the *Moderate CCS (Mod CCS)* assumption includes accelerated reductions in costs of wind, solar, and grid battery technologies consistent with the NREL ATB "Advanced Scenario". It also assumes higher costs for CCS in the power sector consistent with the NREL ATB "Conservative Scenario." In addition, total CO_2 captured and stored from the energy system is capped, reaching 8.7 $GtCO_2$ per year globally by 2050, consistent with average deployment of CCS levels in scenarios assessed in the IPCC AR6 that limit global warming to 1.5°C (with >50% probability) by 2100 with no or limited overshoot. The *Moderate CCS* state also assumes a more stringent limit on bioenergy deployment and is assumed to be capped globally at 100 EJ per year.

We consider three assumptions about U.S. LNG export levels. The *Model Resolved (MR)* assumption uses GCAM to identify economically driven levels for U.S. LNG exports. The *Existing/FID Exports* assumption limits U.S. LNG exports to a maximum of 23.7 billion cubic feet per day (Bcf/day), which is calculated based on 90 percent utilization of existing U.S. non-FTA export capacity and the capacity of export facilities that reached final investment decision (FID) as of December 2023.[40] The *High Exports* assumption lowers the costs for U.S. LNG exports such that they reach 5 Bcf/d above *MR* levels in 2035, 10 Bcf/d above *MR* levels in 2040, 15 Bcf/d above *MR* levels in 2045, and 20 Bcf/d above *MR* levels in 2050.

Note that under all of the above assumptions about U.S. LNG export levels, global natural gas consumption is resolved endogenously (i.e., within the model). To explore the emissions implications of additional U.S. LNG exports, climate policy under scenarios with *Existing/FID Exports* and *High Exports* assumptions is modeled as a price on GHG emissions that is based on the price that would be necessary to achieve the emissions level in the corresponding scenarios with *Model Resolved* U.S. LNG export levels. For example, climate policy under the *Net Zero 2050 (High CCS): Model Resolved* scenario is modeled using regional emission caps according

[36] Ou, Y., Iyer, G., Clarke, L., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J.R., Binsted, M., Cui, R., Fyson, C. and Geiges, A., 2021. Can updated climate pledges limit warming well below 2° C?. Science, 374(6568), pp.693-695.

[37] Iyer, G., Ou, Y., Edmonds, J., Fawcett, A.A., Hultman, N., McFarland, J., Fuhrman, J., Waldhoff, S. and McJeon, H., 2022. Ratcheting of climate pledges needed to limit peak global warming. Nature Climate Change, 12(12), pp.1129-1135.

[38] Joint Global Change Research Institute (2023). GCAM Documentation (Version 7): Table of Contents. [Computer software]. Available at https://jgcri.github.io/gcam-doc/toc.html

[39] Muratori, M., Calvin, K., Wise, M., Kyle, P. and Edmonds, J., 2016. Global economic consequences of deploying bioenergy with carbon capture and storage (BECCS). *Environmental Research Letters*, *11*(9), p.095004.

[40] See footnote 4 in the Executive Summary of this Appendix.

to the *Net Zero 2050* assumptions described earlier. To model climate policy in the *Net Zero 2050 (High CCS): Existing/FID Exports* scenario, we derive effective regional emissions prices from the *Net Zero 2050 (High CCS): Model Resolved* scenario. Regional emissions levels are thus allowed to respond to changes in U.S. LNG export levels in the two scenarios.

A combination of above assumptions about climate policy, technology availability, and U.S. LNG export levels results in a broad range of scenarios. Their names and abbreviations are provided in Table 1.

While GCAM's energy system is calibrated through 2015 to historical data from IEA, his study includes updates to key parameters to calibrate LNG infrastructure assumptions, policies, and other assumptions and outcomes of the model to recent historical trends and data. These updates, some of which have been previously discussed, include:

- All study scenarios include provisions under the IRA and BIL in the U.S. and representation of current emission policies in the rest of the world.
- All study scenarios include EPA's recently finalized power plant rules for new gas-fired and existing coal-fired power plants.[41]
- All study scenarios include planned and existing LNG capacity additions in major economies including the United States, the Middle East, Australia, Canada, Southeast Asia, and Africa.
- The scenarios also include constraints on Russian exports to better align with recent trends and impacts of sanctions. In all of the study scenarios, Russian pipeline exports to the European Union (EU) decline to a level below 2020 levels by 2025, increase slightly through 2035 and remain flat thereafter. In addition, LNG exports from Russia decline beyond 2025, and Russian pipeline exports to the east (e.g., to China) continue to increase or increase and then plateau.
- The study's socioeconomic (population and economic growth) assumptions for the United States are harmonized to the EIA's Annual Energy Outlook (AEO) 2023 Reference Scenario.
- Costs of electricity generation technologies are based on the 2023 NREL ATB Moderate Scenario unless explicitly noted otherwise. Transportation sector technology costs are based on ANL's Autonomie database.
- Historical natural gas producer prices are calibrated with up-to-date data (see Table A-1 in Appendix A-1).

In addition to assumptions described above, the study scenarios also include assumptions about the minimum deployment of H_2 consistent with DOE goals.[42] All scenarios with *Defined Policies* assumptions include a floor on "clean" H_2 (defined as H_2 produced from renewables, nuclear, or CCS) of 10 million metric tonnes (MMT) annually by 2050. All scenarios with *Commitments* and *Net Zero 2050* assumptions include a floor on clean H_2 of 50 MMT by 2050.

Further, the study scenarios include availability of three types of carbon dioxide removal (CDR): bioenergy in combination with CCS (BECCS), direct air capture (DAC), and afforestation. In scenarios with *Commitments* and *Net Zero 2050* assumptions, the deployment of CDR in the U.S.

[41] U.S. Environmental Protection Agency, "New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule" (2024); https://www.epa.gov/stationary-sources-air-pollution/greenhouse-gas-standards-and-guidelines-fossil-fuel-fired-power.

[42] DOE National Clean Hydrogen Strategy and Roadmap. Available at: https://www.hydrogen.energy.gov/docs/hydrogenprogramlibraries/pdfs/us-national-clean-hydrogen-strategy-roadmap.pdf?sfvrsn=c425b44f_5

ranges from 1.1 $GtCO_2$ per year to 1.5 $GtCO_2$ per year in 2050 consistent with the DOE-FECM strategic vision and CDR Primer.[43,44] CDR deployments in the rest of the world are assumed be proportional to GDP and range from 4.5 $GtCO_2$ per year to 7.9 $GtCO_2$ per year in 2050 across scenarios with *Commitments* and *Net Zero 2050* assumptions.

Finally, all scenarios with *Commitments* and *Net Zero 2050* climate policy assumptions include an interpretation of EPA's Waste Emissions Charge (methane fee)[45] and assumptions about stringent non-CO_2 emissions reduction in the U.S. consistent with global commitments.[46]

RESULTS

A. Global market demand for U.S. LNG exports

The scale and fuel composition of global primary energy consumption varies across scenarios depending technology deployment across sectors in each scenario, which in turn depend on the underlying assumptions about climate policy and technology availability. Across scenarios with *Model Resolved* U.S. LNG export levels, global primary energy consumption ranges from 623 exajoules (EJ) to 841 EJ by 2050 (Figure 1). Global primary energy consumption in 2050 is highest in the *Defined Policies: Model Resolved* scenario, reaching levels 35% higher than the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario which has the lowest primary energy consumption.

Global consumption of natural gas is highest in the *Defined Policies: Model Resolved* scenario and makes up 23% of total global energy in 2050. Under the *Commitments* and *Net Zero 2050* climate policy assumptions, global consumption of natural gas is lower as a share of total global energy consumption and in absolute terms, as discussed below. Additionally, in scenarios with *Commitments* and *Net Zero 2050* climate policy assumptions, global natural gas consumption is lower for scenarios with *Moderate CCS* technology availability assumptions than scenarios with *High CCS* technology availability assumptions. For example, global natural gas consumption in the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario is less than half of that in the *Net Zero 2050 (High CCS): Model Resolved* scenario in 2050 and is 8 percentage points lower in terms of share of global total primary energy consumption.

[43] FECM. (2022). Strategic Vision: The Role of Fossil Energy and Carbon Management in Achieving Net-Zero Greenhouse Gas Emissions. Available at: https://www.energy.gov/sites/default/files/2022-04/2022-Strategic-Vision-The-Role-of-Fossil-Energy-and-Carbon-Management-in-Achieving-Net-Zero-Greenhouse-Gas-Emissions_Updated-4.28.22.pdf
[44] Carbon Dioxide Removal Primer, https://cdrprimer.org/
[45] EPA. Inflation Reduction Act: Waste Emissions Charge. Available at: https://www.epa.gov/inflation-reduction-act/waste-emissions-charge
[46] UN Climate Press Release. (December 13, 2023). COP28 Agreement Signals "Beginning of the End" of the Fossil Fuel Era. Available at: https://unfccc.int/news/cop28-agreement-signals-beginning-of-the-end-of-the-fossil-fuel-era

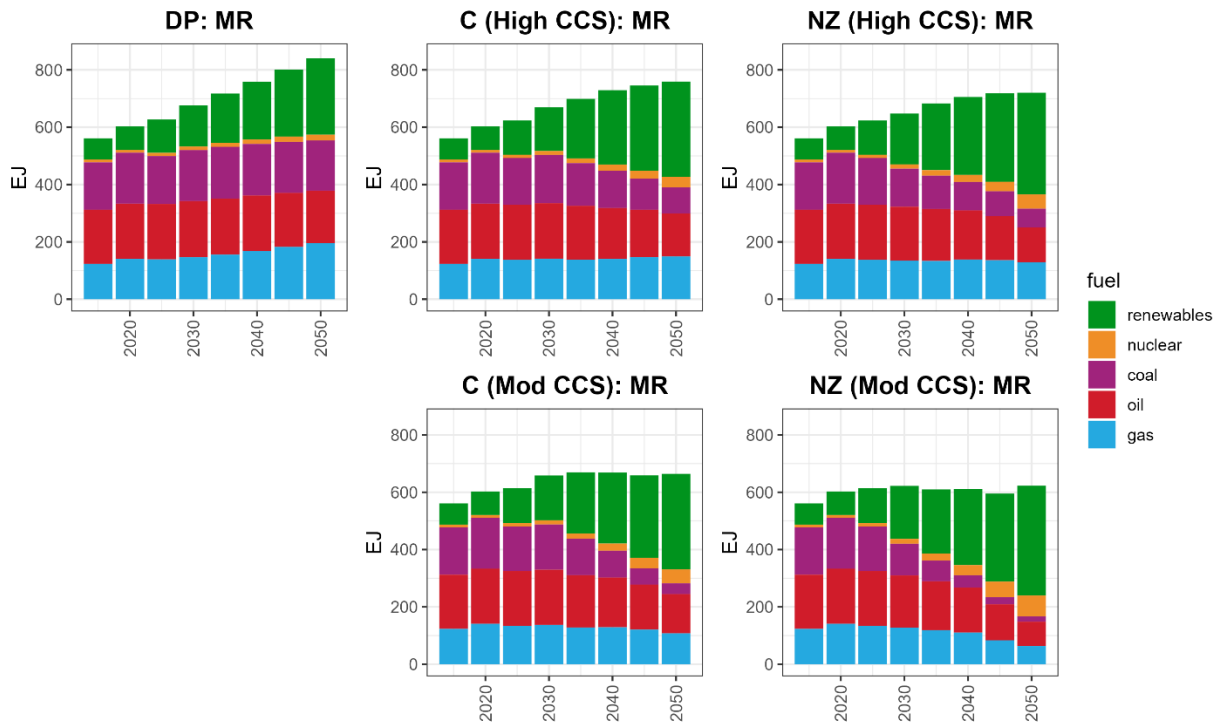

Figure 1. Global primary energy consumption (exajoules, EJ) across scenarios with Model Resolved U.S. LNG export levels.

DP: MR = Defined Policies: Model Resolved; C (High CCS): MR = Commitments (High CCS): Model Resolved; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved. Renewables include wind, solar, biomass, hydro, and geothermal.

Global natural gas consumption ranges between 175 billion cubic feet per day (Bcf/d) and 543 Bcf/d in 2050 across scenarios with *Model Resolved* U.S. LNG export level assumptions (Figure 2**,** Figure 3**,** Table 4**).** In the *Defined Policies: Model Resolved* scenario, natural gas consumption in 2050 is 35% higher than 2022 levels.[47] In the *Commitments (High CCS): Model Resolved* scenario, natural gas consumption in 2050 remains at roughly 2022 levels. However, in the *Net Zero (High CCS): Model Resolved* scenario, natural gas consumption in 2050 is 26% lower than 2022 levels. Under *Moderate CCS* technology assumptions, natural gas consumption in 2050 is lower than under *High CCS* assumptions, driven by assumptions that limit the amount of carbon that is captured and stored and other assumptions (e.g., accelerated reductions in costs of renewable technologies) that drive deployment of renewables. For example, in the *Commitments (Moderate CCS): Model Resolved* and *Net Zero (Moderate CCS): Model Resolved* scenarios, natural gas consumption in 2050 is 11% and 57% lower than 2022 levels, respectively. CCS-enabled technologies comprise 42% and 61% of total natural gas consumption in 2050 in the *Commitments (High CCS): Model Resolved* and *Net Zero 2050 (High CCS): Model Resolved* scenarios, respectively. By contrast, the *Moderate CCS* technology assumptions result in smaller shares of gas CCS in the mix (13% and 49% of total natural gas consumption in 2050 respectively in the *Commitments (Moderate CCS): Model Resolved* and *Net Zero 2050 (Moderate CCS): Model Resolved* scenarios; Figure 2). Nevertheless, unabated gas continues to persist even in the scenarios with *Moderate CCS* technology assumptions, particularly in the industrial sector

[47] Global natural gas consumption was 145 EJ in 2022; from IEA (2023), World Energy Outlook 2023, IEA, Paris https://www.iea.org/reports/world-energy-outlook-2023

(Figure 2). This use of unabated gas is consistent with *Commitments* and *Net Zero 2050* climate policy assumptions due to the availability of CDR technologies.

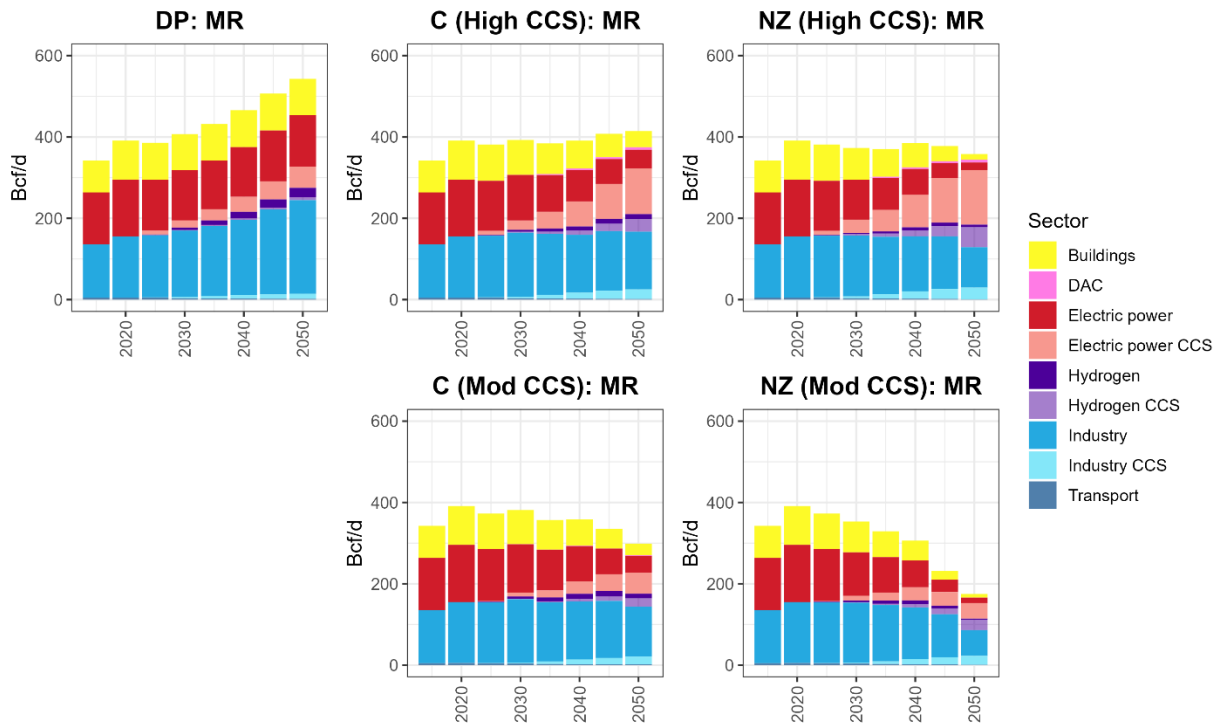

Figure 2. Global natural gas consumption by sector (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels.

DP: MR = Defined Policies: Model Resolved; C (High CCS): MR = Commitments (High CCS): Model Resolved; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved. DAC refers to direct air capture. Note that 1 Bcf/d = 0.36 EJ/y.

Table 4. Global natural gas consumption (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels

Scenario	2030	2035	2040	2045	2050
Defined Policies: Model Resolved	407	432	466	507	543
Commitments (High CCS): Model Resolved	393	384	391	408	414
Net Zero 2050 (High CCS): Model Resolved	373	370	385	378	358
Commitments (Moderate CCS): Model Resolved	381	357	358	335	299
Net Zero 2050 (Moderate CCS): Model Resolved	353	329	306	232	175

There are a broad range of views on natural gas consumption across analyses that are driven by differences in model structures and level of technological and sectoral detail. Additional differences include assumptions about technology availability (e.g., CCS and CDR), socioeconomic growth, policy instruments assumed in the modeling of climate policy, and resource availability, among others. In our modeling, the *Net Zero 2050 (Moderate CCS): Model*

Resolved scenario assumes global climate policies consistent with less than 1.5°C warming by the end of this century, limited deployment of CCS technologies and high deployment of renewable technologies and results in the lowest global natural gas consumption and U.S. LNG export levels. Even lower levels of global natural gas consumption and U.S. LNG exports (e.g., lower than currently operational levels) might be possible under assumptions of more stringent CO_2 and non-CO_2 emission reduction polices, lower deployment of CCS technologies than *Moderate CCS* assumptions, slower population and GDP growth, increased adoption of energy efficiency measures and behavioral changes (e.g., reduced demand for floorspace and transportation services), technological breakthroughs in competing technologies (e.g., geologic hydrogen, fusion, thermal energy storage, etc.), more industrial decarbonization options, and more rapid fuel switching in the industrial sector. A detailed uncertainty analysis that considers various combinations of model structures and assumptions is beyond the scope of this study.

In the *Defined Policies: Model Resolved* scenario, LNG exports make up a growing share of global natural gas consumption in the coming decades, reaching 30% of global natural gas consumption by 2050 (Figure 3). U.S. LNG exports also make up a growing share, from 3% of global natural gas consumption (28% of global LNG exports) in 2022[48] to 10% of global natural gas consumption (35% of global LNG exports) in 2050. U.S. LNG exports reach shares of 8% and 9% of global natural gas consumption by 2050 in the *Commitments (High CCS): Model Resolved* and *Commitments (Moderate CCS): Model Resolved* scenarios, respectively. U.S. LNG exports reach shares of 8% and 10% in the *Net Zero 2050 (High CCS): Model Resolved* and *Net Zero 2050 (Moderate CCS): Model Resolved* scenarios, respectively. Note that these results are influenced, in most part, by the shape of the supply curve for U.S. natural gas relative to other countries. A subsequent section titled “Additional sensitivity analyses” below explores the implications of alternative assumptions about natural gas supply curves for the U.S. and a key competing natural gas producing region, namely, the Middle East.

[48] Global LNG exports were 479 bcm (46.3 Bcf/d) in 2022; from IEA (2023), World Energy Outlook 2023, IEA, Paris https://www.iea.org/reports/world-energy-outlook-2023

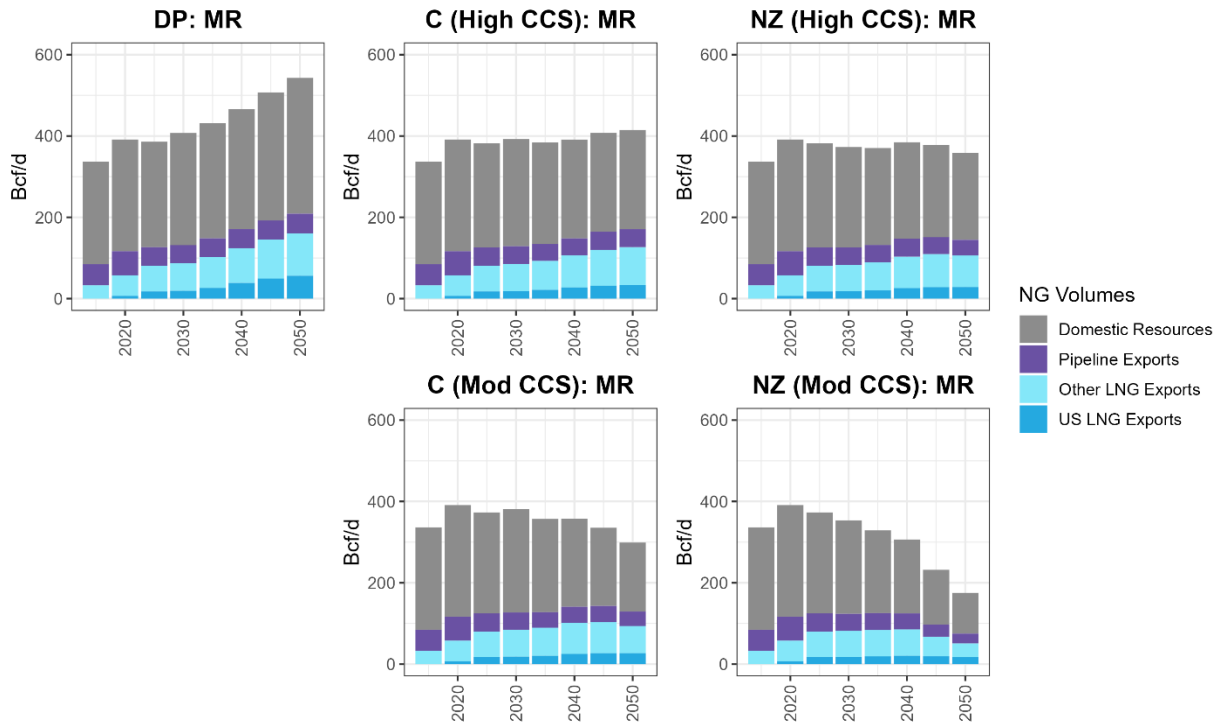

Figure 3. Global natural gas consumption (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels.

DP: MR = Defined Policies: Model Resolved; C (High CCS): MR = Commitments (High CCS): Model Resolved; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved. Note that 1 Bcf/d= 0.36 EJ/y. U.S. LNG exports grow from approximately 12.9 Bcf/d currently (calculated as 90% of capacity operating in December 2023) to 17.2-56.3 Bcf/d in 2050 across scenarios with Model Resolved U.S. LNG export levels (Figure 4**,** Table 5**).** In the Defined Policies: Model Resolved scenario, U.S. LNG exports exceed currently approved export levels (43.6 Bcf/d)[49] by 2045, reaching 56.3 Bcf/d in 2050. In the Commitments (High CCS): Model Resolved, Commitments (Moderate CCS): Model Resolved, and Net Zero 2050 (High CCS): Model Resolved scenarios, U.S. LNG export levels exceed 2023 existing/FID export levels (23.7 Bcf/d)[50] by 2040, reaching 33.1 Bcf/d, 28.5 Bcf/d, and 26.8 Bcf/d, respectively, in 2050. These levels are all lower than currently approved export levels (43.6 Bcf/d). By contrast, in the Net Zero 2050 (Moderate CCS): Model Resolved scenario, U.S. LNG exports reach 17.2 Bcf/d in 2050, which exceeds current operational levels of exports (12.9 Bcf/d)[51] by 2025 but does not exceed 2023 existing/FID export levels or approved export levels.

[49] Current approved levels of LNG exports in the U.S. are approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states to non-Free Trade Agreement (non-FTA) countries as of December 2023.

[50] Existing/FID exports refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that have reached final investment decisions (FID) on their projects, as of December 2023. See https://www.energy.gov/sites/default/files/2024-01/LNG%20Snapshot%20Dec%2031%2023u.pdf

[51] Existing exports are approximately 12.9 Bcf/d, assuming 90% utilization of 2023 U.S. LNG export capacity.

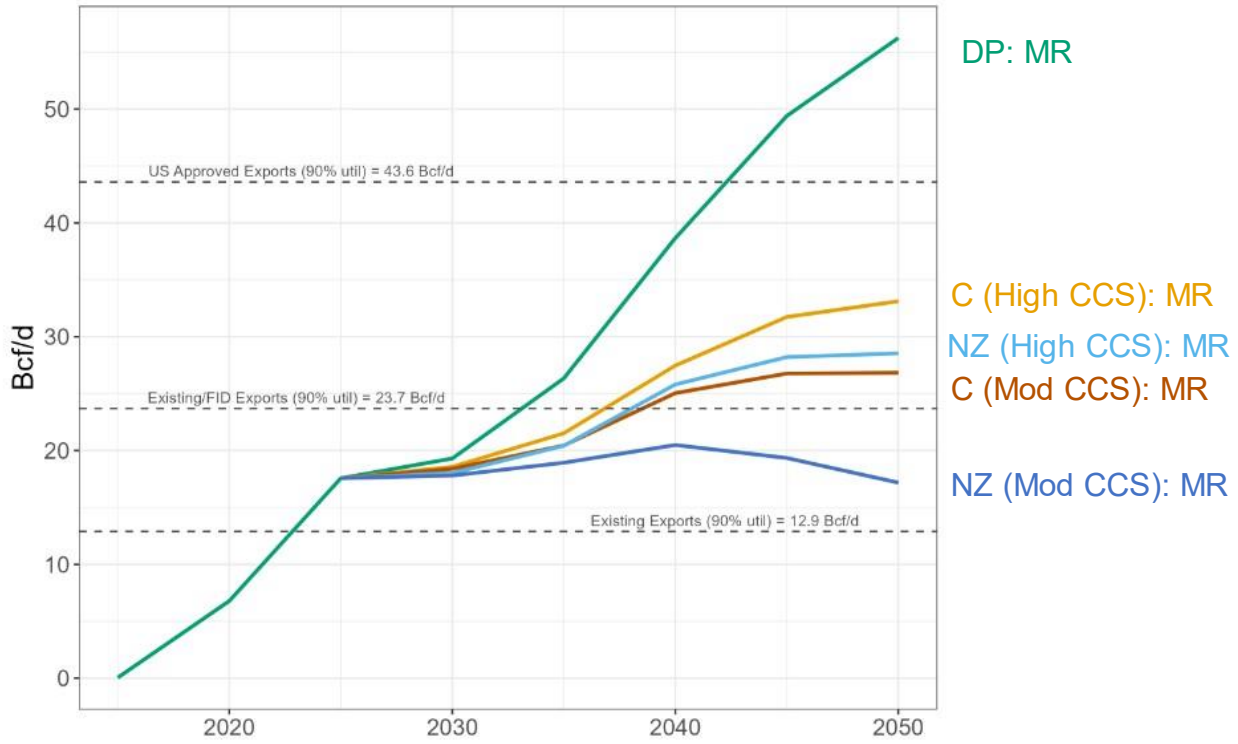

Figure 4. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels.

DP: MR = Defined Policies: Model Resolved; C (High CCS): MR = Commitments (High CCS): Model Resolved; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved. Existing exports are approximately 12.9 Bcf/d, assuming 90% utilization of 2023 U.S. LNG export capacity. Existing/FID exports are 23.7 Bcf/d and refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that have reached final investment decisions (FID) on their projects, as of December 2023. Current approved levels of LNG exports in the U.S. are approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states to non-FTA countries as of December 2023. Note that the figure shows modeled U.S. LNG export volumes under various assumptions of climate policy and technology availability without regard to the volume of exports approved by DOE. However, this report recognizes that 23.7 Bcf/d is the level of exports eventually expected from the amount of U.S. LNG export capacity currently operating or under construction pursuant to a final investment decision as of December 2023. Note that 1 Bcf/d= 0.36 EJ/y.

Table 5. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels

Scenario	2030	2035	2040	2045	2050
Defined Policies: Model Resolved	19.3	26.3	38.7	49.4	56.3
Commitments (High CCS): Model Resolved	18.6	21.5	27.5	31.7	33.1
Net Zero 2050 (High CCS): Model Resolved	18.4	20.4	25.0	26.8	26.8
Commitments (Moderate CCS): Model Resolved	18.0	20.4	25.8	28.2	28.5
Net Zero 2050 (Moderate CCS): Model Resolved	17.8	18.9	20.5	19.3	17.2

B. Global energy system and GHG emissions impacts of increased U.S. LNG exports

This section analyzes the energy system changes and GHG emissions impacts of increasing U.S. LNG exports beyond existing/FID export levels.

The first set of comparisons focuses on the energy system and emissions changes between *Model Resolved* and *Existing/FID Exports* scenarios. Except for the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario, all other scenarios with *Model Resolved* assumptions have U.S. LNG exports exceeding existing/FID export levels. Therefore, this set of comparisons omits the *Net Zero 2050 (Moderate CCS): Model Resolved* scenario.

The second set of comparisons examine the effect of higher levels of U.S. LNG exports beyond *Model Resolved* levels, focusing on the energy system and emissions changes between scenarios with *High Exports* and *Model Resolved* U.S. LNG export levels. The incremental increase in U.S. LNG exports in each year from 2030 to 2050 is the same in each scenario with *High Export* assumptions relative to its *Model Resolved* counterpart by design. This enables a comparison of how the same incremental increase in U.S. LNG exports might affect the energy system and emissions under different assumptions about climate policy and technology availability.

In all, the analysis design allows for different emissions outcomes based on the energy system changes resulting from changes in the availability of U.S. LNG. By using a price-based representation of climate policies, as described earlier, we are able to explore emissions outcomes while holding assumptions about climate policy constant. This means, for example, that while all scenarios with *Net Zero 2050* assumptions have an equivalent stringency of climate policy, they do not all result in the same cumulative emissions in 2050.

1. Comparison of model-resolved exports with 2023 existing/FID export levels

Figure 5**,** Figure 6**,** Figure 7**,** and Figure 8 illustrate the cumulative (2020 to 2050) energy system changes under scenarios with *Model Resolved* U.S. LNG export levels relative to those with *Existing/FID Exports*. While these figures focus on changes in the energy system and fuel substitution outside of the U.S., changes in energy system and fuel substitution within the U.S. in the *Defined Policies: Model Resolved* scenario relative to the *Defined Policies: Existing/FID Exports* scenario are discussed in the appendix on U.S. domestic analysis.

The higher U.S. LNG exports in scenarios with *Model Resolved* exports relative to those with *Existing/FID Exports* result in a combination of displacement effects. First, the higher U.S. LNG exports under scenarios with *Model Resolved* exports lead to a displacement of rest-of-world (ROW) natural gas production (resulting in gas-to-gas substitution) and also an increase in ROW natural gas consumption. In turn, this increased ROW gas consumption displaces other fuel consumption in ROW and also leads to a net increase in total energy consumption. Substitutions away from unabated fossil sources other than natural gas (e.g., coal, oil) to natural gas (i.e., unabated fossil-to-gas substitution) result in decreases in global GHG emissions. Meanwhile, substitutions away from renewables, nuclear, or fossil with CCS sources into natural gas (i.e., zero-/low-carbon-to-gas substitution) result in increases in global GHG emissions. Net increases in energy consumption could also result in increases in global GHG emissions because part of the increased energy demand could be supplied by emitting technologies. The combination of all of the above effects determines the overall emissions impact of additional U.S. LNG exports under each scenario with *Model Resolved* assumptions, relative to its *Existing/FID Exports* counterpart.

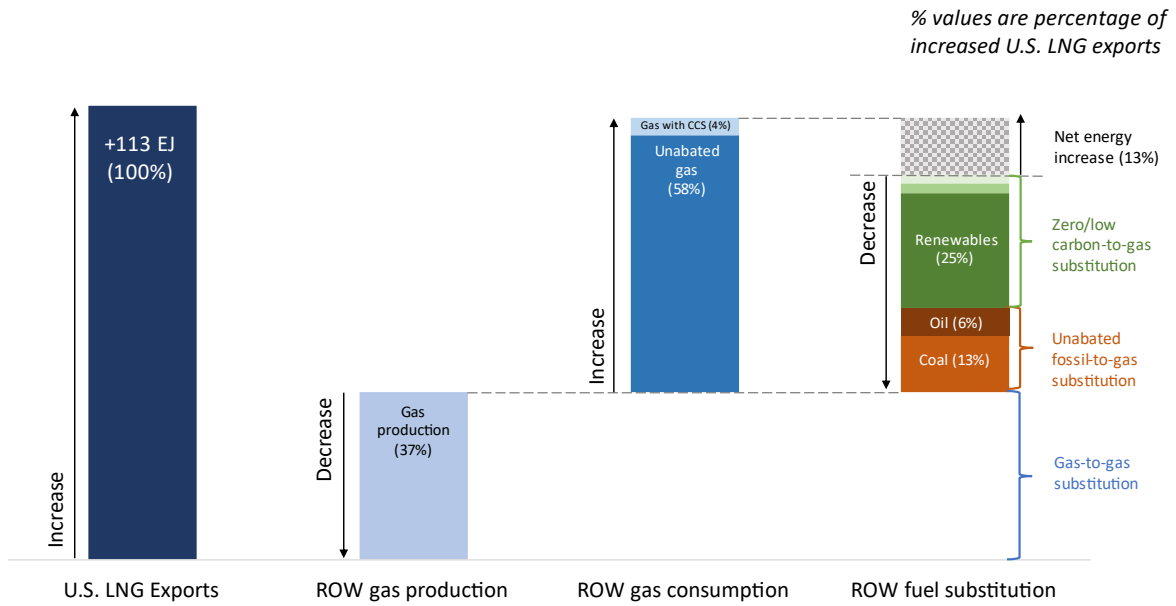

Figure 5. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Defined Policies: Model Resolved scenario relative to the Defined Policies: Existing/FID Exports scenario.

Note that this figure focuses on changes in the energy system and fuel substitution outside of the U.S. Changes in U.S. energy system and fuel substitution are discussed in the appendix on U.S. domestic analysis. Zero/low carbon-to-gas substitutions include displacements of renewables (dark green), nuclear (medium green), and other fossil CCS (light green). Unabated fossil-to-gas substitutions include displacements of coal (orange) and oil (brown).

In the *Defined Policies: Model Resolved* scenario, cumulative U.S. LNG exports (2020-2050) increase by 113 EJ relative to the *Defined Policies: Existing/FID Exports* scenario (Figure 5). Thirty-seven percent of this increase displaces natural gas production in ROW, while 58% is additional unabated gas consumption and 4% is additional gas with CCS consumption. This additional gas consumption in ROW displaces renewables (25% of the increase in U.S. LNG exports), nuclear (2%), other fossil CCS (2%), unabated oil (6%), unabated coal (13%), and leads to an increase in total energy consumption in ROW, representing 13% of the increase in U.S. LNG exports.

Commitments (High CCS): Model Resolved– Existing/FID Exports
Cumulative Changes (2020– 2050)

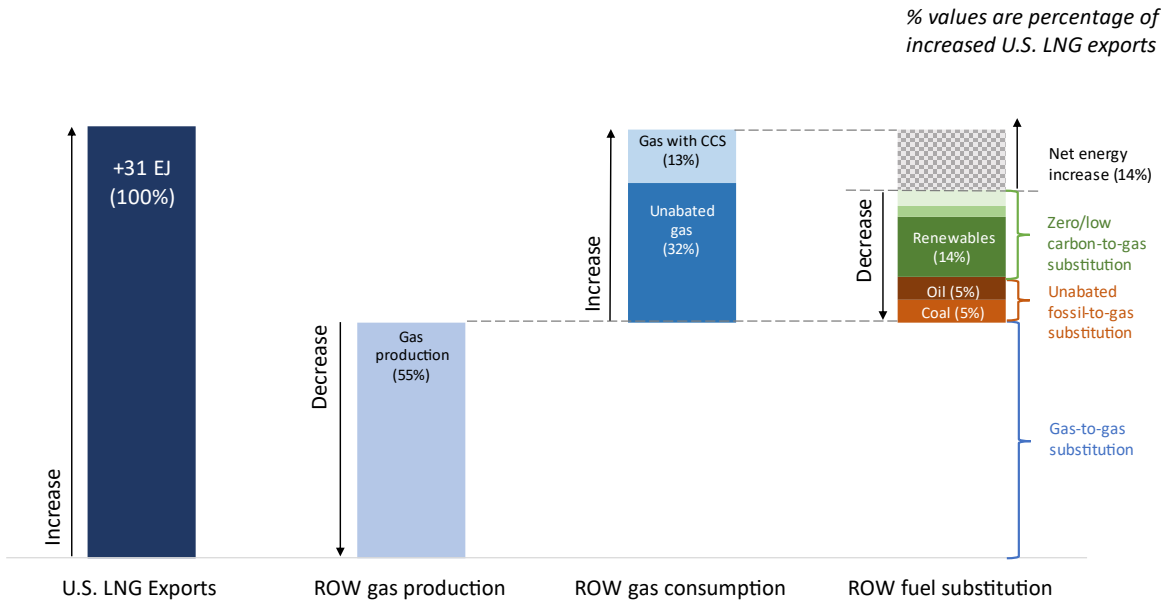

Figure 6. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Commitments (High CCS): Model Resolved scenario relative to the Commitments (High CCS): Existing/FID Exports scenario.

Zero/low carbon-to-gas substitutions include displacements of renewables (dark green), nuclear (medium green), and other fossil CCS (light green). Unabated fossil-to-gas substitutions include displacements of coal (orange) and oil (brown).

Commitments (Moderate CCS): Model Resolved– Existing/FID Exports
Cumulative Changes (2020 – 2050)

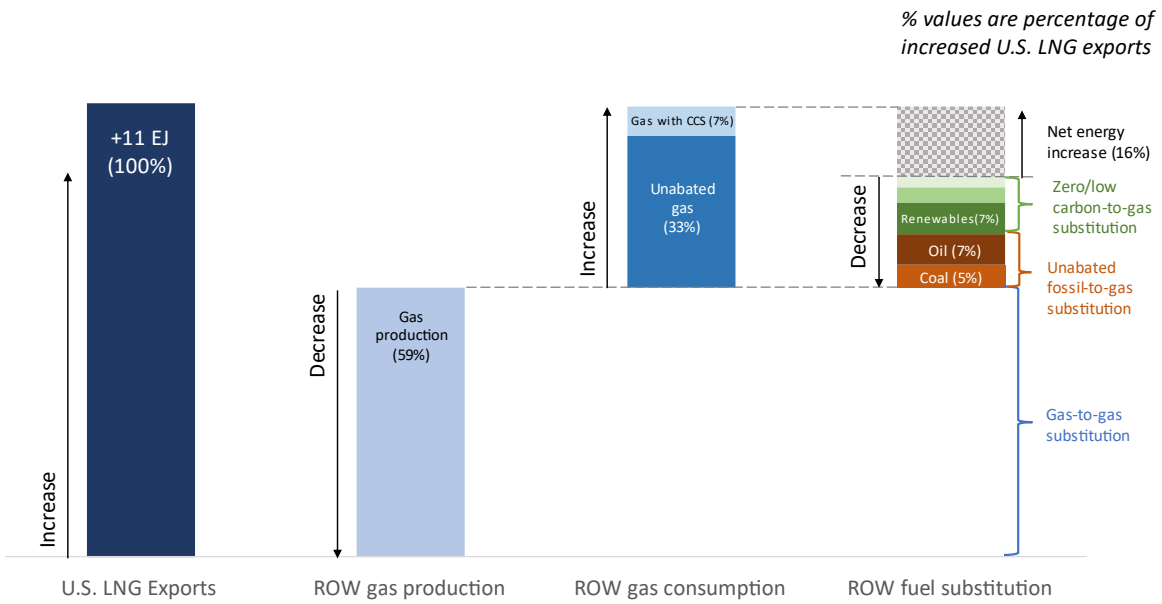

Figure 7. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Commitments (Moderate CCS): Model Resolved scenario relative to the Commitments (Moderate CCS): Existing/FID Exports scenario.

Zero/low carbon-to-gas substitutions include displacements of renewables (dark green), nuclear (medium green), and other fossil CCS (light green). Unabated fossil-to-gas substitutions include displacements of coal (orange) and oil (brown).

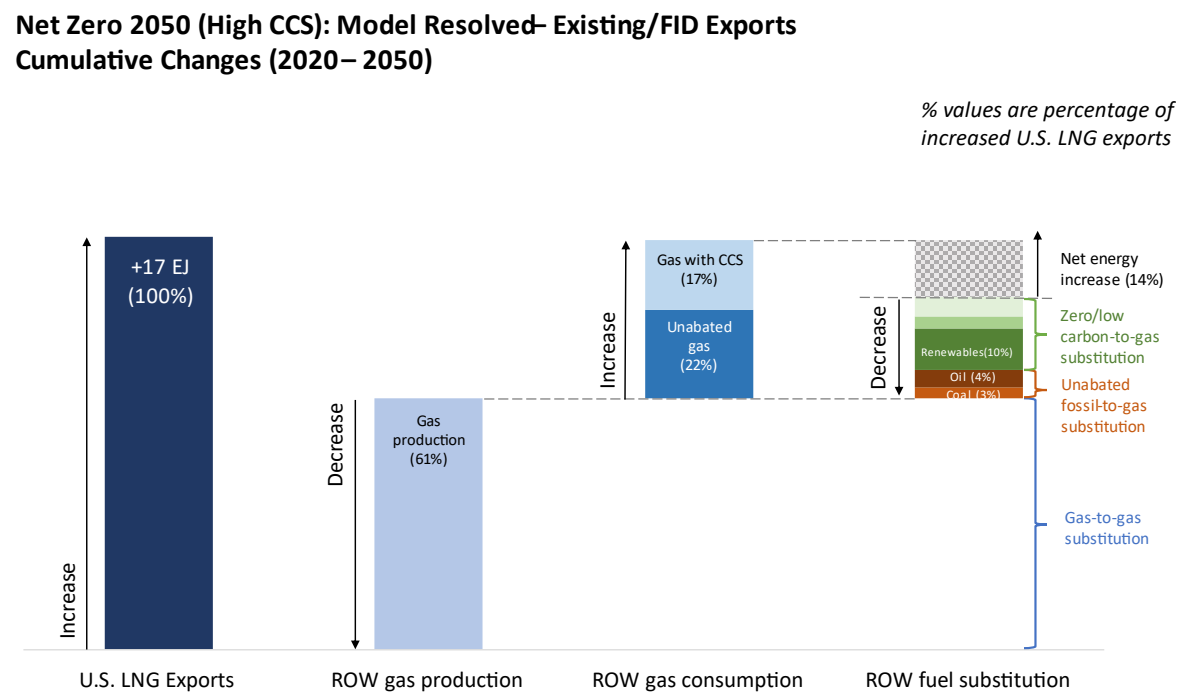

Figure 8. Cumulative changes (2020-2050) in the energy system due to increased U.S. LNG exports in the Net Zero 2050 (High CCS): Model Resolved scenario relative to the Net Zero 2050 (High CCS): Existing/FID Exports scenario.

Zero/low carbon-to-gas substitutions include displacements of renewables (dark green), nuclear (medium green), and other fossil CCS (light green). Fossil-to-gas substitutions include displacements of coal (orange) and oil (brown).

In scenarios with *Commitments* and *Net Zero 2050* climate policy assumptions, increases in U.S. LNG exports with *Model Resolved* U.S. LNG export levels relative to *Existing/FID Exports* are lower than scenarios with the *Defined Policies* climate policy assumption. In the *Commitments (High CCS): Model Resolved, Commitments (Moderate CCS): Model Resolved, and Net Zero 2050 (High CCS): Model Resolved* scenarios, cumulative U.S. LNG exports (2020-2050) increase by 31 EJ, 11 EJ and 17 EJ, respectively, relative to their *Existing/FID Exports* counterparts (Figures 6-8). Nevertheless, the level of displacement of ROW natural gas production observed in these scenarios is higher than that observed in scenarios with *Defined Policies* climate policy assumptions — 55-61% of the increase in U.S. LNG exports in these scenarios displaces natural gas production in ROW. Additionally, the increase in additional ROW natural gas consumption is lower than under *Defined Policies* assumptions.

The split between additional unabated gas versus additional gas with CCS in scenarios with *Model Resolved* U.S. LNG exports relative to scenarios with *Existing/FID Exports* varies with assumptions about climate policy and availability of CCS. For example, in the *Commitments (High CCS): Model Resolved* scenario relative to *Commitments (High CCS): Existing/FID Exports,* the split between additional unabated gas and additional gas with CCS is 32% and 13%, respectively, of the increase in U.S. LNG exports. In the *Commitments (Moderate CCS): Model Resolved* scenario relative *to Commitments (Moderate CCS): Existing/FID Exports,* the split between additional unabated gas and additional gas with CCS is 33% and 7%, respectively, of the increase in U.S. LNG exports. Under the *Net Zero 2050 (High CCS): Market Resolved* scenario relative to *Net Zero 2050 (High CCS): Existing/FID Exports*, the split between additional unabated gas and additional gas with CCS is respectively, 22% and 17% of the increase in U.S. LNG exports. The

different climate policy and technology assumptions also result in varying levels of zero- and low-carbon resources-to-gas substitution and unabated fossil-to-gas substitution.

The resulting changes in cumulative global GHG emissions (2020-2050) are shown in Table 6. Global cumulative GHG emissions under each of the scenarios with *Model Resolved* assumptions are higher than their *Existing/FID Exports* counterparts. Under the *Defined Policies: Model Resolved* scenario relative to *Defined Policies: Existing/FID Exports*, LNG exports in 2050 are assumed to increase from 23.7 Bcf/d to 56.3 Bcf/d and cumulative global GHG emissions are higher by 708 $MtCO_2e$. This corresponds to a 0.05% increase in cumulative global emissions. In normalized terms (obtained by dividing cumulative emissions increase by cumulative increase in U.S. LNG exports over the same period), this emissions increase corresponds to an increase of 6.25 MtCO2e/EJ of additional U.S. LNG exports.

As climate policy stringency increases — moving from *Defined Policies* to *Commitments (High CCS)* to *Net Zero 2050 (High CCS)* — the increase in cumulative global GHG emissions is smaller: in the *Commitments (High CCS): Model Resolved* and *Net Zero 2050 (High CCS): Model Resolved* scenarios, cumulative global GHG emissions increase by 97 $MtCO_2e$ (0.008%, 3.07 $MtCO_2e$/EJ of additional U.S. LNG exports) and 21 $MtCO_2e$ (0.002%, 1.21 $MtCO_2e$/EJ of additional U.S. LNG exports), respectively, relative to their *Existing/FID Exports* counterparts. This is because, as we move from *Defined Policies: Model Resolved* to *Commitments (High CCS): Model Resolved* to *Net Zero 2050 (High CCS): Model Resolved*, the increase in U.S. LNG exports relative to their *Existing/FID Exports* counterparts is smaller, leading to a smaller increase in natural gas consumption and total energy consumption. Moreover, in scenarios with *Commitments* and *Net Zero 2050* climate policy assumptions and *High CCS* technology assumptions, a larger share of additional ROW natural gas consumption utilizes CCS compared to scenarios with *Defined Policies* assumptions, resulting in lower emissions impacts.

Table 6. Cumulative emissions impacts (including normalized emissions impacts) of increased U.S. LNG exports (Model Resolved – Existing/FID Exports), 2020 to 2050. The first column in this table lists the two scenarios between which changes in other columns are calculated. For example, "DP: MR – DP: ExFID" suggests difference in DP: MR scenario relative to DP: ExFID scenario. See the note below the table for a full list of scenario abbreviations and their corresponding full names. The second column shows the change in cumulative global fossil fuel and industrial (FFI) CO_2 emissions across the two scenarios listed in the first column. The time period for the cumulation is 2020 to 2050. The third column shows the change in cumulative global GHG emissions (including FFI CO_2, CO_2 from land-use changes, and non-CO_2 GHG emissions) over the same period (2020-2050) for the same two scenarios listed in the first column. The final column presents change in cumulative global GHG emissions (from the third column) divided by the change in cumulative U.S. LNG exports over the same period for the same two scenarios listed in the first column.

Scenario comparison *(Model Resolved – Existing/FID Exports)*[a]	**Change in Cumulative Global Fossil Fuel and Industrial CO_2 Emissions (2020-2050), $MtCO_2e$**	**Change in Cumulative Global GHG Emissions (2020-2050), $MtCO_2e$[c]**	**Normalized Change in Cumulative Global GHG Emissions (2020-2050) per Change in Cumulative U.S. LNG Exports (2020-2050), $MtCO_2e$/EJ**
DP: MR – DP: ExFID	+1315	+708	+6.25
C (Hi CCS): MR – C (Hi CCS): ExFID	+201	+97	+3.07

C (Mod CCS): MR – C (Mod CCS): ExFID	+73	+67	+5.88
NZ (Hi CCS): MR – NZ (Hi CCS): ExFID	+77	+21	+1.21
NZ (Mod CCS): MR – NZ (Mod CCS): ExFID[b]	NA	NA	NA

[a] DP: MR = Defined Policies: Model Resolved; DP: ExFID = Defined Policies: Existing/FID Exports; C (Hi CCS): MR = Commitments (High CCS): Model Resolved; C (Hi CCS): ExFID = Commitments (High CCS): Existing/FID Exports; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; C (Mod CCS): ExFID = Commitments (Moderate CCS): Existing/FID Exports; NZ (Hi CCS): MR = Net Zero 2050 (High CCS): Model Resolved; NZ (Hi CCS): ExFID = Net Zero 2050 (High CCS): Existing/FID Exports; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved; NZ (Mod CCS): ExFID = Net Zero 2050 (Moderate CCS): Existing/FID Exports.
[b] In the *NZ (Mod CCS): MR* scenario, U.S. LNG exports fall below the existing/FID exports level. Thus, a *NZ (Mod CCS): ExFID* scenario would resolve to the same outcomes as the *NZ (Mod CCS): MR* scenario and is therefore not shown.
[c] GHG emissions include CO_2 emissions from fossil fuels and industry as well as land-use changes, and non-CO_2 emissions (methane, nitrous oxide, and fluorinated gases) from energy, agricultural, and land-use systems and other processes. CO_2 emissions from fossil fuels and industry are subject to uncertainties in regional emission intensities of natural gas and other fossil fuels. Emissions from land-use changes are driven in part by changes in energy production, including those driven by changes in demand (e.g., global demand for LNG). These emissions are also subject to greater uncertainties largely due to uncertainties in data.[52,53] A detailed exploration of these uncertainties is beyond the scope of this study.

The comparison between scenarios with *Commitments* climate policy assumptions and *High CCS* technology assumptions, and scenarios with the same climate policy assumptions but *Moderate CCS* technology assumptions enables U.S. to isolate the implications of different assumptions about technology availability. In the *Commitments (Moderate CCS): Model Resolved* scenario, cumulative global GHG emissions increase by 67 $MtCO_2e$ (0.006%) relative to *Commitments (Moderate CCS): Existing/FID Exports*. This is smaller than the increase of 97 $MtCO_2e$ in the *Commitments (High CCS): Model Resolved* scenario relative to *Commitments (High CCS): Existing/FID Exports* and is driven by the fact that the *Moderate CCS* assumption results in a smaller increase in U.S. LNG exports, and therefore a smaller increase in natural gas consumption and total energy consumption. However, in comparing normalized cumulative global GHG emissions (per unit of additional U.S. LNG exports), *Moderate CCS* technology assumptions result in a higher increase in normalized emissions than *High CCS* (5.88 $MtCO_2e/EJ$ versus 3.07 $MtCO_2e/EJ$). This is because, in a world with limited CCS availability, each incremental unit of increased U.S. LNG exports is more likely to be used in unabated gas technologies, rather than in gas with CCS technologies.

2. Comparison of U.S. LNG exports beyond model-resolved levels relative to model-resolved levels

In all scenarios with *High Exports* assumptions for U.S. LNG, the additional U.S. LNG exports – up to an increase of 20 Bcf/d by 2050 – beyond model-resolved levels result in increased cumulative GHG emissions, relative to their *Model Resolved* counterparts (Table 7). In the *Defined Policies: High Exports* scenario, cumulative global fossil fuel and industrial CO_2 emissions (2020-2050) are 1,147 $MtCO_2e$ higher than in the *Defined Policies: Model Resolved* scenario. Cumulative global GHG emissions (2020-2050) are 738 $MtCO_2e$ (0.05%, 9.75 $MtCO_2e/EJ$ of

[52] Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I.T., Olsen, A., Peters, G.P. and Peters, W., 2022. Global carbon budget 2022. *Earth System Science Data*, *14*(11), pp.4811-4900.
[53] Qin, Z., Zhu, Y., Canadell, J.G., Chen, M., Li, T., Mishra, U. and Yuan, W., 2024. Global spatially explicit carbon emissions from land-use change over the past six decades (1961–2020). *One Earth*, *7*(5), pp.835-847.

additional U.S. LNG exports) higher than in the *Defined Policies: Model Resolved* scenario. As the stringency of climate policy increases— moving from *Defined Policies* to *Commitments (High CCS)* to *Net Zero 2050 (High CCS)* assumptions — there is a smaller increase in cumulative GHG emissions in scenarios with *High* Exports assumptions relative to their *Model Resolved* counterparts. This is because, as the stringency of climate policy increases, additional U.S. LNG exports result in greater increases in gas with CCS as opposed to unabated gas. This result is consistent with the comparisons of scenarios with *Model Resolved* and *Existing/FID Exports* assumptions in the previous section.

Table 7. Cumulative emissions impacts (including normalized emissions impacts) of increased U.S. LNG exports (High Exports – Model Resolved), 2020 to 2050. The first column lists the two scenarios between which changes in other columns are calculated. For example, "DP: Hi Exp - DP: MR" suggests difference in DP: Hi Exp scenario relative to DP: MR scenario. See note below table for a full list of scenario abbreviations and their corresponding full names. The second column shows the change in cumulative global fossil fuel and industrial (FFI) CO_2 Emissions across the two scenarios listed in the first column. The time period for the cumulation is 2020 to 2050. The third column shows the change in cumulative global GHG emissions (including FFI CO_2, CO_2 from land-use changes, and non-CO_2 GHG emissions) over the same period (2020-2050) for the same two scenarios listed in the first column. The final column presents change in cumulative global GHG emissions (from the third column) divided by the change in cumulative U.S. LNG exports over the same period for the same two scenarios listed in the first column.

Scenario comparison (*High Exports – Model Resolved*)[a]	**Change in Cumulative Global Fossil fuel and industrial CO_2 Emissions (2020-2050), $MtCO_2e$**	**Change in Cumulative Global GHG Emissions (2020-2050), $MtCO_2e$[b]**	**Normalized Change in Cumulative Global GHG Emissions (2020-2050) per unit Change in Cumulative U.S. LNG Exports (2020-2050), $MtCO_2e/EJ$**
DP: Hi Exp – DP: MR	+1147	+738	+9.75
C (Hi CCS): Hi Exp – C (Hi CCS): MR	+924	+689	+9.10
C (Mod CCS): Hi Exp – C (Mod CCS): MR	+914	+986	+13.04
NZ (Hi CCS): Hi Exp – NZ (Hi CCS): MR	+563	+302	+3.99
NZ (Mod CCS): Hi Exp – NZ (Mod CCS): MR	+1473	+953	+12.60

[a] DP: Hi Exp = Defined Policies: High Exports; DP: MR = Defined Policies: Model Resolved; C (High CCS): Hi Exp = Commitments (High CCS): High Exports; C (High CCS): MR = Commitments (High CCS): Model Resolved; C (Mod CCS): Hi Exp = Commitments (Moderate CCS): High Exports; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; NZ (High CCS): Hi Exp): Net Zero 2050 (High CCS): High Exports; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; NZ (Mod CCS): Hi Exp = Net Zero 2050 (Moderate CCS): High Exports; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved.

[b] GHG emissions include CO_2 emissions from fossil fuels and industry as well as land-use changes, and non-CO_2 emissions (methane, nitrous oxide, and fluorinated gases) from energy, agricultural, and land-use systems and other processes. CO_2 emissions from fossil fuels and industry are subject to uncertainties in regional emission intensities of natural gas and other fossil fuels. Emissions from land-use changes are driven in part by changes in energy production, including those driven by changes in demand (e.g., global demand for LNG). These emissions are also subject to

greater uncertainties largely due to uncertainties in data.[54,55] A detailed exploration of these uncertainties is beyond the scope of this study.

The emissions implications of additional U.S. LNG exports in scenarios with *High Exports* assumptions relative to *Model Resolved* scenarios under different assumptions of technology availability (i.e., *Moderate CCS* versus *High CCS* assumptions) depend also on the assumed stringency of climate policy (i.e., *Commitments* versus *Net Zero 2050* climate policy assumptions), due to the different types of resulting fuel displacement (Figure 9). For example, cumulative fossil fuel and industrial CO_2 emissions increase by 914 $MtCO_2e$ in the *Commitments (Moderate CCS): High Exports* scenario relative to *Commitments (Moderate CCS): Model Resolved*. This is a 0.001% increase. In absolute terms, this increase is slightly lower than the increase of 924 $MtCO_2e$ (0.001%) in the *Commitments (High CCS): High Exports* scenario relative to *Commitments (High CCS): Model Resolved.* This smaller increase occurs because the additional U.S. LNG exports under *Commitments (Moderate CCS)* assumptions results in a larger substitution away from other fossil fuels (particularly unabated oil) than under *Commitments (High CCS)* assumptions. By contrast, cumulative fossil fuel and industrial CO_2 emissions increase by 1,473 $MtCO_2e$ (0.002%) in the *Net Zero 2050 (Moderate CCS): High Exports* scenario relative to *Net Zero 2050 (Moderate CCS): Model Resolved*. This is higher than the increase of 563 $MtCO_2e$ (0.001%) in the *Net Zero 2050 (High CCS): High Exports* scenario relative to *Net Zero 2050 (High CCS): Model Resolved*. This is because of larger substitution away from renewables under *Net Zero 2050 (Moderate CCS)* assumptions, which have higher levels of renewables to begin with than *Net Zero 2050 (High CCS)* scenarios.

Comparing the normalized cumulative global GHG emissions (per unit of U.S. LNG exports in terms of $MtCO_2e/EJ$) between scenarios with *High CCS* and *Moderate CCS* assumptions reveals similar insights as in the previous section ("Comparison of model-resolved exports with 2023 existing/FID export levels"). In both the *Commitments (Moderate CCS): High Exports* and *Net Zero (Moderate CCS): High Exports* scenarios, the increase in normalized GHG emissions relative to their *Model Resolved* counterparts is greater than the increase in normalized GHG emissions in the *Commitments (High CCS): High Exports* and *Net Zero (High CCS): High Exports* scenarios (relative to their *Model Resolved* counterparts) (Table 7). As before, this is because, in a world with limited CCS availability, each incremental unit of increased U.S. LNG exports is more likely to be used in unabated gas technologies, rather than in combination with CCS.

[54] Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I.T., Olsen, A., Peters, G.P. and Peters, W., 2022. Global carbon budget 2022. *Earth System Science Data*, *14*(11), pp.4811-4900.

[55] Qin, Z., Zhu, Y., Canadell, J.G., Chen, M., Li, T., Mishra, U. and Yuan, W., 2024. Global spatially explicit carbon emissions from land-use change over the past six decades (1961–2020). *One Earth*, *7*(5), pp.835-847.

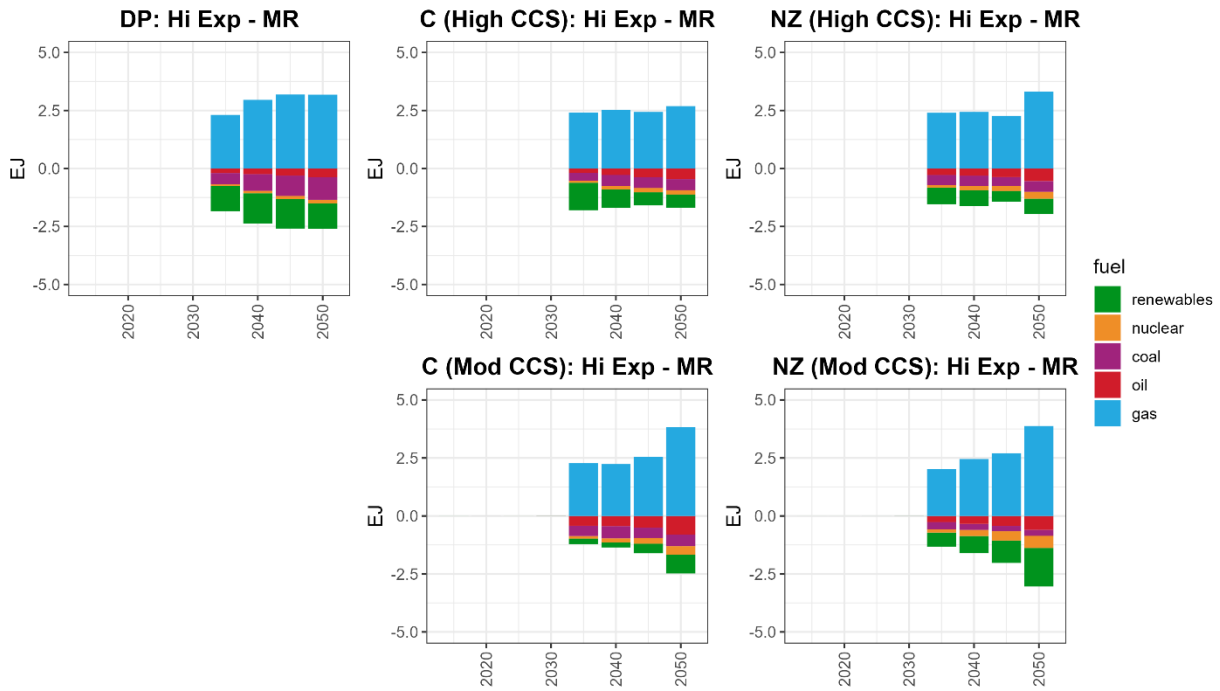

Figure 9. Changes in primary energy consumption in scenarios with High Exports assumptions relative to scenarios with Market Resolved assumptions. DP: MR = Defined Policies: Model Resolved; DP: Hi Exp = Defined Policies: High Exports; C (High CCS): MR = Commitments (High CCS): Model Resolved; C (High CCS): Hi Exp = Commitments (High CCS): High Exports; NZ (High CCS): MR = Net Zero 2050 (High CCS): Model Resolved; NZ (High CCS): Hi Exp = Net Zero 2050 (High CCS): High Exports; C (Mod CCS): MR = Commitments (Moderate CCS): Model Resolved; C (Mod CCS): Hi Exp = Commitments (Moderate CCS): High Exports; NZ (Mod CCS): MR = Net Zero 2050 (Moderate CCS): Model Resolved; NZ (Mod CCS): Hi Exp = Net Zero 2050 (Moderate CCS): High Exports. The High Exports scenarios can also be compared to the Existing/FID scenarios to quantify the changes from a common baseline. These values are summarized in Table 8.

Table 8. Cumulative emissions impacts (including normalized emissions impacts) of increased U.S. LNG exports (High Exports – Existing/FID Exports), 2020 to 2050. The first column lists the two scenarios between which changes in other columns are calculated. For example, "DP: Hi Exp – DP: ExFID" suggests difference in DP: Hi Exp scenario relative to DP: ExFID scenario. See the note below the table for a full list of scenario abbreviations and their corresponding full names. The second column shows the change in cumulative global fossil fuel and industrial (FFI) CO_2 Emissions across the two scenarios listed in the first column. The time period for the cumulation is 2020 to 2050. The third column shows the change in cumulative global GHG emissions (including FFI CO_2, CO_2 from land-use changes, and non-CO_2 GHG emissions) over the same period (2020-2050) for the same two scenarios listed in the first column. The final column presents change in cumulative global GHG emissions (from the third column) divided by the change in cumulative U.S. LNG exports over the same period for the same two scenarios listed in the first column.

Scenario comparison (*High Exports – Model Resolved*)[a]	**Change in Cumulative Global Fossil fuel and industrial CO_2 Emissions (2020-2050), $MtCO_2e$**	**Change in Cumulative Global GHG Emissions (2020-2050), $MtCO_2e$[c]**	**Normalized Change in Cumulative Global GHG Emissions (2020-2050) per unit Change in Cumulative U.S. LNG Exports (2020-2050), $MtCO_2e/EJ$**
DP: Hi Exp – DP: ExFID	+1147	+1446	+7.66
C (Hi CCS): Hi Exp – C (Hi CCS): ExFID	+201	+785	+7.33
C (Mod CCS): Hi Exp – C (Mod CCS): ExFID	+988	+1053	+12.11
NZ (Hi CCS): Hi Exp – NZ (Hi CCS): ExFID	+639	+322	+3.47
NZ (Mod CCS): Hi Exp – NZ (Mod CCS): ExFID[b]	NA	NA	NA

[a] DP: Hi Exp = Defined Policies: High Exports; DP: ExFID = Defined Policies: Existing/FID Exports; C (High CCS): Hi Exp = Commitments (High CCS): High Exports; C (High CCS): ExFID = Commitments (High CCS): Existing/FID Exports; C (Mod CCS): Hi Exp = Commitments (Moderate CCS): High Exports; C (Mod CCS): ExFID = Commitments (Moderate CCS): Existing/FID Exports; NZ (High CCS): Hi Exp): Net Zero 2050 (High CCS): High Exports; NZ (High CCS): ExFID = Net Zero 2050 (High CCS): Existing/FID Exports; NZ (Mod CCS): Hi Exp = Net Zero 2050 (Moderate CCS): High Exports; NZ (Mod CCS): ExFID = Net Zero 2050 (Moderate CCS): Existing/FID Exports.

[b] In the *NZ (Mod CCS): MR* scenario, U.S. LNG exports fall below the existing/FID exports level. Thus, a *NZ (Mod CCS): ExFID* scenario would resolve to the same outcomes as the *NZ (Mod CCS): MR* scenario, and is therefore not shown.

[C] GHG emissions include CO_2 emissions from fossil fuels and industry as well as land-use changes, and non-CO_2 emissions (methane, nitrous oxide, and fluorinated gases) from energy, agricultural, and land-use systems and other processes. CO_2 emissions from fossil fuels and industry are subject to uncertainties in regional emission intensities of natural gas and other fossil fuels. Emissions from land-use changes are driven in part by changes in energy production, including those driven by changes in demand (e.g., global demand for LNG). These emissions are also subject to greater uncertainties largely due to uncertainties in data.[56,57] A detailed exploration of these uncertainties is beyond the scope of this study.

[56] Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I.T., Olsen, A., Peters, G.P. and Peters, W., 2022. Global carbon budget 2022. *Earth System Science Data*, *14*(11), pp.4811-4900.

[57] Qin, Z., Zhu, Y., Canadell, J.G., Chen, M., Li, T., Mishra, U. and Yuan, W., 2024. Global spatially explicit carbon emissions from land-use change over the past six decades (1961–2020). *One Earth*, *7*(5), pp.835-847.

ADDITIONAL SENSITIVITY ANALYSES

The scenarios with *Model Resolved* U.S. LNG exports assumptions discussed above explore the implications of different assumptions about global climate policy landscape and technology availability. Another key factor driving U.S. LNG export levels and their emissions implications is the economic competitiveness of U.S. natural gas relative to natural gas from other producers. In GCAM, an important determinant of the relative competitiveness of a region in the natural gas market is the shape of its natural gas resource supply curve. As described earlier, the shape of each region's natural gas supply curve is based on resource estimates (how much is in the ground) from technical literature and the cost of extracting those resources, with extraction costs increasing as resources deplete. GCAM also includes exogenous assumptions about technological improvements that reduce extraction costs in every future model timestep (that result in lowering of the supply curves). To understand the implications of the economic competitiveness of U.S. natural gas, we conducted additional sensitivity analyses in which the natural gas supply curves of the U.S. and the Middle East, an important competing natural gas producing region, are altered from their default assumptions. These altered natural gas supply assumptions are combined with *Defined Policies* climate policy assumptions. Other combinations (e.g., combining the natural gas supply assumptions with other climate policy assumptions and technology availability assumptions presented in Table 1) are beyond the scope of the present study.

To develop additional sensitivity scenarios, we consider three assumptions related to the economic competitiveness of U.S. natural gas (Table 9**).** The first two assumptions are consistent with the approach taken to analyze high and low U.S. oil and gas supply in EIA's Annual Energy Outlook.[58]

- The *High U.S. Supply* assumption includes 50% higher natural gas resource availability at each price point for the U.S. and 50% increase in the annual rate of technological improvements that reduce resource extraction costs and increase productivity in the U.S. These assumptions result in a flatter U.S. natural gas supply curve relative to the original, making U.S. natural gas more competitive relative to other natural gas producers.
- The *Low U.S. Supply* assumption includes 50% reduction in natural gas resource availability at each price point for the U.S. and 50% reduction in the annual rate of technological improvements that reduce resource extraction costs and increase productivity in the U.S. These assumptions result in a steeper U.S. natural gas supply curve relative to the original, making the U.S. less competitive relative to other natural gas producers.
- The *High Middle East Supply* assumption includes a 100% increase in natural gas resource availability at each price point for GCAM's Middle East region and a 100% increase in annual rate of technological improvements that reduce resource extraction costs and increase productivity in the Middle East. These assumptions result in a flatter natural gas supply curve for the Middle East compared to the original, making the Middle East more competitive relative to the U.S. and other natural gas producers. The *High Middle East Supply* assumption is intended to explore a potential situation in which Middle Eastern producers respond to increased U.S. LNG exports by increasing activities to discover new natural gas resources and reducing extraction costs.

[58] Annual Energy Outlook, U.S. Energy Information Administration, 2023. https://www.eia.gov/outlooks/aeo/assumptions/pdf/OGSM_Assumptions.pdf

We combine the *Defined Policies* climate policy assumption, *Model Resolved* and *Existing/FID Exports* U.S. LNG exports assumptions with the above three assumptions to obtain a total of six sensitivity scenarios (Table 9).

Table 9. Additional sensitivity scenarios explored in this study

Global climate policies	Natural gas resources	U.S. LNG export levels	Sensitivity scenarios full name	Sensitivity scenario abbreviation
Defined Policies	High U.S. Supply	Model Resolved	*DP High U.S. Supply: Model Resolved*	*DP Hi U.S. Sup: MR*
	High U.S. Supply	Existing/FID Exports	*DP High U.S. Supply: Existing/FID Exports*	*DP Hi U.S. Sup: ExFID*
	Low U.S. Supply	Model Resolved	*DP Low U.S. Supply: Model Resolved*	*DP Lo U.S. Sup: MR*
	Low U.S. Supply	Existing/FID Exports	*DP Low U.S. Supply: Existing/FID Exports*	*DP Lo U.S. Sup: ExFID*
	High Middle East Supply	Model Resolved	*DP High Middle East Supply: Model Resolved*	*DP Hi ME Sup: MR*
	High Middle East Supply	Existing/FID Exports	*DP High Middle East Supply: Existing/FID Exports*	*DP Hi ME Sup: ExFID*

A. Implications of High and Low U.S. Natural Gas Supply

Higher availability of U.S. natural gas resources in the *DP High U.S. Supply: Model Resolved* scenario relative to the *Defined Policies: Model Resolved* scenario results in higher LNG exports from the U.S. and a reduction in LNG exports from other regions (Figure 10**,** Figure 11). In addition, the higher U.S. supply under the *DP High U.S. Supply: Model Resolved* scenario results in lower global natural gas prices, in turn resulting in the following global effects: an overall higher consumption of natural gas, lower consumption of other fuels, and higher overall energy consumption. Opposite effects are observed with lower availability of U.S. natural gas resources in the *DP Low U.S. Supply: Model Resolved* scenario.

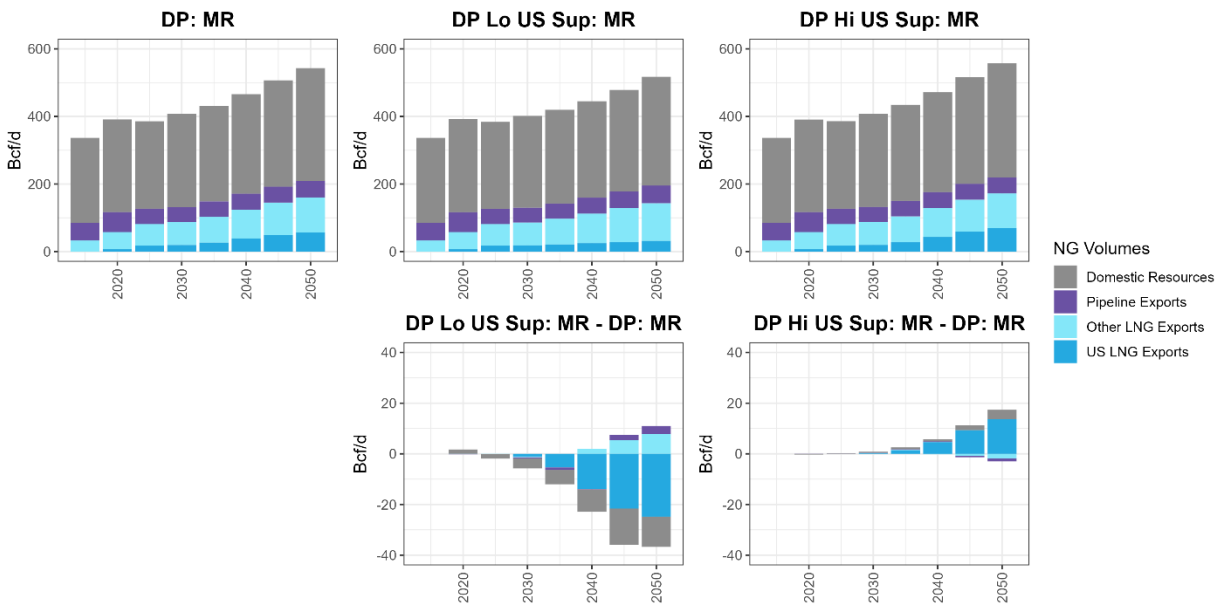

Figure 10. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios (top row), and changes in global natural gas consumption relative to the Defined Policies: Model Resolved scenario (bottom row).

DP: MR = Defined Policies: Model Resolved; DP Hi U.S. Sup: MR = Defined Policies High U.S. Supply: Model Resolved; DP Lo U.S. Sup: Defined Policies Low U.S. Supply: Model Resolved. Note that 1 Bcf/d =0.36 EJ/y.

In the *DP Low U.S. Supply: Model Resolved* and *DP High U.S. Supply: Model Resolved* scenarios, U.S. LNG exports grow to 31.4 Bcf/d (6% of global natural gas consumption and 21% of global LNG exports) and 70.0 Bcf/d (13% of global natural gas consumption and 41% of global LNG exports) by 2050, respectively, compared to 56.3 Bcf/d (10% of global natural gas consumption and 35% of global LNG exports) under the *Defined Policies: Model Resolved* scenario (Figure 10**,** Figure 11). Under the *DP High U.S. Supply: Model Resolved* scenario*,* U.S. LNG exports exceed currently approved export levels (43.6 Bcf/d) by 2040. Under *DP Low U.S. Supply: Model Resolved* scenario*,* U.S. LNG exports exceed 2023 existing/FID export levels (23.7 Bcf/d) by 2040, but do not exceed currently approved levels even by 2050.

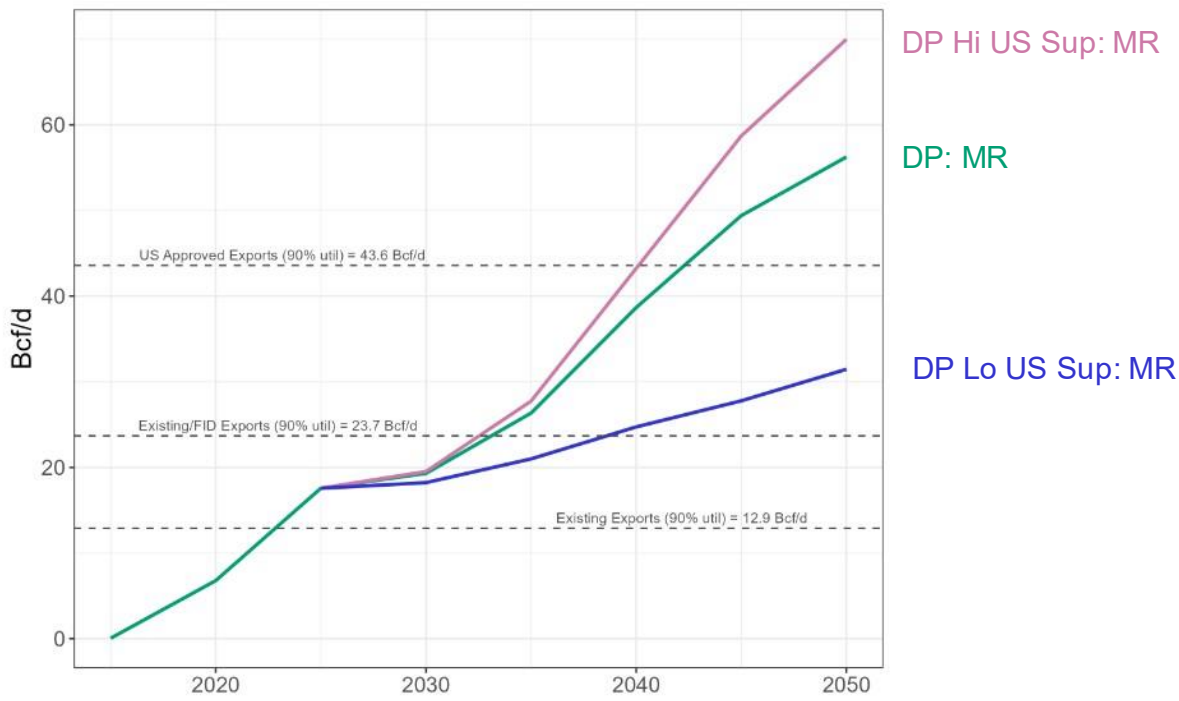

Figure 11. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios.

DP: MR = Defined Policies: Model Resolved; DP Hi U.S. Sup: MR = Defined Policies High U.S. Supply: Model Resolved; DP Lo U.S. Sup: Defined Policies Low U.S. Supply: Model Resolved. Existing exports are approximately 12.9 Bcf/d, assuming 90% utilization of 2023 U.S. LNG export capacity. Existing/FID exports refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that have reached final investment decisions (FID) on their projects, as of December 2023. Current approved levels of LNG exports in the U.S. are approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states to non-FTA countries as of December 2023. Note that 1 Bcf/d= 0.36 EJ/y.

In the *DP High U.S. Supply: Model Resolved* scenario, global natural gas consumption increases to 557 Bcf/d by 2050 compared to 543 Bcf/d under the *Defined Policies: Market Resolved* scenario. The consequent fuel displacement in the *DP High U.S. Supply: Model Resolved* scenario (Figure 12) results in global cumulative GHG emissions (2020-2050) that are 0.8 $GtCO_2e$ (0.05%) higher (Table 10). By contrast, in the *DP Low U.S. Supply: Model Resolved* scenario, global natural gas consumption reaches 517 Bcf/d in 2050, which is lower than natural gas consumption in the *Defined Policies: Market Resolved* scenario. This reduction in natural gas consumption in turn results in a reduction in cumulative GHG emissions of 3.3 $GtCO_2e$ (0.21%), relative to the *Defined Policies: Market Resolved* scenario (Table 10).

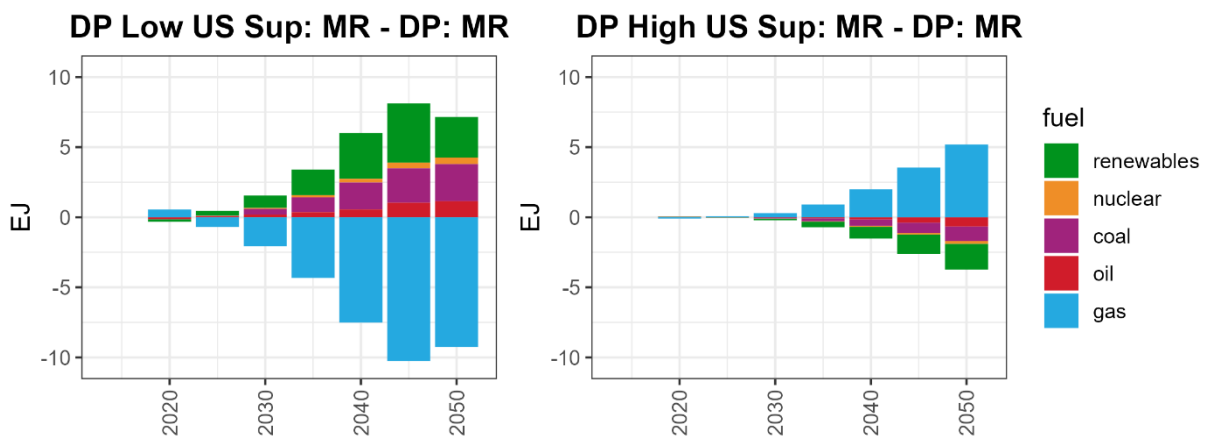

Figure 12. Changes in global primary energy consumption by fuel (EJ) in the DP Low U.S. Supply: Model Resolved and DP High U.S. Supply: Model Resolved scenarios relative to the Defined Policies: Model Resolved scenario. DP: MR = Defined Policies: Model Resolved; DP Hi U.S. Sup: MR = Defined Policies High U.S. Supply: Model Resolved; DP Lo U.S. Sup: Defined Policies Low U.S. Supply: Model Resolved.

Table 10. Cumulative GHG Emissions in the Defined Policies: Market Resolved scenario and high/low U.S. natural gas resource supply sensitivity scenarios

Scenario[a]	Cumulative Global GHG Emissions (2020-2050), $GtCO_2e$[b]
DP: MR	1552.4
DP Lo U.S. Sup: MR	1549.1
DP Hi U.S. Sup: MR	1553.2

[a] DP: MR = Defined Policies: Model Resolved; DP Hi U.S. Sup: MR = Defined Policies High U.S. Supply: Model Resolved; DP Lo U.S. Sup: Defined Policies Low U.S. Supply: Model Resolved.
[b] GHG emissions include CO_2 from fossil fuels and industry as well as land-use changes, and non-CO_2 gases (methane, nitrous oxide, and fluorinated gases) from energy, agricultural, and land-use systems and other processes. Emissions estimates are subject to uncertainties in regional emission intensities of natural gas and other fossil fuels. They are also subject to larger uncertainties in emissions from land-use changes largely due to differences in data.[59,60] A detailed exploration of these uncertainties is beyond the scope of this study.

B. Implications of High Middle East Natural Gas Supply

Similar to the changes observed under *High U.S. Supply* assumptions, the higher availability of Middle East gas resources (in the *DP High Middle East Supply: Model Resolved* scenario relative to *Defined Policies: Model Resolved*) results in an increase in LNG exports from the Middle East and a reduction in LNG exports from other regions – including from the U.S. (Figure 13, Figure 14). Additionally, the higher availability of Middle East gas supply results in lower global natural gas prices, higher consumption of natural gas globally, lower consumption of other fuels globally, and a net increase in global primary energy consumption (Figure 15).

[59] Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I.T., Olsen, A., Peters, G.P. and Peters, W., 2022. Global carbon budget 2022. *Earth System Science Data*, *14*(11), pp.4811-4900.
[60] Qin, Z., Zhu, Y., Canadell, J.G., Chen, M., Li, T., Mishra, U. and Yuan, W., 2024. Global spatially explicit carbon emissions from land-use change over the past six decades (1961–2020). *One Earth*, *7*(5), pp.835-847.

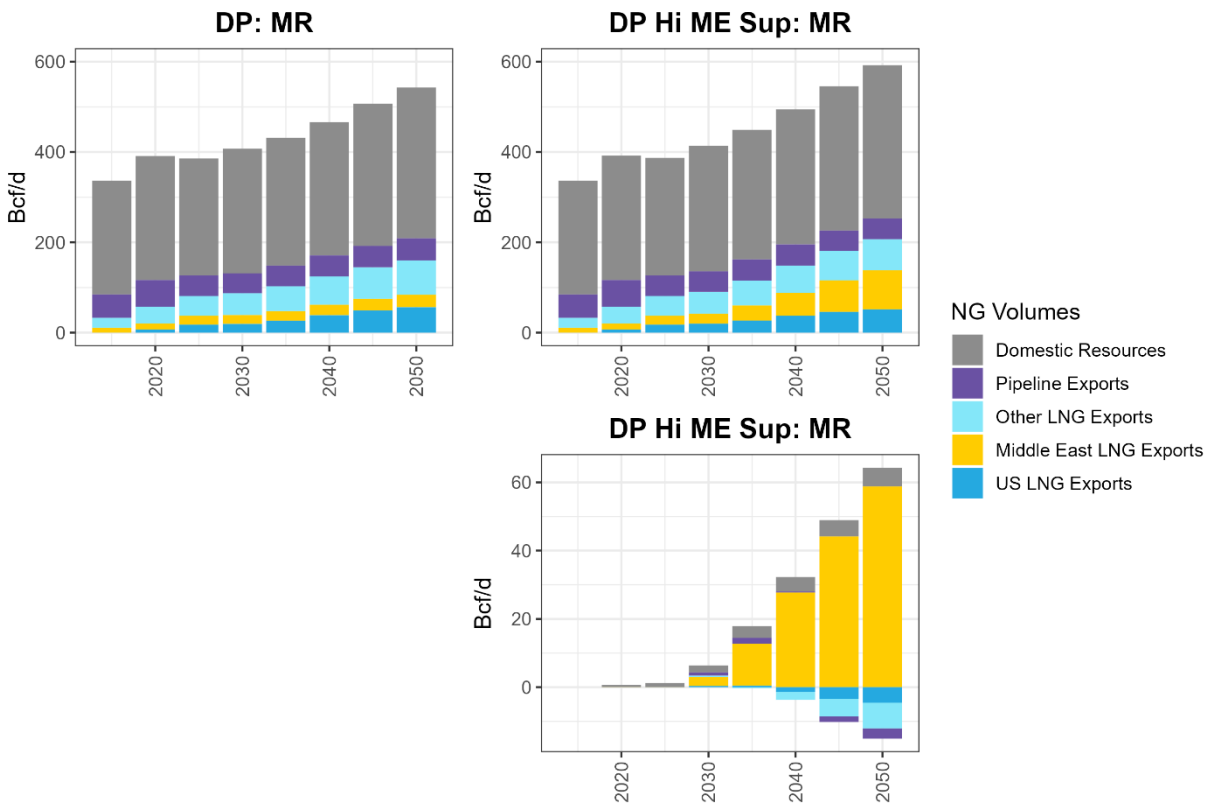

Figure 13. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario (top row) and changes in the Defined Policies High Middle East Supply: Model Resolved sensitivity scenario relative to the Defined Policies: Model Resolved scenario (bottom row).

DP: MR = Defined Policies: Model Resolved; DP Hi ME Sup: MR = Defined Policies High Middle East Supply: Model Resolved. Note that 1 Bcf/d= 0.36 EJ/y.

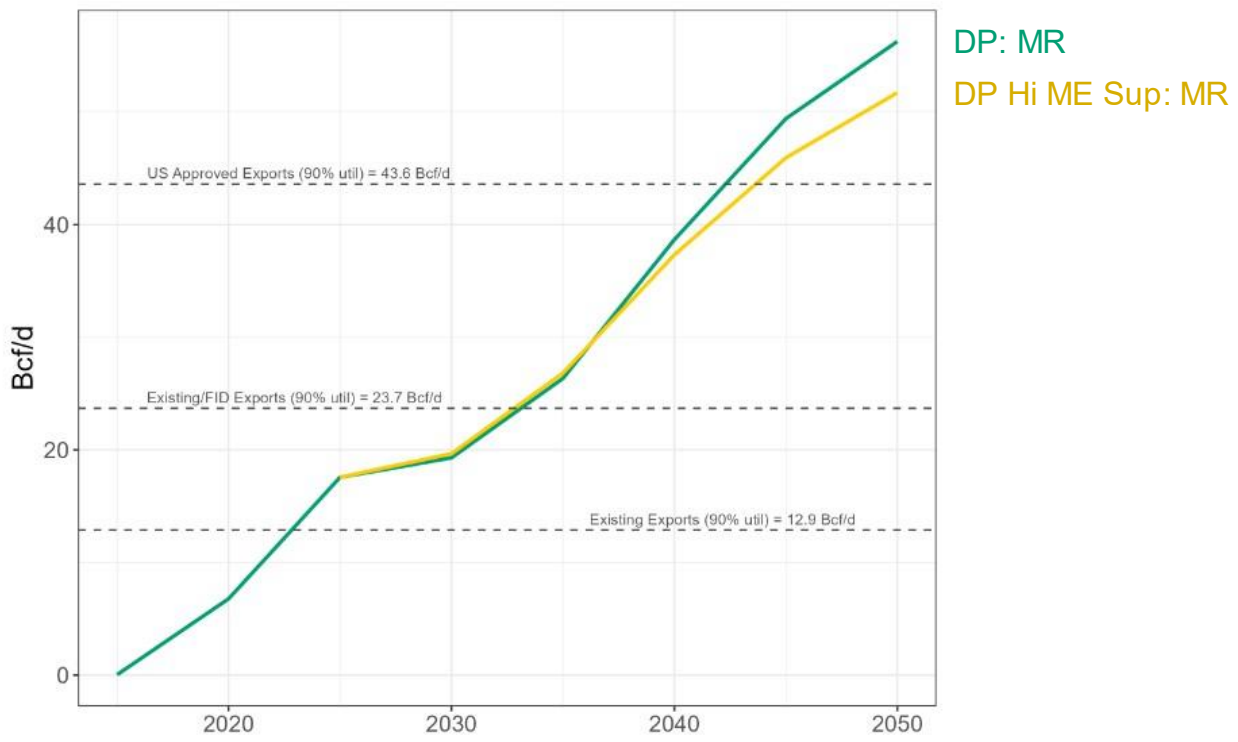

Figure 14. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario.

DP: MR = Defined Policies: Model Resolved; DP Hi ME Sup: MR = Defined Policies High Middle East Supply: Model Resolved. Existing exports are approximately 12.9 Bcf/d, assuming 90% utilization of 2023 U.S. LNG export capacity. Existing/FID exports refer to LNG capacity that is currently operational or LNG projects with export authorizations from DOE that have reached final investment decisions (FID) on their projects, as of December 2023. Current approved levels of LNG exports in the U.S. are approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states to non-FTA countries as of December 2023. Note that 1 Bcf/d= 0.36 EJ/y.

In the *DP High Middle East Supply: Model Resolved* scenario, the share of LNG exports from the Middle East in global natural gas consumption increases to 15% in 2050 compared to 5% under the *Defined Policies: Market Resolved* scenario (Figure 14). In the *DP High Middle East Supply: Model Resolved* scenario, the share of LNG exports from the Middle East in global LNG exports increases to 42% in 2050 compared to 17% in the *Defined Policies: Market Resolved* scenario. In the *DP High Middle East Supply: Model Resolved* scenario, U.S. LNG exports reach 51.7 Bcf/d (9% share of global natural gas consumption and 25% of global LNG exports) by 2050 (Figure 14, Figure 15). This is 4.5 Bcf/d lower (1 percentage point reduction in global natural gas consumption share and a 10 percentage point reduction in global LNG export share) than the U.S. LNG exports in the *Defined Policies: Model Resolved* scenario. U.S. LNG exports continue to grow in the *DP High Middle East Supply: Model Resolved* scenario – despite higher competitiveness of Middle East supply relative to the U.S. – because the higher availability of Middle East natural gas at lower prices in the *DP High Middle East Supply: Model Resolved* scenario results in an increase in global natural gas consumption (Figure 15), which offsets the effects of substitution away from U.S. LNG exports toward LNG exports from Middle East.

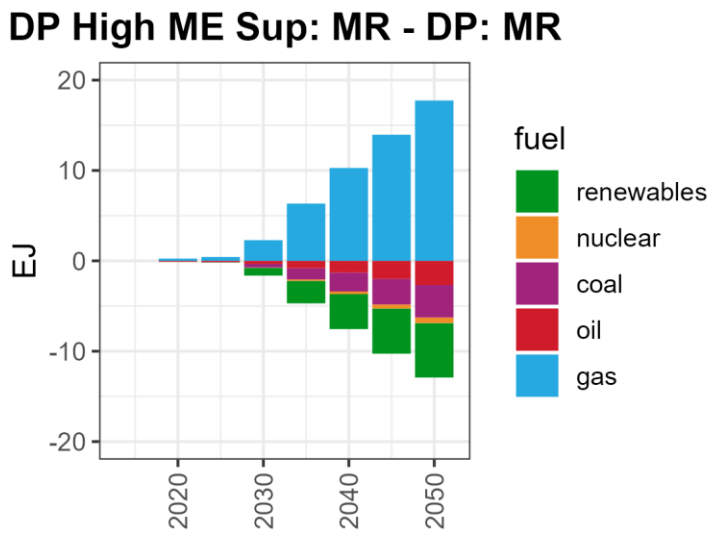

Figure 15. Changes in global primary energy consumption by fuel (EJ) in the DP High Middle East Supply: Model Resolved scenario relative to the Defined Policies: Model Resolved scenario. DP: MR = Defined Policies: Model Resolved; DP Hi ME Sup: MR = Defined Policies High Middle East Supply: Model Resolved.

Cumulative GHG emissions (2020-2050) in the *DP High Middle East Supply: Model Resolved* scenario are higher than in the *Defined Policies: Model Resolved* scenario by 4.3 $GtCO_2e$ (0.28%), due to the increase in natural gas consumption in the global primary energy mix (Table 11). The emissions increase under the *High ME Supply* assumption suggests the potential emissions impact of Middle Eastern producers responding to increased U.S. LNG exports by making additional investments to flatten their resource supply curves.

Table 11. Cumulative GHG Emissions in the Defined Policies: Market Resolved and DP High Middle East Supply: Model Resolved scenarios.

Scenario[a]	Cumulative Global GHG Emissions (2020-2050), $GtCO_2e$[b]
DP: MR	1552.4
DP Hi ME Sup: MR	1556.7

[a] DP: MR = Defined Policies: Model Resolved; DP Hi ME Sup: MR = Defined Policies High Middle East Supply: Model Resolved

[b] GHG emissions include CO_2 emissions from fossil fuels and industry as well as land-use changes, and non-CO_2 emissions (methane, nitrous oxide, and fluorinated gases) from energy, agricultural, and land-use systems and other processes. CO_2 emissions from fossil fuels and industry are subject to uncertainties in regional emission intensities of natural gas and other fossil fuels. Emissions from land-use changes are driven in part by changes in energy production, including those driven by changes in demand (e.g., global demand for LNG). These emissions are also subject to greater uncertainties largely due to uncertainties in data.[61,62] A detailed exploration of these uncertainties is beyond the scope of this study.

[61] Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I.T., Olsen, A., Peters, G.P. and Peters, W., 2022. Global carbon budget 2022. *Earth System Science Data*, *14*(11), pp.4811-4900.

[62] Qin, Z., Zhu, Y., Canadell, J.G., Chen, M., Li, T., Mishra, U. and Yuan, W., 2024. Global spatially explicit carbon emissions from land-use change over the past six decades (1961–2020). *One Earth*, *7*(5), pp.835-847.

SUMMARY

This appendix set out to explore the global market demand for U.S. LNG exports, and the global emissions impacts of increased U.S. LNG exports through 2050. The key insights from this appendix are summarized below. A table summarizing key results is also provided below (Table 10).

A. Summary: Global market demand for U.S. LNG exports

1. Across all scenarios, U.S. LNG exports in 2050 exceed current estimated operational export levels (approximately 12.9 Bcf/d, assuming 90% utilization of U.S. LNG export capacity, as of December 2023).
2. In a scenario based on current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*), the model-resolved U.S. LNG exports exceed currently approved levels (approximately 43.6 Bcf/d, calculated as 90% utilization of the capacity associated with projects approved for exports of U.S. sourced natural gas, including from Alaska and the lower 48 states, to non-FTA countries as of December 2023) by 2045, and reach 56.3 Bcf/d in 2050.
3. In a scenario in which countries are assumed to achieve their current emissions commitments (including the U.S. pledge to reduce economy-wide GHG emissions to net-zero by 2050) along with high deployment of renewables (*Commitments (Moderate CCS): Model Resolved*), global natural gas consumption is lower than a scenario with current GHG emissions policies (*Defined Policies: Model Resolved*). Nevertheless, U.S. LNG export levels are projected to exceed 2023 existing/FID export levels (approximately 23.7 Bcf/d assuming 90% utilization of operating export capacity and capacity under construction pursuant to FID as of December 2023) by 2050. U.S. LNG export levels are projected to grow to 28.5 Bcf/d by 2050, which is lower than currently approved levels (approximately 43.6 Bcf/d) and lower than the scenario with current GHG emissions policies (*Defined Policies: Model Resolved*, 56.3 Bcf/d).
4. In a scenario with *Commitments* climate policy assumptions and high deployment of CCS technologies (*Commitments (High CCS*): *Model Resolved)*, global natural gas consumption is higher than in a scenario with a high level of deployment of renewable technologies (*Commitments (Moderate CCS*): *Model Resolved*). Hence, U.S. LNG exports are projected to grow to higher levels by 2050 (33.1 Bcf/d by 2050) with *High CCS* assumptions while still remaining lower than currently approved levels (43.6 Bcf/d).
5. In a scenario with more stringent climate policy assumptions than current commitments in which the U.S. achieves its net-zero pledge and the rest of the world also achieves net-zero CO_2 emissions by 2050, along with high deployment of CCS technologies (*Net Zero 2050 (High CCS*)*: Model Resolved*), U.S. LNG export levels exceed 2023 existing/FID export levels (23.7 Bcf/d), leveling off after 2045 and reaching 26.8 Bcf/d by 2050 which is still lower than currently approved levels (43.6 Bcf/d). By contrast, in a scenario with the same climate policy assumptions along with high deployment of renewables (*Net Zero 2050 (Moderate CCS*)*: Model Resolved*), U.S. LNG exports exceed current operational levels (12.9 Bcf/d) by 2025, but do not exceed 2023 existing/FID levels (23.7 Bcf/d) or approved levels (43.6 Bcf/d), reaching 17.2 Bcf/d in 2050.
6. In a sensitivity scenario with higher availability of U.S. natural gas supply at lower prices (*DP High U.S. Supply: Model Resolved*)*,* U.S. LNG exports exceed currently approved export levels to reach 70.0 Bcf/d by 2050. In this sensitivity scenario, U.S. LNG exports in 2050 are 13.7 Bcf/d higher, compared to the scenario with current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*).
7. In a sensitivity scenario with lower availability of U.S. natural gas supply at higher prices (*DP Low U.S. Supply: Model Resolved*)*,* U.S. LNG exports exceed 2023 existing/FID

export levels (23.7 Bcf/d) by 2040. U.S. LNG exports are projected to grow to 31.5 Bcf/d by 2050, which is lower than currently approved levels (43.6 Bcf/d) and lower than the scenario with current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*).

8. In a sensitivity scenario with higher availability of natural gas supply and resulting LNG exports from the U.S.'s top competitor in natural gas exports, the Middle East (*DP High Middle East Supply: Model Resolved*), U.S. LNG exports continue to grow because higher availability of Middle East natural gas at lower prices results in an increase in global natural gas consumption. In this scenario, U.S. LNG exports exceed 2023 existing/FID export levels (23.7 Bcf/d) by 2040. Further, U.S. LNG exports grow to 51.7 Bcf/d by 2050, which is higher than currently approved levels (43.6 Bcf/d) but lower than the scenario with current GHG emissions policies in the U.S. and rest of the world (*Defined Policies: Model Resolved*). The increased demand for global natural gas offsets the effects of substitution away from U.S. LNG toward LNG exports from Middle East.

B. Summary: Global emissions impacts of increased U.S. LNG exports through 2050

1. In all scenarios with model-resolved U.S. LNG exports, cumulative GHG emissions are higher than the scenarios in which U.S. LNG exports are limited to 2023 existing/FID levels.
2. In a scenario with current GHG emissions policies and model-resolved U.S. LNG exports (*Defined Policies: Model Resolved*), cumulative global GHG emissions (2020-2050) are 708 $MtCO_2e$ higher relative to the scenario in which U.S. LNG exports are limited to 2023 existing/FID levels (*Defined Policies: Existing/FID Exports*). This corresponds to a 0.05% increase in cumulative emissions. In normalized terms (obtained by dividing cumulative emissions increase by cumulative increase in U.S. LNG exports over the same period), this emissions increase corresponds to an increase of 6.25 $MtCO_2e$/EJ of additional U.S. LNG exports.
3. In a scenario with countries' current emission reduction commitments, high deployment of CCS technologies, and model resolved U.S. LNG exports (*Commitments (High CCS): Model Resolved*), cumulative global GHG emissions (2020-2050) increase by 97 $MtCO_2e$ (0.008%, 3.07 $MtCO_2e$/EJ of additional U.S. LNG exports) compared to the scenario's counterpart in which U.S. LNG exports are limited to 2023 existing/FID levels (*Commitments (High CCS): Existing/FID Exports*).
4. In a scenario in which the U.S. achieves its net-zero pledge and the rest of the world is assumed to achieve net-zero CO_2 emissions along with high deployment of CCS technologies and model-resolved U.S. LNG exports (*Net Zero 2050 (High CCS): Model Resolved*), cumulative GHG emissions increase by 21 $MtCO_2e$ (0.002%, 1.21 $MtCO_2e$/EJ of additional U.S. LNG exports) compared to the scenario's counterpart in which U.S. LNG exports are limited to 2023 existing/FID levels (*Net Zero 2050 (High CCS): Existing/FID Exports*).
5. The increase in emissions in scenarios with more stringent climate policy assumptions is lower. This is because, the increase in model-resolved U.S. LNG exports relative to existing/FID levels in those scenarios is lower, which in turn results in smaller increases in natural gas consumption and smaller increases in total energy consumption. Furthermore, in scenarios with more stringent climate policy assumptions, a larger share of the additional natural gas consumption outside of the U.S. occurs in combination with CCS, resulting in lower emissions impacts.
6. In a scenario with countries' current commitments, high deployment of renewables, and model-resolved U.S. LNG exports (*Commitments (Moderate CCS): Model Resolved*), cumulative global GHG emissions (2020-2050) increase by 67 $MtCO_2e$ (0.006%)

compared to a scenario in which U.S. LNG exports are limited to 2023 existing/FID levels (*Commitments (Moderate CCS): Existing/FID Exports*). This 67 $MtCO_2e$ increase is lower than the 97 $MtCO_2e$ increase in the scenario with high CCS deployment (*Commitments (High CCS): Model Resolved* relative to *Commitments (High CCS): Existing/FID Exports*). This is because, the scenario with moderate CCS deployment results in a smaller increase in U.S. LNG exports relative to 2023 existing/FID levels, and therefore a smaller increase in natural gas consumption and total energy consumption. However, the scenario with moderate CCS deployment results in a higher increase in normalized emissions compared to the scenario with high CCS deployment (5.88 $MtCO_2e/EJ$ versus 3.07 $MtCO_2e/EJ$, respectively). This is because, in a world with limited CCS availability, each incremental unit of increased U.S. LNG exports is more likely to be used in unabated gas technologies, rather than in gas with CCS technologies.

7. In all scenarios in which U.S. LNG exports are assumed to exceed model-resolved levels (up to +20 Bcf/d by 2050, corresponding to the *High Exports* assumption for U.S. LNG exports), global cumulative GHG emissions (2020-2050) are 302 $MtCO_2e$ to 953 $MtCO_2e$ (3.99 $MtCO_2e/EJ$ to 12.60 $MtCO_2e/EJ$ of additional U.S. LNG exports) higher than their counterparts with model-resolved levels of U.S. LNG exports. In scenarios with high CCS deployment, the magnitude of increase in global cumulative GHG emissions decreases with stringency of climate policy, because additional U.S. LNG exports in the scenarios with more stringent climate policy assumptions result in greater increases in gas with CCS, as opposed to unabated gas. In scenarios with moderate CCS deployment, the emissions implications of additional U.S. LNG depend on the resulting fuel displacement.
8. In the sensitivity scenario with higher availability of U.S. natural gas supply at lower prices (*DP High U.S. Supply: Model Resolved*), global cumulative GHG emissions (2020-2050) are 0.8 $GtCO_2e$ higher (0.05%) than the scenario with default supply assumptions (*Defined Policies: Model Resolved*). In the sensitivity scenario with lower availability of U.S. natural gas supply at higher prices (*DP Low U.S. Supply: Model Resolved*), global cumulative GHG emissions (2020-2050) are 3.3 $GtCO_2e$ lower (0.21%) than the scenario with default supply assumptions (*Defined Policies: Model Resolved*).
9. In the sensitivity scenario with higher availability of natural gas supply in a key competing producing region, namely the Middle East (*DP High Middle East Supply: Model Resolved*), global cumulative GHG emissions (2020-2050) are 4.3 $GtCO_2e$ (0.28%) higher than the scenario with default supply assumptions (*Defined Policies: Model Resolved*).

Table 12. Summary of key results across all scenarios explored in this study. Note that values presented in this table may be in different units compared to other tables in the report and may not match due to rounding differences. Also note that the table shows modeled U.S. LNG export volumes under various assumptions of climate policy and technology availability without regard to the volume of exports approved by DOE. However, this report recognizes that 23.7 Bcf/d is the level of exports eventually expected from the amount of U.S. LNG export capacity currently operating or under construction pursuant to a final investment decision as of December 2023.[63]

Scenario	U.S. LNG Exports (Bcf/d)			Cumulative Global GHG Emissions (2020-2050), $GtCO_2e$
	2030	2040	2050	
Defined Policies: Model Resolved	19.3	38.7	56.3	1552.4
Defined Policies: Existing/FID Exports	19.3	23.7	23.7	1551.7
Defined Policies: High Exports	19.3	48.7	76.3	1553.1
Commitments (High CCS): Model Resolved	18.6	27.5	33.1	1267.8
Commitments (High CCS): Existing/FID Exports	18.6	23.7	23.7	1267.7
Commitments (High CCS): High Exports	18.6	37.5	53.1	1268.5
Commitments (Moderate CCS): Model Resolved	18.4	25.0	26.8	1205.5
Commitments (Moderate CCS): Existing/FID Exports	18.4	23.7	23.7	1205.4
Commitments (Moderate CCS): High Exports	18.4	35.0	46.8	1206.5
Net Zero 2050 (High CCS): Model Resolved	18.0	25.8	28.5	1070.5
Net Zero 2050 (High CCS): Existing/FID Exports	18.0	23.7	23.7	1070.5
Net Zero 2050 (High CCS): High Exports	18.0	35.8	48.5	1070.8
Net Zero 2050 (Moderate CCS): Model Resolved	17.8	20.5	17.2	988.9
Net Zero 2050 (Moderate CCS): High Exports	17.8	30.5	37.2	989.8
DP High U.S. Supply: Model Resolved	19.5	43.2	70.0	1553.3
DP High U.S. Supply: Existing/FID Exports	19.5	23.7	23.7	1552.1
DP Low U.S. Supply: Model Resolved	18.2	24.7	31.5	1549.1
DP Low U.S. Supply: Existing/FID Exports	18.2	23.7	23.7	1549.1
DP High Middle East Supply: Model Resolved	19.7	37.3	51.7	1556.7
DP High Middle East Supply: Existing/FID Exports	19.7	23.7	23.7	1556.3

CAVEATS AND LIMITATIONS

The following considerations are required in interpreting this study and its results.

- This study is not intended to serve as a forecast of U.S. LNG exports. Rather, it is an exercise in exploring various conditional “what-if" scenarios of future U.S. LNG exports and examining their implications for the global and U.S. energy and economic systems, and for GHG emissions. Such scenario analysis is a well-established analytical approach for exploring complex relationships across a range of variables.
- The scenarios explored in this study span a range of U.S. LNG export outcomes through 2050. They hinge on many assumptions about a wide range of domestic, international, economic, and non-economic factors such as future socioeconomic development, technology and resource availability, technological advancement, institutional change, and more. A full uncertainty analysis encompassing all of the above factors is beyond the scope of this study.
- This study does not attach probabilities to any of the scenarios and no inference about the likelihood of these scenarios occurring should be implied.

[63] https://www.energy.gov/sites/default/files/2024-01/LNG%20Snapshot%20Dec%2031%2023u.pdf

- The scenarios with *Commitments* and *Net Zero 2050* climate policy assumptions do not explicitly model the actual policy instruments, sectoral measures, and regulations that countries might adopt to meet their pledges. This is primarily due to lack of sufficient literature on policy instruments, regulations, and mechanisms over the longer time horizon of focus in this study. Instead, these scenarios assume that countries achieve their pledges within their geographic boundaries through a cost-effective combination of sectoral transitions. The results from these scenarios could be different depending on the actual policies and mechanisms (including emissions trading) that countries might use to meet their stated pledges in reality.
- The emissions impacts of different levels of U.S. LNG exports discussed in this study are subject to uncertainties in regional emission intensities of natural gas and other fossil fuels (e.g., methane emissions from natural gas infrastructure), uncertainties in land-use change emissions, and climate change impacts (e.g., on building energy demand, crop yields, water availability, etc.).[64,65] Future studies could be designed to understand the sensitivity of results to these effects.
- The regional supply curves (which quantify the relationship between resource availability and extraction costs) are calibrated using regional producer prices (see Table A-1 in the Appendix A-1) rather than extraction costs due to lack of data availability on the latter. This could have implications for the competitiveness of U.S. natural gas relative to other world regions and hence the global market demand for U.S. LNG.
- In this study, traded LNG is represented as a single global market. Future studies can represent bilateral relationships to better account for historical relationships and inertia in the system.
- Broadly, a key limitation of this study is that it relies on a single model, namely, GCAM. While use of a single model is not uncommon, it does not provide a full view of structural uncertainties (i.e., uncertainties arising out of the mathematical abstractions of real-world processes).

[64] Friedlingstein, P., O'sullivan, M., Jones, M.W., Andrew, R.M., Gregor, L., Hauck, J., Le Quéré, C., Luijkx, I.T., Olsen, A., Peters, G.P. and Peters, W., 2022. Global carbon budget 2022. *Earth System Science Data*, *14*(11), pp.4811-4900.
[65] Qin, Z., Zhu, Y., Canadell, J.G., Chen, M., Li, T., Mishra, U. and Yuan, W., 2024. Global spatially explicit carbon emissions from land-use change over the past six decades (1961–2020). *One Earth*, *7*(5), pp.835-847.

APPENDIX A-1: ADDITIONAL DESCRIPTION OF GCAM'S ENERGY SYSTEM

GCAM's energy system contains representations of fossil resources (coal, oil, gas), uranium, and renewable sources (wind, solar, geothermal, hydro, biomass, and traditional biomass) along with processes that transform these resources to final energy carriers (electricity generation, refining, H_2 production, natural gas processing, and district heat), which are ultimately used to deliver goods and services demanded by end use sectors (residential buildings, commercial buildings, transportation, and industry). Each of the sectors in GCAM includes technological detail. For example, the electricity generation sector includes several different technology options to convert coal to electricity such as pulverized coal with and without CCS, and coal integrated gasification combined cycle with and without CCS. The full list of technologies in various sectors in GCAM can be found on the GCAM documentation page (http://jgcri.github.io/gcam-doc/).

In every sector within GCAM, individual technologies compete for market share based on the levelized cost of a technology. The cost of a technology in any period depends on (1) its exogenously specified non-energy cost, (2) its endogenously calculated fuel cost, and (3) any cost of emissions as determined by the climate policy. The first term, non-energy cost, represents capital, fixed, and variable operations and maintenance (O&M) costs incurred over the lifetime of the equipment (except for fuel or electricity costs), expressed per unit of output. For example, the non-energy cost of coal-fired power plant is calculated as the sum of overnight capital cost (amortized using a capital recovery factor and converted to dollars per unit of energy output by applying a capacity factor), and fixed and variable O&M costs. The second term, fuel or electricity cost, depends on the specified efficiency of the technology, which determines the amount of fuel or electricity required to produce each unit of output, as well as the cost of the fuel or electricity. The various data sources and assumptions can be found on the GCAM documentation page (http://jgcri.github.io/gcam-doc/). The prices of fossil fuels and uranium are calculated endogenously. Fossil fuel resource supply in GCAM is modeled using graded resource supply curves that represent increasing cost of extraction as cumulative extraction increases. Wind and rooftop photovoltaic technologies include resource costs that are also calculated from exogenous supply curves that represent marginal costs that increase with deployment, such as long-distance transmission line costs that would be required to produce power from remote wind resources. Utility-scale solar photovoltaic and concentrated solar power technologies are assumed to have constant marginal resource costs regardless of deployment levels. In addition to the above cost components, the levelized costs of renewables also include a representation of intermittency costs for intermittent renewables that attempt to reflect the diminishing contributions to electric capacity reserves as the share of intermittent technologies in the grid increases. The intermittency costs are calculated by assuming that the reserve capacity is provided by natural gas combustion turbines operating at a 5% capacity factor. These intermittency costs could limit the increase in deployment of renewables even under lower capital cost assumptions. GCAM also includes wind and solar technology options with dedicated storage which do not face these intermittency penalties.

In GCAM, technology choice is determined by market competition. The market share captured by a technology increases as its relative costs decline, but GCAM's logit model of market competition avoids a "winner take all" response.

For the purposes of this project, historical natural gas producer prices are calibrated to up-to-date information (see Table A-1). In a future model period, as demand changes, the change in regional producer prices from the historical calibrated values are calculated endogenously using regional supply curves that represent increasing cost of extraction as cumulative extraction increases.

Table A-1.1. Historical natural gas producer prices used for calibration in GCAM

GCAM Region	Natural Gas Producer Prices (2022 $/MMBtu)[a]
European Free Trade Association	1.61
Australia_NZ	1.89
Canada	2.45
Middle East	2.66
Africa_Northern	3.13
USA	3.17
Indonesia	3.61
South Asia	4.48
Southeast Asia	4.48
Central America and Caribbean	4.56
South America_Southern	4.56
Africa_Western	6.11
Russia	7.87
Central Asia	7.87
Europe_Eastern	7.87
South Africa	7.87
EU-12	8.61
EU-15	8.61
Europe_Non_EU	8.61
Africa_Eastern	9.48
Africa_Southern	9.48
China	11.08
India	11.08
Pakistan	11.08
Taiwan	11.97
Argentina	13.19
Brazil	13.19
Colombia	13.19
South America_Northern	13.19
Mexico	13.19
South Korea	13.37
Japan	13.43

[a] Historical natural gas producer prices in the United States are calibrated to the Henry Hub prices from EIA[66]; in Canada, they are calibrated to Alberta marker prices from the Energy Institute's Statistical Review of World Energy (formerly the BP Statistical Review of World Energy).[67] For the rest of the world, natural gas producer prices in each GCAM region are based on the cost, insurance, and freight prices from S&P Global.[68]

As described previously, GCAM includes a representation of natural gas trade. Natural gas can be imported as LNG or through pipelines. Traded LNG is represented as a single global market. Traded pipeline gas is represented in six regional markets (North America, Latin America, Europe, Russia+, Africa and Middle East, and Asia-Pacific). Exporters of pipeline gas export to one of the six regional pipeline blocs from which importers can import. Inter-pipeline bloc trade can also occur. Table A-1.2 includes a full list of pipeline blocs with corresponding GCAM regions.

[66] U.S. EIA (2023). Henry Hub Natural Gas Spot Price. Available at: https://www.eia.gov/dnav/ng/hist/rngwhhda.htm

[67] BP (2022). bp Statistical Review of World Energy. 71st edition. Available at: https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2022-full-report.pdf

[68] S&P Global (2023). S&P Global Commodity Insights. Historical and forecasted LNG prices data sheet.

Table A-1.2. Pipeline blocs represented in GCAM

Pipeline network bloc	Regions that can export to pipeline network bloc	Regions that can import from pipeline network bloc
North America (N. Amer)	Canada, USA, Mexico	Canada, USA, Mexico
Latin America (LA)	Argentina, Brazil, Central America and Caribbean, Colombia, South America_Northern, South America_Southern	Argentina, Brazil, Central America and Caribbean, Colombia, South America_Northern, South America_Southern
Europe (EUR)	EU-12, EU-15, Europe_Non_EU, European Free Trade Association	EU-12, EU-15, Europe_Non_EU, European Free Trade Association, Europe_Eastern
Russia+ (RUS)	Russia	Russia, Central Asia, Europe_Eastern, EU-12, EU-15, Europe_Non_EU, European Free Trade Association, Middle East, China
Africa and Middle East (Afr_MidE)	Africa_Eastern, Africa_Northern, Africa_Southern, Africa_Western, Middle East, South Africa	Africa_Eastern, Africa_Northern, Africa_Southern, Africa_Western, Middle East, South Africa, EU-12, EU-15, Europe_Non_EU, Central Asia
Asia-Pacific (PAC)	Australia_NZ, China, India, Indonesia, Japan, Pakistan, South Asia, South Korea, Southeast Asia, Taiwan	Australia_NZ, China, India, Indonesia, Japan, Pakistan, South Asia, South Korea, Southeast Asia, Taiwan

APPENDIX A-2: U.S. POLICIES INCLUDED UNDER THE DEFINED POLICIES SCENARIO

Table A-2.1. U.S. policies included under the Defined Policies scenario

Section of the Inflation Reduction Act	Program
13101	Production Tax Credit for Electricity from Renewables
13102	Investment Tax Credit for Energy Property
13104	Credit for Carbon Oxide Sequestration (45Q)
13105	Zero-Emission Nuclear Power Production Credit (45U)
13201	Extension of Tax Credits for Biodiesel and Renewable Diesel
13202	Extension of Second-Generation Biofuel Incentives
13203	Sustainable Aviation Fuel Credit (40B)
13301	Energy Efficient Home Improvement Credit (25D)
13304	New Energy Efficient Homes Credit (45L)
50121	Home Energy Performance Based, Whole House Rebates (HOMES)
13302	Residential Clean Energy Credit
50122	High Efficiency Electric Home Rebate Program
13303	Energy Efficient Commercial Buildings Deduction (179D)
13204	Clean Hydrogen Production Tax Credit (45V)
13401	Clean Vehicle Credit (30D)
13403	Commercial Clean Vehicles Credit (45W)
13404	Alternative Fuel Vehicle Refueling Property Credit (30C)
30018	Low or No Emission (Bus) Grants
71101	Clean School Bus Program
Division J, Title VIII	National Electric Vehicle Infrastructure Formula Program
---	EPA Multi-Pollutant Emissions Standards
---	EPA 111(b) and 111(d)
---	State EV credits

APPENDIX A-3: DETAILED DATA TABLES

This page is intentionally left blank. Detailed data-tables follow from the next page.

Table A-3.1. Figure 1 Data. Global primary energy consumption by fuel across scenarios with Model Resolved U.S. LNG export levels (exajoules, EJ)

Scenario	Units	fuel	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	EJ	gas	123	141	139	147	155	168	183	196
DP: MR	EJ	coal	165	178	167	178	181	180	178	175
DP: MR	EJ	oil	189	192	193	196	196	194	188	183
DP: MR	EJ	nuclear	10	10	11	13	14	16	18	21
DP: MR	EJ	biomass	55	56	78	89	100	114	131	146
DP: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP: MR	EJ	wind	3	8	15	24	32	41	48	56
DP: MR	EJ	solar	1	3	7	13	21	28	36	45
DP: MR	EJ	geothermal	0	1	1	2	2	2	2	3
C (High CCS): MR	EJ	gas	123	141	137	141	138	141	147	149
C (High CCS): MR	EJ	coal	165	178	163	168	149	130	109	91
C (High CCS): MR	EJ	oil	189	192	193	194	187	178	165	150
C (High CCS): MR	EJ	nuclear	10	10	12	14	17	21	28	37
C (High CCS): MR	EJ	biomass	55	56	80	96	130	158	167	169
C (High CCS): MR	EJ	hydro	14	15	15	15	16	16	17	17
C (High CCS): MR	EJ	wind	3	8	16	25	36	49	63	81
C (High CCS): MR	EJ	solar	1	3	7	14	24	34	47	63
C (High CCS): MR	EJ	geothermal	0	1	1	2	2	3	3	3
C (Mod CCS): MR	EJ	gas	123	141	134	137	129	129	121	108
C (Mod CCS): MR	EJ	coal	165	178	155	158	127	94	57	37
C (Mod CCS): MR	EJ	oil	189	192	191	192	182	173	157	137
C (Mod CCS): MR	EJ	nuclear	10	10	12	14	18	25	36	49
C (Mod CCS): MR	EJ	biomass	55	56	80	96	126	127	124	119
C (Mod CCS): MR	EJ	hydro	14	15	15	15	16	16	17	17
C (Mod CCS): MR	EJ	wind	3	8	17	27	39	56	76	99

C (Mod CCS): MR	EJ	solar	1	3	8	16	30	45	68	96
C (Mod CCS): MR	EJ	geothermal	0	1	1	2	2	3	3	3
NZ (High CCS): MR	EJ	gas	123	141	137	134	133	139	136	129
NZ (High CCS): MR	EJ	coal	165	178	163	133	116	99	86	66
NZ (High CCS): MR	EJ	oil	189	192	193	188	181	171	154	121
NZ (High CCS): MR	EJ	nuclear	10	10	12	15	19	25	33	50
NZ (High CCS): MR	EJ	biomass	55	56	80	115	148	160	166	161
NZ (High CCS): MR	EJ	hydro	14	15	15	16	16	16	17	17
NZ (High CCS): MR	EJ	wind	3	8	16	29	41	55	71	98
NZ (High CCS): MR	EJ	solar	1	3	7	16	26	38	52	75
NZ (High CCS): MR	EJ	geothermal	0	1	1	2	2	3	3	3
NZ (Mod CCS): MR	EJ	gas	123	141	134	127	119	110	84	63
NZ (Mod CCS): MR	EJ	coal	165	178	155	111	72	42	25	18
NZ (Mod CCS): MR	EJ	oil	189	192	191	183	171	157	126	85
NZ (Mod CCS): MR	EJ	nuclear	10	10	12	17	25	36	54	73
NZ (Mod CCS): MR	EJ	biomass	55	56	80	116	118	121	104	104
NZ (Mod CCS): MR	EJ	hydro	14	15	15	15	16	16	16	17
NZ (Mod CCS): MR	EJ	wind	3	8	17	32	49	69	96	128
NZ (Mod CCS): MR	EJ	solar	1	3	8	20	37	57	88	131
NZ (Mod CCS): MR	EJ	geothermal	0	1	1	2	3	3	3	3

Table A-3.2. Figure 1 Data. Total global primary energy consumption across scenarios with Model Resolved U.S. LNG export levels (exajoules, EJ)

Scenario	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	560	604	626	677	717	759	801	842
C (High CCS): MR	560	604	624	669	699	730	746	760
C (Mod CCS): MR	560	604	613	657	669	668	659	665

NZ (High CCS): MR	560	604	624	648	682	706	718	720
NZ (Mod CCS): MR	560	604	613	623	610	611	596	622

Table A-3.3. Figure 2 Data. Global natural gas consumption by sector (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Units	Sector	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	Buildings	79	96	91	89	89	91	91	89
DP: MR	Bcf/d	DAC	0	0	0	0	0	0	0	0
DP: MR	Bcf/d	Electric power	128	140	125	124	120	122	125	127
DP: MR	Bcf/d	Electric power CCS	0	0	10	18	28	37	44	52
DP: MR	Bcf/d	Hydrogen	0	0	2	6	11	16	20	23
DP: MR	Bcf/d	Hydrogen CCS	0	0	0	2	3	4	5	7
DP: MR	Bcf/d	Industry	131	150	153	163	172	185	209	230
DP: MR	Bcf/d	Industry CCS	0	0	1	3	6	9	11	13
DP: MR	Bcf/d	Transport	5	5	5	4	3	2	2	2
C (High CCS): MR	Bcf/d	Buildings	79	96	90	86	75	69	57	40
C (High CCS): MR	Bcf/d	DAC	0	0	0	0	3	4	5	6
C (High CCS): MR	Bcf/d	Electric power	128	140	123	112	90	77	61	46
C (High CCS): MR	Bcf/d	Electric power CCS	0	0	10	23	41	61	86	112
C (High CCS): MR	Bcf/d	Hydrogen	0	0	1	5	7	10	12	12
C (High CCS): MR	Bcf/d	Hydrogen CCS	0	0	1	2	6	11	18	31
C (High CCS): MR	Bcf/d	Industry	131	150	151	158	150	142	147	142

C (High CCS): MR	Bcf/d	Industry CCS	0	0	1	3	9	15	20	24
C (High CCS): MR	Bcf/d	Transport	5	5	5	4	3	2	2	2
C (Mod CCS): MR	Bcf/d	Buildings	79	96	87	84	73	65	49	28
C (Mod CCS): MR	Bcf/d	DAC	0	0	0	0	0	1	0	2
C (Mod CCS): MR	Bcf/d	Electric power	128	140	128	119	100	87	63	41
C (Mod CCS): MR	Bcf/d	Electric power CCS	0	0	2	10	17	31	41	52
C (Mod CCS): MR	Bcf/d	Hydrogen	0	0	2	5	9	12	13	11
C (Mod CCS): MR	Bcf/d	Hydrogen CCS	0	0	0	1	3	7	11	20
C (Mod CCS): MR	Bcf/d	Industry	131	150	149	156	145	142	140	123
C (Mod CCS): MR	Bcf/d	Industry CCS	0	0	0	2	6	12	16	19
C (Mod CCS): MR	Bcf/d	Transport	5	5	5	4	3	2	2	2
NZ (High CCS): MR	Bcf/d	Buildings	79	96	90	77	68	59	37	14
NZ (High CCS): MR	Bcf/d	DAC	0	0	0	0	3	4	5	7
NZ (High CCS): MR	Bcf/d	Electric power	128	140	123	99	78	64	37	18
NZ (High CCS): MR	Bcf/d	Electric power CCS	0	0	10	32	53	80	109	135
NZ (High CCS): MR	Bcf/d	Hydrogen	0	0	1	3	5	8	9	6
NZ (High CCS): MR	Bcf/d	Hydrogen CCS	0	0	1	4	8	14	25	49
NZ (High CCS): MR	Bcf/d	Industry	131	150	151	150	141	136	130	99

NZ (High CCS): MR	Bcf/d	Industry CCS	0	0	1	4	11	18	24	28
NZ (High CCS): MR	Bcf/d	Transport	5	5	5	4	3	2	2	1
NZ (Mod CCS): MR	Bcf/d	Buildings	79	96	87	76	64	49	21	9
NZ (Mod CCS): MR	Bcf/d	DAC	0	0	0	0	0	0	0	0
NZ (Mod CCS): MR	Bcf/d	Electric power	128	140	128	107	87	66	31	14
NZ (Mod CCS): MR	Bcf/d	Electric power CCS	0	0	2	11	20	32	33	38
NZ (Mod CCS): MR	Bcf/d	Hydrogen	0	0	2	4	8	10	7	3
NZ (Mod CCS): MR	Bcf/d	Hydrogen CCS	0	0	0	1	3	8	14	26
NZ (Mod CCS): MR	Bcf/d	Industry	131	150	149	148	139	127	106	63
NZ (Mod CCS): MR	Bcf/d	Industry CCS	0	0	0	2	6	13	18	22
NZ (Mod CCS): MR	Bcf/d	Transport	5	5	5	4	3	2	2	1

Table A-3.4. Table 4 Data. Global natural gas consumption (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. Note that 1 Bcf/d = 0.36 EJ/y

Scenario	Units	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	337	391	386	407	432	466	507	543
C (High CCS): MR	Bcf/d	337	391	382	393	384	391	408	414
C (Mod CCS): MR	Bcf/d	337	391	373	381	357	358	335	299
NZ (High CCS): MR	Bcf/d	337	391	382	373	370	385	378	358
NZ (Mod CCS): MR	Bcf/d	337	391	373	353	329	306	232	175

Table A-3.5. Figure 3 Data. Global natural gas consumption disaggregated by domestic resources, U.S. LNG exports, other LNG exports, and pipeline exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. Note that 1 Bcf/d = 0.35 EJ/y

Scenario	Units	NG Volumes	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	Domestic Resources	252	275	259	276	283	295	315	334
DP: MR	Bcf/d	Other LNG Exports	33	51	64	68	76	86	96	104
DP: MR	Bcf/d	Pipeline Exports	52	59	45	44	46	47	47	49
DP: MR	Bcf/d	U.S. LNG Exports	0	7	18	19	26	39	49	56
C (High CCS): MR	Bcf/d	Domestic Resources	252	275	255	264	250	243	243	244
C (High CCS): MR	Bcf/d	Other LNG Exports	33	51	63	67	72	79	88	94
C (High CCS): MR	Bcf/d	Pipeline Exports	52	59	45	43	41	42	44	44
C (High CCS): MR	Bcf/d	U.S. LNG Exports	0	7	18	19	22	27	32	33
C (Mod CCS): MR	Bcf/d	Domestic Resources	252	275	248	254	229	217	192	169
C (Mod CCS): MR	Bcf/d	Other LNG Exports	33	51	63	66	69	76	76	67
C (Mod CCS): MR	Bcf/d	Pipeline Exports	52	59	44	42	38	40	40	36
C (Mod CCS): MR	Bcf/d	U.S. LNG Exports	0	7	18	18	20	25	27	27
NZ (High CCS): MR	Bcf/d	Domestic Resources	252	275	255	247	238	237	227	214
NZ (High CCS): MR	Bcf/d	Other LNG Exports	33	51	63	65	69	78	81	78
NZ (High CCS): MR	Bcf/d	Pipeline Exports	52	59	45	43	42	44	41	38
NZ (High CCS): MR	Bcf/d	U.S. LNG Exports	0	7	18	18	20	26	28	29
NZ (Mod CCS): MR	Bcf/d	Domestic Resources	252	275	248	229	203	182	135	100
NZ (Mod CCS): MR	Bcf/d	Other LNG Exports	33	51	63	64	65	65	48	34
NZ (Mod CCS): MR	Bcf/d	Pipeline Exports	52	59	44	42	41	39	30	24
NZ (Mod CCS): MR	Bcf/d	U.S. LNG Exports	0	7	18	18	19	20	19	17

Table A-3.6. Figure 4 (Table 5) Data. U.S. LNG exports (Billion cubic feet/day) across scenarios with Model Resolved U.S. LNG export levels. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	19.3	26.3	38.7	49.4	56.3

C (High CCS): MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	18.6	21.5	27.5	31.7	33.1
C (Mod CCS): MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	18.4	20.4	25.0	26.8	26.8
NZ (High CCS): MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	18.0	20.4	25.8	28.2	28.5
NZ (Mod CCS): MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	17.8	18.9	20.5	19.3	17.2

Table A-3.7. Figure 5 Data. Changes in the energy system due to increased U.S. LNG exports in the Defined Policies: Model Resolved scenario relative to the Defined Policies: Existing/FID Exports scenario (EJ)

Scenario	Units	Variable	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
DP: MR	EJ	U.S. LNG Exports	0	2	6	7	9	14	18	20	341
DP: MR	EJ	ROW gas production	97	109	102	109	115	121	129	136	3613
DP: MR	EJ	ROW energy consumption: Unabated Gas	97	111	105	109	114	121	129	136	3630
DP: MR	EJ	ROW energy consumption: Gas with CCS	0	0	4	7	12	15	19	22	351
DP: MR	EJ	ROW energy consumption: Unabated Coal	149	169	157	166	166	162	158	151	5008
DP: MR	EJ	ROW energy consumption: Unabated Oil	153	158	159	163	165	165	161	157	5007
DP: MR	EJ	ROW energy consumption: Renewables	68	74	107	132	159	188	219	250	4999
DP: MR	EJ	ROW energy consumption: Nuclear	7	7	8	10	11	12	14	16	346
DP: MR	EJ	ROW energy consumption:	0	0	4	7	9	12	14	18	290

		Coal or Oil with CCS									
DP: MR	EJ	ROW total energy consumption	473	518	544	594	635	675	715	750	19632
DP: ExFID	EJ	U.S. LNG Exports	0	2	6	7	9	9	9	9	227
DP: ExFID	EJ	ROW gas production	97	109	102	109	115	122	133	142	3655
DP: ExFID	EJ	ROW energy consumption: Unabated Gas	97	111	105	109	113	117	125	132	3566
DP: ExFID	EJ	ROW energy consumption: Gas with CCS	0	0	4	7	12	15	18	22	347
DP: ExFID	EJ	ROW energy consumption: Unabated Coal	149	169	157	166	166	163	159	153	5023
DP: ExFID	EJ	ROW energy consumption: Unabated Oil	153	158	159	163	165	165	161	157	5014
DP: ExFID	EJ	ROW energy consumption: Renewables	68	74	107	132	159	189	221	252	5028
DP: ExFID	EJ	ROW energy consumption: Nuclear	7	7	8	10	11	12	14	17	349
DP: ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	4	7	9	12	15	18	292
DP: ExFID	EJ	ROW total energy consumption	473	518	544	594	635	674	714	749	19618
DP: MR - DP: ExFID	EJ	U.S. LNG Exports	0	0	0	0	1	5	9	12	113
DP: MR - DP: ExFID	EJ	ROW gas production	0	0	0	0	0	-1	-4	-6	-42

DP: MR - DP: ExFID	EJ	ROW energy consumption: Unabated Gas	0.0	0.0	0.0	0.0	1.3	4.1	4.7	4.7	64.1
DP: MR - DP: ExFID	EJ	ROW energy consumption: Gas with CCS	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5	4.4
DP: MR - DP: ExFID	EJ	ROW energy consumption: Unabated Coal	0.0	0.0	0.0	0.0	-0.3	-0.9	-1.1	-1.1	-14.4
DP: MR - DP: ExFID	EJ	ROW energy consumption: Unabated Oil	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.7	-6.9
DP: MR - DP: ExFID	EJ	ROW energy consumption: Renewables	0.0	0.0	0.0	0.0	-0.6	-1.9	-2.1	-1.9	-28.5
DP: MR - DP: ExFID	EJ	ROW energy consumption: Nuclear	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-2.4
DP: MR - DP: ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-2.1
DP: MR - DP: ExFID	EJ	ROW total energy consumption	0.0	0.0	0.0	0.0	0.3	1.0	1.0	1.0	14.3

Table A-3.8. Figure 6 Data. Changes in the energy system due to increased U.S. LNG exports in the Commitments (High CCS): Model Resolved scenario relative to the Commitments (High CCS): Existing/FID Exports scenario (EJ)

Scenario	Units	Variable	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
C (High CCS): MR	EJ	U.S. LNG Exports	0	2	6	7	8	10	11	12	254
C (High CCS): MR	EJ	ROW gas production	97	109	102	107	106	108	112	114	3342
C (High CCS): MR	EJ	ROW energy consumption: Unabated Gas	97	111	104	106	98	94	90	80	3031

C (High CCS): MR	EJ	ROW energy consumption: Gas with CCS	0	0	4	8	16	25	36	48	592
C (High CCS): MR	EJ	ROW energy consumption: Unabated Coal	149	169	153	157	129	100	68	44	3674
C (High CCS): MR	EJ	ROW energy consumption: Unabated Oil	153	157	158	162	157	150	140	127	4688
C (High CCS): MR	EJ	ROW energy consumption: Renewables	68	74	110	138	187	236	272	304	5855
C (High CCS): MR	EJ	ROW energy consumption: Nuclear	7	7	9	10	13	16	21	28	446
C (High CCS): MR	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	4	8	16	27	39	50	629
C (High CCS): MR	EJ	ROW total energy consumption	473	518	542	590	617	648	666	680	18915
C (High CCS): ExFID	EJ	U.S. LNG Exports	0	2	6	7	8	9	9	9	222
C (High CCS): ExFID	EJ	ROW gas production	97	109	102	107	106	108	114	116	3359
C (High CCS): ExFID	EJ	ROW energy consumption: Unabated Gas	97	111	104	106	98	93	89	80	3021
C (High CCS): ExFID	EJ	ROW energy consumption: Gas with CCS	0	0	4	8	16	25	35	47	588
C (High CCS): ExFID	EJ	ROW energy consumption: Unabated Coal	149	169	153	157	129	100	68	44	3676
C (High CCS): ExFID	EJ	ROW energy consumption: Unabated Oil	153	157	158	162	157	150	140	127	4689

C (High CCS): ExFID	EJ	ROW energy consumption: Renewables	68	74	110	138	187	237	272	304	5859
C (High CCS): ExFID	EJ	ROW energy consumption: Nuclear	7	7	9	10	13	16	21	28	447
C (High CCS): ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	4	8	16	27	39	50	630
C (High CCS): ExFID	EJ	ROW total energy consumption	473	518	542	590	617	647	665	680	18910
C (High CCS): MR - C (High CCS): ExFID	EJ	U.S. LNG Exports	0	0	0	0	0	1	3	3	31
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW gas production	0	0	0	0	0	0	-2	-3	-17
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Unabated Gas	0.0	0.0	0.0	0.0	0.0	1.0	0.8	0.4	10.1
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Gas with CCS	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.4	3.9
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Unabated Coal	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	-1.6

C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Unabated Oil	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-1.7
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Renewables	0.0	0.0	0.0	0.0	0.0	-0.4	-0.3	-0.2	-4.4
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Nuclear	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.8
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-1.2
C (High CCS): MR - C (High CCS): ExFID	EJ	ROW total energy consumption	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.3	4.4

Table A-3.9. Figure 7 Data. Changes in the energy system due to increased U.S. LNG exports in the Commitments (Moderate CCS): Model Resolved scenario relative to the Commitments (Moderate CCS): Existing/FID Exports scenario (EJ)

Scenario	Units	Variable	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
C (Mod CCS): MR	EJ	U.S. LNG Exports	0	2	6	7	7	9	10	10	231
C (Mod CCS): MR	EJ	ROW gas production	97	109	99	104	99	99	93	82	3034
C (Mod CCS): MR	EJ	ROW energy consumption: Unabated Gas	97	111	104	107	100	95	85	67	2985

C (Mod CCS): MR	EJ	ROW energy consumption: Gas with CCS	0	0	1	4	7	14	20	27	305
C (Mod CCS): MR	EJ	ROW energy consumption: Unabated Coal	149	169	148	152	118	82	48	29	3336
C (Mod CCS): MR	EJ	ROW energy consumption: Unabated Oil	153	157	158	162	155	147	134	117	4602
C (Mod CCS): MR	EJ	ROW energy consumption: Renewables	68	74	112	142	193	224	262	302	5793
C (Mod CCS): MR	EJ	ROW energy consumption: Nuclear	7	7	9	11	14	20	29	38	549
C (Mod CCS): MR	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	1	3	6	10	11	14	198
C (Mod CCS): MR	EJ	ROW total energy consumption	473	518	533	580	593	593	588	593	17767
C (Mod CCS): ExFID	EJ	U.S. LNG Exports	0	2	6	7	7	9	9	9	220
C (Mod CCS): ExFID	EJ	ROW gas production	97	109	99	104	99	99	94	83	3041
C (Mod CCS): ExFID	EJ	ROW energy consumption: Unabated Gas	97	111	104	107	100	94	84	67	2981
C (Mod CCS): ExFID	EJ	ROW energy consumption: Gas with CCS	0	0	1	4	7	14	19	27	304
C (Mod CCS): ExFID	EJ	ROW energy consumption: Unabated Coal	149	169	148	152	118	83	49	29	3337

C (Mod CCS): ExFID	EJ	ROW energy consumption: Unabated Oil	153	157	158	162	155	147	135	117	4602
C (Mod CCS): ExFID	EJ	ROW energy consumption: Renewables	68	74	112	142	193	224	262	302	5794
C (Mod CCS): ExFID	EJ	ROW energy consumption: Nuclear	7	7	9	11	14	20	29	38	549
C (Mod CCS): ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	1	3	6	10	11	14	198
C (Mod CCS): ExFID	EJ	ROW total energy consumption	473	518	533	580	593	592	588	593	17765
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	U.S. LNG Exports	0	0	0	0	0	0	1	1	11
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW gas production	0	0	0	0	0	0	-1	-1	-7
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW energy consumption: Unabated Gas	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.2	3.8
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW energy consumption: Gas with CCS	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.8
C (Mod CCS): MR - C (Mod	EJ	ROW energy consumption: Unabated Coal	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.6

CCS): ExFID											
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW energy consumption: Unabated Oil	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.8
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW energy consumption: Renewables	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.8
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW energy consumption: Nuclear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.4
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.3
C (Mod CCS): MR - C (Mod CCS): ExFID	EJ	ROW total energy consumption	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	1.8

Table A-3.10. Figure 8 Data. Changes in the energy system due to increased U.S. LNG exports in the Net Zero 2050 (High CCS): Model Resolved scenario relative to the Commitments (High CCS): Existing/FID Exports scenario (EJ)

Scenario	Units	Variable	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
NZ (High CCS): MR	EJ	U.S. LNG Exports	0	2	6	6	7	9	10	10	236
NZ (High CCS): MR	EJ	ROW gas production	97	109	102	101	102	104	102	96	3162

NZ (High CCS): MR	EJ	ROW energy consumption: Unabated Gas	97	111	104	95	88	81	66	45	2635
NZ (High CCS): MR	EJ	ROW energy consumption: Gas with CCS	0	0	4	12	22	34	47	64	789
NZ (High CCS): MR	EJ	ROW energy consumption: Unabated Coal	149	169	153	117	86	56	37	28	2834
NZ (High CCS): MR	EJ	ROW energy consumption: Unabated Oil	153	157	158	155	150	142	126	93	4413
NZ (High CCS): MR	EJ	ROW energy consumption: Renewables	68	74	110	162	213	251	286	328	6323
NZ (High CCS): MR	EJ	ROW energy consumption: Nuclear	7	7	9	12	15	20	27	40	550
NZ (High CCS): MR	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	4	16	27	41	50	46	834
NZ (High CCS): MR	EJ	ROW total energy consumption	473	518	542	569	601	625	640	643	18378
NZ (High CCS): ExFID	EJ	U.S. LNG Exports	0	2	6	6	7	9	9	9	219
NZ (High CCS): ExFID	EJ	ROW gas production	97	109	102	101	102	105	103	97	3173
NZ (High CCS): ExFID	EJ	ROW energy consumption: Unabated Gas	97	111	104	95	88	81	66	45	2632
NZ (High CCS): ExFID	EJ	ROW energy consumption: Gas with CCS	0	0	4	12	22	34	47	64	786

NZ (High CCS): ExFID	EJ	ROW energy consumption: Unabated Coal	149	169	153	117	86	56	37	28	2835
NZ (High CCS): ExFID	EJ	ROW energy consumption: Unabated Oil	153	157	158	155	150	142	126	93	4414
NZ (High CCS): ExFID	EJ	ROW energy consumption: Renewables	68	74	110	162	213	251	286	328	6324
NZ (High CCS): ExFID	EJ	ROW energy consumption: Nuclear	7	7	9	12	15	20	27	40	550
NZ (High CCS): ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0	0	4	16	27	41	50	46	835
NZ (High CCS): ExFID	EJ	ROW total energy consumption	473	518	542	569	601	625	640	643	18376
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	U.S. LNG Exports	0	0	0	0	0	1	2	2	17
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW gas production	0	0	0	0	0	0	-1	-1	-10
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Unabated Gas	0.0	0.0	0.0	0.0	0.0	0.5	0.2	0.1	3.7
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Gas with CCS	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	2.9

NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Unabated Coal	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	-0.5
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Unabated Oil	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	-0.7
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Renewables	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	-1.8
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Nuclear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW energy consumption: Coal or Oil with CCS	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.8
NZ (High CCS): MR - NZ (High CCS): ExFID	EJ	ROW total energy consumption	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	2.4

Table A-3.11. Table 6-8 data. Global FFI CO_2 and GHG Emissions across scenarios ($MtCO_2e$)

Variable	Scenario	Units	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
Global FFI CO_2	*DP: MR*	$MtCO_2e$	35624	38399	36091	36605	35773	35012	34140	32949	1102145
Global FFI CO_2	*DP: ExFID*	$MtCO_2e$	35624	38399	36091	36605	35737	34906	34047	32900	1100830
Global FFI CO_2	*DP: Hi Exp*	$MtCO_2e$	35624	38399	36091	36605	35839	35086	34204	32990	1103292
Global FFI CO_2	*C (High CCS): MR*	$MtCO_2e$	35624	38399	35269	34541	27899	21401	14847	8393	810161
Global FFI CO_2	*C (High CCS): ExFID*	$MtCO_2e$	35624	38399	35269	34541	27899	21377	14834	8389	809960
Global FFI CO_2	*C (High CCS): Hi Exp*	$MtCO_2e$	35624	38399	35269	34541	27985	21455	14878	8417	811085
Global FFI CO_2	*C (Mod CCS): MR*	$MtCO_2e$	35624	38398	35257	34543	28116	21603	14991	8419	813004
Global FFI CO_2	*C (Mod CCS): ExFID*	$MtCO_2e$	35624	38398	35257	34543	28116	21597	14984	8416	812930
Global FFI CO_2	*C (Mod CCS): Hi Exp*	$MtCO_2e$	35624	38398	35257	34543	28162	21635	15042	8508	813918
Global FFI CO_2	*NZ (High CCS): MR*	$MtCO_2e$	35624	38399	35269	27896	20640	13869	7072	89	639192
Global FFI CO_2	*NZ (High CCS): ExFID*	$MtCO_2e$	35624	38399	35269	27896	20640	13858	7068	88	639115
Global FFI CO_2	*NZ (High CCS): Hi Exp*	$MtCO_2e$	35624	38399	35269	27896	20682	13910	7096	98	639754
Global FFI CO_2	*NZ (Mod CCS): MR*	$MtCO_2e$	35624	38398	35257	27960	21041	14132	7324	253	644529
Global FFI CO_2	*NZ (Mod CCS): ExFID*	$MtCO_2e$	35624	38398	35257	27960	21041	14132	7324	253	644529

Global FFI CO_2	*NZ (Mod CCS): Hi Exp*	$MtCO_2e$	35624	38398	35257	27960	21096	14209	7410	382	646001
Global GHG	*DP: MR*	$MtCO_2e$	52602	53751	50998	49137	50177	49419	49307	48656	1552407
Global GHG	*DP: ExFID*	$MtCO_2e$	52602	53751	50998	49137	50174	49367	49244	48615	1551699
Global GHG	*DP: Hi Exp*	$MtCO_2e$	52602	53751	50998	49137	50180	49486	49361	48693	1553144
Global GHG	*C (High CCS): MR*	$MtCO_2e$	52602	53884	50170	49312	42605	37022	29257	21428	1267764
Global GHG	*C (High CCS): ExFID*	$MtCO_2e$	52602	53884	50170	49312	42605	37036	29226	21424	1267667
Global GHG	*C (High CCS): Hi Exp*	$MtCO_2e$	52602	53884	50170	49312	42613	37075	29325	21443	1268452
Global GHG	*C (Mod CCS): MR*	$MtCO_2e$	52602	53884	49677	48838	40885	32230	25802	18887	1205470
Global GHG	*C (Mod CCS): ExFID*	$MtCO_2e$	52602	53884	49677	48838	40885	32222	25796	18888	1205403
Global GHG	*C (Mod CCS): Hi Exp*	$MtCO_2e$	52602	53884	49677	48838	40949	32266	25851	18967	1206456
Global GHG	*NZ (High CCS): MR*	$MtCO_2e$	52602	53884	50170	40087	35528	27454	20645	13155	1070536
Global GHG	*NZ (High CCS): ExFID*	$MtCO_2e$	52602	53884	50170	40087	35529	27466	20627	13157	1070515
Global GHG	*NZ (High CCS): Hi Exp*	$MtCO_2e$	52602	53884	50170	40087	35499	27495	20707	13130	1070838
Global GHG	*NZ (Mod CCS): MR*	$MtCO_2e$	52602	53884	49677	38693	30011	24145	16171	11251	988887
Global GHG	*NZ (Mod CCS): ExFID*	$MtCO_2e$	52602	53884	49677	38693	30011	24145	16171	11251	988888

Global GHG	*NZ (Mod CCS): Hi Exp*	$MtCO_2e$	52602	53884	49677	38693	30034	24222	16242	11282	989841

Table A-3.12. Table 6-8 data. U.S. LNG exports across scenarios (EJ). Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Units	Variable	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
DP: MR	EJ	U.S. LNG Exports	0.0	2.4	6.3	7.0	9.5	13.9	17.8	20.3	340.6
DP: ExFID	EJ	U.S. LNG Exports	0.0	2.4	6.3	7.0	8.5	8.5	8.5	8.5	227.4
DP: Hi Exp	EJ	U.S. LNG Exports	0.0	2.4	6.3	7.0	11.3	17.5	23.2	27.5	416.3
C (High CCS): MR	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.7	7.8	9.9	11.4	11.9	253.6
C (High CCS): ExFID	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.7	7.8	8.5	8.5	8.5	222.2
C (High CCS): Hi Exp	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.7	9.6	13.5	16.8	19.1	329.3
C (Mod CCS): MR	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.6	7.4	9.0	9.6	9.7	231.3
C (Mod CCS): ExFID	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.6	7.4	8.5	8.5	8.5	219.9
C (Mod CCS): Hi Exp	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.6	9.2	12.6	15.0	16.9	306.9
NZ (High CCS): MR	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.5	7.4	9.3	10.2	10.3	236.4
NZ (High CCS): ExFID	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.5	7.4	8.5	8.5	8.5	219.2
NZ (High CCS): Hi Exp	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.5	9.2	12.9	15.6	17.5	312.0
NZ (Mod CCS): MR	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.4	6.8	7.4	7.0	6.2	195.5
NZ (Mod CCS): ExFID	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.4	6.8	7.4	7.0	6.2	195.5
NZ (Mod CCS): Hi Exp	EJ	U.S. LNG Exports	0.0	2.4	6.3	6.4	8.6	11.0	12.4	13.4	271.1

Table A-3.13. Table 6-8 data. Changes in emissions due to increased U.S. LNG exports (MR-ExFID, Hi Exp-MR, Hi Exp-ExFID)

Scenario	Units	Variable	2015	2020	2025	2030	2035	2040	2045	2050	Change in Cumulative Emissions 2020-2050, $MtCO_2e$	Change in Cumulative U.S. LNG Exports 2020-2050, EJ	Change in Cumulative Emissions/ Change in Cumulative U.S. LNG Exports, $MtCO_2e/EJ$
DP: MR - DP: ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	36	106	93	49	1315	113	12
C (High CCS): MR - C (High CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	0	24	14	4	201	31	6
C (Mod CCS): MR - C (Mod CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	0	6	7	4	73	11	6
NZ (High CCS): MR - NZ (High CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	0	11	3	1	77	17	4
DP: Hi Exp - DP: MR	$MtCO_2e$	Global FFI CO_2	0	0	0	0	66	74	64	41	1147	76	15
C (High CCS): Hi Exp - C (High CCS): MR	$MtCO_2e$	Global FFI CO_2	0	0	0	0	86	54	31	23	924	76	12
C (Mod CCS): Hi Exp - C (Mod CCS): MR	$MtCO_2e$	Global FFI CO_2	0	0	0	0	46	32	51	88	914	76	12

NZ (High CCS): Hi Exp - NZ (High CCS): MR	$MtCO_2e$	Global FFI CO_2	0	0	0	0	42	41	24	9	563	76	7
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	$MtCO_2e$	Global FFI CO_2	0	0	0	0	55	76	86	129	1473	76	19
DP: Hi Exp - DP: ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	102	180	157	90	2462	189	13
C (High CCS): Hi Exp - C (High CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	86	78	45	27	1125	107	11
C (Mod CCS): Hi Exp - C (Mod CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	46	39	58	92	988	87	11
NZ (High CCS): Hi Exp - NZ (High CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	42	52	27	10	639	93	7
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): ExFID	$MtCO_2e$	Global FFI CO_2	0	0	0	0	55	76	86	129	1473	76	19
DP: MR - DP: ExFID	$MtCO_2e$	Global GHG	0	0	0	0	3	52	63	41	708	113	6

C (High CCS): MR - C (High CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	0	-14	31	4	97	31	3
C (Mod CCS): MR - C (Mod CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	0	8	6	0	67	11	6
NZ (High CCS): MR - NZ (High CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	0	-12	18	-2	21	17	1
DP: Hi Exp - DP: MR	$MtCO_2e$	Global GHG	0	0	0	0	4	67	54	37	738	76	10
C (High CCS): Hi Exp - C (High CCS): MR	$MtCO_2e$	Global GHG	0	0	0	0	8	53	68	15	689	76	9
C (Mod CCS): Hi Exp - C (Mod CCS): MR	$MtCO_2e$	Global GHG	0	0	0	0	64	36	49	80	986	76	13
NZ (High CCS): Hi Exp - NZ (High CCS): MR	$MtCO_2e$	Global GHG	0	0	0	0	-29	42	63	-24	302	76	4
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	$MtCO_2e$	Global GHG	0	0	0	0	23	77	71	32	953	76	13
DP: Hi Exp - DP: ExFID	$MtCO_2e$	Global GHG	0	0	0	0	6	119	117	78	1446	189	8

C (High CCS): Hi Exp - C (High CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	8	39	100	18	785	107	7
C (Mod CCS): Hi Exp - C (Mod CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	64	44	55	80	1053	87	12
NZ (High CCS): Hi Exp - NZ (High CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	-30	29	81	-26	322	93	3
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): ExFID	$MtCO_2e$	Global GHG	0	0	0	0	23	77	71	32	953	76	13

Table A-3.14. Figure 9 Data. Changes in primary energy consumption in scenarios with High Exports assumptions relative to scenarios with Market Resolved assumptions

Scenario	Units	Fuel	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	EJ	gas	123	141	139	147	155	168	183	196
DP: MR	EJ	coal	165	178	167	178	181	180	178	175
DP: MR	EJ	oil	189	192	193	196	196	194	188	183
DP: MR	EJ	nuclear	10	10	11	13	14	16	18	21
DP: MR	EJ	biomass	55	56	78	89	100	114	131	146
DP: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP: MR	EJ	wind	3	8	15	24	32	41	48	56

DP: MR	EJ	solar	1	3	7	13	21	28	36	45
DP: MR	EJ	geothermal	0	1	1	2	2	2	2	3
DP: Hi Exp	EJ	gas	123	141	139	147	158	171	186	199
DP: Hi Exp	EJ	coal	165	178	167	178	180	179	177	174
DP: Hi Exp	EJ	oil	189	192	193	196	195	194	188	182
DP: Hi Exp	EJ	nuclear	10	10	11	13	14	16	18	20
DP: Hi Exp	EJ	biomass	55	56	78	89	100	113	130	145
DP: Hi Exp	EJ	hydro	14	15	15	15	16	16	17	17
DP: Hi Exp	EJ	wind	3	8	15	24	32	40	48	56
DP: Hi Exp	EJ	solar	1	3	7	13	21	28	36	45
DP: Hi Exp	EJ	geothermal	0	1	1	2	2	2	2	3
C (High CCS): MR	EJ	gas	123	141	137	141	138	141	147	149
C (High CCS): MR	EJ	coal	165	178	163	168	149	130	109	91
C (High CCS): MR	EJ	oil	189	192	193	194	187	178	165	150
C (High CCS): MR	EJ	nuclear	10	10	12	14	17	21	28	37
C (High CCS): MR	EJ	biomass	55	56	80	96	130	158	167	169
C (High CCS): MR	EJ	hydro	14	15	15	15	16	16	17	17
C (High CCS): MR	EJ	wind	3	8	16	25	36	49	63	81
C (High CCS): MR	EJ	solar	1	3	7	14	24	34	47	63
C (High CCS): MR	EJ	geothermal	0	1	1	2	2	3	3	3
C (High CCS): Hi Exp	EJ	gas	123	141	137	141	141	143	149	152
C (High CCS): Hi Exp	EJ	coal	165	178	163	168	149	130	109	90
C (High CCS): Hi Exp	EJ	oil	189	192	193	194	187	177	165	150
C (High CCS): Hi Exp	EJ	nuclear	10	10	12	14	17	20	27	37
C (High CCS): Hi Exp	EJ	biomass	55	56	80	96	129	158	167	168
C (High CCS): Hi Exp	EJ	hydro	14	15	15	15	16	16	17	17
C (High CCS): Hi Exp	EJ	wind	3	8	16	25	36	49	63	80
C (High CCS): Hi Exp	EJ	solar	1	3	7	14	24	34	47	63
C (High CCS): Hi Exp	EJ	geothermal	0	1	1	2	2	3	3	3
C (Mod CCS): MR	EJ	gas	123	141	134	137	129	129	121	108
C (Mod CCS): MR	EJ	coal	165	178	155	158	127	94	57	37

C (Mod CCS): MR	EJ	oil	189	192	191	192	182	173	157	137
C (Mod CCS): MR	EJ	nuclear	10	10	12	14	18	25	36	49
C (Mod CCS): MR	EJ	biomass	55	56	80	96	126	127	124	119
C (Mod CCS): MR	EJ	hydro	14	15	15	15	16	16	17	17
C (Mod CCS): MR	EJ	wind	3	8	17	27	39	56	76	99
C (Mod CCS): MR	EJ	solar	1	3	8	16	30	45	68	96
C (Mod CCS): MR	EJ	geothermal	0	1	1	2	2	3	3	3
C (Mod CCS): Hi Exp	EJ	gas	123	141	134	137	131	131	123	111
C (Mod CCS): Hi Exp	EJ	coal	165	178	155	158	127	93	56	37
C (Mod CCS): Hi Exp	EJ	oil	189	192	191	192	182	173	157	136
C (Mod CCS): Hi Exp	EJ	nuclear	10	10	12	14	18	25	36	49
C (Mod CCS): Hi Exp	EJ	biomass	55	56	80	96	126	127	124	119
C (Mod CCS): Hi Exp	EJ	hydro	14	15	15	15	16	16	17	17
C (Mod CCS): Hi Exp	EJ	wind	3	8	17	27	39	56	76	99
C (Mod CCS): Hi Exp	EJ	solar	1	3	8	16	30	45	68	95
C (Mod CCS): Hi Exp	EJ	geothermal	0	1	1	2	2	3	3	3
NZ (High CCS): MR	EJ	gas	123	141	137	134	133	139	136	129
NZ (High CCS): MR	EJ	coal	165	178	163	133	116	99	86	66
NZ (High CCS): MR	EJ	oil	189	192	193	188	181	171	154	121
NZ (High CCS): MR	EJ	nuclear	10	10	12	15	19	25	33	50
NZ (High CCS): MR	EJ	biomass	55	56	80	115	148	160	166	161
NZ (High CCS): MR	EJ	hydro	14	15	15	16	16	16	17	17
NZ (High CCS): MR	EJ	wind	3	8	16	29	41	55	71	98
NZ (High CCS): MR	EJ	solar	1	3	7	16	26	38	52	75
NZ (High CCS): MR	EJ	geothermal	0	1	1	2	2	3	3	3
NZ (High CCS): Hi Exp	EJ	gas	123	141	137	134	136	141	138	132
NZ (High CCS): Hi Exp	EJ	coal	165	178	163	133	116	99	86	65
NZ (High CCS): Hi Exp	EJ	oil	189	192	193	188	181	171	154	121

NZ (High CCS): Hi Exp	EJ	nuclear	10	10	12	15	19	25	33	50
NZ (High CCS): Hi Exp	EJ	biomass	55	56	80	115	147	160	166	161
NZ (High CCS): Hi Exp	EJ	hydro	14	15	15	16	16	16	17	17
NZ (High CCS): Hi Exp	EJ	wind	3	8	16	29	40	55	71	97
NZ (High CCS): Hi Exp	EJ	solar	1	3	7	16	26	38	52	75
NZ (High CCS): Hi Exp	EJ	geothermal	0	1	1	2	2	3	3	3
NZ (Mod CCS): MR	EJ	gas	123	141	134	127	119	110	84	63
NZ (Mod CCS): MR	EJ	coal	165	178	155	111	72	42	25	18
NZ (Mod CCS): MR	EJ	oil	189	192	191	183	171	157	126	85
NZ (Mod CCS): MR	EJ	nuclear	10	10	12	17	25	36	54	73
NZ (Mod CCS): MR	EJ	biomass	55	56	80	116	118	121	104	104
NZ (Mod CCS): MR	EJ	hydro	14	15	15	15	16	16	16	17
NZ (Mod CCS): MR	EJ	wind	3	8	17	32	49	69	96	128
NZ (Mod CCS): MR	EJ	solar	1	3	8	20	37	57	88	131
NZ (Mod CCS): MR	EJ	geothermal	0	1	1	2	3	3	3	3
NZ (Mod CCS): Hi Exp	EJ	gas	123	141	134	127	121	113	86	67
NZ (Mod CCS): Hi Exp	EJ	coal	165	178	155	111	72	42	25	18
NZ (Mod CCS): Hi Exp	EJ	oil	189	192	191	183	171	157	125	85
NZ (Mod CCS): Hi Exp	EJ	nuclear	10	10	12	17	25	35	53	73
NZ (Mod CCS): Hi Exp	EJ	biomass	55	56	80	116	118	120	104	104
NZ (Mod CCS): Hi Exp	EJ	hydro	14	15	15	15	16	16	16	17
NZ (Mod CCS): Hi Exp	EJ	wind	3	8	17	32	49	69	96	127
NZ (Mod CCS): Hi Exp	EJ	solar	1	3	8	20	37	57	88	130
NZ (Mod CCS): Hi Exp	EJ	geothermal	0	1	1	2	3	3	3	3
DP: Hi Exp - DP: MR	EJ	gas	0.0	0.0	0.0	0.0	2.3	3.0	3.2	3.2
DP: Hi Exp - DP: MR	EJ	coal	0.0	0.0	0.0	0.0	-0.5	-0.7	-0.9	-1.0
DP: Hi Exp - DP: MR	EJ	oil	0.0	0.0	0.0	0.0	-0.2	-0.2	-0.3	-0.4

DP: Hi Exp - DP: MR	EJ	nuclear	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2
DP: Hi Exp - DP: MR	EJ	biomass	0.0	0.0	0.0	0.0	-0.9	-1.0	-0.9	-0.8
DP: Hi Exp - DP: MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp - DP: MR	EJ	wind	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.2
DP: Hi Exp - DP: MR	EJ	solar	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
DP: Hi Exp - DP: MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp - C (High CCS): MR	EJ	gas	0.0	0.0	0.0	0.0	2.4	2.5	2.4	2.7
C (High CCS): Hi Exp - C (High CCS): MR	EJ	coal	0.0	0.0	0.0	0.0	-0.3	-0.5	-0.5	-0.5
C (High CCS): Hi Exp - C (High CCS): MR	EJ	oil	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.4	-0.5
C (High CCS): Hi Exp - C (High CCS): MR	EJ	nuclear	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2
C (High CCS): Hi Exp - C (High CCS): MR	EJ	biomass	0.0	0.0	0.0	0.0	-1.0	-0.5	-0.3	-0.3
C (High CCS): Hi Exp - C (High CCS): MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp - C (High CCS): MR	EJ	wind	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.2
C (High CCS): Hi Exp - C (High CCS): MR	EJ	solar	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
C (High CCS): Hi Exp - C (High CCS): MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	gas	0.0	0.0	0.0	0.0	2.3	2.2	2.6	3.8
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	coal	0.0	0.0	0.0	0.0	-0.4	-0.5	-0.4	-0.5
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	oil	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.5	-0.8
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	nuclear	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.4
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	biomass	0.0	0.0	0.0	0.0	0.0	0.1	0.1	-0.1
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	wind	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.3

C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	solar	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.4
C (Mod CCS): Hi Exp - C (Mod CCS): MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	gas	0.0	0.0	0.0	0.0	2.4	2.4	2.3	3.3
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	coal	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	-0.5
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	oil	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.4	-0.5
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	nuclear	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.3
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	biomass	0.0	0.0	0.0	0.0	-0.5	-0.4	-0.2	-0.3
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	wind	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.2
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	solar	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.2
NZ (High CCS): Hi Exp - NZ (High CCS): MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	gas	0.0	0.0	0.0	0.0	2.0	2.5	2.7	3.9
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	coal	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.2	-0.3
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	oil	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.4	-0.6
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	nuclear	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.4	-0.5

NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	biomass	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.4	-0.6
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	wind	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	-0.4
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	solar	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.3	-0.7
NZ (Mod CCS): Hi Exp - NZ (Mod CCS): MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table A-3.15. Figure 10 Data. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Units	NG Volumes	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	Domestic Resources	252	275	259	276	283	295	315	334
DP: MR	Bcf/d	Other LNG Exports	33	51	64	68	76	86	96	104
DP: MR	Bcf/d	Pipeline Exports	52	59	45	44	46	47	47	49
DP: MR	Bcf/d	U.S. LNG Exports	0	7	18	19	26	39	49	56
DP Lo U.S. Sup: MR	Bcf/d	Domestic Resources	252	276	257	272	278	286	300	322
DP Lo U.S. Sup: MR	Bcf/d	Other LNG Exports	33	51	64	68	76	88	101	112
DP Lo U.S. Sup: MR	Bcf/d	Pipeline Exports	52	59	45	44	45	47	49	52
DP Lo U.S. Sup: MR	Bcf/d	U.S. LNG Exports	0	7	18	18	21	25	28	31
DP Hi U.S. Sup: MR	Bcf/d	Domestic Resources	252	274	259	276	284	296	317	338
DP Hi U.S. Sup: MR	Bcf/d	Other LNG Exports	33	51	64	68	77	85	95	102
DP Hi U.S. Sup: MR	Bcf/d	Pipeline Exports	52	59	45	44	46	47	46	47
DP Hi U.S. Sup: MR	Bcf/d	U.S. LNG Exports	0	7	18	20	28	43	59	70
DP Lo U.S. Sup: MR - DP: MR	Bcf/d	Domestic Resources	0	2	-2	-4	-6	-9	-14	-12
DP Lo U.S. Sup: MR - DP: MR	Bcf/d	Other LNG Exports	0	0	0	0	0	2	5	8
DP Lo U.S. Sup: MR - DP: MR	Bcf/d	Pipeline Exports	0	0	0	0	-1	0	2	3
DP Lo U.S. Sup: MR - DP: MR	Bcf/d	U.S. LNG Exports	0	0	0	-1	-5	-14	-22	-25
DP Hi U.S. Sup: MR - DP: MR	Bcf/d	Domestic Resources	0	0	0	0	1	1	2	4
DP Hi U.S. Sup: MR - DP: MR	Bcf/d	Other LNG Exports	0	0	0	0	0	0	-1	-2

DP Hi U.S. Sup: MR - DP: MR	Bcf/d	Pipeline Exports	0	0	0	0	0	0	-1	-1
DP Hi U.S. Sup: MR - DP: MR	Bcf/d	U.S. LNG Exports	0	0	0	0	1	5	9	14

Table A-3.16. Figure 11 Data. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	19.3	26.3	38.7	49.4	56.3
DP Lo U.S. Sup: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	18.2	21.0	24.7	27.8	31.5
DP Hi U.S. Sup: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	19.5	27.7	43.2	58.7	70.0

Table A-3.17. Figure 12 Data. Global primary energy consumption by fuel (EJ) in the Defined Policies: Model Resolved scenario and U.S. supply sensitivity scenarios

Scenario	Units	Fuel	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	EJ	gas	123	141	139	147	155	168	183	196
DP: MR	EJ	coal	165	178	167	178	181	180	178	175
DP: MR	EJ	oil	189	192	193	196	196	194	188	183
DP: MR	EJ	nuclear	10	10	11	13	14	16	18	21
DP: MR	EJ	biomass	55	56	78	89	100	114	131	146
DP: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP: MR	EJ	wind	3	8	15	24	32	41	48	56
DP: MR	EJ	solar	1	3	7	13	21	28	36	45
DP: MR	EJ	geothermal	0	1	1	2	2	2	2	3
DP Lo U.S. Sup: MR	EJ	gas	123	141	138	145	151	160	172	186
DP Lo U.S. Sup: MR	EJ	coal	165	178	167	178	182	182	181	178
DP Lo U.S. Sup: MR	EJ	oil	189	192	193	196	196	194	189	184
DP Lo U.S. Sup: MR	EJ	nuclear	10	10	11	13	14	16	18	21

DP Lo U.S. Sup: MR	EJ	biomass	55	56	78	90	102	116	134	148
DP Lo U.S. Sup: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP Lo U.S. Sup: MR	EJ	wind	3	8	15	24	32	41	49	57
DP Lo U.S. Sup: MR	EJ	solar	1	3	7	13	21	29	37	45
DP Lo U.S. Sup: MR	EJ	geothermal	0	1	1	2	2	2	3	3
DP Hi U.S. Sup: MR	EJ	gas	123	141	139	147	156	170	186	201
DP Hi U.S. Sup: MR	EJ	coal	165	178	167	178	180	179	178	174
DP Hi U.S. Sup: MR	EJ	oil	189	192	193	196	196	194	188	182
DP Hi U.S. Sup: MR	EJ	nuclear	10	10	11	13	14	16	18	20
DP Hi U.S. Sup: MR	EJ	biomass	55	56	78	89	100	113	130	145
DP Hi U.S. Sup: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP Hi U.S. Sup: MR	EJ	wind	3	8	15	24	32	41	48	56
DP Hi U.S. Sup: MR	EJ	solar	1	3	7	13	21	28	36	45
DP Hi U.S. Sup: MR	EJ	geothermal	0	1	1	2	2	2	2	3
DP Lo U.S. Sup: MR - DP: MR	EJ	gas	0.0	0.6	-0.7	-2.1	-4.3	-7.5	-10.3	-9.3
DP Lo U.S. Sup: MR - DP: MR	EJ	coal	0.0	0.0	0.0	0.4	1.1	1.9	2.5	2.6
DP Lo U.S. Sup: MR - DP: MR	EJ	oil	0.0	-0.1	0.1	0.2	0.4	0.6	1.0	1.1
DP Lo U.S. Sup: MR - DP: MR	EJ	nuclear	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5
DP Lo U.S. Sup: MR - DP: MR	EJ	biomass	0.0	-0.1	0.3	0.7	1.3	2.5	3.1	1.8
DP Lo U.S. Sup: MR - DP: MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR - DP: MR	EJ	wind	0.0	-0.1	0.0	0.1	0.3	0.5	0.7	0.7
DP Lo U.S. Sup: MR - DP: MR	EJ	solar	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.4
DP Lo U.S. Sup: MR - DP: MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR - DP: MR	EJ	gas	0.0	-0.1	0.1	0.3	0.9	2.0	3.5	5.2
DP Hi U.S. Sup: MR - DP: MR	EJ	coal	0.0	0.0	0.0	-0.1	-0.2	-0.5	-0.7	-1.0
DP Hi U.S. Sup: MR - DP: MR	EJ	oil	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.4	-0.7
DP Hi U.S. Sup: MR - DP: MR	EJ	nuclear	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2
DP Hi U.S. Sup: MR - DP: MR	EJ	biomass	0.0	0.0	0.0	-0.1	-0.3	-0.6	-1.0	-1.3
DP Hi U.S. Sup: MR - DP: MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR - DP: MR	EJ	wind	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.3
DP Hi U.S. Sup: MR - DP: MR	EJ	solar	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2

DP Hi U.S. Sup: MR - DP: MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table A-3.18. Table 10 Data. GHG Emissions ($MtCO_2e$) in the Defined Policies: Market Resolved scenario and high/low U.S. natural gas resource supply sensitivity scenarios

Variable	Scenario	Units	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
Global GHG	*DP: MR*	$MtCO_2e$	52602	53751	50998	49137	50177	49419	49307	48656	1552407
Global GHG	*DP Lo U.S. Sup: MR*	$MtCO_2e$	52602	53775	50984	49089	50087	49253	49102	48403	1549106
Global GHG	*DP Hi U.S. Sup: MR*	$MtCO_2e$	52602	53746	51000	49143	50189	49459	49365	48746	1553258

Table A-3.19. Figure 13 Data. Global natural gas consumption (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Units	NG Volumes	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	Domestic Resources	252	275	259	276	283	295	315	334
DP: MR	Bcf/d	Other LNG Exports	33	51	64	68	76	86	96	104
DP: MR	Bcf/d	Pipeline Exports	52	59	45	44	46	47	47	49
DP: MR	Bcf/d	U.S. LNG Exports	0	7	18	19	26	39	49	56
DP Hi ME Sup: MR	Bcf/d	Domestic Resources	252	275	260	278	287	299	320	340
DP Hi ME Sup: MR	Bcf/d	Other LNG Exports	33	51	64	71	88	111	135	155
DP Hi ME Sup: MR	Bcf/d	Pipeline Exports	52	59	45	45	47	47	45	46
DP Hi ME Sup: MR	Bcf/d	U.S. LNG Exports	0	7	18	20	27	37	46	52
DP Hi ME Sup: MR - DP: MR	Bcf/d	Domestic Resources	0	1	1	2	3	4	5	6
DP Hi ME Sup: MR - DP: MR	Bcf/d	Other LNG Exports	0	0	0	3	12	25	39	51
DP Hi ME Sup: MR - DP: MR	Bcf/d	Pipeline Exports	0	0	0	1	2	0	-2	-3
DP Hi ME Sup: MR - DP: MR	Bcf/d	U.S. LNG Exports	0	0	0	0	0	-1	-3	-5

Table A-3.20. Figure 14 Data. U.S. LNG exports (Billion cubic feet/day) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	19.3	26.3	38.7	49.4	56.3
DP Lo U.S. Sup: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	18.2	21.0	24.7	27.8	31.5
DP Hi U.S. Sup: MR	Bcf/d	U.S. LNG Exports	0.1	6.8	17.6	19.5	27.7	43.2	58.7	70.0

Table A-3.21. Figure 15 Data. Global primary energy consumption by fuel (EJ) in the Defined Policies: Model Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario

Scenario	Units	fuel	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	EJ	gas	123	141	139	147	155	168	183	196
DP: MR	EJ	coal	165	178	167	178	181	180	178	175
DP: MR	EJ	oil	189	192	193	196	196	194	188	183
DP: MR	EJ	nuclear	10	10	11	13	14	16	18	21
DP: MR	EJ	biomass	55	56	78	89	100	114	131	146
DP: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP: MR	EJ	wind	3	8	15	24	32	41	48	56
DP: MR	EJ	solar	1	3	7	13	21	28	36	45
DP: MR	EJ	geothermal	0	1	1	2	2	2	2	3
DP Hi ME Sup: MR	EJ	gas	123	141	139	149	162	178	197	213
DP Hi ME Sup: MR	EJ	coal	165	178	167	177	179	178	175	172
DP Hi ME Sup: MR	EJ	oil	189	192	193	195	195	192	186	180
DP Hi ME Sup: MR	EJ	nuclear	10	10	11	13	14	16	18	20
DP Hi ME Sup: MR	EJ	biomass	55	56	78	89	98	111	127	142
DP Hi ME Sup: MR	EJ	hydro	14	15	15	15	16	16	17	17
DP Hi ME Sup: MR	EJ	wind	3	8	15	24	32	40	47	55
DP Hi ME Sup: MR	EJ	solar	1	3	7	13	21	28	36	44
DP Hi ME Sup: MR	EJ	geothermal	0	1	1	2	2	2	2	3
DP Hi ME Sup: MR - DP: MR	EJ	gas	0.0	0.2	0.4	2.3	6.3	10.3	14.0	17.7
DP Hi ME Sup: MR - DP: MR	EJ	coal	0.0	0.0	0.0	-0.4	-1.2	-2.1	-2.8	-3.6

DP Hi ME Sup: MR - DP: MR	EJ	oil	0.0	-0.1	-0.1	-0.3	-0.8	-1.3	-2.0	-2.7
DP Hi ME Sup: MR - DP: MR	EJ	nuclear	0.0	0.0	0.0	0.0	-0.2	-0.3	-0.4	-0.6
DP Hi ME Sup: MR - DP: MR	EJ	biomass	0.0	0.0	0.0	-0.7	-1.9	-2.9	-3.7	-4.2
DP Hi ME Sup: MR - DP: MR	EJ	hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR - DP: MR	EJ	wind	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.8	-1.0
DP Hi ME Sup: MR - DP: MR	EJ	solar	0.0	0.0	0.0	-0.1	-0.2	-0.4	-0.6	-0.7
DP Hi ME Sup: MR - DP: MR	EJ	geothermal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table A-3.22. Table 11 Data. GHG Emissions ($MtCO_2e$) in the Defined Policies: Market Resolved scenario and Defined Policies High Middle East Supply: Model Resolved sensitivity scenario

Variable	Scenario	Units	2015	2020	2025	2030	2035	2040	2045	2050	Cumulative 2020-2050
Global GHG	*DP: MR*	$MtCO_2e$	52602	53751	50998	49137	50177	49419	49307	48656	1552407
Global GHG	*DP Hi ME Sup: MR*	$MtCO_2e$	52602	53760	51014	49160	50267	49655	49596	48980	1556682

Table A-3.23. Additional Data. Natural gas consumption (Bcf/d) across all 32 GCAM regions and all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Region	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
DP: MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	15	16	18	19
DP: MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
DP: MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	5	7	11	15
DP: MR	Argentina	Bcf/d	NG Consumption	5	5	5	5	6	6	6	6
DP: MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
DP: MR	Brazil	Bcf/d	NG Consumption	4	5	5	6	8	10	11	12
DP: MR	Canada	Bcf/d	NG Consumption	11	12	8	9	8	8	7	6
DP: MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	5	5
DP: MR	Central Asia	Bcf/d	NG Consumption	11	13	14	15	15	16	17	17
DP: MR	China	Bcf/d	NG Consumption	18	28	45	48	54	60	63	65

DP: MR	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	3	3
DP: MR	EU-12	Bcf/d	NG Consumption	5	8	8	8	8	8	8	8
DP: MR	EU-15	Bcf/d	NG Consumption	36	41	30	24	20	19	20	21
DP: MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	6	6	6	6
DP: MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	8	8	9	9
DP: MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
DP: MR	India	Bcf/d	NG Consumption	5	8	12	17	22	28	33	39
DP: MR	Indonesia	Bcf/d	NG Consumption	4	6	6	8	9	11	12	13
DP: MR	Japan	Bcf/d	NG Consumption	12	13	12	13	13	12	13	13
DP: MR	Mexico	Bcf/d	NG Consumption	7	8	8	10	11	12	13	14
DP: MR	Middle East	Bcf/d	NG Consumption	46	48	47	50	54	59	66	71
DP: MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	7	8	10	11
DP: MR	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	37	37
DP: MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	1	2
DP: MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	2	2	2	2
DP: MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	4	4
DP: MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
DP: MR	South Korea	Bcf/d	NG Consumption	5	5	5	6	6	6	6	6
DP: MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	15	17	18	19	19
DP: MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
DP: MR	USA	Bcf/d	NG Consumption	74	83	85	85	84	87	96	104
DP: ExFID	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
DP: ExFID	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	15	16	17	19
DP: ExFID	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
DP: ExFID	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	5	7	11	15
DP: ExFID	Argentina	Bcf/d	NG Consumption	5	5	5	5	5	6	6	6
DP: ExFID	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
DP: ExFID	Brazil	Bcf/d	NG Consumption	4	5	5	6	8	9	10	11
DP: ExFID	Canada	Bcf/d	NG Consumption	11	12	8	9	8	8	7	6

DP: ExFID	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	4	5
DP: ExFID	Central Asia	Bcf/d	NG Consumption	11	13	14	15	15	16	16	17
DP: ExFID	China	Bcf/d	NG Consumption	18	28	45	48	53	56	60	62
DP: ExFID	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	3	3
DP: ExFID	EU-12	Bcf/d	NG Consumption	5	8	8	8	8	7	7	8
DP: ExFID	EU-15	Bcf/d	NG Consumption	36	41	30	24	19	17	17	19
DP: ExFID	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	6	6	6	6
DP: ExFID	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	8	8	8	9
DP: ExFID	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
DP: ExFID	India	Bcf/d	NG Consumption	5	8	12	17	22	27	32	36
DP: ExFID	Indonesia	Bcf/d	NG Consumption	4	6	6	8	9	10	12	13
DP: ExFID	Japan	Bcf/d	NG Consumption	12	13	12	13	13	12	12	12
DP: ExFID	Mexico	Bcf/d	NG Consumption	7	8	8	10	11	12	13	14
DP: ExFID	Middle East	Bcf/d	NG Consumption	46	48	47	50	54	59	66	71
DP: ExFID	Pakistan	Bcf/d	NG Consumption	3	4	5	5	7	8	9	10
DP: ExFID	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	37	37
DP: ExFID	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	1	1
DP: ExFID	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	2	2	2	2
DP: ExFID	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	4	4
DP: ExFID	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
DP: ExFID	South Korea	Bcf/d	NG Consumption	5	5	5	6	6	6	6	6
DP: ExFID	Southeast Asia	Bcf/d	NG Consumption	12	14	13	15	16	17	18	18
DP: ExFID	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
DP: ExFID	USA	Bcf/d	NG Consumption	74	83	85	85	84	87	97	107
DP: Hi Exp	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
DP: Hi Exp	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	15	16	18	19
DP: Hi Exp	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
DP: Hi Exp	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	5	7	11	15

DP: Hi Exp	Argentina	Bcf/d	NG Consumption	5	5	5	5	6	6	6	7
DP: Hi Exp	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
DP: Hi Exp	Brazil	Bcf/d	NG Consumption	4	5	5	6	8	10	11	12
DP: Hi Exp	Canada	Bcf/d	NG Consumption	11	12	8	9	8	8	7	6
DP: Hi Exp	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	5	5
DP: Hi Exp	Central Asia	Bcf/d	NG Consumption	11	13	14	15	15	16	17	17
DP: Hi Exp	China	Bcf/d	NG Consumption	18	28	45	48	56	63	66	68
DP: Hi Exp	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	3	3
DP: Hi Exp	EU-12	Bcf/d	NG Consumption	5	8	8	8	8	8	8	9
DP: Hi Exp	EU-15	Bcf/d	NG Consumption	36	41	30	24	23	22	22	23
DP: Hi Exp	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	6	6	6	6
DP: Hi Exp	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	8	9	9	10
DP: Hi Exp	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
DP: Hi Exp	India	Bcf/d	NG Consumption	5	8	12	17	23	29	35	40
DP: Hi Exp	Indonesia	Bcf/d	NG Consumption	4	6	6	8	9	11	12	13
DP: Hi Exp	Japan	Bcf/d	NG Consumption	12	13	12	13	13	13	13	13
DP: Hi Exp	Mexico	Bcf/d	NG Consumption	7	8	8	10	11	12	13	14
DP: Hi Exp	Middle East	Bcf/d	NG Consumption	46	48	47	50	54	59	66	71
DP: Hi Exp	Pakistan	Bcf/d	NG Consumption	3	4	5	5	7	9	10	11
DP: Hi Exp	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	38	37
DP: Hi Exp	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	2	2
DP: Hi Exp	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	2	2	2	2
DP: Hi Exp	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	4	5
DP: Hi Exp	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
DP: Hi Exp	South Korea	Bcf/d	NG Consumption	5	5	5	6	6	6	6	6
DP: Hi Exp	Southeast Asia	Bcf/d	NG Consumption	12	14	13	15	17	18	19	20
DP: Hi Exp	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
DP: Hi Exp	USA	Bcf/d	NG Consumption	74	83	85	85	83	86	94	100

C (High CCS): MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	3
C (High CCS): MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	14	15	15	15
C (High CCS): MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	3
C (High CCS): MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	4	7	11	16
C (High CCS): MR	Argentina	Bcf/d	NG Consumption	5	5	5	5	5	5	5	5
C (High CCS): MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
C (High CCS): MR	Brazil	Bcf/d	NG Consumption	4	5	5	7	7	8	9	9
C (High CCS): MR	Canada	Bcf/d	NG Consumption	11	12	8	8	7	6	6	5
C (High CCS): MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	4	4
C (High CCS): MR	Central Asia	Bcf/d	NG Consumption	11	13	14	15	14	13	12	11
C (High CCS): MR	China	Bcf/d	NG Consumption	18	28	45	48	52	57	63	62
C (High CCS): MR	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	2	2
C (High CCS): MR	EU-12	Bcf/d	NG Consumption	5	8	7	7	7	7	7	6
C (High CCS): MR	EU-15	Bcf/d	NG Consumption	36	41	29	22	15	14	15	16
C (High CCS): MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	5	5	4	4
C (High CCS): MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	7	7	6
C (High CCS): MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
C (High CCS): MR	India	Bcf/d	NG Consumption	5	8	12	16	21	27	34	39
C (High CCS): MR	Indonesia	Bcf/d	NG Consumption	4	6	6	7	9	9	10	10
C (High CCS): MR	Japan	Bcf/d	NG Consumption	12	13	12	12	12	11	10	9
C (High CCS): MR	Mexico	Bcf/d	NG Consumption	7	8	8	10	10	10	10	10
C (High CCS): MR	Middle East	Bcf/d	NG Consumption	46	48	47	49	48	48	48	47
C (High CCS): MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	7	7	7
C (High CCS): MR	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	34	31
C (High CCS): MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	2	2
C (High CCS): MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
C (High CCS): MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	3	4
C (High CCS): MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4

C (High CCS): MR	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	4	3	2
C (High CCS): MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	14	14	14	16	17
C (High CCS): MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
C (High CCS): MR	USA	Bcf/d	NG Consumption	74	83	82	76	67	61	59	60
C (High CCS): ExFID	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	3
C (High CCS): ExFID	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	14	15	15	15
C (High CCS): ExFID	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	3
C (High CCS): ExFID	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	4	7	11	16
C (High CCS): ExFID	Argentina	Bcf/d	NG Consumption	5	5	5	5	5	5	5	5
C (High CCS): ExFID	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
C (High CCS): ExFID	Brazil	Bcf/d	NG Consumption	4	5	5	7	7	8	8	9
C (High CCS): ExFID	Canada	Bcf/d	NG Consumption	11	12	8	8	7	6	6	5
C (High CCS): ExFID	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	4	4
C (High CCS): ExFID	Central Asia	Bcf/d	NG Consumption	11	13	14	15	14	13	12	11
C (High CCS): ExFID	China	Bcf/d	NG Consumption	18	28	45	48	52	56	62	61
C (High CCS): ExFID	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	2	2
C (High CCS): ExFID	EU-12	Bcf/d	NG Consumption	5	8	7	7	7	7	7	6
C (High CCS): ExFID	EU-15	Bcf/d	NG Consumption	36	41	29	22	15	14	15	15
C (High CCS): ExFID	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	5	4	4	4
C (High CCS): ExFID	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	7	7	6
C (High CCS): ExFID	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
C (High CCS): ExFID	India	Bcf/d	NG Consumption	5	8	12	16	21	27	33	39
C (High CCS): ExFID	Indonesia	Bcf/d	NG Consumption	4	6	6	7	9	9	10	10
C (High CCS): ExFID	Japan	Bcf/d	NG Consumption	12	13	12	12	12	11	10	9
C (High CCS): ExFID	Mexico	Bcf/d	NG Consumption	7	8	8	10	10	10	10	10
C (High CCS): ExFID	Middle East	Bcf/d	NG Consumption	46	48	47	49	48	48	48	47
C (High CCS): ExFID	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	7	7	7
C (High CCS): ExFID	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	34	31
C (High CCS): ExFID	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	2	2

C (High CCS): ExFID	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
C (High CCS): ExFID	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	3	4
C (High CCS): ExFID	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
C (High CCS): ExFID	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	4	3	2
C (High CCS): ExFID	Southeast Asia	Bcf/d	NG Consumption	12	14	13	14	14	14	15	17
C (High CCS): ExFID	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
C (High CCS): ExFID	USA	Bcf/d	NG Consumption	74	83	82	76	67	61	60	61
C (High CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
C (High CCS): Hi Exp	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	14	15	15	15
C (High CCS): Hi Exp	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
C (High CCS): Hi Exp	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	4	7	11	16
C (High CCS): Hi Exp	Argentina	Bcf/d	NG Consumption	5	5	5	5	5	5	5	5
C (High CCS): Hi Exp	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
C (High CCS): Hi Exp	Brazil	Bcf/d	NG Consumption	4	5	5	7	8	9	9	10
C (High CCS): Hi Exp	Canada	Bcf/d	NG Consumption	11	12	8	8	7	6	6	5
C (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	4	4
C (High CCS): Hi Exp	Central Asia	Bcf/d	NG Consumption	11	13	14	15	14	13	12	12
C (High CCS): Hi Exp	China	Bcf/d	NG Consumption	18	28	45	48	55	60	66	64
C (High CCS): Hi Exp	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	2	2
C (High CCS): Hi Exp	EU-12	Bcf/d	NG Consumption	5	8	7	7	7	7	7	6
C (High CCS): Hi Exp	EU-15	Bcf/d	NG Consumption	36	41	29	22	18	16	16	17
C (High CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	5	5	4	4
C (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	7	7	6
C (High CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
C (High CCS): Hi Exp	India	Bcf/d	NG Consumption	5	8	12	16	22	28	35	41
C (High CCS): Hi Exp	Indonesia	Bcf/d	NG Consumption	4	6	6	7	9	9	10	10
C (High CCS): Hi Exp	Japan	Bcf/d	NG Consumption	12	13	12	12	12	11	11	10
C (High CCS): Hi Exp	Mexico	Bcf/d	NG Consumption	7	8	8	10	10	10	10	10

C (High CCS): Hi Exp	Middle East	Bcf/d	NG Consumption	46	48	47	49	48	48	48	47
C (High CCS): Hi Exp	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	7	8	7
C (High CCS): Hi Exp	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	35	31
C (High CCS): Hi Exp	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	2	2
C (High CCS): Hi Exp	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
C (High CCS): Hi Exp	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	3	4
C (High CCS): Hi Exp	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
C (High CCS): Hi Exp	South Korea	Bcf/d	NG Consumption	5	5	5	5	5	4	3	2
C (High CCS): Hi Exp	Southeast Asia	Bcf/d	NG Consumption	12	14	13	14	14	14	16	17
C (High CCS): Hi Exp	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
C (High CCS): Hi Exp	USA	Bcf/d	NG Consumption	74	83	82	76	66	59	58	59
C (Mod CCS): MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	2
C (Mod CCS): MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	12	12	11	11	10
C (Mod CCS): MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	2
C (Mod CCS): MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	3	5	8	11
C (Mod CCS): MR	Argentina	Bcf/d	NG Consumption	5	5	4	4	4	4	3	3
C (Mod CCS): MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
C (Mod CCS): MR	Brazil	Bcf/d	NG Consumption	4	5	5	6	6	7	6	6
C (Mod CCS): MR	Canada	Bcf/d	NG Consumption	11	12	8	8	7	6	4	4
C (Mod CCS): MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	3	3
C (Mod CCS): MR	Central Asia	Bcf/d	NG Consumption	11	13	14	14	13	11	9	7
C (Mod CCS): MR	China	Bcf/d	NG Consumption	18	28	46	50	54	62	67	56
C (Mod CCS): MR	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	1	1
C (Mod CCS): MR	EU-12	Bcf/d	NG Consumption	5	8	7	6	5	5	5	4
C (Mod CCS): MR	EU-15	Bcf/d	NG Consumption	36	41	26	19	12	12	12	11
C (Mod CCS): MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	5	4	3	2
C (Mod CCS): MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	6	5	4
C (Mod CCS): MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	1	0	0	0	0

C (Mod CCS): MR	India	Bcf/d	NG Consumption	5	8	12	16	22	28	33	33
C (Mod CCS): MR	Indonesia	Bcf/d	NG Consumption	4	6	6	7	8	8	8	7
C (Mod CCS): MR	Japan	Bcf/d	NG Consumption	12	13	12	12	11	10	7	5
C (Mod CCS): MR	Mexico	Bcf/d	NG Consumption	7	8	8	9	9	8	8	8
C (Mod CCS): MR	Middle East	Bcf/d	NG Consumption	46	48	46	48	44	40	36	34
C (Mod CCS): MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	6	5	5
C (Mod CCS): MR	Russia	Bcf/d	NG Consumption	43	46	34	37	35	32	25	20
C (Mod CCS): MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	2	1
C (Mod CCS): MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
C (Mod CCS): MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	3	3	3
C (Mod CCS): MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	3	4
C (Mod CCS): MR	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	4	2	2
C (Mod CCS): MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	14	13	14	13	13
C (Mod CCS): MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	1
C (Mod CCS): MR	USA	Bcf/d	NG Consumption	74	83	82	75	61	56	46	39
C (Mod CCS): ExFID	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	2
C (Mod CCS): ExFID	Africa_Northern	Bcf/d	NG Consumption	10	11	11	12	12	11	11	10
C (Mod CCS): ExFID	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	2
C (Mod CCS): ExFID	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	3	5	8	11
C (Mod CCS): ExFID	Argentina	Bcf/d	NG Consumption	5	5	4	4	4	4	3	3
C (Mod CCS): ExFID	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
C (Mod CCS): ExFID	Brazil	Bcf/d	NG Consumption	4	5	5	6	6	7	6	6
C (Mod CCS): ExFID	Canada	Bcf/d	NG Consumption	11	12	8	8	7	6	4	4
C (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	3	3
C (Mod CCS): ExFID	Central Asia	Bcf/d	NG Consumption	11	13	14	14	13	11	9	7
C (Mod CCS): ExFID	China	Bcf/d	NG Consumption	18	28	46	50	54	62	67	55
C (Mod CCS): ExFID	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	1	1
C (Mod CCS): ExFID	EU-12	Bcf/d	NG Consumption	5	8	7	6	5	5	5	4
C (Mod CCS): ExFID	EU-15	Bcf/d	NG Consumption	36	41	26	19	12	12	12	10

C (Mod CCS): ExFID	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	5	4	3	2
C (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	6	5	4
C (Mod CCS): ExFID	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	1	0	0	0	0
C (Mod CCS): ExFID	India	Bcf/d	NG Consumption	5	8	12	16	22	28	32	33
C (Mod CCS): ExFID	Indonesia	Bcf/d	NG Consumption	4	6	6	7	8	8	8	7
C (Mod CCS): ExFID	Japan	Bcf/d	NG Consumption	12	13	12	12	11	10	7	5
C (Mod CCS): ExFID	Mexico	Bcf/d	NG Consumption	7	8	8	9	9	8	8	8
C (Mod CCS): ExFID	Middle East	Bcf/d	NG Consumption	46	48	46	48	44	40	36	34
C (Mod CCS): ExFID	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	6	5	5
C (Mod CCS): ExFID	Russia	Bcf/d	NG Consumption	43	46	34	37	35	32	25	20
C (Mod CCS): ExFID	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	2	1
C (Mod CCS): ExFID	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
C (Mod CCS): ExFID	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	3	3	3
C (Mod CCS): ExFID	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	3	4
C (Mod CCS): ExFID	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	4	2	2
C (Mod CCS): ExFID	Southeast Asia	Bcf/d	NG Consumption	12	14	13	14	13	14	13	13
C (Mod CCS): ExFID	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	1
C (Mod CCS): ExFID	USA	Bcf/d	NG Consumption	74	83	82	75	61	56	46	39
C (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
C (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	NG Consumption	10	11	11	12	12	11	11	10
C (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	2
C (Mod CCS): Hi Exp	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	3	5	8	11
C (Mod CCS): Hi Exp	Argentina	Bcf/d	NG Consumption	5	5	4	4	4	4	4	3
C (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
C (Mod CCS): Hi Exp	Brazil	Bcf/d	NG Consumption	4	5	5	6	7	7	7	6
C (Mod CCS): Hi Exp	Canada	Bcf/d	NG Consumption	11	12	8	8	7	6	4	4
C (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	3	3
C (Mod CCS): Hi Exp	Central Asia	Bcf/d	NG Consumption	11	13	14	14	13	11	9	7

C (Mod CCS): Hi Exp	China	Bcf/d	NG Consumption	18	28	46	50	57	65	71	60
C (Mod CCS): Hi Exp	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	1	1
C (Mod CCS): Hi Exp	EU-12	Bcf/d	NG Consumption	5	8	7	6	6	6	5	4
C (Mod CCS): Hi Exp	EU-15	Bcf/d	NG Consumption	36	41	26	19	14	14	13	11
C (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	5	4	3	2
C (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	7	5	4
C (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	1	0	0	0	0
C (Mod CCS): Hi Exp	India	Bcf/d	NG Consumption	5	8	12	16	22	29	34	35
C (Mod CCS): Hi Exp	Indonesia	Bcf/d	NG Consumption	4	6	6	7	8	8	8	7
C (Mod CCS): Hi Exp	Japan	Bcf/d	NG Consumption	12	13	12	12	11	10	7	5
C (Mod CCS): Hi Exp	Mexico	Bcf/d	NG Consumption	7	8	8	9	9	8	7	8
C (Mod CCS): Hi Exp	Middle East	Bcf/d	NG Consumption	46	48	46	48	44	40	36	33
C (Mod CCS): Hi Exp	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	6	5	5
C (Mod CCS): Hi Exp	Russia	Bcf/d	NG Consumption	43	46	34	37	35	32	25	20
C (Mod CCS): Hi Exp	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	2	1
C (Mod CCS): Hi Exp	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
C (Mod CCS): Hi Exp	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	3	3	3
C (Mod CCS): Hi Exp	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	3	3
C (Mod CCS): Hi Exp	South Korea	Bcf/d	NG Consumption	5	5	5	5	5	4	2	2
C (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	NG Consumption	12	14	13	14	13	14	13	13
C (Mod CCS): Hi Exp	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	1
C (Mod CCS): Hi Exp	USA	Bcf/d	NG Consumption	74	83	82	75	60	55	45	38
NZ (High CCS): MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	0	1	1	2	3
NZ (High CCS): MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	12	13	13	13	13
NZ (High CCS): MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	3
NZ (High CCS): MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	4	7	11	17
NZ (High CCS): MR	Argentina	Bcf/d	NG Consumption	5	5	5	4	4	4	4	4
NZ (High CCS): MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	2
NZ (High CCS): MR	Brazil	Bcf/d	NG Consumption	4	5	5	6	7	8	9	9

NZ (High CCS): MR	Canada	Bcf/d	NG Consumption	11	12	8	8	6	5	5	4
NZ (High CCS): MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	3	3
NZ (High CCS): MR	Central Asia	Bcf/d	NG Consumption	11	13	14	13	13	12	11	9
NZ (High CCS): MR	China	Bcf/d	NG Consumption	18	28	45	46	52	59	54	44
NZ (High CCS): MR	Colombia	Bcf/d	NG Consumption	1	1	1	1	1	2	2	2
NZ (High CCS): MR	EU-12	Bcf/d	NG Consumption	5	8	7	7	7	7	7	6
NZ (High CCS): MR	EU-15	Bcf/d	NG Consumption	36	41	29	23	18	18	18	16
NZ (High CCS): MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	5	5	4	3	3
NZ (High CCS): MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	6	6	5
NZ (High CCS): MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
NZ (High CCS): MR	India	Bcf/d	NG Consumption	5	8	12	16	21	27	30	29
NZ (High CCS): MR	Indonesia	Bcf/d	NG Consumption	4	6	6	7	8	9	9	9
NZ (High CCS): MR	Japan	Bcf/d	NG Consumption	12	13	12	12	11	10	9	8
NZ (High CCS): MR	Mexico	Bcf/d	NG Consumption	7	8	8	9	9	9	10	10
NZ (High CCS): MR	Middle East	Bcf/d	NG Consumption	46	48	47	46	46	44	41	40
NZ (High CCS): MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	6	6	6
NZ (High CCS): MR	Russia	Bcf/d	NG Consumption	43	46	37	35	33	30	26	21
NZ (High CCS): MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	2	1
NZ (High CCS): MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
NZ (High CCS): MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	3	3	4
NZ (High CCS): MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	5
NZ (High CCS): MR	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	4	2	2
NZ (High CCS): MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	13	13	15	16	19
NZ (High CCS): MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	2	1
NZ (High CCS): MR	USA	Bcf/d	NG Consumption	74	83	82	75	66	66	63	59
NZ (High CCS): ExFID	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	0	1	1	2	3
NZ (High CCS): ExFID	Africa_Northern	Bcf/d	NG Consumption	10	11	11	12	13	13	13	13
NZ (High CCS): ExFID	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	3

NZ (High CCS): ExFID	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	4	7	11	17
NZ (High CCS): ExFID	Argentina	Bcf/d	NG Consumption	5	5	5	4	4	4	4	4
NZ (High CCS): ExFID	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	2
NZ (High CCS): ExFID	Brazil	Bcf/d	NG Consumption	4	5	5	6	7	8	8	9
NZ (High CCS): ExFID	Canada	Bcf/d	NG Consumption	11	12	8	8	6	5	5	4
NZ (High CCS): ExFID	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	3	3
NZ (High CCS): ExFID	Central Asia	Bcf/d	NG Consumption	11	13	14	13	13	12	11	9
NZ (High CCS): ExFID	China	Bcf/d	NG Consumption	18	28	45	46	52	58	54	44
NZ (High CCS): ExFID	Colombia	Bcf/d	NG Consumption	1	1	1	1	1	2	2	2
NZ (High CCS): ExFID	EU-12	Bcf/d	NG Consumption	5	8	7	7	7	7	7	6
NZ (High CCS): ExFID	EU-15	Bcf/d	NG Consumption	36	41	29	23	18	18	18	16
NZ (High CCS): ExFID	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	5	5	4	3	3
NZ (High CCS): ExFID	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	6	6	5
NZ (High CCS): ExFID	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
NZ (High CCS): ExFID	India	Bcf/d	NG Consumption	5	8	12	16	21	27	30	29
NZ (High CCS): ExFID	Indonesia	Bcf/d	NG Consumption	4	6	6	7	8	9	9	9
NZ (High CCS): ExFID	Japan	Bcf/d	NG Consumption	12	13	12	12	11	10	9	8
NZ (High CCS): ExFID	Mexico	Bcf/d	NG Consumption	7	8	8	9	9	9	10	10
NZ (High CCS): ExFID	Middle East	Bcf/d	NG Consumption	46	48	47	46	46	45	41	40
NZ (High CCS): ExFID	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	6	6	5
NZ (High CCS): ExFID	Russia	Bcf/d	NG Consumption	43	46	37	35	33	30	26	21
NZ (High CCS): ExFID	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	2	1
NZ (High CCS): ExFID	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
NZ (High CCS): ExFID	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	3	3	4
NZ (High CCS): ExFID	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	5
NZ (High CCS): ExFID	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	4	2	2
NZ (High CCS): ExFID	Southeast Asia	Bcf/d	NG Consumption	12	14	13	13	13	14	16	19
NZ (High CCS): ExFID	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	2	1

NZ (High CCS): ExFID	USA	Bcf/d	NG Consumption	74	83	82	75	66	66	64	59
NZ (High CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	0	1	1	2	3
NZ (High CCS): Hi Exp	Africa_Northern	Bcf/d	NG Consumption	10	11	11	12	13	13	13	13
NZ (High CCS): Hi Exp	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	2	3
NZ (High CCS): Hi Exp	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	4	7	11	17
NZ (High CCS): Hi Exp	Argentina	Bcf/d	NG Consumption	5	5	5	4	5	4	4	4
NZ (High CCS): Hi Exp	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	1	1	1	2
NZ (High CCS): Hi Exp	Brazil	Bcf/d	NG Consumption	4	5	5	6	7	8	9	10
NZ (High CCS): Hi Exp	Canada	Bcf/d	NG Consumption	11	12	8	8	6	5	5	4
NZ (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	3	3
NZ (High CCS): Hi Exp	Central Asia	Bcf/d	NG Consumption	11	13	14	13	13	12	11	9
NZ (High CCS): Hi Exp	China	Bcf/d	NG Consumption	18	28	45	46	54	61	56	47
NZ (High CCS): Hi Exp	Colombia	Bcf/d	NG Consumption	1	1	1	1	1	2	2	2
NZ (High CCS): Hi Exp	EU-12	Bcf/d	NG Consumption	5	8	7	7	8	8	7	6
NZ (High CCS): Hi Exp	EU-15	Bcf/d	NG Consumption	36	41	29	23	21	20	20	17
NZ (High CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	5	5	4	3	3
NZ (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	7	7	6	5
NZ (High CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
NZ (High CCS): Hi Exp	India	Bcf/d	NG Consumption	5	8	12	16	22	28	31	30
NZ (High CCS): Hi Exp	Indonesia	Bcf/d	NG Consumption	4	6	6	7	8	9	9	9
NZ (High CCS): Hi Exp	Japan	Bcf/d	NG Consumption	12	13	12	12	11	11	9	9
NZ (High CCS): Hi Exp	Mexico	Bcf/d	NG Consumption	7	8	8	9	9	9	10	10
NZ (High CCS): Hi Exp	Middle East	Bcf/d	NG Consumption	46	48	47	46	46	44	41	40
NZ (High CCS): Hi Exp	Pakistan	Bcf/d	NG Consumption	3	4	5	5	6	7	7	6
NZ (High CCS): Hi Exp	Russia	Bcf/d	NG Consumption	43	46	37	35	33	30	27	21
NZ (High CCS): Hi Exp	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	2	1
NZ (High CCS): Hi Exp	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
NZ (High CCS): Hi Exp	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	3	3	4

NZ (High CCS): Hi Exp	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	5
NZ (High CCS): Hi Exp	South Korea	Bcf/d	NG Consumption	5	5	5	5	5	4	2	2
NZ (High CCS): Hi Exp	Southeast Asia	Bcf/d	NG Consumption	12	14	13	13	14	15	16	20
NZ (High CCS): Hi Exp	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	2	2
NZ (High CCS): Hi Exp	USA	Bcf/d	NG Consumption	74	83	82	75	66	66	63	58
NZ (Mod CCS): MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	0	1	1	1	1
NZ (Mod CCS): MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	10	9	8	7	7
NZ (Mod CCS): MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	1	2
NZ (Mod CCS): MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	2	3	5	6	8
NZ (Mod CCS): MR	Argentina	Bcf/d	NG Consumption	5	5	4	4	3	3	2	2
NZ (Mod CCS): MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	1	1	1	1
NZ (Mod CCS): MR	Brazil	Bcf/d	NG Consumption	4	5	5	5	5	5	5	4
NZ (Mod CCS): MR	Canada	Bcf/d	NG Consumption	11	12	8	7	5	4	3	2
NZ (Mod CCS): MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	2	2
NZ (Mod CCS): MR	Central Asia	Bcf/d	NG Consumption	11	13	14	13	11	9	5	3
NZ (Mod CCS): MR	China	Bcf/d	NG Consumption	18	28	46	48	56	61	44	26
NZ (Mod CCS): MR	Colombia	Bcf/d	NG Consumption	1	1	1	1	1	1	1	1
NZ (Mod CCS): MR	EU-12	Bcf/d	NG Consumption	5	8	7	6	6	5	3	2
NZ (Mod CCS): MR	EU-15	Bcf/d	NG Consumption	36	41	26	20	16	14	10	7
NZ (Mod CCS): MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	5	4	3	2	1
NZ (Mod CCS): MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	6	5	3	2
NZ (Mod CCS): MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
NZ (Mod CCS): MR	India	Bcf/d	NG Consumption	5	8	12	16	22	24	19	14
NZ (Mod CCS): MR	Indonesia	Bcf/d	NG Consumption	4	6	6	7	7	7	6	5
NZ (Mod CCS): MR	Japan	Bcf/d	NG Consumption	12	13	12	12	10	7	4	3
NZ (Mod CCS): MR	Mexico	Bcf/d	NG Consumption	7	8	8	8	8	7	6	6
NZ (Mod CCS): MR	Middle East	Bcf/d	NG Consumption	46	48	46	43	38	33	27	25
NZ (Mod CCS): MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	5	5	4	2
NZ (Mod CCS): MR	Russia	Bcf/d	NG Consumption	43	46	34	31	24	19	11	6
NZ (Mod CCS): MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	1	1

NZ (Mod CCS): MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	0	1
NZ (Mod CCS): MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	2	2	2
NZ (Mod CCS): MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	2	2	2
NZ (Mod CCS): MR	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	3	2	1
NZ (Mod CCS): MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	13	12	12	10	10
NZ (Mod CCS): MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	2	2	1	0
NZ (Mod CCS): MR	USA	Bcf/d	NG Consumption	74	83	82	72	62	54	40	25
NZ (Mod CCS): ExFID	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	0	1	1	1	1
NZ (Mod CCS): ExFID	Africa_Northern	Bcf/d	NG Consumption	10	11	11	10	9	8	7	7
NZ (Mod CCS): ExFID	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	1	2
NZ (Mod CCS): ExFID	Africa_Western	Bcf/d	NG Consumption	2	2	2	2	3	5	6	8
NZ (Mod CCS): ExFID	Argentina	Bcf/d	NG Consumption	5	5	4	4	3	3	2	2
NZ (Mod CCS): ExFID	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	1	1	1	1
NZ (Mod CCS): ExFID	Brazil	Bcf/d	NG Consumption	4	5	5	5	5	5	5	4
NZ (Mod CCS): ExFID	Canada	Bcf/d	NG Consumption	11	12	8	7	5	4	3	2
NZ (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	2	2
NZ (Mod CCS): ExFID	Central Asia	Bcf/d	NG Consumption	11	13	14	13	11	9	5	3
NZ (Mod CCS): ExFID	China	Bcf/d	NG Consumption	18	28	46	48	56	61	44	26
NZ (Mod CCS): ExFID	Colombia	Bcf/d	NG Consumption	1	1	1	1	1	1	1	1
NZ (Mod CCS): ExFID	EU-12	Bcf/d	NG Consumption	5	8	7	6	6	5	3	2
NZ (Mod CCS): ExFID	EU-15	Bcf/d	NG Consumption	36	41	26	20	16	14	10	7
NZ (Mod CCS): ExFID	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	5	4	3	2	1
NZ (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	6	5	3	2
NZ (Mod CCS): ExFID	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
NZ (Mod CCS): ExFID	India	Bcf/d	NG Consumption	5	8	12	16	22	24	19	14
NZ (Mod CCS): ExFID	Indonesia	Bcf/d	NG Consumption	4	6	6	7	7	7	6	5
NZ (Mod CCS): ExFID	Japan	Bcf/d	NG Consumption	12	13	12	12	10	7	4	3
NZ (Mod CCS): ExFID	Mexico	Bcf/d	NG Consumption	7	8	8	8	8	7	6	6

NZ (Mod CCS): ExFID	Middle East	Bcf/d	NG Consumption	46	48	46	43	38	33	27	25
NZ (Mod CCS): ExFID	Pakistan	Bcf/d	NG Consumption	3	4	5	5	5	5	4	2
NZ (Mod CCS): ExFID	Russia	Bcf/d	NG Consumption	43	46	34	31	24	19	11	6
NZ (Mod CCS): ExFID	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	1	1
NZ (Mod CCS): ExFID	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	0	1
NZ (Mod CCS): ExFID	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	2	2	2
NZ (Mod CCS): ExFID	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	2	2	2
NZ (Mod CCS): ExFID	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	3	2	1
NZ (Mod CCS): ExFID	Southeast Asia	Bcf/d	NG Consumption	12	14	13	13	12	12	10	10
NZ (Mod CCS): ExFID	Taiwan	Bcf/d	NG Consumption	2	2	2	2	2	2	1	0
NZ (Mod CCS): ExFID	USA	Bcf/d	NG Consumption	74	83	82	72	62	54	40	25
NZ (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	0	1	1	1	1
NZ (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	NG Consumption	10	11	11	10	9	8	7	7
NZ (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	1	1	2
NZ (Mod CCS): Hi Exp	Africa_Western	Bcf/d	NG Consumption	2	2	2	2	3	5	6	8
NZ (Mod CCS): Hi Exp	Argentina	Bcf/d	NG Consumption	5	5	4	4	3	3	2	2
NZ (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	1	1	1	1
NZ (Mod CCS): Hi Exp	Brazil	Bcf/d	NG Consumption	4	5	5	5	5	5	5	5
NZ (Mod CCS): Hi Exp	Canada	Bcf/d	NG Consumption	11	12	8	7	5	4	3	2
NZ (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	3	2	2
NZ (Mod CCS): Hi Exp	Central Asia	Bcf/d	NG Consumption	11	13	14	13	11	9	6	4
NZ (Mod CCS): Hi Exp	China	Bcf/d	NG Consumption	18	28	46	48	58	64	47	30
NZ (Mod CCS): Hi Exp	Colombia	Bcf/d	NG Consumption	1	1	1	1	1	1	1	1
NZ (Mod CCS): Hi Exp	EU-12	Bcf/d	NG Consumption	5	8	7	6	6	5	4	3
NZ (Mod CCS): Hi Exp	EU-15	Bcf/d	NG Consumption	36	41	26	20	18	15	11	8
NZ (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	5	4	3	2	1
NZ (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	6	5	3	2
NZ (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0

NZ (Mod CCS): Hi Exp	India	Bcf/d	NG Consumption	5	8	12	16	22	25	20	15
NZ (Mod CCS): Hi Exp	Indonesia	Bcf/d	NG Consumption	4	6	6	7	7	7	6	4
NZ (Mod CCS): Hi Exp	Japan	Bcf/d	NG Consumption	12	13	12	12	10	7	4	3
NZ (Mod CCS): Hi Exp	Mexico	Bcf/d	NG Consumption	7	8	8	8	8	7	6	6
NZ (Mod CCS): Hi Exp	Middle East	Bcf/d	NG Consumption	46	48	46	43	38	33	27	25
NZ (Mod CCS): Hi Exp	Pakistan	Bcf/d	NG Consumption	3	4	5	5	5	5	4	3
NZ (Mod CCS): Hi Exp	Russia	Bcf/d	NG Consumption	43	46	34	31	24	19	12	7
NZ (Mod CCS): Hi Exp	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	2	1	1
NZ (Mod CCS): Hi Exp	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	1	1	1	1
NZ (Mod CCS): Hi Exp	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	2	2	2	2
NZ (Mod CCS): Hi Exp	South Asia	Bcf/d	NG Consumption	3	3	3	3	2	2	2	2
NZ (Mod CCS): Hi Exp	South Korea	Bcf/d	NG Consumption	5	5	5	5	4	3	2	1
NZ (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	NG Consumption	12	14	13	13	12	12	10	10
NZ (Mod CCS): Hi Exp	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	2	1	0
NZ (Mod CCS): Hi Exp	USA	Bcf/d	NG Consumption	74	83	82	72	62	54	40	24
DP Lo U.S. Sup: MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
DP Lo U.S. Sup: MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	15	16	18	19
DP Lo U.S. Sup: MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
DP Lo U.S. Sup: MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	5	7	11	15
DP Lo U.S. Sup: MR	Argentina	Bcf/d	NG Consumption	5	5	5	5	5	6	6	6
DP Lo U.S. Sup: MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
DP Lo U.S. Sup: MR	Brazil	Bcf/d	NG Consumption	4	5	5	6	8	9	10	11
DP Lo U.S. Sup: MR	Canada	Bcf/d	NG Consumption	11	12	8	8	8	8	7	6
DP Lo U.S. Sup: MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	4	5
DP Lo U.S. Sup: MR	Central Asia	Bcf/d	NG Consumption	11	13	14	15	15	16	16	17
DP Lo U.S. Sup: MR	China	Bcf/d	NG Consumption	18	28	45	47	52	56	60	63
DP Lo U.S. Sup: MR	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	3	3
DP Lo U.S. Sup: MR	EU-12	Bcf/d	NG Consumption	5	8	8	8	8	7	8	8
DP Lo U.S. Sup: MR	EU-15	Bcf/d	NG Consumption	36	41	30	24	18	17	17	19

DP Lo U.S. Sup: MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	6	6	6	6
DP Lo U.S. Sup: MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	8	8	8	9
DP Lo U.S. Sup: MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
DP Lo U.S. Sup: MR	India	Bcf/d	NG Consumption	5	8	12	17	22	27	32	37
DP Lo U.S. Sup: MR	Indonesia	Bcf/d	NG Consumption	4	6	6	8	9	10	12	13
DP Lo U.S. Sup: MR	Japan	Bcf/d	NG Consumption	12	13	12	13	13	12	12	12
DP Lo U.S. Sup: MR	Mexico	Bcf/d	NG Consumption	7	9	8	9	11	12	13	14
DP Lo U.S. Sup: MR	Middle East	Bcf/d	NG Consumption	46	48	47	50	54	59	66	71
DP Lo U.S. Sup: MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	7	8	9	10
DP Lo U.S. Sup: MR	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	37	37
DP Lo U.S. Sup: MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	1	2
DP Lo U.S. Sup: MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	2	2	2	2
DP Lo U.S. Sup: MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	4	4
DP Lo U.S. Sup: MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
DP Lo U.S. Sup: MR	South Korea	Bcf/d	NG Consumption	5	5	5	6	6	6	6	6
DP Lo U.S. Sup: MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	15	16	17	18	18
DP Lo U.S. Sup: MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
DP Lo U.S. Sup: MR	USA	Bcf/d	NG Consumption	74	84	83	81	78	78	80	89
DP Hi U.S. Sup: MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
DP Hi U.S. Sup: MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	15	16	18	19
DP Hi U.S. Sup: MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	2	3
DP Hi U.S. Sup: MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	5	7	11	15
DP Hi U.S. Sup: MR	Argentina	Bcf/d	NG Consumption	5	5	5	5	6	6	6	7
DP Hi U.S. Sup: MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	0	1	1	1
DP Hi U.S. Sup: MR	Brazil	Bcf/d	NG Consumption	4	5	5	7	8	10	11	12
DP Hi U.S. Sup: MR	Canada	Bcf/d	NG Consumption	11	12	8	9	8	8	7	7
DP Hi U.S. Sup: MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	3	4	5	5
DP Hi U.S. Sup: MR	Central Asia	Bcf/d	NG Consumption	11	13	14	15	15	16	17	17

DP Hi U.S. Sup: MR	China	Bcf/d	NG Consumption	18	28	45	48	54	61	65	67
DP Hi U.S. Sup: MR	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	3	3
DP Hi U.S. Sup: MR	EU-12	Bcf/d	NG Consumption	5	8	8	8	8	8	8	9
DP Hi U.S. Sup: MR	EU-15	Bcf/d	NG Consumption	36	41	30	24	21	20	21	22
DP Hi U.S. Sup: MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	6	6	6	6
DP Hi U.S. Sup: MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	8	8	9	10
DP Hi U.S. Sup: MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
DP Hi U.S. Sup: MR	India	Bcf/d	NG Consumption	5	8	12	17	22	28	34	40
DP Hi U.S. Sup: MR	Indonesia	Bcf/d	NG Consumption	4	6	6	8	9	11	12	13
DP Hi U.S. Sup: MR	Japan	Bcf/d	NG Consumption	12	13	12	13	13	13	13	13
DP Hi U.S. Sup: MR	Mexico	Bcf/d	NG Consumption	7	8	8	10	11	12	13	14
DP Hi U.S. Sup: MR	Middle East	Bcf/d	NG Consumption	46	48	47	50	54	59	66	71
DP Hi U.S. Sup: MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	7	9	10	11
DP Hi U.S. Sup: MR	Russia	Bcf/d	NG Consumption	43	46	37	40	39	38	38	37
DP Hi U.S. Sup: MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	1	2
DP Hi U.S. Sup: MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	2	2	2	2
DP Hi U.S. Sup: MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	4	5
DP Hi U.S. Sup: MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
DP Hi U.S. Sup: MR	South Korea	Bcf/d	NG Consumption	5	5	5	6	6	6	6	6
DP Hi U.S. Sup: MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	15	17	18	19	20
DP Hi U.S. Sup: MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
DP Hi U.S. Sup: MR	USA	Bcf/d	NG Consumption	74	83	85	85	84	88	98	109
DP Hi ME Sup: MR	Africa_Eastern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	5
DP Hi ME Sup: MR	Africa_Northern	Bcf/d	NG Consumption	10	11	11	13	15	16	18	19
DP Hi ME Sup: MR	Africa_Southern	Bcf/d	NG Consumption	0	0	0	1	1	2	3	4
DP Hi ME Sup: MR	Africa_Western	Bcf/d	NG Consumption	2	2	2	3	5	7	11	16
DP Hi ME Sup: MR	Argentina	Bcf/d	NG Consumption	5	5	5	5	6	6	7	7
DP Hi ME Sup: MR	Australia_NZ	Bcf/d	NG Consumption	4	1	0	1	1	1	1	1
DP Hi ME Sup: MR	Brazil	Bcf/d	NG Consumption	4	5	5	7	8	10	12	14

DP Hi ME Sup: MR	Canada	Bcf/d	NG Consumption	11	12	8	9	8	8	8	7
DP Hi ME Sup: MR	Central America and Caribbean	Bcf/d	NG Consumption	2	3	3	3	4	4	5	5
DP Hi ME Sup: MR	Central Asia	Bcf/d	NG Consumption	11	13	14	15	15	16	17	17
DP Hi ME Sup: MR	China	Bcf/d	NG Consumption	18	28	45	49	59	68	73	76
DP Hi ME Sup: MR	Colombia	Bcf/d	NG Consumption	1	1	1	2	2	2	3	3
DP Hi ME Sup: MR	EU-12	Bcf/d	NG Consumption	5	8	8	8	8	9	9	10
DP Hi ME Sup: MR	EU-15	Bcf/d	NG Consumption	36	41	30	26	25	25	26	28
DP Hi ME Sup: MR	Europe_Eastern	Bcf/d	NG Consumption	5	6	6	6	6	6	6	6
DP Hi ME Sup: MR	Europe_Non_EU	Bcf/d	NG Consumption	5	6	7	7	8	9	10	10
DP Hi ME Sup: MR	European Free Trade Association	Bcf/d	NG Consumption	1	1	1	0	0	0	0	0
DP Hi ME Sup: MR	India	Bcf/d	NG Consumption	5	8	12	17	23	30	37	43
DP Hi ME Sup: MR	Indonesia	Bcf/d	NG Consumption	4	6	6	8	9	11	12	13
DP Hi ME Sup: MR	Japan	Bcf/d	NG Consumption	12	13	12	13	13	13	13	14
DP Hi ME Sup: MR	Mexico	Bcf/d	NG Consumption	7	8	8	10	11	12	13	14
DP Hi ME Sup: MR	Middle East	Bcf/d	NG Consumption	46	49	49	51	57	65	74	81
DP Hi ME Sup: MR	Pakistan	Bcf/d	NG Consumption	3	4	5	5	7	9	10	12
DP Hi ME Sup: MR	Russia	Bcf/d	NG Consumption	43	46	37	40	39	39	38	38
DP Hi ME Sup: MR	South Africa	Bcf/d	NG Consumption	1	1	1	1	1	1	2	2
DP Hi ME Sup: MR	South America_Northern	Bcf/d	NG Consumption	3	2	1	1	2	2	2	2
DP Hi ME Sup: MR	South America_Southern	Bcf/d	NG Consumption	2	2	2	2	3	3	4	5
DP Hi ME Sup: MR	South Asia	Bcf/d	NG Consumption	3	3	3	3	3	3	4	4
DP Hi ME Sup: MR	South Korea	Bcf/d	NG Consumption	5	5	5	6	6	6	6	7
DP Hi ME Sup: MR	Southeast Asia	Bcf/d	NG Consumption	12	14	13	15	17	19	21	22
DP Hi ME Sup: MR	Taiwan	Bcf/d	NG Consumption	2	2	2	2	3	3	3	3
DP Hi ME Sup: MR	USA	Bcf/d	NG Consumption	74	83	85	85	83	87	95	104

Table A-3.24. Additional Data. Natural gas production (Bcf/d) across all 32 GCAM regions and all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Region	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
DP: MR	Africa_Northern	Bcf/d	NG Production	13	18	17	19	23	27	32	37
DP: MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
DP: MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	9	10
DP: MR	Argentina	Bcf/d	NG Production	4	3	2	3	3	3	2	2
DP: MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	11	10	10
DP: MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	3
DP: MR	Canada	Bcf/d	NG Production	16	16	15	15	16	19	20	21
DP: MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	6	7	8
DP: MR	Central Asia	Bcf/d	NG Production	19	12	13	13	13	14	14	14
DP: MR	China	Bcf/d	NG Production	13	17	19	20	22	23	22	22
DP: MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
DP: MR	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP: MR	EU-15	Bcf/d	NG Production	10	11	10	8	6	6	6	8
DP: MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	3	3
DP: MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: MR	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	12	13	14	15
DP: MR	India	Bcf/d	NG Production	3	4	4	6	8	10	12	14
DP: MR	Indonesia	Bcf/d	NG Production	7	9	10	12	13	14	15	16
DP: MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: MR	Mexico	Bcf/d	NG Production	4	3	2	3	3	3	3	4
DP: MR	Middle East	Bcf/d	NG Production	57	62	67	69	74	80	89	95
DP: MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	4	4
DP: MR	Russia	Bcf/d	NG Production	60	76	55	60	61	60	58	58
DP: MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	1	1
DP: MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
DP: MR	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	5	6	6
DP: MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5

DP: MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: MR	Southeast Asia	Bcf/d	NG Production	14	17	16	17	17	17	17	16
DP: MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: MR	USA	Bcf/d	NG Production	73	90	102	105	112	129	150	165
DP: ExFID	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
DP: ExFID	Africa_Northern	Bcf/d	NG Production	13	18	17	19	23	28	34	39
DP: ExFID	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
DP: ExFID	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	9	9	10
DP: ExFID	Argentina	Bcf/d	NG Production	4	3	2	3	3	3	2	2
DP: ExFID	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	11	11	11
DP: ExFID	Brazil	Bcf/d	NG Production	2	2	2	2	2	3	3	3
DP: ExFID	Canada	Bcf/d	NG Production	16	16	15	15	16	19	21	22
DP: ExFID	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	6	7	8
DP: ExFID	Central Asia	Bcf/d	NG Production	19	12	13	13	13	14	14	15
DP: ExFID	China	Bcf/d	NG Production	13	17	19	20	22	22	22	22
DP: ExFID	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
DP: ExFID	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	2	3
DP: ExFID	EU-15	Bcf/d	NG Production	10	11	10	8	6	5	6	8
DP: ExFID	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	3	4
DP: ExFID	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: ExFID	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	11	13	15	16
DP: ExFID	India	Bcf/d	NG Production	3	4	4	6	8	10	12	14
DP: ExFID	Indonesia	Bcf/d	NG Production	7	9	10	12	13	14	15	16
DP: ExFID	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: ExFID	Mexico	Bcf/d	NG Production	4	3	2	3	3	3	3	4
DP: ExFID	Middle East	Bcf/d	NG Production	57	62	67	69	74	82	92	100
DP: ExFID	Pakistan	Bcf/d	NG Production	3	3	3	3	3	4	4	4
DP: ExFID	Russia	Bcf/d	NG Production	60	76	55	60	61	59	59	60
DP: ExFID	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	1	1
DP: ExFID	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
DP: ExFID	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	5	6	7

DP: ExFID	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5
DP: ExFID	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: ExFID	Southeast Asia	Bcf/d	NG Production	14	17	16	17	17	17	17	16
DP: ExFID	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: ExFID	USA	Bcf/d	NG Production	73	90	102	105	110	116	127	137
DP: Hi Exp	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
DP: Hi Exp	Africa_Northern	Bcf/d	NG Production	13	18	17	19	23	27	32	36
DP: Hi Exp	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
DP: Hi Exp	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	9	10
DP: Hi Exp	Argentina	Bcf/d	NG Production	4	3	2	3	3	2	2	2
DP: Hi Exp	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	11	10	10
DP: Hi Exp	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP: Hi Exp	Canada	Bcf/d	NG Production	16	16	15	15	16	19	20	20
DP: Hi Exp	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	6	7	8
DP: Hi Exp	Central Asia	Bcf/d	NG Production	19	12	13	13	13	13	13	14
DP: Hi Exp	China	Bcf/d	NG Production	13	17	19	20	22	23	22	22
DP: Hi Exp	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
DP: Hi Exp	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP: Hi Exp	EU-15	Bcf/d	NG Production	10	11	10	8	7	6	7	8
DP: Hi Exp	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	2	3
DP: Hi Exp	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: Hi Exp	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	12	13	14	15
DP: Hi Exp	India	Bcf/d	NG Production	3	4	4	6	8	9	11	13
DP: Hi Exp	Indonesia	Bcf/d	NG Production	7	9	10	12	13	14	15	16
DP: Hi Exp	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: Hi Exp	Mexico	Bcf/d	NG Production	4	3	2	3	3	3	3	4
DP: Hi Exp	Middle East	Bcf/d	NG Production	57	62	67	69	74	80	88	94
DP: Hi Exp	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	3
DP: Hi Exp	Russia	Bcf/d	NG Production	60	76	55	60	61	60	57	56
DP: Hi Exp	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	1	1
DP: Hi Exp	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1

DP: Hi Exp	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	5	5	6
DP: Hi Exp	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5
DP: Hi Exp	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: Hi Exp	Southeast Asia	Bcf/d	NG Production	14	17	16	17	17	17	17	16
DP: Hi Exp	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP: Hi Exp	USA	Bcf/d	NG Production	73	90	102	105	117	138	163	181
C (High CCS): MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
C (High CCS): MR	Africa_Northern	Bcf/d	NG Production	13	18	17	19	21	25	29	32
C (High CCS): MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
C (High CCS): MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	9	10
C (High CCS): MR	Argentina	Bcf/d	NG Production	4	3	2	3	3	2	2	2
C (High CCS): MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	9	8
C (High CCS): MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
C (High CCS): MR	Canada	Bcf/d	NG Production	16	16	15	15	15	16	18	18
C (High CCS): MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	5	6	6
C (High CCS): MR	Central Asia	Bcf/d	NG Production	19	12	13	13	12	11	11	10
C (High CCS): MR	China	Bcf/d	NG Production	13	17	18	20	21	21	22	21
C (High CCS): MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
C (High CCS): MR	EU-12	Bcf/d	NG Production	2	2	2	2	1	1	2	2
C (High CCS): MR	EU-15	Bcf/d	NG Production	10	11	9	7	5	4	5	6
C (High CCS): MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	2	2
C (High CCS): MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): MR	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	10	12	13	14
C (High CCS): MR	India	Bcf/d	NG Production	3	4	4	6	7	9	12	14
C (High CCS): MR	Indonesia	Bcf/d	NG Production	7	9	10	11	12	13	13	14
C (High CCS): MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): MR	Mexico	Bcf/d	NG Production	4	3	2	3	2	2	2	2
C (High CCS): MR	Middle East	Bcf/d	NG Production	57	62	66	68	67	68	71	72
C (High CCS): MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	3
C (High CCS): MR	Russia	Bcf/d	NG Production	60	76	55	60	58	56	53	49
C (High CCS): MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	1

C (High CCS): MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
C (High CCS): MR	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	4	5	5
C (High CCS): MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	4	5
C (High CCS): MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): MR	Southeast Asia	Bcf/d	NG Production	14	17	16	17	16	15	15	14
C (High CCS): MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): MR	USA	Bcf/d	NG Production	73	90	100	95	90	91	96	98
C (High CCS): ExFID	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
C (High CCS): ExFID	Africa_Northern	Bcf/d	NG Production	13	18	17	19	21	25	30	33
C (High CCS): ExFID	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
C (High CCS): ExFID	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	9	10
C (High CCS): ExFID	Argentina	Bcf/d	NG Production	4	3	2	3	3	2	2	2
C (High CCS): ExFID	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	9	8
C (High CCS): ExFID	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
C (High CCS): ExFID	Canada	Bcf/d	NG Production	16	16	15	15	15	16	18	19
C (High CCS): ExFID	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	5	6	7
C (High CCS): ExFID	Central Asia	Bcf/d	NG Production	19	12	13	13	12	12	11	10
C (High CCS): ExFID	China	Bcf/d	NG Production	13	17	18	20	21	21	22	21
C (High CCS): ExFID	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
C (High CCS): ExFID	EU-12	Bcf/d	NG Production	2	2	2	2	1	1	2	2
C (High CCS): ExFID	EU-15	Bcf/d	NG Production	10	11	9	7	5	4	5	6
C (High CCS): ExFID	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	2	2
C (High CCS): ExFID	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): ExFID	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	10	12	14	14
C (High CCS): ExFID	India	Bcf/d	NG Production	3	4	4	6	7	9	12	14
C (High CCS): ExFID	Indonesia	Bcf/d	NG Production	7	9	10	11	12	13	13	14
C (High CCS): ExFID	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): ExFID	Mexico	Bcf/d	NG Production	4	3	2	3	2	2	2	2
C (High CCS): ExFID	Middle East	Bcf/d	NG Production	57	62	66	68	67	69	72	74
C (High CCS): ExFID	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	3
C (High CCS): ExFID	Russia	Bcf/d	NG Production	60	76	55	60	58	56	54	49

C (High CCS): ExFID	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	1	1
C (High CCS): ExFID	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
C (High CCS): ExFID	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	4	5	6
C (High CCS): ExFID	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5
C (High CCS): ExFID	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): ExFID	Southeast Asia	Bcf/d	NG Production	14	17	16	17	16	15	15	15
C (High CCS): ExFID	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): ExFID	USA	Bcf/d	NG Production	73	90	100	95	90	88	88	89
C (High CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
C (High CCS): Hi Exp	Africa_Northern	Bcf/d	NG Production	13	18	17	19	21	24	28	31
C (High CCS): Hi Exp	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
C (High CCS): Hi Exp	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	8	9
C (High CCS): Hi Exp	Argentina	Bcf/d	NG Production	4	3	2	3	2	2	2	2
C (High CCS): Hi Exp	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	9	7
C (High CCS): Hi Exp	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
C (High CCS): Hi Exp	Canada	Bcf/d	NG Production	16	16	15	15	15	16	18	17
C (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	5	6	6
C (High CCS): Hi Exp	Central Asia	Bcf/d	NG Production	19	12	13	13	12	11	10	10
C (High CCS): Hi Exp	China	Bcf/d	NG Production	13	17	18	20	21	22	22	21
C (High CCS): Hi Exp	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	0	0
C (High CCS): Hi Exp	EU-12	Bcf/d	NG Production	2	2	2	2	1	2	2	2
C (High CCS): Hi Exp	EU-15	Bcf/d	NG Production	10	11	9	7	5	5	5	6
C (High CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	2	2
C (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	11	12	13	13
C (High CCS): Hi Exp	India	Bcf/d	NG Production	3	4	4	6	7	9	11	13
C (High CCS): Hi Exp	Indonesia	Bcf/d	NG Production	7	9	10	11	12	13	13	13
C (High CCS): Hi Exp	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): Hi Exp	Mexico	Bcf/d	NG Production	4	3	2	3	2	2	2	2
C (High CCS): Hi Exp	Middle East	Bcf/d	NG Production	57	62	66	68	67	68	70	70
C (High CCS): Hi Exp	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	3

C (High CCS): Hi Exp	Russia	Bcf/d	NG Production	60	76	55	60	59	56	52	47
C (High CCS): Hi Exp	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	1
C (High CCS): Hi Exp	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
C (High CCS): Hi Exp	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	4	5	5
C (High CCS): Hi Exp	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	4	5
C (High CCS): Hi Exp	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): Hi Exp	Southeast Asia	Bcf/d	NG Production	14	17	16	17	16	15	15	14
C (High CCS): Hi Exp	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (High CCS): Hi Exp	USA	Bcf/d	NG Production	73	90	100	95	95	100	109	117
C (Mod CCS): MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
C (Mod CCS): MR	Africa_Northern	Bcf/d	NG Production	13	18	17	18	18	21	23	23
C (Mod CCS): MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
C (Mod CCS): MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	7	7	7	7
C (Mod CCS): MR	Argentina	Bcf/d	NG Production	4	3	2	3	2	2	1	1
C (Mod CCS): MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	8	6
C (Mod CCS): MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	1	1
C (Mod CCS): MR	Canada	Bcf/d	NG Production	16	16	15	15	14	15	15	13
C (Mod CCS): MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	5	5	4
C (Mod CCS): MR	Central Asia	Bcf/d	NG Production	19	12	12	13	12	10	8	6
C (Mod CCS): MR	China	Bcf/d	NG Production	13	17	18	20	21	22	22	18
C (Mod CCS): MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	0	0
C (Mod CCS): MR	EU-12	Bcf/d	NG Production	2	2	2	2	1	1	1	1
C (Mod CCS): MR	EU-15	Bcf/d	NG Production	10	11	9	6	4	4	4	4
C (Mod CCS): MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	1	1	1	1
C (Mod CCS): MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): MR	European Free Trade Association	Bcf/d	NG Production	12	11	9	9	10	11	12	11
C (Mod CCS): MR	India	Bcf/d	NG Production	3	4	4	6	7	9	11	10
C (Mod CCS): MR	Indonesia	Bcf/d	NG Production	7	9	10	11	12	12	11	10
C (Mod CCS): MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): MR	Mexico	Bcf/d	NG Production	4	3	2	2	2	1	1	1
C (Mod CCS): MR	Middle East	Bcf/d	NG Production	57	62	66	67	62	60	56	51

C (Mod CCS): MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	2	2
C (Mod CCS): MR	Russia	Bcf/d	NG Production	60	76	53	57	54	51	45	35
C (Mod CCS): MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	0	0
C (Mod CCS): MR	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	4	4	4
C (Mod CCS): MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	4	4
C (Mod CCS): MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): MR	Southeast Asia	Bcf/d	NG Production	14	17	16	17	15	14	13	11
C (Mod CCS): MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): MR	USA	Bcf/d	NG Production	73	90	99	94	83	84	77	71
C (Mod CCS): ExFID	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
C (Mod CCS): ExFID	Africa_Northern	Bcf/d	NG Production	13	18	17	18	18	21	23	23
C (Mod CCS): ExFID	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
C (Mod CCS): ExFID	Africa_Western	Bcf/d	NG Production	5	5	7	8	7	7	7	7
C (Mod CCS): ExFID	Argentina	Bcf/d	NG Production	4	3	2	3	2	2	1	1
C (Mod CCS): ExFID	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	8	6
C (Mod CCS): ExFID	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	1
C (Mod CCS): ExFID	Canada	Bcf/d	NG Production	16	16	15	15	14	15	15	13
C (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	5	5	4
C (Mod CCS): ExFID	Central Asia	Bcf/d	NG Production	19	12	12	13	12	10	8	6
C (Mod CCS): ExFID	China	Bcf/d	NG Production	13	17	18	20	21	22	22	18
C (Mod CCS): ExFID	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	0	0
C (Mod CCS): ExFID	EU-12	Bcf/d	NG Production	2	2	2	2	1	1	1	1
C (Mod CCS): ExFID	EU-15	Bcf/d	NG Production	10	11	9	6	4	4	4	4
C (Mod CCS): ExFID	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	1	1	1	1
C (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): ExFID	European Free Trade Association	Bcf/d	NG Production	12	11	9	9	10	11	12	11
C (Mod CCS): ExFID	India	Bcf/d	NG Production	3	4	4	6	7	9	11	11
C (Mod CCS): ExFID	Indonesia	Bcf/d	NG Production	7	9	10	11	12	12	11	10
C (Mod CCS): ExFID	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): ExFID	Mexico	Bcf/d	NG Production	4	3	2	2	2	1	1	1

C (Mod CCS): ExFID	Middle East	Bcf/d	NG Production	57	62	66	67	62	60	57	52
C (Mod CCS): ExFID	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	2	2
C (Mod CCS): ExFID	Russia	Bcf/d	NG Production	60	76	53	57	54	51	45	35
C (Mod CCS): ExFID	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): ExFID	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	0	0
C (Mod CCS): ExFID	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	4	4	4
C (Mod CCS): ExFID	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	4	4
C (Mod CCS): ExFID	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): ExFID	Southeast Asia	Bcf/d	NG Production	14	17	16	17	15	14	13	11
C (Mod CCS): ExFID	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): ExFID	USA	Bcf/d	NG Production	73	90	99	94	83	83	74	68
C (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
C (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	NG Production	13	18	17	18	18	21	22	22
C (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
C (Mod CCS): Hi Exp	Africa_Western	Bcf/d	NG Production	5	5	7	8	7	7	7	6
C (Mod CCS): Hi Exp	Argentina	Bcf/d	NG Production	4	3	2	3	2	2	1	1
C (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	8	5
C (Mod CCS): Hi Exp	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	1	1
C (Mod CCS): Hi Exp	Canada	Bcf/d	NG Production	16	16	15	15	14	15	14	13
C (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	5	5	4
C (Mod CCS): Hi Exp	Central Asia	Bcf/d	NG Production	19	12	12	13	12	10	8	6
C (Mod CCS): Hi Exp	China	Bcf/d	NG Production	13	17	18	20	21	22	22	17
C (Mod CCS): Hi Exp	Colombia	Bcf/d	NG Production	1	1	1	1	1	0	0	0
C (Mod CCS): Hi Exp	EU-12	Bcf/d	NG Production	2	2	2	2	1	1	1	1
C (Mod CCS): Hi Exp	EU-15	Bcf/d	NG Production	10	11	9	6	4	4	4	4
C (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	1	1	1	1
C (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Production	12	11	9	9	10	11	12	11
C (Mod CCS): Hi Exp	India	Bcf/d	NG Production	3	4	4	6	7	9	10	9
C (Mod CCS): Hi Exp	Indonesia	Bcf/d	NG Production	7	9	10	11	12	12	11	10
C (Mod CCS): Hi Exp	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0

C (Mod CCS): Hi Exp	Mexico	Bcf/d	NG Production	4	3	2	2	2	1	1	1
C (Mod CCS): Hi Exp	Middle East	Bcf/d	NG Production	57	62	66	67	63	60	55	50
C (Mod CCS): Hi Exp	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	2	2
C (Mod CCS): Hi Exp	Russia	Bcf/d	NG Production	60	76	53	57	55	51	44	34
C (Mod CCS): Hi Exp	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): Hi Exp	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	0	0
C (Mod CCS): Hi Exp	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	4	4	4
C (Mod CCS): Hi Exp	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	4	4
C (Mod CCS): Hi Exp	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	NG Production	14	17	16	17	15	14	12	11
C (Mod CCS): Hi Exp	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
C (Mod CCS): Hi Exp	USA	Bcf/d	NG Production	73	90	99	94	88	93	91	90
NZ (High CCS): MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
NZ (High CCS): MR	Africa_Northern	Bcf/d	NG Production	13	18	17	17	19	23	27	29
NZ (High CCS): MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (High CCS): MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	8	9
NZ (High CCS): MR	Argentina	Bcf/d	NG Production	4	3	2	2	2	2	2	1
NZ (High CCS): MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	9	7
NZ (High CCS): MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
NZ (High CCS): MR	Canada	Bcf/d	NG Production	16	16	15	15	14	16	17	16
NZ (High CCS): MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	4	4	5	5	5
NZ (High CCS): MR	Central Asia	Bcf/d	NG Production	19	12	13	12	12	11	10	8
NZ (High CCS): MR	China	Bcf/d	NG Production	13	17	18	19	21	22	19	15
NZ (High CCS): MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (High CCS): MR	EU-12	Bcf/d	NG Production	2	2	2	2	1	2	1	1
NZ (High CCS): MR	EU-15	Bcf/d	NG Production	10	11	9	8	5	5	6	6
NZ (High CCS): MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	1	2	2	1
NZ (High CCS): MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): MR	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	10	12	12	12
NZ (High CCS): MR	India	Bcf/d	NG Production	3	4	4	5	7	9	10	10
NZ (High CCS): MR	Indonesia	Bcf/d	NG Production	7	9	10	11	12	12	12	12

NZ (High CCS): MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): MR	Mexico	Bcf/d	NG Production	4	3	2	2	2	2	2	2
NZ (High CCS): MR	Middle East	Bcf/d	NG Production	57	62	66	65	65	65	63	61
NZ (High CCS): MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	2
NZ (High CCS): MR	Russia	Bcf/d	NG Production	60	76	55	54	54	52	44	34
NZ (High CCS): MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	0
NZ (High CCS): MR	South America_Southern	Bcf/d	NG Production	4	3	3	3	4	4	5	5
NZ (High CCS): MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	6
NZ (High CCS): MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): MR	Southeast Asia	Bcf/d	NG Production	14	17	16	16	15	15	15	15
NZ (High CCS): MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): MR	USA	Bcf/d	NG Production	73	90	100	93	89	95	96	92
NZ (High CCS): ExFID	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
NZ (High CCS): ExFID	Africa_Northern	Bcf/d	NG Production	13	18	17	17	19	23	27	30
NZ (High CCS): ExFID	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (High CCS): ExFID	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	8	9
NZ (High CCS): ExFID	Argentina	Bcf/d	NG Production	4	3	2	2	2	2	2	1
NZ (High CCS): ExFID	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	9	7
NZ (High CCS): ExFID	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
NZ (High CCS): ExFID	Canada	Bcf/d	NG Production	16	16	15	15	14	16	17	17
NZ (High CCS): ExFID	Central America and Caribbean	Bcf/d	NG Production	4	4	4	4	4	5	5	6
NZ (High CCS): ExFID	Central Asia	Bcf/d	NG Production	19	12	13	12	12	11	10	8
NZ (High CCS): ExFID	China	Bcf/d	NG Production	13	17	18	19	21	22	19	15
NZ (High CCS): ExFID	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (High CCS): ExFID	EU-12	Bcf/d	NG Production	2	2	2	2	1	2	1	1
NZ (High CCS): ExFID	EU-15	Bcf/d	NG Production	10	11	9	8	5	5	6	6
NZ (High CCS): ExFID	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	1	2	2	1
NZ (High CCS): ExFID	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): ExFID	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	10	12	13	12
NZ (High CCS): ExFID	India	Bcf/d	NG Production	3	4	4	5	7	9	10	10

NZ (High CCS): ExFID	Indonesia	Bcf/d	NG Production	7	9	10	11	12	12	13	13
NZ (High CCS): ExFID	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): ExFID	Mexico	Bcf/d	NG Production	4	3	2	2	2	2	2	2
NZ (High CCS): ExFID	Middle East	Bcf/d	NG Production	57	62	66	65	65	65	64	62
NZ (High CCS): ExFID	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	2
NZ (High CCS): ExFID	Russia	Bcf/d	NG Production	60	76	55	54	54	52	44	34
NZ (High CCS): ExFID	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): ExFID	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	0
NZ (High CCS): ExFID	South America_Southern	Bcf/d	NG Production	4	3	3	3	4	4	5	5
NZ (High CCS): ExFID	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	6
NZ (High CCS): ExFID	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): ExFID	Southeast Asia	Bcf/d	NG Production	14	17	16	16	15	15	15	15
NZ (High CCS): ExFID	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): ExFID	USA	Bcf/d	NG Production	73	90	100	93	89	93	91	87
NZ (High CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	0	1	1	1
NZ (High CCS): Hi Exp	Africa_Northern	Bcf/d	NG Production	13	18	17	17	19	23	26	28
NZ (High CCS): Hi Exp	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (High CCS): Hi Exp	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	8	9
NZ (High CCS): Hi Exp	Argentina	Bcf/d	NG Production	4	3	2	2	2	2	2	1
NZ (High CCS): Hi Exp	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	8	7
NZ (High CCS): Hi Exp	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
NZ (High CCS): Hi Exp	Canada	Bcf/d	NG Production	16	16	15	15	14	16	16	16
NZ (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Production	4	4	4	4	4	5	5	5
NZ (High CCS): Hi Exp	Central Asia	Bcf/d	NG Production	19	12	13	12	12	11	9	8
NZ (High CCS): Hi Exp	China	Bcf/d	NG Production	13	17	18	19	21	22	19	15
NZ (High CCS): Hi Exp	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	0	0
NZ (High CCS): Hi Exp	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	1	1
NZ (High CCS): Hi Exp	EU-15	Bcf/d	NG Production	10	11	9	8	6	6	6	5
NZ (High CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	1	2	1	1
NZ (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	10	12	12	12

NZ (High CCS): Hi Exp	India	Bcf/d	NG Production	3	4	4	5	7	9	10	9
NZ (High CCS): Hi Exp	Indonesia	Bcf/d	NG Production	7	9	10	11	12	12	12	12
NZ (High CCS): Hi Exp	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): Hi Exp	Mexico	Bcf/d	NG Production	4	3	2	2	2	2	2	2
NZ (High CCS): Hi Exp	Middle East	Bcf/d	NG Production	57	62	66	65	65	65	62	59
NZ (High CCS): Hi Exp	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	2	2
NZ (High CCS): Hi Exp	Russia	Bcf/d	NG Production	60	76	55	54	55	52	43	33
NZ (High CCS): Hi Exp	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): Hi Exp	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	0
NZ (High CCS): Hi Exp	South America_Southern	Bcf/d	NG Production	4	3	3	3	4	4	4	5
NZ (High CCS): Hi Exp	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	6
NZ (High CCS): Hi Exp	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): Hi Exp	Southeast Asia	Bcf/d	NG Production	14	17	16	16	15	15	14	15
NZ (High CCS): Hi Exp	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (High CCS): Hi Exp	USA	Bcf/d	NG Production	73	90	100	93	93	104	110	111
NZ (Mod CCS): MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	0	1	1	0
NZ (Mod CCS): MR	Africa_Northern	Bcf/d	NG Production	13	18	17	16	15	16	14	13
NZ (Mod CCS): MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (Mod CCS): MR	Africa_Western	Bcf/d	NG Production	5	5	7	7	7	6	5	5
NZ (Mod CCS): MR	Argentina	Bcf/d	NG Production	4	3	2	2	2	2	1	1
NZ (Mod CCS): MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	7	4
NZ (Mod CCS): MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	1	1	1
NZ (Mod CCS): MR	Canada	Bcf/d	NG Production	16	16	15	14	14	13	10	7
NZ (Mod CCS): MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	4	4	4	3	3
NZ (Mod CCS): MR	Central Asia	Bcf/d	NG Production	19	12	12	11	10	8	5	3
NZ (Mod CCS): MR	China	Bcf/d	NG Production	13	17	18	18	20	21	14	8
NZ (Mod CCS): MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	0	0	0
NZ (Mod CCS): MR	EU-12	Bcf/d	NG Production	2	2	2	1	1	1	1	0
NZ (Mod CCS): MR	EU-15	Bcf/d	NG Production	10	11	9	6	5	4	3	2
NZ (Mod CCS): MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	1	1	1	1	0
NZ (Mod CCS): MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0

NZ (Mod CCS): MR	European Free Trade Association	Bcf/d	NG Production	12	11	9	9	9	9	8	6
NZ (Mod CCS): MR	India	Bcf/d	NG Production	3	4	4	5	7	7	5	4
NZ (Mod CCS): MR	Indonesia	Bcf/d	NG Production	7	9	10	10	10	10	8	7
NZ (Mod CCS): MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): MR	Mexico	Bcf/d	NG Production	4	3	2	1	1	1	0	0
NZ (Mod CCS): MR	Middle East	Bcf/d	NG Production	57	62	66	63	56	50	39	33
NZ (Mod CCS): MR	Pakistan	Bcf/d	NG Production	3	3	3	3	2	2	2	1
NZ (Mod CCS): MR	Russia	Bcf/d	NG Production	60	76	53	50	47	40	25	15
NZ (Mod CCS): MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	0	0	0	0
NZ (Mod CCS): MR	South America_Southern	Bcf/d	NG Production	4	3	3	3	3	3	3	2
NZ (Mod CCS): MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	3	3	2
NZ (Mod CCS): MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): MR	Southeast Asia	Bcf/d	NG Production	14	17	16	16	14	13	9	8
NZ (Mod CCS): MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): MR	USA	Bcf/d	NG Production	73	90	99	91	83	77	63	47
NZ (Mod CCS): ExFID	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	0	1	1	0
NZ (Mod CCS): ExFID	Africa_Northern	Bcf/d	NG Production	13	18	17	16	15	16	14	13
NZ (Mod CCS): ExFID	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
NZ (Mod CCS): ExFID	Africa_Western	Bcf/d	NG Production	5	5	7	7	7	6	5	5
NZ (Mod CCS): ExFID	Argentina	Bcf/d	NG Production	4	3	2	2	2	2	1	1
NZ (Mod CCS): ExFID	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	7	4
NZ (Mod CCS): ExFID	Brazil	Bcf/d	NG Production	2	2	2	2	2	1	1	1
NZ (Mod CCS): ExFID	Canada	Bcf/d	NG Production	16	16	15	14	14	13	10	7
NZ (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	NG Production	4	4	4	4	4	4	3	3
NZ (Mod CCS): ExFID	Central Asia	Bcf/d	NG Production	19	12	12	11	10	8	5	3
NZ (Mod CCS): ExFID	China	Bcf/d	NG Production	13	17	18	18	20	21	14	8
NZ (Mod CCS): ExFID	Colombia	Bcf/d	NG Production	1	1	1	1	1	0	0	0
NZ (Mod CCS): ExFID	EU-12	Bcf/d	NG Production	2	2	2	1	1	1	1	0
NZ (Mod CCS): ExFID	EU-15	Bcf/d	NG Production	10	11	9	6	5	4	3	2
NZ (Mod CCS): ExFID	Europe_Eastern	Bcf/d	NG Production	2	2	2	1	1	1	1	0

NZ (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): ExFID	European Free Trade Association	Bcf/d	NG Production	12	11	9	9	9	9	8	6
NZ (Mod CCS): ExFID	India	Bcf/d	NG Production	3	4	4	5	7	7	5	4
NZ (Mod CCS): ExFID	Indonesia	Bcf/d	NG Production	7	9	10	10	10	10	8	7
NZ (Mod CCS): ExFID	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): ExFID	Mexico	Bcf/d	NG Production	4	3	2	1	1	1	0	0
NZ (Mod CCS): ExFID	Middle East	Bcf/d	NG Production	57	62	66	63	56	50	39	33
NZ (Mod CCS): ExFID	Pakistan	Bcf/d	NG Production	3	3	3	3	2	2	2	1
NZ (Mod CCS): ExFID	Russia	Bcf/d	NG Production	60	76	53	50	47	40	25	15
NZ (Mod CCS): ExFID	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): ExFID	South America_Northern	Bcf/d	NG Production	2	2	1	1	0	0	0	0
NZ (Mod CCS): ExFID	South America_Southern	Bcf/d	NG Production	4	3	3	3	3	3	3	2
NZ (Mod CCS): ExFID	South Asia	Bcf/d	NG Production	4	4	4	4	4	3	3	2
NZ (Mod CCS): ExFID	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): ExFID	Southeast Asia	Bcf/d	NG Production	14	17	16	16	14	13	9	8
NZ (Mod CCS): ExFID	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): ExFID	USA	Bcf/d	NG Production	73	90	99	91	83	77	63	47
NZ (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	NG Production	13	18	17	16	15	16	13	12
NZ (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	0
NZ (Mod CCS): Hi Exp	Africa_Western	Bcf/d	NG Production	5	5	7	7	7	6	5	4
NZ (Mod CCS): Hi Exp	Argentina	Bcf/d	NG Production	4	3	2	2	2	1	1	0
NZ (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	10	7	4
NZ (Mod CCS): Hi Exp	Brazil	Bcf/d	NG Production	2	2	2	2	1	1	1	0
NZ (Mod CCS): Hi Exp	Canada	Bcf/d	NG Production	16	16	15	14	14	13	11	8
NZ (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	NG Production	4	4	4	4	4	4	3	2
NZ (Mod CCS): Hi Exp	Central Asia	Bcf/d	NG Production	19	12	12	11	10	8	5	3
NZ (Mod CCS): Hi Exp	China	Bcf/d	NG Production	13	17	18	18	20	20	12	7
NZ (Mod CCS): Hi Exp	Colombia	Bcf/d	NG Production	1	1	1	1	1	0	0	0
NZ (Mod CCS): Hi Exp	EU-12	Bcf/d	NG Production	2	2	2	1	1	1	1	0
NZ (Mod CCS): Hi Exp	EU-15	Bcf/d	NG Production	10	11	9	6	5	5	3	2

NZ (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	NG Production	2	2	2	1	1	1	1	0
NZ (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	NG Production	12	11	9	9	9	9	8	7
NZ (Mod CCS): Hi Exp	India	Bcf/d	NG Production	3	4	4	5	6	6	4	3
NZ (Mod CCS): Hi Exp	Indonesia	Bcf/d	NG Production	7	9	10	10	10	10	8	7
NZ (Mod CCS): Hi Exp	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): Hi Exp	Mexico	Bcf/d	NG Production	4	3	2	1	1	1	0	0
NZ (Mod CCS): Hi Exp	Middle East	Bcf/d	NG Production	57	62	66	63	56	50	39	33
NZ (Mod CCS): Hi Exp	Pakistan	Bcf/d	NG Production	3	3	3	3	2	2	1	1
NZ (Mod CCS): Hi Exp	Russia	Bcf/d	NG Production	60	76	53	50	48	40	24	13
NZ (Mod CCS): Hi Exp	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): Hi Exp	South America_Northern	Bcf/d	NG Production	2	2	1	1	0	0	0	0
NZ (Mod CCS): Hi Exp	South America_Southern	Bcf/d	NG Production	4	3	3	3	3	3	2	2
NZ (Mod CCS): Hi Exp	South Asia	Bcf/d	NG Production	4	4	4	4	3	3	3	2
NZ (Mod CCS): Hi Exp	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	NG Production	14	17	16	16	14	12	9	7
NZ (Mod CCS): Hi Exp	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
NZ (Mod CCS): Hi Exp	USA	Bcf/d	NG Production	73	90	99	91	88	87	78	66
DP Lo U.S. Sup: MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
DP Lo U.S. Sup: MR	Africa_Northern	Bcf/d	NG Production	13	18	17	19	23	28	34	38
DP Lo U.S. Sup: MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
DP Lo U.S. Sup: MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	9	9	10
DP Lo U.S. Sup: MR	Argentina	Bcf/d	NG Production	4	3	2	3	3	3	2	2
DP Lo U.S. Sup: MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	11	10	11
DP Lo U.S. Sup: MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	3	3	3
DP Lo U.S. Sup: MR	Canada	Bcf/d	NG Production	16	15	15	15	17	19	22	22
DP Lo U.S. Sup: MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	6	7	8
DP Lo U.S. Sup: MR	Central Asia	Bcf/d	NG Production	19	12	13	13	13	14	14	15
DP Lo U.S. Sup: MR	China	Bcf/d	NG Production	13	17	19	20	22	22	22	22
DP Lo U.S. Sup: MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1
DP Lo U.S. Sup: MR	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	2	3

DP Lo U.S. Sup: MR	EU-15	Bcf/d	NG Production	10	11	10	8	5	5	6	8
DP Lo U.S. Sup: MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	3	3
DP Lo U.S. Sup: MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Lo U.S. Sup: MR	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	11	13	15	16
DP Lo U.S. Sup: MR	India	Bcf/d	NG Production	3	4	4	6	8	10	12	14
DP Lo U.S. Sup: MR	Indonesia	Bcf/d	NG Production	7	9	10	12	13	14	15	16
DP Lo U.S. Sup: MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Lo U.S. Sup: MR	Mexico	Bcf/d	NG Production	4	3	3	3	3	3	3	4
DP Lo U.S. Sup: MR	Middle East	Bcf/d	NG Production	57	62	67	69	74	81	91	99
DP Lo U.S. Sup: MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	4	4	4
DP Lo U.S. Sup: MR	Russia	Bcf/d	NG Production	60	76	55	59	60	59	59	60
DP Lo U.S. Sup: MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	1	1
DP Lo U.S. Sup: MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
DP Lo U.S. Sup: MR	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	5	6	6
DP Lo U.S. Sup: MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5
DP Lo U.S. Sup: MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Lo U.S. Sup: MR	Southeast Asia	Bcf/d	NG Production	14	17	16	17	17	17	17	16
DP Lo U.S. Sup: MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Lo U.S. Sup: MR	USA	Bcf/d	NG Production	73	92	100	100	101	105	111	125
DP Hi U.S. Sup: MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
DP Hi U.S. Sup: MR	Africa_Northern	Bcf/d	NG Production	13	18	17	19	23	27	32	36
DP Hi U.S. Sup: MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	2
DP Hi U.S. Sup: MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	9	10
DP Hi U.S. Sup: MR	Argentina	Bcf/d	NG Production	4	3	2	3	3	2	2	2
DP Hi U.S. Sup: MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	11	10	10
DP Hi U.S. Sup: MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP Hi U.S. Sup: MR	Canada	Bcf/d	NG Production	16	16	15	15	16	19	20	20
DP Hi U.S. Sup: MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	6	7	8
DP Hi U.S. Sup: MR	Central Asia	Bcf/d	NG Production	19	12	13	13	13	13	14	14
DP Hi U.S. Sup: MR	China	Bcf/d	NG Production	13	17	19	20	22	23	23	22
DP Hi U.S. Sup: MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	1	1	1

DP Hi U.S. Sup: MR	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP Hi U.S. Sup: MR	EU-15	Bcf/d	NG Production	10	11	10	8	6	6	7	8
DP Hi U.S. Sup: MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	3	3
DP Hi U.S. Sup: MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi U.S. Sup: MR	European Free Trade Association	Bcf/d	NG Production	12	11	10	10	12	13	14	15
DP Hi U.S. Sup: MR	India	Bcf/d	NG Production	3	4	4	6	8	10	11	14
DP Hi U.S. Sup: MR	Indonesia	Bcf/d	NG Production	7	9	10	12	13	14	15	16
DP Hi U.S. Sup: MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi U.S. Sup: MR	Mexico	Bcf/d	NG Production	4	3	2	3	3	3	3	3
DP Hi U.S. Sup: MR	Middle East	Bcf/d	NG Production	57	62	67	69	74	80	88	94
DP Hi U.S. Sup: MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	4	4
DP Hi U.S. Sup: MR	Russia	Bcf/d	NG Production	60	76	55	60	61	60	58	57
DP Hi U.S. Sup: MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	1	1
DP Hi U.S. Sup: MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
DP Hi U.S. Sup: MR	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	5	6	6
DP Hi U.S. Sup: MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5
DP Hi U.S. Sup: MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi U.S. Sup: MR	Southeast Asia	Bcf/d	NG Production	14	17	16	17	17	17	17	16
DP Hi U.S. Sup: MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi U.S. Sup: MR	USA	Bcf/d	NG Production	73	89	102	106	115	135	162	185
DP Hi ME Sup: MR	Africa_Eastern	Bcf/d	NG Production	0	0	0	0	1	1	1	1
DP Hi ME Sup: MR	Africa_Northern	Bcf/d	NG Production	13	18	17	19	23	27	31	34
DP Hi ME Sup: MR	Africa_Southern	Bcf/d	NG Production	1	1	1	1	1	1	1	1
DP Hi ME Sup: MR	Africa_Western	Bcf/d	NG Production	5	5	7	8	8	8	9	9
DP Hi ME Sup: MR	Argentina	Bcf/d	NG Production	4	3	2	3	3	2	2	2
DP Hi ME Sup: MR	Australia_NZ	Bcf/d	NG Production	7	13	13	13	12	11	9	9
DP Hi ME Sup: MR	Brazil	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP Hi ME Sup: MR	Canada	Bcf/d	NG Production	16	16	15	15	16	18	20	19
DP Hi ME Sup: MR	Central America and Caribbean	Bcf/d	NG Production	4	4	4	5	5	6	6	7
DP Hi ME Sup: MR	Central Asia	Bcf/d	NG Production	19	12	13	13	13	13	13	13
DP Hi ME Sup: MR	China	Bcf/d	NG Production	13	17	19	21	22	23	22	22

DP Hi ME Sup: MR	Colombia	Bcf/d	NG Production	1	1	1	1	1	0	0	1
DP Hi ME Sup: MR	EU-12	Bcf/d	NG Production	2	2	2	2	2	2	2	2
DP Hi ME Sup: MR	EU-15	Bcf/d	NG Production	10	11	10	9	7	7	7	8
DP Hi ME Sup: MR	Europe_Eastern	Bcf/d	NG Production	2	2	2	2	2	2	2	3
DP Hi ME Sup: MR	Europe_Non_EU	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi ME Sup: MR	European Free Trade Association	Bcf/d	NG Production	12	11	10	11	12	13	13	14
DP Hi ME Sup: MR	India	Bcf/d	NG Production	3	4	4	6	7	9	11	12
DP Hi ME Sup: MR	Indonesia	Bcf/d	NG Production	7	9	10	12	13	14	14	15
DP Hi ME Sup: MR	Japan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi ME Sup: MR	Mexico	Bcf/d	NG Production	4	3	2	3	3	3	3	3
DP Hi ME Sup: MR	Middle East	Bcf/d	NG Production	57	62	68	73	90	115	143	167
DP Hi ME Sup: MR	Pakistan	Bcf/d	NG Production	3	3	3	3	3	3	3	3
DP Hi ME Sup: MR	Russia	Bcf/d	NG Production	60	76	55	60	62	59	55	53
DP Hi ME Sup: MR	South Africa	Bcf/d	NG Production	0	0	0	0	0	0	0	1
DP Hi ME Sup: MR	South America_Northern	Bcf/d	NG Production	2	2	1	1	1	1	1	1
DP Hi ME Sup: MR	South America_Southern	Bcf/d	NG Production	4	3	3	4	4	5	5	6
DP Hi ME Sup: MR	South Asia	Bcf/d	NG Production	4	4	4	4	4	4	5	5
DP Hi ME Sup: MR	South Korea	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi ME Sup: MR	Southeast Asia	Bcf/d	NG Production	14	17	16	17	17	17	16	16
DP Hi ME Sup: MR	Taiwan	Bcf/d	NG Production	0	0	0	0	0	0	0	0
DP Hi ME Sup: MR	USA	Bcf/d	NG Production	73	90	102	106	113	128	146	161

Table A-3.25. Additional Data. LNG exports (Bcf/d) across all 32 GCAM regions and all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Region	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0
DP: MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.7	7.4	10.1	12.9	14.8
DP: MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2
DP: MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.1	5.4	4.9	4.0	2.9	1.9
DP: MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.8	10.4	9.0	8.6
DP: MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.9	4.9	8.4	11.2	12.5
DP: MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.8	2.0	2.5	3.1	3.6
DP: MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.6	1.0	1.4
DP: MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.4	0.7	1.0
DP: MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.6	0.8	1.0
DP: MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.5	0.9	1.4
DP: MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP: MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	7.1	9.5	12.1	14.2
DP: MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2
DP: MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.6	3.8	4.1	4.2	4.4	4.7
DP: MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.8	21.4	23.4	25.9	28.0
DP: MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.7	4.2	3.5	2.9	2.5
DP: MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
DP: MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.4	2.0	2.6	3.2
DP: MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.0	1.0	1.0	1.0

DP: MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.5	2.9	2.4
DP: MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	19.3	26.3	38.7	49.4	56.3
DP: ExFID	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.1
DP: ExFID	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.7	7.3	10.5	14.1	16.6
DP: ExFID	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2
DP: ExFID	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.1	5.4	4.9	4.1	3.0	2.1
DP: ExFID	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.8	10.5	9.7	9.9
DP: ExFID	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: ExFID	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.9	4.8	8.8	12.3	14.0
DP: ExFID	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.8	2.0	2.6	3.4	4.0
DP: ExFID	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.7	1.2	1.7
DP: ExFID	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.5	0.9	1.3
DP: ExFID	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.7	1.0	1.4
DP: ExFID	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.5	1.1	1.8
DP: ExFID	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP: ExFID	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	7.1	10.0	12.9	15.2
DP: ExFID	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.3
DP: ExFID	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.6	3.8	4.1	4.3	4.7	5.0
DP: ExFID	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.8	21.2	24.1	28.3	31.8
DP: ExFID	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.7	4.2	3.6	3.0	2.7
DP: ExFID	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.5
DP: ExFID	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1

DP: ExFID	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.3	2.1	2.9	3.5
DP: ExFID	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.0	1.0	1.1	1.2
DP: ExFID	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.6	3.1	2.8
DP: ExFID	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	19.3	23.7	23.7	23.7	23.7
DP: Hi Exp	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0
DP: Hi Exp	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.7	7.6	10.1	12.7	14.6
DP: Hi Exp	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1
DP: Hi Exp	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.1	5.4	4.9	4.0	2.9	1.9
DP: Hi Exp	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.9	10.4	8.9	8.3
DP: Hi Exp	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.9	5.1	8.3	11.0	12.1
DP: Hi Exp	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.8	2.1	2.5	3.0	3.5
DP: Hi Exp	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.4	0.6	1.0	1.3
DP: Hi Exp	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.9
DP: Hi Exp	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.6	0.8	1.0
DP: Hi Exp	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.5	0.9	1.3
DP: Hi Exp	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP: Hi Exp	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	6.9	9.2	11.8	13.8
DP: Hi Exp	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2
DP: Hi Exp	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.6	3.8	4.2	4.2	4.4	4.7
DP: Hi Exp	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.8	21.8	23.5	25.5	27.3
DP: Hi Exp	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: Hi Exp	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.7	4.1	3.5	2.8	2.4

DP: Hi Exp	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
DP: Hi Exp	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: Hi Exp	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.4	2.0	2.6	3.1
DP: Hi Exp	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.0	1.0	0.9	1.0
DP: Hi Exp	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.5	2.8	2.3
DP: Hi Exp	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: Hi Exp	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	19.3	31.3	48.7	64.4	76.3
C (High CCS): MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.0
C (High CCS): MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.5	6.5	8.5	10.9	12.4
C (High CCS): MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1
C (High CCS): MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.0	5.4	4.9	3.9	2.8	1.8
C (High CCS): MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.5	9.9	8.1	7.1
C (High CCS): MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.8	4.4	7.7	10.7	11.8
C (High CCS): MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.7	1.8	2.1	2.7	3.2
C (High CCS): MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.8	1.1
C (High CCS): MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.8
C (High CCS): MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.6	0.7	0.8
C (High CCS): MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.4	0.7	1.1
C (High CCS): MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
C (High CCS): MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.3	6.7	9.1	11.4	13.0
C (High CCS): MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (High CCS): MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.5	3.6	3.8	3.9	4.2	4.5
C (High CCS): MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.4	19.9	21.7	24.6	26.6

C (High CCS): MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.1	3.4	2.6	2.1
C (High CCS): MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3
C (High CCS): MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.1	1.7	2.4	2.8
C (High CCS): MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	0.9	0.9	0.8
C (High CCS): MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.5	2.9	2.3
C (High CCS): MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.6	21.5	27.5	31.7	33.1
C (High CCS): ExFID	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.0
C (High CCS): ExFID	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.5	6.5	8.6	11.5	13.3
C (High CCS): ExFID	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2
C (High CCS): ExFID	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.0	5.4	4.9	4.0	2.9	1.8
C (High CCS): ExFID	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.5	10.0	8.4	7.6
C (High CCS): ExFID	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.8	4.4	7.8	11.3	12.4
C (High CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.7	1.8	2.2	2.9	3.4
C (High CCS): ExFID	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.9	1.2
C (High CCS): ExFID	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.9
C (High CCS): ExFID	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.6	0.7	0.9
C (High CCS): ExFID	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.4	0.8	1.2
C (High CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
C (High CCS): ExFID	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.3	6.7	9.2	11.8	13.5
C (High CCS): ExFID	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2
C (High CCS): ExFID	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.5	3.6	3.8	3.9	4.4	4.7
C (High CCS): ExFID	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

C (High CCS): ExFID	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.4	19.9	21.8	25.8	28.5
C (High CCS): ExFID	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): ExFID	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.1	3.4	2.7	2.2
C (High CCS): ExFID	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
C (High CCS): ExFID	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): ExFID	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.1	1.7	2.5	3.0
C (High CCS): ExFID	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	0.9	0.9	0.9
C (High CCS): ExFID	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.5	3.0	2.5
C (High CCS): ExFID	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): ExFID	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.6	21.5	23.7	23.7	23.7
C (High CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
C (High CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.5	6.7	8.5	10.5	11.7
C (High CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1
C (High CCS): Hi Exp	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.0	5.4	4.8	3.9	2.8	1.7
C (High CCS): Hi Exp	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.6	9.9	7.9	6.6
C (High CCS): Hi Exp	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.8	4.5	7.6	10.3	11.1
C (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.7	1.9	2.1	2.6	3.0
C (High CCS): Hi Exp	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.8	1.0
C (High CCS): Hi Exp	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.7
C (High CCS): Hi Exp	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.5	0.6	0.7
C (High CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.4	0.7	0.9
C (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
C (High CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.3	6.7	8.8	11.0	12.4
C (High CCS): Hi Exp	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1

C (High CCS): Hi Exp	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.5	3.6	3.9	3.9	4.2	4.3
C (High CCS): Hi Exp	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.4	20.3	21.5	23.6	24.7
C (High CCS): Hi Exp	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): Hi Exp	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.0	3.3	2.5	2.0
C (High CCS): Hi Exp	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.3
C (High CCS): Hi Exp	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): Hi Exp	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.2	1.7	2.3	2.6
C (High CCS): Hi Exp	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	0.9	0.8	0.8
C (High CCS): Hi Exp	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.5	2.7	2.2
C (High CCS): Hi Exp	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): Hi Exp	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.6	26.5	37.5	46.7	53.1
C (Mod CCS): MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
C (Mod CCS): MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.4	6.1	8.3	9.4	8.8
C (Mod CCS): MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1
C (Mod CCS): MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	4.9	5.4	4.9	3.9	2.7	1.6
C (Mod CCS): MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	12.9	12.6	11.4	9.6	7.1	4.7
C (Mod CCS): MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.3	7.5	9.3	8.9
C (Mod CCS): MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.6	1.7	1.7	2.0	2.2	2.1
C (Mod CCS): MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.6
C (Mod CCS): MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.5
C (Mod CCS): MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.4	0.4	0.4	0.4
C (Mod CCS): MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.6
C (Mod CCS): MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1

C (Mod CCS): MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	6.5	8.8	10.2	10.3
C (Mod CCS): MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.4	3.5	3.6	3.7	3.9	3.6
C (Mod CCS): MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.3	19.1	20.9	21.1	18.2
C (Mod CCS): MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.6	4.6	4.0	3.3	2.4	1.6
C (Mod CCS): MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
C (Mod CCS): MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.7	1.0	1.6	1.9	1.9
C (Mod CCS): MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	0.9	0.7	0.6
C (Mod CCS): MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.7	4.7	4.1	3.4	2.5	1.7
C (Mod CCS): MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.4	20.4	25.0	26.8	26.8
C (Mod CCS): ExFID	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
C (Mod CCS): ExFID	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.4	6.1	8.3	9.7	9.2
C (Mod CCS): ExFID	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1
C (Mod CCS): ExFID	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	4.9	5.4	4.9	3.9	2.8	1.6
C (Mod CCS): ExFID	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	12.9	12.6	11.4	9.6	7.2	4.8
C (Mod CCS): ExFID	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.3	7.5	9.6	9.2
C (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.6	1.7	1.7	2.0	2.3	2.2
C (Mod CCS): ExFID	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.6	0.7
C (Mod CCS): ExFID	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.5
C (Mod CCS): ExFID	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.4	0.4	0.4	0.4

C (Mod CCS): ExFID	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.6
C (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): ExFID	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	6.5	8.8	10.3	10.5
C (Mod CCS): ExFID	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): ExFID	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.4	3.5	3.6	3.7	3.9	3.7
C (Mod CCS): ExFID	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.3	19.1	20.9	21.6	18.8
C (Mod CCS): ExFID	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Russia	Bcf/d	LNG Exports	1.7	4.6	4.6	4.6	4.0	3.3	2.4	1.6
C (Mod CCS): ExFID	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
C (Mod CCS): ExFID	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.7	1.0	1.6	2.0	2.0
C (Mod CCS): ExFID	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	0.9	0.8	0.6
C (Mod CCS): ExFID	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.7	4.7	4.1	3.4	2.6	1.8
C (Mod CCS): ExFID	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.4	20.4	23.7	23.7	23.7
C (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.4	6.3	8.1	8.9	8.6
C (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1
C (Mod CCS): Hi Exp	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	4.9	5.4	4.8	3.9	2.7	1.5
C (Mod CCS): Hi Exp	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	12.9	12.6	11.4	9.6	6.9	4.6
C (Mod CCS): Hi Exp	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.4	7.3	8.8	8.6
C (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.6	1.7	1.7	1.9	2.1	2.0
C (Mod CCS): Hi Exp	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.6
C (Mod CCS): Hi Exp	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (Mod CCS): Hi Exp	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4
C (Mod CCS): Hi Exp	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.4	0.4	0.4	0.4
C (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.6
C (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	6.6	8.5	9.7	10.0
C (Mod CCS): Hi Exp	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0
C (Mod CCS): Hi Exp	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.4	3.5	3.7	3.7	3.8	3.6
C (Mod CCS): Hi Exp	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.3	19.5	20.6	20.1	17.7
C (Mod CCS): Hi Exp	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Russia	Bcf/d	LNG Exports	1.7	4.6	4.6	4.6	3.9	3.2	2.3	1.5
C (Mod CCS): Hi Exp	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2
C (Mod CCS): Hi Exp	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.7	1.1	1.5	1.8	1.9
C (Mod CCS): Hi Exp	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	0.9	0.7	0.5
C (Mod CCS): Hi Exp	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.7	4.7	4.1	3.3	2.4	1.6
C (Mod CCS): Hi Exp	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.4	25.4	35.0	41.8	46.8
NZ (High CCS): MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.2	6.0	8.3	9.9	10.1
NZ (High CCS): MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1
NZ (High CCS): MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.0	5.3	4.8	3.9	2.7	1.6
NZ (High CCS): MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.6	11.4	9.8	7.5	5.5
NZ (High CCS): MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.4	7.8	10.0	10.2
NZ (High CCS): MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.7	1.7	2.1	2.5	2.6
NZ (High CCS): MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.7	0.9

NZ (High CCS): MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.5
NZ (High CCS): MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.5	0.5	0.5
NZ (High CCS): MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.8
NZ (High CCS): MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	2.5	5.7	8.2	10.3	11.1
NZ (High CCS): MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.5	3.5	3.7	3.8	4.0	4.0
NZ (High CCS): MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.4	19.5	21.7	23.2	22.1
NZ (High CCS): MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.0	3.3	2.5	1.9
NZ (High CCS): MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3
NZ (High CCS): MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.7	1.1	1.7	2.1	2.3
NZ (High CCS): MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.1	1.0	0.9	0.7	0.6
NZ (High CCS): MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.7	4.1	3.4	2.6	1.9
NZ (High CCS): MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.0	20.4	25.8	28.2	28.5
NZ (High CCS): ExFID	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): ExFID	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.2	6.0	8.4	10.3	10.6
NZ (High CCS): ExFID	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.1
NZ (High CCS): ExFID	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.0	5.3	4.8	3.9	2.8	1.7
NZ (High CCS): ExFID	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.6	11.4	9.8	7.7	5.7
NZ (High CCS): ExFID	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.4	7.9	10.4	10.6

NZ (High CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.7	1.7	2.1	2.6	2.7
NZ (High CCS): ExFID	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.8	0.9
NZ (High CCS): ExFID	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.5	0.6
NZ (High CCS): ExFID	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.5	0.5	0.5
NZ (High CCS): ExFID	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.4	0.7	0.8
NZ (High CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): ExFID	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	2.5	5.7	8.3	10.5	11.4
NZ (High CCS): ExFID	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): ExFID	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.5	3.5	3.7	3.8	4.1	4.1
NZ (High CCS): ExFID	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.4	19.5	21.8	24.0	23.2
NZ (High CCS): ExFID	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
NZ (High CCS): ExFID	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.0	3.4	2.6	1.9
NZ (High CCS): ExFID	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3
NZ (High CCS): ExFID	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.7	1.1	1.7	2.2	2.4
NZ (High CCS): ExFID	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.1	1.0	0.9	0.7	0.6
NZ (High CCS): ExFID	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.7	4.1	3.4	2.7	1.9
NZ (High CCS): ExFID	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): ExFID	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.0	20.4	23.7	23.7	23.7
NZ (High CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.2	6.2	8.2	9.4	9.5
NZ (High CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1
NZ (High CCS): Hi Exp	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.0	5.3	4.8	3.9	2.7	1.6
NZ (High CCS): Hi Exp	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.6	11.4	9.7	7.3	5.2

NZ (High CCS): Hi Exp	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.5	7.6	9.5	9.6
NZ (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.7	1.8	2.1	2.4	2.5
NZ (High CCS): Hi Exp	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.5	0.7	0.8
NZ (High CCS): Hi Exp	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4
NZ (High CCS): Hi Exp	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.4	0.4	0.4	0.5
NZ (High CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.7
NZ (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	2.5	5.7	7.8	9.7	10.6
NZ (High CCS): Hi Exp	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): Hi Exp	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.5	3.5	3.8	3.8	3.9	3.8
NZ (High CCS): Hi Exp	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.4	19.9	21.4	22.0	20.8
NZ (High CCS): Hi Exp	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.0	3.3	2.4	1.8
NZ (High CCS): Hi Exp	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2
NZ (High CCS): Hi Exp	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.7	1.1	1.7	2.0	2.2
NZ (High CCS): Hi Exp	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.1	1.0	0.8	0.7	0.5
NZ (High CCS): Hi Exp	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.7	4.1	3.4	2.5	1.7
NZ (High CCS): Hi Exp	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.0	25.4	35.8	43.2	48.5
NZ (Mod CCS): MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
NZ (Mod CCS): MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.1	5.4	6.2	4.7	3.5
NZ (Mod CCS): MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.0
NZ (Mod CCS): MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	4.9	5.1	4.8	3.8	2.4	1.2

NZ (Mod CCS): MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	12.9	12.5	11.1	9.0	5.5	2.8
NZ (Mod CCS): MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.7	6.9	6.1	5.0
NZ (Mod CCS): MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.6	1.6	1.5	1.6	1.2	0.9
NZ (Mod CCS): MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.1	0.2	0.4	0.3	0.3
NZ (Mod CCS): MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
NZ (Mod CCS): MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.4	0.4	0.4	0.2	0.1
NZ (Mod CCS): MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.2
NZ (Mod CCS): MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
NZ (Mod CCS): MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	2.3	4.8	6.5	6.1	5.4
NZ (Mod CCS): MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.4	3.3	3.2	3.2	2.5	2.0
NZ (Mod CCS): MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.6	18.7	18.0	13.1	8.8
NZ (Mod CCS): MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.6	4.5	4.0	3.1	1.9	1.1
NZ (Mod CCS): MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
NZ (Mod CCS): MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.6	0.9	1.2	1.0	0.9
NZ (Mod CCS): MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.1	1.0	0.7	0.4	0.3
NZ (Mod CCS): MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.7	4.7	4.1	3.1	1.8	0.9
NZ (Mod CCS): MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	17.8	18.9	20.5	19.3	17.2
NZ (Mod CCS): ExFID	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.1	5.4	6.2	4.7	3.5

NZ (Mod CCS): ExFID	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.0
NZ (Mod CCS): ExFID	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	4.9	5.1	4.8	3.8	2.4	1.2
NZ (Mod CCS): ExFID	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	12.9	12.5	11.1	9.0	5.5	2.8
NZ (Mod CCS): ExFID	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.7	6.9	6.1	5.0
NZ (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.6	1.6	1.5	1.6	1.2	0.9
NZ (Mod CCS): ExFID	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.1	0.2	0.4	0.3	0.3
NZ (Mod CCS): ExFID	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1
NZ (Mod CCS): ExFID	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.4	0.4	0.4	0.2	0.1
NZ (Mod CCS): ExFID	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.2
NZ (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
NZ (Mod CCS): ExFID	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	2.3	4.8	6.5	6.1	5.4
NZ (Mod CCS): ExFID	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.4	3.3	3.2	3.2	2.5	2.0
NZ (Mod CCS): ExFID	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.6	18.7	18.0	13.1	8.8
NZ (Mod CCS): ExFID	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Russia	Bcf/d	LNG Exports	1.7	4.6	4.6	4.5	4.0	3.1	1.9	1.1
NZ (Mod CCS): ExFID	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
NZ (Mod CCS): ExFID	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.6	0.9	1.2	1.0	0.9
NZ (Mod CCS): ExFID	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.1	1.0	0.7	0.4	0.3
NZ (Mod CCS): ExFID	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.7	4.7	4.1	3.1	1.8	0.9
NZ (Mod CCS): ExFID	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	17.8	18.9	20.5	19.3	17.2

NZ (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.1	5.5	6.0	4.9	4.0
NZ (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.0
NZ (Mod CCS): Hi Exp	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	4.9	5.1	4.7	3.8	2.3	1.2
NZ (Mod CCS): Hi Exp	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	12.9	12.5	11.2	8.9	5.6	3.0
NZ (Mod CCS): Hi Exp	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.7	4.9	6.8	6.4	5.8
NZ (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.6	1.6	1.6	1.5	1.3	0.9
NZ (Mod CCS): Hi Exp	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.1	0.2	0.4	0.2	0.1
NZ (Mod CCS): Hi Exp	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
NZ (Mod CCS): Hi Exp	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.4	0.4	0.4	0.2	0.1
NZ (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.2
NZ (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	2.3	4.8	6.2	6.3	6.2
NZ (Mod CCS): Hi Exp	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.4	3.3	3.3	3.1	2.7	2.4
NZ (Mod CCS): Hi Exp	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.6	18.9	17.7	13.7	10.2
NZ (Mod CCS): Hi Exp	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Russia	Bcf/d	LNG Exports	1.7	4.6	4.6	4.5	4.0	3.1	1.6	0.8
NZ (Mod CCS): Hi Exp	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
NZ (Mod CCS): Hi Exp	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.6	0.9	1.2	1.0	0.9
NZ (Mod CCS): Hi Exp	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.1	1.0	0.7	0.2	0.1
NZ (Mod CCS): Hi Exp	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.7	4.7	4.1	3.1	1.7	0.8

NZ (Mod CCS): Hi Exp	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	17.8	23.9	30.5	34.3	37.2
DP Lo U.S. Sup: MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.1	0.1	0.1	0.1	0.1	0.0
DP Lo U.S. Sup: MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.6	7.4	10.4	13.6	15.9
DP Lo U.S. Sup: MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2
DP Lo U.S. Sup: MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.1	5.4	4.9	4.1	3.0	2.0
DP Lo U.S. Sup: MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.8	10.5	9.5	9.5
DP Lo U.S. Sup: MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.8	4.8	8.4	11.4	12.9
DP Lo U.S. Sup: MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.8	2.0	2.5	3.3	3.8
DP Lo U.S. Sup: MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.7	1.1	1.6
DP Lo U.S. Sup: MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.5	0.8	1.2
DP Lo U.S. Sup: MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.7	0.9	1.2
DP Lo U.S. Sup: MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.5	1.1	1.6
DP Lo U.S. Sup: MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP Lo U.S. Sup: MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	7.3	10.0	12.7	14.9
DP Lo U.S. Sup: MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2
DP Lo U.S. Sup: MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.6	3.7	4.1	4.2	4.6	4.9
DP Lo U.S. Sup: MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.6	21.3	23.9	27.5	30.4
DP Lo U.S. Sup: MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.7	4.2	3.6	3.0	2.6
DP Lo U.S. Sup: MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.4	0.5
DP Lo U.S. Sup: MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.3	2.1	2.8	3.4
DP Lo U.S. Sup: MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.1	1.0	1.1	1.1

DP Lo U.S. Sup: MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.6	3.1	2.7
DP Lo U.S. Sup: MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Lo U.S. Sup: MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	18.2	21.0	24.7	27.8	31.5
DP Hi U.S. Sup: MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.0
DP Hi U.S. Sup: MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.7	7.5	10.1	12.8	14.7
DP Hi U.S. Sup: MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.2	0.1	0.2
DP Hi U.S. Sup: MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.1	5.4	4.9	4.0	2.9	1.9
DP Hi U.S. Sup: MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.8	10.4	8.9	8.4
DP Hi U.S. Sup: MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	2.9	4.9	8.4	11.2	12.4
DP Hi U.S. Sup: MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.8	2.1	2.5	3.1	3.5
DP Hi U.S. Sup: MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.3	0.6	1.0	1.3
DP Hi U.S. Sup: MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.4	0.7	1.0
DP Hi U.S. Sup: MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.6	0.8	1.0
DP Hi U.S. Sup: MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.5	0.9	1.4
DP Hi U.S. Sup: MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP Hi U.S. Sup: MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	7.0	9.4	12.0	13.9
DP Hi U.S. Sup: MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.2
DP Hi U.S. Sup: MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.6	3.8	4.2	4.2	4.4	4.7
DP Hi U.S. Sup: MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	19.8	21.5	23.4	25.7	27.5
DP Hi U.S. Sup: MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Hi U.S. Sup: MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.7	4.2	3.5	2.8	2.4
DP Hi U.S. Sup: MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
DP Hi U.S. Sup: MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1

DP Hi U.S. Sup: MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.8	1.4	2.0	2.6	3.1
DP Hi U.S. Sup: MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.0	1.0	1.0	1.0
DP Hi U.S. Sup: MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.5	2.8	2.4
DP Hi U.S. Sup: MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Hi U.S. Sup: MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	19.5	27.7	43.2	58.7	70.0
DP Hi ME Sup: MR	Africa_Eastern	Bcf/d	LNG Exports	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0
DP Hi ME Sup: MR	Africa_Northern	Bcf/d	LNG Exports	2.6	5.4	5.3	5.8	7.6	9.8	12.0	13.6
DP Hi ME Sup: MR	Africa_Southern	Bcf/d	LNG Exports	0.3	0.1	0.1	0.2	0.2	0.1	0.1	0.1
DP Hi ME Sup: MR	Africa_Western	Bcf/d	LNG Exports	2.6	3.0	5.1	5.4	4.8	3.9	2.8	1.8
DP Hi ME Sup: MR	Argentina	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Australia_NZ	Bcf/d	LNG Exports	3.1	12.3	13.0	12.7	11.8	10.3	8.5	7.6
DP Hi ME Sup: MR	Brazil	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Canada	Bcf/d	LNG Exports	0.0	0.0	2.4	3.0	5.0	8.1	10.4	11.4
DP Hi ME Sup: MR	Central America and Caribbean	Bcf/d	LNG Exports	1.5	1.4	1.7	1.8	2.1	2.4	2.9	3.2
DP Hi ME Sup: MR	Central Asia	Bcf/d	LNG Exports	0.0	0.0	0.1	0.2	0.4	0.6	0.9	1.2
DP Hi ME Sup: MR	China	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Colombia	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi ME Sup: MR	EU-12	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.2	0.3	0.5	0.8
DP Hi ME Sup: MR	EU-15	Bcf/d	LNG Exports	0.7	0.3	0.3	0.5	0.5	0.6	0.6	0.8
DP Hi ME Sup: MR	Europe_Eastern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.2	0.4	0.8	1.1
DP Hi ME Sup: MR	Europe_Non_EU	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
DP Hi ME Sup: MR	European Free Trade Association	Bcf/d	LNG Exports	0.9	0.8	0.8	3.4	6.6	8.8	11.3	13.1
DP Hi ME Sup: MR	India	Bcf/d	LNG Exports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DP Hi ME Sup: MR	Indonesia	Bcf/d	LNG Exports	2.7	2.9	3.6	3.8	4.2	4.2	4.3	4.5
DP Hi ME Sup: MR	Japan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Mexico	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Middle East	Bcf/d	LNG Exports	10.8	13.8	19.7	22.4	33.7	51.2	70.0	86.8
DP Hi ME Sup: MR	Pakistan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi ME Sup: MR	Russia	Bcf/d	LNG Exports	1.7	4.6	4.7	4.6	4.1	3.4	2.7	2.2

DP Hi ME Sup: MR	South Africa	Bcf/d	LNG Exports	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4
DP Hi ME Sup: MR	South America_Northern	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Hi ME Sup: MR	South America_Southern	Bcf/d	LNG Exports	0.3	0.4	0.6	0.9	1.4	2.0	2.5	2.9
DP Hi ME Sup: MR	South Asia	Bcf/d	LNG Exports	1.4	1.0	1.1	1.2	1.0	0.9	0.9	0.9
DP Hi ME Sup: MR	South Korea	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Southeast Asia	Bcf/d	LNG Exports	3.9	4.7	4.8	4.8	4.2	3.4	2.7	2.1
DP Hi ME Sup: MR	Taiwan	Bcf/d	LNG Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Hi ME Sup: MR	USA	Bcf/d	LNG Exports	0.1	6.8	17.6	19.7	26.8	37.3	45.9	51.7

Table A-3.26. Additional Data. Pipeline exports (Bcf/d) across all 32 GCAM regions and all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Region	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.4	1.8	2.7	3.9	5.4
DP: MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
DP: MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.1	4.5	4.1	3.7
DP: MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.5	0.5	0.5
DP: MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
DP: MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	1.0	0.8	0.4	0.2
DP: MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
DP: MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.6	6.7	4.4	3.5	2.0	0.8
DP: MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.8	0.8	0.7	0.7
DP: MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.8	17.1	21.8	24.2	25.9	27.6
DP: MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.3
DP: MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8

DP: ExFID	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.4	1.8	2.8	4.1	5.7
DP: ExFID	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.4
DP: ExFID	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.1	4.4	3.8	3.4
DP: ExFID	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5
DP: ExFID	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
DP: ExFID	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	0.9	0.7	0.4	0.2
DP: ExFID	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
DP: ExFID	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.6	6.7	4.2	3.2	2.0	0.8
DP: ExFID	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.9	0.8	0.7	0.7
DP: ExFID	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: ExFID	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DP: ExFID	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.8	17.1	21.3	23.2	26.2	29.2
DP: ExFID	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.3
DP: ExFID	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
DP: Hi Exp	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP: Hi Exp	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.4	1.8	2.6	3.7	5.1

DP: Hi Exp	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
DP: Hi Exp	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.1	4.5	4.1	3.8
DP: Hi Exp	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.4
DP: Hi Exp	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
DP: Hi Exp	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	1.1	0.8	0.4	0.2
DP: Hi Exp	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
DP: Hi Exp	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.6	6.7	4.9	3.9	1.9	0.8
DP: Hi Exp	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.6
DP: Hi Exp	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DP: Hi Exp	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP: Hi Exp	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.8	17.1	22.1	24.7	25.5	26.8
DP: Hi Exp	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.2
DP: Hi Exp	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
C (High CCS): MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.3	1.6	2.6	4.3	6.5
C (High CCS): MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
C (High CCS): MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (High CCS): MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.0	4.0	3.3	2.8
C (High CCS): MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.4
C (High CCS): MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
C (High CCS): MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.3	0.8	0.6	0.4	0.2
C (High CCS): MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.5	6.3	3.6	2.7	1.9	0.8
C (High CCS): MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.7	0.7	0.6	0.7
C (High CCS): MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
C (High CCS): MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	17.1	19.3	20.8	23.6	22.8
C (High CCS): MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.2
C (High CCS): MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
C (High CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.3	1.6	2.6	4.4	6.5
C (High CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
C (High CCS): ExFID	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.0	4.0	3.2	2.8

C (High CCS): ExFID	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.4
C (High CCS): ExFID	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
C (High CCS): ExFID	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.3	0.8	0.6	0.4	0.2
C (High CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.5	6.3	3.6	2.7	1.9	0.8
C (High CCS): ExFID	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.7
C (High CCS): ExFID	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
C (High CCS): ExFID	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	17.1	19.3	20.4	23.8	23.3
C (High CCS): ExFID	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.2
C (High CCS): ExFID	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
C (High CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): Hi Exp	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.3	1.6	2.5	4.1	6.1
C (High CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
C (High CCS): Hi Exp	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (High CCS): Hi Exp	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	4.9	4.0	3.2	2.8
C (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.4	0.4	0.3
C (High CCS): Hi Exp	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
C (High CCS): Hi Exp	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.3	0.9	0.7	0.4	0.2
C (High CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.5	6.3	3.9	3.0	1.9	0.8
C (High CCS): Hi Exp	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.7	0.6	0.6	0.6
C (High CCS): Hi Exp	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): Hi Exp	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	17.1	20.4	21.3	23.0	21.7
C (High CCS): Hi Exp	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.6	0.4	0.2

C (High CCS): Hi Exp	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
C (Mod CCS): MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.2	1.1	1.2	2.2	3.4	4.8
C (Mod CCS): MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.0	5.7	4.8	3.6	2.5	1.9
C (Mod CCS): MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.6	0.6	0.5	0.4	0.3	0.3
C (Mod CCS): MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
C (Mod CCS): MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.7	1.1	0.6	0.5	0.4	0.2
C (Mod CCS): MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.0	5.6	2.9	2.5	1.8	0.8
C (Mod CCS): MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.7	0.7	0.6	0.6
C (Mod CCS): MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (Mod CCS): MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.6	17.1	17.6	20.6	21.8	17.7
C (Mod CCS): MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.1	1.2	1.0	0.6	0.4	0.2

C (Mod CCS): MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
C (Mod CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.2	1.1	1.2	2.2	3.4	4.8
C (Mod CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): ExFID	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.0	5.7	4.8	3.6	2.5	1.9
C (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.6	0.6	0.5	0.4	0.3	0.3
C (Mod CCS): ExFID	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
C (Mod CCS): ExFID	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.7	1.1	0.6	0.5	0.4	0.2
C (Mod CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.0	5.6	2.9	2.4	1.7	0.8
C (Mod CCS): ExFID	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.7	0.7	0.6	0.6
C (Mod CCS): ExFID	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (Mod CCS): ExFID	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.6	17.1	17.6	20.4	21.8	17.8
C (Mod CCS): ExFID	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.1	1.2	1.0	0.6	0.4	0.2
C (Mod CCS): ExFID	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (Mod CCS): ExFID	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
C (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.2	1.1	1.2	2.0	3.2	4.1
C (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
C (Mod CCS): Hi Exp	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.0	5.7	4.8	3.5	2.5	1.8
C (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.6	0.6	0.5	0.4	0.3	0.2
C (Mod CCS): Hi Exp	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
C (Mod CCS): Hi Exp	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.7	1.1	0.7	0.6	0.4	0.2
C (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.0	5.6	3.3	2.7	1.9	0.8
C (Mod CCS): Hi Exp	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.7	0.6	0.6	0.5
C (Mod CCS): Hi Exp	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (Mod CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.6	17.1	18.5	20.6	21.2	17.1
C (Mod CCS): Hi Exp	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.1	1.2	0.9	0.6	0.4	0.2
C (Mod CCS): Hi Exp	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
NZ (High CCS): MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

NZ (High CCS): MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.2	1.6	2.9	4.8	7.3
NZ (High CCS): MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
NZ (High CCS): MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.1	4.1	3.4	3.0
NZ (High CCS): MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.6	0.6	0.5	0.4	0.4
NZ (High CCS): MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	0.9	0.7	0.4	0.2
NZ (High CCS): MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.5	6.8	4.1	3.4	2.0	0.8
NZ (High CCS): MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
NZ (High CCS): MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
NZ (High CCS): MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	16.2	19.5	22.3	20.0	16.2
NZ (High CCS): MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.1	1.0	0.7	0.4	0.2
NZ (High CCS): MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
NZ (High CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): ExFID	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.2	1.6	2.9	4.9	7.3

NZ (High CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
NZ (High CCS): ExFID	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.1	4.1	3.4	3.0
NZ (High CCS): ExFID	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.6	0.6	0.5	0.4	0.4
NZ (High CCS): ExFID	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): ExFID	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	0.9	0.7	0.4	0.2
NZ (High CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.5	6.8	4.1	3.4	2.0	0.8
NZ (High CCS): ExFID	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
NZ (High CCS): ExFID	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): ExFID	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
NZ (High CCS): ExFID	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (High CCS): ExFID	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	16.2	19.5	22.1	20.1	16.3
NZ (High CCS): ExFID	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.1	1.0	0.7	0.4	0.2
NZ (High CCS): ExFID	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
NZ (High CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): Hi Exp	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.2	1.6	2.8	4.5	6.7
NZ (High CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
NZ (High CCS): Hi Exp	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.0	4.1	3.5	3.0
NZ (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.3
NZ (High CCS): Hi Exp	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): Hi Exp	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	1.0	0.8	0.4	0.2
NZ (High CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.5	6.8	4.6	3.7	1.9	0.8
NZ (High CCS): Hi Exp	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.7
NZ (High CCS): Hi Exp	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2
NZ (High CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	16.2	20.4	22.6	19.5	15.7
NZ (High CCS): Hi Exp	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.1	1.0	0.6	0.4	0.2
NZ (High CCS): Hi Exp	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
NZ (Mod CCS): MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.2	1.0	1.2	2.2	2.6	3.5
NZ (Mod CCS): MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
NZ (Mod CCS): MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.0	5.8	4.8	3.5	2.2	1.2
NZ (Mod CCS): MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.6	0.6	0.5	0.4	0.2	0.2
NZ (Mod CCS): MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NZ (Mod CCS): MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.7	1.0	0.8	0.6	0.3	0.1
NZ (Mod CCS): MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.0	6.4	3.7	2.7	1.6	0.7
NZ (Mod CCS): MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.6
NZ (Mod CCS): MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (Mod CCS): MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.6	16.2	19.9	19.5	13.2	8.3
NZ (Mod CCS): MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.1	1.1	0.9	0.6	0.3	0.2
NZ (Mod CCS): MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
NZ (Mod CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.2	1.0	1.2	2.2	2.6	3.5
NZ (Mod CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
NZ (Mod CCS): ExFID	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.0	5.8	4.8	3.5	2.2	1.2
NZ (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): ExFID	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.6	0.6	0.5	0.4	0.2	0.2
NZ (Mod CCS): ExFID	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NZ (Mod CCS): ExFID	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.7	1.0	0.8	0.6	0.3	0.1
NZ (Mod CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.0	6.4	3.7	2.7	1.6	0.7
NZ (Mod CCS): ExFID	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.6
NZ (Mod CCS): ExFID	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (Mod CCS): ExFID	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.6	16.2	19.9	19.5	13.2	8.3
NZ (Mod CCS): ExFID	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.1	1.1	0.9	0.6	0.3	0.2
NZ (Mod CCS): ExFID	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): ExFID	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
NZ (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.2	1.0	1.2	2.0	2.0	2.0
NZ (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
NZ (Mod CCS): Hi Exp	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.0	5.8	4.7	3.5	2.1	1.1
NZ (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.6	0.6	0.5	0.4	0.1	0.1
NZ (Mod CCS): Hi Exp	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
NZ (Mod CCS): Hi Exp	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.7	1.0	0.9	0.6	0.3	0.1
NZ (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.0	6.4	4.0	2.9	1.6	0.6
NZ (Mod CCS): Hi Exp	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.7	0.6	0.5	0.4	0.4
NZ (Mod CCS): Hi Exp	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): Hi Exp	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.6	16.2	20.9	19.8	11.5	6.1
NZ (Mod CCS): Hi Exp	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.1	1.1	0.9	0.6	0.2	0.1
NZ (Mod CCS): Hi Exp	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
DP Lo U.S. Sup: MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.3	1.8	2.8	4.1	5.7
DP Lo U.S. Sup: MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
DP Lo U.S. Sup: MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Canada	Bcf/d	Pipeline Exports	6.2	6.3	6.0	5.8	5.5	5.4	5.1	4.7
DP Lo U.S. Sup: MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5
DP Lo U.S. Sup: MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
DP Lo U.S. Sup: MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	0.9	0.7	0.4	0.2
DP Lo U.S. Sup: MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.6	6.5	4.0	3.1	2.0	0.8

DP Lo U.S. Sup: MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.9	0.8	0.8	0.7
DP Lo U.S. Sup: MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2
DP Lo U.S. Sup: MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DP Lo U.S. Sup: MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.8	16.9	20.8	23.4	26.4	29.4
DP Lo U.S. Sup: MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.3
DP Lo U.S. Sup: MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
DP Hi U.S. Sup: MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi U.S. Sup: MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.4	1.8	2.6	3.7	5.2
DP Hi U.S. Sup: MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.0	0.1	0.1	0.2	0.3
DP Hi U.S. Sup: MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.0	4.3	3.7	3.3
DP Hi U.S. Sup: MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.4
DP Hi U.S. Sup: MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
DP Hi U.S. Sup: MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.4	1.0	0.8	0.4	0.2
DP Hi U.S. Sup: MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.6	6.7	4.6	3.7	1.9	0.8
DP Hi U.S. Sup: MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.8	0.8	0.7	0.7

DP Hi U.S. Sup: MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Hi U.S. Sup: MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
DP Hi U.S. Sup: MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.8	17.1	21.9	24.7	25.9	27.2
DP Hi U.S. Sup: MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.7	0.4	0.2
DP Hi U.S. Sup: MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8
DP Hi ME Sup: MR	Africa_Eastern	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
DP Hi ME Sup: MR	Africa_Northern	Bcf/d	Pipeline Exports	1.3	1.4	1.4	1.4	1.8	2.5	3.4	4.7
DP Hi ME Sup: MR	Africa_Southern	Bcf/d	Pipeline Exports	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.3
DP Hi ME Sup: MR	Argentina	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Australia_NZ	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Canada	Bcf/d	Pipeline Exports	6.2	6.5	6.1	5.8	5.0	4.3	3.8	3.4
DP Hi ME Sup: MR	Central America and Caribbean	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Central Asia	Bcf/d	Pipeline Exports	7.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	China	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Colombia	Bcf/d	Pipeline Exports	0.8	0.8	0.7	0.7	0.6	0.4	0.3	0.3
DP Hi ME Sup: MR	EU-12	Bcf/d	Pipeline Exports	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0
DP Hi ME Sup: MR	EU-15	Bcf/d	Pipeline Exports	2.2	2.1	1.8	1.5	1.2	0.8	0.4	0.2
DP Hi ME Sup: MR	Europe_Eastern	Bcf/d	Pipeline Exports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Europe_Non_EU	Bcf/d	Pipeline Exports	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	European Free Trade Association	Bcf/d	Pipeline Exports	10.1	9.7	8.6	7.1	5.4	3.8	1.9	0.8
DP Hi ME Sup: MR	India	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Indonesia	Bcf/d	Pipeline Exports	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.6
DP Hi ME Sup: MR	Japan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Mexico	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1

DP Hi ME Sup: MR	Middle East	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.5
DP Hi ME Sup: MR	Pakistan	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Russia	Bcf/d	Pipeline Exports	15.3	27.1	15.7	17.5	22.4	24.7	24.9	25.5
DP Hi ME Sup: MR	South Africa	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	South America_Southern	Bcf/d	Pipeline Exports	1.4	1.4	1.2	1.2	1.0	0.6	0.4	0.2
DP Hi ME Sup: MR	South Korea	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Southeast Asia	Bcf/d	Pipeline Exports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	USA	Bcf/d	Pipeline Exports	5.3	8.8	8.8	8.8	8.8	8.8	8.8	8.8

Table A-3.27. Additional Data. LNG Imports (Bcf/d) across all 32 GCAM regions and all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Region	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.6	1.2	2.0	3.1
DP: MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.1	1.5	1.9	2.2
DP: MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.4	2.1
DP: MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.4	0.7	1.2	1.9
DP: MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.6	1.6	2.3	3.1	3.7	4.1
DP: MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DP: MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.4	3.2	4.7	6.5	7.9	8.8
DP: MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4
DP: MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.4	0.6	0.8	1.0
DP: MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.6	2.4	3.0	3.3
DP: MR	China	Bcf/d	LNG Imports	2.7	8.0	21.2	21.7	24.5	27.0	28.2	28.8
DP: MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.8	2.2	2.5	2.8
DP: MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.9	3.7	3.2	3.6	4.2	4.6
DP: MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	8.4	6.3	4.7	5.1	7.0	8.4
DP: MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.8	2.4	2.9	3.1
DP: MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.3	5.8	6.3	6.6	6.8
DP: MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

DP: MR	India	Bcf/d	LNG Imports	2.3	4.1	7.8	10.7	14.4	18.3	21.8	24.9
DP: MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	1.0	1.6	2.1	2.6
DP: MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.5	12.5	12.2	12.3	12.3
DP: MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.6	1.8	2.0	2.3	2.7
DP: MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	1.1	2.1	2.9	3.4
DP: MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.7	2.1	3.4	5.0	6.3	7.2
DP: MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.4	4.7	6.4	7.2
DP: MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.8	0.9	1.1	1.3
DP: MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.1	0.6	1.1	1.3
DP: MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.8	1.1	1.4	1.6
DP: MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.3	5.6	5.7	5.8	6.0	6.1
DP: MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.1	1.7	2.6	3.6	4.5	5.0
DP: MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.6	2.8	2.9	3.0
DP: MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2
DP: ExFID	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	1.0	1.8	2.8
DP: ExFID	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.1	1.3	1.6	1.9
DP: ExFID	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	1.2	1.8
DP: ExFID	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.5	0.9	1.4
DP: ExFID	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.6	1.6	2.2	2.7	3.3	3.6
DP: ExFID	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
DP: ExFID	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.4	3.2	4.5	5.7	6.9	7.7
DP: ExFID	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
DP: ExFID	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.5	0.7	0.9
DP: ExFID	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.5	2.0	2.5	2.7
DP: ExFID	China	Bcf/d	LNG Imports	2.7	8.0	21.2	21.7	23.7	24.4	25.2	25.6
DP: ExFID	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.8	2.1	2.4	2.6
DP: ExFID	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.9	3.7	3.1	3.4	3.9	4.2
DP: ExFID	EU-15	Bcf/d	LNG Imports	5.0	7.3	8.4	6.3	4.4	4.4	5.5	6.7
DP: ExFID	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.7	2.2	2.5	2.7

DP: ExFID	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.3	5.7	5.7	5.8	5.9
DP: ExFID	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
DP: ExFID	India	Bcf/d	LNG Imports	2.3	4.1	7.8	10.7	14.1	16.8	19.7	22.3
DP: ExFID	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.9	1.4	1.9	2.3
DP: ExFID	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.5	12.4	11.8	11.7	11.6
DP: ExFID	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.6	1.8	1.8	2.0	2.2
DP: ExFID	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	1.1	1.6	2.2	2.7
DP: ExFID	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.7	2.1	3.3	4.5	5.7	6.5
DP: ExFID	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.3	3.8	5.0	5.6
DP: ExFID	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.7	0.8	1.0	1.1
DP: ExFID	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.1	0.5	0.9	1.1
DP: ExFID	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.8	0.9	1.2	1.4
DP: ExFID	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.3	5.6	5.7	5.6	5.6	5.7
DP: ExFID	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.1	1.7	2.5	3.2	3.8	4.1
DP: ExFID	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.6	2.7	2.8	2.8
DP: ExFID	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1
DP: Hi Exp	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.6	1.2	2.1	3.3
DP: Hi Exp	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.2	1.7	2.1	2.4
DP: Hi Exp	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.5	2.3
DP: Hi Exp	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.4	0.8	1.4	2.4
DP: Hi Exp	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.6	1.6	2.5	3.3	4.0	4.4
DP: Hi Exp	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
DP: Hi Exp	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.4	3.2	5.0	7.0	8.6	9.6
DP: Hi Exp	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5
DP: Hi Exp	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.4	0.6	0.9	1.1
DP: Hi Exp	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.7	2.7	3.4	3.8
DP: Hi Exp	China	Bcf/d	LNG Imports	2.7	8.0	21.2	21.7	26.1	29.5	31.2	32.0
DP: Hi Exp	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.8	2.2	2.6	3.0

DP: Hi Exp	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.9	3.7	3.5	3.9	4.6	5.0
DP: Hi Exp	EU-15	Bcf/d	LNG Imports	5.0	7.3	8.4	6.3	5.5	5.8	8.4	10.3
DP: Hi Exp	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.9	2.6	3.2	3.4
DP: Hi Exp	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.3	6.0	6.6	7.1	7.4
DP: Hi Exp	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
DP: Hi Exp	India	Bcf/d	LNG Imports	2.3	4.1	7.8	10.7	15.0	19.3	23.3	27.0
DP: Hi Exp	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	1.0	1.7	2.4	2.9
DP: Hi Exp	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.5	12.7	12.4	12.7	12.8
DP: Hi Exp	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.6	1.9	2.2	2.7	3.1
DP: Hi Exp	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	1.3	2.3	3.4	4.1
DP: Hi Exp	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.7	2.1	3.5	5.3	6.6	7.7
DP: Hi Exp	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.7	5.4	7.4	8.4
DP: Hi Exp	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.8	1.0	1.2	1.4
DP: Hi Exp	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.2	0.7	1.2	1.4
DP: Hi Exp	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.8	1.1	1.5	1.8
DP: Hi Exp	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.3	5.6	5.8	6.0	6.1	6.3
DP: Hi Exp	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.1	1.7	2.8	4.0	5.1	5.8
DP: Hi Exp	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.6	2.8	3.0	3.1
DP: Hi Exp	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
C (High CCS): MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.7	2.4
C (High CCS): MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.0	1.3	1.5	1.5
C (High CCS): MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	1.3	1.9
C (High CCS): MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.6	1.0	1.7
C (High CCS): MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.7	1.5	1.7	2.3	2.7	2.9
C (High CCS): MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.5	3.3	4.2	5.3	6.1	6.7
C (High CCS): MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
C (High CCS): MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.6

C (High CCS): MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	1.0	1.2	1.7	1.9	1.9
C (High CCS): MR	China	Bcf/d	LNG Imports	2.7	8.0	21.9	22.4	24.5	26.5	28.2	28.1
C (High CCS): MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.6	1.7	1.7	1.8
C (High CCS): MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.7	3.4	2.7	3.1	3.5	3.5
C (High CCS): MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	7.7	5.3	3.3	3.4	4.5	5.6
C (High CCS): MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.2	1.3	1.6	1.9	1.9
C (High CCS): MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	5.4	5.2	5.0	4.6
C (High CCS): MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): MR	India	Bcf/d	LNG Imports	2.3	4.1	7.6	10.5	14.0	17.8	22.1	25.5
C (High CCS): MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.8	1.2	1.5	1.6
C (High CCS): MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.2	11.4	10.6	10.1	8.9
C (High CCS): MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.7	1.6	1.6	1.6	1.6
C (High CCS): MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	0.8	1.2	1.5	1.5
C (High CCS): MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.8	2.2	3.0	3.9	4.4	4.6
C (High CCS): MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.5	4.5	5.6	5.9
C (High CCS): MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.8	1.0	1.2	1.1
C (High CCS): MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
C (High CCS): MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.7	0.8	1.0	1.2
C (High CCS): MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.8	4.5	3.9	3.0	2.2
C (High CCS): MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.5	1.8	2.4	3.2	3.9
C (High CCS): MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.7	2.8	2.7
C (High CCS): MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
C (High CCS): ExFID	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.6	2.3
C (High CCS): ExFID	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.0	1.2	1.4	1.5
C (High CCS): ExFID	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.7	1.2	1.8
C (High CCS): ExFID	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.5	0.9	1.6
C (High CCS): ExFID	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.7	1.5	1.7	2.2	2.6	2.8
C (High CCS): ExFID	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.5	3.3	4.2	5.1	5.8	6.5

C (High CCS): ExFID	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2
C (High CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6
C (High CCS): ExFID	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	1.0	1.2	1.6	1.8	1.9
C (High CCS): ExFID	China	Bcf/d	LNG Imports	2.7	8.0	21.9	22.4	24.5	25.7	27.3	27.3
C (High CCS): ExFID	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.6	1.7	1.7	1.8
C (High CCS): ExFID	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.7	3.4	2.7	3.0	3.4	3.4
C (High CCS): ExFID	EU-15	Bcf/d	LNG Imports	5.0	7.3	7.7	5.3	3.3	3.3	4.3	5.5
C (High CCS): ExFID	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.2	1.3	1.6	1.8	1.9
C (High CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	5.4	5.1	4.9	4.5
C (High CCS): ExFID	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): ExFID	India	Bcf/d	LNG Imports	2.3	4.1	7.6	10.5	14.0	17.4	21.5	24.9
C (High CCS): ExFID	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.8	1.1	1.4	1.6
C (High CCS): ExFID	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.2	11.4	10.5	10.0	8.8
C (High CCS): ExFID	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.7	1.6	1.6	1.5	1.6
C (High CCS): ExFID	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	0.8	1.1	1.4	1.4
C (High CCS): ExFID	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.8	2.2	3.0	3.8	4.3	4.5
C (High CCS): ExFID	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.5	4.2	5.2	5.5
C (High CCS): ExFID	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.8	1.0	1.2	1.1
C (High CCS): ExFID	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
C (High CCS): ExFID	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.7	0.8	1.0	1.2
C (High CCS): ExFID	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.8	4.5	3.8	2.9	2.2
C (High CCS): ExFID	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.5	1.8	2.3	3.1	3.7
C (High CCS): ExFID	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.6	2.8	2.6
C (High CCS): ExFID	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
C (High CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	1.0	1.8	2.6
C (High CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.1	1.4	1.7	1.7
C (High CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.8	1.4	2.1

C (High CCS): Hi Exp	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.4	0.7	1.3	2.2
C (High CCS): Hi Exp	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.7	1.5	1.9	2.5	2.9	3.2
C (High CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): Hi Exp	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.5	3.3	4.5	5.8	6.6	7.5
C (High CCS): Hi Exp	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3
C (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.5	0.6	0.7
C (High CCS): Hi Exp	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	1.0	1.3	1.9	2.2	2.2
C (High CCS): Hi Exp	China	Bcf/d	LNG Imports	2.7	8.0	21.9	22.4	26.4	29.2	31.5	31.4
C (High CCS): Hi Exp	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.7	1.8	1.8	1.9
C (High CCS): Hi Exp	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.7	3.4	2.9	3.2	3.6	3.6
C (High CCS): Hi Exp	EU-15	Bcf/d	LNG Imports	5.0	7.3	7.7	5.3	3.8	3.9	5.4	6.7
C (High CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.2	1.4	1.8	2.0	2.1
C (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	5.6	5.6	5.4	5.0
C (High CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (High CCS): Hi Exp	India	Bcf/d	LNG Imports	2.3	4.1	7.6	10.5	14.6	19.0	23.7	27.7
C (High CCS): Hi Exp	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.8	1.3	1.6	1.8
C (High CCS): Hi Exp	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.2	11.6	10.9	10.5	9.4
C (High CCS): Hi Exp	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.7	1.7	1.7	1.7	1.8
C (High CCS): Hi Exp	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	0.9	1.4	1.8	1.9

C (High CCS): Hi Exp	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.8	2.2	3.2	4.2	4.7	4.9
C (High CCS): Hi Exp	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.9	5.4	6.6	7.0
C (High CCS): Hi Exp	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.9	1.1	1.3	1.2
C (High CCS): Hi Exp	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.5
C (High CCS): Hi Exp	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.7	0.9	1.1	1.4
C (High CCS): Hi Exp	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.8	4.6	4.1	3.1	2.3
C (High CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.5	1.9	2.6	3.6	4.6
C (High CCS): Hi Exp	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.7	2.9	2.8
C (High CCS): Hi Exp	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.2
C (Mod CCS): MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.5	1.7
C (Mod CCS): MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	0.8	0.9	0.9	0.9
C (Mod CCS): MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.3	0.6	1.0	1.3
C (Mod CCS): MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.9
C (Mod CCS): MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.5	1.4	1.4	1.7	1.8	1.7
C (Mod CCS): MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
C (Mod CCS): MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.2	3.0	3.5	4.2	4.2	4.1
C (Mod CCS): MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
C (Mod CCS): MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4
C (Mod CCS): MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.1	1.2	1.2	1.1
C (Mod CCS): MR	China	Bcf/d	LNG Imports	2.7	8.0	23.5	24.1	26.3	29.6	31.6	26.7
C (Mod CCS): MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.5	1.5	1.2	1.2
C (Mod CCS): MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.0	2.5	1.9	2.2	2.2	1.9
C (Mod CCS): MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	6.5	4.1	2.3	2.7	3.1	3.4
C (Mod CCS): MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.1	1.2	1.3	1.2
C (Mod CCS): MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	5.3	4.9	3.8	3.1

C (Mod CCS): MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (Mod CCS): MR	India	Bcf/d	LNG Imports	2.3	4.1	7.9	10.8	14.5	18.7	22.0	22.2
C (Mod CCS): MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.5	0.7	0.9	1.0	0.9
C (Mod CCS): MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.4	12.2	11.2	9.9	6.8	4.7
C (Mod CCS): MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.6	1.5	1.3	1.2	1.2
C (Mod CCS): MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.4	0.6	0.6	0.8	0.9	0.9
C (Mod CCS): MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.9	2.3	2.8	3.2	3.2	2.9
C (Mod CCS): MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.8	1.4	3.2	3.6	3.5
C (Mod CCS): MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.5	0.6	0.9	1.2	1.2	0.9
C (Mod CCS): MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
C (Mod CCS): MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.8
C (Mod CCS): MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.9	4.4	3.5	2.2	1.7
C (Mod CCS): MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.4	1.6	2.3	2.6	2.8
C (Mod CCS): MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.6	2.5	1.1
C (Mod CCS): MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
C (Mod CCS): ExFID	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.4	1.6
C (Mod CCS): ExFID	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	0.8	0.9	0.9	0.9
C (Mod CCS): ExFID	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.3	0.6	1.0	1.3
C (Mod CCS): ExFID	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.9
C (Mod CCS): ExFID	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.5	1.4	1.4	1.7	1.8	1.7
C (Mod CCS): ExFID	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
C (Mod CCS): ExFID	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.2	3.0	3.5	4.2	4.2	4.1
C (Mod CCS): ExFID	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
C (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4
C (Mod CCS): ExFID	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.1	1.2	1.2	1.1
C (Mod CCS): ExFID	China	Bcf/d	LNG Imports	2.7	8.0	23.5	24.1	26.3	29.3	31.2	26.3
C (Mod CCS): ExFID	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.5	1.5	1.2	1.1
C (Mod CCS): ExFID	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.0	2.5	1.9	2.2	2.2	1.9

C (Mod CCS): ExFID	EU-15	Bcf/d	LNG Imports	5.0	7.3	6.5	4.1	2.3	2.6	3.1	3.4
C (Mod CCS): ExFID	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.1	1.2	1.3	1.2
C (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	5.3	4.9	3.7	3.1
C (Mod CCS): ExFID	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
C (Mod CCS): ExFID	India	Bcf/d	LNG Imports	2.3	4.1	7.9	10.8	14.5	18.6	21.8	22.0
C (Mod CCS): ExFID	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.5	0.7	0.9	1.0	0.9
C (Mod CCS): ExFID	Japan	Bcf/d	LNG Imports	11.5	13.1	12.4	12.2	11.2	9.8	6.7	4.6
C (Mod CCS): ExFID	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.6	1.5	1.3	1.2	1.2
C (Mod CCS): ExFID	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.4	0.6	0.6	0.8	0.9	0.9
C (Mod CCS): ExFID	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.9	2.3	2.8	3.1	3.1	2.9
C (Mod CCS): ExFID	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.8	1.4	3.1	3.5	3.4
C (Mod CCS): ExFID	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.5	0.6	0.9	1.2	1.2	0.9
C (Mod CCS): ExFID	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
C (Mod CCS): ExFID	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.6	0.7	0.8	0.8
C (Mod CCS): ExFID	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.9	4.4	3.5	2.2	1.7
C (Mod CCS): ExFID	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.4	1.6	2.3	2.5	2.7
C (Mod CCS): ExFID	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.6	2.5	1.1
C (Mod CCS): ExFID	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
C (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	1.0	1.6	2.0
C (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	0.8	1.0	1.1	1.1
C (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.7	1.1	1.7
C (Mod CCS): Hi Exp	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.2	0.5	0.8	1.6
C (Mod CCS): Hi Exp	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.5	1.4	1.5	1.9	2.0	2.2
C (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
C (Mod CCS): Hi Exp	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.2	3.0	3.8	4.6	4.7	5.1
C (Mod CCS): Hi Exp	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
C (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.5
C (Mod CCS): Hi Exp	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.1	1.3	1.3	1.2

C (Mod CCS): Hi Exp	China	Bcf/d	LNG Imports	2.7	8.0	23.5	24.1	28.7	33.0	36.3	32.1
C (Mod CCS): Hi Exp	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.5	1.5	1.3	1.3
C (Mod CCS): Hi Exp	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.0	2.5	2.0	2.3	2.3	2.1
C (Mod CCS): Hi Exp	EU-15	Bcf/d	LNG Imports	5.0	7.3	6.5	4.1	2.7	3.0	3.4	4.4
C (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.2	1.3	1.3	1.3
C (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	5.5	5.2	4.0	3.4
C (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
C (Mod CCS): Hi Exp	India	Bcf/d	LNG Imports	2.3	4.1	7.9	10.8	15.2	19.9	23.9	25.4
C (Mod CCS): Hi Exp	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.5	0.8	1.0	1.1	1.0
C (Mod CCS): Hi Exp	Japan	Bcf/d	LNG Imports	11.5	13.1	12.4	12.2	11.4	10.1	7.1	5.1
C (Mod CCS): Hi Exp	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.6	1.5	1.4	1.3	1.3
C (Mod CCS): Hi Exp	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.4	0.6	0.7	1.0	1.1	1.4
C (Mod CCS): Hi Exp	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.9	2.3	3.0	3.4	3.4	3.3
C (Mod CCS): Hi Exp	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.8	1.7	3.9	4.4	4.4
C (Mod CCS): Hi Exp	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.5	0.6	1.0	1.3	1.3	1.0
C (Mod CCS): Hi Exp	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
C (Mod CCS): Hi Exp	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.6	0.8	0.8	1.0
C (Mod CCS): Hi Exp	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.9	4.5	3.7	2.3	1.8
C (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.4	1.7	2.5	2.9	3.5
C (Mod CCS): Hi Exp	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.7	2.6	1.3
C (Mod CCS): Hi Exp	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
NZ (High CCS): MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.9	1.4	1.8
NZ (High CCS): MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.7	0.9	1.1	1.2	1.3
NZ (High CCS): MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.7	1.2	1.7
NZ (High CCS): MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.6	1.0	1.7
NZ (High CCS): MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.7	1.5	1.5	2.0	2.4	2.5
NZ (High CCS): MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
NZ (High CCS): MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.5	2.9	3.7	5.0	6.0	6.7
NZ (High CCS): MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2

NZ (High CCS): MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6
NZ (High CCS): MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.7	1.0	1.4	1.6	1.5
NZ (High CCS): MR	China	Bcf/d	LNG Imports	2.7	8.0	21.9	22.0	24.3	27.1	26.0	21.7
NZ (High CCS): MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.3	1.4	1.5	1.6	1.8
NZ (High CCS): MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.7	3.5	2.9	3.4	3.6	3.3
NZ (High CCS): MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	7.7	5.7	3.9	4.4	6.2	6.2
NZ (High CCS): MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.0	1.1	1.4	1.5	1.4
NZ (High CCS): MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.1	5.1	4.9	4.3	3.9
NZ (High CCS): MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): MR	India	Bcf/d	LNG Imports	2.3	4.1	7.6	10.6	14.2	18.1	20.3	19.4
NZ (High CCS): MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.8	1.1	1.3	1.4
NZ (High CCS): MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	11.9	11.0	10.1	8.9	8.2
NZ (High CCS): MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.6	1.6	1.5	1.5	1.6
NZ (High CCS): MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.4	0.7	1.0	1.1	1.1
NZ (High CCS): MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.8	2.1	2.7	3.5	3.8	3.4
NZ (High CCS): MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.8	0.9	2.6	3.6	3.5
NZ (High CCS): MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.9	1.1	1.2	1.1
NZ (High CCS): MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
NZ (High CCS): MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.5	0.6	0.7	1.0	1.2
NZ (High CCS): MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.8	4.4	3.6	2.3	1.7
NZ (High CCS): MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.3	1.7	2.4	3.3	4.8
NZ (High CCS): MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.3	2.5	2.7	2.2	1.4
NZ (High CCS): MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
NZ (High CCS): ExFID	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.9	1.4	1.8
NZ (High CCS): ExFID	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.7	0.9	1.1	1.2	1.3
NZ (High CCS): ExFID	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.7	1.2	1.7

NZ (High CCS): ExFID	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.6	1.0	1.7
NZ (High CCS): ExFID	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.7	1.5	1.5	1.9	2.3	2.5
NZ (High CCS): ExFID	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
NZ (High CCS): ExFID	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.5	2.9	3.7	4.8	5.9	6.6
NZ (High CCS): ExFID	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
NZ (High CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.5
NZ (High CCS): ExFID	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.7	1.0	1.4	1.5	1.5
NZ (High CCS): ExFID	China	Bcf/d	LNG Imports	2.7	8.0	21.9	22.0	24.3	26.6	25.6	21.5
NZ (High CCS): ExFID	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.3	1.4	1.5	1.6	1.8
NZ (High CCS): ExFID	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.7	3.5	2.9	3.4	3.6	3.3
NZ (High CCS): ExFID	EU-15	Bcf/d	LNG Imports	5.0	7.3	7.7	5.7	3.9	4.3	6.0	6.0
NZ (High CCS): ExFID	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.0	1.1	1.3	1.5	1.4
NZ (High CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.1	5.1	4.8	4.3	3.8
NZ (High CCS): ExFID	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
NZ (High CCS): ExFID	India	Bcf/d	LNG Imports	2.3	4.1	7.6	10.6	14.2	17.9	20.1	19.1
NZ (High CCS): ExFID	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.8	1.1	1.3	1.4
NZ (High CCS): ExFID	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	11.9	11.0	10.1	8.8	8.1
NZ (High CCS): ExFID	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.6	1.6	1.5	1.5	1.5
NZ (High CCS): ExFID	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.4	0.7	0.9	1.0	1.1

NZ (High CCS): ExFID	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.8	2.1	2.7	3.5	3.8	3.4
NZ (High CCS): ExFID	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.8	0.9	2.5	3.5	3.3
NZ (High CCS): ExFID	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.9	1.1	1.2	1.1
NZ (High CCS): ExFID	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4
NZ (High CCS): ExFID	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.5	0.6	0.7	0.9	1.2
NZ (High CCS): ExFID	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.8	4.4	3.5	2.3	1.7
NZ (High CCS): ExFID	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.3	1.7	2.4	3.2	4.7
NZ (High CCS): ExFID	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.3	2.5	2.6	2.1	1.4
NZ (High CCS): ExFID	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
NZ (High CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.9	1.6	2.1
NZ (High CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.7	1.0	1.2	1.4	1.6
NZ (High CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	1.4	2.0
NZ (High CCS): Hi Exp	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.7	1.4	2.6
NZ (High CCS): Hi Exp	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.7	1.5	1.8	2.2	2.6	2.9
NZ (High CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5
NZ (High CCS): Hi Exp	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.5	2.9	4.0	5.4	6.7	7.9
NZ (High CCS): Hi Exp	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3
NZ (High CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.4	0.6	0.6
NZ (High CCS): Hi Exp	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.7	1.1	1.6	1.8	1.8

NZ (High CCS): Hi Exp	China	Bcf/d	LNG Imports	2.7	8.0	21.9	22.0	26.4	29.9	28.5	24.4
NZ (High CCS): Hi Exp	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.3	1.4	1.6	1.7	2.0
NZ (High CCS): Hi Exp	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.7	3.5	3.1	3.5	3.8	3.4
NZ (High CCS): Hi Exp	EU-15	Bcf/d	LNG Imports	5.0	7.3	7.7	5.7	4.6	5.0	7.3	7.5
NZ (High CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.0	1.1	1.5	1.6	1.5
NZ (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.1	5.3	5.2	4.6	4.2
NZ (High CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
NZ (High CCS): Hi Exp	India	Bcf/d	LNG Imports	2.3	4.1	7.6	10.6	14.9	19.2	21.8	21.3
NZ (High CCS): Hi Exp	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.8	1.2	1.4	1.6
NZ (High CCS): Hi Exp	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	11.9	11.2	10.4	9.2	8.7
NZ (High CCS): Hi Exp	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.6	1.6	1.6	1.6	1.8
NZ (High CCS): Hi Exp	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.4	0.8	1.2	1.4	1.6
NZ (High CCS): Hi Exp	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.8	2.1	2.9	3.8	4.1	3.8
NZ (High CCS): Hi Exp	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.8	1.0	3.1	4.4	4.2
NZ (High CCS): Hi Exp	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.9	1.2	1.3	1.2
NZ (High CCS): Hi Exp	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5
NZ (High CCS): Hi Exp	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.5	0.6	0.8	1.1	1.4
NZ (High CCS): Hi Exp	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.8	4.5	3.7	2.4	1.8
NZ (High CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.3	1.8	2.7	3.8	6.0

NZ (High CCS): Hi Exp	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.3	2.5	2.7	2.3	1.5
NZ (High CCS): Hi Exp	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
NZ (Mod CCS): MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	0.9	0.9
NZ (Mod CCS): MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.6	0.5	0.6	0.6	0.6
NZ (Mod CCS): MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.1	0.3	0.5	0.8	1.1
NZ (Mod CCS): MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.1	0.3	0.6	1.0
NZ (Mod CCS): MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.5	1.5	1.2	1.2	1.2	1.0
NZ (Mod CCS): MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3
NZ (Mod CCS): MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.2	2.2	2.4	3.0	3.2	3.3
NZ (Mod CCS): MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0
NZ (Mod CCS): MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3
NZ (Mod CCS): MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.6	0.6	0.7	0.6	0.4
NZ (Mod CCS): MR	China	Bcf/d	LNG Imports	2.7	8.0	23.5	24.4	27.1	29.4	22.2	13.4
NZ (Mod CCS): MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.2	1.1	1.0	0.9	0.9
NZ (Mod CCS): MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.0	2.6	2.0	2.0	1.6	1.2
NZ (Mod CCS): MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	6.5	4.6	3.1	3.0	2.8	2.4
NZ (Mod CCS): MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.0	0.9	0.9	0.8	0.6
NZ (Mod CCS): MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.1	4.6	3.7	2.6	1.9
NZ (Mod CCS): MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
NZ (Mod CCS): MR	India	Bcf/d	LNG Imports	2.3	4.1	7.9	11.0	15.1	16.8	13.4	9.9
NZ (Mod CCS): MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.5	0.6	0.7	0.6	0.5
NZ (Mod CCS): MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.4	11.7	9.9	7.1	3.7	2.7
NZ (Mod CCS): MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.5	1.2	1.1	0.9	0.4
NZ (Mod CCS): MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.4	0.2	0.4	0.5	0.7	0.9
NZ (Mod CCS): MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.9	2.3	2.2	2.5	2.1	1.5
NZ (Mod CCS): MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.7	0.7	0.7	0.7	0.6
NZ (Mod CCS): MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.5	0.7	1.0	1.3	1.0	0.6
NZ (Mod CCS): MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3

NZ (Mod CCS): MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.7
NZ (Mod CCS): MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.9	4.3	2.8	1.5	1.0
NZ (Mod CCS): MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.1	1.3	1.7	1.7	2.1
NZ (Mod CCS): MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.3	2.5	2.3	0.7	0.4
NZ (Mod CCS): MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
NZ (Mod CCS): ExFID	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	0.9	0.9
NZ (Mod CCS): ExFID	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.6	0.5	0.6	0.6	0.6
NZ (Mod CCS): ExFID	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.1	0.3	0.5	0.8	1.1
NZ (Mod CCS): ExFID	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.1	0.3	0.6	1.0
NZ (Mod CCS): ExFID	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.5	1.5	1.2	1.2	1.2	1.0
NZ (Mod CCS): ExFID	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3
NZ (Mod CCS): ExFID	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.2	2.2	2.4	3.0	3.2	3.3
NZ (Mod CCS): ExFID	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0
NZ (Mod CCS): ExFID	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3
NZ (Mod CCS): ExFID	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.6	0.6	0.7	0.6	0.4
NZ (Mod CCS): ExFID	China	Bcf/d	LNG Imports	2.7	8.0	23.5	24.4	27.1	29.4	22.2	13.4
NZ (Mod CCS): ExFID	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.2	1.1	1.0	0.9	0.9
NZ (Mod CCS): ExFID	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.0	2.6	2.0	2.0	1.6	1.2
NZ (Mod CCS): ExFID	EU-15	Bcf/d	LNG Imports	5.0	7.3	6.5	4.6	3.1	3.0	2.8	2.4
NZ (Mod CCS): ExFID	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.0	0.9	0.9	0.8	0.6
NZ (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.1	4.6	3.7	2.6	1.9

NZ (Mod CCS): ExFID	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
NZ (Mod CCS): ExFID	India	Bcf/d	LNG Imports	2.3	4.1	7.9	11.0	15.1	16.8	13.4	9.9
NZ (Mod CCS): ExFID	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.5	0.6	0.7	0.6	0.5
NZ (Mod CCS): ExFID	Japan	Bcf/d	LNG Imports	11.5	13.1	12.4	11.7	9.9	7.1	3.7	2.7
NZ (Mod CCS): ExFID	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.5	1.2	1.1	0.9	0.4
NZ (Mod CCS): ExFID	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.4	0.2	0.4	0.5	0.7	0.9
NZ (Mod CCS): ExFID	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.9	2.3	2.2	2.5	2.1	1.5
NZ (Mod CCS): ExFID	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.7	0.7	0.7	0.7	0.6
NZ (Mod CCS): ExFID	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.5	0.7	1.0	1.3	1.0	0.6
NZ (Mod CCS): ExFID	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
NZ (Mod CCS): ExFID	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.7
NZ (Mod CCS): ExFID	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.9	4.3	2.8	1.5	1.0
NZ (Mod CCS): ExFID	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.1	1.3	1.7	1.7	2.1
NZ (Mod CCS): ExFID	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.3	2.5	2.3	0.7	0.4
NZ (Mod CCS): ExFID	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
NZ (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	1.1	1.1
NZ (Mod CCS): Hi Exp	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.6	0.5	0.6	0.7	1.0
NZ (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.1	0.3	0.6	1.0	1.5
NZ (Mod CCS): Hi Exp	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.2	0.4	1.3	3.5

NZ (Mod CCS): Hi Exp	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.5	1.5	1.3	1.4	1.8	1.7
NZ (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7
NZ (Mod CCS): Hi Exp	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.2	2.2	2.7	3.4	4.1	4.7
NZ (Mod CCS): Hi Exp	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
NZ (Mod CCS): Hi Exp	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4
NZ (Mod CCS): Hi Exp	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.6	0.6	0.8	0.7	0.6
NZ (Mod CCS): Hi Exp	China	Bcf/d	LNG Imports	2.7	8.0	23.5	24.4	29.5	33.7	28.0	19.3
NZ (Mod CCS): Hi Exp	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.2	1.1	1.1	1.0	1.1
NZ (Mod CCS): Hi Exp	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.0	2.6	2.1	2.1	2.0	1.7
NZ (Mod CCS): Hi Exp	EU-15	Bcf/d	LNG Imports	5.0	7.3	6.5	4.6	3.6	3.4	3.5	3.9
NZ (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.0	0.9	0.9	0.9	0.7
NZ (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.1	4.7	3.9	2.9	2.3
NZ (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
NZ (Mod CCS): Hi Exp	India	Bcf/d	LNG Imports	2.3	4.1	7.9	11.0	15.9	18.0	15.6	12.6
NZ (Mod CCS): Hi Exp	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.5	0.7	0.8	0.7	0.6
NZ (Mod CCS): Hi Exp	Japan	Bcf/d	LNG Imports	11.5	13.1	12.4	11.7	10.1	7.4	4.0	3.2
NZ (Mod CCS): Hi Exp	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.5	1.3	1.1	1.0	0.9
NZ (Mod CCS): Hi Exp	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.4	0.2	0.4	0.7	1.2	1.9
NZ (Mod CCS): Hi Exp	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.9	2.3	2.4	2.7	2.6	2.0

NZ (Mod CCS): Hi Exp	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.7	0.7	0.8	0.8	0.9
NZ (Mod CCS): Hi Exp	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.5	0.7	1.1	1.3	1.1	0.6
NZ (Mod CCS): Hi Exp	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5
NZ (Mod CCS): Hi Exp	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.4	0.4	0.5	0.8	1.1
NZ (Mod CCS): Hi Exp	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.0	4.9	4.4	3.0	1.6	1.2
NZ (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.0	1.1	1.4	1.9	2.3	3.7
NZ (Mod CCS): Hi Exp	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.3	2.5	2.4	0.7	0.4
NZ (Mod CCS): Hi Exp	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1
DP Lo U.S. Sup: MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	1.0	1.8	2.9
DP Lo U.S. Sup: MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.1	1.3	1.6	1.9
DP Lo U.S. Sup: MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.4	0.8	1.2	1.9
DP Lo U.S. Sup: MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.3	0.5	0.9	1.5
DP Lo U.S. Sup: MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.6	1.6	2.1	2.7	3.3	3.7
DP Lo U.S. Sup: MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
DP Lo U.S. Sup: MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.4	3.1	4.4	5.8	6.9	7.8
DP Lo U.S. Sup: MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.3
DP Lo U.S. Sup: MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.3	0.5	0.7	0.9
DP Lo U.S. Sup: MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.5	2.0	2.5	2.7
DP Lo U.S. Sup: MR	China	Bcf/d	LNG Imports	2.7	8.1	21.3	21.5	23.1	24.3	25.1	25.6
DP Lo U.S. Sup: MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.8	2.1	2.4	2.7
DP Lo U.S. Sup: MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.9	3.6	3.0	3.4	3.9	4.3
DP Lo U.S. Sup: MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	8.4	6.1	4.2	4.4	5.7	7.1
DP Lo U.S. Sup: MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	1.0	1.1	1.1	1.6	2.2	2.6	2.8
DP Lo U.S. Sup: MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.3	5.6	5.7	5.9	6.0
DP Lo U.S. Sup: MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

DP Lo U.S. Sup: MR	India	Bcf/d	LNG Imports	2.3	4.1	7.8	10.5	13.8	16.7	19.7	22.6
DP Lo U.S. Sup: MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	0.9	1.4	1.9	2.3
DP Lo U.S. Sup: MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.5	12.3	11.8	11.8	11.8
DP Lo U.S. Sup: MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.2	1.3	1.5	1.7	1.9	2.2
DP Lo U.S. Sup: MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	1.0	1.6	2.3	2.8
DP Lo U.S. Sup: MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.7	2.1	3.2	4.5	5.7	6.6
DP Lo U.S. Sup: MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.1	3.8	5.0	5.7
DP Lo U.S. Sup: MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.7	0.8	1.0	1.1
DP Lo U.S. Sup: MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.1	0.5	1.0	1.1
DP Lo U.S. Sup: MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.7	0.9	1.2	1.4
DP Lo U.S. Sup: MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.3	5.6	5.6	5.6	5.7	5.8
DP Lo U.S. Sup: MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.1	1.7	2.4	3.1	3.8	4.2
DP Lo U.S. Sup: MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.5	2.7	2.8	2.8
DP Lo U.S. Sup: MR	USA	Bcf/d	LNG Imports	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2
DP Hi U.S. Sup: MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.6	1.2	2.1	3.3
DP Hi U.S. Sup: MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.8	1.2	1.6	2.0	2.4
DP Hi U.S. Sup: MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	0.9	1.5	2.3
DP Hi U.S. Sup: MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.1	0.4	0.8	1.4	2.3
DP Hi U.S. Sup: MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.6	1.7	2.3	3.2	3.9	4.3
DP Hi U.S. Sup: MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DP Hi U.S. Sup: MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.4	3.2	4.8	6.8	8.4	9.4
DP Hi U.S. Sup: MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5
DP Hi U.S. Sup: MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.4	0.6	0.8	1.1
DP Hi U.S. Sup: MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	0.9	1.6	2.5	3.2	3.6
DP Hi U.S. Sup: MR	China	Bcf/d	LNG Imports	2.7	8.0	21.2	21.7	24.9	28.1	30.0	30.8
DP Hi U.S. Sup: MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.8	2.2	2.6	2.9
DP Hi U.S. Sup: MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.9	3.7	3.3	3.7	4.5	4.9
DP Hi U.S. Sup: MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	8.4	6.3	4.9	5.3	8.1	9.9
DP Hi U.S. Sup: MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.1	1.8	2.5	3.1	3.3

DP Hi U.S. Sup: MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.3	5.9	6.5	6.9	7.2
DP Hi U.S. Sup: MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2
DP Hi U.S. Sup: MR	India	Bcf/d	LNG Imports	2.3	4.1	7.8	10.7	14.6	18.8	22.8	26.4
DP Hi U.S. Sup: MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	1.0	1.6	2.3	2.8
DP Hi U.S. Sup: MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.6	12.6	12.3	12.6	12.7
DP Hi U.S. Sup: MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.5	1.7	1.9	2.1	2.5	2.9
DP Hi U.S. Sup: MR	Middle East	Bcf/d	LNG Imports	0.4	0.5	0.5	0.6	1.2	2.2	3.2	3.9
DP Hi U.S. Sup: MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.7	2.2	3.4	5.1	6.5	7.6
DP Hi U.S. Sup: MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	2.5	5.0	7.0	8.0
DP Hi U.S. Sup: MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.8	1.0	1.2	1.3
DP Hi U.S. Sup: MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.1	0.7	1.1	1.3
DP Hi U.S. Sup: MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.8	1.1	1.4	1.7
DP Hi U.S. Sup: MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.3	5.6	5.8	5.9	6.1	6.3
DP Hi U.S. Sup: MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.1	1.7	2.6	3.8	4.9	5.5
DP Hi U.S. Sup: MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.4	2.6	2.8	2.9	3.1
DP Hi U.S. Sup: MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1
DP Hi ME Sup: MR	Africa_Eastern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.6	1.4	2.4	3.7
DP Hi ME Sup: MR	Africa_Northern	Bcf/d	LNG Imports	0.4	0.6	0.6	0.9	1.3	1.9	2.4	2.9
DP Hi ME Sup: MR	Africa_Southern	Bcf/d	LNG Imports	0.0	0.0	0.1	0.2	0.5	1.0	1.7	2.7
DP Hi ME Sup: MR	Africa_Western	Bcf/d	LNG Imports	0.0	0.0	0.0	0.2	0.5	1.0	1.8	3.1
DP Hi ME Sup: MR	Argentina	Bcf/d	LNG Imports	0.5	0.9	1.6	1.8	2.7	3.8	4.5	5.1
DP Hi ME Sup: MR	Australia_NZ	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
DP Hi ME Sup: MR	Brazil	Bcf/d	LNG Imports	0.5	1.6	2.4	3.4	5.4	7.8	9.7	11.2
DP Hi ME Sup: MR	Canada	Bcf/d	LNG Imports	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.7
DP Hi ME Sup: MR	Central America and Caribbean	Bcf/d	LNG Imports	0.1	0.1	0.1	0.2	0.4	0.7	1.0	1.3
DP Hi ME Sup: MR	Central Asia	Bcf/d	LNG Imports	0.2	0.4	0.6	1.0	1.9	3.1	4.1	4.7
DP Hi ME Sup: MR	China	Bcf/d	LNG Imports	2.7	8.0	21.3	22.6	28.4	34.1	37.4	39.2
DP Hi ME Sup: MR	Colombia	Bcf/d	LNG Imports	0.9	1.2	1.3	1.5	1.9	2.3	2.8	3.2

DP Hi ME Sup: MR	EU-12	Bcf/d	LNG Imports	0.1	1.4	3.9	3.9	3.8	4.4	5.3	5.9
DP Hi ME Sup: MR	EU-15	Bcf/d	LNG Imports	5.0	7.3	8.4	6.9	6.2	8.2	12.1	15.0
DP Hi ME Sup: MR	Europe_Eastern	Bcf/d	LNG Imports	0.0	0.9	1.1	1.2	2.0	2.9	3.6	3.9
DP Hi ME Sup: MR	Europe_Non_EU	Bcf/d	LNG Imports	3.4	4.6	5.1	5.4	6.3	7.1	7.9	8.4
DP Hi ME Sup: MR	European Free Trade Association	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3
DP Hi ME Sup: MR	India	Bcf/d	LNG Imports	2.3	4.1	7.8	11.1	15.8	21.0	26.1	30.9
DP Hi ME Sup: MR	Indonesia	Bcf/d	LNG Imports	0.2	0.3	0.4	0.6	1.1	1.9	2.7	3.4
DP Hi ME Sup: MR	Japan	Bcf/d	LNG Imports	11.5	13.1	12.3	12.7	12.9	12.8	13.2	13.6
DP Hi ME Sup: MR	Mexico	Bcf/d	LNG Imports	0.8	1.2	1.4	1.7	2.0	2.5	3.2	3.9
DP Hi ME Sup: MR	Middle East	Bcf/d	LNG Imports	0.4	0.4	0.4	0.4	0.6	0.9	1.3	1.5
DP Hi ME Sup: MR	Pakistan	Bcf/d	LNG Imports	0.5	1.0	1.7	2.3	3.8	5.7	7.3	8.6
DP Hi ME Sup: MR	Russia	Bcf/d	LNG Imports	0.0	0.9	0.7	0.9	3.1	6.4	9.1	10.5
DP Hi ME Sup: MR	South Africa	Bcf/d	LNG Imports	0.3	0.3	0.4	0.6	0.8	1.1	1.3	1.6
DP Hi ME Sup: MR	South America_Northern	Bcf/d	LNG Imports	0.0	0.0	0.0	0.0	0.3	0.8	1.3	1.5
DP Hi ME Sup: MR	South America_Southern	Bcf/d	LNG Imports	0.3	0.4	0.4	0.6	0.9	1.3	1.7	2.2
DP Hi ME Sup: MR	South Korea	Bcf/d	LNG Imports	4.6	5.2	5.3	5.7	5.9	6.2	6.4	6.7
DP Hi ME Sup: MR	Southeast Asia	Bcf/d	LNG Imports	0.6	1.1	1.1	1.9	3.0	4.6	6.2	7.5
DP Hi ME Sup: MR	Taiwan	Bcf/d	LNG Imports	1.8	2.1	2.3	2.5	2.7	2.9	3.1	3.3
DP Hi ME Sup: MR	USA	Bcf/d	LNG Imports	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3

Table A-3.28. Additional Data. Pipeline imports (Bcf/d) across all 32 GCAM regions and all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Scenario	Region	Unit	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.1	2.1	3.6	5.5
DP: MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.6	0.5	0.3	0.2	0.2
DP: MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.5
DP: MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.8	1.7	1.8	1.7	1.5
DP: MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.8	0.8	0.9	1.0
DP: MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.5	7.5	10.3	12.5	14.1
DP: MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.2	3.0	2.5	2.2
DP: MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.8	11.1	9.9	7.4	5.8
DP: MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.4	1.8	1.3	1.1
DP: MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.7	1.8	2.0	2.3
DP: MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
DP: MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	6.1	6.9	7.5	7.9
DP: MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DP: MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.2	1.5	1.8	2.1
DP: MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
DP: MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
DP: MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.6
DP: MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DP: MR	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.9	7.5	6.0	4.7	3.8	3.2
DP: ExFID	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.1	2.3	3.9	5.7
DP: ExFID	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.2
DP: ExFID	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.8	0.6	0.5
DP: ExFID	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.8	1.7	1.8	1.8	1.6
DP: ExFID	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.8	0.9	1.0	1.1
DP: ExFID	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.5	7.2	9.6	12.3	14.4
DP: ExFID	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.2	2.8	2.4	2.2
DP: ExFID	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.8	10.5	8.8	7.1	5.9
DP: ExFID	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.5	1.9	1.5	1.2
DP: ExFID	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.7	2.0	2.4	2.7
DP: ExFID	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2
DP: ExFID	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	6.2	7.1	7.8	8.2
DP: ExFID	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP: ExFID	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.2	1.6	2.2	2.5
DP: ExFID	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
DP: ExFID	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
DP: ExFID	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.8	0.8	0.8	0.7	0.7
DP: ExFID	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: ExFID	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.9	7.5	6.0	4.2	3.2	2.5

DP: Hi Exp	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.0	2.0	3.4	5.2
DP: Hi Exp	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.6	0.5	0.3	0.2	0.2
DP: Hi Exp	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4
DP: Hi Exp	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.8	1.7	1.7	1.6	1.5
DP: Hi Exp	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.9
DP: Hi Exp	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.5	7.9	10.5	12.5	14.0
DP: Hi Exp	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.1	3.0	2.5	2.2
DP: Hi Exp	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.8	12.0	10.8	7.5	5.8
DP: Hi Exp	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.4	1.8	1.3	1.0
DP: Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.6	1.7	1.8	2.0
DP: Hi Exp	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
DP: Hi Exp	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	6.0	6.7	7.3	7.6
DP: Hi Exp	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DP: Hi Exp	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.1	1.4	1.7	1.9
DP: Hi Exp	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DP: Hi Exp	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0
DP: Hi Exp	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.6
DP: Hi Exp	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP: Hi Exp	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.9	7.5	6.2	4.9	4.1	3.6
C (High CCS): MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (High CCS): MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.0	2.1	4.1	6.7
C (High CCS): MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.2
C (High CCS): MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4
C (High CCS): MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.7	1.5	1.4	1.5	1.4
C (High CCS): MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.7	0.7	0.6	0.6
C (High CCS): MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	6.9	9.4	12.7	12.9
C (High CCS): MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.4	2.9	2.6	2.2	1.8
C (High CCS): MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.2	8.7	7.4	6.7	5.1
C (High CCS): MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.3	1.7	1.1	0.7
C (High CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.5	1.4	1.4	1.2
C (High CCS): MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.0	0.1	0.1
C (High CCS): MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.4	5.8	6.2	6.3	6.4
C (High CCS): MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (High CCS): MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.1	1.4	1.6	1.7
C (High CCS): MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
C (High CCS): MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
C (High CCS): MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
C (High CCS): MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): MR	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.5	6.5	5.2	4.4	3.9
C (High CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (High CCS): ExFID	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.0	2.2	4.1	6.6
C (High CCS): ExFID	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.2
C (High CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.8	0.5	0.4
C (High CCS): ExFID	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.7	1.5	1.4	1.5	1.5
C (High CCS): ExFID	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.7	0.7	0.6	0.6
C (High CCS): ExFID	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	6.9	9.1	12.7	13.1
C (High CCS): ExFID	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.4	2.9	2.5	2.2	1.8
C (High CCS): ExFID	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.2	8.7	7.2	6.6	5.1
C (High CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.3	1.7	1.1	0.7
C (High CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.5	1.4	1.5	1.3
C (High CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.1
C (High CCS): ExFID	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.4	5.8	6.3	6.3	6.4
C (High CCS): ExFID	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
C (High CCS): ExFID	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.1	1.5	1.7	1.8
C (High CCS): ExFID	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
C (High CCS): ExFID	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0
C (High CCS): ExFID	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
C (High CCS): ExFID	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): ExFID	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.5	6.5	5.2	4.3	3.8
C (High CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (High CCS): Hi Exp	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	0.9	2.0	3.9	6.3
C (High CCS): Hi Exp	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.2
C (High CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4
C (High CCS): Hi Exp	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.7	1.4	1.4	1.5	1.4
C (High CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.7	0.6	0.6	0.5
C (High CCS): Hi Exp	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	7.4	9.5	12.2	12.3
C (High CCS): Hi Exp	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.4	3.0	2.7	2.3	1.9
C (High CCS): Hi Exp	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.2	9.8	8.4	6.8	5.0
C (High CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.3	1.6	1.0	0.7
C (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.5	1.4	1.3	1.1
C (High CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.0	0.1	0.1
C (High CCS): Hi Exp	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.4	5.7	6.1	6.2	6.3
C (High CCS): Hi Exp	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1
C (High CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.1	1.3	1.4	1.5

C (High CCS): Hi Exp	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
C (High CCS): Hi Exp	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
C (High CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
C (High CCS): Hi Exp	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (High CCS): Hi Exp	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.5	6.6	5.3	4.5	4.0
C (Mod CCS): MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	0.6	1.7	3.1	4.8
C (Mod CCS): MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1
C (Mod CCS): MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.1	1.2	1.0	0.7	0.5	0.3
C (Mod CCS): MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.6	1.7	1.4	1.3	1.3	1.4
C (Mod CCS): MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.7	0.5	0.4	0.3
C (Mod CCS): MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	6.9	10.5	13.4	11.2
C (Mod CCS): MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.2	2.4	2.6	2.3	1.7	1.2
C (Mod CCS): MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	13.2	10.1	6.7	6.7	5.9	4.1
C (Mod CCS): MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.3	1.5	0.9	0.5
C (Mod CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.5	1.3	0.9	0.7
C (Mod CCS): MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
C (Mod CCS): MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.4	5.8	5.6	5.6	5.7
C (Mod CCS): MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (Mod CCS): MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	0.9	1.0	1.0	1.1	1.0	0.9
C (Mod CCS): MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
C (Mod CCS): MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
C (Mod CCS): MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
C (Mod CCS): MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): MR	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.5	6.5	5.5	4.4	3.7
C (Mod CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	0.6	1.7	3.1	4.8
C (Mod CCS): ExFID	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1
C (Mod CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.1	1.2	1.0	0.7	0.5	0.3
C (Mod CCS): ExFID	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.6	1.7	1.4	1.3	1.3	1.4
C (Mod CCS): ExFID	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.7	0.5	0.4	0.3
C (Mod CCS): ExFID	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	6.9	10.5	13.4	11.2
C (Mod CCS): ExFID	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.2	2.4	2.6	2.3	1.7	1.2
C (Mod CCS): ExFID	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	13.2	10.1	6.7	6.6	5.8	4.1
C (Mod CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.3	1.5	0.9	0.5
C (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.5	1.3	0.9	0.7
C (Mod CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
C (Mod CCS): ExFID	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.4	5.8	5.6	5.6	5.7
C (Mod CCS): ExFID	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

C (Mod CCS): ExFID	Russia	Bcf/d	Pipeline Imports	1.1	1.2	0.9	1.0	1.0	1.1	1.0	0.9
C (Mod CCS): ExFID	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
C (Mod CCS): ExFID	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
C (Mod CCS): ExFID	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
C (Mod CCS): ExFID	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): ExFID	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.5	6.5	5.5	4.4	3.7
C (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	0.6	1.6	2.9	4.1
C (Mod CCS): Hi Exp	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1
C (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.1	1.2	1.0	0.7	0.4	0.3
C (Mod CCS): Hi Exp	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.6	1.7	1.4	1.3	1.3	1.3
C (Mod CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.6	0.5	0.4	0.3
C (Mod CCS): Hi Exp	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	7.3	10.2	12.7	10.9
C (Mod CCS): Hi Exp	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.2	2.4	2.7	2.4	1.8	1.3
C (Mod CCS): Hi Exp	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	13.2	10.1	7.8	7.5	6.4	3.9
C (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.2	1.5	0.9	0.5
C (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.4	1.2	0.8	0.6
C (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
C (Mod CCS): Hi Exp	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.4	5.7	5.5	5.5	5.6
C (Mod CCS): Hi Exp	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Russia	Bcf/d	Pipeline Imports	1.1	1.2	0.9	1.0	0.9	1.0	0.9	0.8

C (Mod CCS): Hi Exp	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
C (Mod CCS): Hi Exp	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
C (Mod CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.5	0.5
C (Mod CCS): Hi Exp	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C (Mod CCS): Hi Exp	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.5	6.5	5.6	4.5	3.8
NZ (High CCS): MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.2	0.9	2.4	4.6	7.5
NZ (High CCS): MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1
NZ (High CCS): MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4
NZ (High CCS): MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.5	1.3	1.2	1.2	1.2
NZ (High CCS): MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.7	0.6	0.6	0.5	0.4
NZ (High CCS): MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.1	6.6	9.9	9.2	7.6
NZ (High CCS): MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.1	2.8	2.3	1.7
NZ (High CCS): MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.9	10.3	9.7	7.4	5.1
NZ (High CCS): MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	2.7	2.2	1.6	1.0	0.6
NZ (High CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.5	1.4	1.3	1.1	0.9
NZ (High CCS): MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
NZ (High CCS): MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	5.9	6.2	6.3	6.6
NZ (High CCS): MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
NZ (High CCS): MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	0.9	0.9	1.1	1.2	1.1
NZ (High CCS): MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2

NZ (High CCS): MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.8
NZ (High CCS): MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): MR	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.8	6.6	5.6	4.8	4.1
NZ (High CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.2	0.9	2.4	4.6	7.4
NZ (High CCS): ExFID	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.2
NZ (High CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4
NZ (High CCS): ExFID	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.5	1.3	1.2	1.2	1.2
NZ (High CCS): ExFID	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.7	0.6	0.6	0.5	0.4
NZ (High CCS): ExFID	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.1	6.6	9.8	9.2	7.6
NZ (High CCS): ExFID	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.1	2.8	2.3	1.7
NZ (High CCS): ExFID	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.9	10.3	9.5	7.4	5.1
NZ (High CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	2.7	2.2	1.6	1.0	0.6
NZ (High CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.5	1.4	1.3	1.1	0.9
NZ (High CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1

NZ (High CCS): ExFID	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	5.9	6.2	6.3	6.6
NZ (High CCS): ExFID	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
NZ (High CCS): ExFID	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	0.9	0.9	1.1	1.3	1.1
NZ (High CCS): ExFID	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
NZ (High CCS): ExFID	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): ExFID	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.8
NZ (High CCS): ExFID	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): ExFID	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.8	6.6	5.6	4.7	4.1
NZ (High CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.2	0.8	2.2	4.3	6.8
NZ (High CCS): Hi Exp	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.2	0.1
NZ (High CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4

NZ (High CCS): Hi Exp	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.5	1.3	1.2	1.2	1.1
NZ (High CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.7	0.6	0.6	0.5	0.4
NZ (High CCS): Hi Exp	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.1	7.0	9.7	9.0	7.5
NZ (High CCS): Hi Exp	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.1	2.9	2.3	1.7
NZ (High CCS): Hi Exp	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.9	11.6	10.7	7.3	4.8
NZ (High CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	2.7	2.3	1.6	1.0	0.5
NZ (High CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.5	1.4	1.2	1.0	0.8
NZ (High CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
NZ (High CCS): Hi Exp	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	5.9	6.1	6.2	6.5
NZ (High CCS): Hi Exp	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	0.9	0.9	1.0	1.1	0.9
NZ (High CCS): Hi Exp	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1
NZ (High CCS): Hi Exp	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
NZ (High CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (High CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
NZ (High CCS): Hi Exp	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (High CCS): Hi Exp	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.8	6.7	5.7	4.9	4.3
NZ (Mod CCS): MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.1	0.5	1.6	2.3	3.5
NZ (Mod CCS): MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.1	0.1
NZ (Mod CCS): MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.1	1.1	1.0	0.7	0.4	0.3
NZ (Mod CCS): MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.6	1.5	1.1	0.9	0.7	0.7
NZ (Mod CCS): MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.7	0.6	0.4	0.2	0.1
NZ (Mod CCS): MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	8.7	10.6	7.6	4.6
NZ (Mod CCS): MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.2	2.4	2.7	2.1	1.2	0.7
NZ (Mod CCS): MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	13.2	11.0	9.3	7.6	5.0	3.1
NZ (Mod CCS): MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	2.6	1.8	1.2	0.6	0.2
NZ (Mod CCS): MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.5	1.3	0.9	0.5	0.3
NZ (Mod CCS): MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0
NZ (Mod CCS): MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	5.6	5.2	5.2	5.7
NZ (Mod CCS): MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	0.9	0.8	0.6	0.5	0.3	0.2
NZ (Mod CCS): MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1
NZ (Mod CCS): MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.6	0.6	0.5	0.5	0.6
NZ (Mod CCS): MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): MR	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.8	6.9	6.2	5.1	3.6
NZ (Mod CCS): ExFID	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.1	0.5	1.6	2.3	3.5
NZ (Mod CCS): ExFID	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.1	0.1
NZ (Mod CCS): ExFID	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.1	1.1	1.0	0.7	0.4	0.3
NZ (Mod CCS): ExFID	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.6	1.5	1.1	0.9	0.7	0.7
NZ (Mod CCS): ExFID	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.7	0.6	0.4	0.2	0.1
NZ (Mod CCS): ExFID	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	8.7	10.6	7.6	4.6
NZ (Mod CCS): ExFID	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.2	2.4	2.7	2.1	1.2	0.7
NZ (Mod CCS): ExFID	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	13.2	11.0	9.3	7.6	5.0	3.1
NZ (Mod CCS): ExFID	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	2.6	1.8	1.2	0.6	0.2
NZ (Mod CCS): ExFID	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.5	1.3	0.9	0.5	0.3
NZ (Mod CCS): ExFID	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0
NZ (Mod CCS): ExFID	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): ExFID	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	5.6	5.2	5.2	5.7
NZ (Mod CCS): ExFID	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Russia	Bcf/d	Pipeline Imports	1.1	1.2	0.9	0.8	0.6	0.5	0.3	0.2
NZ (Mod CCS): ExFID	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.1
NZ (Mod CCS): ExFID	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.6	0.6	0.5	0.5	0.6
NZ (Mod CCS): ExFID	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): ExFID	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.8	6.9	6.2	5.1	3.6
NZ (Mod CCS): Hi Exp	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.1	0.5	1.4	1.7	2.0
NZ (Mod CCS): Hi Exp	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.5	0.4	0.3	0.1	0.0
NZ (Mod CCS): Hi Exp	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.1	1.1	0.9	0.6	0.2	0.1
NZ (Mod CCS): Hi Exp	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.6	1.5	1.1	0.9	0.7	0.7
NZ (Mod CCS): Hi Exp	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.7	0.6	0.4	0.2	0.1

NZ (Mod CCS): Hi Exp	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	8.9	10.5	6.9	3.7
NZ (Mod CCS): Hi Exp	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.2	2.4	2.8	2.1	1.0	0.5
NZ (Mod CCS): Hi Exp	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	13.2	11.0	10.4	8.2	4.6	2.1
NZ (Mod CCS): Hi Exp	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	2.6	1.8	1.2	0.5	0.1
NZ (Mod CCS): Hi Exp	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.5	1.3	0.9	0.3	0.1
NZ (Mod CCS): Hi Exp	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0
NZ (Mod CCS): Hi Exp	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	5.6	5.1	5.0	5.2
NZ (Mod CCS): Hi Exp	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Russia	Bcf/d	Pipeline Imports	1.1	1.2	0.9	0.8	0.6	0.5	0.3	0.2
NZ (Mod CCS): Hi Exp	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1
NZ (Mod CCS): Hi Exp	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0
NZ (Mod CCS): Hi Exp	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NZ (Mod CCS): Hi Exp	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.6	0.6	0.5	0.4	0.4
NZ (Mod CCS): Hi Exp	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NZ (Mod CCS): Hi Exp	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.8	7.8	6.9	6.3	5.2	4.0
DP Lo U.S. Sup: MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.4	1.1	2.3	3.9	5.8
DP Lo U.S. Sup: MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.2
DP Lo U.S. Sup: MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.8	0.6	0.5
DP Lo U.S. Sup: MR	Canada	Bcf/d	Pipeline Imports	2.1	2.5	1.7	1.8	1.8	1.7	1.7	1.5
DP Lo U.S. Sup: MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.8	0.9	1.0	1.1
DP Lo U.S. Sup: MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.3	7.0	9.8	12.5	14.7
DP Lo U.S. Sup: MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.2	2.8	2.4	2.2
DP Lo U.S. Sup: MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.5	10.0	8.7	7.1	5.9
DP Lo U.S. Sup: MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.5	1.9	1.5	1.2
DP Lo U.S. Sup: MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.7	2.0	2.4	2.7
DP Lo U.S. Sup: MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.2
DP Lo U.S. Sup: MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.8	4.7	5.2	5.9	6.8	7.4	8.0
DP Lo U.S. Sup: MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2
DP Lo U.S. Sup: MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.2	1.6	2.1	2.5
DP Lo U.S. Sup: MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
DP Lo U.S. Sup: MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
DP Lo U.S. Sup: MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Lo U.S. Sup: MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.8	0.8	0.8	0.7	0.7
DP Lo U.S. Sup: MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

DP Lo U.S. Sup: MR	USA	Bcf/d	Pipeline Imports	8.0	7.8	8.4	7.6	6.6	5.8	5.0	4.2
DP Hi U.S. Sup: MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.0	2.1	3.5	5.2
DP Hi U.S. Sup: MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.6	0.5	0.3	0.2	0.2
DP Hi U.S. Sup: MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	1.0	0.7	0.5	0.4
DP Hi U.S. Sup: MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.8	1.7	1.8	1.7	1.6
DP Hi U.S. Sup: MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.8	0.8	0.9	0.9
DP Hi U.S. Sup: MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	5.6	7.6	10.5	12.8	14.3
DP Hi U.S. Sup: MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.2	3.0	2.5	2.2
DP Hi U.S. Sup: MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	11.9	11.4	10.4	7.5	5.8
DP Hi U.S. Sup: MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.4	1.8	1.3	1.0
DP Hi U.S. Sup: MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.6	1.7	1.9	2.1
DP Hi U.S. Sup: MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
DP Hi U.S. Sup: MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.0	4.4	5.4	6.2	7.0	7.6	8.1
DP Hi U.S. Sup: MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
DP Hi U.S. Sup: MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.1	1.4	1.7	2.0
DP Hi U.S. Sup: MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
DP Hi U.S. Sup: MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
DP Hi U.S. Sup: MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.6
DP Hi U.S. Sup: MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi U.S. Sup: MR	USA	Bcf/d	Pipeline Imports	8.0	8.9	8.9	7.5	5.9	4.3	3.2	2.5

DP Hi ME Sup: MR	Africa_Eastern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Africa_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Africa_Western	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.3	1.0	2.0	3.5	5.3
DP Hi ME Sup: MR	Argentina	Bcf/d	Pipeline Imports	0.6	0.6	0.6	0.6	0.4	0.3	0.2	0.1
DP Hi ME Sup: MR	Australia_NZ	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Brazil	Bcf/d	Pipeline Imports	1.4	1.4	1.2	1.2	0.9	0.6	0.4	0.3
DP Hi ME Sup: MR	Canada	Bcf/d	Pipeline Imports	2.1	2.4	1.7	1.8	1.7	1.7	1.6	1.5
DP Hi ME Sup: MR	Central Asia	Bcf/d	Pipeline Imports	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.8
DP Hi ME Sup: MR	China	Bcf/d	Pipeline Imports	2.4	3.6	4.8	6.0	8.3	11.0	12.9	14.3
DP Hi ME Sup: MR	Colombia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	EU-12	Bcf/d	Pipeline Imports	4.0	5.4	2.1	2.3	3.0	2.9	2.4	2.1
DP Hi ME Sup: MR	EU-15	Bcf/d	Pipeline Imports	23.6	24.6	14.1	12.5	12.8	10.8	7.4	5.5
DP Hi ME Sup: MR	Europe_Eastern	Bcf/d	Pipeline Imports	3.5	3.3	3.2	3.0	2.4	1.7	1.1	0.8
DP Hi ME Sup: MR	Europe_Non_EU	Bcf/d	Pipeline Imports	1.5	1.4	1.5	1.6	1.5	1.5	1.5	1.6
DP Hi ME Sup: MR	European Free Trade Association	Bcf/d	Pipeline Imports	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1
DP Hi ME Sup: MR	India	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Indonesia	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Mexico	Bcf/d	Pipeline Imports	2.5	4.1	4.4	5.3	6.0	6.7	7.2	7.5
DP Hi ME Sup: MR	Middle East	Bcf/d	Pipeline Imports	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Pakistan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Russia	Bcf/d	Pipeline Imports	1.1	1.2	1.0	1.1	1.1	1.2	1.4	1.6
DP Hi ME Sup: MR	South Africa	Bcf/d	Pipeline Imports	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
DP Hi ME Sup: MR	South America_Northern	Bcf/d	Pipeline Imports	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0
DP Hi ME Sup: MR	South America_Southern	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	South Korea	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	Southeast Asia	Bcf/d	Pipeline Imports	0.6	0.7	0.7	0.8	0.8	0.7	0.6	0.6
DP Hi ME Sup: MR	Taiwan	Bcf/d	Pipeline Imports	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DP Hi ME Sup: MR	USA	Bcf/d	Pipeline Imports	8.0	8.8	8.9	7.5	6.1	4.8	3.9	3.3

Table A-3.29. Additional Data. Global natural gas consumption, global natural gas production, global LNG exports, global LNG imports, global pipeline exports, global pipeline imports (Bcf/d) across all scenarios. Note that 1 Bcf/d= 0.36 EJ/y

Note: consumption may not exactly match production due to rounding errors. Likewise, sum of LNG and pipeline exports might not match sum of LNG and pipeline imports due to rounding errors.

Scenario	Variable	2015	2020	2025	2030	2035	2040	2045	2050
DP: MR	NG Consumption	342	388	385	410	434	466	509	542
DP: ExFID	NG Consumption	342	388	385	410	430	455	494	532
DP: Hi Exp	NG Consumption	342	388	385	410	439	475	516	549
C (High CCS): MR	NG Consumption	342	388	380	392	385	394	410	414
C (High CCS): ExFID	NG Consumption	342	388	380	392	385	392	407	413
C (High CCS): Hi Exp	NG Consumption	342	388	380	392	393	400	417	422
C (Mod CCS): MR	NG Consumption	342	388	373	381	358	359	337	303
C (Mod CCS): ExFID	NG Consumption	342	388	373	381	358	359	336	301
C (Mod CCS): Hi Exp	NG Consumption	342	388	373	381	365	367	343	307
NZ (High CCS): MR	NG Consumption	342	388	380	372	369	383	375	358
NZ (High CCS): ExFID	NG Consumption	342	388	380	372	369	382	375	357
NZ (High CCS): Hi Exp	NG Consumption	342	388	380	372	380	392	382	366
NZ (Mod CCS): MR	NG Consumption	342	388	373	354	332	309	231	174
NZ (Mod CCS): ExFID	NG Consumption	342	388	373	354	332	309	231	174
NZ (Mod CCS): Hi Exp	NG Consumption	342	388	373	354	336	314	240	183
DP Lo U.S. Sup: MR	NG Consumption	342	390	383	403	422	446	479	517
DP Hi U.S. Sup: MR	NG Consumption	342	388	385	411	435	471	516	557
DP Hi ME Sup: MR	NG Consumption	342	389	387	415	449	494	546	592
DP: MR	NG Production	342	391	385	406	429	465	507	544
DP: ExFID	NG Production	342	391	385	406	426	455	494	532
DP: Hi Exp	NG Production	342	391	385	406	435	471	514	552
C (High CCS): MR	NG Production	342	391	380	393	384	388	408	415
C (High CCS): ExFID	NG Production	342	391	380	393	384	387	406	413
C (High CCS): Hi Exp	NG Production	342	391	380	393	390	399	414	422
C (Mod CCS): MR	NG Production	342	391	375	384	359	357	334	297

C (Mod CCS): ExFID	NG Production	342	391	375	384	359	356	333	296
C (Mod CCS): Hi Exp	NG Production	342	391	375	384	366	365	342	309
NZ (High CCS): MR	NG Production	342	391	380	373	370	385	379	354
NZ (High CCS): ExFID	NG Production	342	391	380	373	370	383	377	354
NZ (High CCS): Hi Exp	NG Production	342	391	380	373	376	395	382	366
NZ (Mod CCS): MR	NG Production	342	391	375	353	331	304	232	173
NZ (Mod CCS): ExFID	NG Production	342	391	375	353	331	304	232	173
NZ (Mod CCS): Hi Exp	NG Production	342	391	375	353	334	310	240	183
DP Lo U.S. Sup: MR	NG Production	342	392	384	400	416	443	477	516
DP Hi U.S. Sup: MR	NG Production	342	390	385	407	432	469	519	558
DP Hi ME Sup: MR	NG Production	342	391	386	414	447	494	542	590
DP: MR	LNG Exports	33	58	81	88	102	124	145	160
DP: ExFID	LNG Exports	33	58	81	88	99	112	128	141
DP: Hi Exp	LNG Exports	33	58	81	88	108	134	158	178
C (High CCS): MR	LNG Exports	33	58	81	86	93	106	120	127
C (High CCS): ExFID	LNG Exports	33	58	81	86	93	103	116	124
C (High CCS): Hi Exp	LNG Exports	33	58	81	86	99	115	131	141
C (Mod CCS): MR	LNG Exports	33	58	80	85	90	101	103	93
C (Mod CCS): ExFID	LNG Exports	33	58	80	85	90	100	102	92
C (Mod CCS): Hi Exp	LNG Exports	33	58	80	85	95	109	115	111
NZ (High CCS): MR	LNG Exports	33	58	81	83	89	103	109	106
NZ (High CCS): ExFID	LNG Exports	33	58	81	83	89	102	107	104
NZ (High CCS): Hi Exp	LNG Exports	33	58	81	83	95	112	120	121
NZ (Mod CCS): MR	LNG Exports	33	58	80	82	84	85	67	51
NZ (Mod CCS): ExFID	LNG Exports	33	58	80	82	84	85	67	51
NZ (Mod CCS): Hi Exp	LNG Exports	33	58	80	82	90	94	83	74
DP Lo U.S. Sup: MR	LNG Exports	33	58	81	86	97	112	129	143
DP Hi U.S. Sup: MR	LNG Exports	33	58	81	88	104	128	153	173
DP Hi ME Sup: MR	LNG Exports	33	58	81	91	115	148	181	207
DP: MR	LNG Imports	38	58	81	87	103	125	145	161

DP: ExFID	LNG Imports	38	58	81	87	100	112	128	141
DP: Hi Exp	LNG Imports	38	58	81	87	109	134	159	178
C (High CCS): MR	LNG Imports	38	58	81	86	93	107	120	127
C (High CCS): ExFID	LNG Imports	38	58	81	86	93	103	116	123
C (High CCS): Hi Exp	LNG Imports	38	58	81	86	99	116	131	141
C (Mod CCS): MR	LNG Imports	38	58	80	85	90	101	103	94
C (Mod CCS): ExFID	LNG Imports	38	58	80	85	90	100	102	93
C (Mod CCS): Hi Exp	LNG Imports	38	58	80	85	95	110	114	112
NZ (High CCS): MR	LNG Imports	38	58	81	83	90	103	110	106
NZ (High CCS): ExFID	LNG Imports	38	58	81	83	90	102	108	105
NZ (High CCS): Hi Exp	LNG Imports	38	58	81	83	95	112	121	121
NZ (Mod CCS): MR	LNG Imports	38	58	80	82	84	86	67	51
NZ (Mod CCS): ExFID	LNG Imports	38	58	80	82	84	86	67	51
NZ (Mod CCS): Hi Exp	LNG Imports	38	58	80	82	90	94	83	74
DP Lo U.S. Sup: MR	LNG Imports	38	58	81	86	97	112	129	143
DP Hi U.S. Sup: MR	LNG Imports	38	58	81	88	105	129	154	172
DP Hi ME Sup: MR	LNG Imports	38	58	81	91	115	148	181	207
DP: MR	Pipeline Exports	52	59	46	44	46	47	47	49
DP: ExFID	Pipeline Exports	52	59	46	44	45	46	47	50
DP: Hi Exp	Pipeline Exports	52	59	46	44	46	47	46	47
C (High CCS): MR	Pipeline Exports	52	59	45	43	42	42	44	44
C (High CCS): ExFID	Pipeline Exports	52	59	45	43	42	41	44	44
C (High CCS): Hi Exp	Pipeline Exports	52	59	45	43	43	42	43	42
C (Mod CCS): MR	Pipeline Exports	52	59	44	42	38	40	40	36
C (Mod CCS): ExFID	Pipeline Exports	52	59	44	42	38	40	40	36
C (Mod CCS): Hi Exp	Pipeline Exports	52	59	44	42	40	40	40	34
NZ (High CCS): MR	Pipeline Exports	52	59	45	43	43	44	41	38
NZ (High CCS): ExFID	Pipeline Exports	52	59	45	43	43	44	41	39
NZ (High CCS): Hi Exp	Pipeline Exports	52	59	45	43	44	45	40	37
NZ (Mod CCS): MR	Pipeline Exports	52	59	44	42	41	39	30	24

NZ (Mod CCS): ExFID	Pipeline Exports	52	59	44	42	41	39	30	24
NZ (Mod CCS): Hi Exp	Pipeline Exports	52	59	44	42	43	39	27	19
DP Lo U.S. Sup: MR	Pipeline Exports	52	59	45	44	45	47	49	52
DP Hi U.S. Sup: MR	Pipeline Exports	52	59	46	44	46	47	46	47
DP Hi ME Sup: MR	Pipeline Exports	52	59	45	45	47	47	45	46
DP: MR	Pipeline Imports	53	59	45	44	46	47	47	49
DP: ExFID	Pipeline Imports	53	59	45	44	45	46	48	50
DP: Hi Exp	Pipeline Imports	53	59	45	44	46	47	46	47
C (High CCS): MR	Pipeline Imports	53	59	45	43	41	42	44	44
C (High CCS): ExFID	Pipeline Imports	53	59	45	43	41	41	44	44
C (High CCS): Hi Exp	Pipeline Imports	53	59	45	43	43	42	43	43
C (Mod CCS): MR	Pipeline Imports	53	59	44	42	39	40	40	36
C (Mod CCS): ExFID	Pipeline Imports	53	59	44	42	39	40	40	36
C (Mod CCS): Hi Exp	Pipeline Imports	53	59	44	42	40	40	40	34
NZ (High CCS): MR	Pipeline Imports	53	59	45	43	42	45	41	39
NZ (High CCS): ExFID	Pipeline Imports	53	59	45	43	42	44	41	39
NZ (High CCS): Hi Exp	Pipeline Imports	53	59	45	43	44	45	40	37
NZ (Mod CCS): MR	Pipeline Imports	53	59	44	42	41	39	30	24
NZ (Mod CCS): ExFID	Pipeline Imports	53	59	44	42	41	39	30	24
NZ (Mod CCS): Hi Exp	Pipeline Imports	53	59	44	42	43	39	27	19
DP Lo U.S. Sup: MR	Pipeline Imports	53	59	45	44	45	47	49	52
DP Hi U.S. Sup: MR	Pipeline Imports	53	59	45	44	46	47	46	47
DP Hi ME Sup: MR	Pipeline Imports	53	59	45	45	47	47	45	46