KEY TAKEAWAYS FROM BERKELEY RESEARCH GROUP'S U.S. LNG GHG FULL LIFECYCLE ANALYSIS REPORT

APRIL 2024

Berkeley Research Group (BRG) conducted a full lifecycle analysis of greenhouse gas emissions from U.S. LNG in comparison to other fuels in 13 of the world's largest markets for U.S. LNG exports in Europe and Asia. The report, titled "Comparative GHG Footprint Analysis for European and Asian Supplies of U.S. LNG, Pipeline Gas and Coal", evaluated carbon dioxide (CO2) and methane (CH4) volumes and intensity of U.S. LNG, pipeline gas, and coal. The full supply chain for each fuel was analyzed, which included production and mining, processing, transportation and use by power generators.

U.S. LNG's greenhouse gas (GHG) emissions intensity was lower than almost every fuel:

- Coal was **over twice as high** as U.S. LNG in both Europe and Asia.
- Pipeline Gas in Europe was **more than a third higher** than U.S. LNG for gas coming from Russia.
- Pipeline Gas in Asia was **more than four times higher** than U.S. LNG in the case of pipeline gas from Turkmenistan and slightly higher than U.S. LNG for pipeline gas from Russia.

Breaking that down further, in France, Germany, Italy, Netherlands, Poland, Spain, Turkey and the UK, U.S. LNG emissions intensity was:

- **53% lower** than coal
- **29% lower** than natural gas by pipeline from Russia
- **19% lower** than natural gas by pipeline from Algeria

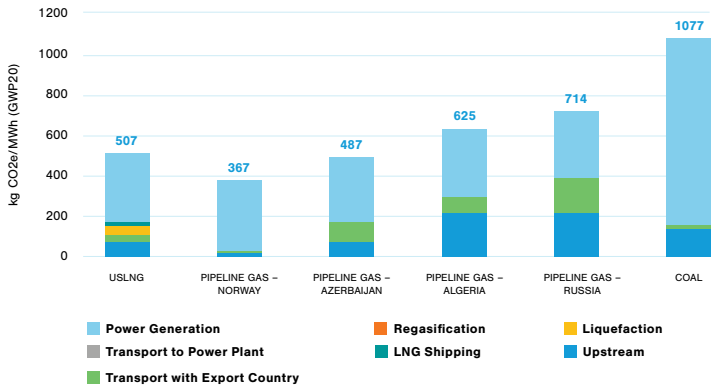
In China, India, Japan, South Korea and Taiwan U.S. LNG emissions intensity was:

- more than **50% lower** than coal
- more than **75% lower** than pipeline gas from Turkmenistan
- **18% lower** than pipeline gas from Russia

Only natural gas piped from Norway **(38% lower)** & Azerbaijan **(4% lower)** was lower than U.S. LNG

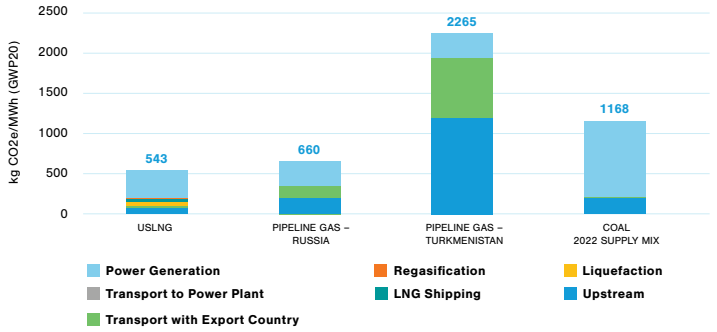
The full 2024 Berkeley Research Group report is available **here** and made possible by LNG Allies.

AVERAGE GHG EMISSIONS INTENSITY OF USLNG, PIPELINE GAS IMPORTS AND COAL TO EUROPE



Source: BRG, Comparative GHG Footprint Analysis of USLNG, Pipeline Gas and Coal, April 2024, Figure 3

AVERAGE GHG EMISSIONS INTENSITY OF USLNG, PIPELINE GAS IMPORTS AND COAL TO EUROPE



Source: BRG, Comparative GHG Footprint Analysis of USLNG, Pipeline Gas and Coal, April 2024, Figure 4