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Trans-Pacific Partnership Agreement: Likely Impact on
the U.S. Economy and on Specific Industry Sectors

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My name is Paul Cicio and I am the President of the Industrial Energy Consumers of America (IECA). IECA is a nonpartisan association of energy-intensive trade-exposed manufacturing companies, commonly referred to as EITE industries, with over \$1.0 trillion in annual sales, over 2,900 facilities nationwide, and with more than 1.4 million employees.

IECA membership represents a diverse set of industries including: chemical, plastics, steel, iron ore, aluminum, paper, food processing, fertilizer, insulation, glass, industrial gases, pharmaceutical, building products, brewing, independent oil refining, automotive, and cement.

EITE industries use 75 percent of the natural gas and 73 percent of electricity consumed by the manufacturing sector, and would be negatively impacted if natural gas prices increase as a result of exporting LNG. EITE industries account for over 40 percent of all manufacturing jobs.

The Trans-Pacific Partnership Agreement (TPP) would allow all DOE approved LNG export applications to ship LNG to all TPP countries, and would result in substantial LNG export volumes to Asia. Japan is the largest importer of LNG in the world. Without the TPP, exporters would not be allowed to ship to these countries unless given special approval by the U.S. Department of Energy (DOE).

To date, the DOE has approved 14.09 Bcf/day (which represents 19% of 2014 U.S. demand) of LNG shipments to countries that have no free trade agreement with the U.S. Excessive LNG exports create significant risks to the EITE industries and the U.S. consumer, and we do not have an alternative. Excessive LNG exports have significantly damaged Australian manufacturers and consumers, and it can happen here as well.

The DOE report entitled "The Macroeconomic Impact of Increasing U.S. LNG Exports," dated October 29, 2015,¹ makes the following point that illustrates that excessive LNG exports are not in the public interest and will significantly damage EITE industries.

"In every case, greater LNG exports raise domestic prices and lower prices internationally. The majority of the price movement (in absolute terms) occurs in Asia."

Page 17 of the report says that LNG exports increasing from 12 Bcf/d to 20 Bcf/d during 2026 and 2040, reduces prices in the Asian-Pacific market by 73 cents per million British thermal units, while increasing U.S. prices by 15 cents per million British thermal units – a combined net negative impact to competitiveness of 88 cents, or a 40% equivalent increase as compared to current prices.

KEY POINTS

1. Excessive LNG exports significantly accelerate consumption of U.S. low-cost natural gas – damaging long-term manufacturing competitiveness and jobs.
2. Excessive LNG exports are not in the public interest and will increase the domestic price of natural gas and natural gas-fired electricity, reduce EITE global competitiveness, reduce GDP, and impact middle class jobs.

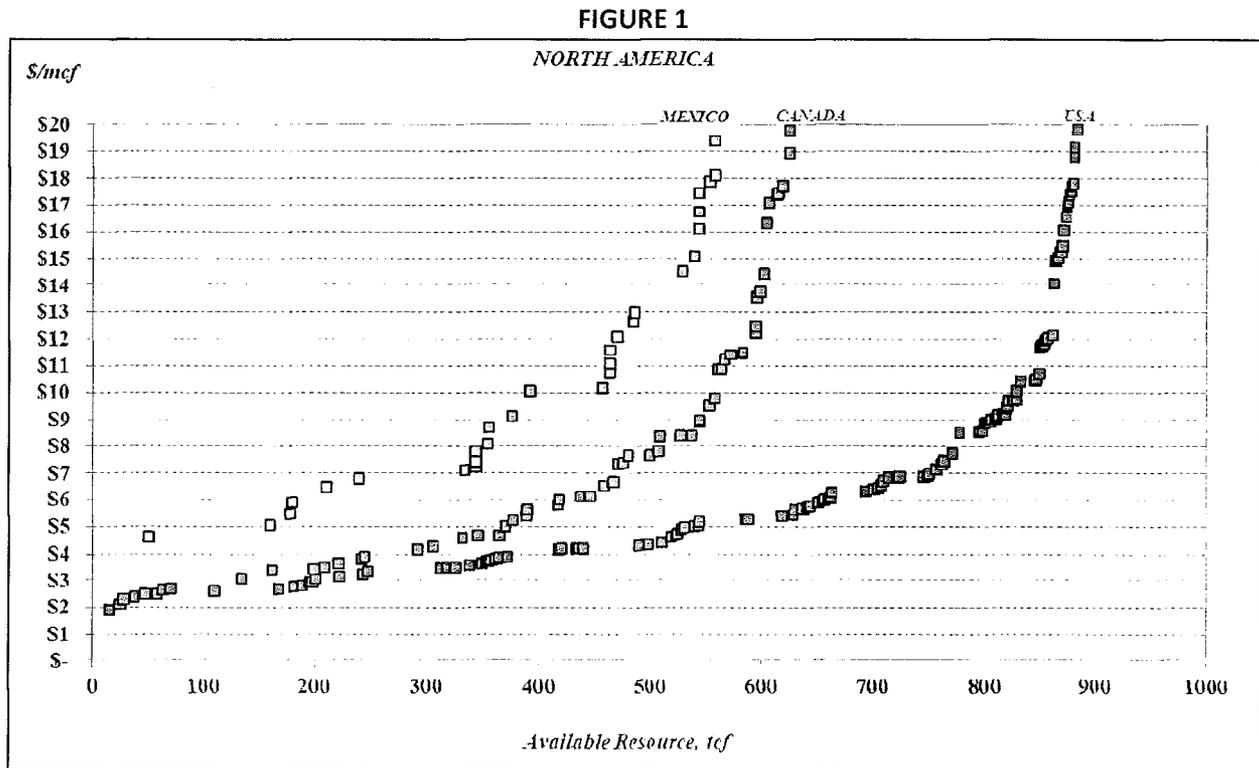
¹ "The Macroeconomic Impact of Increasing U.S. LNG Exports," U.S. Department of Energy, October 29, 2015, http://energy.gov/sites/prod/files/2015/12/f27/20151113_macro_impact_of_lng_exports_0.pdf.

3. Exporting LNG is a failed public policy. Consuming the natural gas in manufacturing creates eight times more middle class jobs.

1. Excessive LNG exports significantly accelerate consumption of low-cost natural gas – damaging long-term manufacturing competitiveness and jobs.

Natural gas is not a renewable resource and LNG exports significantly accelerate the consumption of U.S. low-cost natural gas. Figure 1 is from page B-20 of the DOE study previously mentioned and shows the shale breakeven curves for North America by country. These are not proven reserves.

Figure 2 illustrates the EIA forecasted U.S. demand² and LNG export demand at 14 Bcf/day or the equivalent of 5.11 Tcf/year. This is the amount that the DOE has already approved for export to countries without a free trade agreement. The cumulative demand in 2040 is 799.15 Tcf and would consume all low-cost natural gas under about \$9.00/mcf. Today's Henry Hub price is safely under \$3.00/mcf. If LNG exports are increased to 20 bcf/day or 7.30 Tcf (see Figure 3), all low-cost natural gas under \$11.00/mcf is consumed.



² EIA, AEO 2015

FIGURE 2: CUMULATIVE U.S. NATURAL GAS AND LNG EXPORT DEMAND (Trillion cubic feet)

	2016	2020	2025	2030	2035	2040	Cumulative Total (2016-2040)
U.S. Natural Gas Demand	27.04	26.14	26.88	28.08	28.82	29.70	691.84
LNG Demand of 5.11 Tcf/year or 14 Bcf/day		5.11	5.11	5.11	5.11	5.11	107.31
Total Overall Demand	27.04	31.25	31.99	33.19	33.93	34.81	799.15

Source: Energy Information Administration (EIA)

FIGURE 3: CUMULATIVE U.S. NATURAL GAS AND LNG EXPORT DEMAND (Trillion cubic feet)

	2016	2020	2025	2030	2035	2040	Cumulative Total (2016-2040)
U.S. Natural Gas Demand	27.04	26.14	26.88	28.08	28.82	29.70	691.84
LNG Demand of 7.30 Tcf/year or 20 Bcf/day		7.30	7.30	7.30	7.30	7.30	153.30
Total Overall Demand	27.04	33.44	34.18	35.38	36.12	37.00	845.14

Source: Energy Information Administration (EIA)

- Excessive LNG exports are not in the public interest and will increase the domestic price of natural gas and natural gas-fired electricity, reduce EITE global competitiveness, reduce GDP, and impact middle class jobs.**

The DOE/NERA study entitled "The Macroeconomic Impacts of LNG Export from the United States,"³ illustrates how excessive LNG exports are inconsistent with the public interest.

The study describes how "households with income solely from wages or transfers, in particular, will not participate in these benefits."⁴ It goes on to explain how "[h]igher natural gas prices ... can also be expected to have negative effects on output and employment, particularly in sectors that make intensive use of natural gas." In other words, the vast majority of households will transfer income and wealth to a small number of natural gas resource owners, as LNG exports place EITE industries at a global disadvantage.

Figure 4 from the report clearly illustrates the point of winners and losers. The losers, below the horizontal line, are impacted by a consistent loss of capital income, individual income and indirect taxes. Above the line are the winners, those who own natural gas resources and benefit from net transfers.

Even more startling is the meager so-called "net economic gain" under any of the scenarios. NERA projects only a net \$10 billion net economic gain in 2015 and a \$20 billion net gain in 2020, but this declines going forward. Given the size of the \$16.7 trillion U.S. economy, a \$20 billion gain is less than one hour of GDP work, an insignificant economic gain.

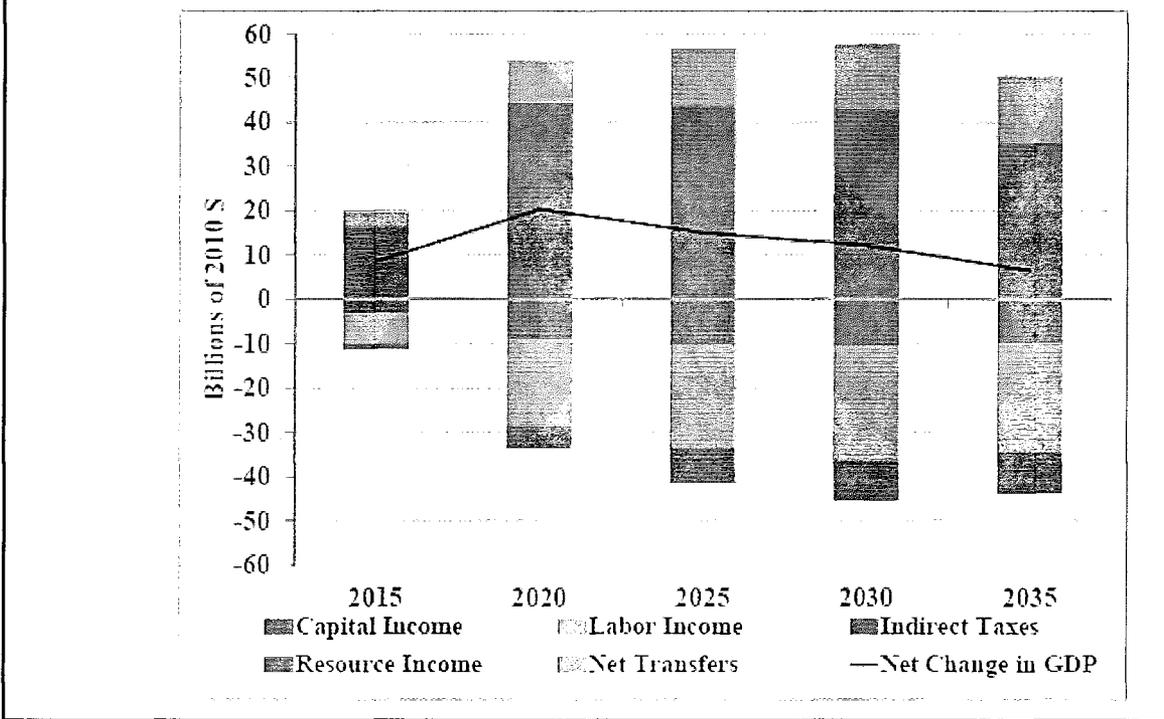
The most recent DOE LNG export study forecasts an even smaller economic gain of between \$7-20 billion USD annually from 2026 to 2040.

³ "Macroeconomic Impacts of LNG Export from the United States" NERA Economic Consulting, December 3, 2012, http://energy.gov/sites/prod/files/2013/04/f0/nera_lng_report.pdf.

⁴ *Ibid*, page 8.

FIGURE 4

Figure 3: Change in Income Components and Total GDP in USREF_SD_HR (Billions of 2010S)



This most recent study is even more damning and looks at the incremental economic impact of increased LNG exports from 10 Bcf/d to 20 Bcf/d. The study does not include the negative impacts of increasing LNG exports from 0 to 10 Bcf/d. The DOE's failure to not include those impacts illustrates how this Administration has placed the interests of the oil and gas industry above the U.S. consumer and manufacturing sector.

3. Exporting LNG is a failed public policy. Consuming the natural gas in manufacturing creates eight times more middle class jobs.

A Charles River Associates study, illustrated in Figure 5 compares the benefits of using 5 Bcf/d of natural gas in manufacturing versus exporting it. Consuming the natural gas in the manufacturing sector increases GDP by two and increases 8 times more jobs (over 4 times more the construction jobs).

FIGURE 5

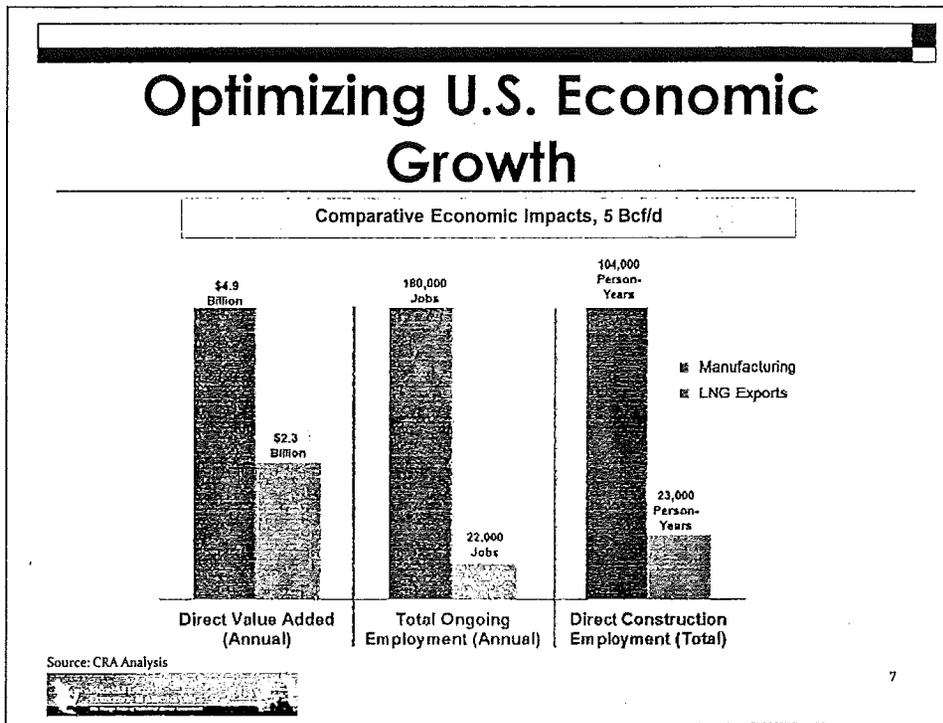


FIGURE 6

Thank you.

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President