

# LNG ANSWERS

U.S. Liquefied Natural Gas Exports:  
America's Opportunity and Advantage





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## “Across all scenarios, the U.S. [is] projected to gain net economic benefits from allowing LNG exports.”

“Moreover, for every one of the market scenarios examined, net economic benefits increase as the level of LNG exports increase[s]. In particular, scenarios with unlimited exports always have higher net economic benefits than corresponding cases with limited exports...Natural gas price changes attributable to LNG exports remain in a relatively narrow range across the entire range of scenarios.”<sup>1</sup>

<sup>1</sup> NERA Study: *Macroeconomic Impacts of LNG from the United States* (December 2012).



FROM A RECENT  
STUDY



## **WHAT IS LIQUEFIED NATURAL GAS (LNG)?**

- **LNG has been safely handled for decades**
- **LNG is highly regulated:  
FERC, DOT, USCG, DHS, and others**
- **In liquid state, the volume shrinks by about 600  
times, making it easy to store and transport**
- **LNG is not stored under pressure and is not  
flammable in its liquid state**

## **“Abundant North American gas resources mitigate the impact of demand changes, including exports.”**

“Vast shale gas resources, that are now economically viable due to technological advancements in recent years, have effectively caused the aggregate U.S. supply curve to flatten, representing greater supply elasticity. Coupled with the market’s demonstrated ability to respond to market changes, the availability of large North American supplies mitigates the price impact of exports.”<sup>2</sup>

<sup>2</sup> *Exporting the American Renaissance: Global impacts of LNG exports from the United States* (Deloitte, January 2013).



**FROM A RECENT  
STUDY**

## WHAT IS AT ISSUE?

Various applications to export LNG are pending before the Department of Energy (DOE).

## WHAT IS THE SOLUTION?

In 1938, Congress passed the Natural Gas Act, which established a rebuttable presumption that all natural gas exports, including LNG, are in the public interest and shall be permitted. In the Energy Policy Act of 2005, Congress revisited the issue of LNG imports and exports – and confirmed that LNG exports **are presumed to be in the public interest**. Any party seeking to challenge the import or export authorization must overcome this presumption **with substantial evidence**. But all the evidence shows that LNG exports are in the public interest and that the DOE should expeditiously approve pending LNG export applications.

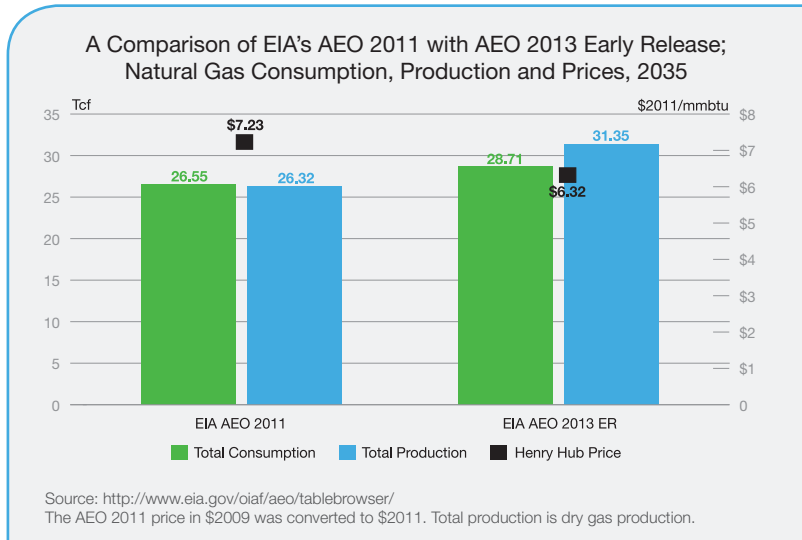
## **If the NERA study was conducted using AEO 2013 data then the price impacts of exports would most likely be smaller.**

The NERA study, commissioned by the DOE, which concluded that exports provided an economic benefit across all scenarios used supply and price projections from the 2011 *Annual Energy Outlook* (AEO) from the *Energy Information Administration*. Critics suggested this invalidates the results; however, the most recent release AEO 2013 projects a greater natural gas supply, for both domestic consumption and LNG exports, at lower prices. In fact AEO 2013 shows that by 2035 production is up 19% and prices down over 20%. If the NERA study was conducted using AEO 2013 data then the price impacts of exports would most likely be smaller.

## **DIDN'T THE STUDY USE OLD DATA?**

## COMPARING THE DATA

The 2013 *Annual Energy Outlook* projects a greater natural gas supply, for both domestic consumption and LNG exports, at lower prices. It shows that by 2035 production is up 19% and prices down over 20%.





## **“The [National Export Initiative] will help meet my Administration’s goal of doubling exports over the next 5 years...”**

“The [National Export Initiative] will help meet my Administration’s goal of doubling exports over the next 5 years by working to remove trade barriers abroad, by helping firms – especially small business – overcome the hurdles to entering new export markets, by assisting with financing, and in general by pursuing a Government-wide approach to export advocacy abroad.”<sup>3</sup>

<sup>3</sup> Executive Order 13534, March 11, 2010.



**FROM THE OVAL  
OFFICE**

## WHAT ARE THE BENEFITS OF EXPORTING LNG?

### EXPORTS WILL:

- Create and support thousands of jobs;
- Generate billions of dollars in government revenues;
- Reduce our trade deficit;
- Help the industry operate efficiently by maintaining production levels, thereby enhancing energy security;
- And increase domestic production of associated natural gas liquids (NGLs), putting downward pressure on prices of chemical manufacturing feedstocks.

DOE should expeditiously move forward with the approval of LNG export applications to ensure the above benefits are realized, and to ensure domestic projects are competitive with international projects.

## The Washington Post on LNG Exports:

When countries can buy and sell to each other, their economies do what they are best at, producing more with less and driving economic growth. A new Energy Department study on increasing U.S. natural gas exports proves this timeless lesson again, as it shows how bewildering the opposition to exporting the fuel is..."<sup>4</sup>

<sup>4</sup> *Natural gas exports: A boon to the economy*; Washington Post (December 2012).

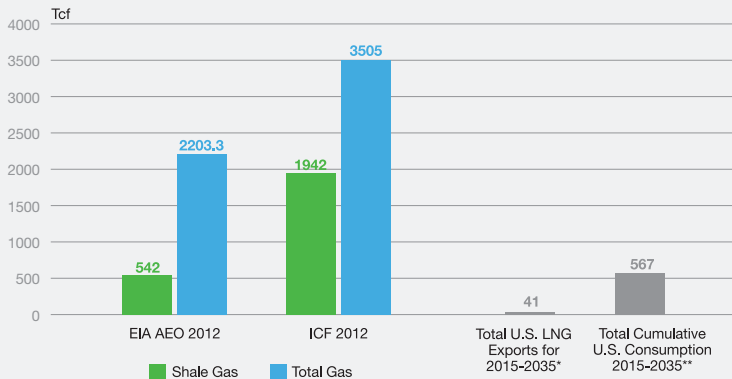


FROM THE NEWS

## WON'T EXPORTS ELIMINATE OUR ENERGY ADVANTAGE?

The *U.S. Energy Information Administration* (EIA) estimates that total U.S. consumption of natural gas from 2015 to 2035 is only 25.8% of their resource estimates, and consumption is only 16.1% of resource estimates by the energy consulting firm ICF International. And even assuming export amounts greater than EIA's projections exports in no way threaten America's supply of natural gas.

Estimates of U.S. Total Natural Gas Resource Base  
vs. Total U.S. LNG Exports and Consumption



\*20 years of 6 Bcf/d of LNG exports phased in between 2015 and 2020 reaching 6 Bcf/d in 2020 and thereafter. \*\*Source: EIA AEO 2013ER.

## **“The scale of American LNG exports would be naturally limited by the competition.”**

“...There are two points to be made now. First, the scale of American LNG exports would be naturally limited by the competition from other existing suppliers around the world, as well as by new supplies coming from recent large gas discoveries offshore of East Africa and Israel. Second is a larger context. The U.S. is successfully pushing Japan to reduce its oil imports from Iran, one of its largest traditional suppliers. At the same time, Japan...is buying expensive LNG from both spot markets and traditional suppliers in the Middle East and Asia to replace nuclear power for generating electricity. How can America, having asked Japan to reduce Iranian oil imports, turn around and prohibit the export of surplus natural gas to this key ally?”<sup>5</sup>

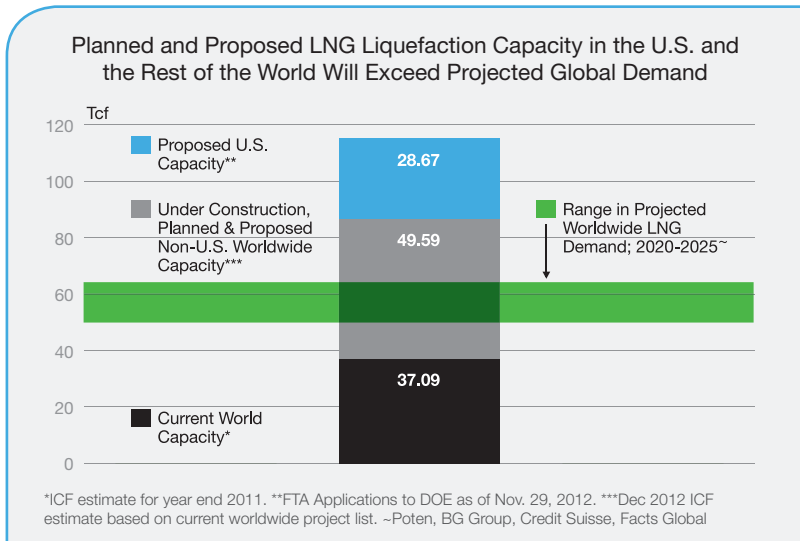
<sup>5</sup> Daniel Yergin: *The Real Stimulus: Low-Cost Natural Gas*, Wall Street Journal, October 2012.



**FROM THE NEWS**

## SHOULD GOVERNMENT LIMIT LNG EXPORTS?

An artificial limit by the Federal Government is not necessary, because we've already got one, courtesy of supply and demand. This chart shows that the level of planned and proposed facilities for natural gas liquefaction – the process to make natural gas exportable – far exceeds projected global demand. And the window for the U.S. is closing rapidly -- some of the planned capacity outside of the U.S. is already under construction. To capture this economic opportunity we must act quickly.



## LNG Exports Will Drive Additional Production and Support Thousands of Additional Jobs

- Each additional Bcf (billion cubic feet) per day of shale gas production supports **32,000 total jobs** throughout the economy
- Roughly **359,000 people are employed** by small businesses within the upstream oil and natural gas industry and support industries
- **Nearly 45%** of all employment in the upstream oil and natural gas industry and support industries is provided by small businesses

**LNG EXPORTS  
CREATE U.S. JOBS**

## IS THE INDUSTRY READY TO MEET THE DEMANDS OF A WIDER MARKET?

If we look at natural gas exploratory and development wells in 2012 versus 2011, we see that the industry is ready to expand future natural gas production with development drilling.

U.S. Total	2011	2012	Delta	Percent
Exploratory Wells	658	793	+135	+21%
Development Wells	3,154	1,912	(1,242)	(39%)

In 2012, the number of exploratory natural gas wells increased even while development wells decreased due to market conditions.

Source: API Quarterly Completion Report



## **America's newfound abundance of natural gas resources is a boon to the nation.**

America's newfound abundance of natural gas resources is a boon to the nation. It is creating jobs, reducing home heating and electric bills and lowering energy and raw materials costs for businesses. And the opportunity to do more is before us – to produce more natural gas, spur additional economic activity and create even more jobs – by serving international markets as well as American ones.

Allowing our oil and natural gas companies to supply other markets through exports is indisputably in our national interest, and the *U.S. Department of Energy* should approve pending applications for authorization to export natural gas without delay.

## **CONCLUSION**

## **BROAD SUPPORT FOR LNG EXPORTS**

*Sending Natural Gas Abroad* - The New York Times

<http://nyti.ms/11LWnvz>

*The Case for Natural Gas Exports* - Michael Levi, Council on Foreign Relations

<http://nyti.ms/11LW2sQ>

*Say Yes to LNG* - The Baltimore Sun

<http://bit.ly/11LWN57>

*Natural-Gas Exports Could Lift U.S. Trade and Economy* - Bloomberg View

<http://bloom.bg/11LX7kk>

*Shale gas exports will aid US and its allies* - Bill Richardson and Spencer Abraham

<http://1.usa.gov/11LXoDS>



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