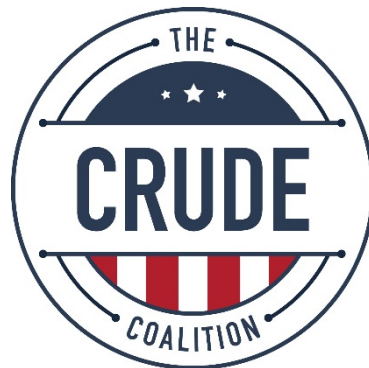


Keeping U.S. Crude in America: Critical for U.S. Consumers, Businesses, and National Security

North American Crude Markets & Storage Summit
June 29, 2015 | Houston, TX





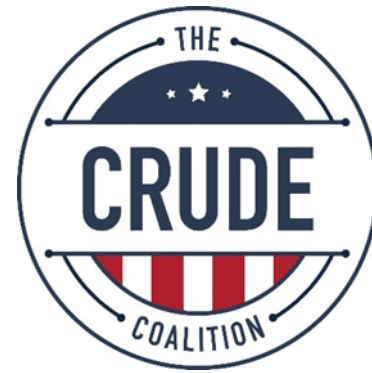
Overview

- Historical Context / Legislative Update
- Price Impact on Consumers and Businesses
- Export Impact on Refiners
- Energy Independence and National Security



The Oil Export Law

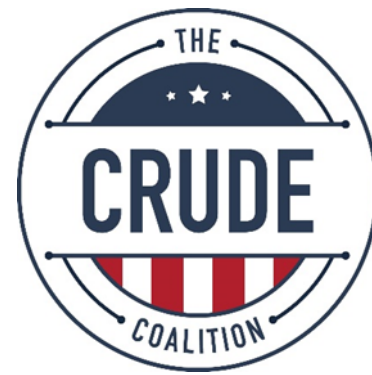
- Yom Kippur War
- 1973 Arab Oil Embargo – “Oil Shocks”
 - Rapid and steep crude oil price rise
- Energy Policy & Conservation Act of 1975 (EPCA)
 - President shall “promulgate a rule prohibiting the export of crude oil” produced in the United States (with some exceptions)



The Oil Export Law (cont)

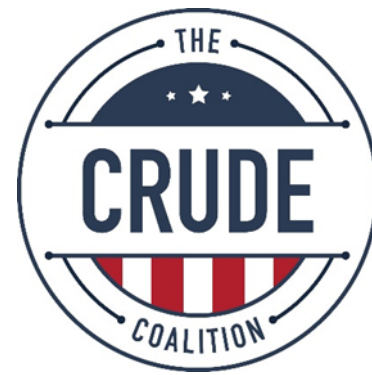
- Energy Policy & Conservation Act of 1975 (cont)

Exemptions to the prohibition shall be “based on the purpose for export, class of seller or purchaser, country of destination, or any other reasonable classification or basis as the President determines to be appropriate and consistent with the national interest and the purposes of this chapter.”



The Oil Export Law (cont)

- Bureau of Industry & Security (BIS) Regulations
 - 15 C.F.R. Sec. 754.2 – License Must Be Obtained for All Exports
- Listed Exemptions:
 - From Alaska's Cook Inlet
 - To Canada for consumption or use therein
 - Exports in connection with refining or exchange of Strategic Petroleum Reserve oil
 - Exports of California heavy crude (not > 25k bpd)
 - Etc.



The Oil Export Law (cont)

- Purpose of EPCA:

“Decrease dependence on foreign imports, enhance national security, achieve the efficient utilization of scarce resources, and guarantee the availability of domestic energy supplies at prices consumers can afford.”

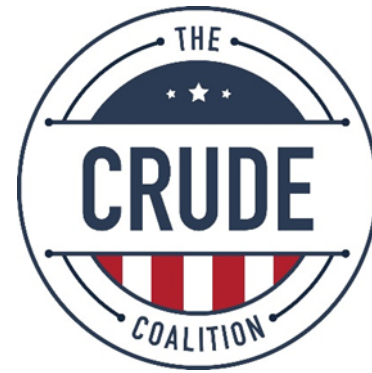
- S. Rep. No. 94-516 at 117 (1975) (Conf. Rep.)

- All These Purposes Remain Valid Today



Legislative Update

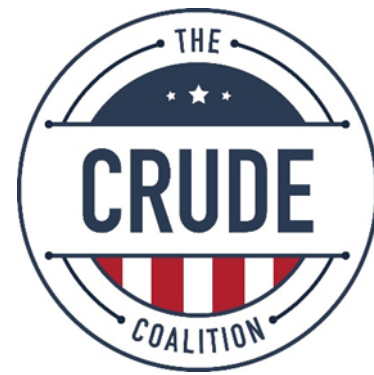
- U.S. House of Representatives
 - Hearings – Energy & Commerce, Foreign Affairs subcommittees
 - H.R. ~~666~~, 702 (Barton-TX)
- U.S. Senate
 - Hearings – Energy & Natural Resources
 - S.1312 (Murkowski – AK), S.1372 (Heitkamp-ND)
 - Floor Amendments
 - Comprehensive Energy Legislation



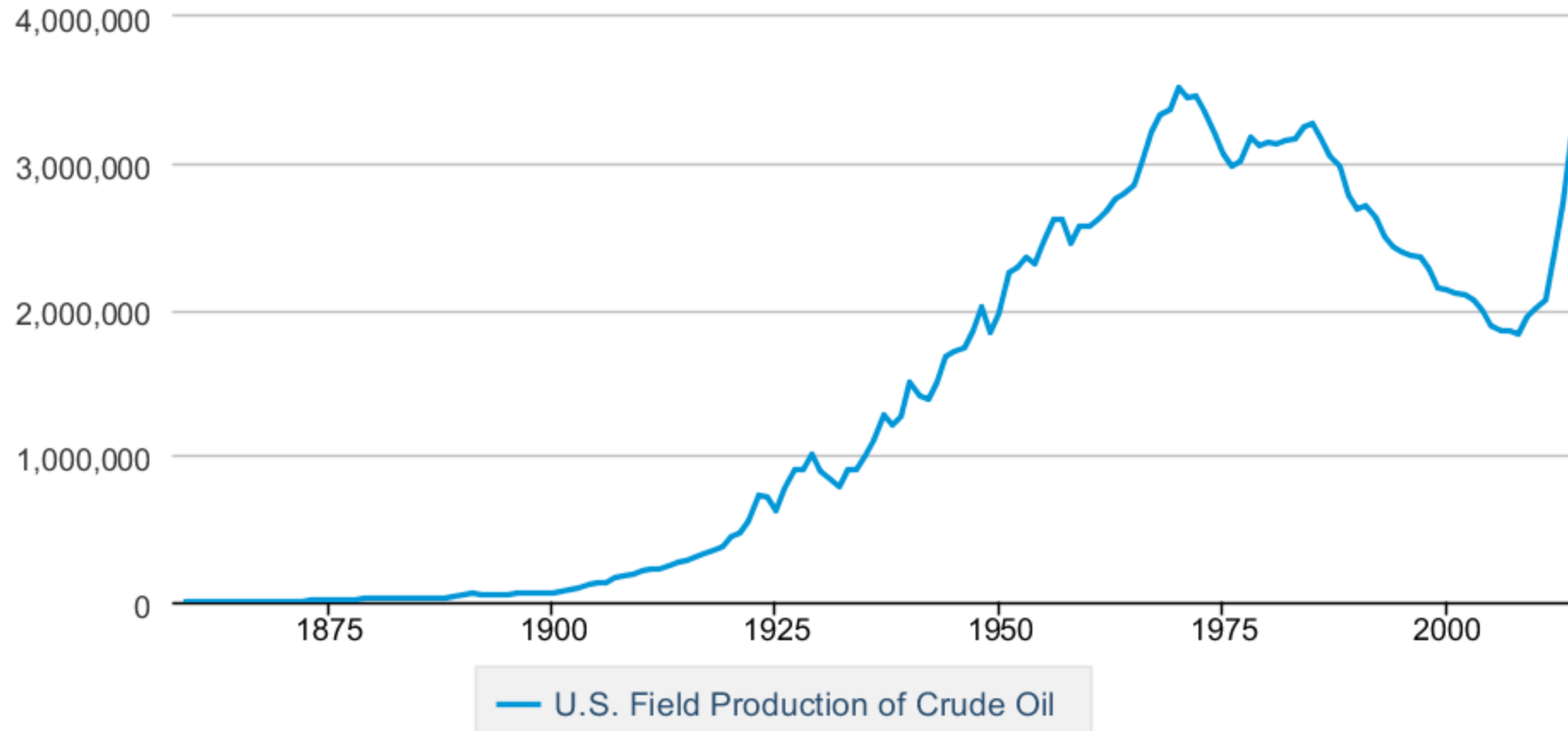
Executive Branch

- White House
 - Political Calculus
 - Comments by staff and Cabinet
- Ancillary Executive Branch Issues
 - Condensate FAQ Issued by BIS (Dec. 2014)
 - FOIA Request
 - Petition for Rulemaking
 - Mexican Swap License Pending

U.S. Field Production of Crude Oil



Thousand Barrels

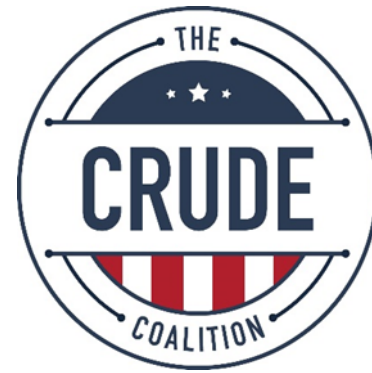


Source: U.S. Energy Information Administration



U.S. Production Has Not Plunged

- Total U.S. crude oil production averaged an estimated **9.6 million b/d in May, 2015.**
- U.S. production expected to generally decline from June 2015 through early 2016 before growth resumes.
- Projected U.S. crude oil production averages 9.4 million b/d in 2015 and 9.3 million b/d in 2016.
- Low crude prices due to global glut, OPEC decisions
- Shale production skyrocketed *while the ban was in place*



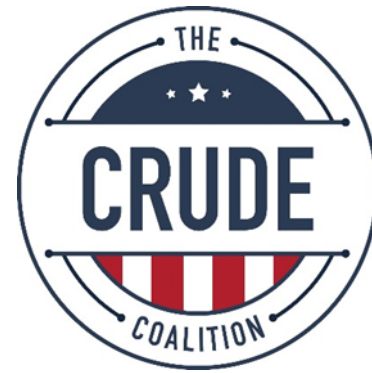
Ban Keeps Fuel Prices Low (Barclays)

- Consumers Getting “**Dividend**” From Export Ban in Lower Fuel Prices than Otherwise
- Domestic Crude Discounts Have Been **Passed Through**
- Americans Got Discount of \$3.1 / Barrel Since 2011 and \$3.5 / Barrel in 2014 – A “**Material**” **Benefit to Consumers**
- Annual Economic Benefit of Crude Discounts Greater than **\$10.2 Billion in 2015** (\$11.4 Billion in 2014)
- Diesel Prices Would be “**Significantly**” **Higher**



Exporting Crude Will Raise Fuel Prices

- The price of crude drives the price of refined products
- Exports won't change global price, just the domestic price – WTI rises to Brent
- Producers want to lift export restrictions because they want *more* money for their product, *not less*
- There is no refining “wall” – we have capacity (Baker & O'Brien, AFPM, EIA)
- Crude storage increases were market-driven, not export policy-driven

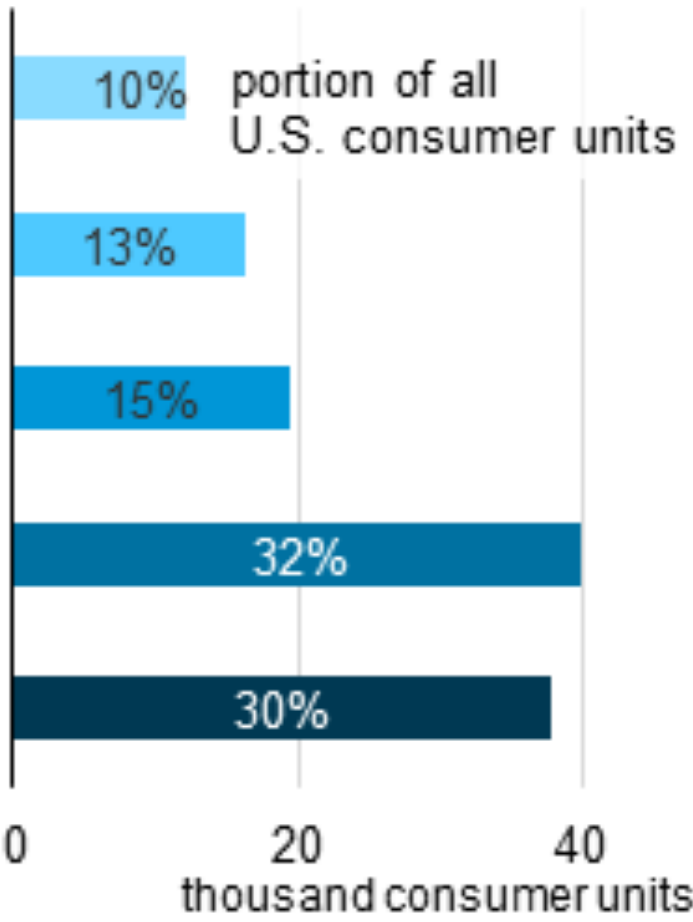
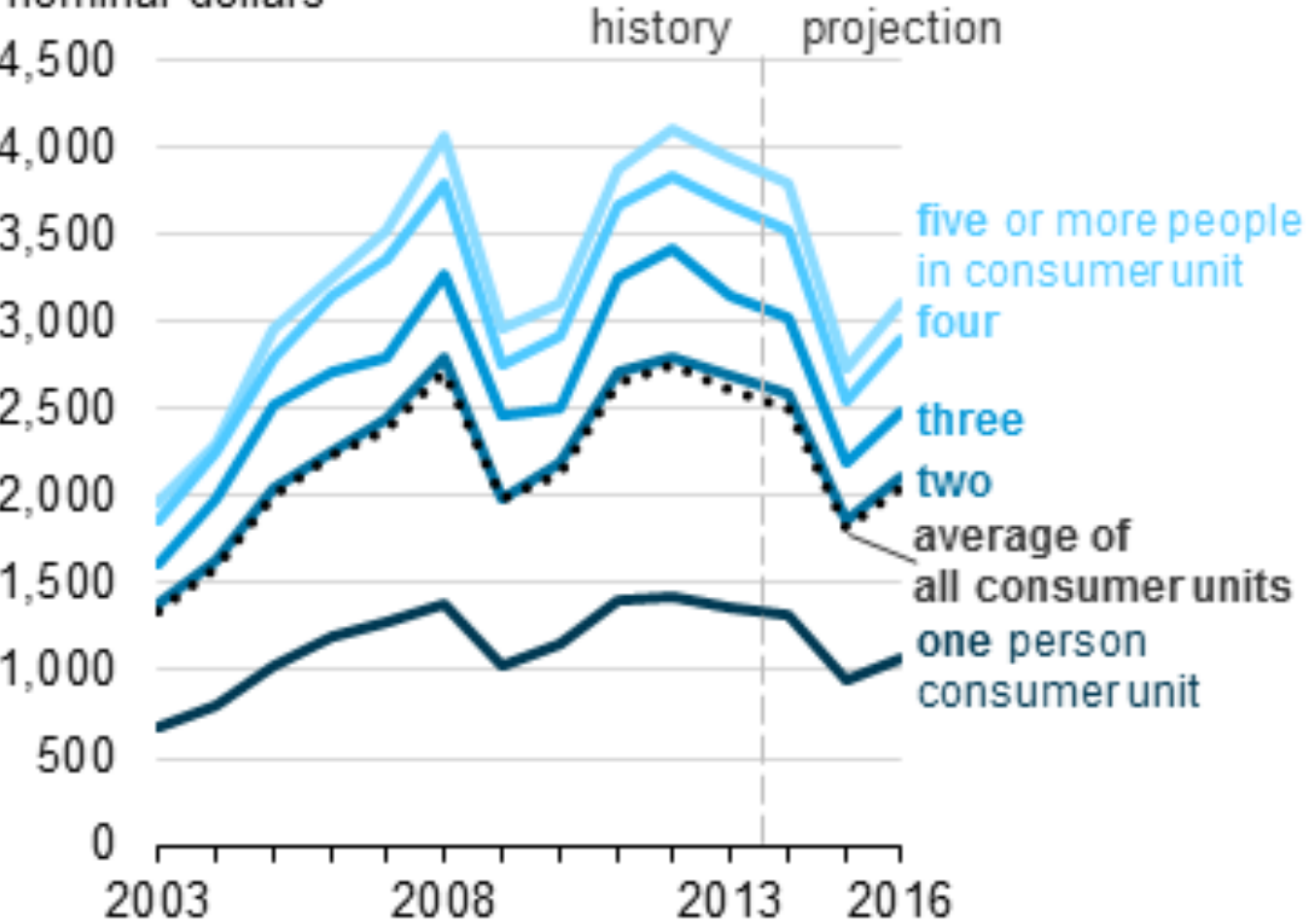


Lower Fuel Prices: A Boon to Americans

- EIA: Average Household Will **Save \$700 in 2015; many much more**
- Allstate/National Journal Poll: **79 percent** say cost of living is “fair” or “poor”
- 32 percent say lower gasoline makes a “**huge**” or “**significant**” impact
- 47 percent say “modest” or “slight”

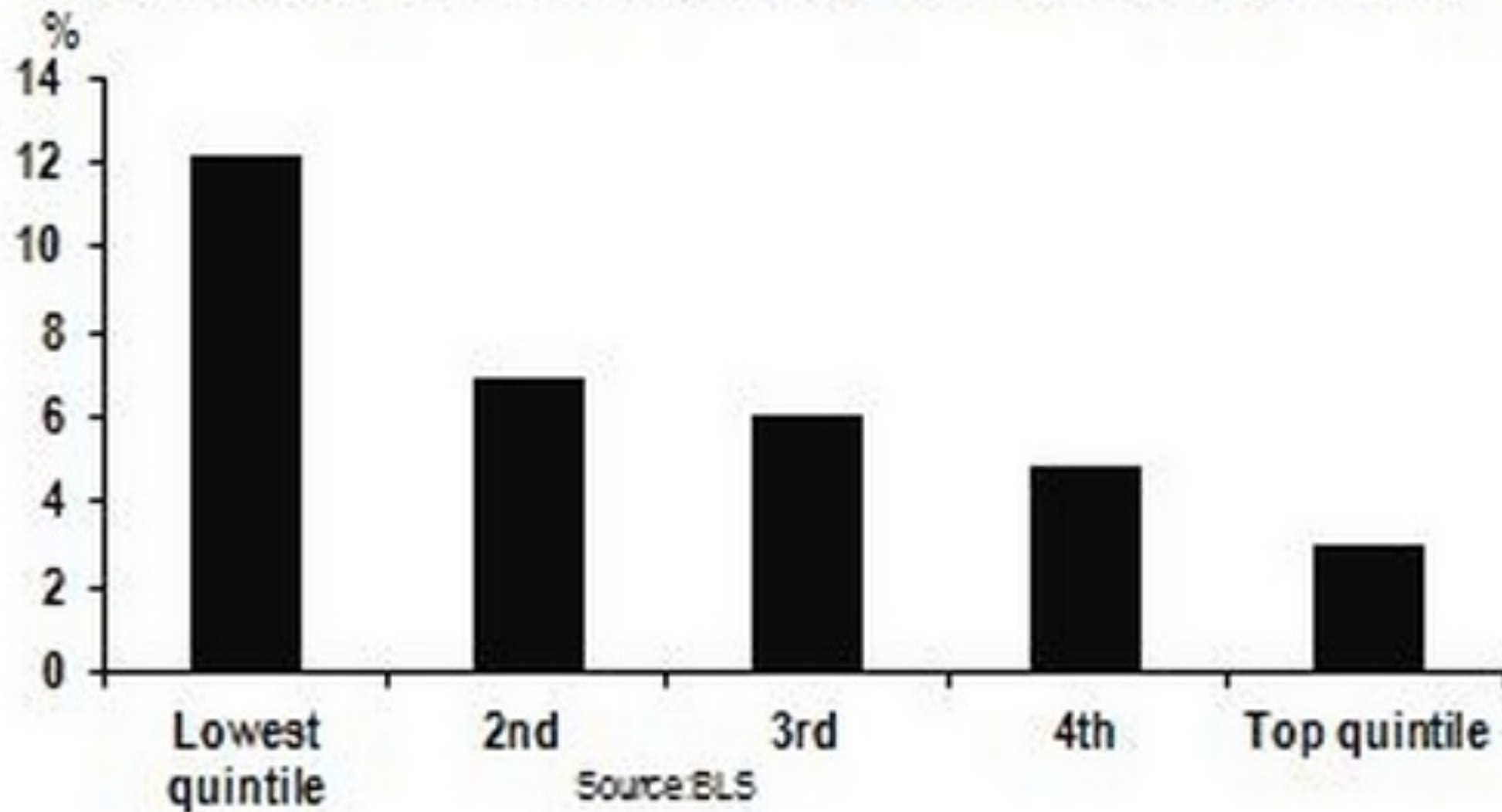


Average annual household expenditures on gasoline (2003-16)
nominal dollars



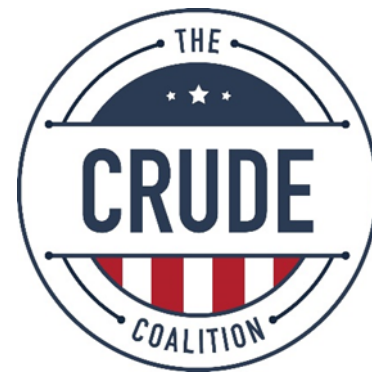


Percent of after-tax income spent on gasoline in 2013, by income



Crude and LNG are Completely Different





Crude vs. LNG

- Crude is The Foundation of Our Economy
 - Products from Crude are Pervasive
 - Crude Oil Crisis is Quickly a Major Economic Crisis
- Crude is Priced by a Cartel, Not a Free Market
- We Still Import a Lot of Crude
 - 7 Million bpd of Foreign Oil
- U.S. Proven Reserves of Crude Much Smaller than LNG
 - 13 Years at Current Production Pace
- Exporting LNG Won't Hurt Consumers, Businesses or National Security

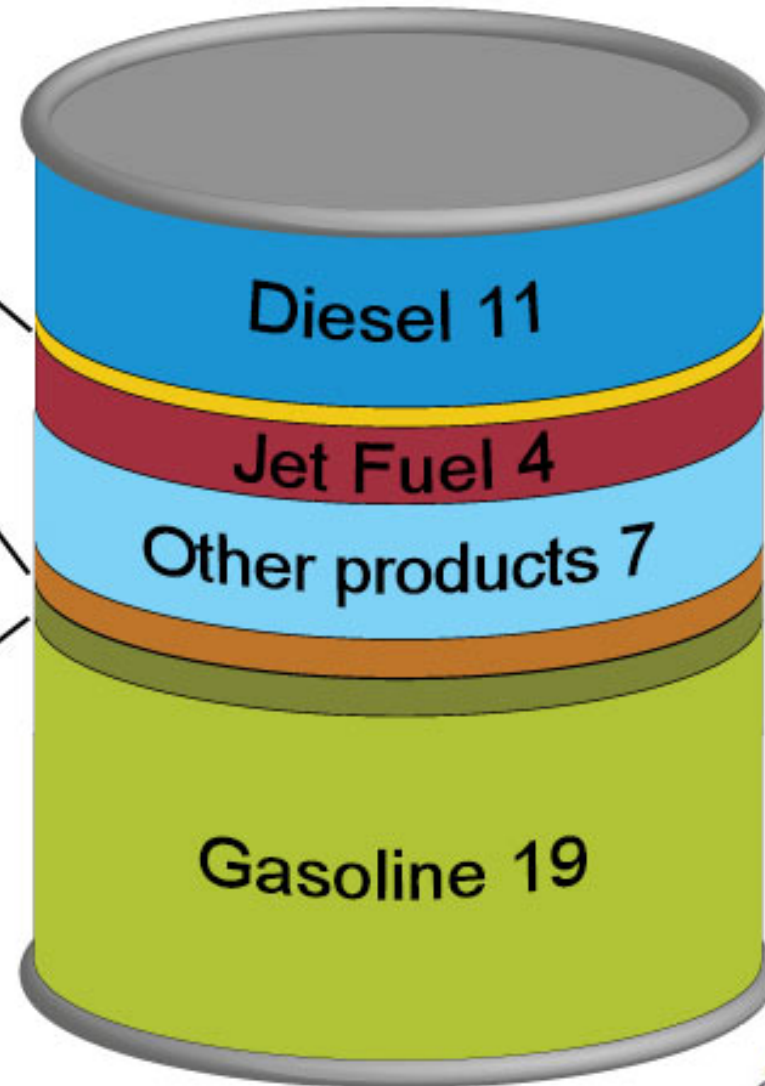
Products made from a barrel of crude oil, 2013 gallons

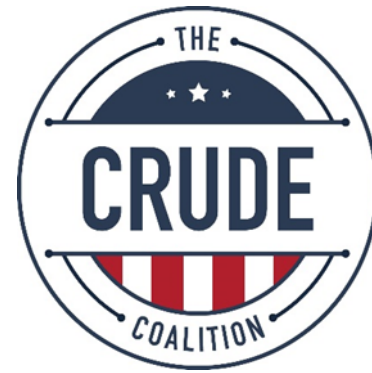


Other distillates
(heating oil) 1

Heavy fuel oil
(residual) 1

Liquefied
petroleum gases
(LPG) 2





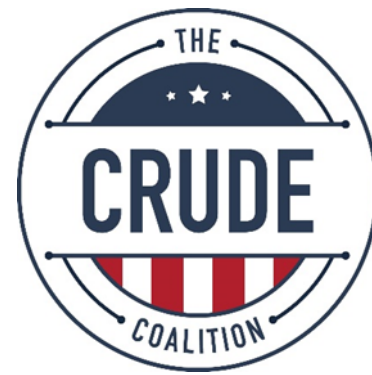
Cheap Crude Boosting the US Economy

- A report from the National Association for Business Economics shows that cheap crude is:
 - Increasing consumer confidence and economic growth **across the board.**
 - Lowering unemployment and inflation.
- Healthier consumer spending, bolstered by lower oil prices, is expected to “make **outsized contributions** to the projected acceleration in overall economic activity.”
- Economic growth into 2016 is attributable in large part to “the **psychological impact of lower gasoline prices**”



Americans Oppose Exporting Crude

- Hart Research Poll of 1106 likely 2016 voters
- **Large majorities across party lines oppose** increasing the amount of oil exported abroad – 69 percent
- 46 percent **strongly oppose**
- GOP: 61 percent
- Independents: 69 percent
- Democrats: 75 percent



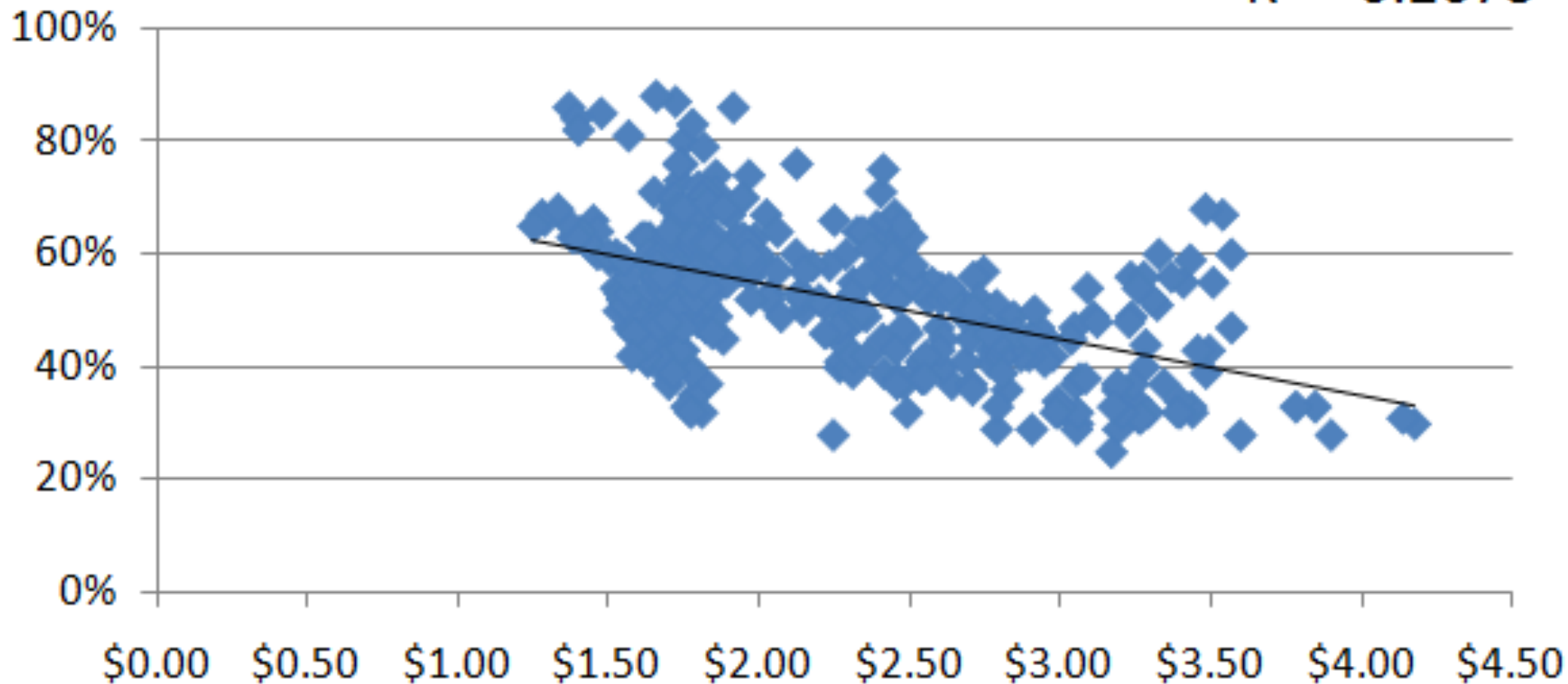
Americans Oppose Exporting Crude

- University of New Hampshire
- **2/3 said US is importing too much oil from abroad**
- 81 percent say reduce imports before allowing exports
- Less likely to vote for a politician who votes for crude oil exports under three different circumstances:
 - (1) before the US becomes energy independent,
 - (2) before the impact on US gas prices is known for certain or
 - (3) if US gas prices increase as a result.
- New Hampshire concerns center around pump prices



Presidential Approval vs. Gas Prices (Jimmy Carter- Barack Obama)

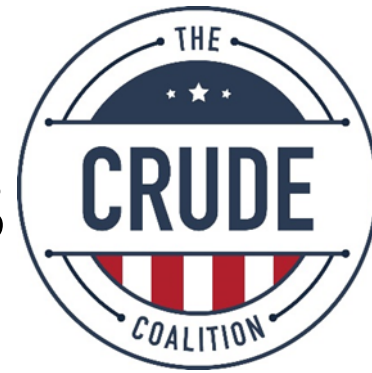
$R^2 = 0.2673$





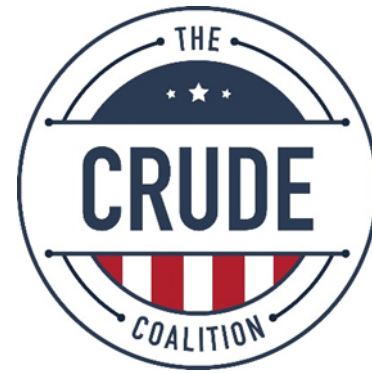
American Refining Renaissance

- US has become largest exporter of petroleum products
- Half of exports go to Latin America; lifting ban would make Latin American refiners more competitive (Inter-American Dialogue)
- Helping to make Philadelphia as energy / manufacturing hub – low-cost feedstocks, brownfields, transportation infrastructure



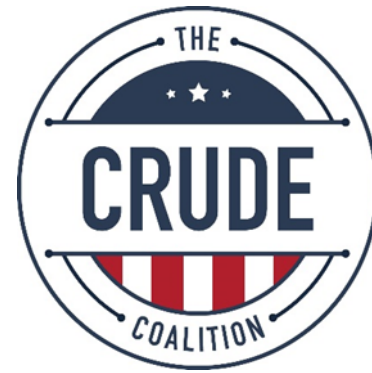
Oil Export Consequences For U.S. Refiners

- Rising Input Costs: WTI Rises to Meet Brent
- U.S. Incentive to Invest in Processing More Domestic LTO Ebbs
- More Imported Crude + More Imported Refined Products
- Competitive Environment Intensifies – Export Lifeline to European, Latin American, and Other Foreign Refineries



Chinese and Saudi Refining Threat

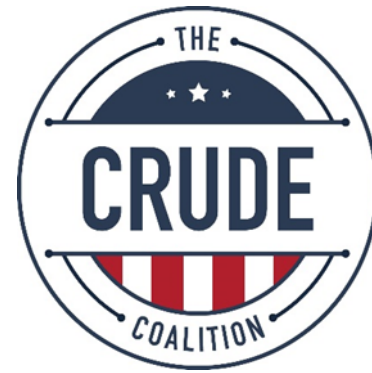
- Global refining runs rose by 1.1 million b/d in 2014, with growth in the US, China and the Middle East outweighing declines in Europe and OECD Asia Pacific (BP Statistical Review of World Energy)
- November 2014: **Chinese** refining hits over 10 million barrels per day (2nd highest on record) (Yahoo Finance)
- **Saudi Arabia** plans to be world's 2nd-largest exporter of refined products by 2017 - 3 million bpd of capacity ("Saudi Arabia Plans to Increase Refining Capacity," *Wall Street Journal*, Feb. 25, 2015)



Effect of Philly Refinery Shutdowns

- 2012: Possible loss of three refineries in Philadelphia area
 - Loss of 50 percent of NE refining capacity
 - Distribution network disrupted by new movements of product and imports
 - Higher price differentials for wholesale products compared with the Gulf Coast and markets abroad would have to occur to incentivize producers to send more products to the Northeast

(source: “Potential Impacts of Reductions in Refinery Activity on Northeast Petroleum Product Markets,” EIA February 2012, updated May 11, 2012)



Effect of Philly Refinery Shutdowns

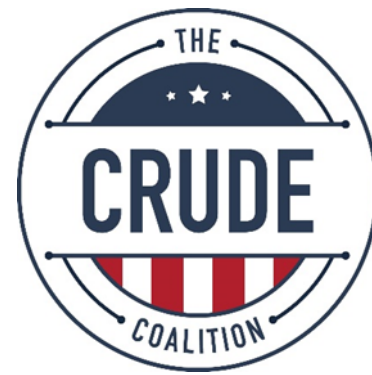
- Penn. Dept. of Labor: 18.3 jobs lost for every refinery job
- 22 jobs in State of Pennsylvania for every refinery job
- 61 jobs in the nation for every refinery job
- \$1.6 billion in lost economic benefits (direct/indirect)
 - sales, labor income, state and local tax

(source: “Economic Impact of ConocoPhillips and Sunoco Closings,” Center for Workforce & Analysis, Pennsylvania Department of Labor, January 9, 2012)



Where Would Exports Likely Go?

- NW Europe – Shipping costs mean refined products from Europe come back to United States
- China – Cheap oil for their refiners, making them more competitive vs. rest of the world (including U.S.)
- China and India are key drivers of non-OECD growth, projected to grow by 5.5% per annum between 2013 and 2035. (BP)



Where Would Exports Likely Go? (cont)

- Virtually all (96%) of the projected growth is non-OECD, with energy consumption growing at 2.2 percent per annum. (BP Energy Outlook 2035)
- China has surpassed the US as the world's biggest importer of crude.
- China has the fastest growing petrochemical industry in the world and will have a long-term need for increased feedstock imports.

Exports and Energy Independence





America: Not Yet Energy Independent

- Energy Secretary Ernest Moniz:

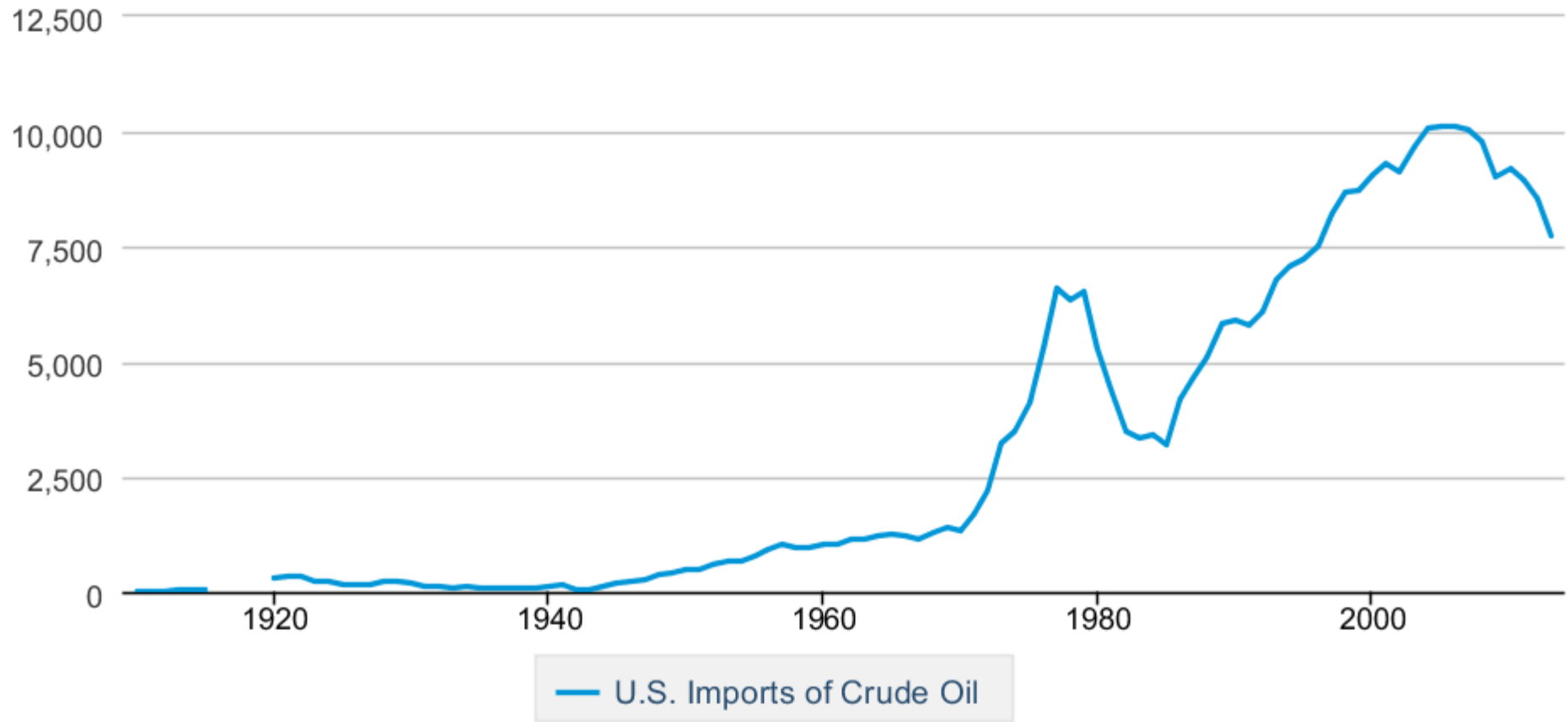
“We Still Import over 7 Million Barrels of Oil Per Day”

“A Compelling Case Has Not Been Made”

U.S. Imports of Crude Oil



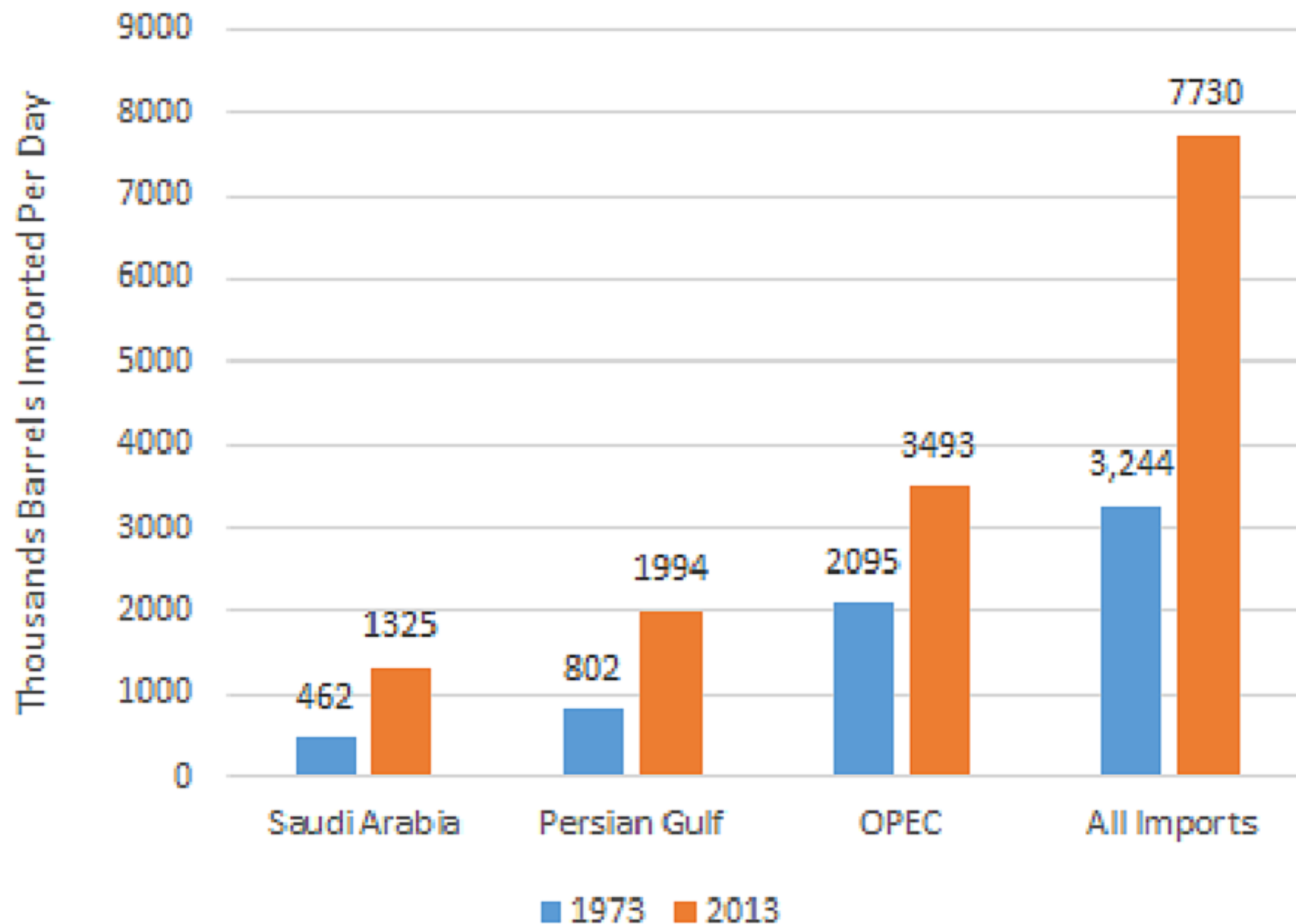
Thousand Barrels per Day



Source: U.S. Energy Information Administration



US Imports Far More Crude Than in 1973



Source: EIA Data



OPEC and U.S. Drillers

- OPEC is a Cartel
- OPEC Can Set Production Targets
- U.S. Shale Drillers Respond to One Thing: Price
- Amos Hochstein, U.S. Special Envoy for International Energy Affairs:
“We don’t control our own energy production and we don’t use it as weapons or tools or leverages for pursuit of other policies.”



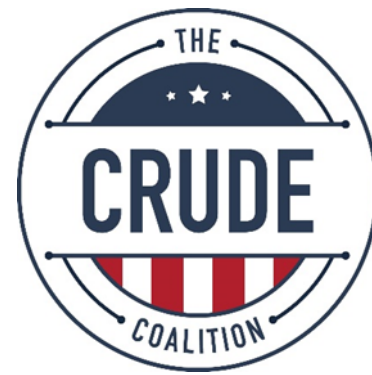
Foreign Policy: A Hollow Argument

- Help E. Europe vs. Russia? CRS Report Says Not So Fast
- E.Europe Refiners Configured to Medium Sour Russian Urals – Expensive Re-Fit for U.S. LTO
- Lacking Infrastructure to Get Crude to Refineries from Ports
- Russia Would Probably Maintain Market Share
- Financial Justification Iffy
- Plenty of Alternatives for E.Europe to Obtain Crude or Products Closer



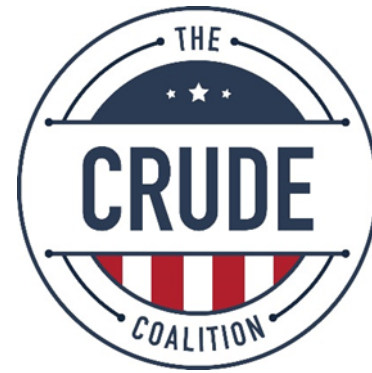
Foreign Policy: A Hollow Argument

- Michael Levi, Council on Foreign Relations:
 - Potential Impact of U.S. Oil on Curbing Russia “overstated”
 - Physical Origin of a Barrel of Oil Matters Little to Small Countries that Need It – Price is Everything
 - If You Have Infrastructure to Bring in US Oil, There Are Closer Sources (Azerbaijan, Norway, etc.)
 - Undermines Decades of U.S. Policy Trying to Prevent Russia from Using Energy As a Weapon



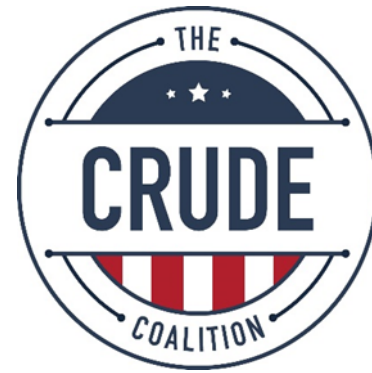
Foreign Policy: A Hollow Argument

- Other Unforeseen Consequences / Potential Ramifications
 - Effect on refined exports to Latin America allows opening to increased Chinese market share
 - Effect on fragile U.S. allies fighting terror groups (e.g., Iraq, Nigeria)
 - Biggest beneficiary of lifting the ban: China



Keep U.S. Crude in America!

- Americans **Are Benefiting** From Lower Fuel Prices
- Americans **Oppose** Exporting U.S. Crude
- **Fuel Prices Will Rise** With Exports
- **We Are Not Energy Independent**
- America's Refining Sector is **Essential to National Security**



The CRUDE Coalition

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- jay.hauck@hauckllc.com | 202-270-3442