19th ICIS Pan American Base Oils and Lubricants Conference

U.S. Energy & Economic Policy Geopolitical & Financial Stress Points – Select Views

Max Pyziur
December 4, 2025
Jersey City, NJ

I·C·I·S
Independent Commodity Intelligence Services

About the Energy Policy Research Foundation

Energy Policy Research Foundation

- Est. 1944; based in Washington
- Analyses of natural gas, crude oil, transportation fuels, energy transitions, electrification.
- Partnerships with domestic and international think tanks, ministries (n.b. Institute for Energy Economics, Japan; METI).
- Frequent invitations for Congressional testimony and discussion.
- Non-partisan and not-for-profit.

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Presentation Outline

- **Major Energy Initiatives of the Second Trump Administration**
  - **Expand oil and gas leasing on federal lands**
  - **Repeal 2009 Endangerment Finding**
  - **Projection of Economic Strength**
  - **Promote Energy Dominance**
- **Sanctions Policy – Russia**
- **Risks - Systemic and Otherwise / Legacy & Alternative Indicators**
- **Energy Transitions – A Comment**
- **Conclusion: U.S. Hydrocarbon Markets**

Major Energy Initiatives of the Second Trump Administration

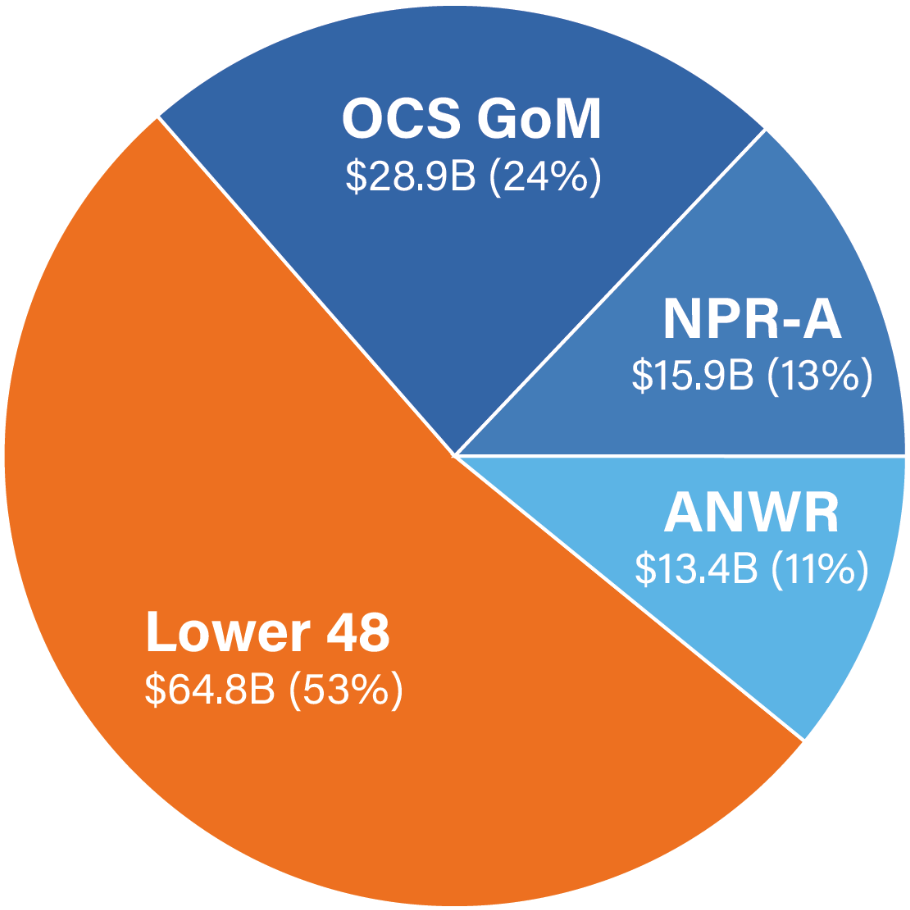
- Refill the Strategic Petroleum Reserve (SPR)
- Return to Regular Order on LNG Exports
- Withdraw from Paris Agreement

- Expand oil and gas leasing on federal lands
- Repeal 2009 Endangerment Finding
- Projection of Economic Strength
- Promote Energy Dominance

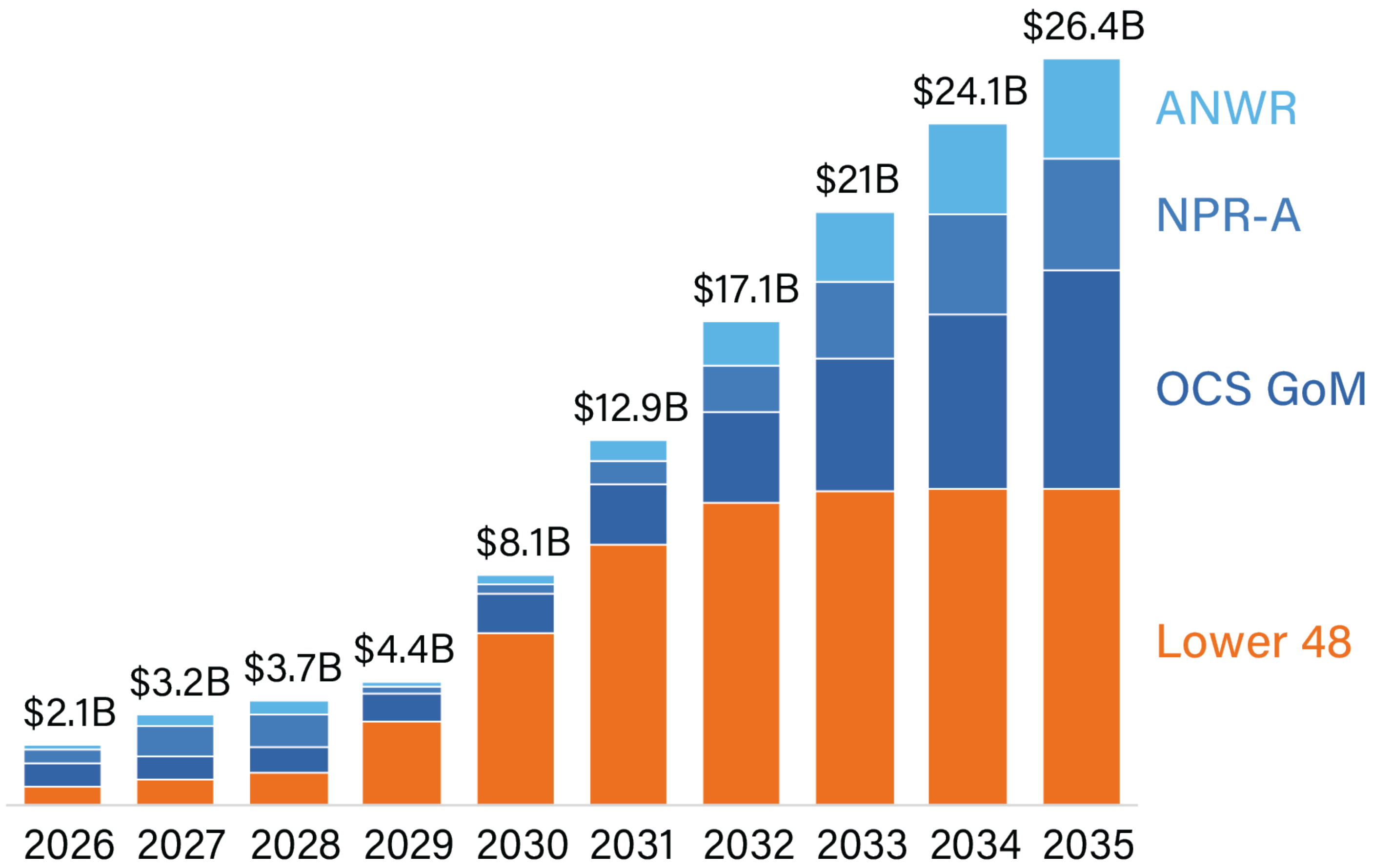
Estimated Additional Budgetary Receipts by Producing Region

Billion U.S. Dollars (2026-2035)

Cumulative



Year-by-year



Source: EPRINC: Analysis of incremental revenues from accelerated leading on public lands. *Analsyis for U.S. House of Representatives. April-May 2025*.

Rescinding Endangerment Finding (EF) Would Affect Many EPA GHG Rules

2009 EF –Based Rule

- EPA GHG Vehicle Emission

Existing Rules that Rely on the EF

- New & existing power plant rules
- Additional light and medium duty GHG vehicle standards
- Heavy-duty vehicle standards
- Oil and gas methane waste rules
- EPA California Waiver
- Renewable Fuel Standard
- Mandatory GHG Reporting Rule

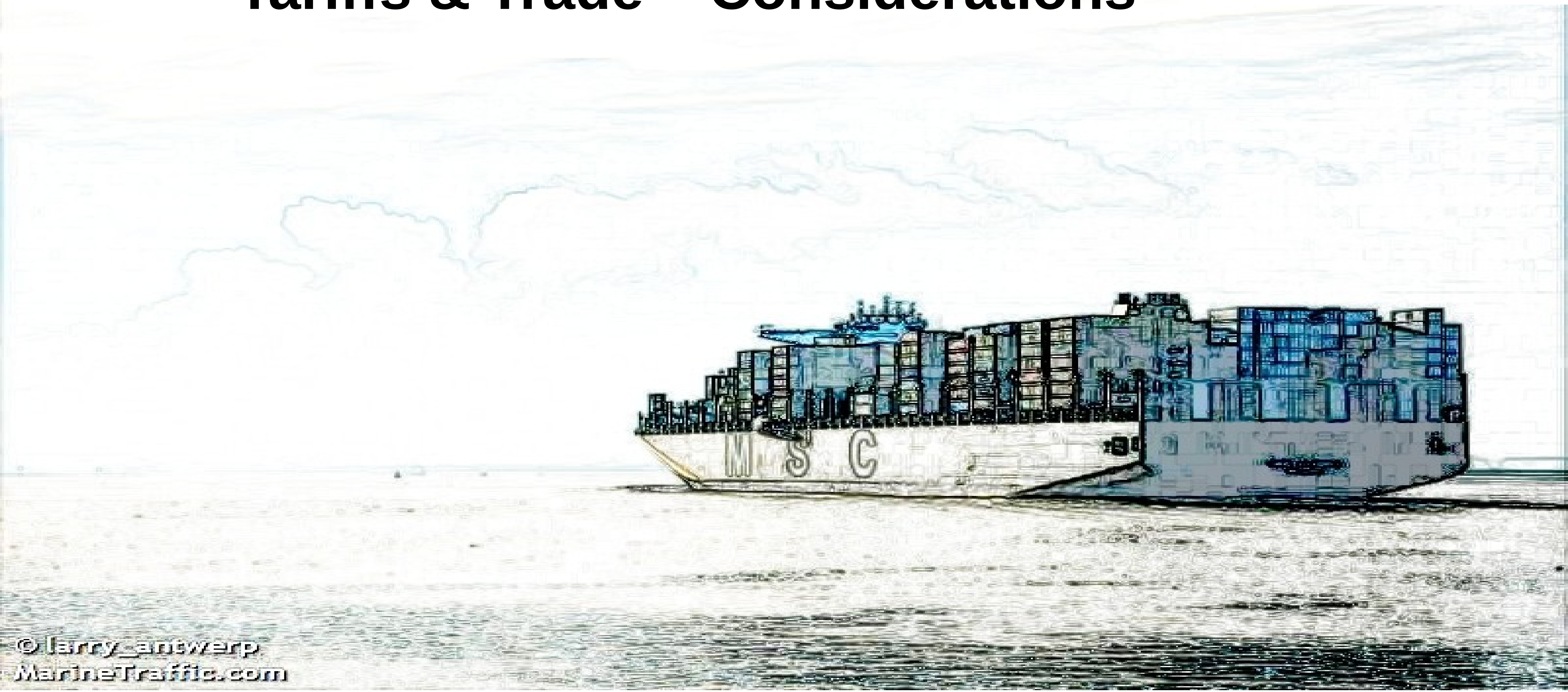
Future EF-based rules

- GHG NAAQS
- National LCFS under Section 211

Role of EPA Endangerment Finding (EF) Review Extends Beyond EPA

Agency	Affected Programs	Dependency on Endangerment Finding
EPA	Clean Air Act GHG rules	Central legal basis
DOT (NHTSA)	CAFE standards	Joint EPA-DOT vehicle rules
DOE	Appliance & building codes	GHG cost-benefit support
SEC	Climate risk disclosure	Scientific legitimacy & materiality
FERC	Pipeline & LNG reviews	Reference to climate harms
CEQ	NEPA GHG guidance	EPA's climate science authority
DOI	Federal leasing, land use	Social cost of carbon, mitigation
OSHA	Heat illness rules	Link between climate & worker safety

Tariffs & Trade – Considerations



On Tariffs & Trade Wars – Regulatory Authorities

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Immediate Implementation This Time

By relying heavily on the 1977 IEEPA provisions in Trade War 2.0, President Trump can:

- Avoid the one year review and investigation periods
- Utilize modification authority to increase or decrease tariffs as needed
- Implement tariffs immediately

9-12 month investigation periods required by US trade law provisions utilized in 2018-19	No investigation period required in expected trade law provisions used in 2025
Section 301, Trade Act of 1974	Section 203, International Emergency Economic Powers Act of 1977 (IEEPA)
Section 232, Trade Expansion Act of 1962	Section 338, Tariff Act of 1930
Section 201, Trade Act of 1974	Section 122, Trade Act of 1974

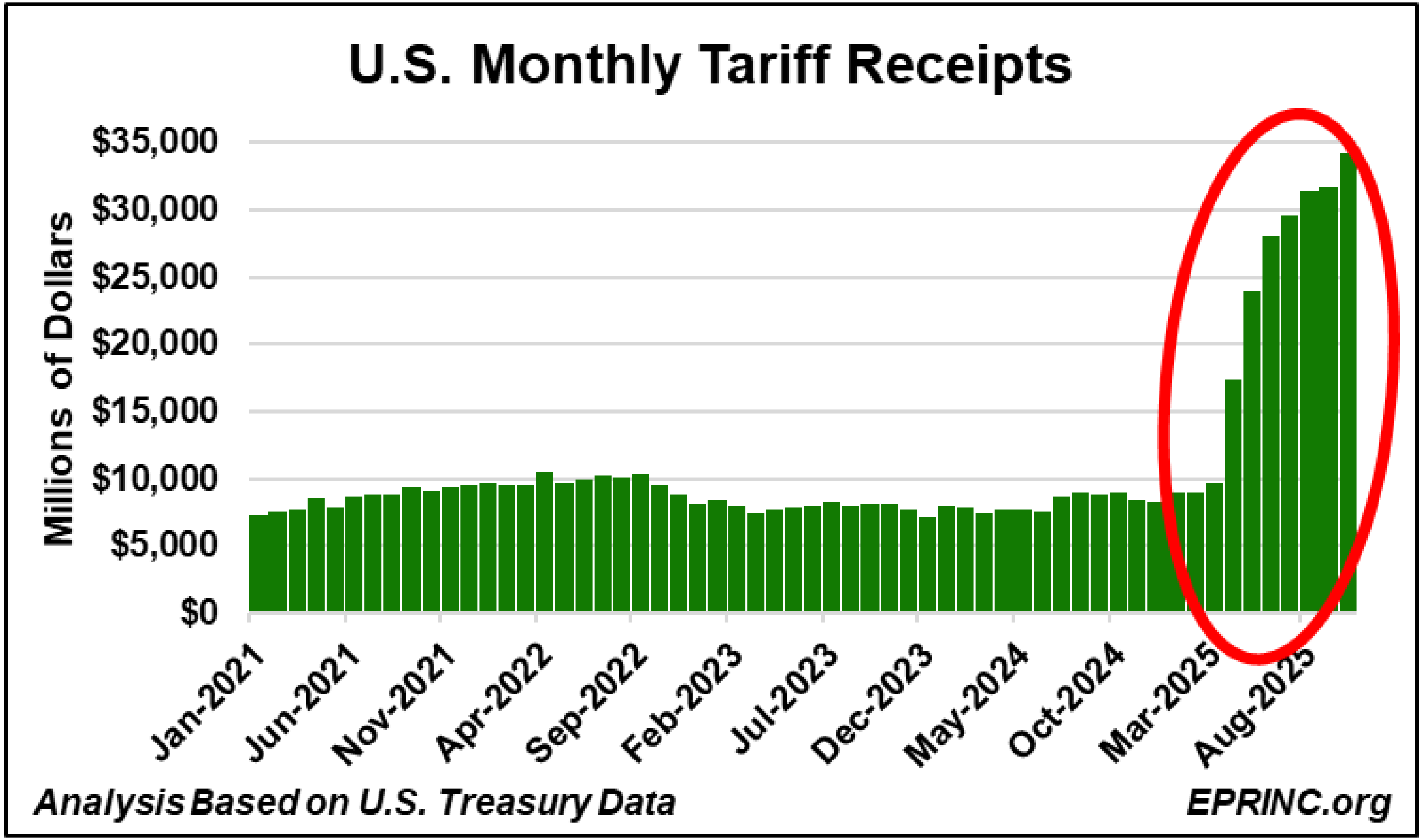
Supreme Court Decision Pending: *Learning Resources vs Trump (heard Nov 5)*

Source: (1) Bloomberg, "A Roadmap Through Trump's Tariff Realities and Trade War Drama" (Shawn Donnan & Anna Wong). Bloomberg Economics.

The Long Shadow of William McKinley / APR 2025 / page 15

From Mitsubishi UFJ Financial Group

Tariffs – Impacts?



U.S. tariff Revenue is on track to reach a record total of $335 billion in 2025.

But is that enough?

U.S. Treasury – Eleven Months through August 2024

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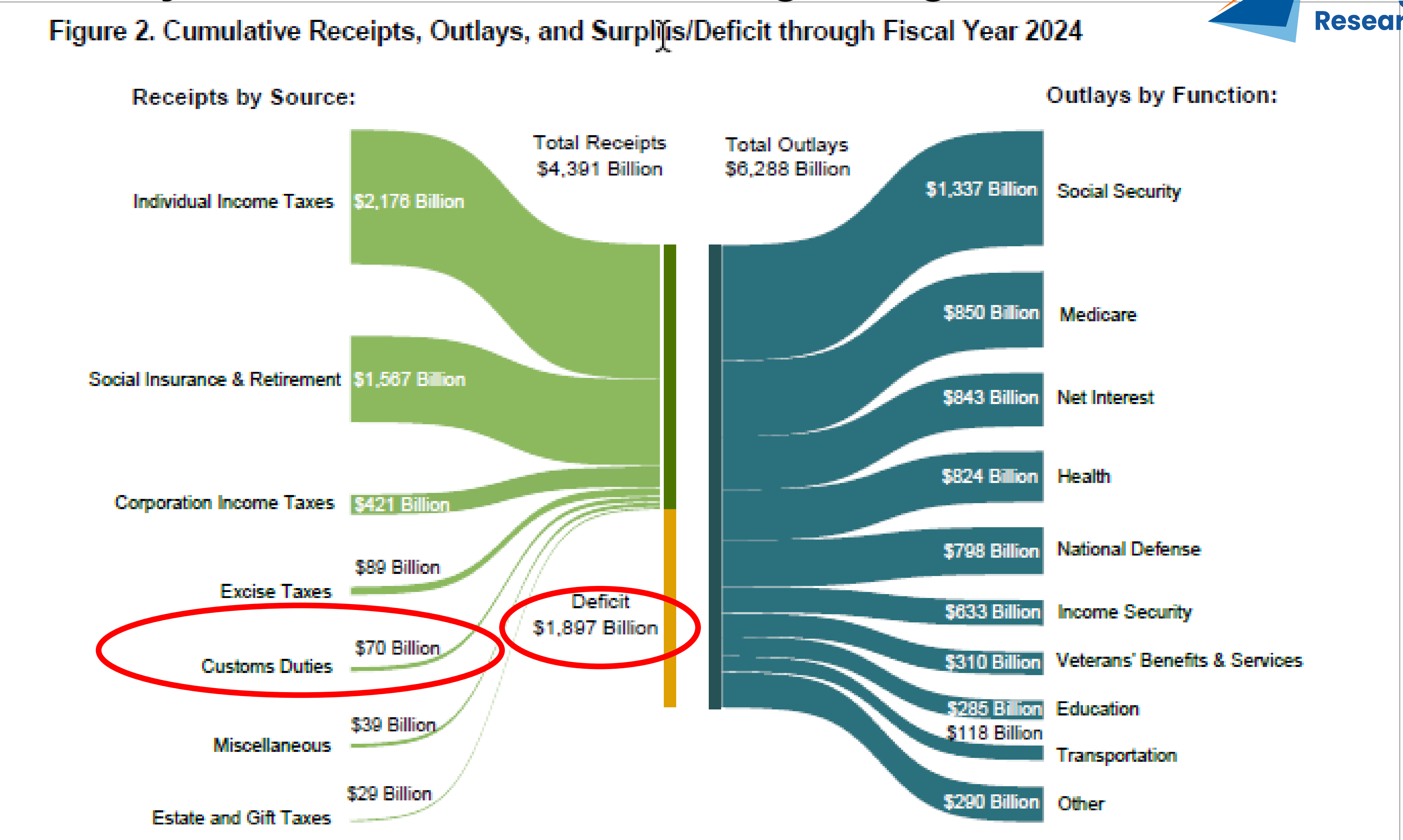
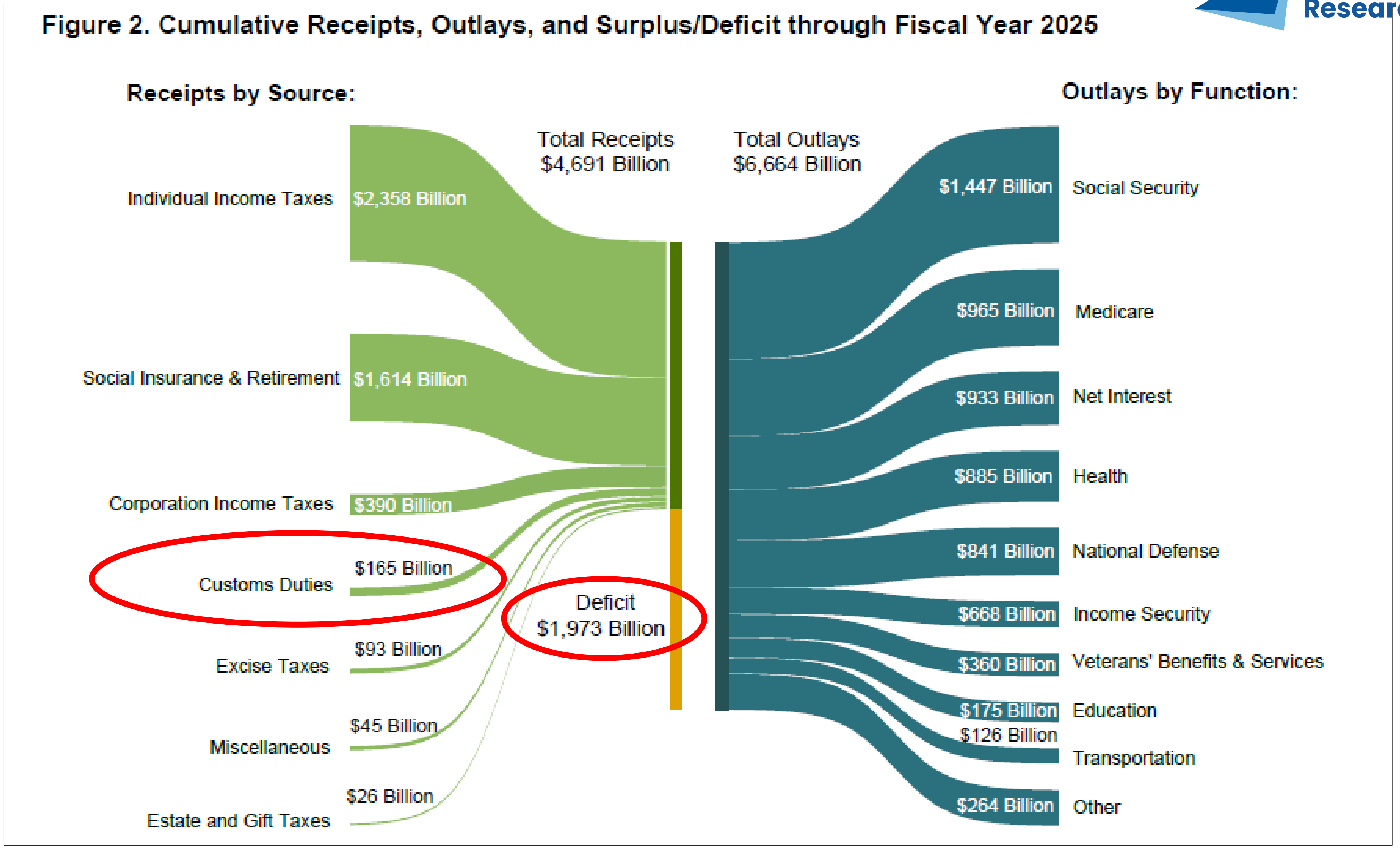


U.S. Treasury – Eleven Months through August 2025



U.S. Energy Dominance: The Case of the EU – Progress?

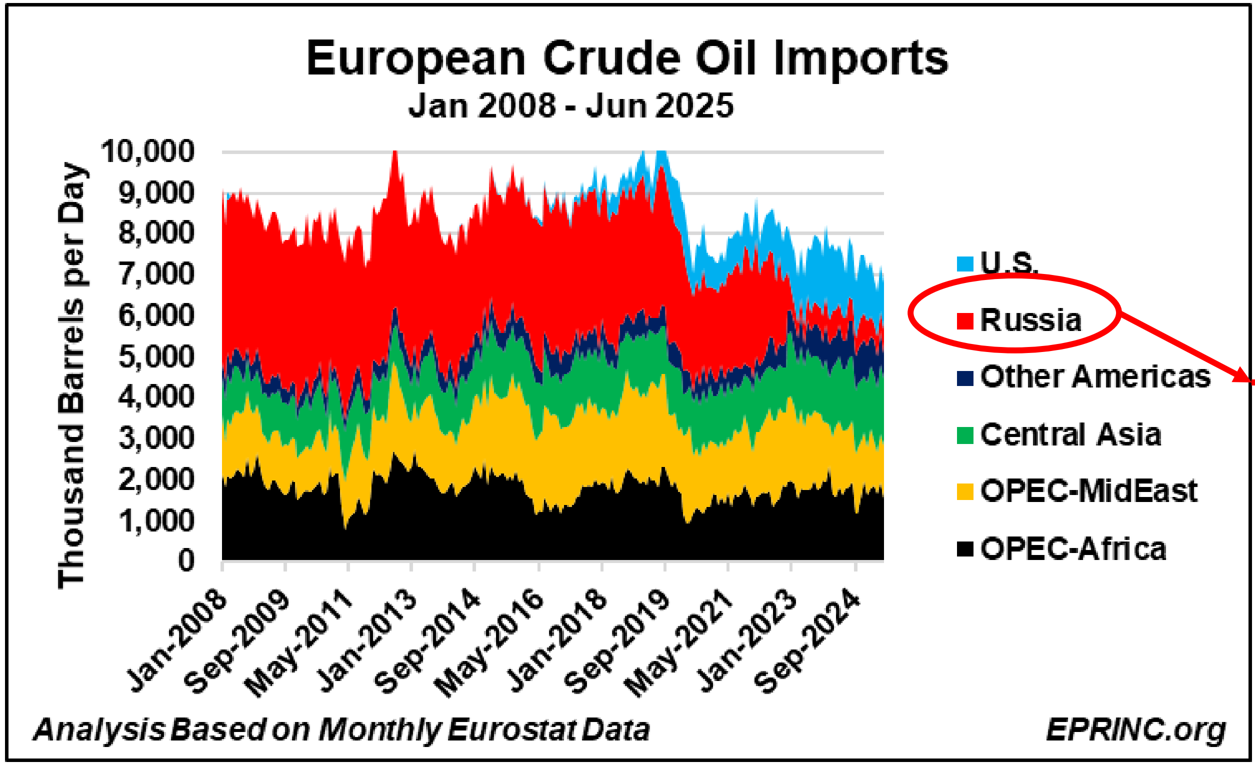
European Imports of U.S. Energy and Displacing Russian Exports …

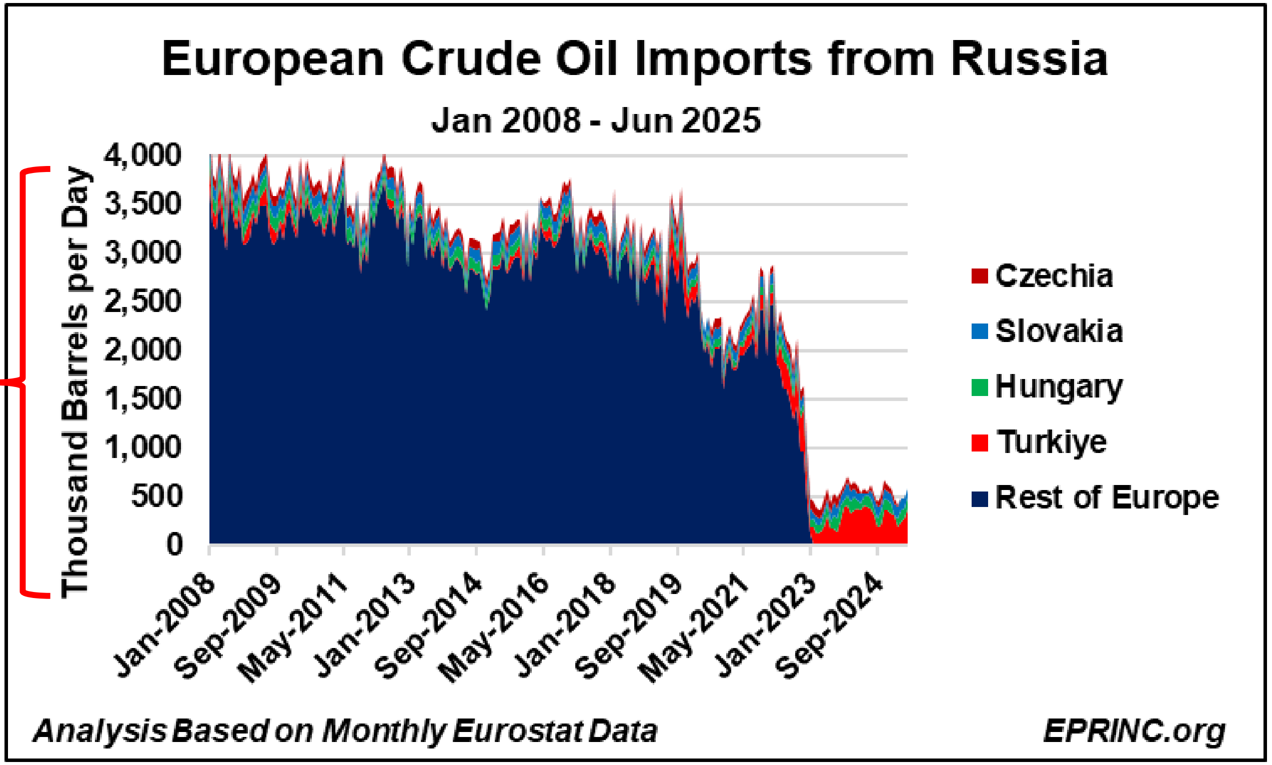
On July 28, 2025, the Trump administration concluded a nonbinding framework agreement for the EU to purchase $750 billion of U.S. energy over the course of three years ($250 billion per year).

Shortly afterwords, Axios reported that European Commission President Ursula von der Leyen added, "We still have too much Russian LNG that is coming through the back door ... to our European Union," concluding, "... We want to absolutely get rid of Russian fossil fuels, and therefore it is much welcome to purchase the more affordable and better LNG from the United States."

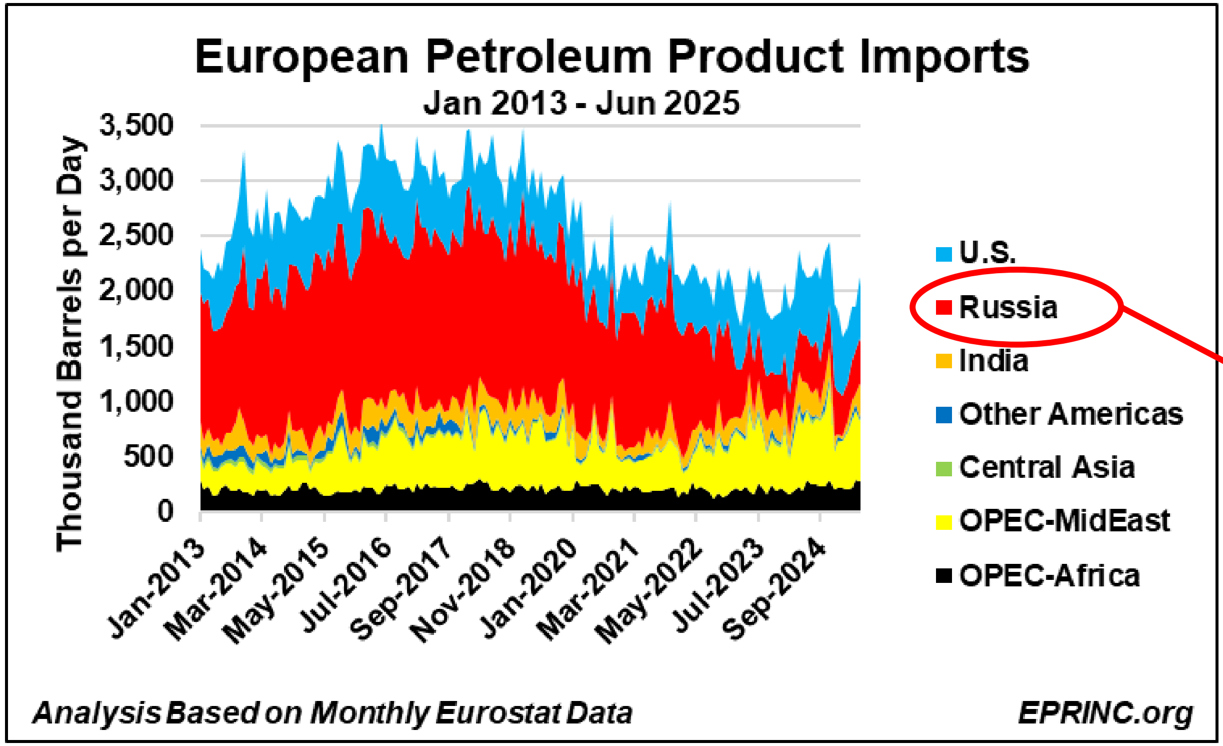
…but is this too little too late???

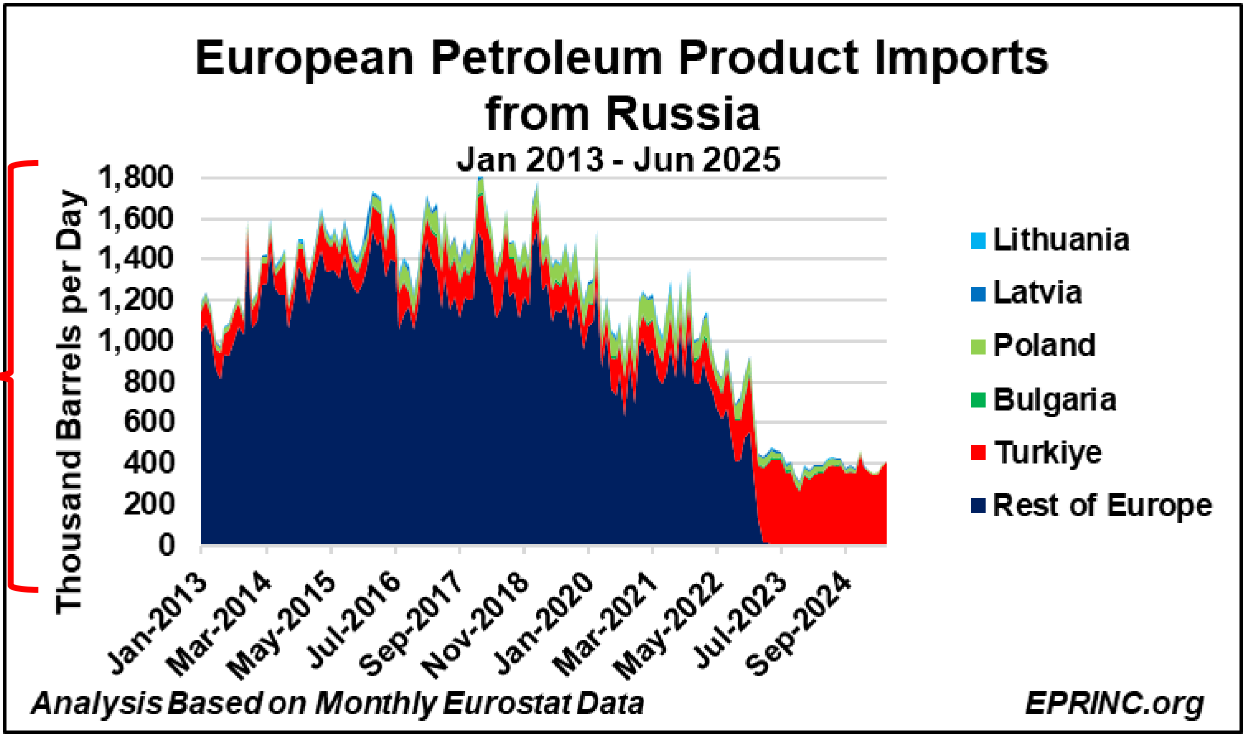
European Imports of U.S. Energy and Displacing Russian Exports – Crude Oil



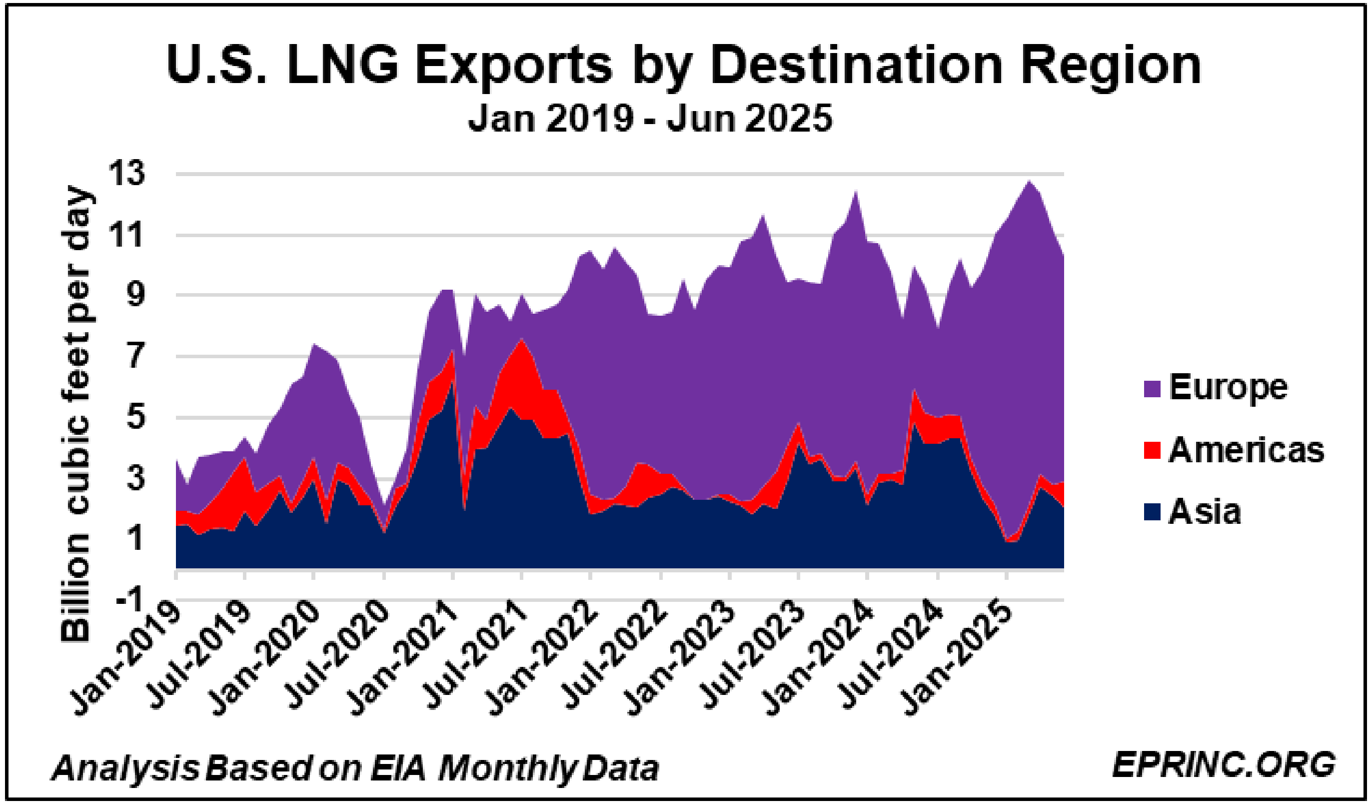


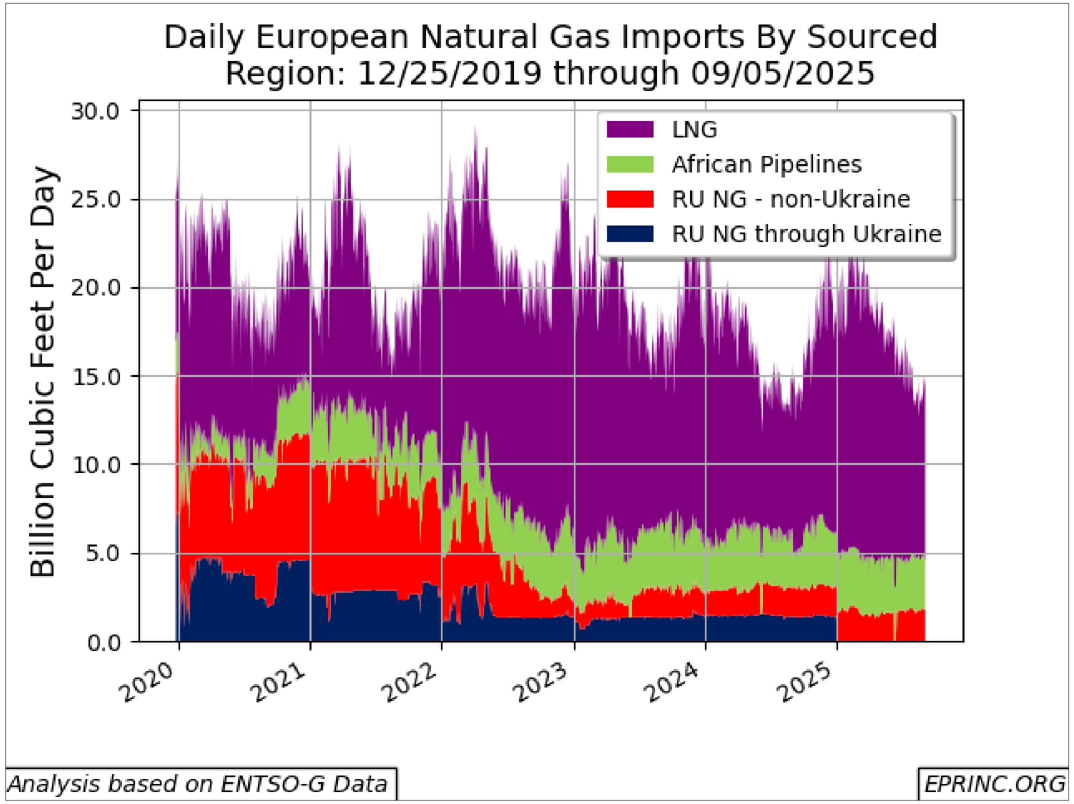
European Imports of U.S. Energy and Displacing Russian Exports – Petroleum Products



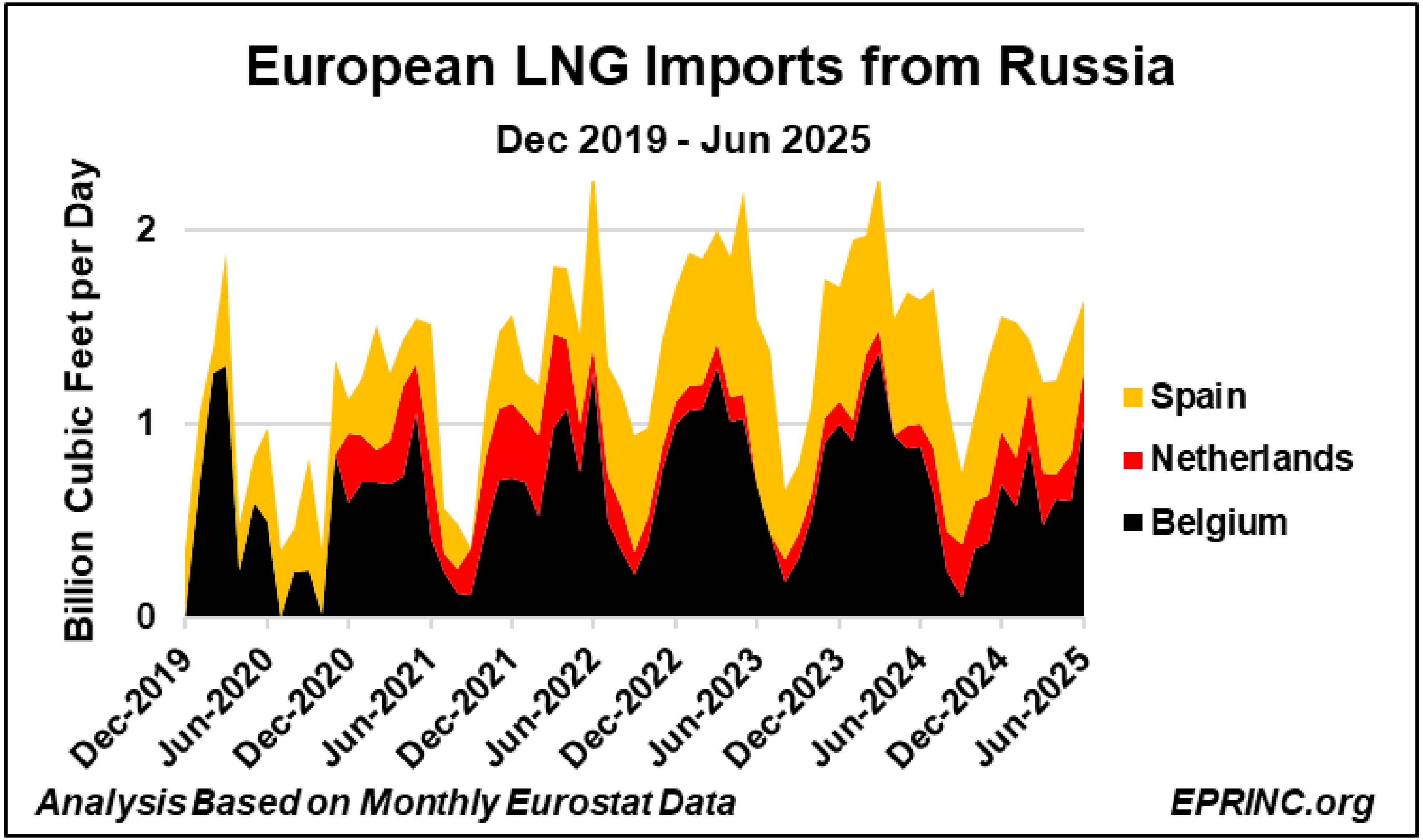


European Imports of U.S. Energy and Displacing Russian Exports – Natural Gas

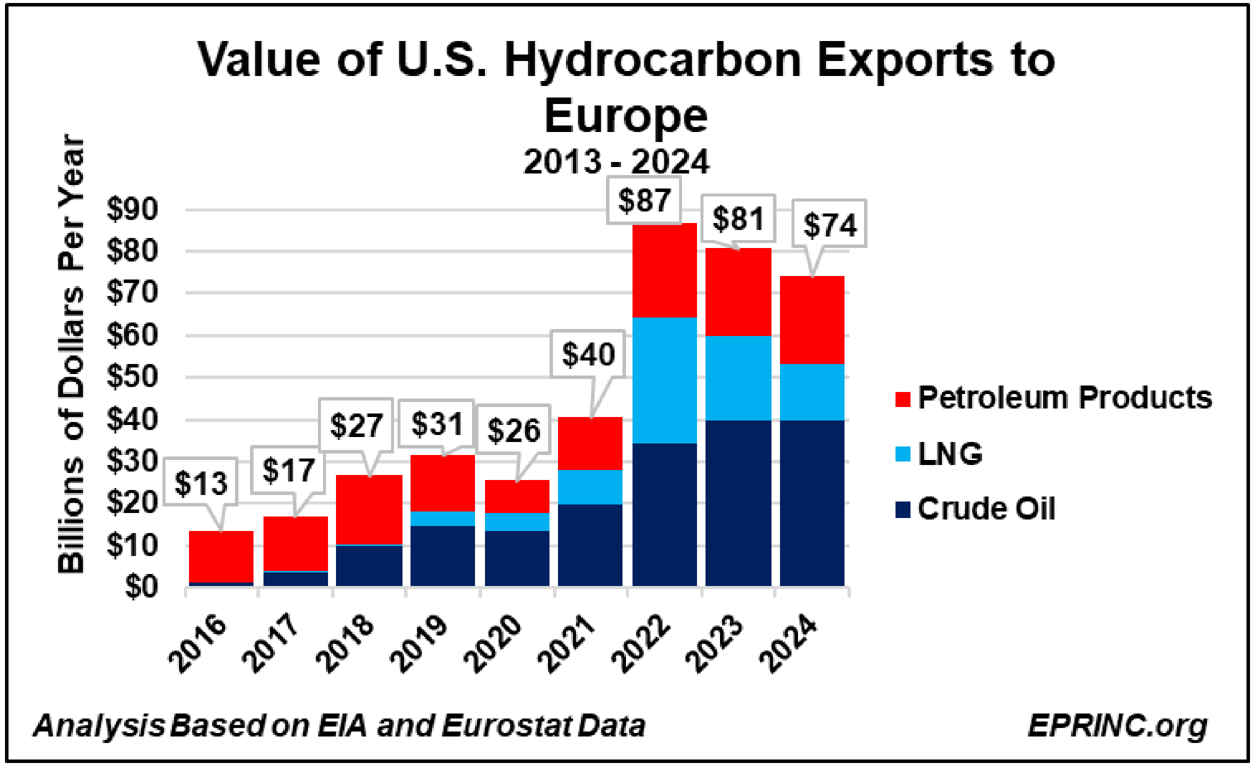


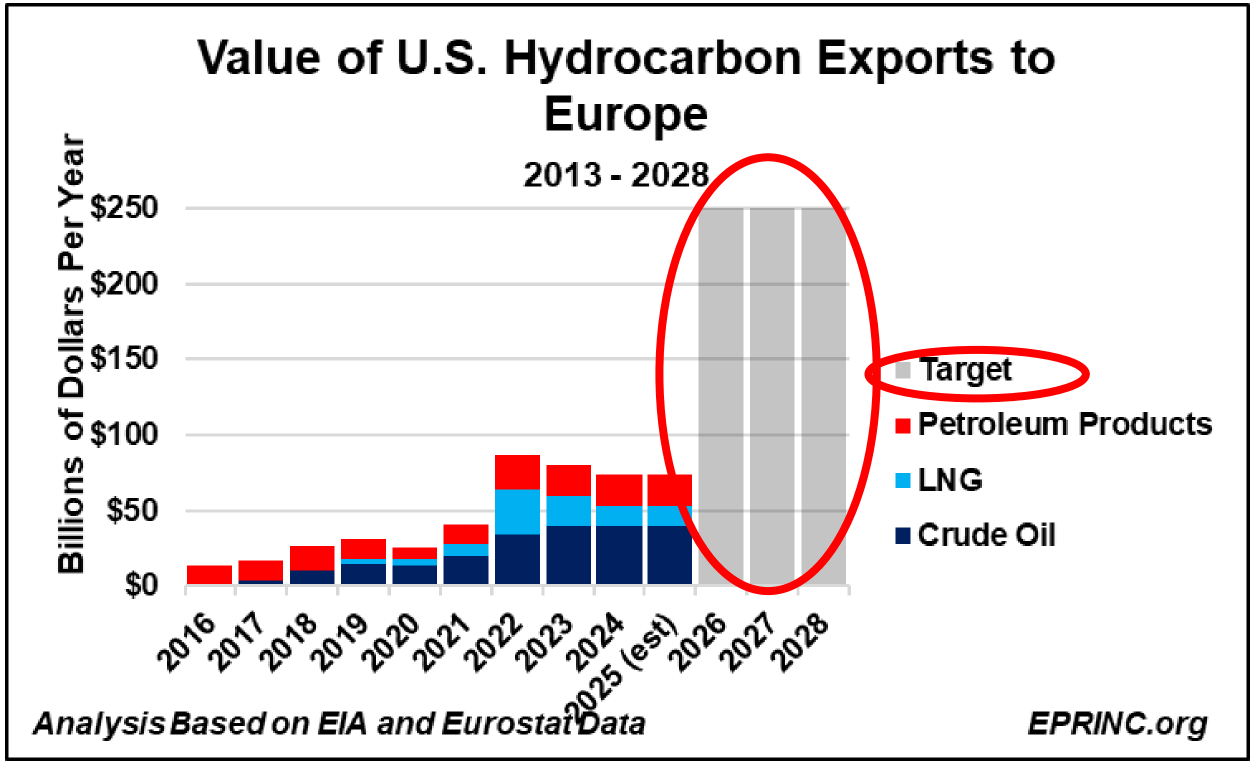


European Imports of U.S. Energy and Displacing Russian Exports – Natural Gas

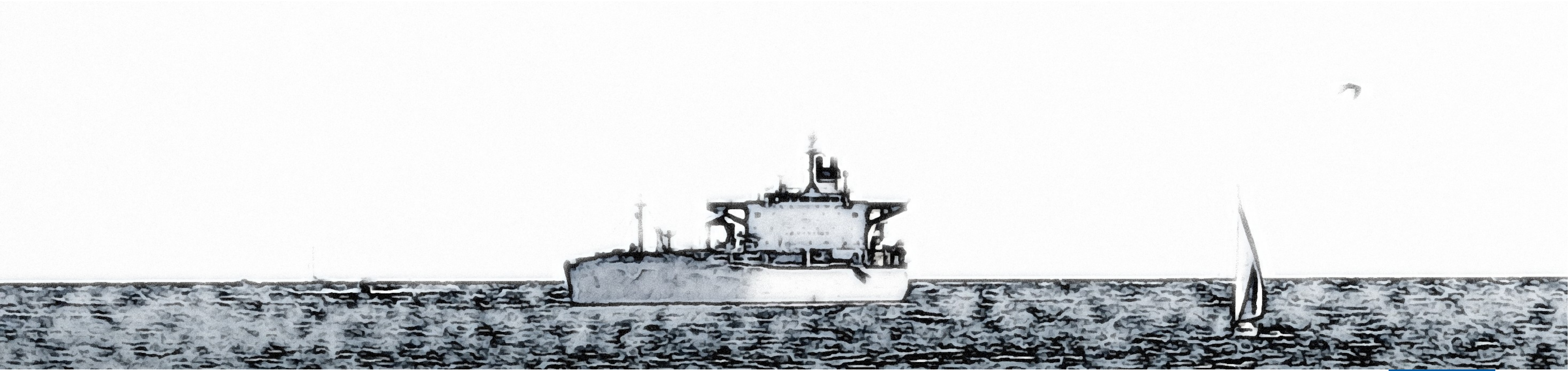


European Imports of U.S. Energy and Displacing Russian Exports: Putting It All Together

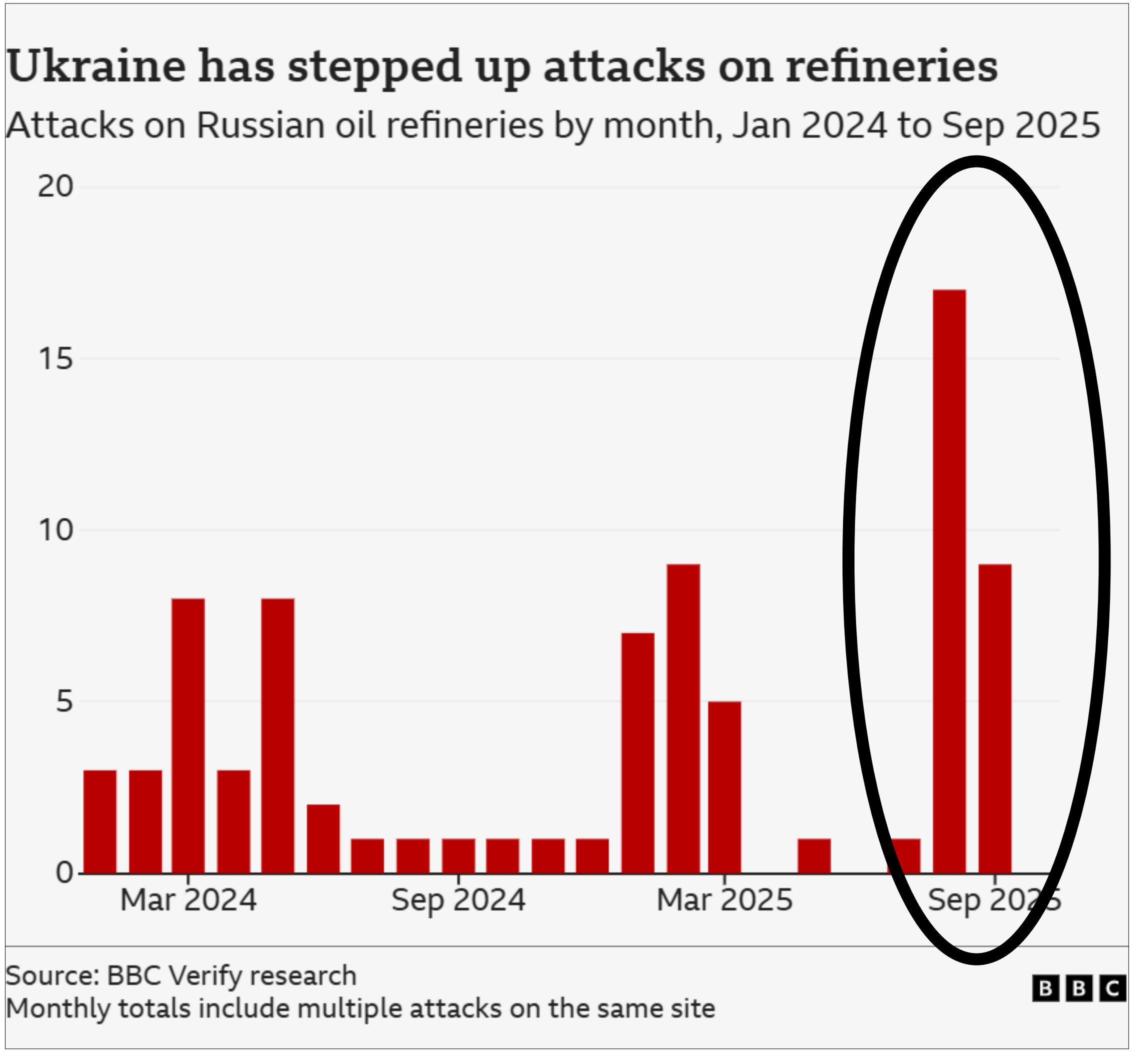




Sanctions Policy – Russia



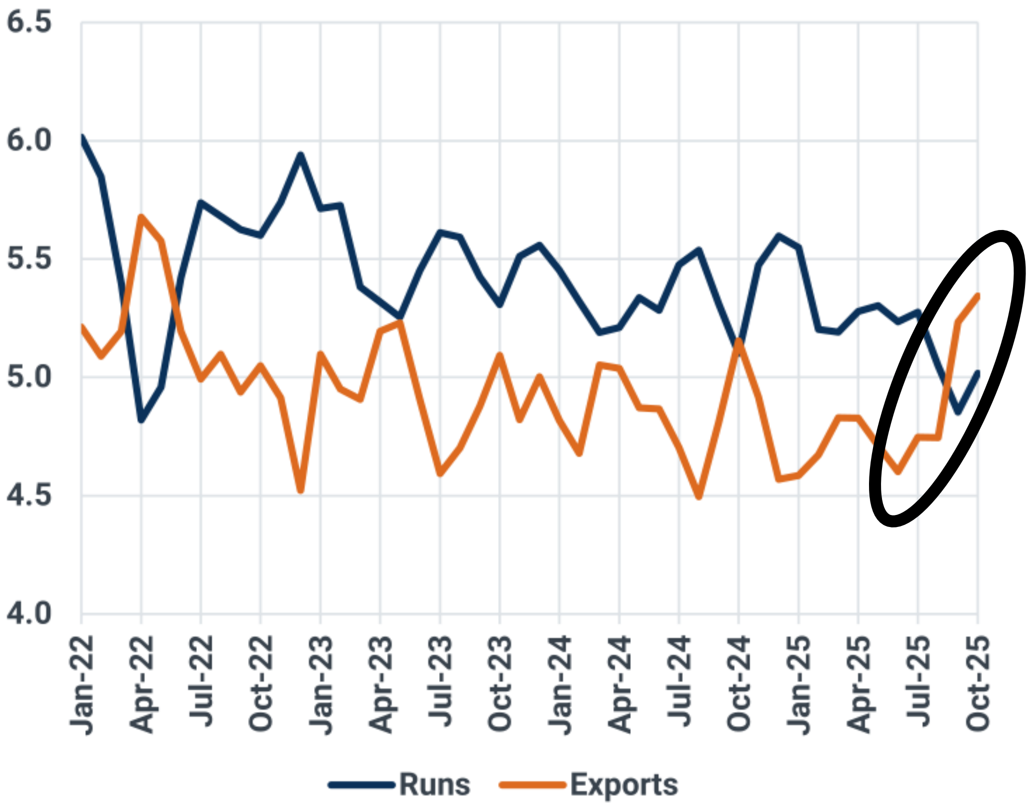
Ukraine's Impairment of Russian Crude and Products Production & Exports



Inverse balance: refinery outages free up crude for export

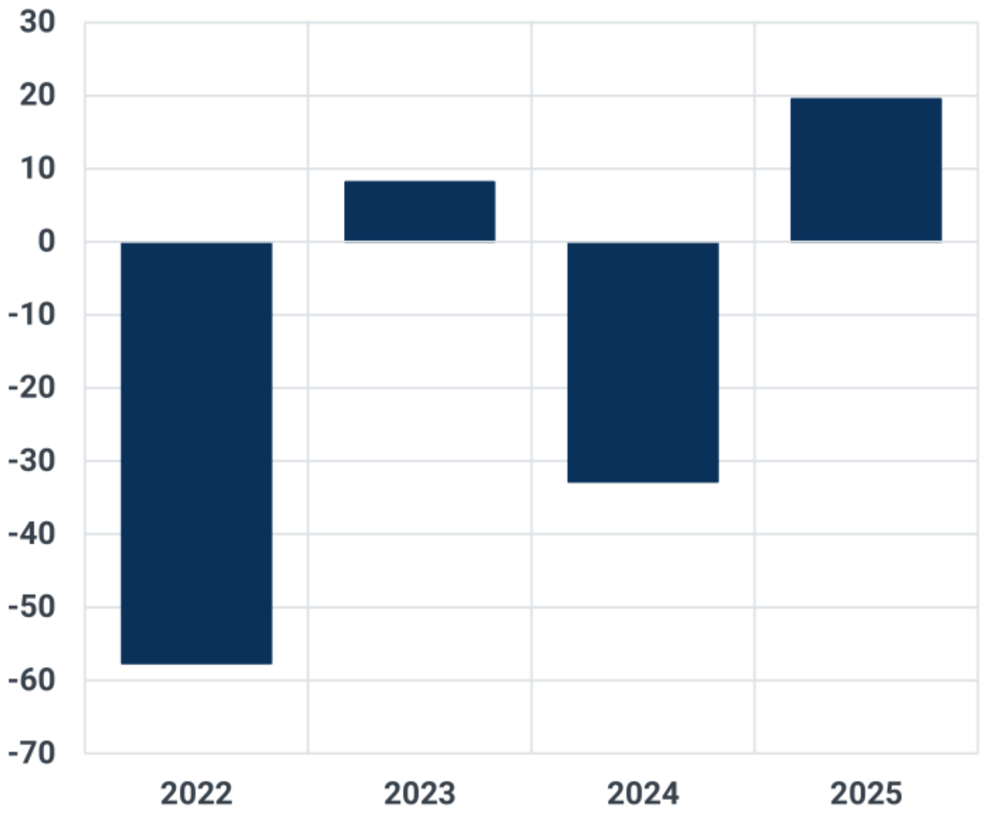
The system adjusts by channeling volumes away from domestic consumption and toward exports

Russian refinery runs and oil exports, Mbd



Source: Kpler

Degree of substitution between refining runs and crude exports, kbd



Source: Kpler

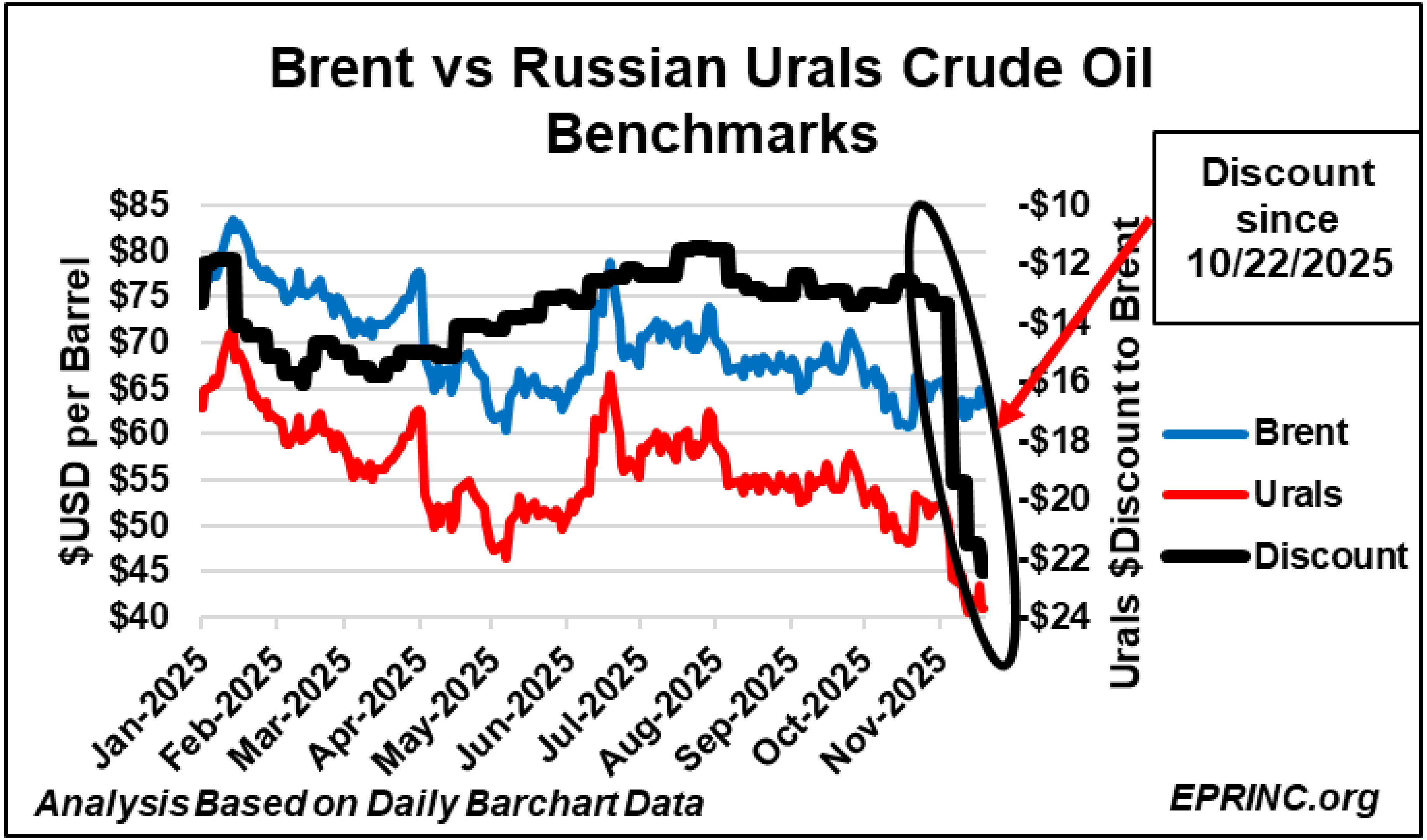
Kpler's Conclusions on Ukraine's Attacks on Russian Energy Infrastructure

- **A swift return of Russian refining capacity any time soon remains unlikely.**

- **Transportation fuel shortages in Russia's domestic market are here to stay, increasing the probability of product export curbs.**

- **Turkey is looking to diversify their product imports away from Russian sourced.**

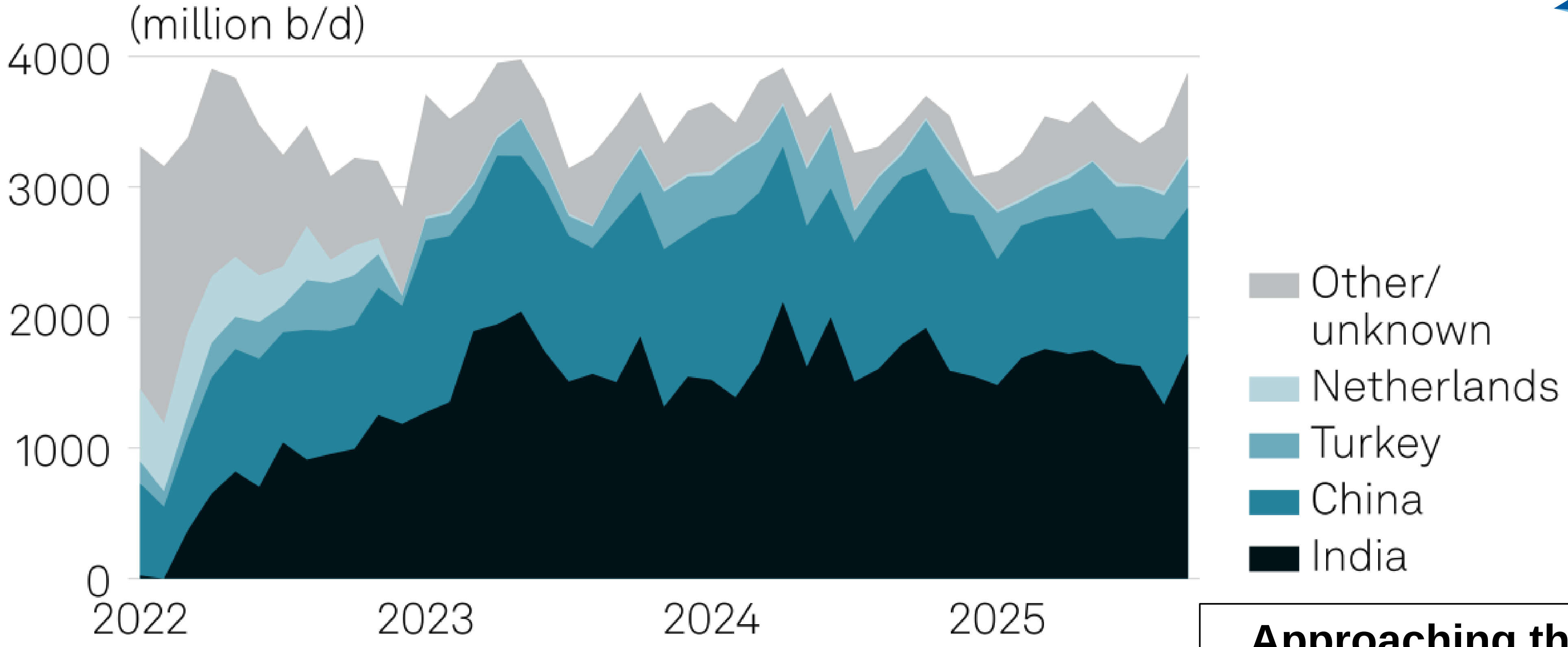
Impact of Recent U.S. and EU Sanctions on the Price of Russian Urals Crude Oil



In mid-October 2025, the U.S. announced additional sanctions against RosNeft and Lukoil, Russia's two largest oil producers, to go into effect on November 21.

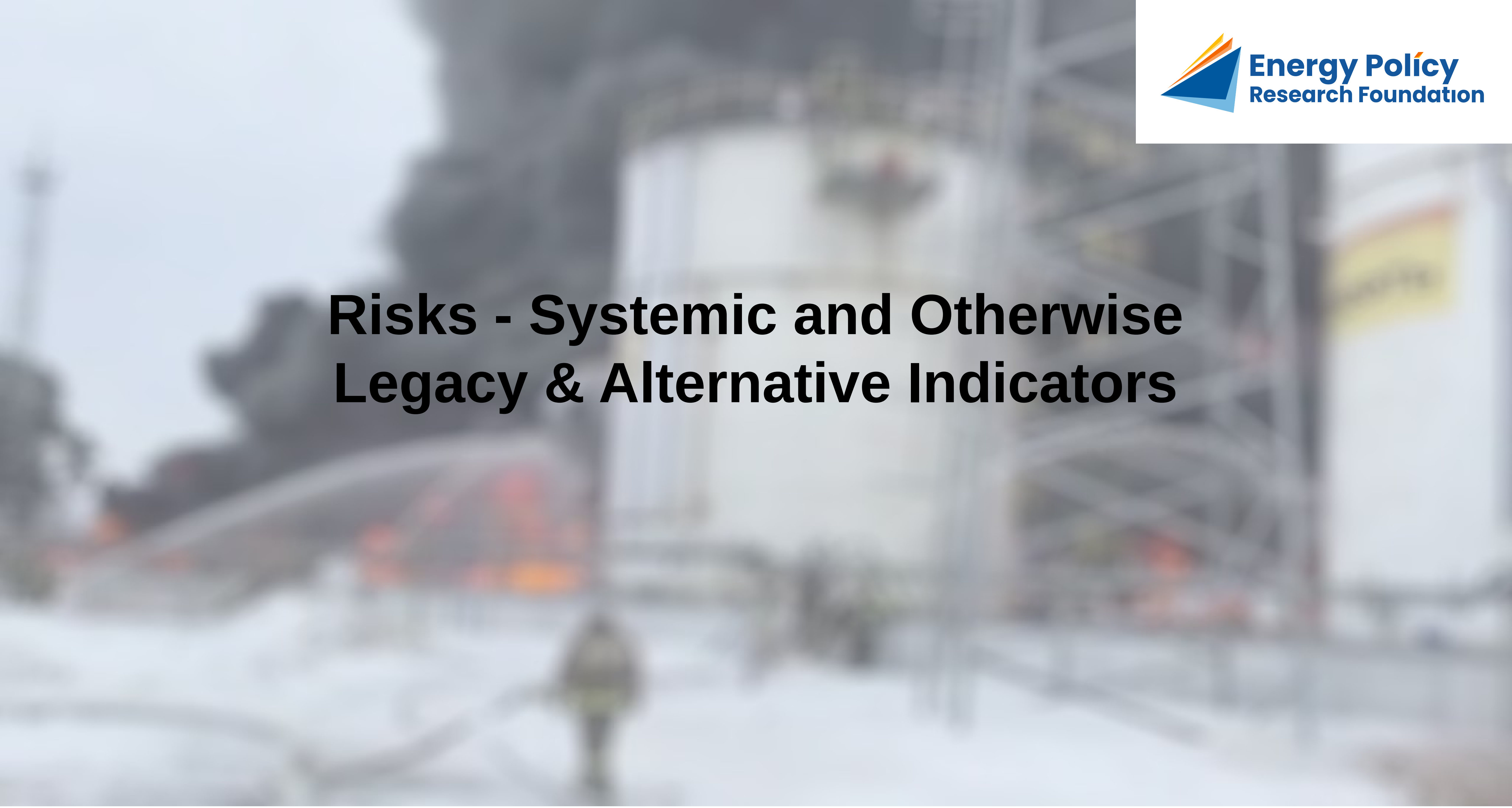
The EU announced an additional set of sanctions banning imports of Russian coal, LPG, and future LNG investments, along with sanctions against an additional 117 tankers of Russia's "shadow fleet" for a total of 558.

Russian seaborne crude exports by destination

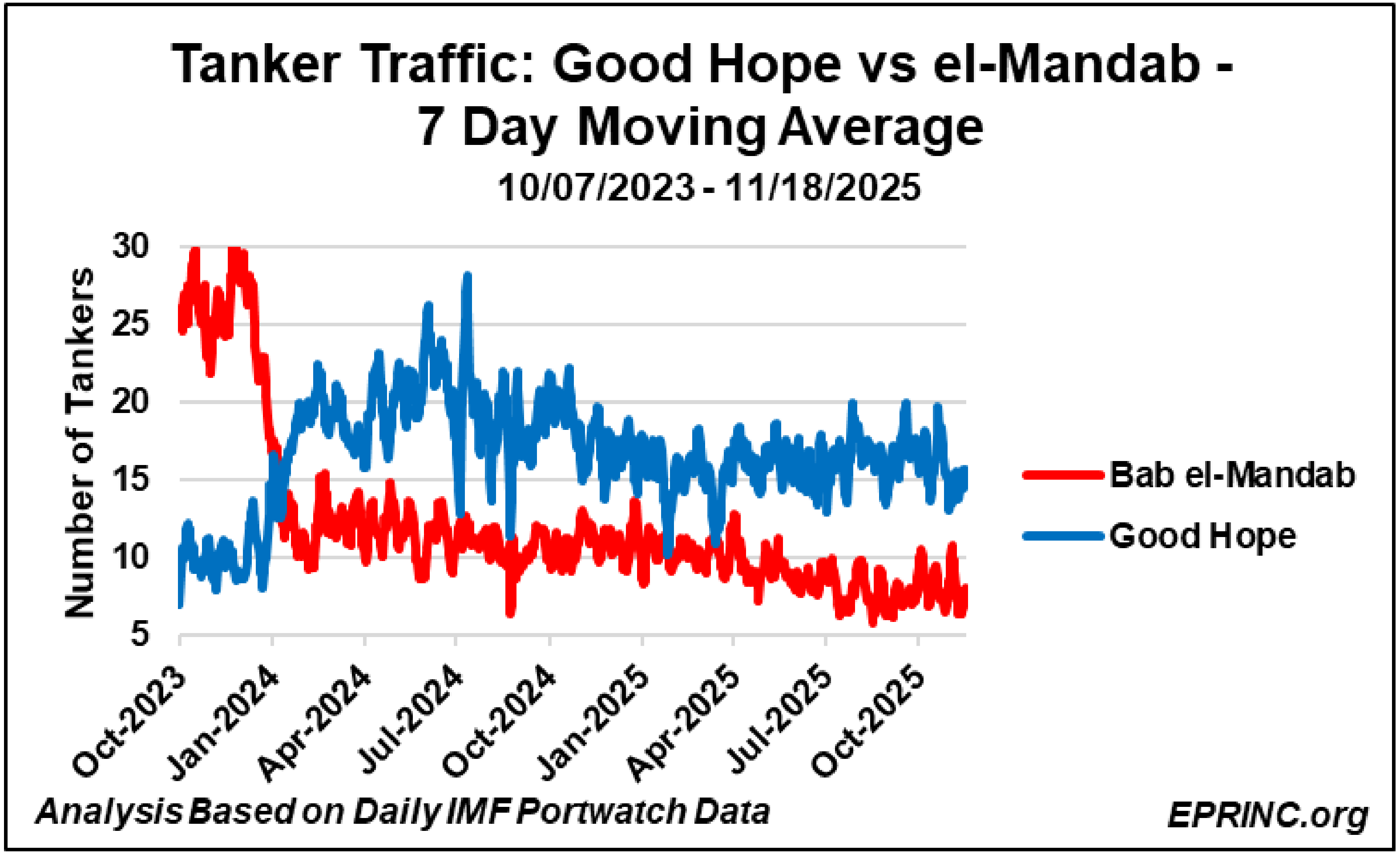


Note: Includes ship-to-ship transfers by observed location
Source: S&P Global Commodities at Sea

Approaching the deadline, Russia has been exporting 3.5 million barrels per day (MB/d) of crude oil; of this, approximately 1.7 MB/d was shipped to China, 1.1 MB/d to India, and 0.35 MB/d to Türkiye.



Risks - Systemic and Otherwise
Legacy & Alternative Indicators

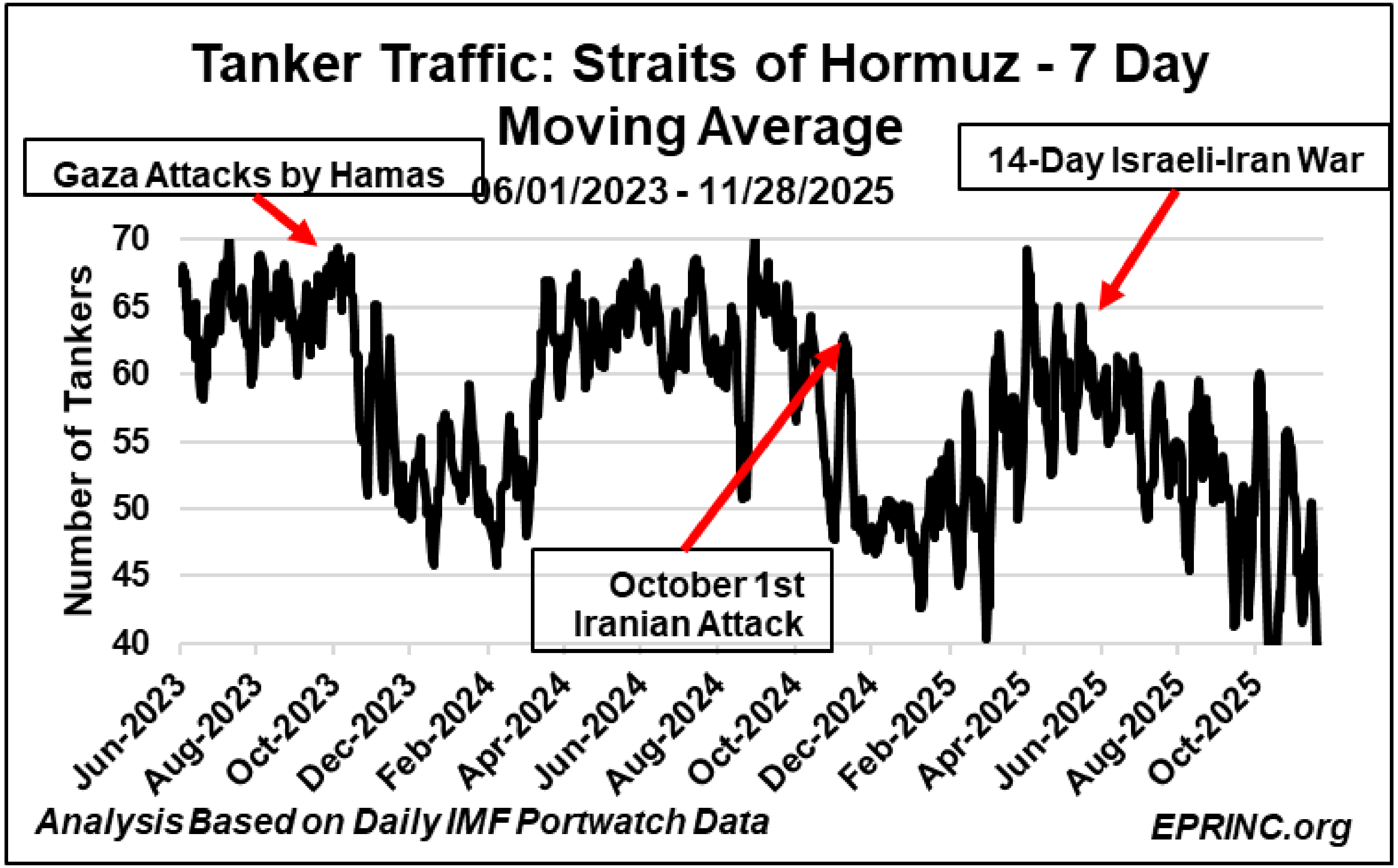


Pre-October 2023, about 20% of total Suez vessel traffic was comprised of tankers moving crude oil.

Notably, in the months that followed, some of the tanker traffic crossing the Bab al-Mandab strait at the southern entrance to the Red Sea was attacked by pirates, drones, and missiles from the Iranian-backed Houthi-controlled region of Yemen.

The attacks and threats have permanently altered the distribution of tanker traffic with ships diverting around the Cape of Good Hope resulting in Red Sea tanker traffic dropping to 40% of its pre-war level.

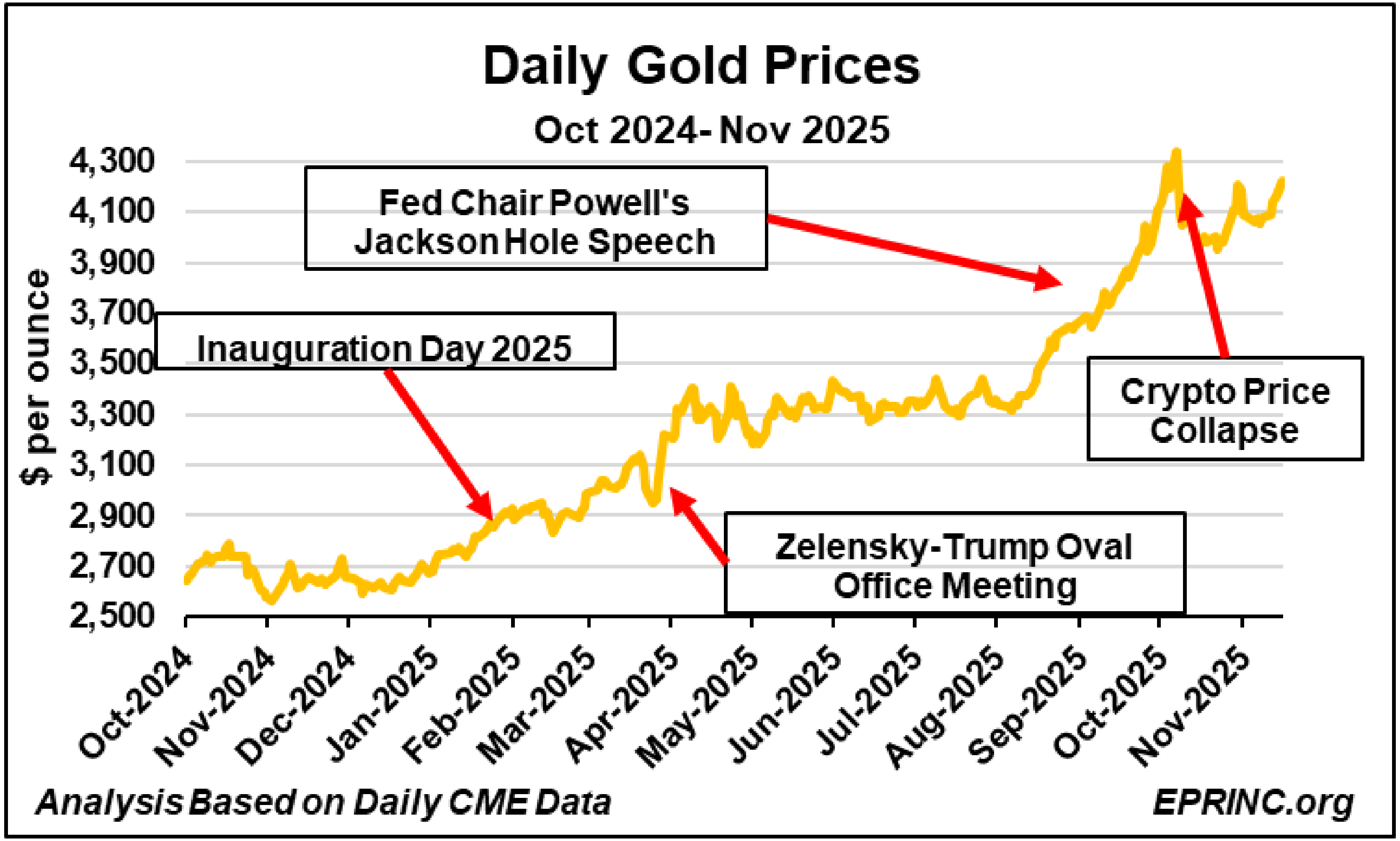
In response, Cape of Good Hope-routed tanker traffic has increased, but levels remain considerably less than that of Red Sea traffic loss.



In the four months following October 2023, there had been a noticeable decline of tanker traffic through the Hormuz Straits; subsequently, there was a partial recovery.

Following the September 2024 regional escalation, along with speculation of an Israeli retaliation against Iran's October 1st attack, Hormuz traffic has begun to decline again.

Some period of recovery with another decline following the 14-day War.



Two primary catalysts for gold prices since the election:
i) ad-hoc trade, tariff, and security negotiations, and;
ii) Chairman Powell's dovish Jackson Hole speech.
Neither provided a haven from policy chaos and currency debasement.

Risks / Possible Headwinds – A Watchlist

- **Private Credit: localized or systemic problem?**
  - **Blue Owl / Meta $27 Billion Louisiana datacenter off-balance sheet accounting**
  - **Collateral fraud - TriColor Holdings and First Brands Group**
- **OpenAI's $250 Billion contracted computation liability - will it deliver?**
- **Opacity in Crypto Markets leading to sell-off at beginning of October**
- **Postponed/Canceled Economic Reports: GDP, Labor, Inflation**
- **Geopolitical whiplash: Venezuela, Russia/Ukraine, China/Taiwan**

Risks – Electricity

- Expected demand requirements in the next five years
  - GridStrategies' 2024 estimate that U.S. would need 125 GWs of new generation by 2030
  - GridStrategies' 2025 estimate that U.S. would need 166 GWs of new generation by 2030
- If relying solely on combined-cycle natural gas power, then
  - 125 GWs would require 22.5 BCF/d
  - 166 GWs would require almost 30 BCF/d
- Current gross U.S. natural gas exports (pipelined and LNG) are 24 BCF/d

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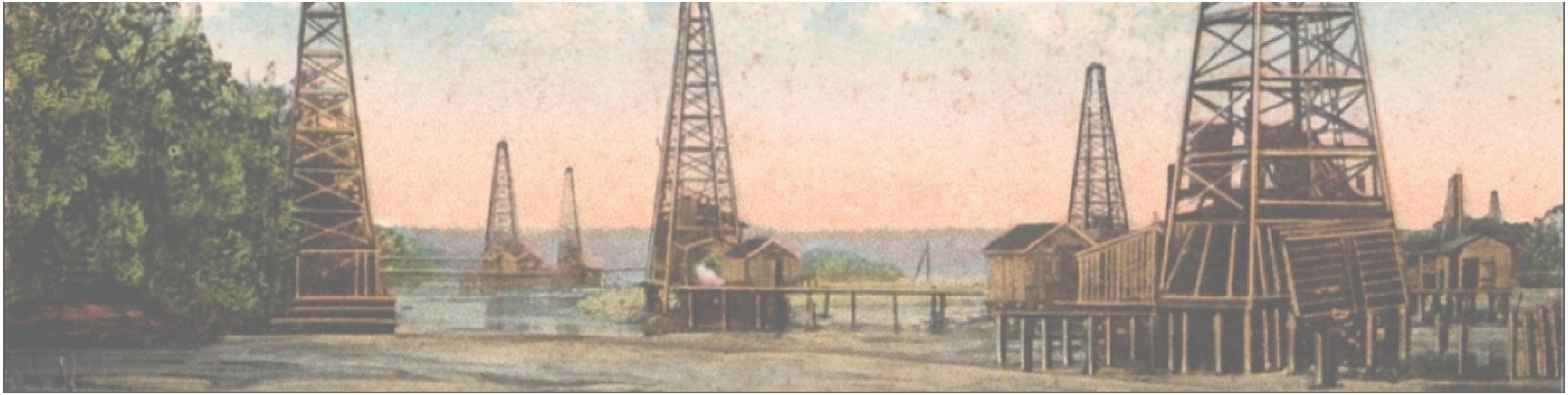
Risks – Electricity

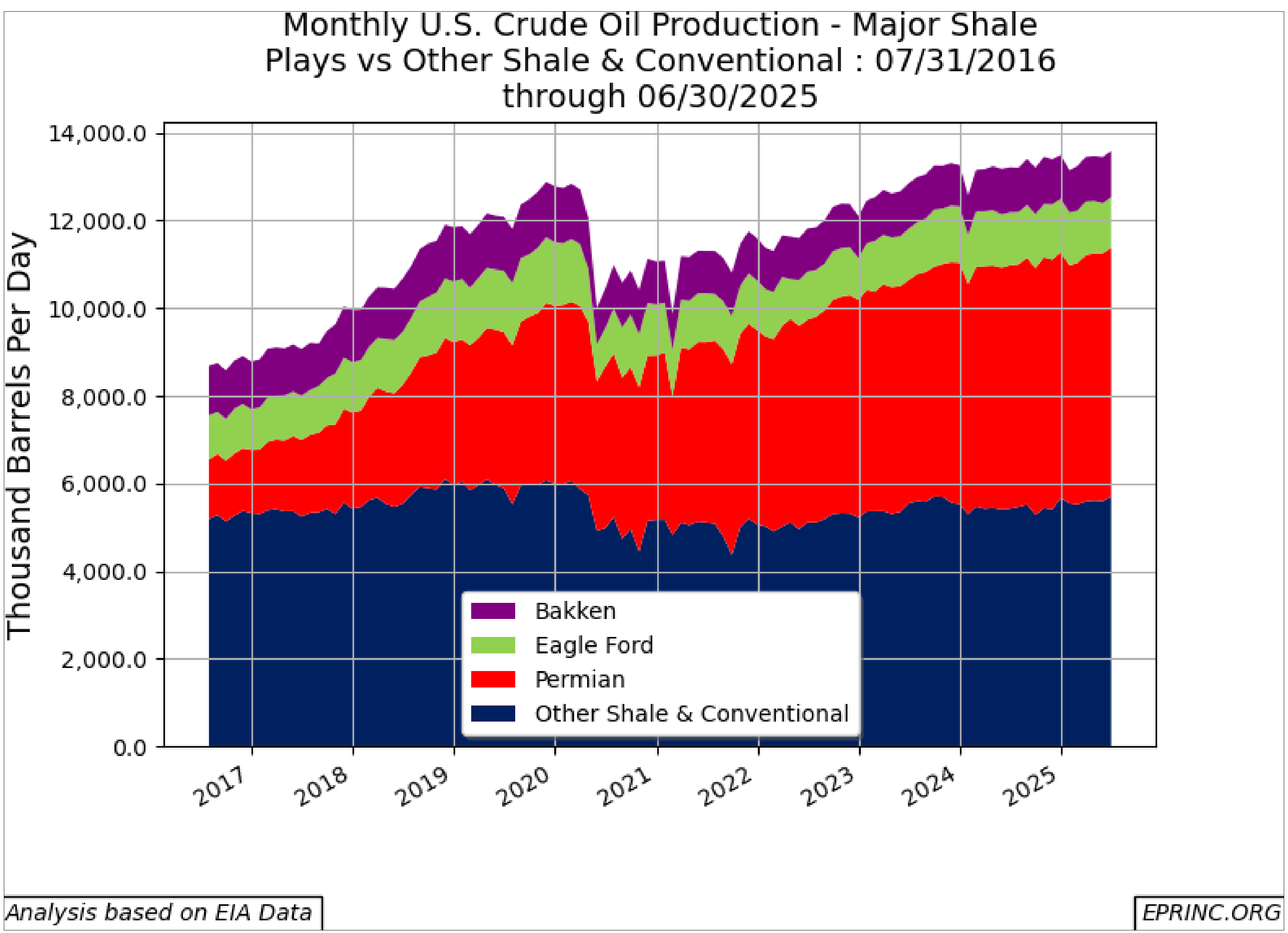
GridStrategies and other forecasters do not account for (or explain):

- hardware efficiency trends,
- project realization risks,
- timing uncertainties
- physical constraints
- transmission headroom
- queue congestion
- gas turbine lead times,
- water siting, labor, and other hard limits

Conclusion: need a planning approach that accommodates a range of uncertainty and minimizes risk.

Global Oil Markets – Select Views





Despite low prices and Dallas Fed survey claims, U.S. crude oil production continues to increase, albeit flattening a bit in recent months.

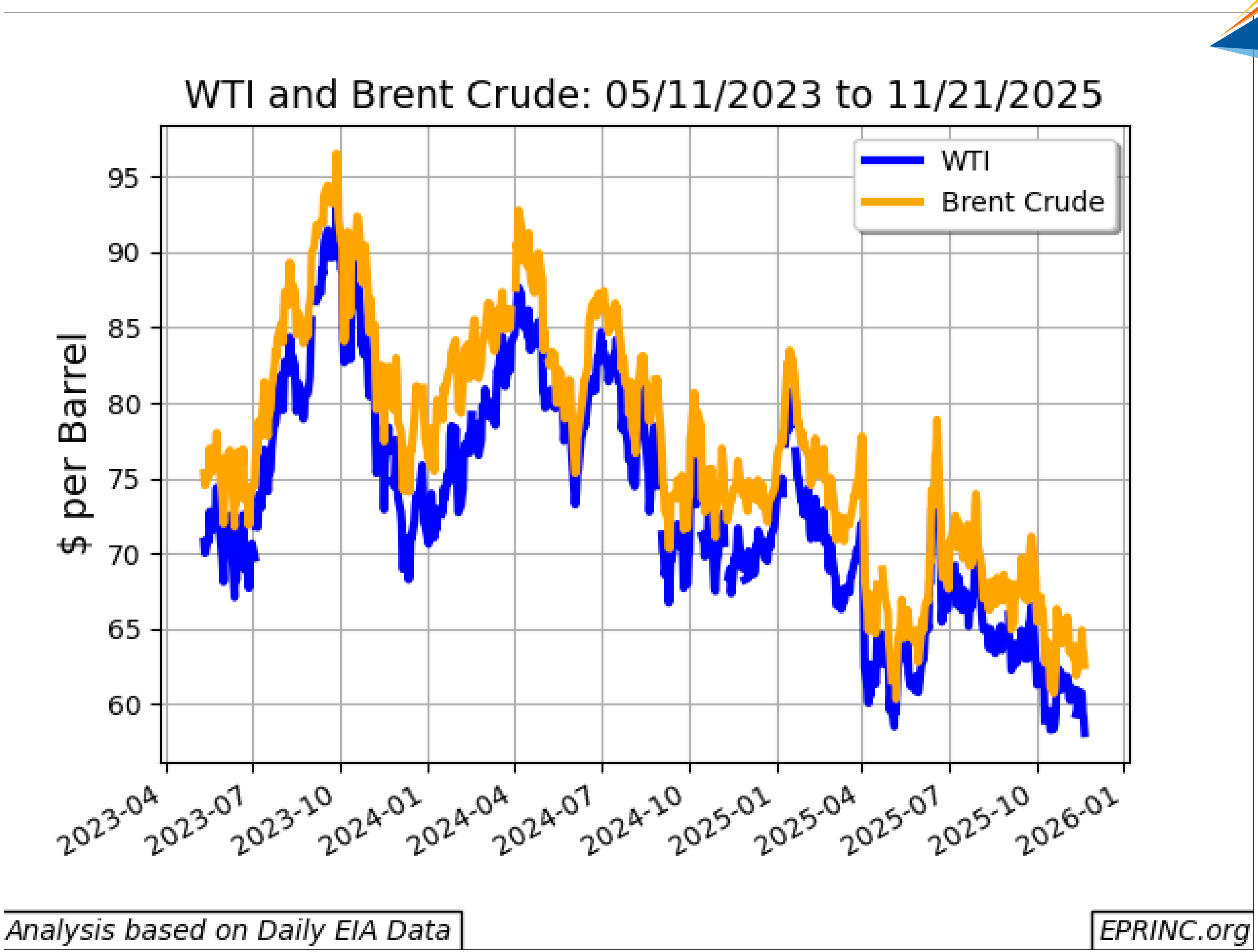
OPEC+ Recent Policy Shifts

Despite a weak market, OPEC+ is in the process of restoring 2.2 MB/d of cuts

- **December 2023: OPEC+ announces 2.2 MB/d of cuts; through several extensions are kept in place until April 2025.**

- **Ahead of summer 2025: OPEC+ declared output hikes of 411 kbd for July and June, 555 KB/d for August, 547 KB/d for September.**

- **August 8, 2025: OPEC+ agrees to unwind the last of the cuts.**


WTI and Brent Crude: 05/11/2023 to 11/21/2025
$ per Barrel
WTI
Brent Crude
95
90
85
80
75
70
65
60
2023-04
2023-07
2023-10
2024-01
2024-04
2024-07
2024-10
2025-01
2025-04
2025-07
2025-10
2026-01
Analysis based on Daily EIA Data
EPRINC.org

Whither U.S. Crude Oil Inventories?

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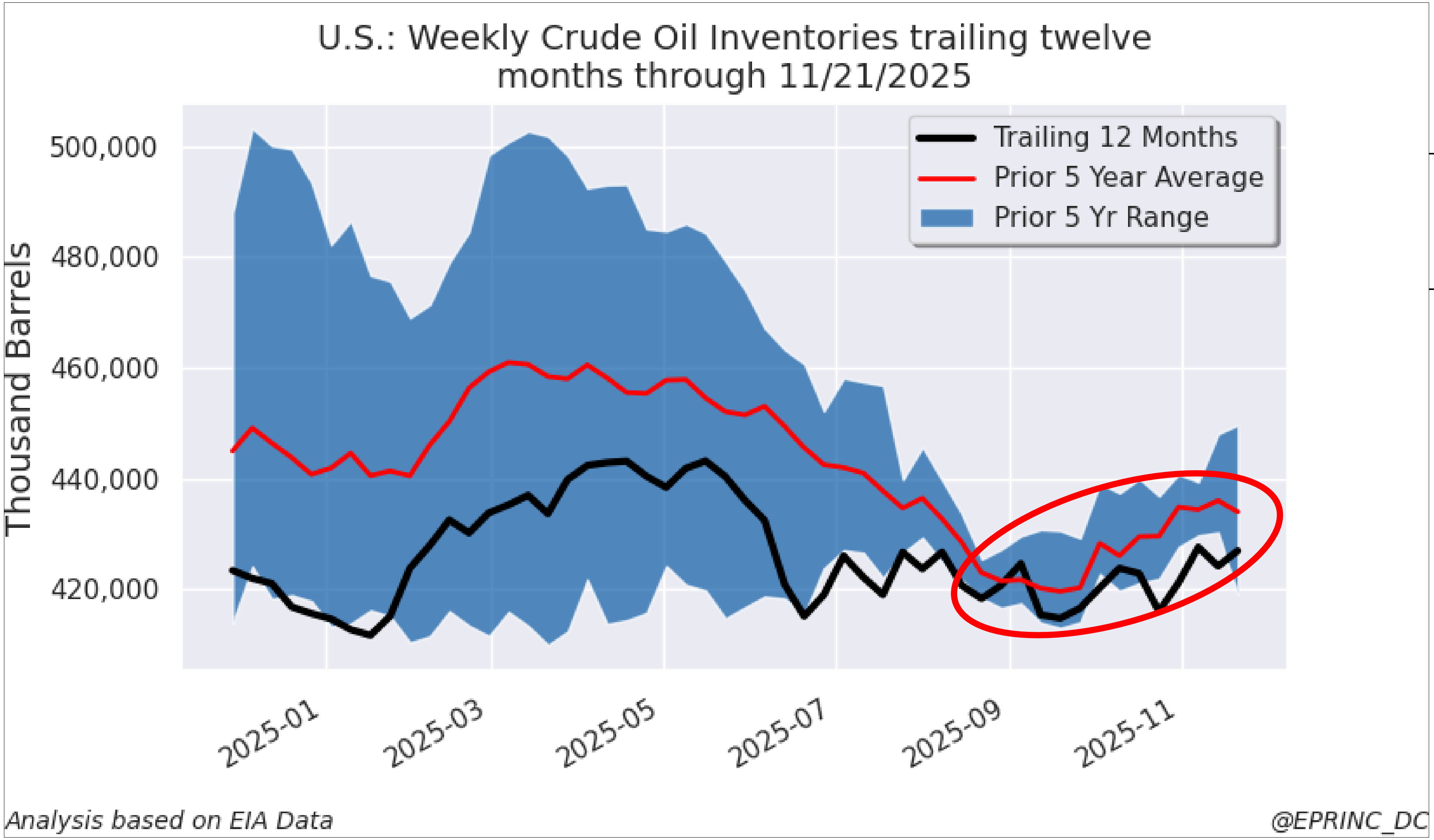
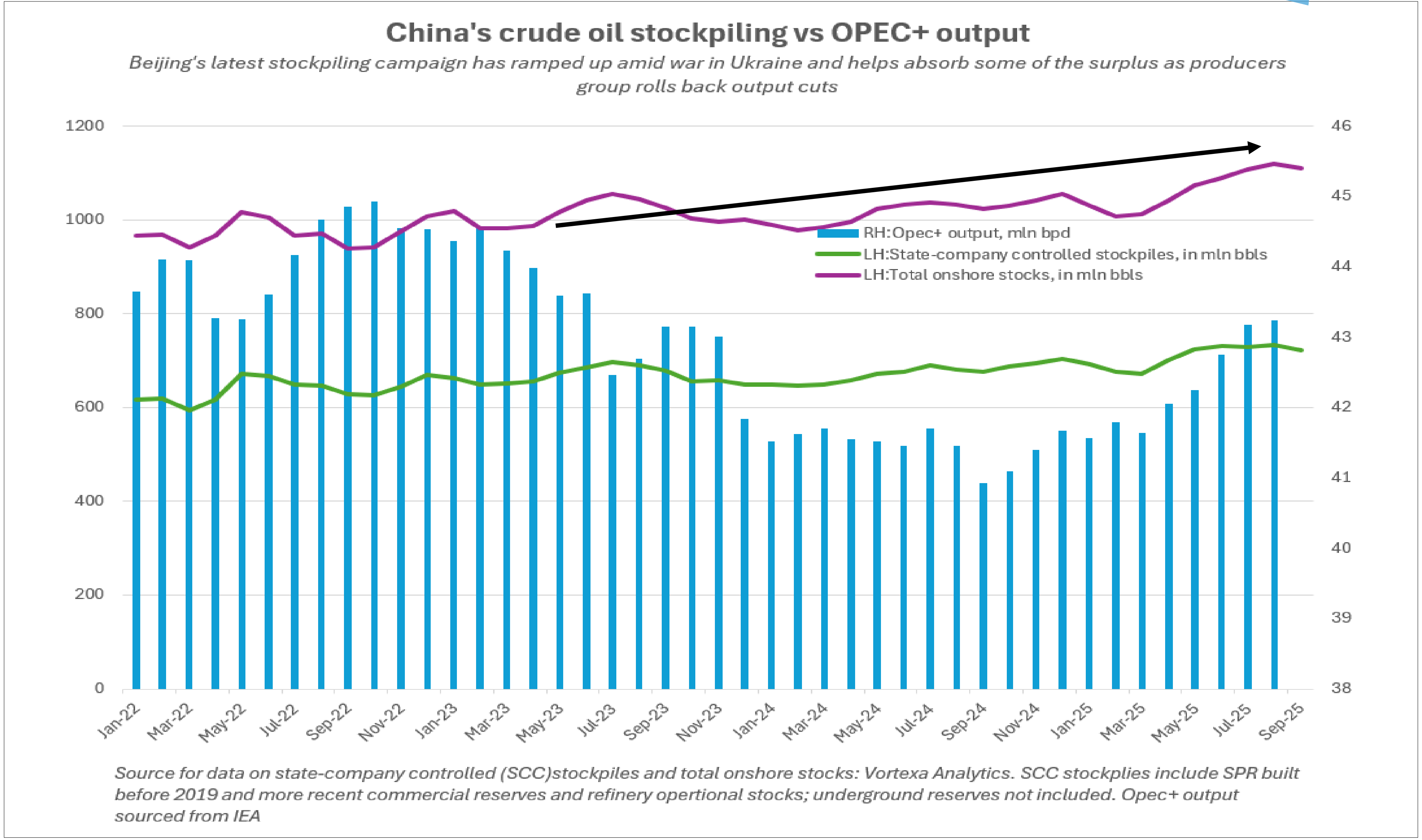


… no inventory builds this year …

Where Is Crude Going? – China, for now



Energy Transitions – A Comment

Energy Transitions - Technological

Major Technological Energy Transitions			
Source	**Application**	**Onset**	**Duration**
Muscles	to secure food supply and improve shelter	**300,000 BCE**	290,000 yrs
Draft Animals and Fire	for agriculture and to produce metals and other durable materials	**10,000 BCE**	6,000 yrs
Rivers and Wind	Use waterwheels and windmills	**4,000 BCE**	5,500 yrs
Coal, Oil, and Natural Gas	Led to the Industrial Revolution and increased mobility	**17th Century**	250 yrs
Electricity	Beginning of the widespread use of electricity	**Late 19th Century**	70 yrs
Nuclear Power, Wind Turbines PV Cells	Energy sources for Electricity generation	**Mid-20th Century**	
Source: Vaclav Smil - "World History and Energy"		***EPRINC***	

Energy Transitions
Induced / Government Policy: <u>Examples</u>

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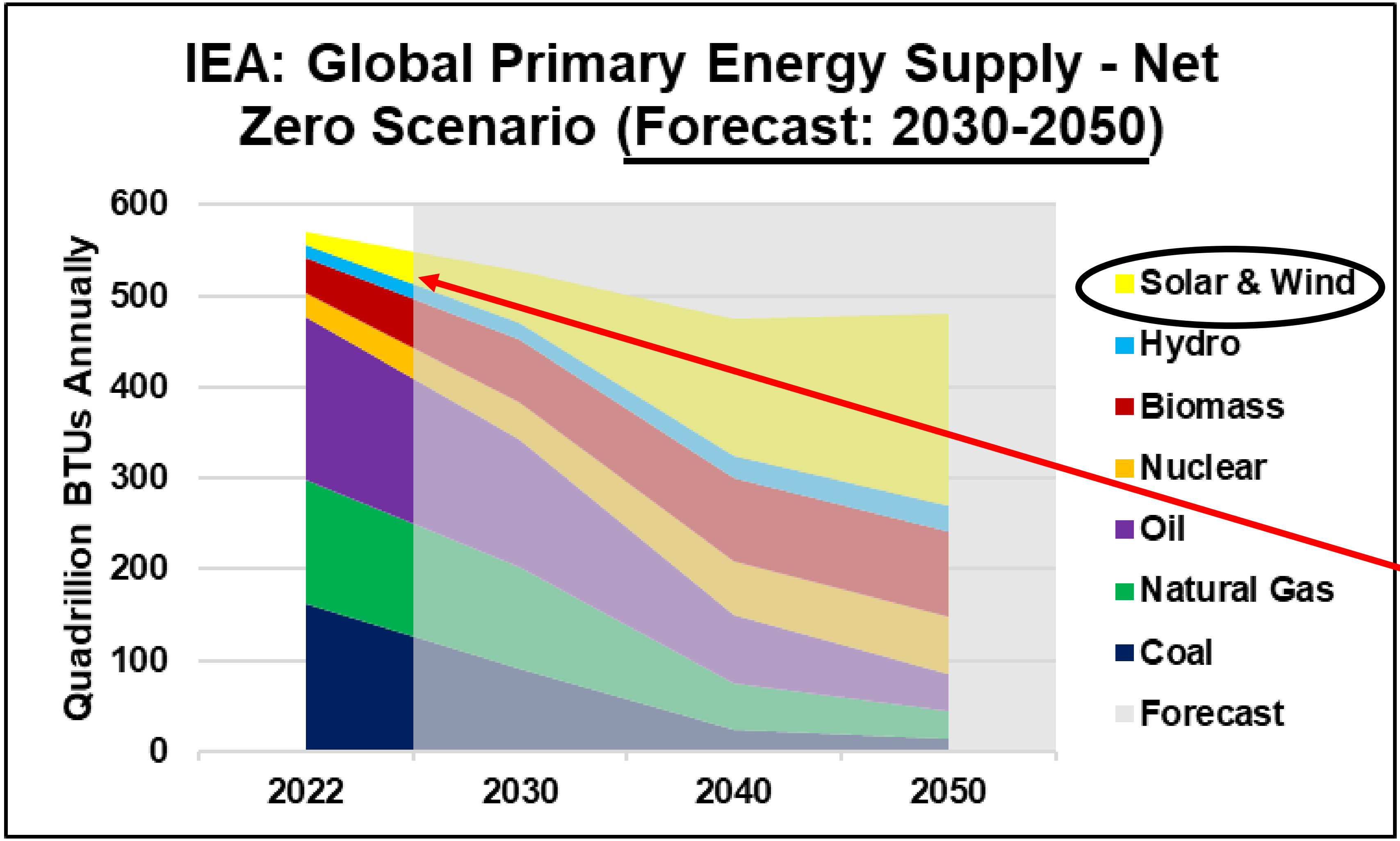
- **Japan's shift from oil-fired to nuclear-powered electricity generation**
- **France's Messmer Plan, similar to Japan's shift.**
- **1980's Cold War Europe transitioned from petroleum products in residential and commercial use to Soviet pipelined natural gas**
- **Argentina sought to capture economic rent by exporting its crude oil production and transforming a large portion of its automobile fleet to natural gas**
- **U.S. has undertaken numerous initiatives: SynFuels, CAFE, RFS, cellulosic ethanol**

Esso Filling Station w Natural Gas Mendoza, Argentina

Energy Transitions
Induced / Government Policy: Conclusions

- **Successes: Japan, 1980s Cold War Europe, France**
- **Debatable: Argentina**
- **Controversial: U.S.**

IEA's Net Zero Aspiration: Fossil's Share to Go from 80% to 16% in 2050



Over $5.5 trillion in investment over eighteen years, but wind and solar amount to only 2.3%!

Energy Transitions

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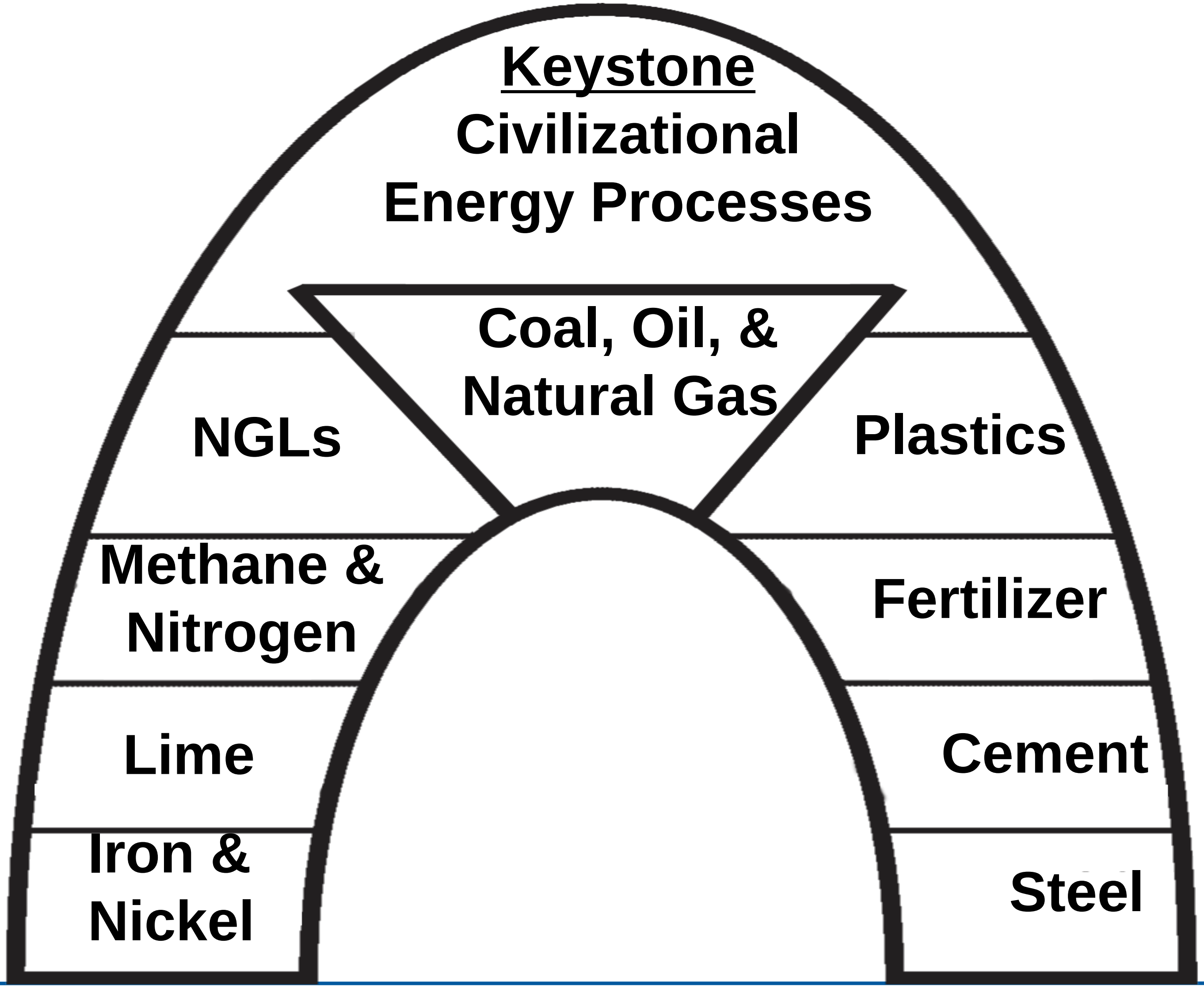
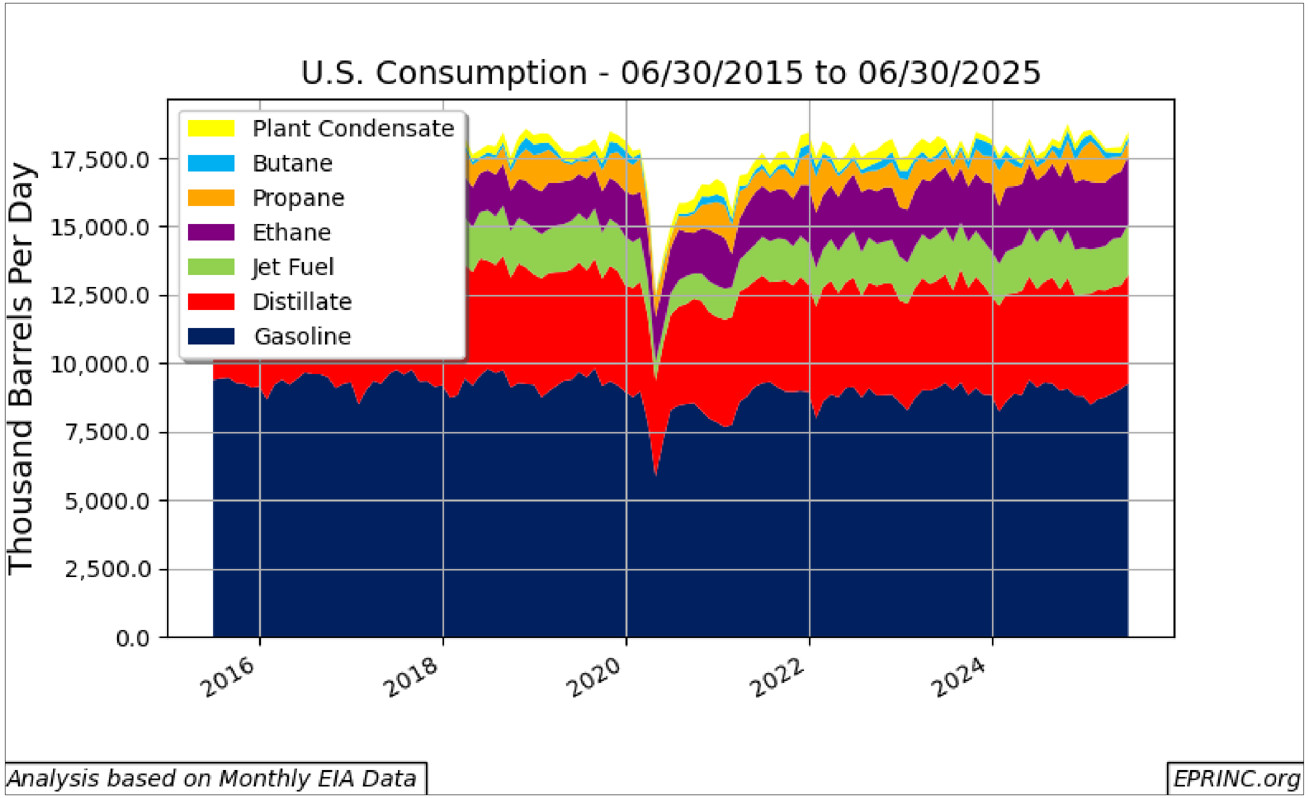


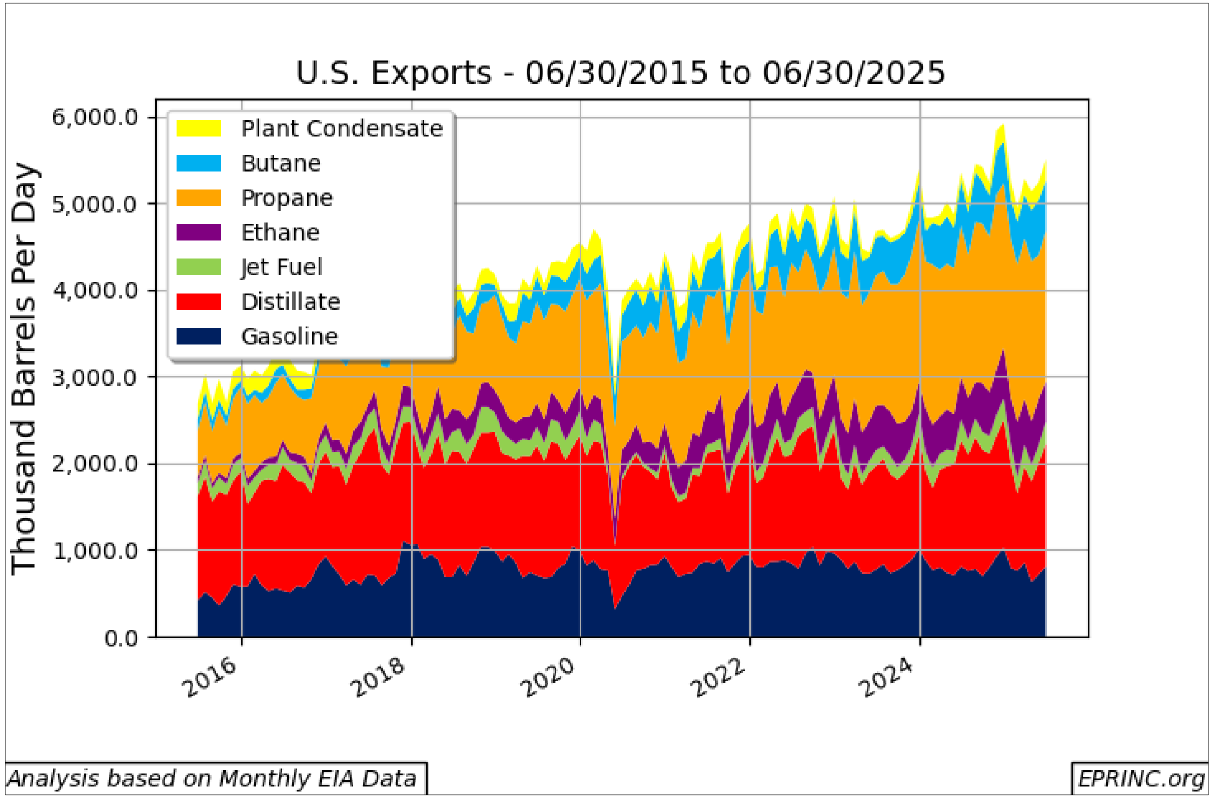
Currently and for the foreseeable future, there are no substitutes for hydrocarbons in the production of the four key civilizational pillars (according to Vaclav Smil): steel, cement, fertilizer and plastics.

(Smil should add lubricants to his four pillars)

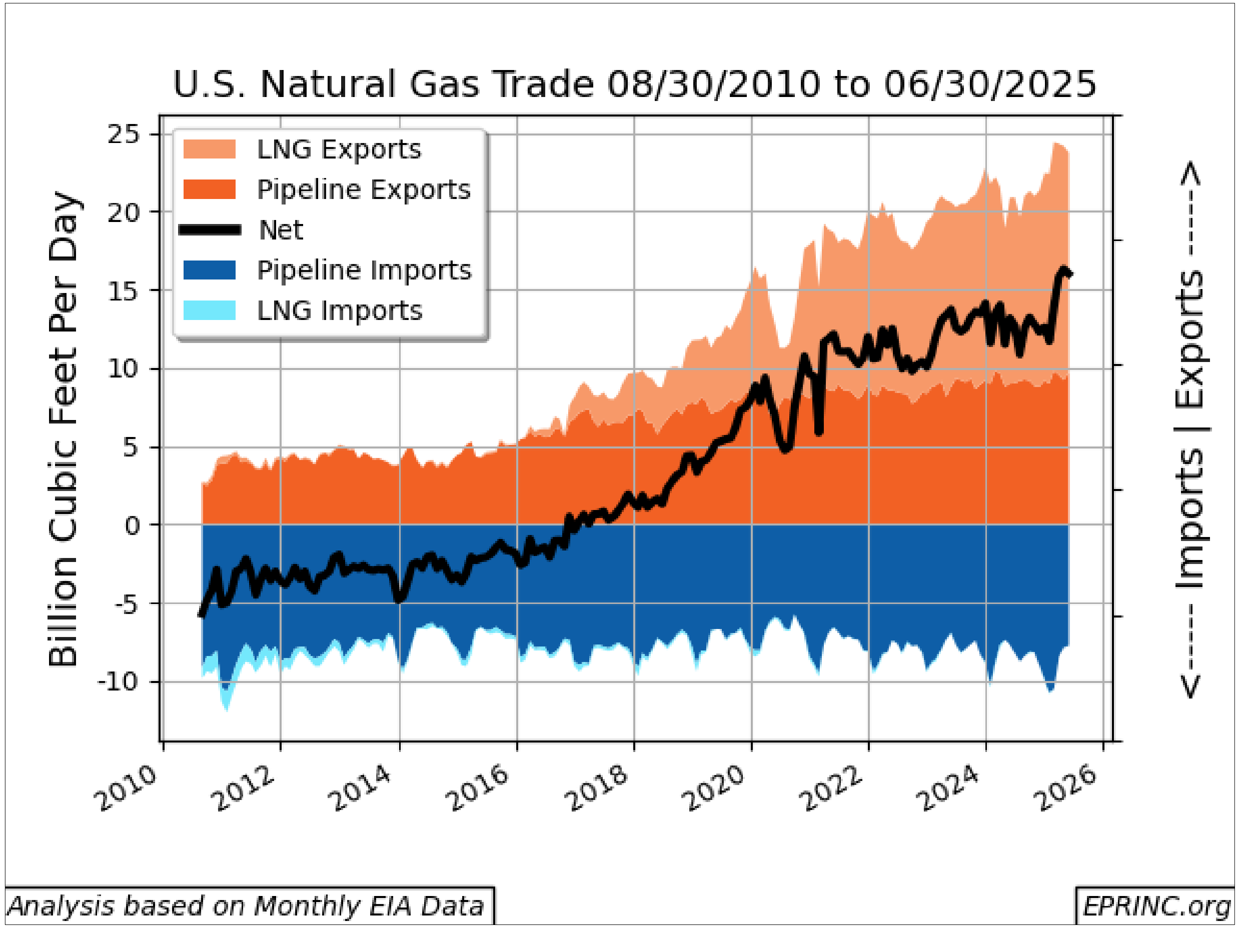
Conclusion: U.S. Hydrocarbon Markets in the Shadow of the North American Petroleum Renaissance

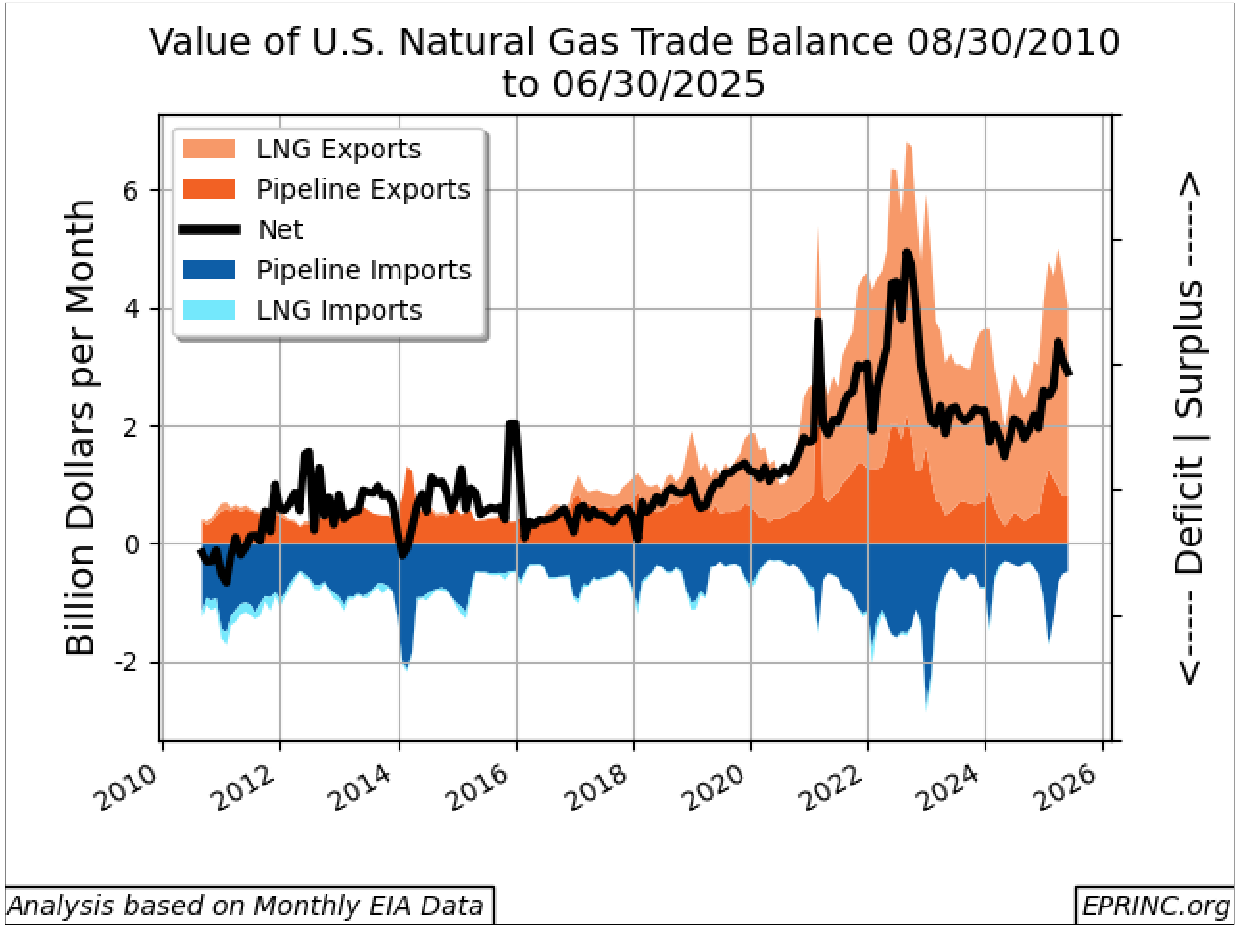
U.S. Products & NGLs Consumption & Exports



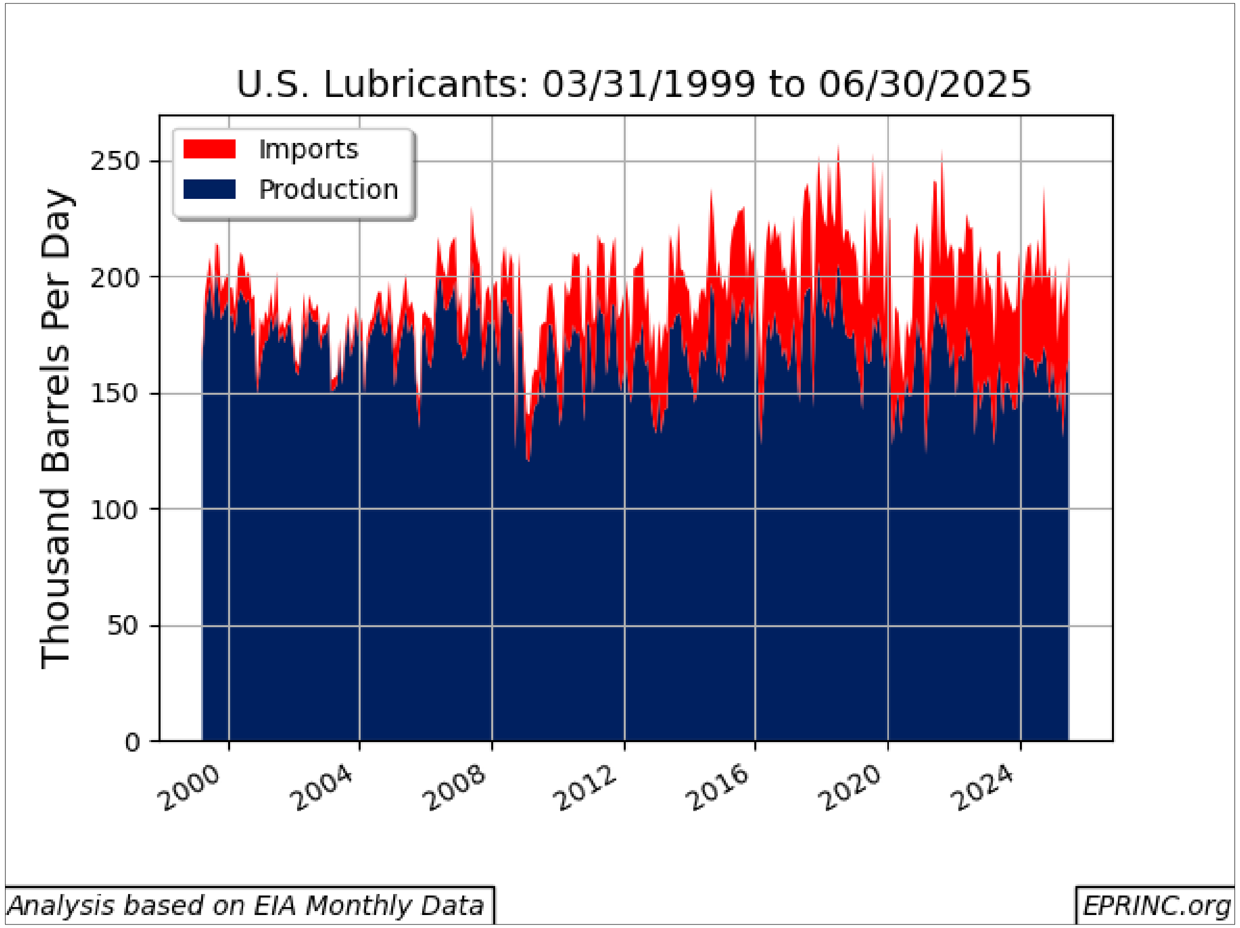


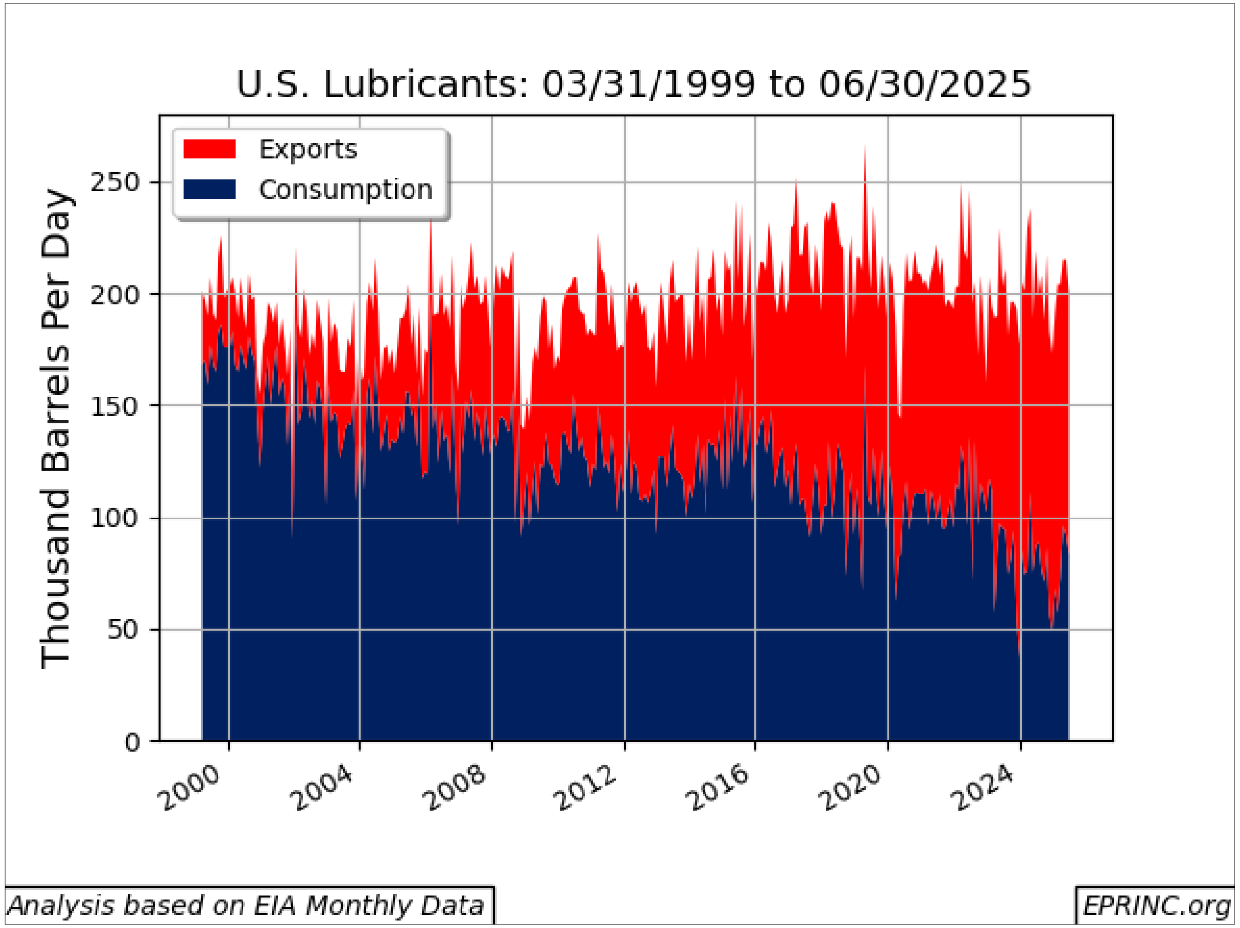
U.S. Natural Gas Trade





U.S. Lubricants
Supply & Demand





Thank you.
Questions?

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