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UA-EAF Forum/US-UA Energy Dialogue

The Three Seas Initiative Paradigm:

Examining the Possibilities from Energy to Security

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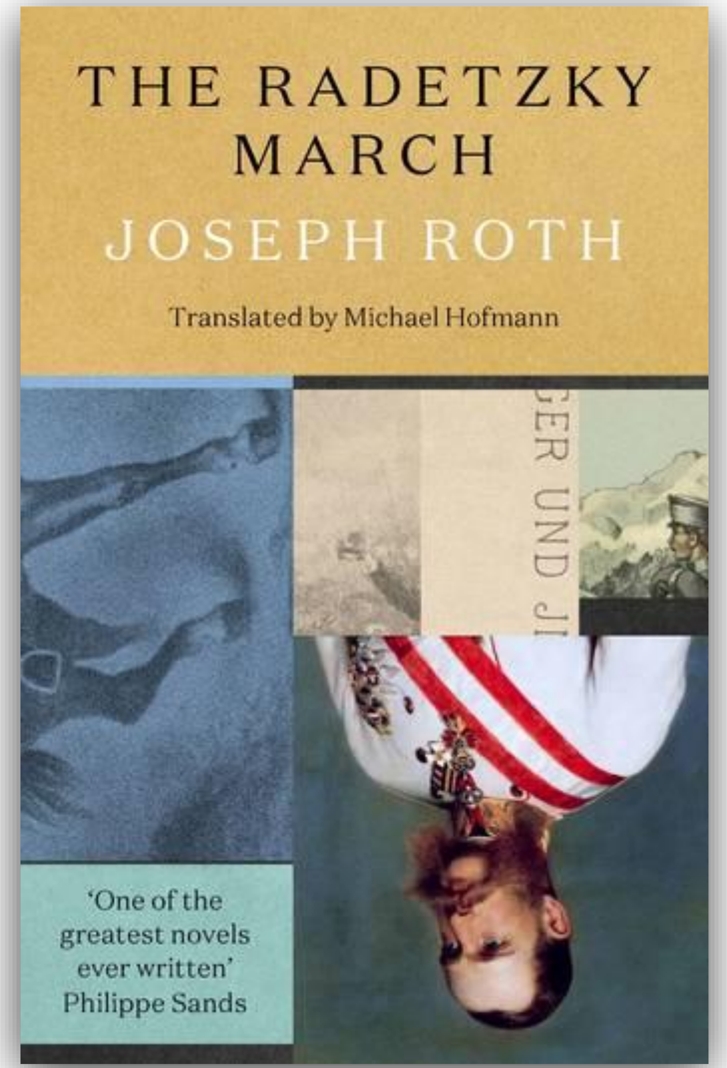

Matthew Sawoski / Max Pyziur

November 13, 2025

The Bush Institute / Texas A&M DC

Washington DC

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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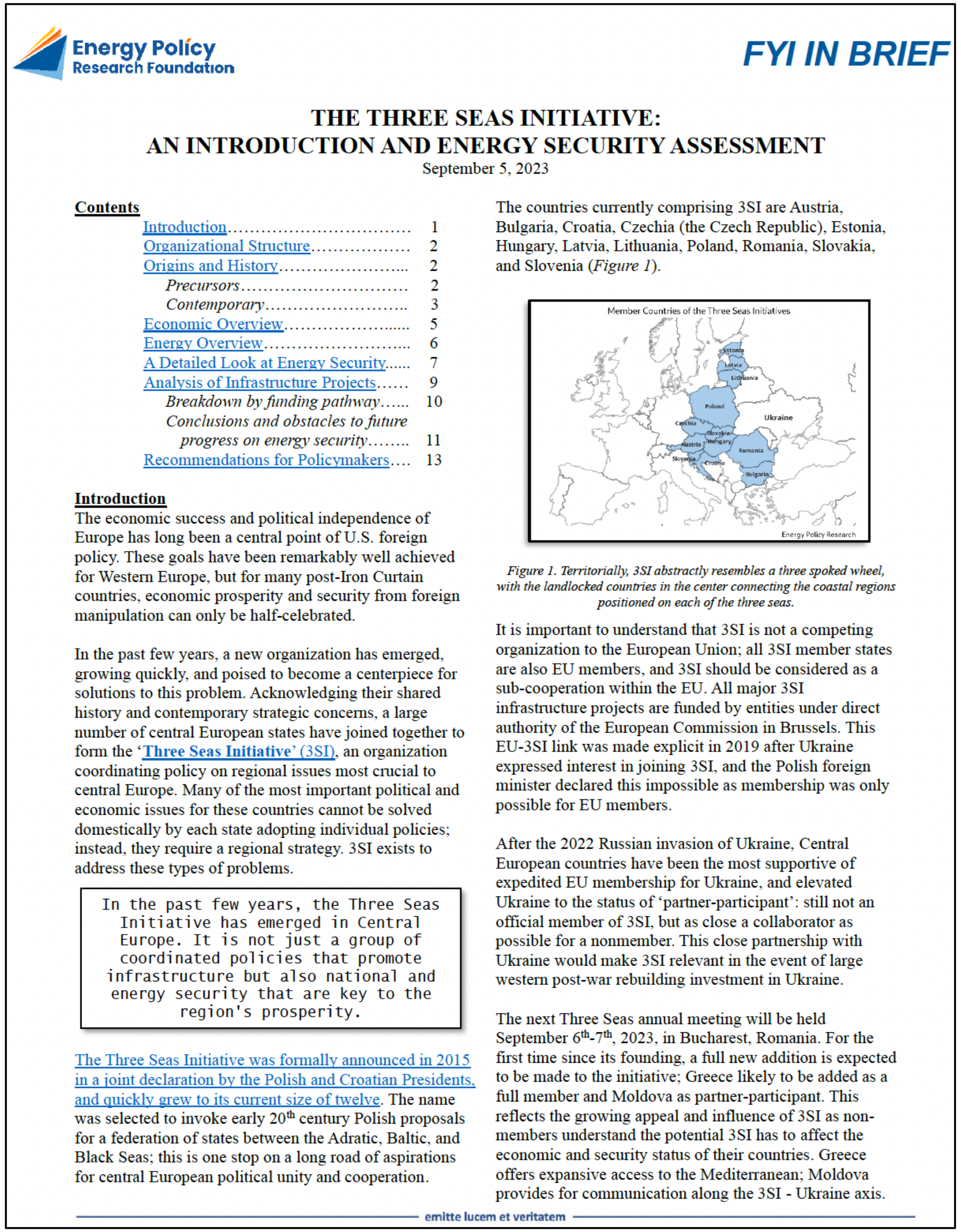

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FYI IN BRIEF

THE THREE SEAS INITIATIVE: AN INTRODUCTION AND ENERGY SECURITY ASSESSMENT

September 5, 2023

Contents

Introduction

The economic success and political independence of Europe has long been a central point of U.S. foreign policy. These goals have been remarkably well achieved for Western Europe, but for many post-Iron Curtain countries, economic prosperity and security from foreign manipulation can only be half-celebrated.

In the past few years, a new organization has emerged, growing quickly, and poised to become a centerpiece for solutions to this problem. Acknowledging their shared history and contemporary strategic concerns, a large number of central European states have joined together to form the 'Three Seas Initiative' (3SI), an organization coordinating policy on regional issues most crucial to central Europe. Many of the most important political and economic issues for these countries cannot be solved domestically by each state adopting individual policies; instead, they require a regional strategy. 3SI exists to address these types of problems.

> In the past few years, the Three Seas Initiative has emerged in Central Europe. It is not just a group of coordinated policies that promote infrastructure but also national and energy security that are key to the region's prosperity.

The Three Seas Initiative was formally announced in 2015 in a joint declaration by the Polish and Croatian Presidents, and quickly grew to its current size of twelve. The name was selected to invoke early 20th century Polish proposals for a federation of states between the Adratic, Baltic, and Black Seas; this is one stop on a long road of aspirations for central European political unity and cooperation.

The countries currently comprising 3SI are Austria, Bulgaria, Croatia, Czechia (the Czech Republic), Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia (*Figure 1*).

Member Countries of the Three Seas Initiatives

Figure 1. Territorially, 3SI abstractly resembles a three spoked wheel, with the landlocked countries in the center connecting the coastal regions positioned on each of the three seas.

It is important to understand that 3SI is not a competing organization to the European Union; all 3SI member states are also EU members, and 3SI should be considered as a sub-cooperation within the EU. All major 3SI infrastructure projects are funded by entities under direct authority of the European Commission in Brussels. This EU-3SI link was made explicit in 2019 after Ukraine expressed interest in joining 3SI, and the Polish foreign minister declared this impossible as membership was only possible for EU members.

After the 2022 Russian invasion of Ukraine, Central European countries have been the most supportive of expedited EU membership for Ukraine, and elevated Ukraine to the status of 'partner-participant': still not an official member of 3SI, but as close a collaborator as possible for a nonmember. This close partnership with Ukraine would make 3SI relevant in the event of large western post-war rebuilding investment in Ukraine.

The next Three Seas annual meeting will be held September 6th-7th, 2023, in Bucharest, Romania. For the first time since its founding, a full new addition is expected to be made to the initiative; Greece likely to be added as a full member and Moldova as partner-participant. This reflects the growing appeal and influence of 3SI as non-members understand the potential 3SI has to affect the economic and security status of their countries. Greece offers expansive access to the Mediterranean; Moldova provides for communication along the 3SI - Ukraine axis.

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The Three Seas Initiative: An Introduction and Energy Security Assessment

(published September 2023)

Presentation Outline

- Three Seas Initiative (3SI) Founding and Contemporary History
  - Precursors and Conceptual Beginnings
- Economic and Demographic Overview
- Energy - Select Views / Energy Security
  - Ukraine & European Energy
- 3SI Infrastructure Analysis: the Priority Project List
- Conclusions, Path Forward, Further Recommendations

Three Seas Initiative (3SI) Founding and Contemporary History

- Formally announced in 2015 in a joint declaration by the Polish and Croatian presidents and quickly grew to its current size of thirteen.
- All 3SI states are EU members; all are NATO members with the exception of Austria.
- As non-EU member countries, Ukraine and Moldova have acquired the status of Partner-Participant.
- Rationale: economic prosperity and security from foreign manipulation can only be half celebrated compared to that of Western Europe.

3SI Precursors and Conceptual Beginnings

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European countries whose territory constituted/constitutes a part of:				
	Polish-Lithuanian Commonwealth (1569 - 1795)	Austro-Hungarian Empire (1867-1918)	Intermarium (proposed 1920)	Three Seas Initiative (2015 -)
Austria	Never	Complete	Never	Complete
Bulgaria	Never	Never	Never	Complete
Croatia	Never	Complete	Complete	Complete
Czechia	Never	Complete	Complete	Complete
Estonia	Partial	Never	Complete	Complete
Greece	Never	Never	Never	Complete
Hungary	Never	Complete	Complete	Complete
Latvia	Complete	Never	Complete	Complete
Lithuania	Complete	Never	Complete	Complete
Poland	Partial	Partial	Complete	Complete
Romania	Never	Partial	Complete	Complete
Slovakia	Never	Complete	Complete	Complete
Slovenia	Never	Complete	Complete	Complete
Belarus	Complete	Never	Complete	Never
Moldova	Partial	Never	Never	Partner-Participant
Ukraine	Complete	Partial	Complete	Partner-Participant
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- **Supranational polities with no singular distinct national identities. Rather, a collection of nations and ethnics**
- **Polish-Lithuanian Commonwealth (1569-1795)**
- **Austro-Hungarian (Habsburg) Empire (1867-1918)**
- **Intermarium (proposed 1920)**

3SI Precursors and Conceptual Beginnings

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- **3SI suggests the ideas of Halford Mackinder. His key works include: *The Geographical Pivot of History (1904}*; *Democratic Ideals and Reality: A Study in the Politics of Reconstruction (1919).***
- **Notion of an equilibrium of maritime and land power in a temperate geographical zone with navigable inland waterways.**
- **Mackinder saw the region as a bulwark against the threat of Russia.**

3SI Precursors and Conceptual Beginnings

Key blueprint: *Completing Europe – From the North-South Corridor to Energy, Transportation, and Telecommunications Union* by The Atlantic Council & Central Europe Energy Partners (CEEP), (November 21, 2014)

Stressed the necessity of establishing a North-South Corridor of meridional lines.

Economic and Demographic Overview

Economic Highlights of the Member Countries of the Three Seas Initiative														
		Population (2021)		Economy (2021)					Freight Transport 2021 - Million Metric Tons Kilometers					
						Breakdown								
	Area (square miles)	(Millions)	Annualized Growth Rate	GDP PPP in 2017 $Millions	Annualized Growth Rate	Services	Industry	Agriculture	Total	Maritime	Road	Rail	Waterway	Aviation
Austria	32,383.0	9.0	0.7%	487,616.4	0.8%	62.4%	25.8%	0.0%	73,591		49,809	21,779	1,506	497
Bulgaria	42,854.9	6.8	-0.7%	168,305.7	2.0%	62.3%	20.9%	4.3%	49,590	25,497	13,267	4,657	5,792	377
Croatia	21,851.0	3.9	-1.0%	123,227.0	1.6%	60.4%	19.8%	2.9%	83,029	69,526	9,302	3,172	841	188
Czechia	30,452.0	10.7	0.2%	429,698.7	1.8%	58.8%	30.3%	1.9%	71,988		55,108	16,326	22	532
Estonia	17,505.0	1.3	0.0%	51,657.0	3.3%	62.5%	23.1%	2.0%	67,353	61,816	3,171	2,124		242
Hungary	35,920.0	9.7	-0.3%	330,200.6	2.7%	57.0%	24.3%	3.4%	43,428		29,726	11,347	1,873	482
Latvia	24,938.0	1.9	-0.9%	60,476.5	2.9%	63.7%	19.9%	4.1%	28,407	14,189	6,417	7,367		434
Lithuania,	25,212.0	2.8	-0.8%	110,305.8	3.4%	60.7%	25.3%	3.3%	27,590	3,921	8,725	14,566		378
Poland	124,547.0	37.8	-0.1%	1,322,150.5	3.4%	56.9%	27.9%	2.2%	271,245	25,609	189,780	54,387	54	1,415
Romania	92,046.0	19.2	-0.5%	595,932.3	3.2%	58.2%	27.8%	4.4%	68,154	13,280	26,790	13,625	13,522	937
Slovakia	18,933.0	5.5	0.1%	178,788.1	2.1%	59.1%	28.2%	1.7%	25,787		16,509	8,190	839	249
Slovenia	7,827.0	2.1	0.3%	84,779.8	2.0%	57.7%	28.5%	1.7%	16,671	1,898	9,778	4,937		58
3SI Total	474,468.9	110.8	-0.2%	3,943,138.4	2.6%	58.7%	26.8%	2.5%	826,833	215,736	418,382	162,477	24,449	5,789
Europe Total	1,970,285.0	545.6		24,346,192.8	1.1%	64.7%	23.8%	1.5%	7,944,539	5,264,009	2,078,655	451,619	135,047	15,209
3SI as % of Europe	24.1%	20.3%		16.2%		14.7%	18.2%	26.5%	10.4%	4.1%	20.1%	36.0%	18.1%	38.1%
Ukraine	233,030	40.9	-1.0%	535,642.0	0.42%				n / a	n / a	168,109	16,884	n / a	n / a

Analysis based on IMF, Eurostat, & country-level data

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Economic and Demographic Overview

Area and Population (2021)	3SI	Europe	Percentage	Metric
Area	474	1,900	24.9%	Thousand sq miles
Population	111	545	20.4%	Millions
Growth Rate	-0.2%	0.2%		

GDP (2021)	3SI	Europe	Percentage	Metric
GDP	$4,000	$24,400	16.4%	Billion USD
Per Capita	$35,000	$44,000	79.5%	USD
Growth Rate	2.6%	1.1%		
Source: IMF, Eurostat, Country-Level data				***EPRINC.org***

Economic and Demographic Overview

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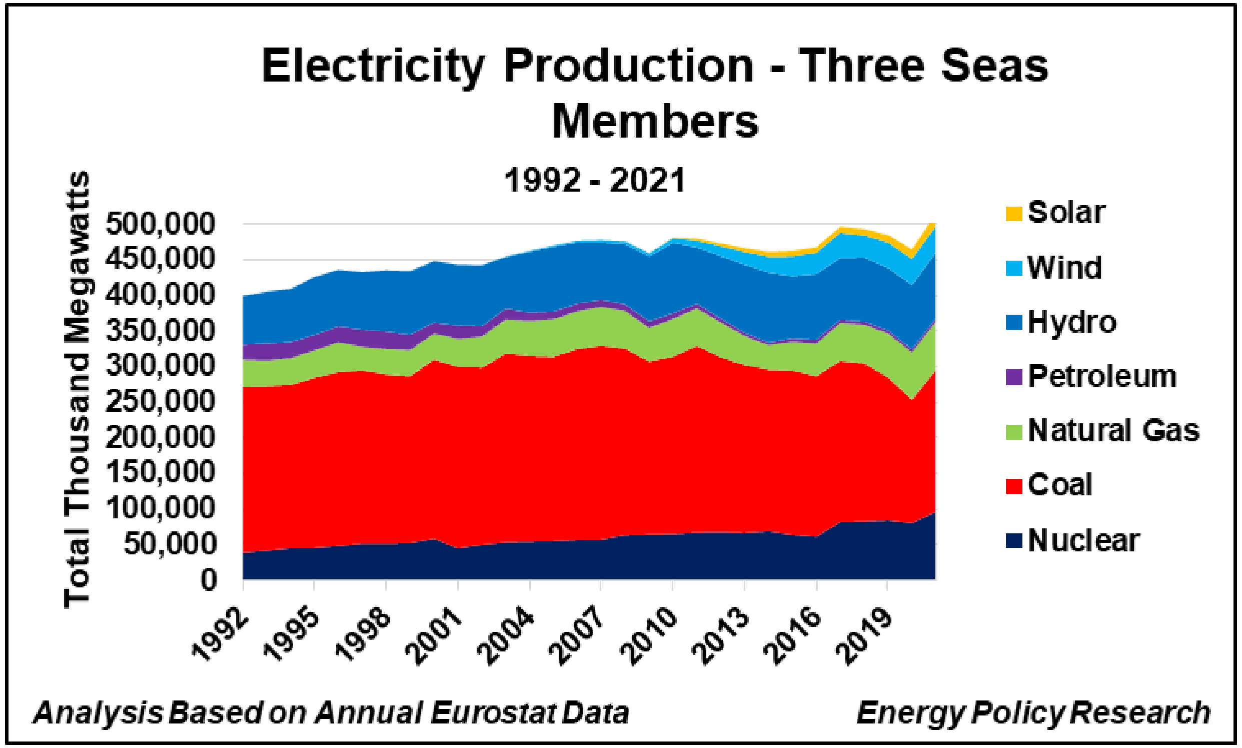
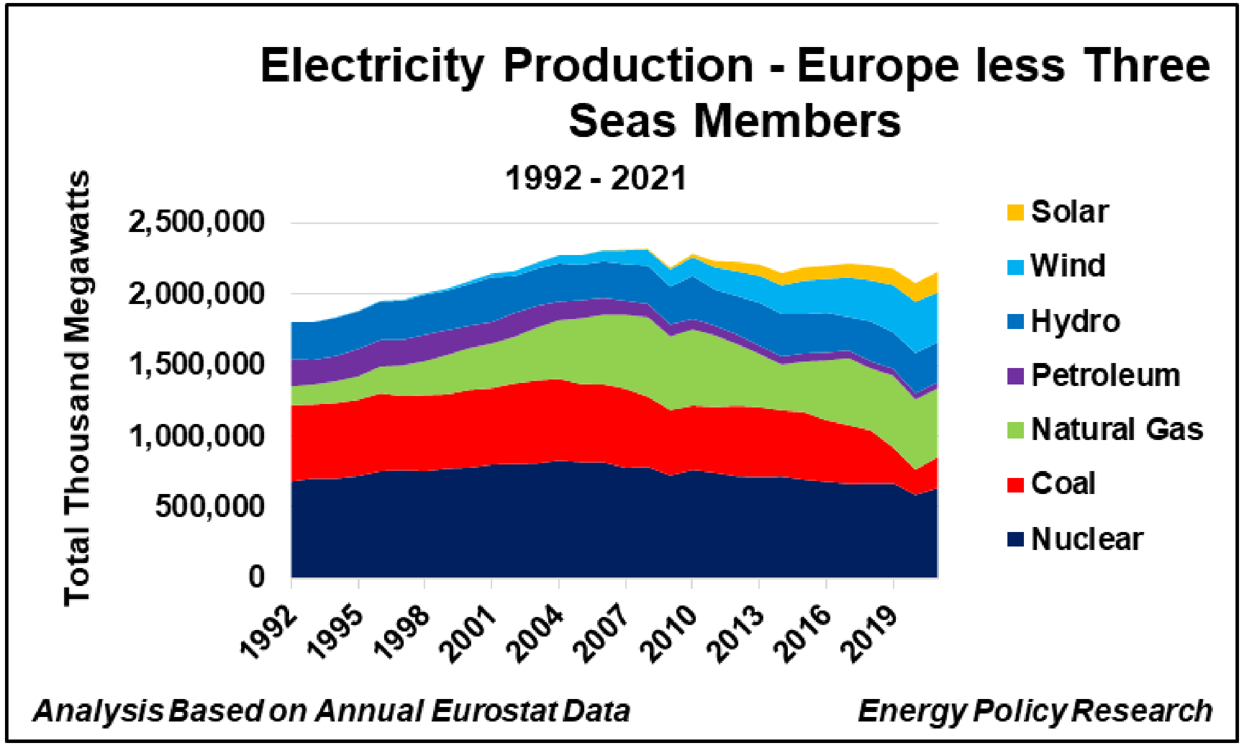
Freight Transport – Total (2021)	3SI	Europe	Percentage	Metric
Total	827	7,945	10.4%	MTKMs
Maritime	216	5,264	4.1%	MTKMs
Service / Industry / Agriculture	**Service**	**Industry**	**Agriculture**	
3SI	59.0%	27.0%	2.5%	
Europe	65.0%	24.0%	1.5%	
3SI % of Europe	**Service**	**Industry**	**Agriculture**	
3SI	14.7%	18.2%	26.5%	
Source: IMF, Eurostat, Country-Level data				*EPRINC.org*

3SI Energy – Select Views



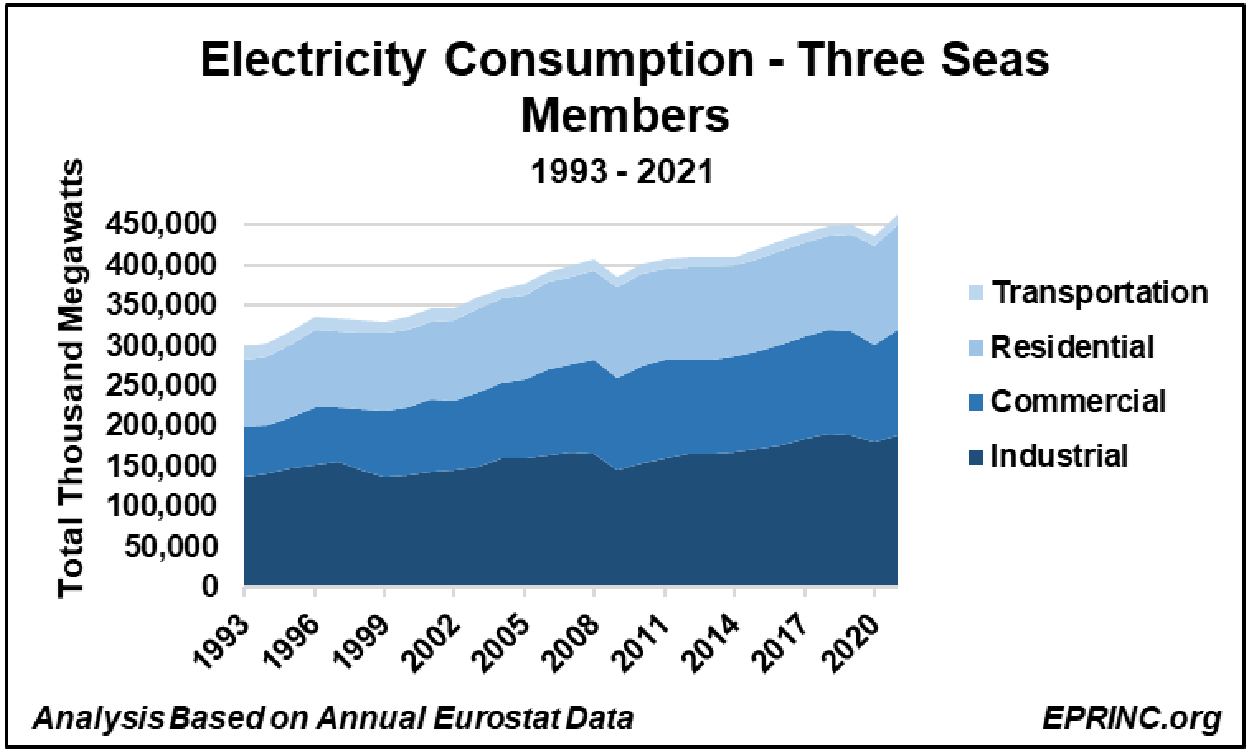


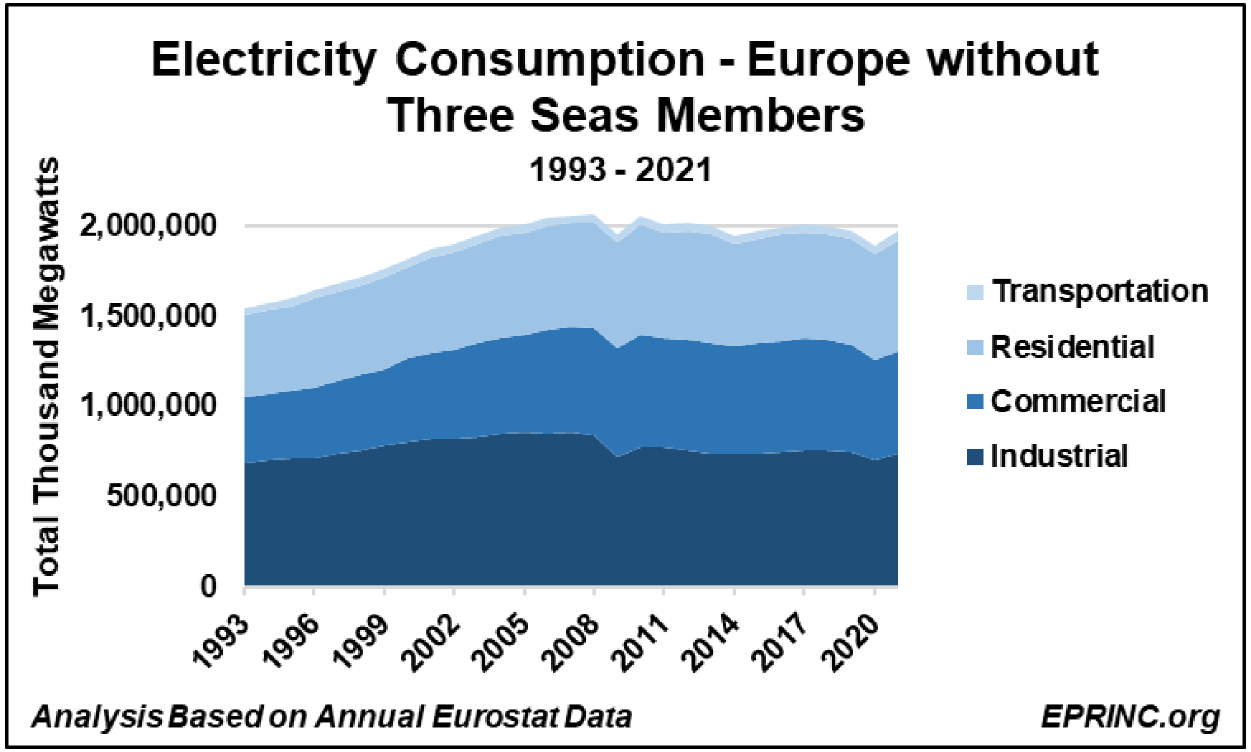
Side-by-side comparison of electricity production.

3SI shows growth, dominance of coal and hydro.

Legacy Europe is declining but diversifying the resource mix (more natural gas, wind, and solar; less coal).

3SI Energy – Select Views





Side-by-side comparison of electricity consumption.

3SI shows growing demand across all sectors.

Legacy Europe is declining probably due to efficiency gains.

3SI Energy – Select Views

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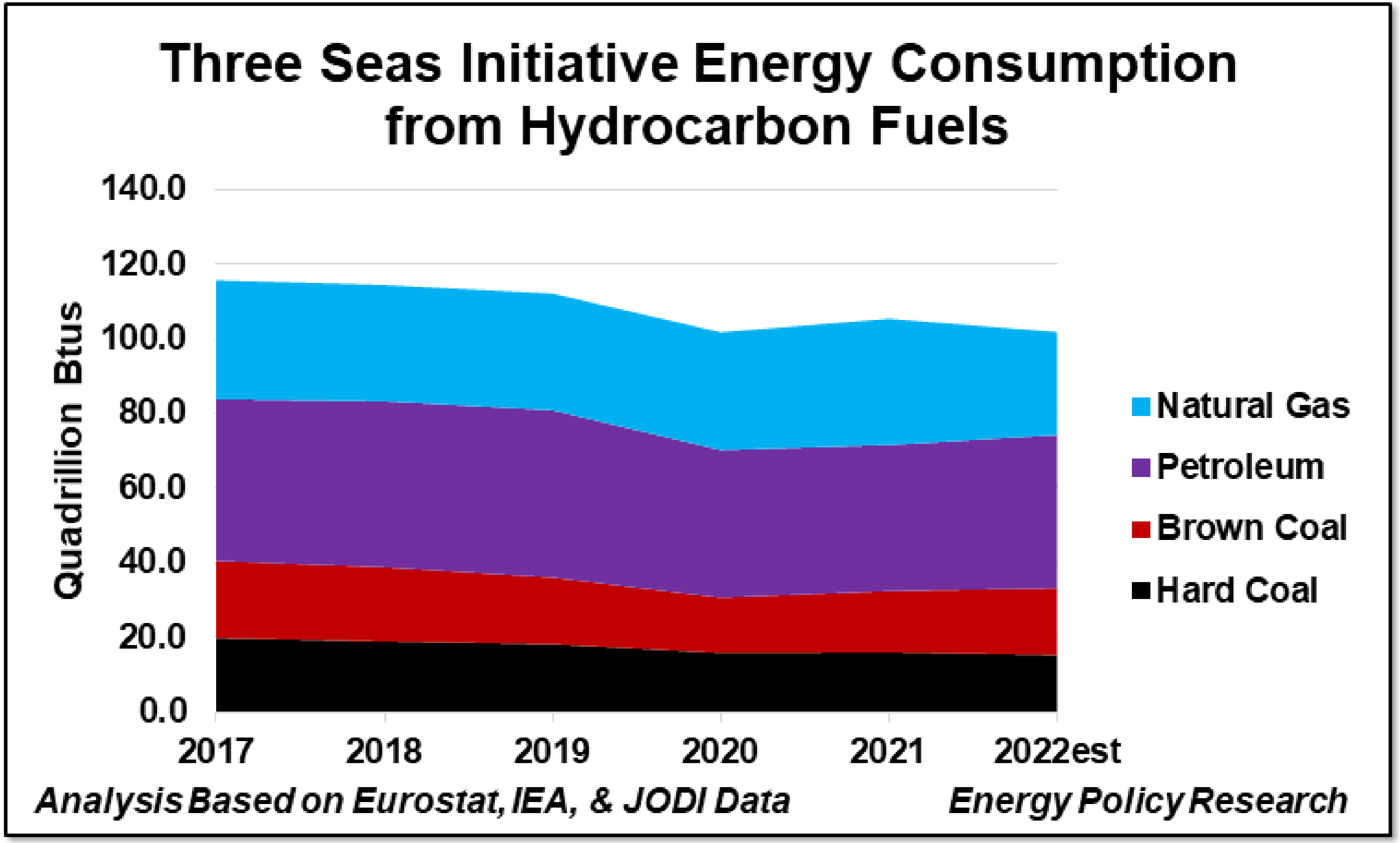
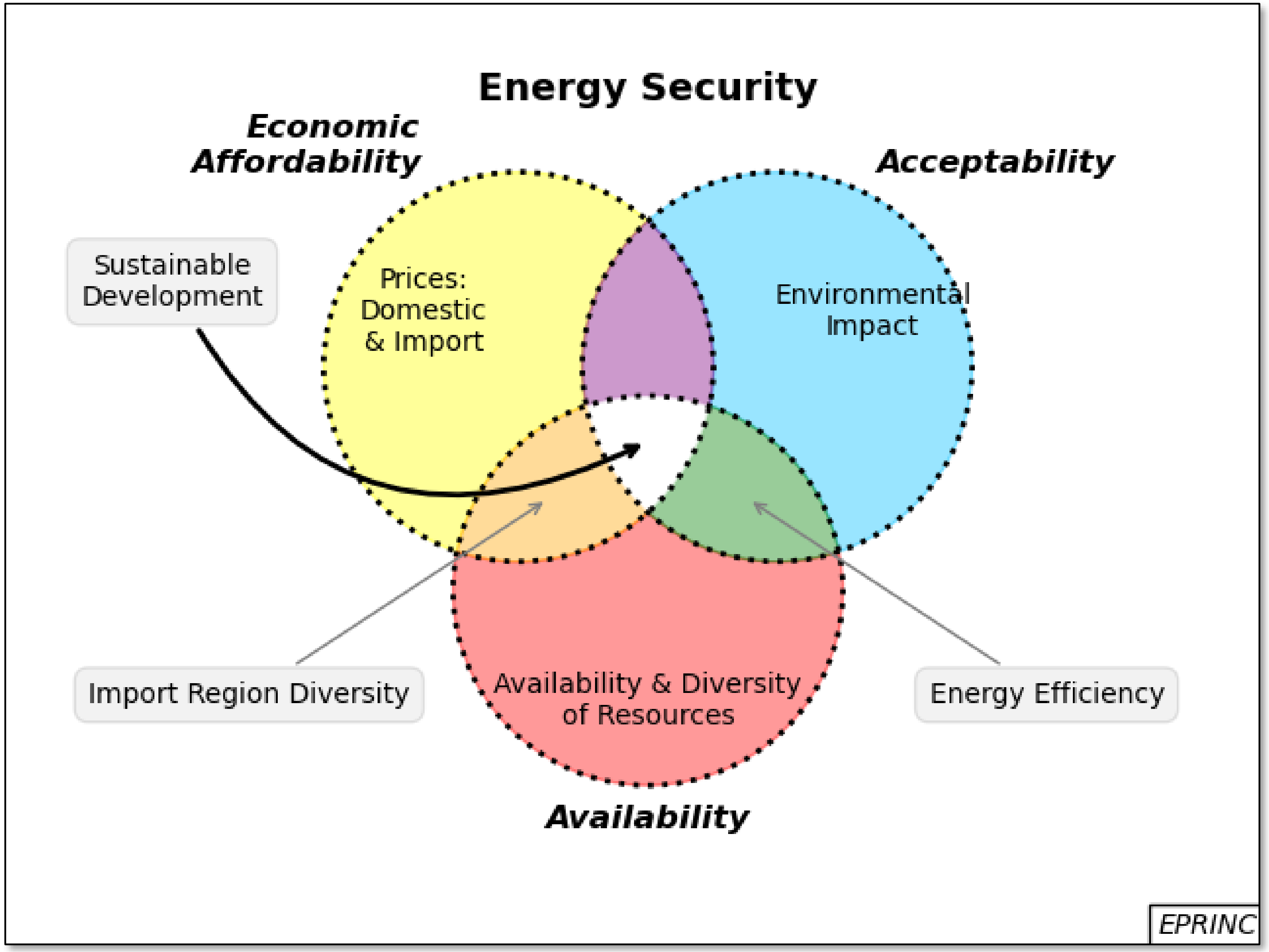


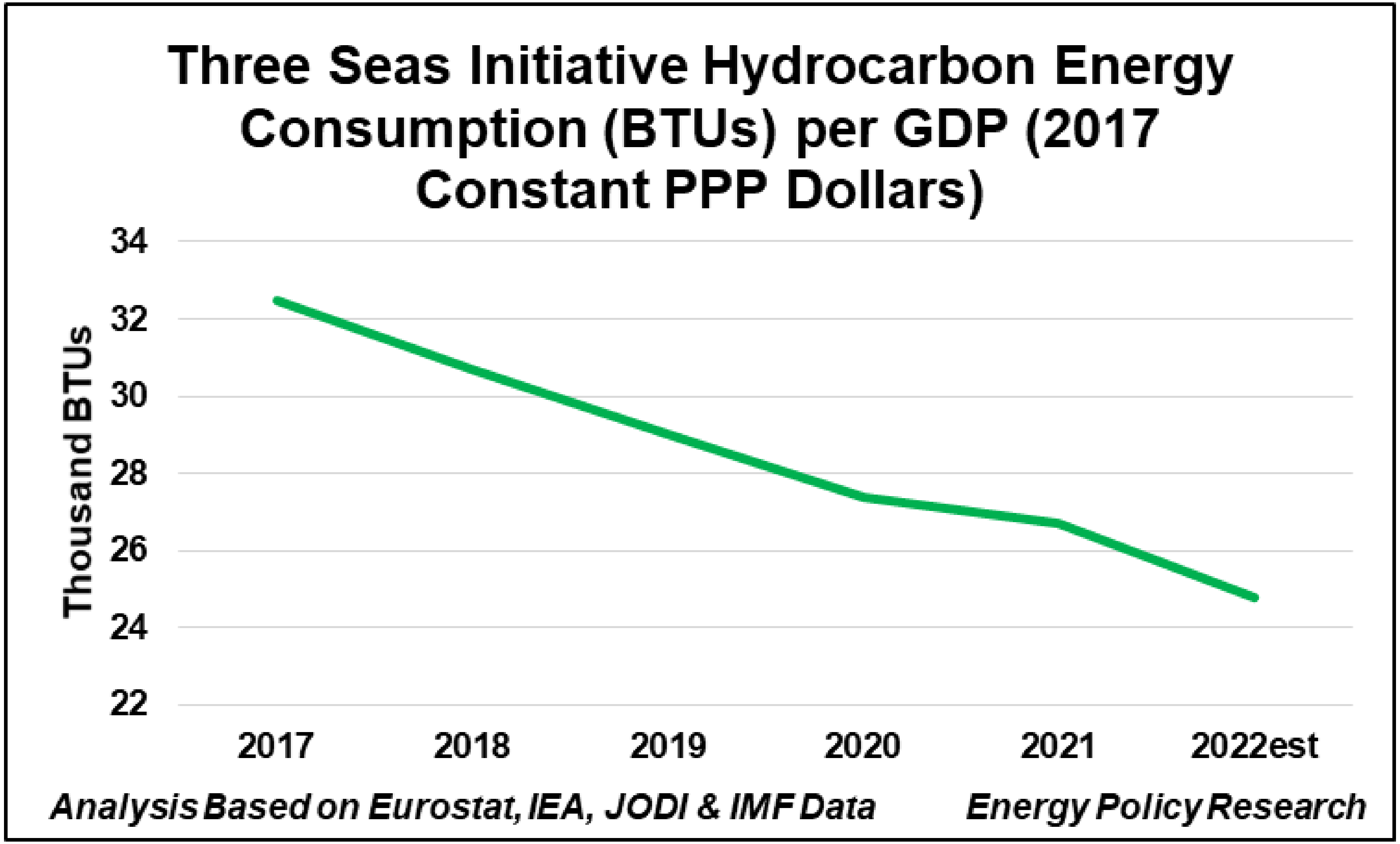
Despite economic growth, hydrocarbon consumption is declining.

Energy Security – a Visualization



Source: Sai, Furubayashi, Nakata, and others

Energy Security – Acceptability / Efficiency



3SI energy efficiency improved at an annualized rate of 5.3%.

Energy Security – Availability/Import Dependence
3SI Imports of Crude Oil

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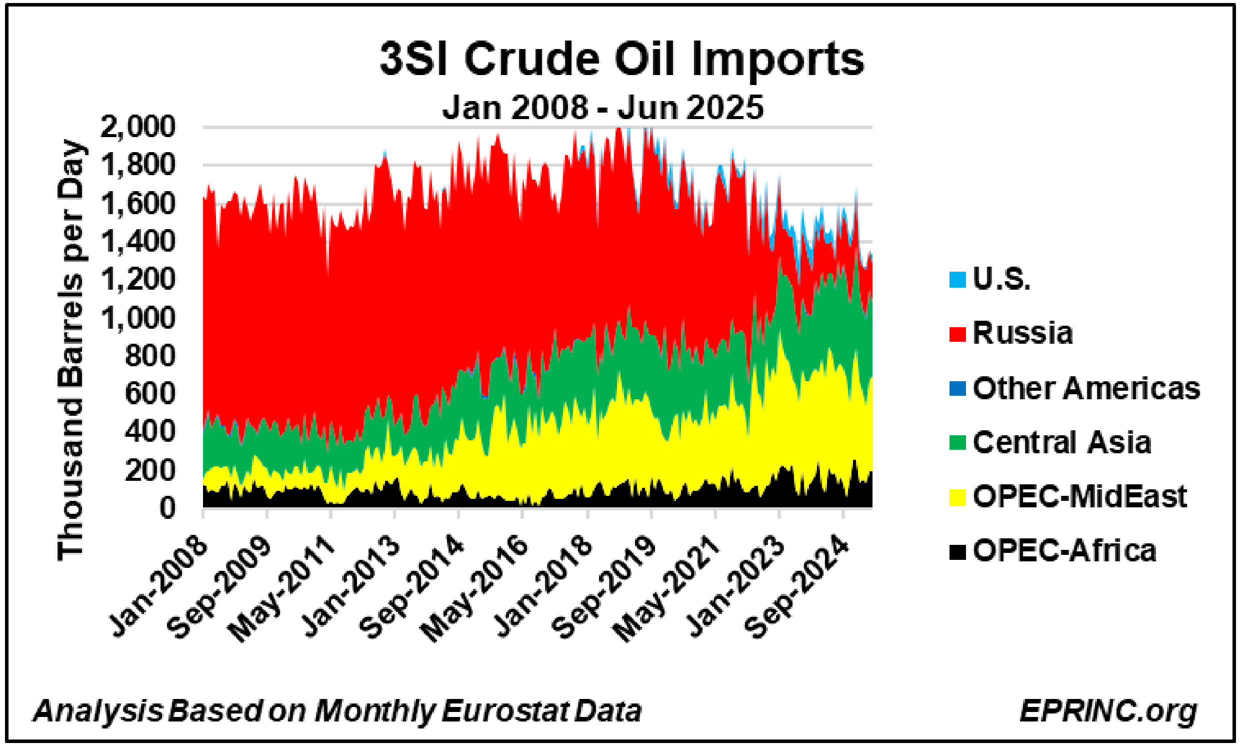
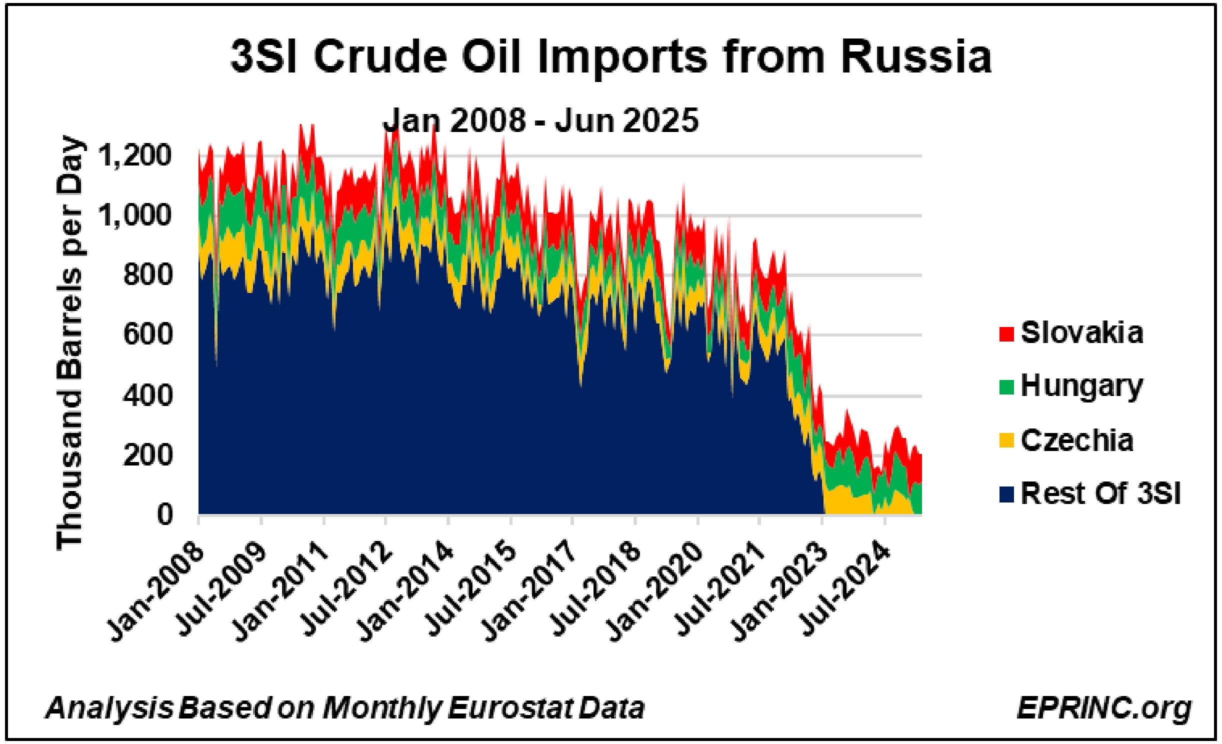
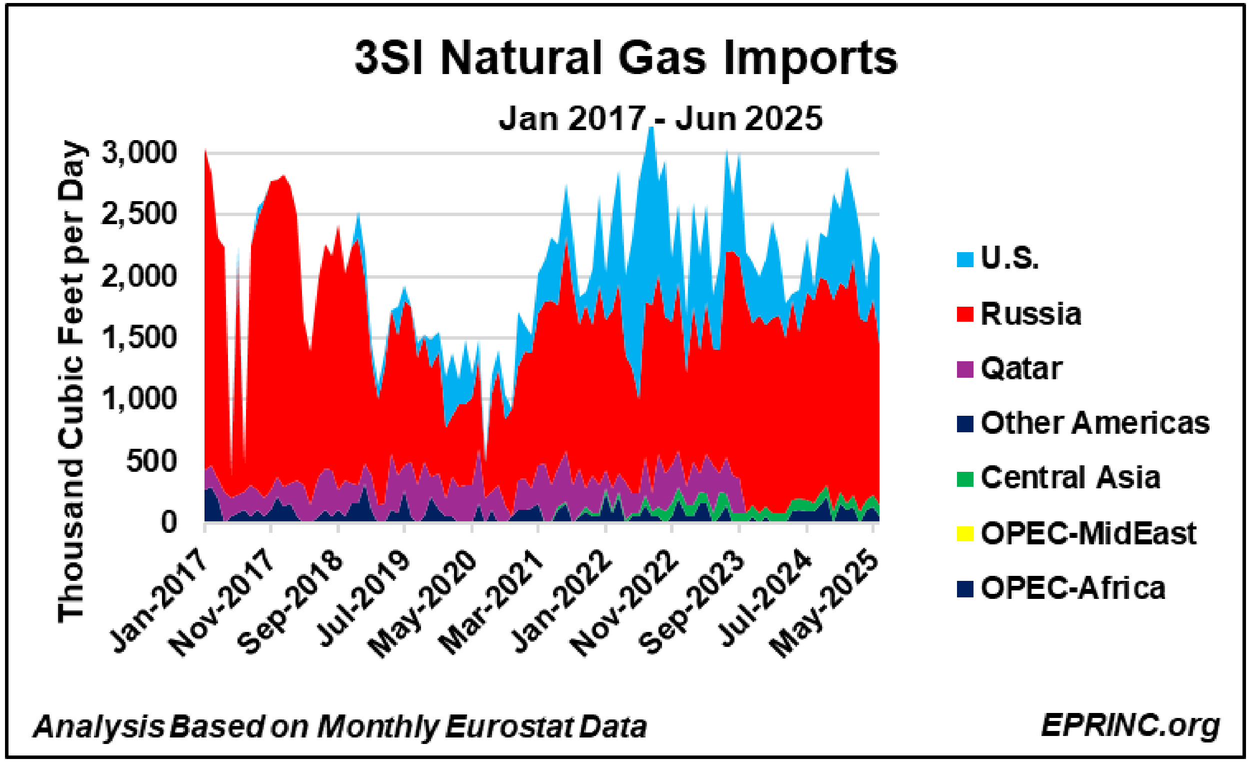
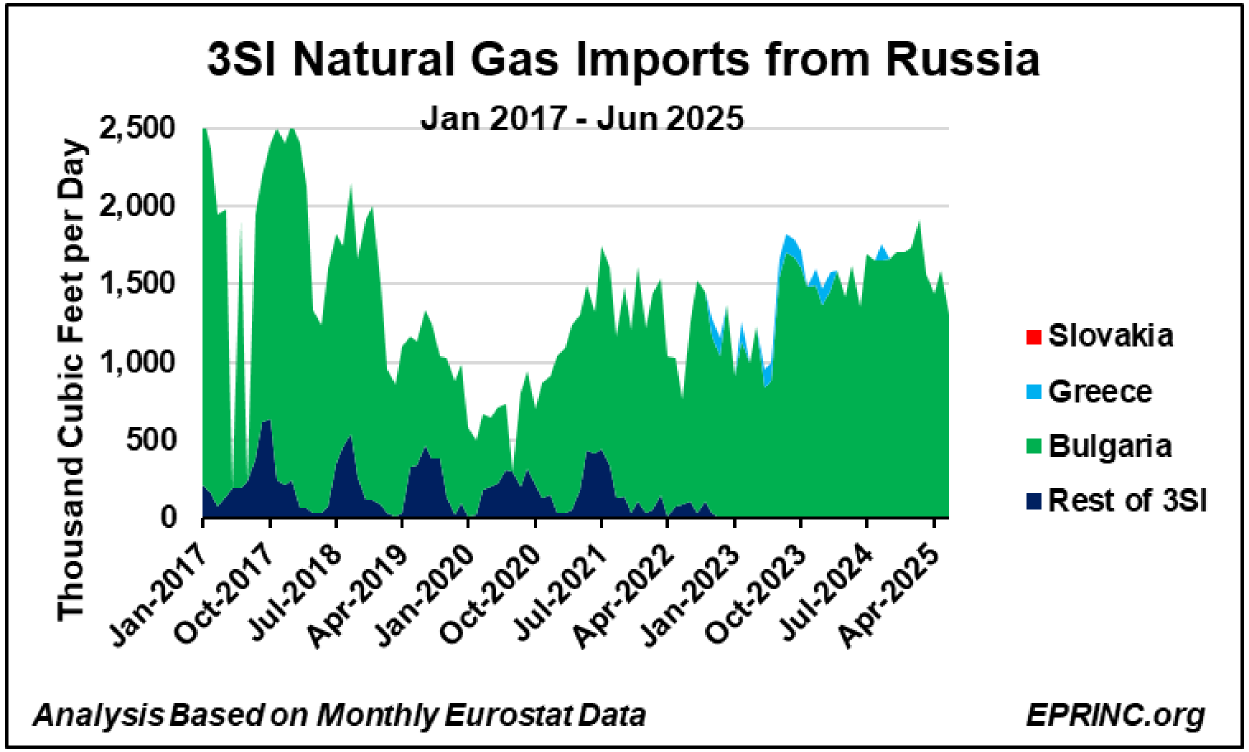




Energy Security – Availability/Import Dependence
3SI Imports of Natural Gas





Energy Security – Availability/Import Dependence
3SI Displacing Russian Natural Gas with U.S. LNG

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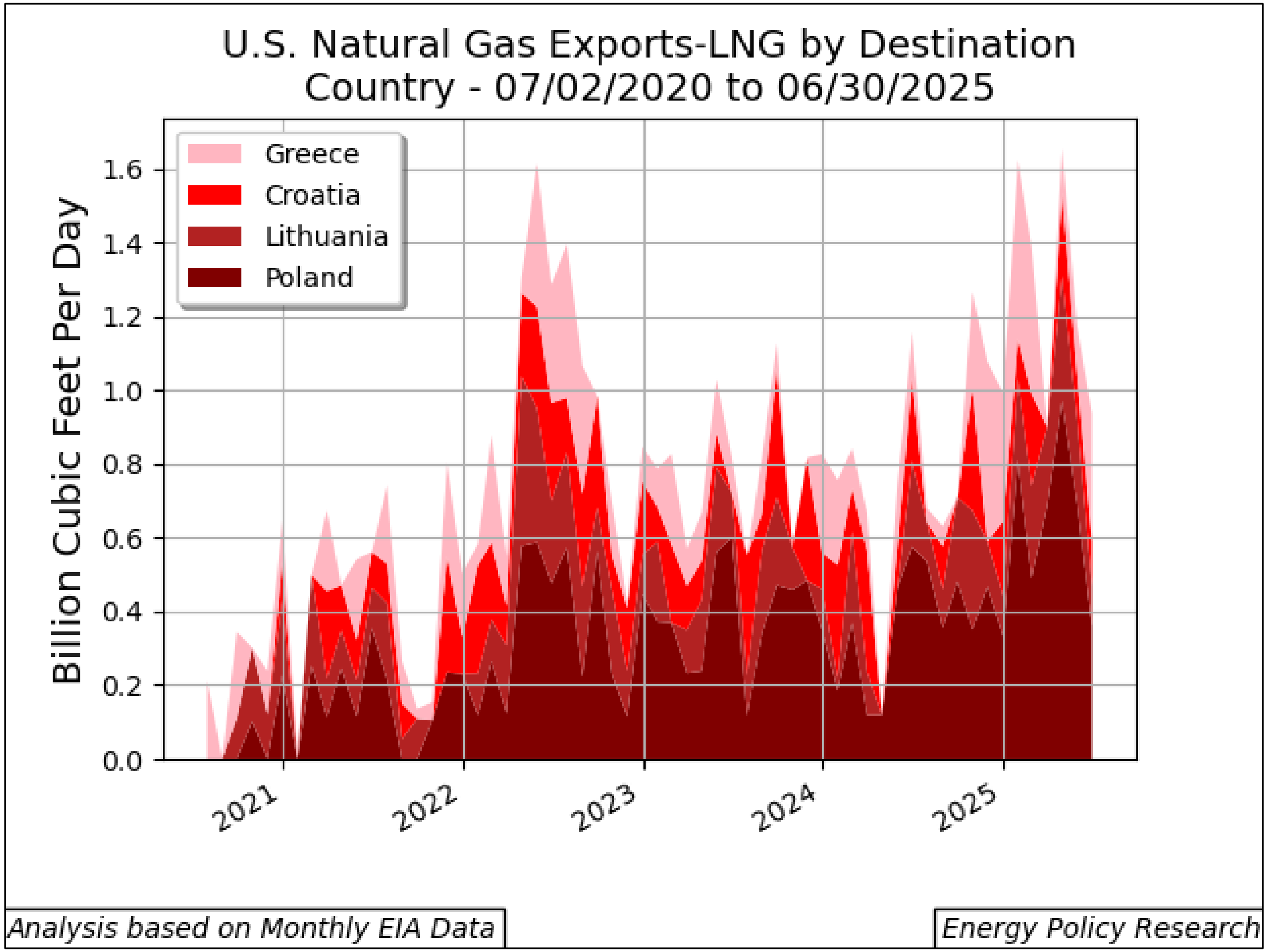
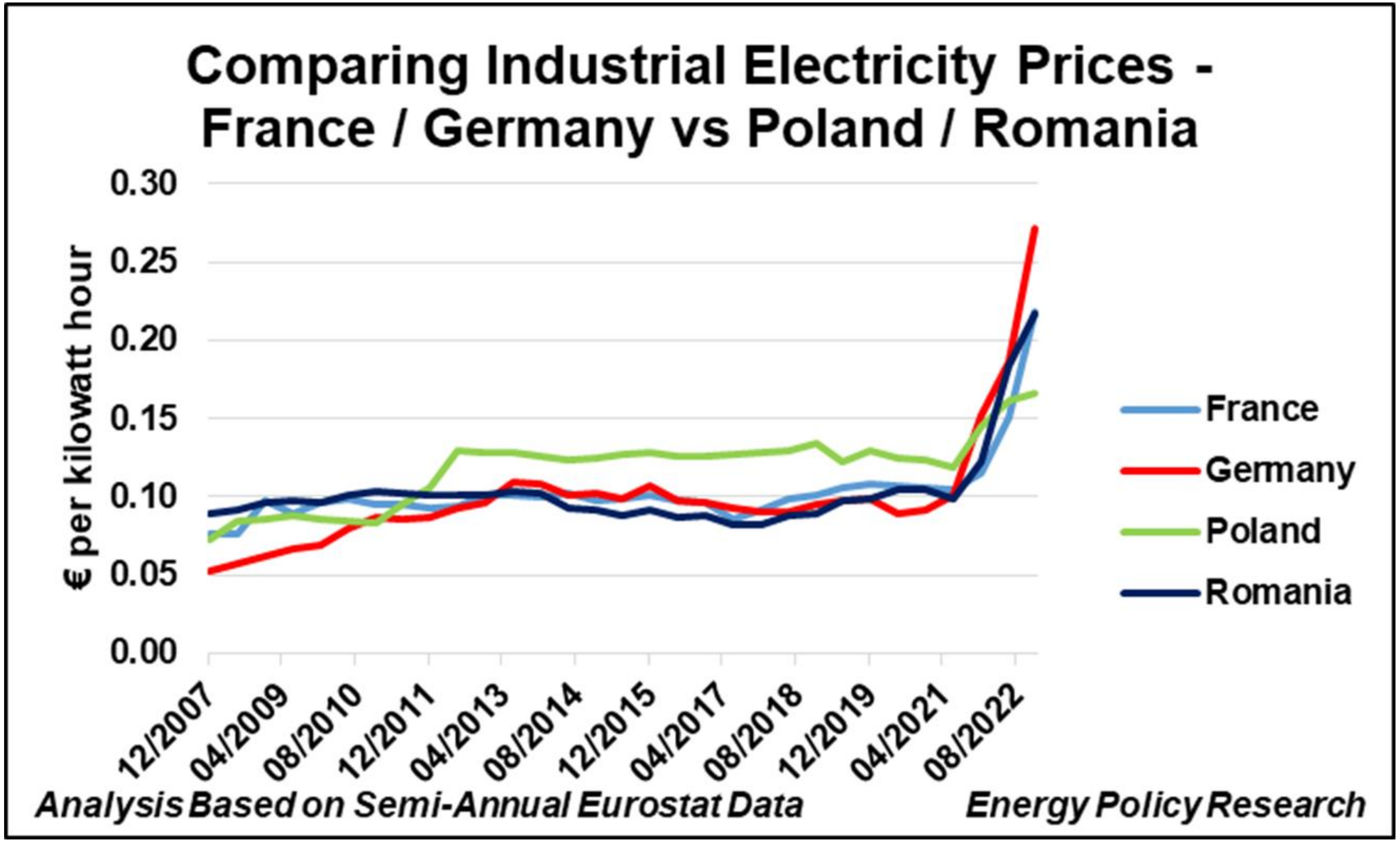


Energy Security – Affordability

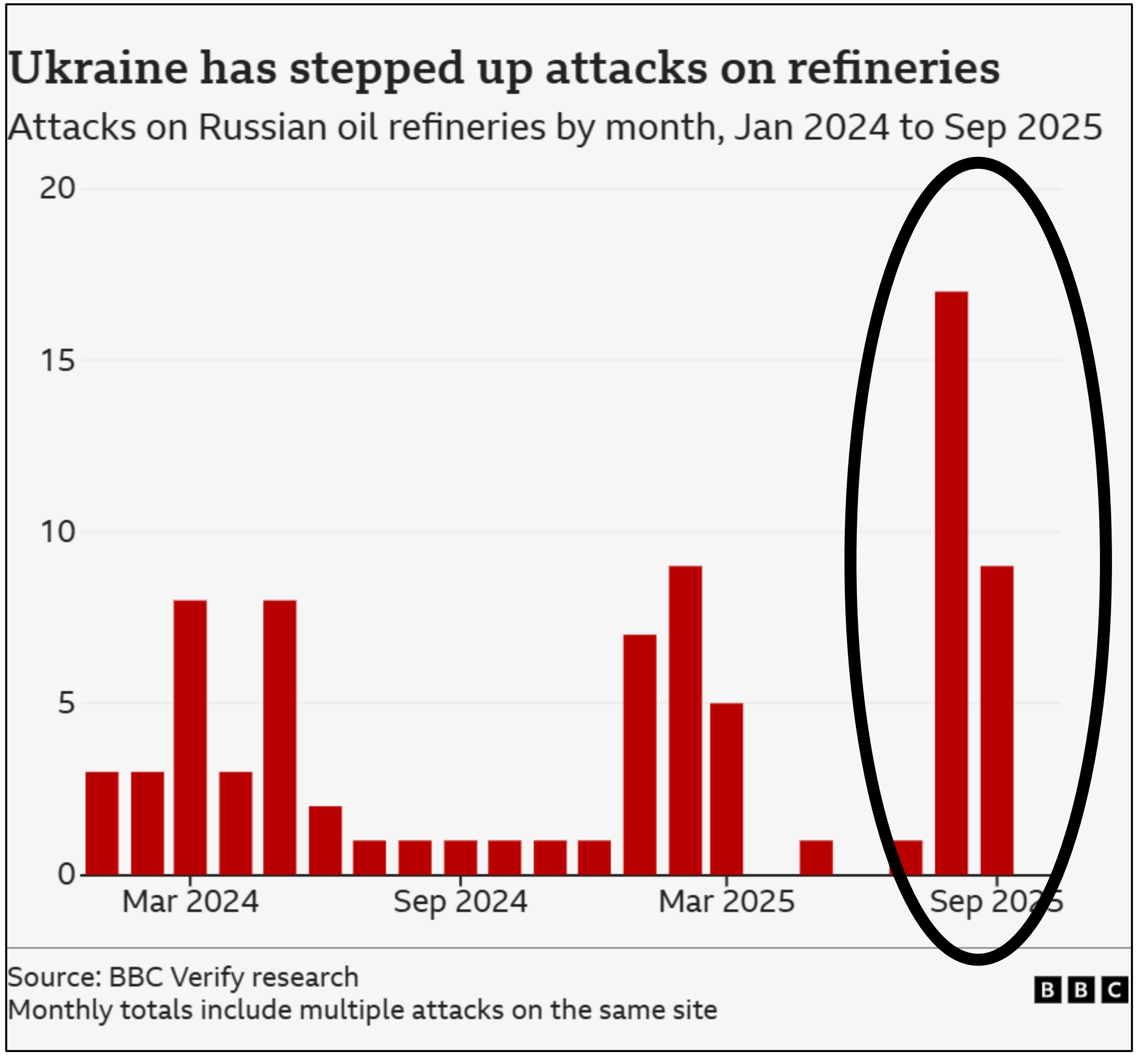


Nothing meaningful here: whether the major EU countries, or the two largest TSI countries, the general trajectory is the same.

The reason for the upward slope in 2022 is because of the price of all fuels becoming expensive due to the boycott of Russian natural gas and other hydrocarbons.

Ukraine & European Energy

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

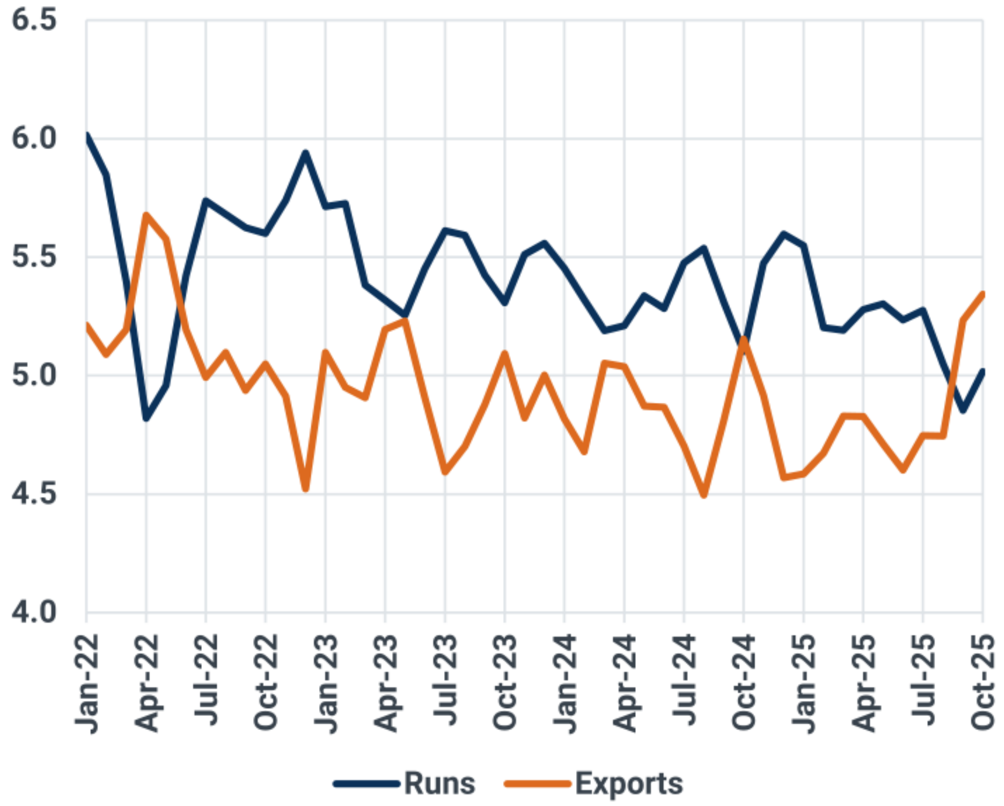


Ukraine's Impairment of Russian Energy

Inverse balance: refinery outages free up crude for export

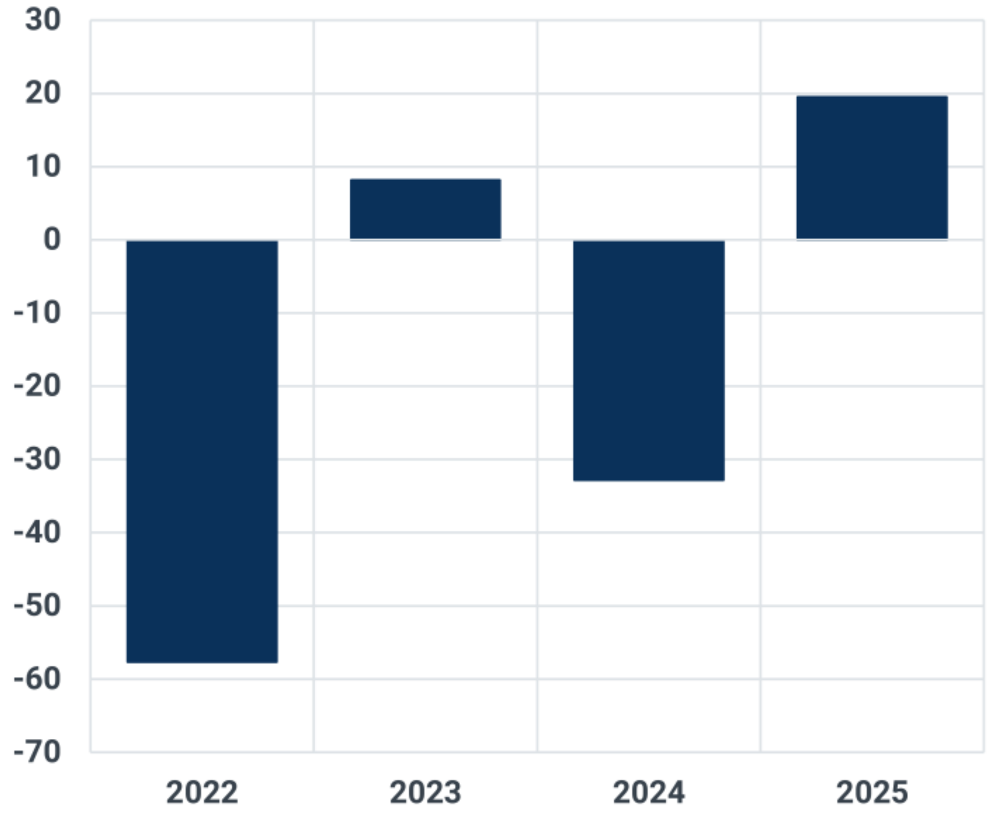
The system adjusts by channeling volumes away from domestic consumption and toward exports

Russian refinery runs and oil exports, Mbd



Source: Kpler

Degree of substitution between refining runs and crude exports, kbd



Source: Kpler

kpler

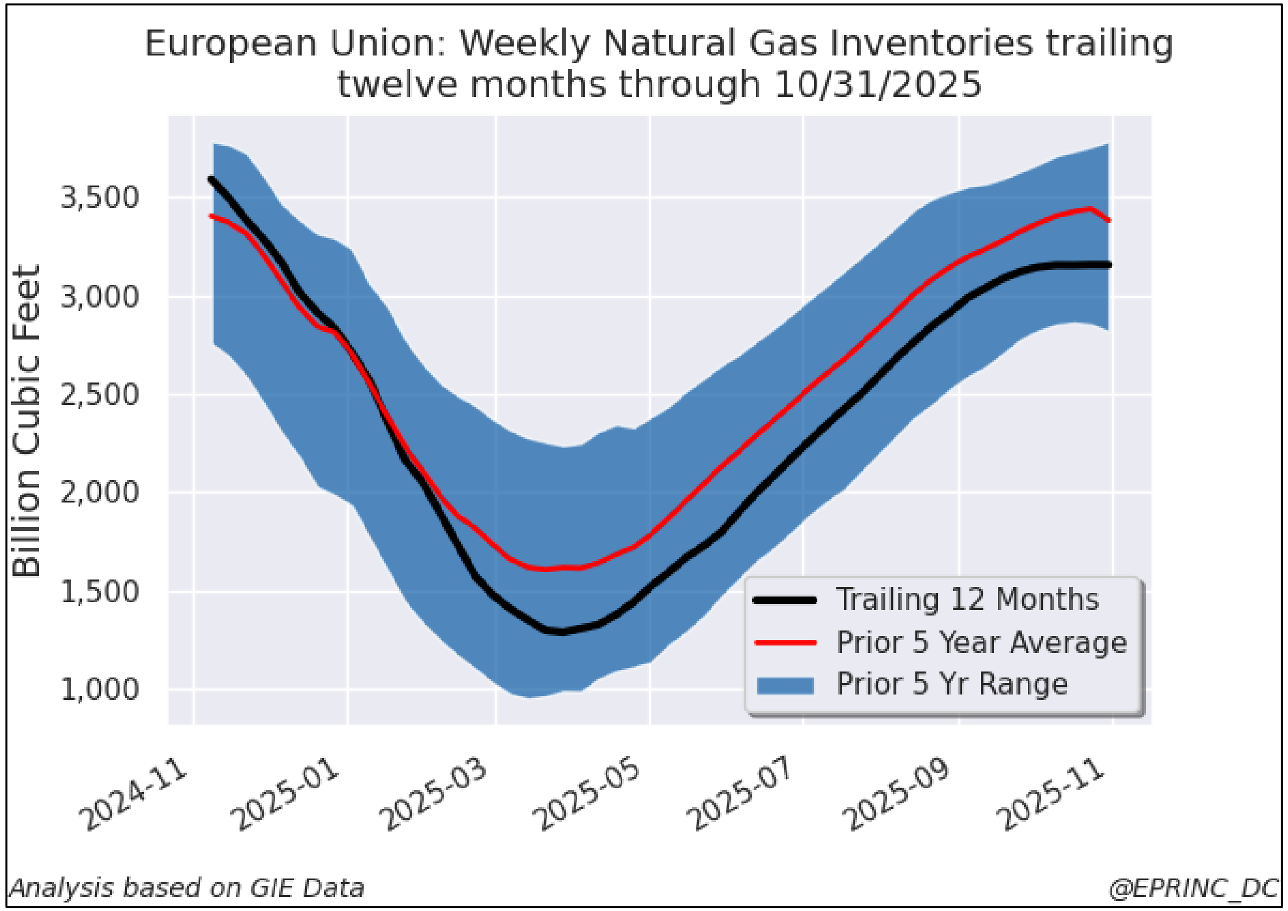
Ukraine's Impairment of Russian Energy – Kpler's Conclusions

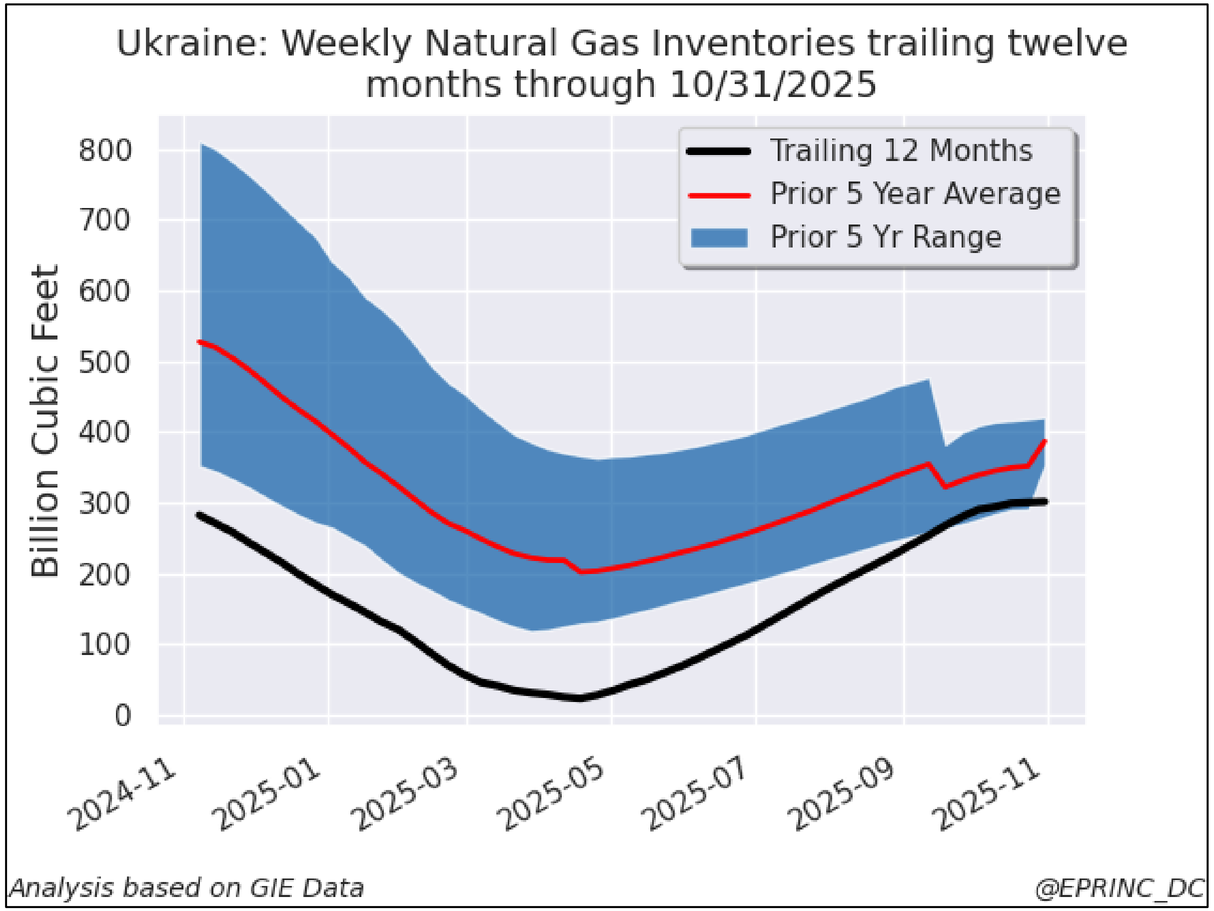
- A swift return of Russian refining capacity any time soon remains unlikely.

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

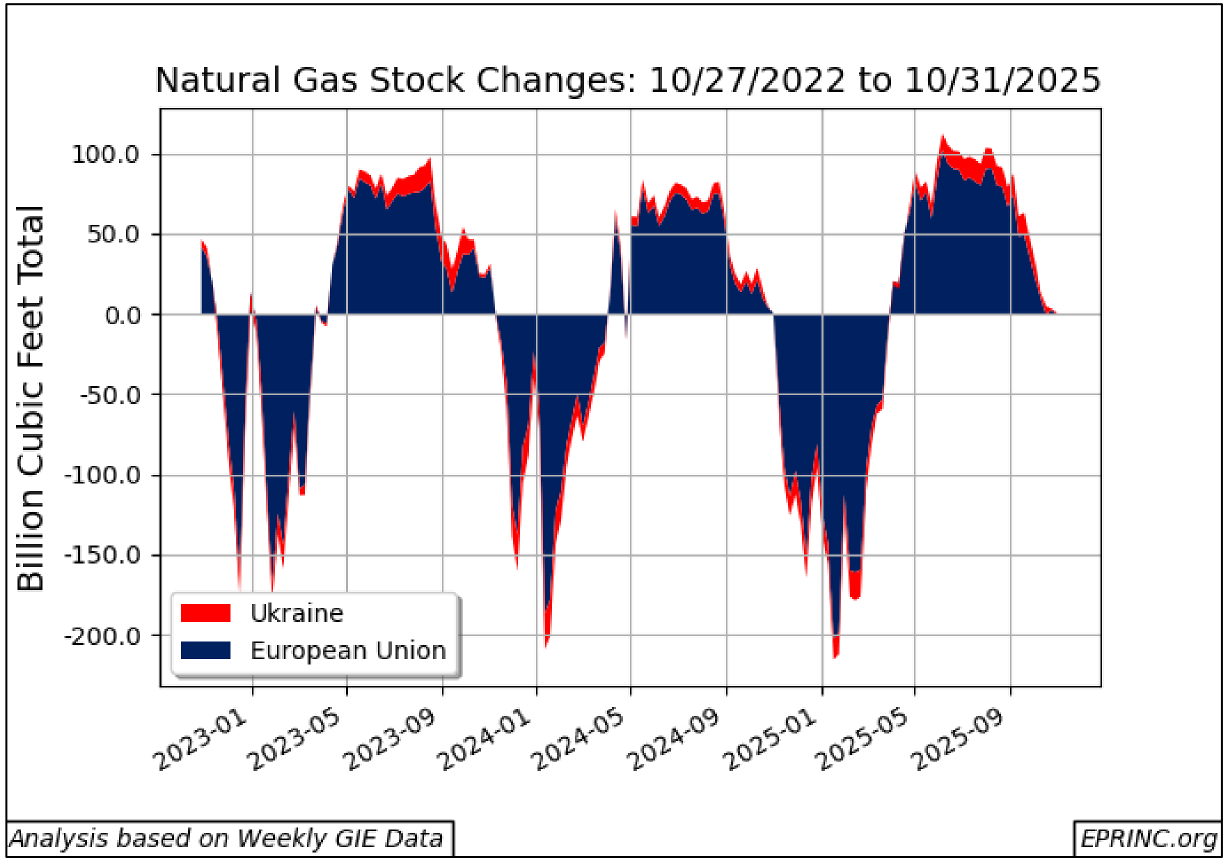
- Brazil and Turkey are looking to diversify their product imports away from Russian sourced.

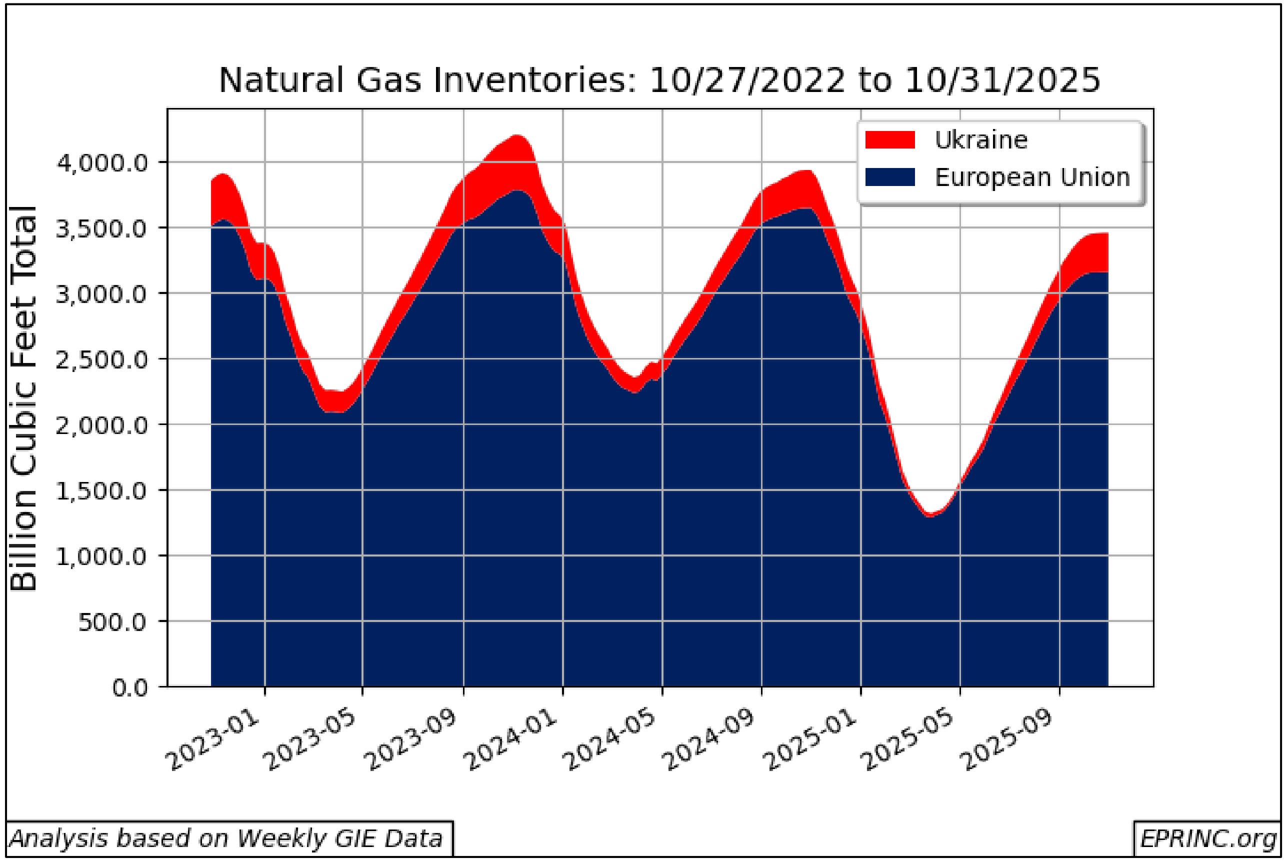
Ukraine & European Energy – Gas Storage



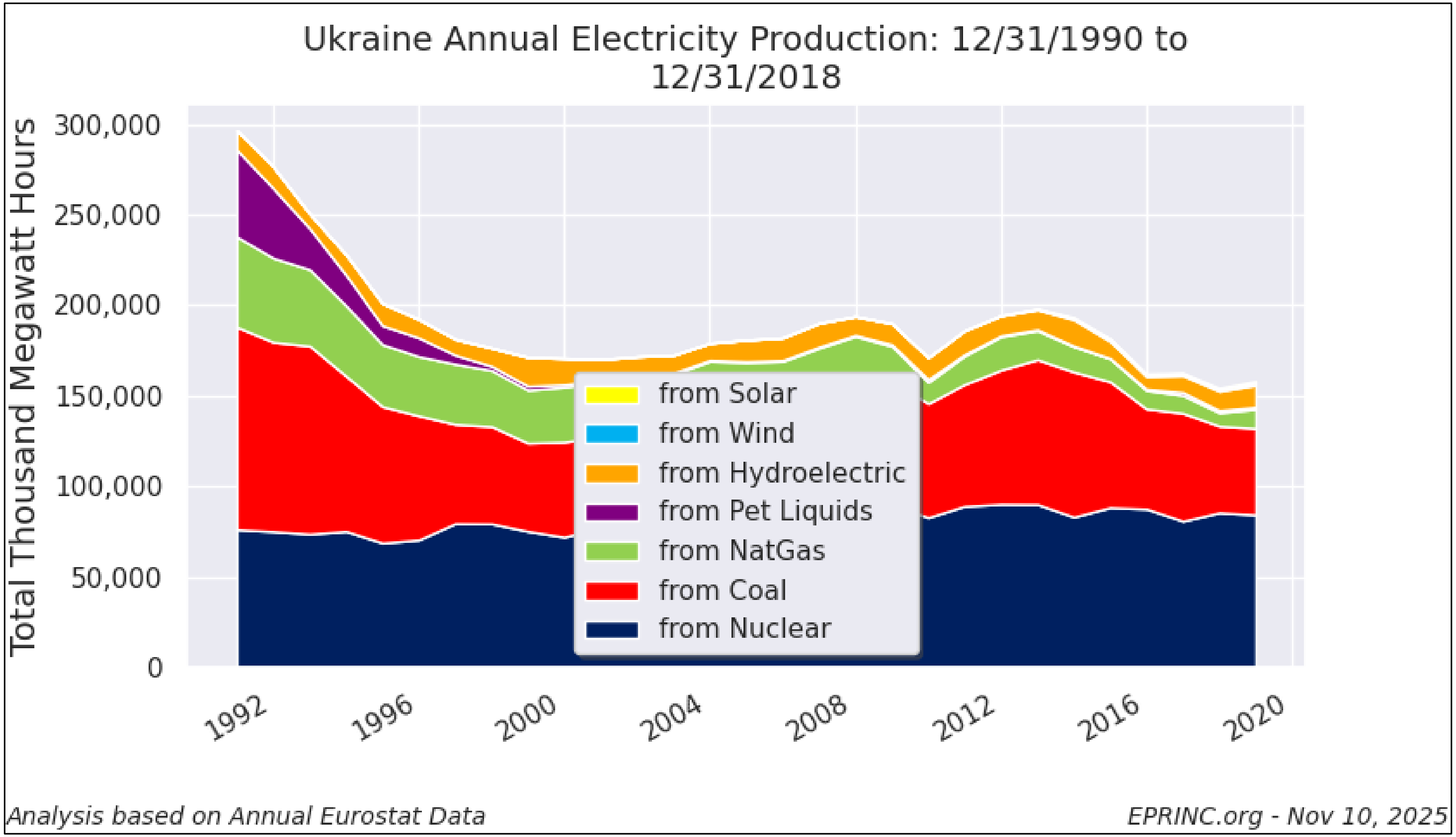


Ukraine & European Energy – Gas Storage





Ukraine & European Energy – Electricity



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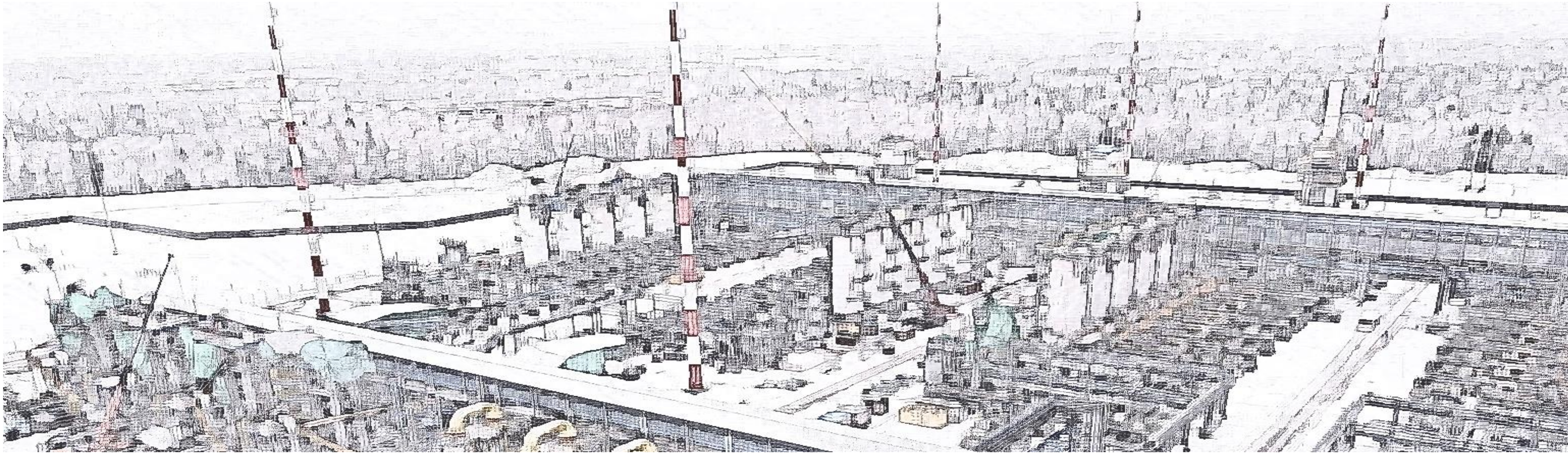
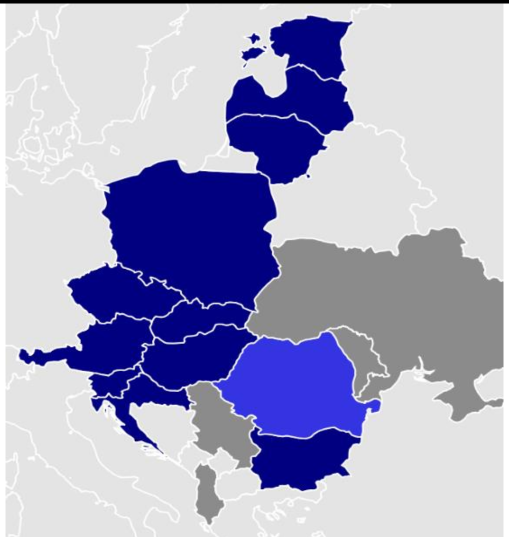
3SI Infrastructure Analysis: the Priority Project List



Despite Proud Claims, Priority Projects Vary Dramatically

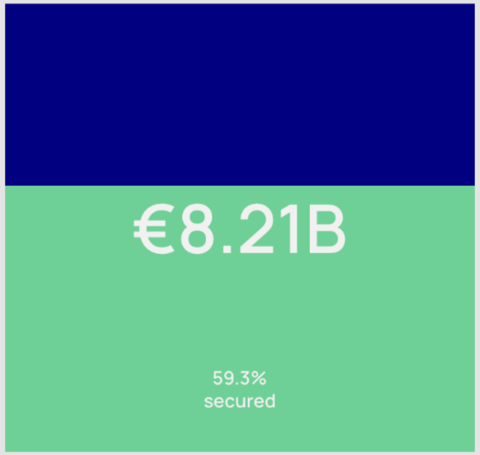
"Digital Platform monitoring hydrographic bases in the 3SI region"



Initial Initial working hypotheses:

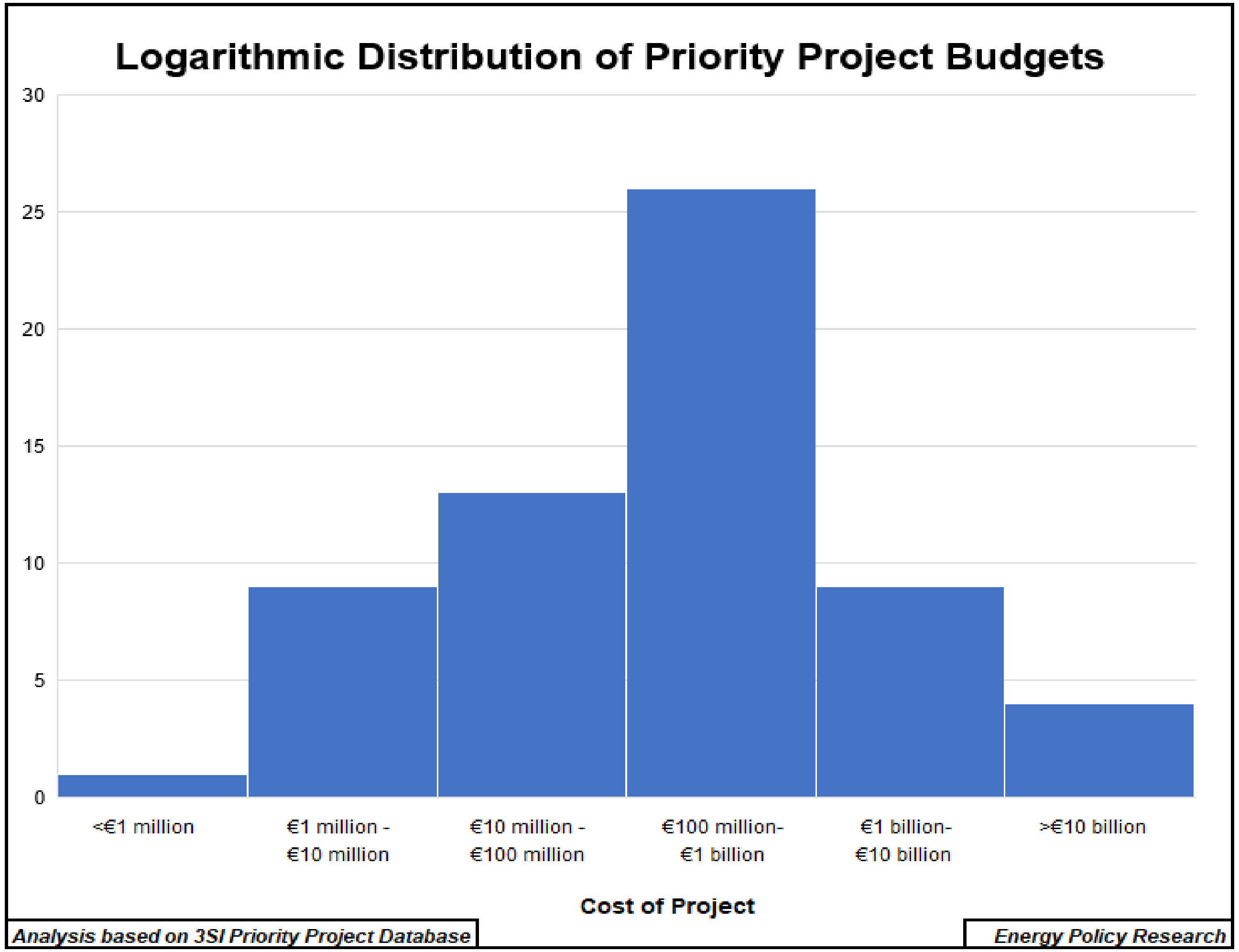
- Estimated budget: 2,500,000 EURO;
- 4% the annual interest rate taken into account;
- credit repayment from year 3 (first year of operation);
- a team of approx. 20 people (specialists, technicians, administrative staff);
- worked on average values of the three years of operation, in which the credit will be reimbursed.

Total 82.1 billion euro. While more than 59,3% of the budget expenditure is already covered by approved funds, an additional € 33.4 billion would be needed to implement relevant projects.



"Baltic–Adriatic TEN-T Core Network Corridor"

A Sense of Scale: The Budget Distribution



The four projects in the far-right bucket with values over €10 billion account for around two-thirds of all proposed budget for 3SI projects.

Analysis Framework: Three Key Dimensions

1. Bankability

Can private markets fund this project?

Clear: Straightforward ROI

Possible: With creative financing

Unlikely: Requires public funding

2. Geography

Who benefits from the investment?

Non-geolocated: Regional benefits

National: Single country focus

Multinational: Cross-border impact

3. Budget Size

Scale, absolute and relative to National GDP

Small: Under €100M

Medium: €100-500M

Large: Over €500M

Nationally Affordable: <0.2% of Proposing Country GDP

Not Nationally Affordable: >0.2% of Proposing Country GDP

Pathways to Financing: Four Categories

- *Category i: Clearly Bankable Projects*
- *Category ii: Non-geolocated Projects*
- *Category iii: National Projects*
- *Category iv: Large Multinational Projects*

Priority Project Types	Average Budget (millions of €)	# of Projects	# of Projects w/ Budget Provided	# of Projects w/ at least 1% funding	Total Proposed Budget	% share of all project budgets	Total Funding Secured (millions of €)	% share of all secured funding	Total % Secured
Digital	**€ 32.3**	**9**	**5**	**2**	**€ 161.4**	**0%**	**€ 103.3**	**0%**	**64%**
Category ii: Non-geolocated	€ 3.5	5	2	0	€ 7.0	0%	€ -	0%	0%
Category iii: National	€ 51.5	4	3	2	€ 154.4	0%	€ 103.3	0%	67%
Energy	**€ 891.0**	**36**	**28**	**8**	**€ 24,949.2**	**26%**	**€ 3,316.0**	**10%**	**13%**
Category i: Bankable	€ 184.2	12	10	2	€ 1,841.6	2%	€ 160.5	0%	9%
Category ii: Non-geolocated	€ 10.0	1	1	0	€ 10.0	0%	€ -	0%	0%
Category iii: National	€ 257.6	11	8	1	€ 2,060.4	2%	€ 25.0	0%	1%
Category iv: Large Multinational	€ 2,337.5	12	9	5	€ 21,037.2	22%	€ 3,130.5	10%	15%
Transport	**€ 2,333.1**	**44**	**30**	**19**	**€ 69,992.0**	**74%**	**€ 29,518.4**	**90%**	**42%**
Category i: Bankable	€ 418.9	6	4	3	€ 1,675.5	2%	€ 1,150.5	3%	69%
Category ii: Non-geolocated	€ 21.7	2	1	1	€ 21.7	0%	€ 21.7	0%	100%
Category iii: National	€ 162.9	21	13	5	€ 2,117.3	2%	€ 80.4	0%	4%
Category iv: Large Multinational	€ 5,514.8	15	12	10	€ 66,177.5	70%	€ 28,265.8	86%	43%
Grand Total	**€ 1,509.565**	**89**	**63**	**29**	**€ 95,102.6**	**100%**	**€ 32,937.8**	**100%**	**35%**

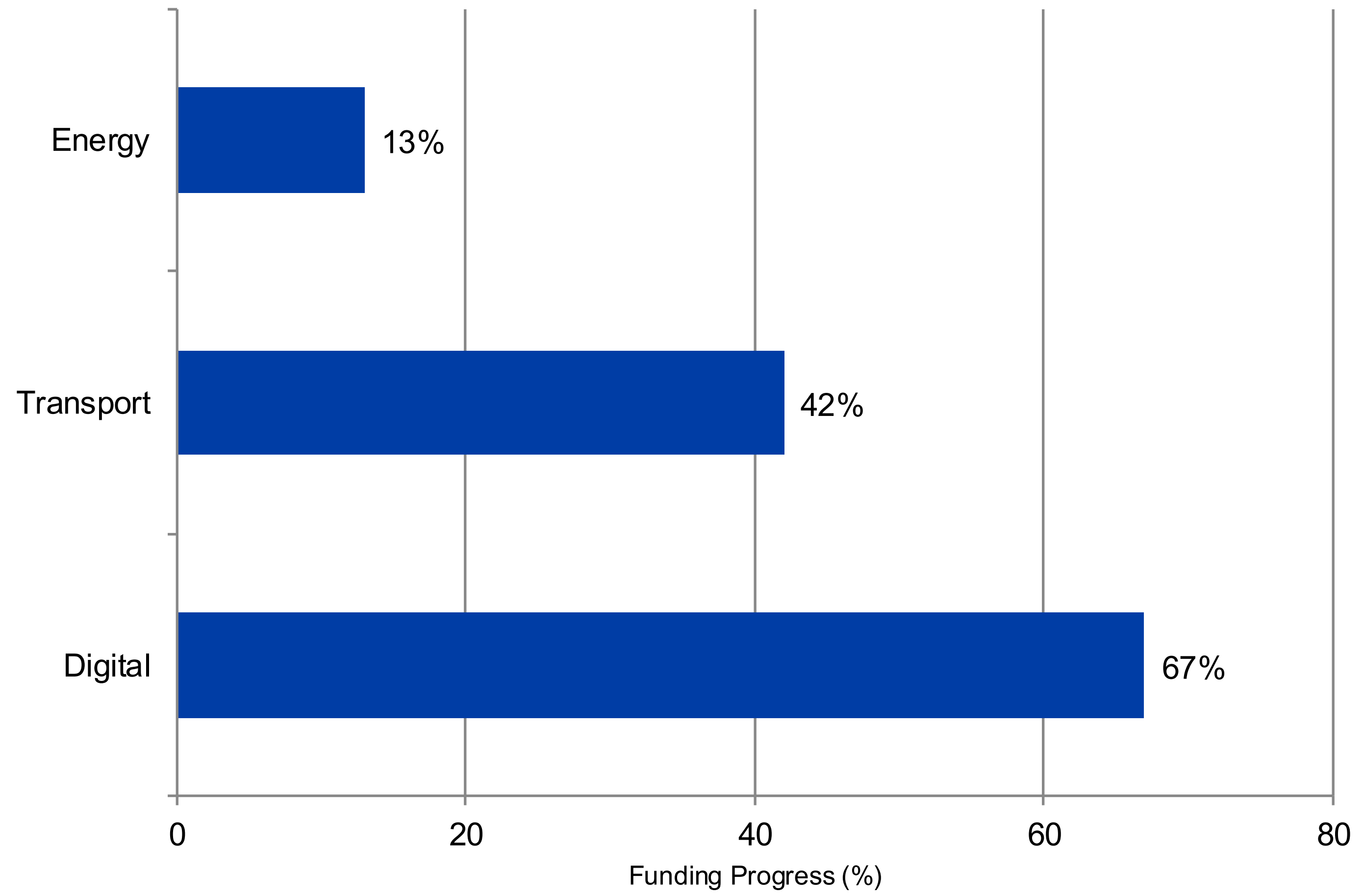
Analysis based on 3SI Priority Project Database ***Enery Policy Research***

Overall Funding Progress by Sector

Overall Progress
35%

Transport Sector
42%

Energy Sector
13%

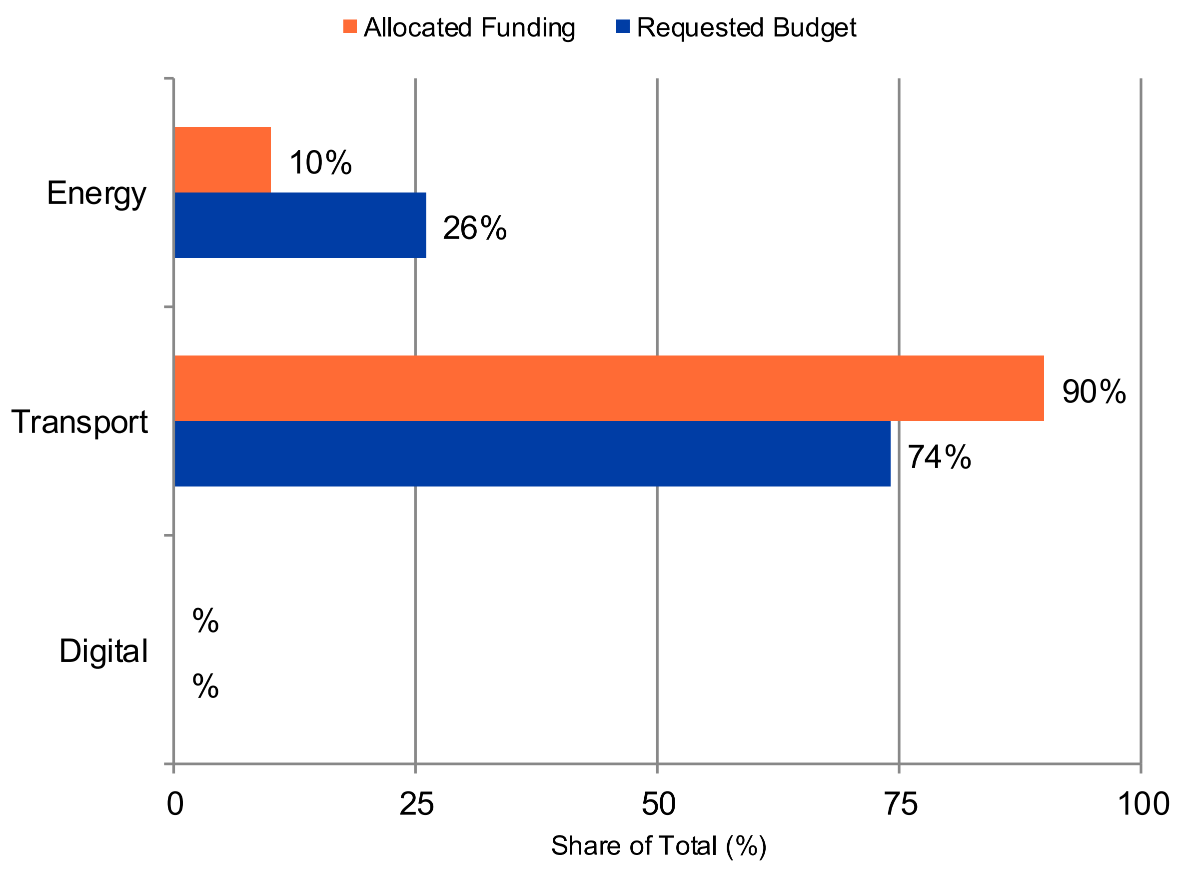


Energy Sector: A Crisis in Funding

Key Findings

- Energy projects represent **26% of total requested budget**
- Only **10% of allocated funding** went to energy
- Most critical multinational gas pipelines: **0% funded**

Systemic changes needed to achieve energy security



Which Large Multinational Energy Projects got Funded?

Energy Policy Research Foundation

List of Category iv (Large Multinational) Energy Projects

	Project	Type	Proposing countries	Budget (millions of €s)	% of total	Funding (millions of €s)	% of total	Percent Secured	Funding Sources
1	Romania-Hungary gas interconnector expansion (ROHU)	Pipeline	Hungary	?	0%	€ -	0%	0%	
2	Bulgaria-Romania-Hungary-Austria pipeline (BRUA)	Pipeline	Romania	€ 14,550.0	69%	€ -	0%	0%	
3	Bulgaria-Hungary-Romania-Slovakia pipeline (Eastring)	Pipeline	Slovakia	€ 2,060.0	10%	€ -	0%	0%	
4	Hungary and Slovakia gas interconnector expansion	Pipeline	Hungary	?	0%	€ -	0%	0%	
5	Hungary- Slovenia-Italy pipleine (HUSIIT)	Pipeline	Hungary & Slovenia	€ 84.5 (only Slovenian part)	0%	€ -	0%	0%	
6	Ionic Adriatic Pipeline (IAP) Croatia-Bosnia-Montegero-Albania	Pipeline	Croatia	€ 600.0	3%	€ -	0%	0%	
7	Polish new regional gas energy security infastructure (Baltic Pipe, LNG terminal, interconnectors to Ukraine and Slovakia)	Pipeline	Poland	€ 1,563.0	7%	€ 1,563.0	50%	100%	National: CEF (roughly 2:1)
8	Gas interconnector Poland-Lithuania (GIPL)	Pipeline	Lithuania & Poland	€ 466.1	2%	€ 466.1	15%	100%	CEF: national (roughly 3:1)
9	Integrating Baltic States' electricity networks with European networks	Electric Grid	Lithuania, Latvia & Estonia	€ 1,625.0	8%	€ 1,625.0	34%	65%	CEF (100%)
10	Integrating Croatian and Slovenian Electric Grids (SINRCO.GRID)	Electric Grid	Croatia & Slovenia	€ 88.6	0%	€ 45.2	1%	51%	CEF (100%)
	Total			**€ 21,037.2**	**100%**	**€ 3,130.5**	**100%**	**15%**	

Analysis based on 3SI Priority Project Database ***Energy Policy Research***

- Poland played a *crucial* role in nationally funding Baltic natural gas infrastructure, with huge national security consequences
- Same model not applicable elsewhere in 3SI

Two Critical Obstacles to Energy Security

1. Lack of Modularity

Unlike highways, pipelines cannot be built incrementally. Full completion required before benefits accrue.

Contrast: Via Carpathia highway funded section-by-section with immediate value.

2. Climate Policy Shift

In 2021, EU replaced INEA with CINEA, prioritizing "decarbonization" over security.

Impact: IEA Net Zero: no new oil/gas investment beyond 2021 approvals.

Combined Impact

After 2022 Invasion of Ukraine, Austria, Hungary, Slovakia, Slovenia remain heavily dependent on Russian gas with no clear diversification path.

Conclusions and Path Forward

Key Findings

- 3SI on better track for transport than energy
- Energy sector systematically underfunded
- 92% of energy budgets unfunded
- Policy shift eliminated gas funding

Path Forward

- U.S. diplomatic emphasis on 3SI role
- Support balanced energy security in EU
- Maintain U.S. LNG export capacity
- 3SI is growing faster than Western Europe, but a lot more needs to be done

Without systemic changes to energy infrastructure financing, Central Europe's energy security and independence remain at risk

Further Recommendations for Policy Makers

- Energy infrastructure process not working, needs overhaul
- 3SI has a critical geostrategic component: security must not play second fiddle to economics
- Consider small operating budget for 3SI small unbankable digital projects
- More accountability ownership of the priority projects in general
- US LNG exports and the Obama Doctrine
- More cooperation with Ukraine, other partners

Thank you.

Questions?