



The **infrastructure** for the **AI economy**

Carbon Arc **Maritime Data** (CA0080) + **Commodity Metrics** (CA0077):

Commodity Flows, Pricing Signals, and Supply Chain Stress

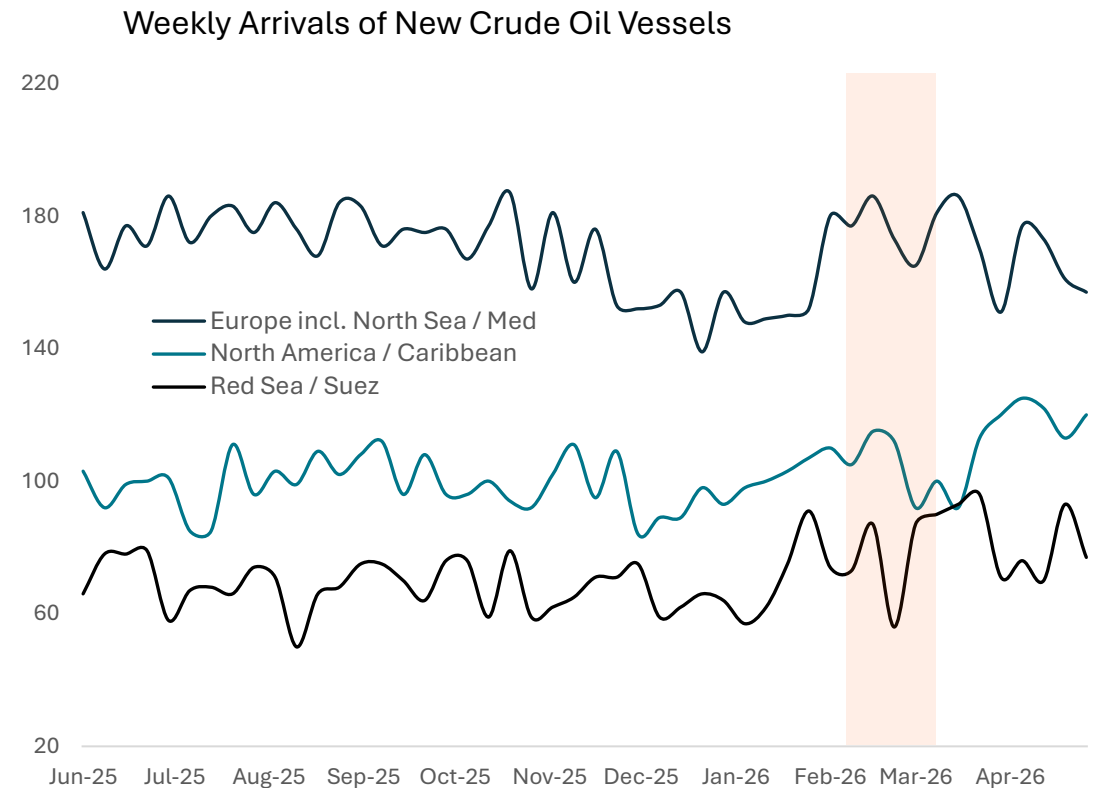
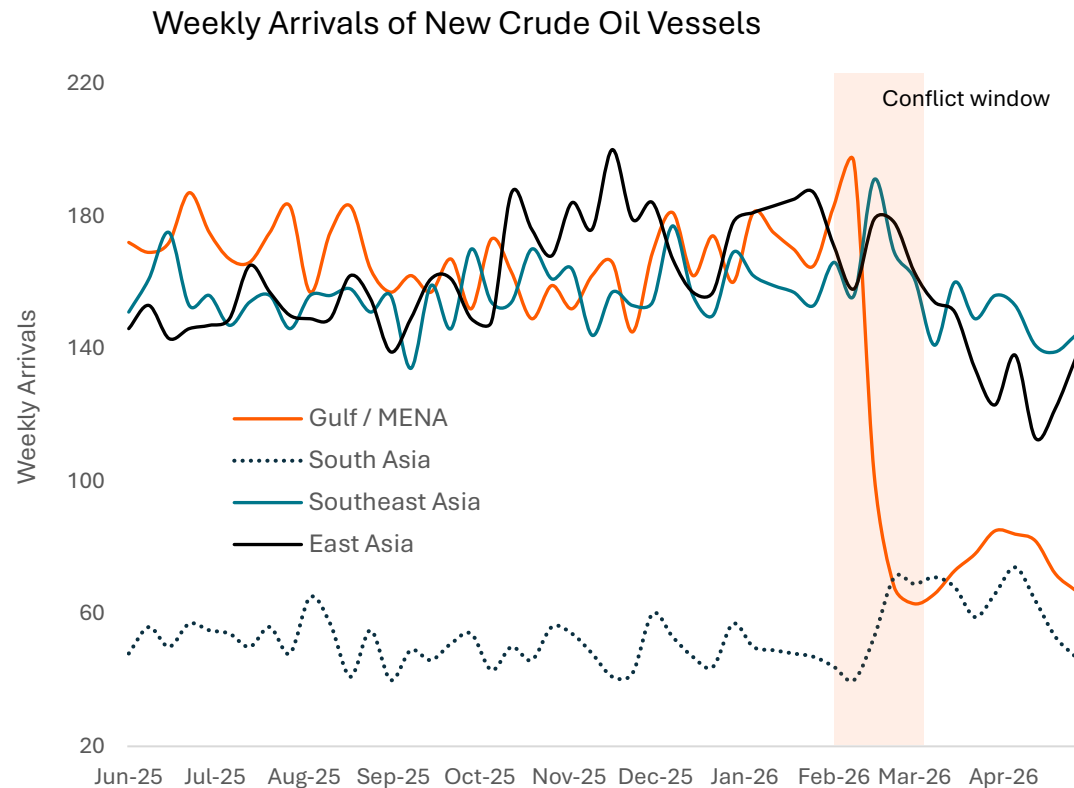
Carbon Arc's Maritime Data and Commodity Metrics combine physical vessel activity with commodity price signals to show how disruptions propagate across global supply chains. Maritime data captures where vessels are arriving, where traffic is thinning, and where flows are being redirected; commodity data helps connect those physical shifts to price pressure in crude, refined products, natural gas, fertilizer inputs, petrochemicals, and agriculture-linked markets. Used together, the datasets help identify not only where supply chains are disrupted, but where the economic effects may surface next.

Access to the provides:

1. Ability to track whether and how regional conflict is changing crude, LNG, or any other major commercial vessel-type's traffic patterns before traditional trade data is available.
2. Identify which importing regions are losing supply from key export corridors and which regions are absorbing redirected flows.
3. Connect physical vessel-flow changes to commodity-price moves in oil, gas, fertilizer, petrochemicals, and food/ag inputs.

Crude Flows Shift as Gulf Arrivals Collapse

For crude oil, the sharp decline in new vessel arrivals into the Gulf region coincided with a broader reshuffling of global crude tanker traffic. East Asia and Southeast Asia arrivals weakened soon after Gulf traffic fell, while South Asia arrivals rose, consistent with diverted or redistributed crude tanker activity. Europe remained comparatively stable, while North America / Caribbean arrivals rose to a period high.



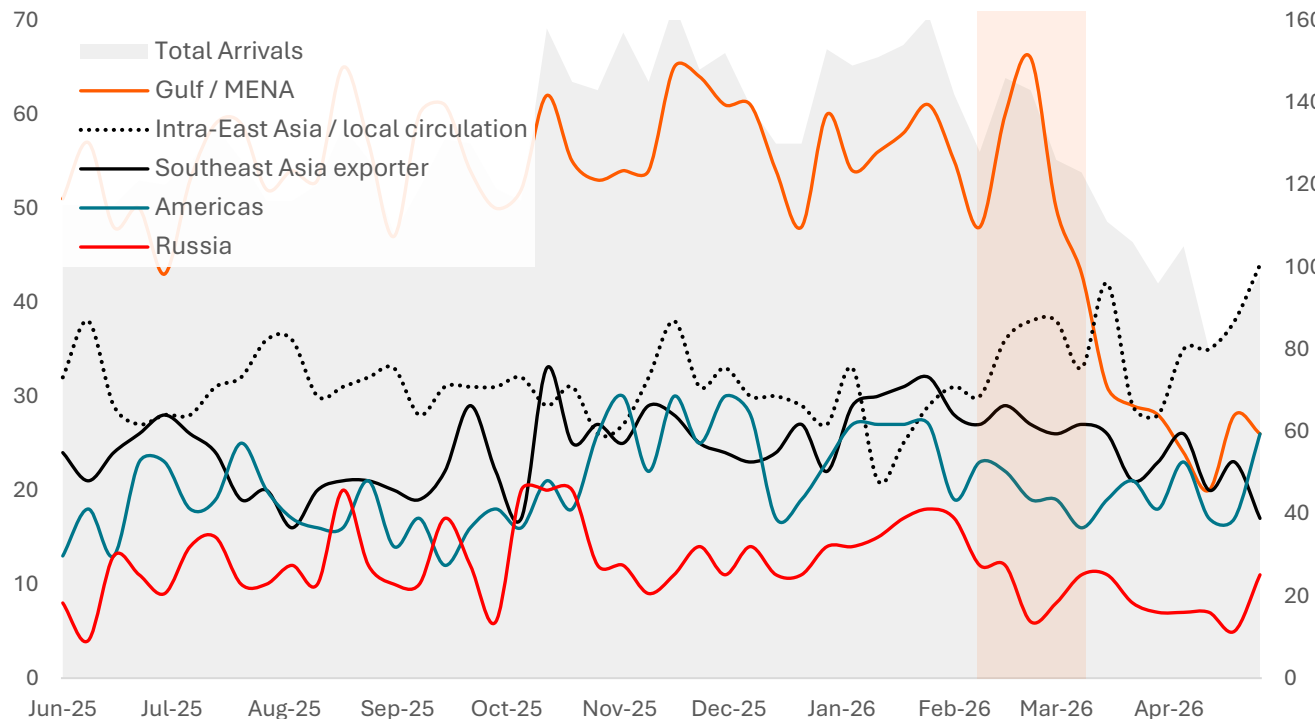
Crude Tankers: East Asia Arrivals by Export Origins

The weekly average of crude oil vessel arrivals into East Asia fell 28% below its pre-war level. Traffic from the Gulf declined 61% and traffic from Southeast Asia also declined from levels seen in late 2025. The response has been a clear physical flow shift with arrivals increasing from the Americas and increased intra-Asia port circulation.

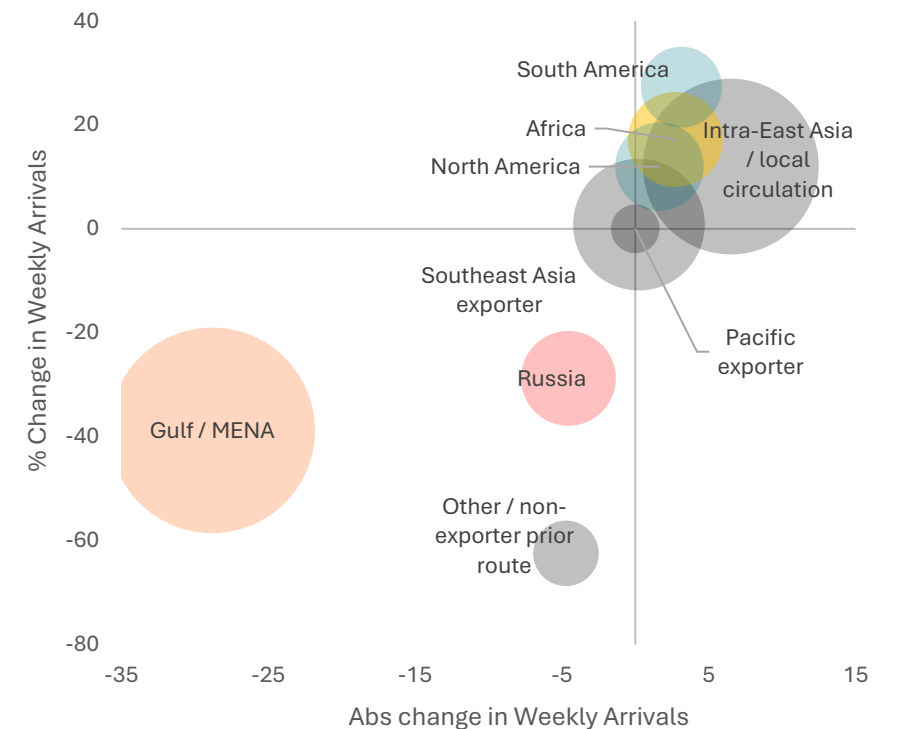
Weekly Crude Arrivals

-28%

Weekly Arrivals of New Crude Oil Vessels



Shift in East Asia Crude Arrivals by Attributed Export Region



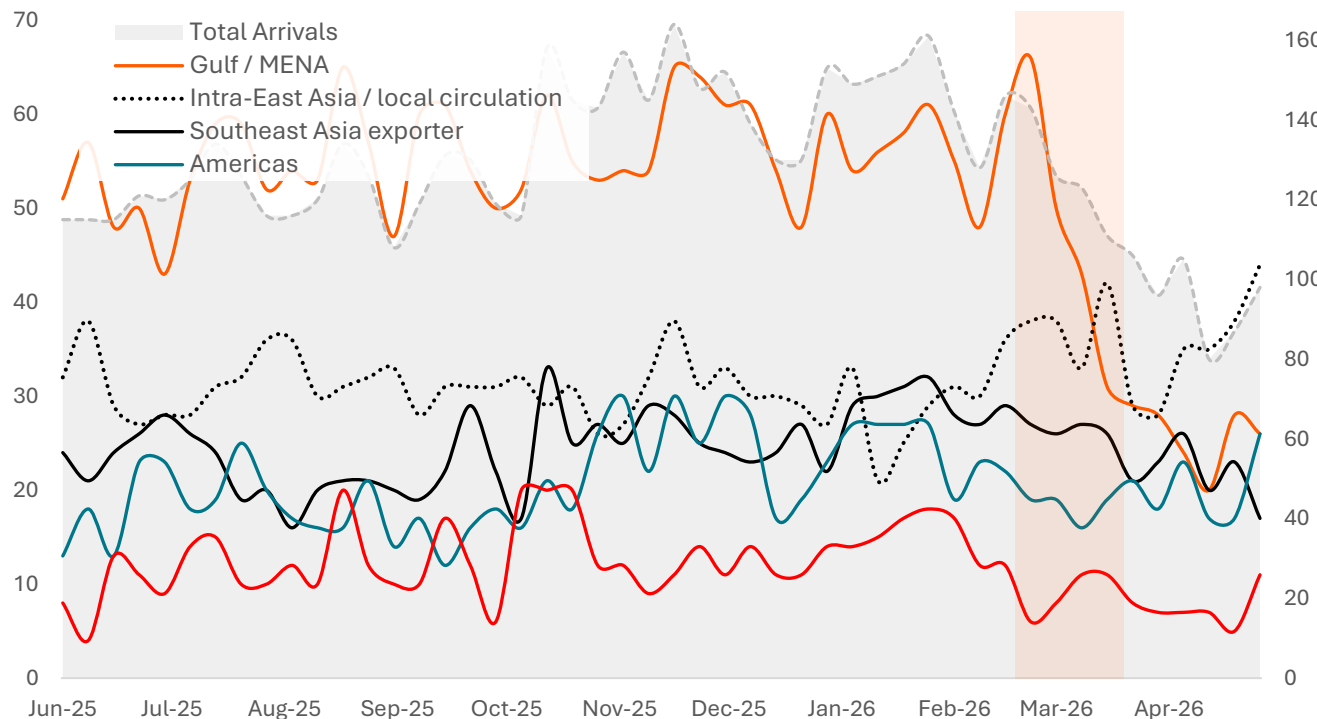
Crude Tankers: **China** Arrivals by Export Origins

Weekly crude arrivals from the Gulf to Chinese ports fell 58% from their pre-war baseline and overall crude vessel arrivals, excluding intra-East Asia/local circulation, fell 35%. Crude vessels with origins from South America and Africa slightly offset the loss of Gulf-origin traffic, while intra-regional circulation increased.

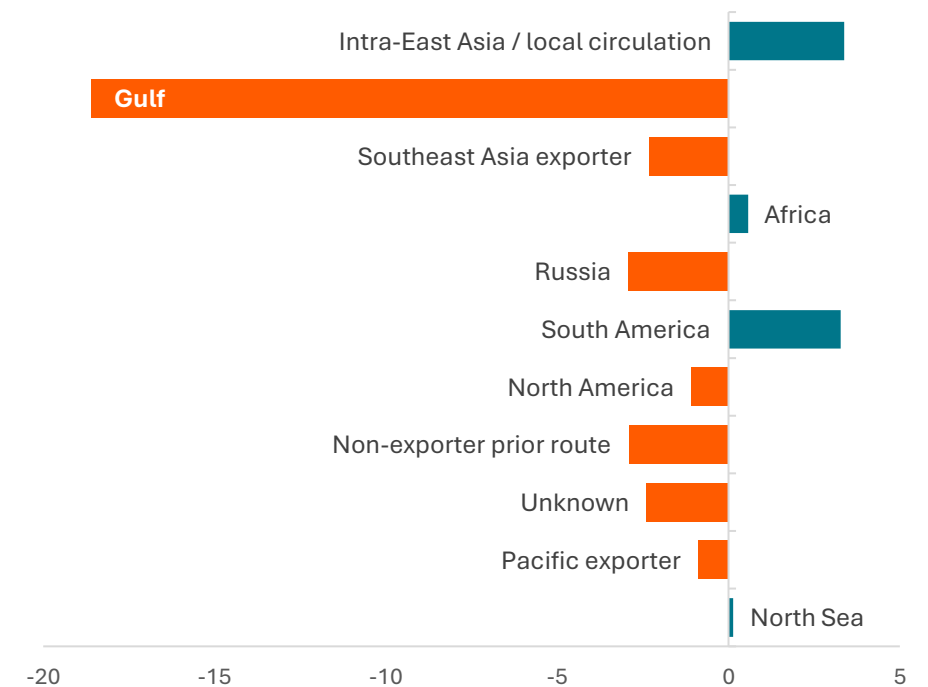
Weekly Crude Arrivals

-35%

Weekly Arrivals of New Crude Oil Vessels



Change in Weekly Arrivals Post-War vs. Baseline



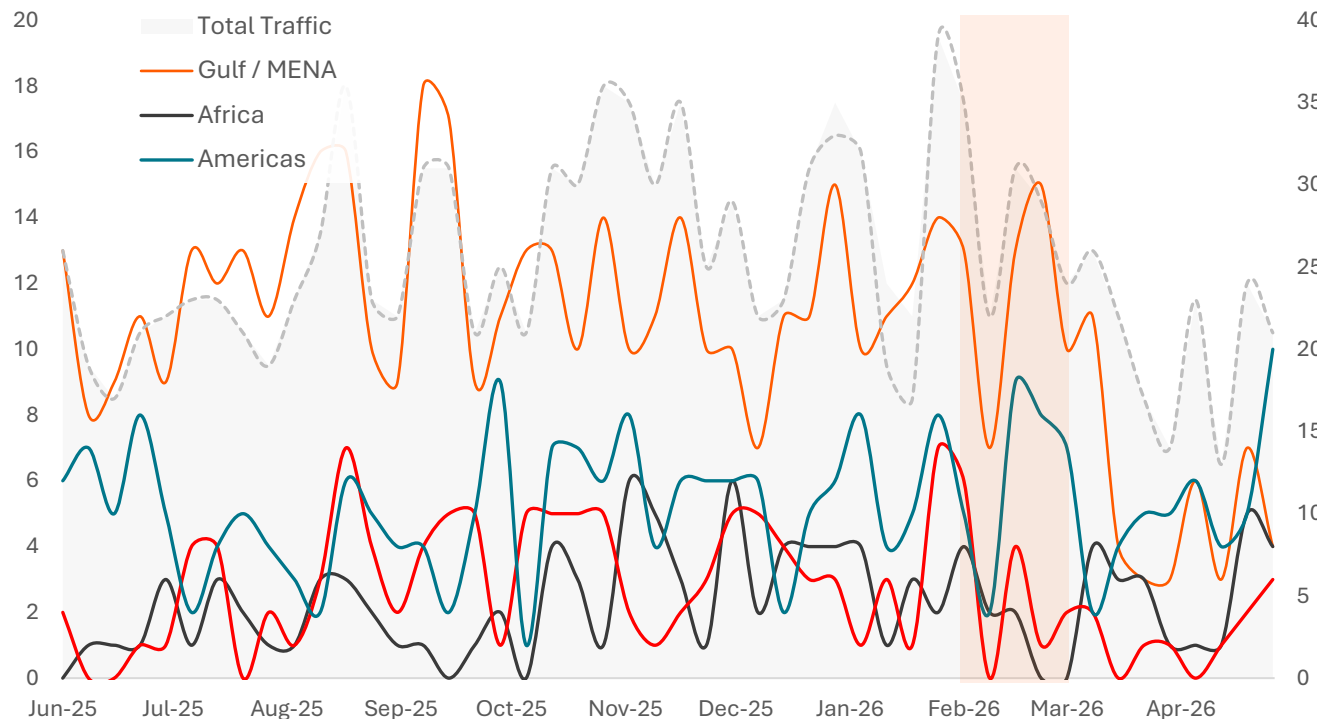
Crude Tankers: **Korea** Arrivals by Export Origins

Weekly crude arrivals from the Gulf to Korean ports fell 41% from their pre-war baseline and overall crude oil arrivals fell 21%. The declines were partly offset by increased arrivals from North America and smaller gains from Africa and Southeast Asia.

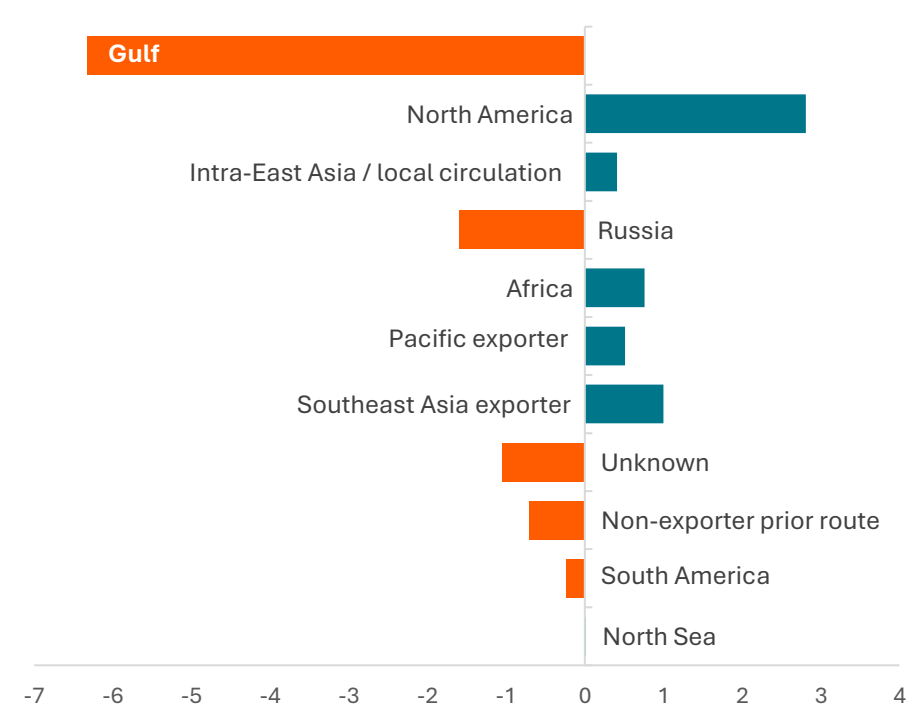
Weekly Crude Arrivals

-21%

Weekly Arrivals of New Crude Oil Vessels



Change in Weekly Arrivals Post-War vs. Baseline



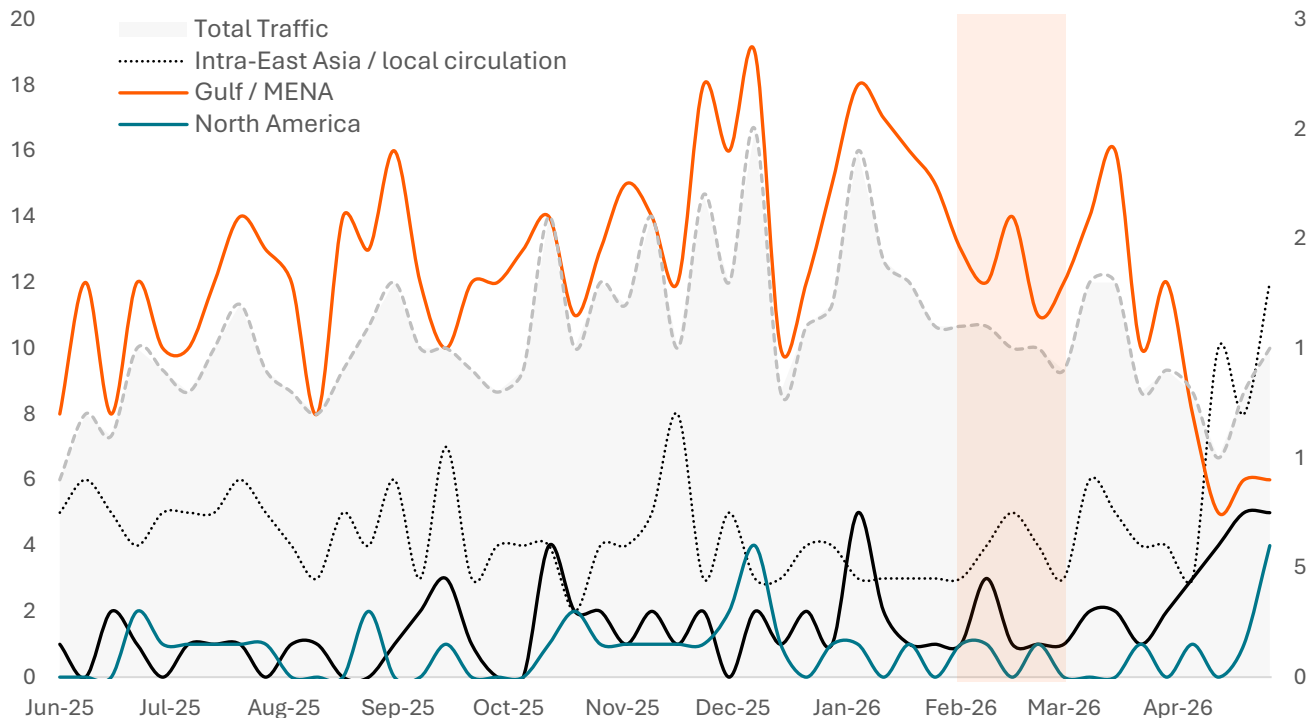
Crude Tankers: **Japan** Arrivals by Export Origins

Weekly crude arrivals from the Gulf to Japanese ports fell 50% from their pre-war baseline and overall crude oil arrivals fell 18%. Decreased supply has been supported by an increase from Southeast Asia, Africa and the U.S. Among the East Asian markets shown, Japan appears to have offset the Gulf reduction most effectively.

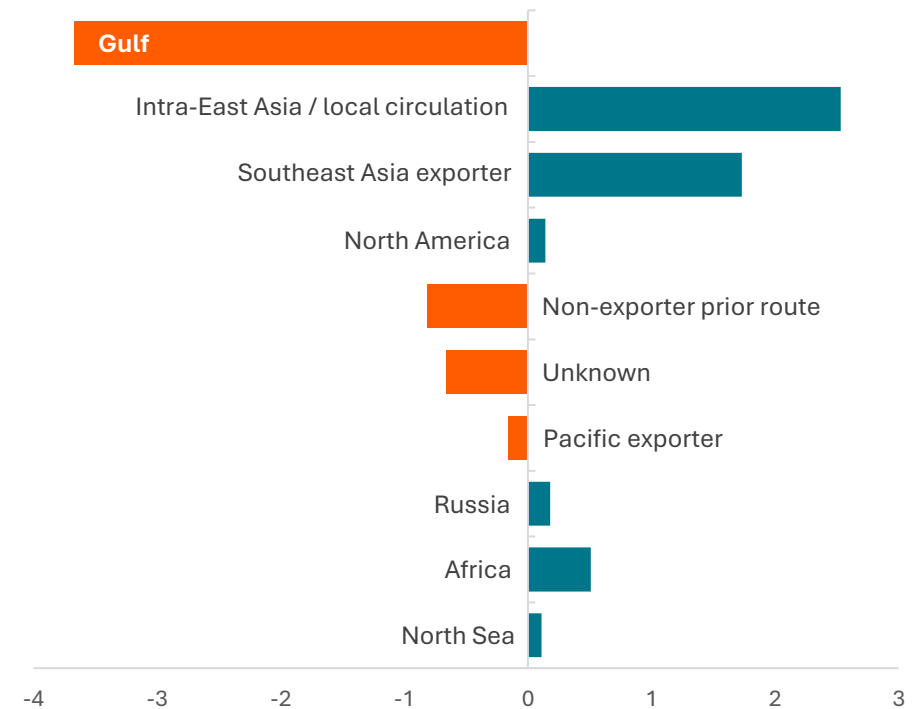
Weekly Crude Arrivals

-18%

Weekly Arrivals of New Crude Oil Vessels



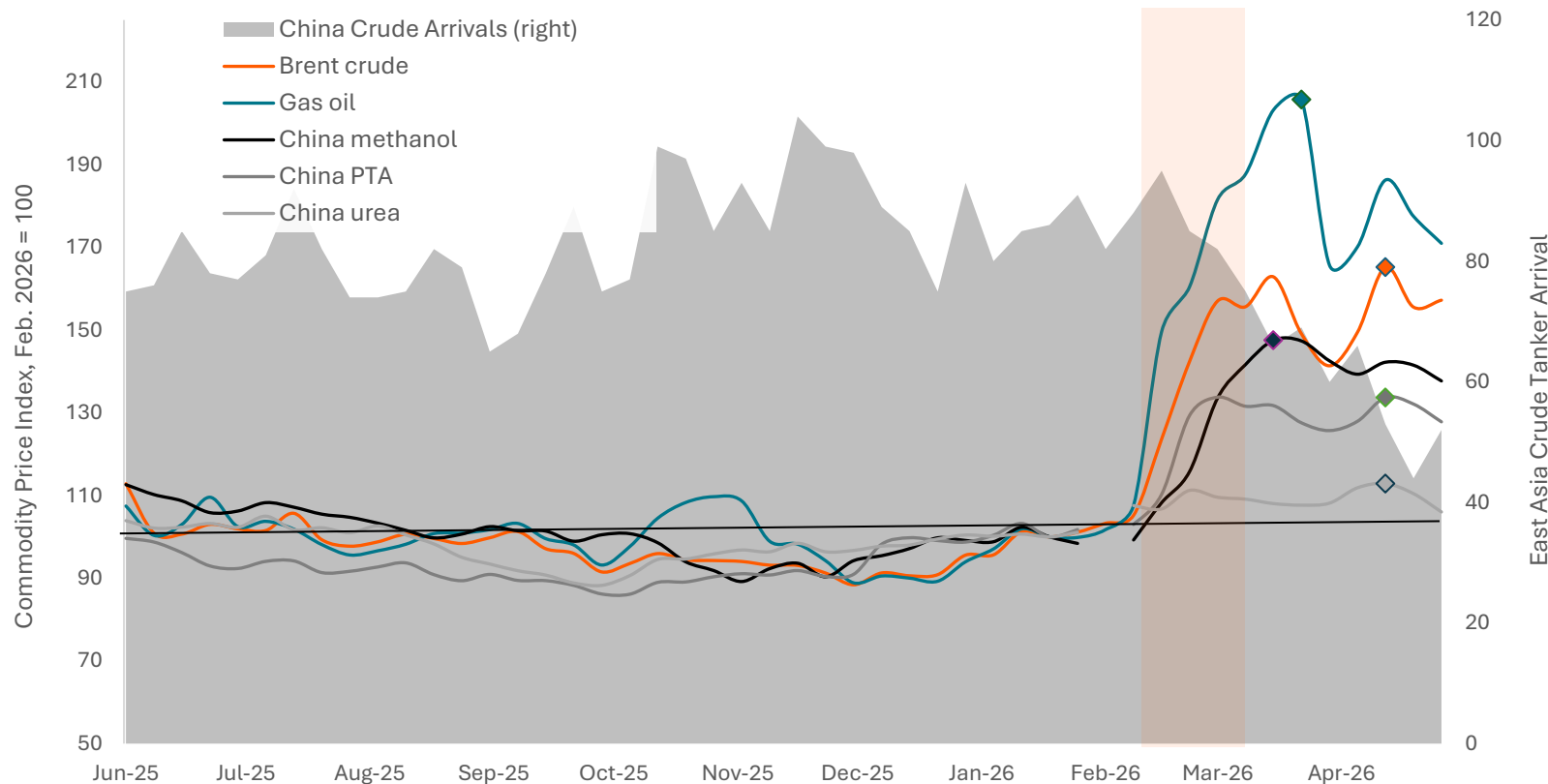
Change in Weekly Arrivals Post-War vs. Baseline



Crude Tanker Arrivals and Downstream Price Signals

As Gulf-linked crude arrivals into East Asia weakened, global crude and refined-product benchmarks repriced sharply higher, while China methanol and PTA showed a downstream petrochemical response and China urea pointed to a more muted but still visible fertilizer-input transmission channel.

China Crude Arrivals and Related Commodity Price Reactions



Price Peaks from Feb 2026 Base

Gas Oil

+106%

China Methanol

+48%

China PTA

+33%

China Urea

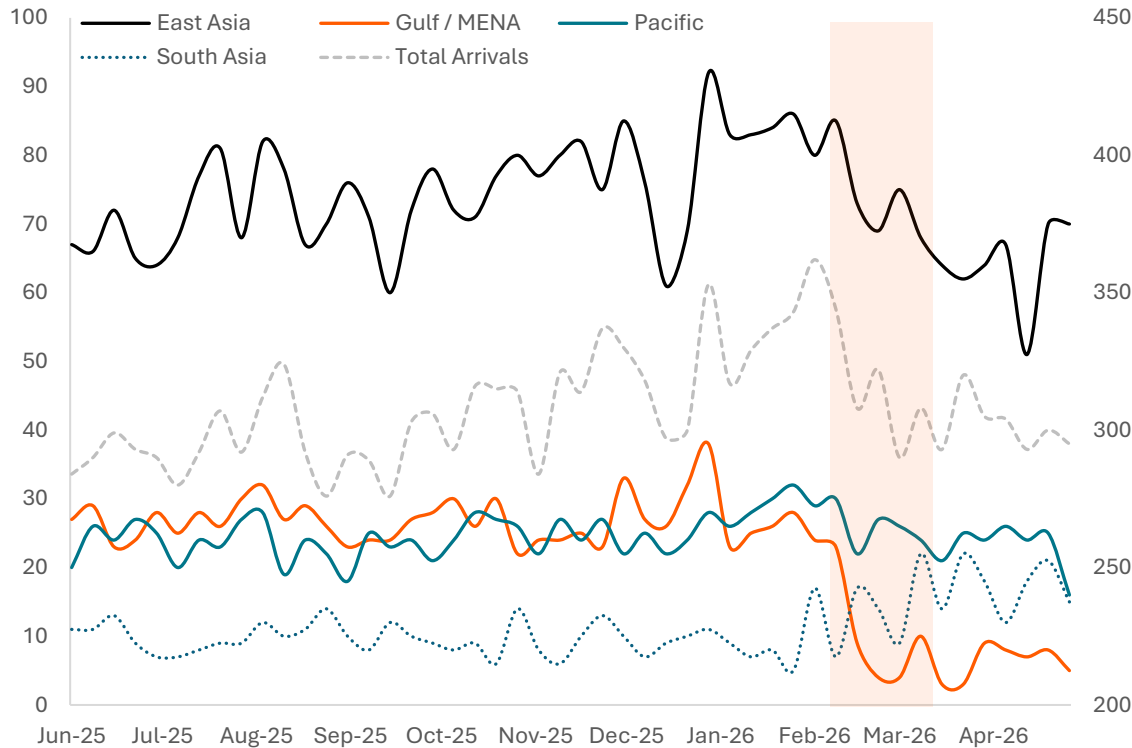
+12%

LNG Disruption and Redistribution

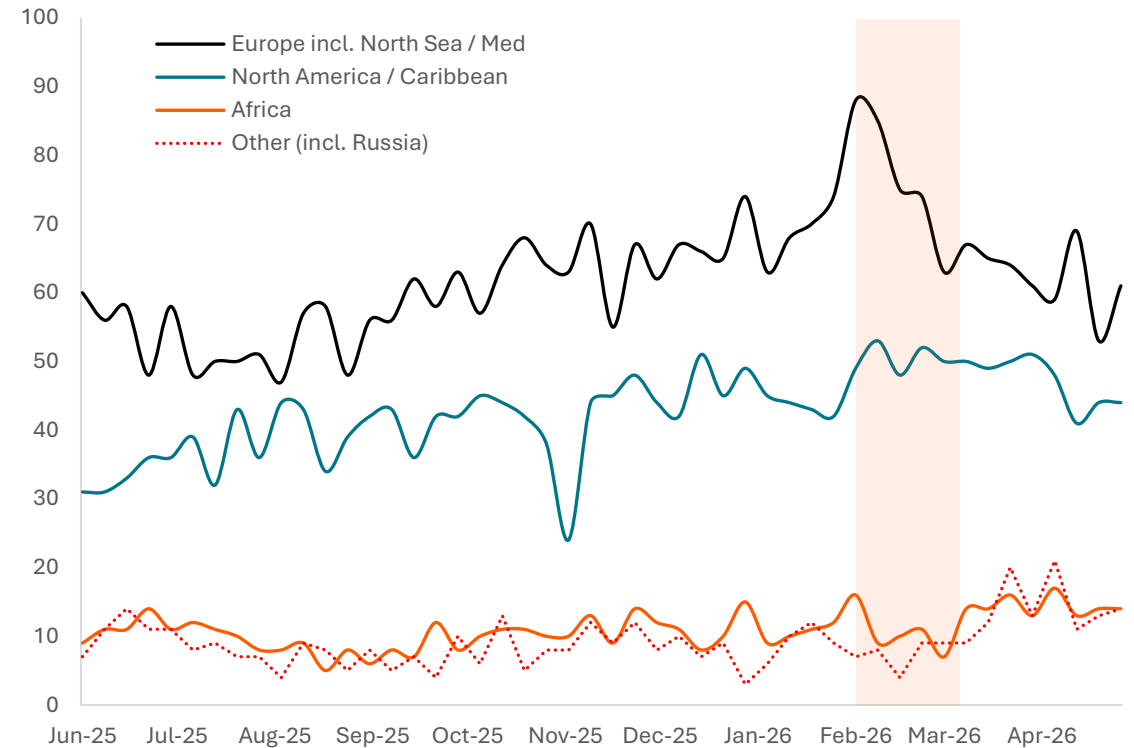
Restricted flows from Gulf ports sparked a global shift in LNG traffic. The decline in arrivals into East Asia coincided with the rise of arrivals into South Asian ports, reflecting both diversion and broader route redistribution.

LNG vessel arrivals into European ports were clearly disrupted as the conflict window began. US/Caribbean activity was stable, but the destination mix of those vessels changed, revealing a redistribution away from European terminals toward Asia.

Weekly Arrivals of New LNG Vessels: Asia + Gulf, Pacific Suppliers



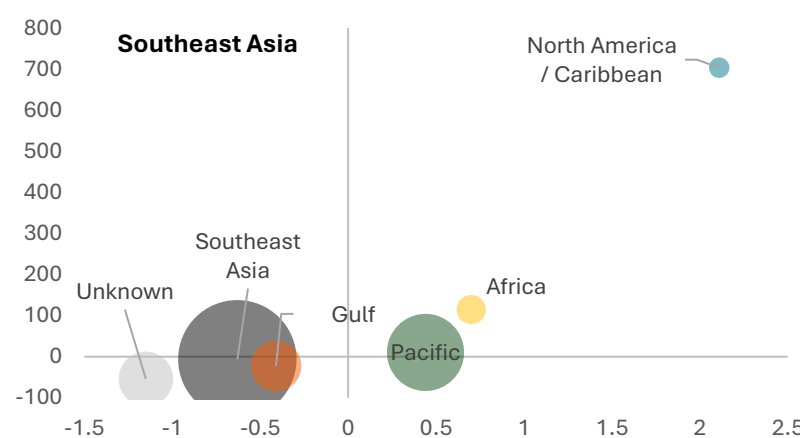
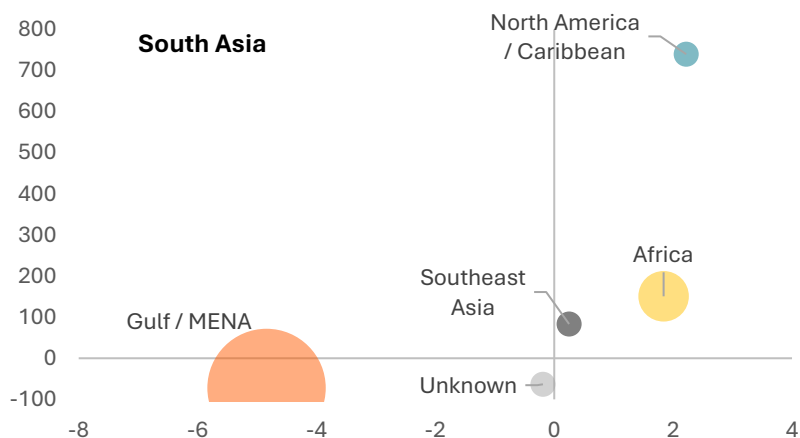
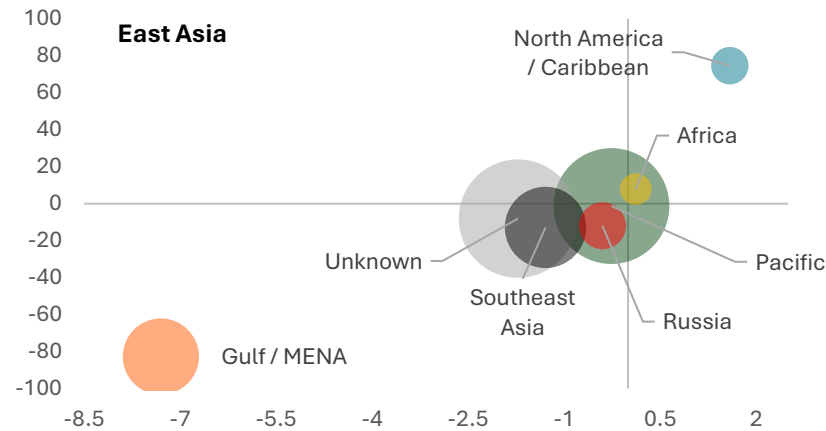
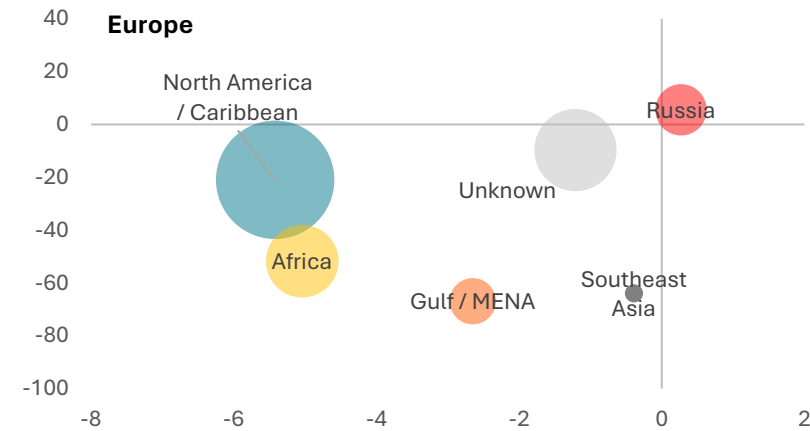
Weekly Arrivals of New LNG Vessels: Europe and its suppliers



LNG Vessel Rotation from European Destinations to Asia

The redistribution pattern is clearest when arrivals are viewed by attributed loading region and destination. Europe lost North America / Caribbean- and Africa-attributed LNG arrivals, while Asia saw meaningful increases from those same supply regions.

Pre- vs. Post-War % Change in Weekly Arrivals (Y-axis), Absolute Change in Weekly Arrivals (X-axis), Sized by Avg. Pre-War Weekly Arrivals



Change in Weekly LNG Arrivals

Gulf → Asia

-72%

Americas → Europe

-21%

Americas → Asia

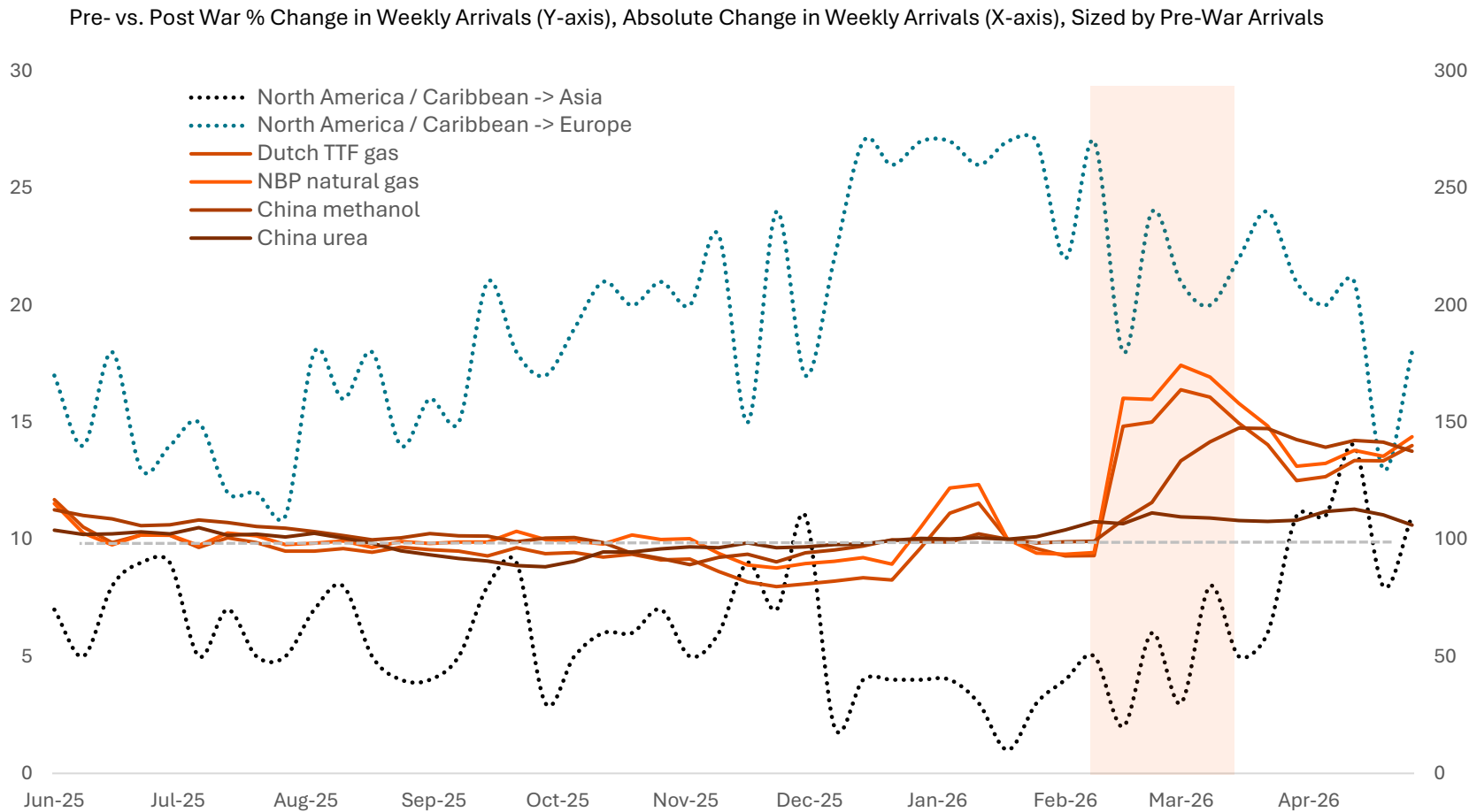
+217%

Africa → Asia

+72%

LNG Disruption and Redistribution: Diversion Delays

Median observed days from prior U.S. LNG call to destinations show the latency between European ports and East Asian redistribution traffic. Longer routes to East Asia explain part of the price impact and downstream supply stress.



Median Days Between Callings

US → Milford Haven, UK

15 days

US → Taichung, TW

41 days

US → Chiba, JP+Incheon, KR

43 days

US → Guangdong Dap., CN

52 days*

* Minimum days between callings