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**INSIGHTS**

# THE CHINA-IRAN OIL-FOR-WEAPONS TRADE LOOP

ENTITIES, SANCTIONS, AND IMPLICATIONS FOR  
PROXY WARFARE

*DRYAD GLOBAL ANALYST,  
SCARLETT SUAREZ*



**DRYAD GLOBAL<sup>®</sup>**

# The China-Iran Oil-for-Weapons Trade Loop: Entities, Sanctions, and Implications for Proxy Warfare

## Bottom Line Up Front

- **Resilient ecosystem:** China-Iran oil-for-weapons trade sustains Iran's military capabilities and proxy warfare in the Middle East, resisting U.S. sanctions
- **Oil exports:** Iran ships 1.5–2 million bpd of sanctioned crude; 80–90% goes to China, yielding \$53–54 billion annually
- **Facilitation methods:** Uses shadow tankers and front companies for evasion.
- **Weapons procurement:** Funds purchases of Chinese ballistic missile components, drones, and air defense systems
- **Strategic partnership:** 2021 25-year deal includes up to \$400 billion in Chinese investments for discounted oil
- **Recent developments:** October 2025 IRGC negotiations with firms like Haokan link oil shipments directly to weapons deliveries
- **Sanctions response:** U.S. targeted 500+ entities/vessels since January 2025; trade continues via renminbi payments and barter
- **Proxy arming:** Enables Iran to supply Hezbollah, Houthis, and Iraqi militias
- **Broader impacts:** Fuels Middle East instability, disrupts global trade, and drives geopolitical shifts





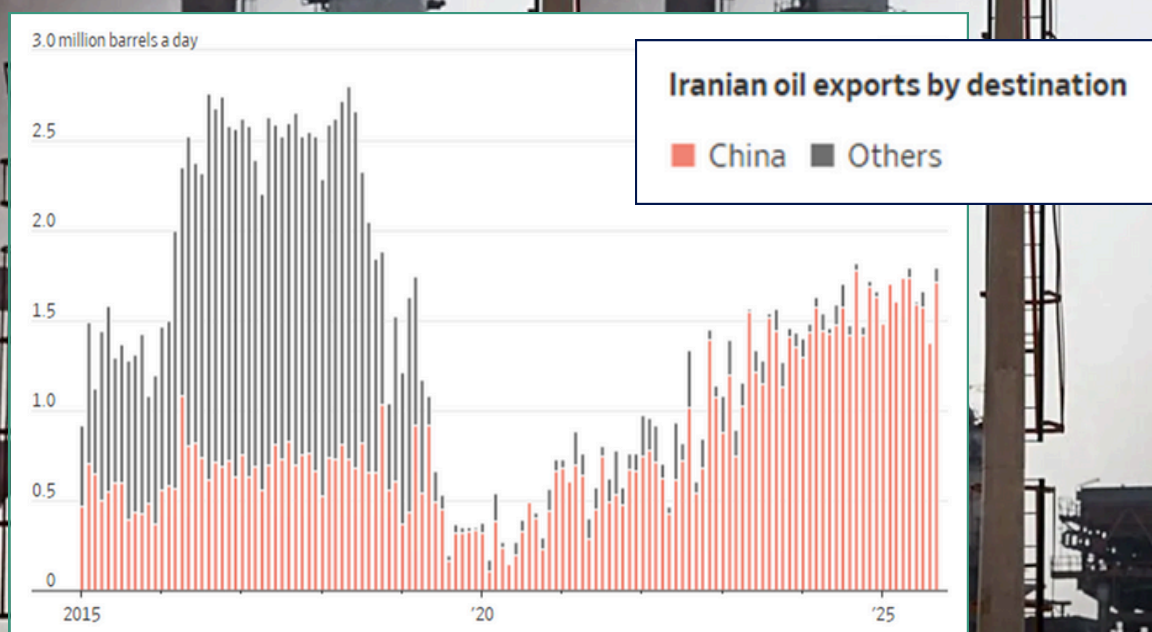
# Introduction

## *THE TRADE LOOP BETWEEN CHINA AND IRAN FOR OIL AND WEAPONRY POSES A SERIOUS THREAT TO GLOBAL SANCTIONS AND MIDDLE EASTERN REGIONAL STABILITY.*

Iran's ability to export sanctioned oil to China, primarily through **covert networks**, generates substantial revenue to fund its military-industrial complex and proxy operations. In return, China supplies Iran with critical military technologies, often through **dual-use components and barter arrangements**, as evidenced by the October 2025 negotiations.

This cycle, rooted in the **2021 China-Iran 25-Year Comprehensive Strategic Partnership Agreement**—signed on 27 March 2021, in Tehran by Foreign Ministers Javad Zarif and Wang Yi—undermines Western efforts to isolate Tehran and strengthens an anti-Western axis involving China and Russia. The agreement outlines **up to \$400 billion in Chinese investments over 25 years in Iran's energy, infrastructure, and military sectors in exchange for discounted crude oil**, while fostering joint military exercises, intelligence sharing, and sanction-evasion mechanisms through Chinese banking.

Though only partially implemented (**\$10–20 billion invested by 2025** due to sanctions/mutual distrust), it has formalized and expanded the oil-for-weapons trade loop. This paper provides a detailed analysis of the entities facilitating this trade, the impact of global sanctions, and the cascading effects on Iran's proxy warfare.



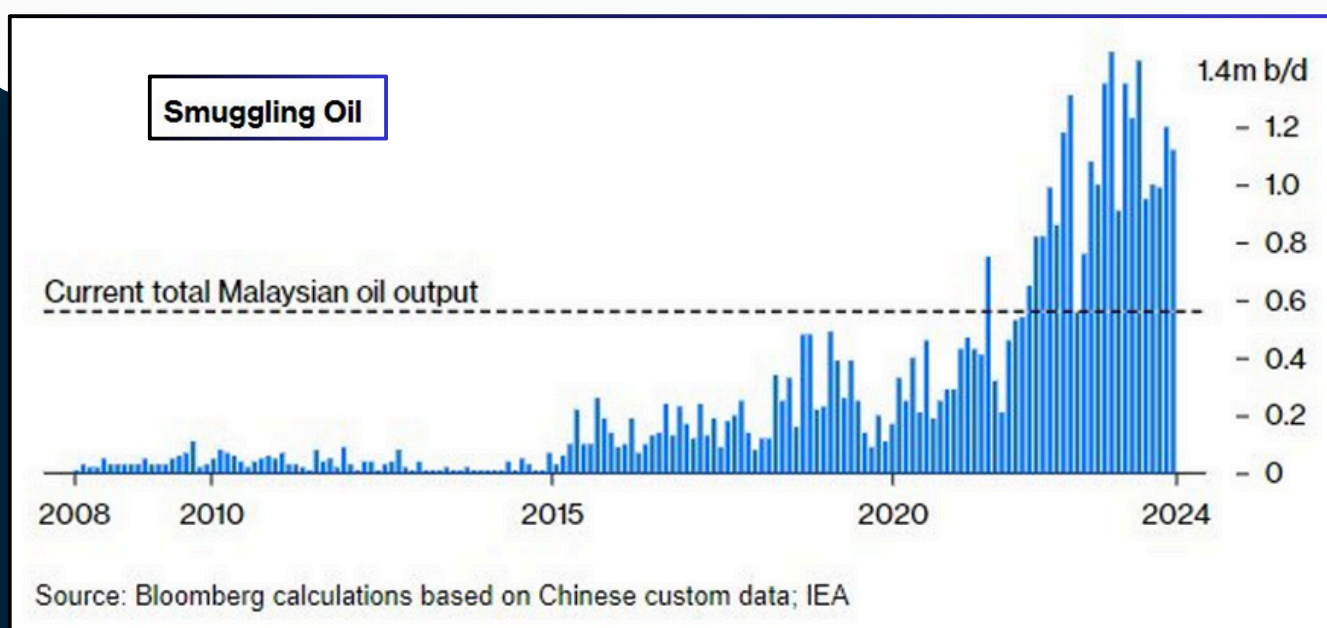
## October 2025 Negotiations

In October 2025, negotiations between the **IRGC, AFGS, and Chinese firms**, notably Haokan, focused on bartering oil shipments for military technologies, including **HQ-9 surface-to-air missiles, ammonium perchlorate, and drone components**. Reported by the Wall Street Journal and Bloomberg, these talks built on the 2021 China-Iran 25-year agreement and follow a March 2025 Beijing trilateral with Russia, emphasizing anti-Western alignment. Conducted amid heightened U.S. sanctions (including a UN snapback mechanism activated on 2 October 2025 and Treasury actions on 9 October 2025 targeting 28 entities and 23 vessels), the negotiations aim to settle **\$8.4 billion** in 2024 oil debts.

## Key Entities in the Oil Smuggling Network

Iran's oil exports rely on a **"shadow fleet" of over 477 tankers (132 added in 2024)** and a web of front companies to disguise shipments as Malaysian or Iraqi crude. Most of this oil goes to China's independent teapot refineries in Shandong Province, which handle over **90%** of Iran's exports. Renminbi transactions via small Chinese banks or barter for infrastructure projects insured by China's Sinosure are used to bypass Western financial systems, with approximately **\$8.4 billion** allocated to Chinese projects in Iran by 2024. The now operational May 2025 China-Iran rail link further streamlines logistics, reducing transit times **from 40 to 15 days**.

*Officially, Chinese imports of Malaysian oil have surged to an all-time high over the last few months, but in reality, oil traders say it's re-branded Iranian crude.*



## Iranian Front Companies

Iranian front companies have been identified as key players in illicit financial and oil-related activities.

**Sepehr Energy Jahan Nama Pars**, controlled by Iran's **Armed Forces General Staff (AFGS)**, serves as a primary broker for oil shipments, facilitating the movement of approximately **2 million barrels in late 2024**, with an estimated value exceeding **\$100 million**. Additionally, a network of Hong Kong-based shell companies, including **Xin Rui Ji Trad Co., Limited**, **Star Energy International Limited**, **Milen Trading Co., Limited**, and **Puyuan Trade Co., Limited**, has been engaged in laundering funds through complex inter- entity transactions disguised as legitimate deals. These operations highlight the sophisticated methods used to obscure financial activities and evade oversight.

## Chinese Teapot Refineries

Since 2023, **Shandong Shengxing Chemical Co., Ltd.** has processed over **\$1 billion** worth of Iranian crude, marking it as a key player in these activities. Similarly, **Shandong Shouguang Luqing Petrochemical Co., Ltd.** has handled approximately **\$500 million** in crude, including oil linked to Houthi networks. Additionally, **Hebei Xinhai Chemical Group Co., Ltd.** and **Shandong Jincheng Petrochemical Group** have emerged as major buyers of illicit crude, contributing to the complex network of unauthorized oil trade between Iran and China. These operations underscore the scale and sophistication of illicit crude oil processing within China's independent refinery sector.

Shandong's Teapot Refinery Hubs



Source: Platts



## Port Terminals and Logistics

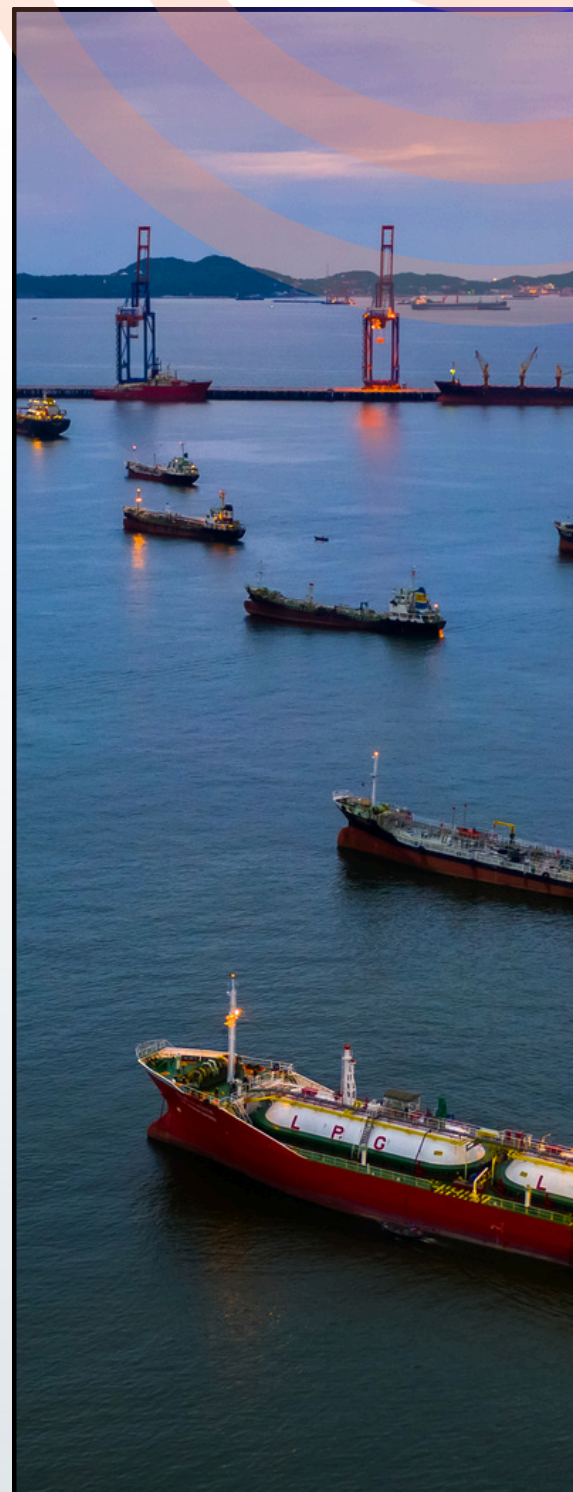
**Rizhao Shihua Crude Oil Terminal Co.**, located at Lanshan Port, has received millions of barrels of crude oil in 2024–2025 via tankers such as Kongm, Big Mag, and Voy. Additionally, **Huaying Huizhou Daya Bay Petrochemical Terminal, Shandong Jingang Port Co. in Dongying**, and **Baogang Logistics** have played critical roles in enabling deliveries from the shadow fleet, supporting the logistics of unauthorized oil trade. These operations highlight the integral role of specific port infrastructure in facilitating illicit crude oil movements.

## Inspection and Shipping Facilitators

**CCIC Singapore Pte. Ltd.** and **Huangdao Inspection and Certification Co.** have been involved in providing falsified documentation, notably certifying Iranian oil as Malaysian in mid-2024 to obscure its origins. Additionally, **Qingdao Fushen Petrochemical Co., Ltd.** supports these operations by providing inspection services that further enable the misrepresentation of illicit oil shipments. These activities underscore the critical role of fraudulent certification and inspection processes in facilitating the illicit oil trade.

## Shadow Fleet Vessels

Notable vessels, including **WEN YAO** (IMO 9288095), **FIONA** (IMO 9365752), **ATILA/HECATE** (IMO 9233753), **SALVIA** (IMO 9569700), **DERYA** (IMO 9569700), **MADESTAR** (IMO 9289726), **MAX STAR** (IMO 9134165), and **GAS DIOR** (IMO 9379404), have been actively involved in ship-to-ship transfers in the South China Sea. For instance, ATILA/HECATE facilitated the shipment of **2 million barrels of oil** to China in early 2025. Additionally, brokers such as Petronix Energy Trading Limited, Petroquimico FZE, and Markan White (Ravenala Trading) play a critical role in managing sales and payments for these illicit transactions. Notably, Petronix Energy Trading Limited alone handled **millions of metric tons of oil** in 2024, underscoring the scale of these operations within the shadow fleet network.



## Entities in Weapons Procurement from China

Following the 2020 UN arms embargo lift, Iran has shifted to procure dual-use technologies and weapons from China, with historical arms imports between 2008-18 valued at **\$269 million** by the Stockholm International Peace Research Institute. These imports are facilitated by **Iran's Ministry of Defense and Armed Forces Logistics (MODAFL)**, **IRGC fronts**, and **Chinese suppliers**, who frequently barter for oil. Negotiations in October 2025 explicitly linked oil shipments to the delivery of missile and drone components.

## Iranian Procurement Fronts

Several Iranian entities have been identified as key procurement fronts for acquiring components critical to military and defense operations. **The Rayan Fan Group**, including **Rayan Fan Kav Andish**, is actively involved in sourcing components for unmanned aerial vehicles (UAVs) and missiles. Similarly, **Qods Aviation Industries (QAI)** and **Shahid Bakeri Industrial Group (SBIG)** play significant roles in procuring parts for Mohajer-6 drones and ballistic missiles, supporting Iran's military capabilities. Additionally, **Pishgaman Tejarat Rafi Novin**, **Saman Tejarat Barman Trading Company (STB)**, and **Rah Roshd International Trade Exchanges Development** have been linked to the acquisition of sodium perchlorate for the Islamic Revolutionary Guard Corps (IRGC) in 2025.

## Chinese Suppliers and Fronts

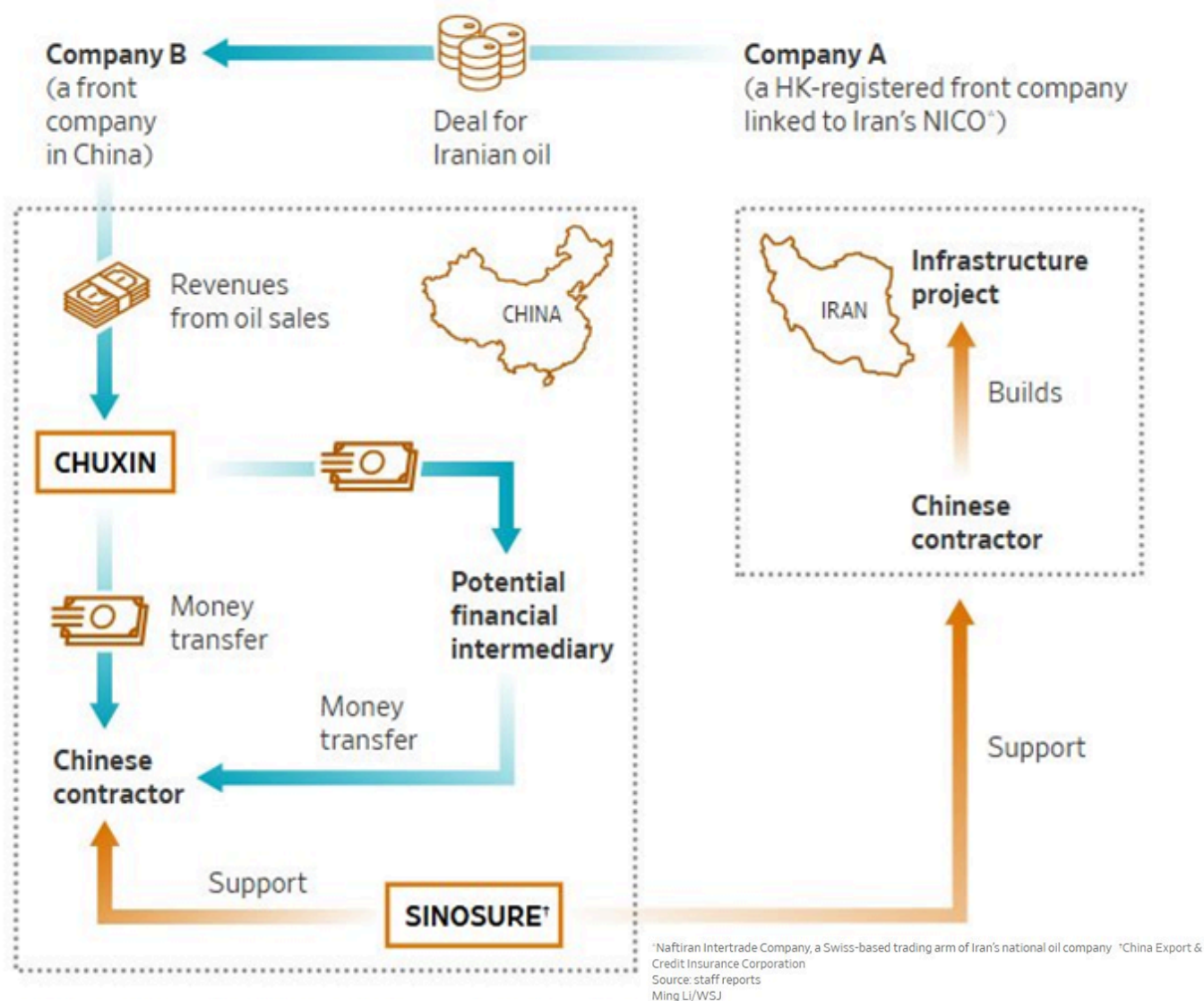
A network of Chinese suppliers and front companies has been actively involved in supplying critical materials and facilitating illicit trade with Iranian entities. Companies such as **Hebei Senning Automated Equipment Co Ltd** (operating as **Sunny International**), **Futech Co Ltd**, and **Haokan** have been supplying servo motors, electronics, and





propellants, with **Haokan** notably leading oil-for-arms negotiations in October 2025. Additionally, entities like **Lion Commodities** (Hong Kong), **Shenzhen Amor Logistics Co Ltd**, **Innovia** (part of the Emily Liu network - a U.S.-sanctioned smuggling operation led by Chinese national **Baoxia Liu ("Emily Liu")**, which procures and reroutes sensitive U.S.-origin components (e.g., for drones/UAVs and ballistic missiles) to Iran's IRGC-linked entities, evading sanctions to support Tehran's military and proxy warfare), and **Shenzhen Jinghon Electronics Limited** have been shipping dual-use goods to the **Rayan Fan Group** since 2024, supporting Iran's procurement efforts. Other networks, including **Khazra** (linked to Liu Baoxia/Emily Liu), **P.B. Sadr**, and **Blue Calm Marine Services Company**, have been facilitating transshipments of goods since 2014.

## How China Pays Iran for Oil





# Sanctions Landscape

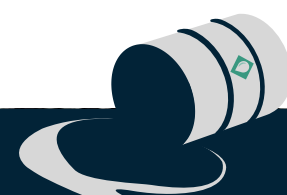
SINCE **JANUARY 2025**, THE UNITED STATES HAS PURSUED AN **AGGRESSIVE SANCTIONS CAMPAIGN** AGAINST IRAN'S PETROLEUM SECTOR AND ITS TRADE NETWORKS, PARTICULARLY TARGETING CHINESE BUYERS, THROUGH 19 ROUNDS OF MEASURES UNDER **EXECUTIVE ORDERS 13902 AND 13846** AND **NATIONAL SECURITY PRESIDENTIAL MEMORANDUM 2**. THESE SANCTIONS HAVE DESIGNATED OVER 253 ENTITIES AND VESSELS TO DISRUPT IRAN'S OIL EXPORTS, WHICH FUND ITS REGIME AND REGIONAL ACTIVITIES.

Notable actions include **February 2025's** designation of five Iranians and one Indian individual for facilitating over **\$100 million** in ammonium perchlorate shipments, targeting Sepehr Energy's Elyas Niroomand Toomaj; **March 2025's** sanctions on Shandong Shouguang Luqing and 11 other Chinese teapot refineries, alongside eight vessels; April measures against Shandong Shengxing for purchasing over **\$1 billion** in Iranian oil, as well as Hebei Xinhai and vessels like **RESTON** and **BESTLA**, which transported over **3 million barrels**; **May 2025's** sanctions on more than 20 entities linked to Sepehr, including Xin Rui Ji and CCIC Singapore, for handling billions in shipments; June's targeting of Huaying Petrochemical for **1 million barrels**; and **September 2025's** sanctions on 21 entities and 17 individuals, including Hebei Senning for its role with Rayan Fan, following the UN sanctions snapback on 27 September. The latest round, announced on **9 October 2025**, targeted 100 entities and vessels, including **Shandong Jincheng** and **Rizhao Shihua**, and blocked over **\$25 million** in fuel oil transactions.

Despite these efforts, which have frozen over **\$500 million in assets**, Iran's oil exports have proven resilient, rebounding from **898,000 barrels per day** in January 2025 to **1.43 million** by February, according to Kepler data. This resurgence is largely driven by China's defiance, with Beijing condemning U.S. sanctions as "illegal" and a violation of international trade norms, as stated by Foreign Ministry spokesperson Guo Jiakun in March 2025. China's use of yuan-based transactions, state-backed firms like China National Petroleum Corporation (CNPC), and opaque supply chains—often involving ship-to-ship transfers and relabeled crude—has enabled it to absorb **over 60% of Iran's oil exports**, shielding its firms from U.S. enforcement and sustaining Iran's economy. This dynamic underscores the limitations of unilateral sanctions, as China's strategic support, coupled with Iran's use of shadow fleets and non-Western markets, continues to undermine U.S. efforts to curtail Tehran's oil trade.

## Second- and Third-Order Effects on Proxy Warfare

*Iran allocates 50% of its oil revenue (\$26 billion/year) to the IRGC and AFGS, funding proxy groups like Hezbollah (\$700M/year pre-2020, reduced but active), the Houthis, Hamas, and Iraqi militias (e.g., Asaib Ahl al-Haq's \$1B/year oil skim). This sustains Iran's "Shia Imamate" strategy of indirect warfare, amplifying regional instability.*



### Second-Order Effects (Direct Proxy Arming & Operations)



Iran's Funding of Proxies

The intricate "**Revenue-to-Weapons Pipeline**" reveals a troubling nexus between Iran's oil revenue and its military ambitions, with significant financial flows directly fueling the production and deployment of advanced weaponry. **\$8.4 billion in oil revenue in 2024** provided the financial basis for the purchase of **1,000 tons of sodium perchlorate between February and March 2025**, a critical component used in the production of approximately 260 short-range missiles.

This escalation is further compounded by the integration of Chinese components into **Shahed drones**, which have been deployed in conflicts in Ukraine and the Red Sea, facilitated through PKGB networks. These drones, notorious for their kamikaze capabilities, underscore Iran's ability to leverage global supply chains to sustain its proxy warfare, blending economic ingenuity with military strategy.

This financial pipeline also drives a broader **Proxy Escalation across the Middle East**, amplifying Iran's regional influence through its supported militias. The Houthis capitalized on **\$2 billion** in oil proceeds during 2024–2025 to orchestrate attacks in the Red Sea, **disrupting 12% of global trade** and prompting international naval responses like **Operation Prosperity Guardian**. Hezbollah's 2025 border strikes against Israel were enabled by missiles supplied by the Iranian Revolutionary Guard Corps (IRGC), showcasing the direct transfer of resources to bolster its Lebanese ally. Meanwhile, Hamas's October 2023 assault on Israel drew on over **\$100 million in IRGC funds**, derived from a mix of cryptocurrency and oil profits.

Beyond direct combat support, Iran's Regional Entrenchment is solidified through control of key smuggling routes and oil flows that sustain its allies. In Iraq, IRGC-backed proxies oversee smuggling networks that generate **approximately \$1 billion annually**, channeling these funds into anti-U.S. operations and reinforcing Iran's foothold in the region. In Syria, the supply of **50,000 barrels per day** of Iranian oil was a lifeline for the Assad regime. Together, these financial and logistical efforts illustrate a deliberate strategy to entrench Iran's influence, using oil revenue as both a weapon and a shield in an increasingly volatile geopolitical landscape.

### Iranian Crude and Condensate Flows (1H2018 - THOUSAND BARRELS PER DAY):





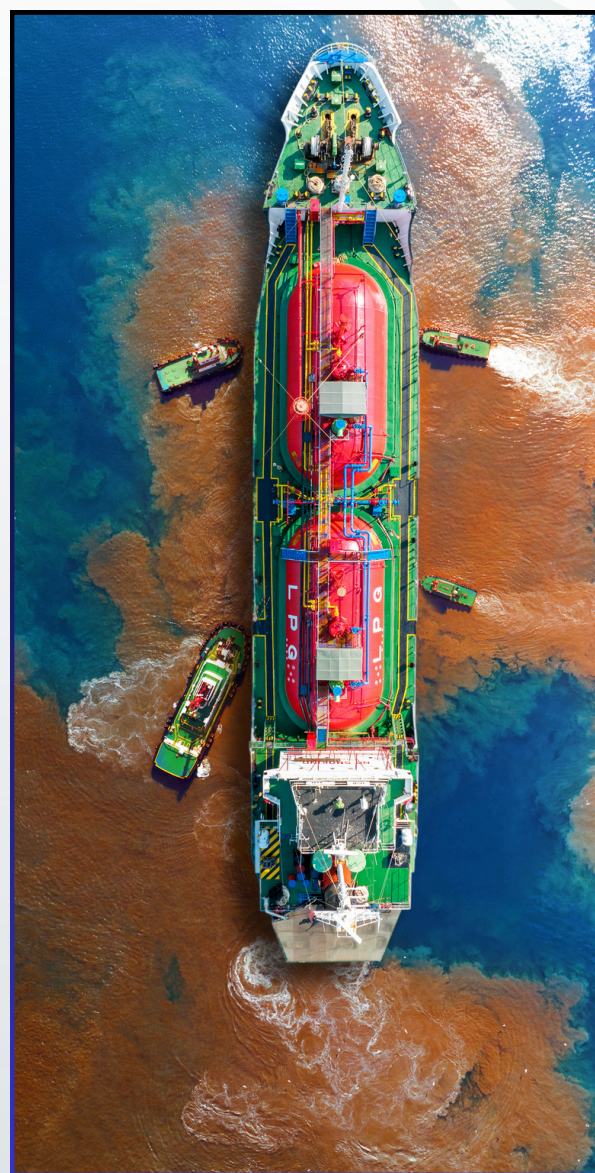
## Third-Order Effects (Geopolitical and Economic Ripples)

« *THE THIRD-ORDER EFFECTS OF GEOPOLITICAL AND ECONOMIC RIPPLES EMANATING FROM RECENT DEVELOPMENTS UNDERSCORE A COMPLEX WEB OF CHALLENGES WITH FAR-REACHING IMPLICATIONS.* »

Global energy and trade disruptions, driven by Houthi attacks in the Red Sea, have significantly altered the economic landscape, with **shipping costs surging by 300% in 2024** and global **oil prices rising by \$3–4 per barrel**. While these disruptions have bolstered China's economy through its substantial oil imports, they carry substantial risks, including the potential imposition of secondary sanctions on Chinese teapot refineries. Such measures could further inflate very large crude carrier (VLCC) freight costs, triggering a cascade of effects across global energy markets and supply chains.

Simultaneously, **alliance shifts and escalation risks** highlight the deepening Iran-Russia-China axis, reinforced by a strategic exchange where Russia trades Iranian drone technology for oil expertise, thereby diminishing U.S. influence in the region. Venezuela has emerged as a pivotal hub within this network, facilitating an Iran-China arms-for-oil exchange that strengthens their mutual interests. The ongoing **Israel-Iran proxy war**, which escalated notably in June 2025, has intensified these tensions, with proxy rearming efforts raising the specter of a broader conflict. This evolving alliance dynamic signals a significant reconfiguration of power, challenging Western-led sanctions and heightening the potential for regional instability.

Further complicating the situation, the evidence-based analysis of sanctions' unintended consequences reveals how evasion networks have inadvertently accelerated Iran's nuclear and missile programs, particularly as the **JCPOA's "termination day"** was on 18 October 2025. JCPOA's Termination Day signifies the expiration of UN Security Council Resolution 2231, which underpinned the 2015 Iran nuclear agreement and incorporated a snapback mechanism to restore UN sanctions in the event of Iran's non-compliance.



After this date, the snapback mechanism becomes obsolete, depriving the international community of a critical instrument for enforcing Iran's nuclear obligations. This development is particularly concerning given Iran's escalation of its nuclear program, which now includes a stockpile of approximately **6,000 kg of near-weapons-grade enriched uranium** and over **10,000 advanced centrifuges**. Sophisticated sanctions evasion networks, operating through front companies and illicit trade channels in countries such as China and Turkey, have inadvertently fueled this progress by securing restricted materials, including centrifuge components and missile propellant precursors.

These networks have enabled proxies in Yemen and Iraq to emulate Hezbollah's effective model of resilience and militancy, as highlighted in Saudi assessments, thereby intensifying concerns over the proliferation of advanced weaponry and tactics.

***THIS UNFORESEEN OUTCOME UNDERSCORES THE LIMITATIONS OF ECONOMIC SANCTIONS IN CURBING IRAN'S MILITARY AMBITIONS.***

The economic feedback in Iran and Iraq further illustrates the domestic and regional ramifications of these dynamics. In Iraq, proxy oil skimming by Iran-aligned militias erodes national sovereignty, exacerbating sectarian violence and destabilizing governance. In Iran, the Islamic Revolutionary Guard Corps (IRGC) maintains an estimated **20% control of the nation's GDP**, sustaining a regime of domestic repression amid a staggering **40% inflation rate**. This economic dominance not only consolidates the IRGC's power but also perpetuates a vicious cycle of internal unrest and external aggression, complicating efforts to stabilize the region.



# Threats to Maritime Shipping

*THE CHINA-IRAN OIL-FOR-WEAPONS TRADE LOOP POSES SIGNIFICANT RISKS TO MARITIME SHIPPING, EXTENDING BEYOND THE IMMEDIATE DANGERS OF SHIP-TO-SHIP (STS) TRANSFERS, POLLUTION, SANCTIONS EVASION, AND PROXY WARFARE.*

An expansion of this trade could create a **parallel maritime system that bypasses Western oversight**, undermining global shipping security, governance, and economic stability.



## 1 Escalation of Shadow Fleet Risks

*The escalation of risks associated with the shadow fleet presents significant challenges to global maritime safety and economic stability.*

A substantial portion of this fleet consists of aging tankers, approximately 70% of which are over 15 years old, as reported by Lloyd's List in 2024. Many of these tankers suffer from inadequate maintenance, thereby heightening the likelihood of accidents or catastrophic oil spills. A spill comparable to the 2020 Wakashio incident, which incurred damages exceeding \$1 billion, could severely disrupt critical shipping routes, such as the Malacca Strait, with far-reaching consequences.

Additionally, ship-to-ship (STS) transfers in high-traffic areas like the South China Sea—exemplified by the ATILA's 2-million-barrel shipment in early 2025—pose further hazards, including the potential for collisions and leaks that could paralyze the Malacca Strait for weeks, resulting in billions of dollars in economic losses. Compounding these risks, shadow fleet vessels frequently operate without adequate insurance coverage, falling outside the protections of the International Group of P&I Clubs. This liability gap was starkly illustrated by a 2023 Malaysian spill, which imposed a \$50 million cleanup burden on coastal states due to the absence of a responsible party, underscoring the urgent need for enhanced oversight and accountability.

**READ NEXT: '[METIS INSIGHTS: The Hidden World of Russia's Sanctions-Evading Tanker Fleet](#)'**



## 2

## Erosion of Maritime Governance and International Standards

*The erosion of maritime governance and international standards presents a growing threat to global shipping integrity, driven by the activities of shadow fleets that systematically undermine established protocols.*

These fleets violate International Maritime Organization (IMO) regulations by disabling Automatic Identification Systems (AIS), registering under flags of convenience, and falsifying certifications, a practice that, if expanded, could normalize noncompliance and encourage other nations to adopt similar evasive tactics.

This trend is further exacerbated by the proliferation of a "dark pool" shipping ecosystem, fueled by the reliance on shadow fleets and front companies such as Sepehr Energy and Petronix, which currently account for approximately 10% of global oil tanker capacity. Should this sector double in size, as projected, it risks significantly reducing transparency and amplifying the illicit flow of arms and oil. Additionally, port state control faces substantial challenges, as Chinese ports like Rizhao Shihua and Huaying Huizhou Daya Bay—key handlers of illegal crude—receive minimal scrutiny, undermining enforcement efforts. This lack of oversight heightens the potential for regional ports to evolve into illicit trade hubs, further complicating Western interdiction strategies.

## 3

## Economic and Trade Disruptions

*The economic and trade disruptions stemming from recent geopolitical tensions are reshaping global commerce with significant implications.*

Houthi attacks, financed by Iran's \$2 billion in oil revenue from 2024, have driven shipping costs up by 300%, necessitating rerouting via the Cape of Good Hope, which adds an estimated \$1–2 million per very large crude carrier (VLCC) voyage. Should this trend expand, projections from Platts in 2025 suggest oil prices could rise by an additional \$5–10 per barrel, further straining the energy market.

Additionally, the imposition of secondary sanctions, such as those targeting refineries like Shandong Shengxing in April 2025, poses risks to Western shippers handling illicit cargoes, as evidenced by a \$10 million fine levied on a European firm in 2024, potentially disrupting legitimate trade flows. Compounding these challenges, the increasing use of renminbi-based payments and barter systems, which facilitated \$8.4 billion in Chinese infrastructure deals in 2024, bypasses the SWIFT network, threatening to marginalize dollar-based shipping contracts and elevate costs for Western firms.

# 4

## Heightened Security Threats from Proxy Warfare

*The China-Iran oil-for-weapons trade loop, by funneling \$26 billion annually to the IRGC and Armed Forces General Staff (AFGS), directly enables Iran's proxy warfare, posing severe risks to maritime security. The expansion of this trade could intensify these threats, targeting critical shipping lanes and escalating regional tensions.*

**Direct Attacks on Shipping:** Iran-backed Houthis, leveraging Chinese-supplied drone and missile components, have conducted over 130 attacks in the Red Sea and Gulf of Aden since 2024, according to U.S. Naval Forces Central Command (NAVCENT). The Houthis' use of advanced Chinese-supplied components, such as guidance systems for Shahed-136 drones and anti-ship ballistic missiles, has increased the precision and lethality of these attacks, with a 2025 NAVCENT report noting a 40% rise in successful hits compared to 2023. If the China-Iran trade loop expands, further oil revenue could enable the Houthis to acquire more sophisticated weaponry, potentially doubling attack frequency to over 250 incidents annually by 2026, per a 2025 Lloyd's List projection.

**Piracy and Asymmetric Threats:** The IRGC and its proxies could adopt piracy tactics, as demonstrated in the 2019 Stena Impero seizure in the Strait of Hormuz. Recent reports of cyber-attacks and GPS spoofing in the Persian Gulf in 2024, linked to IRGC-affiliated groups, indicate a growing asymmetric threat. The IRGC's access to Chinese dual-use technologies, such as electronic components from firms like Shenzhen Jinghon Electronics Limited, enhances their capability to deploy cyber tools and unmanned systems for maritime harassment. An expanded trade loop could increase IRGC funding for such operations, potentially enabling proxies like Hezbollah or Iraqi militias to conduct similar attacks in the Mediterranean or Arabian Gulf. A 2025 Maritime Security Council report warns that unchecked growth of Iran's proxy capabilities could lead to a 30% increase in piracy-related incidents by 2027, particularly in the Strait of Hormuz.

**Weapons Proliferation at Sea:** The trade loop facilitates arms smuggling to proxies via maritime routes, with Chinese dual-use components shipped through fronts since 2024. These components have been identified in Houthi drones and Hezbollah missiles used in attacks in 2025. Maritime smuggling routes, often disguised as legitimate trade through ports like Latakia, Syria, or Aden, Yemen, enable the transfer of missile components, drones, and small arms to Iran's proxies. For example, a 2025 U.S. Navy interdiction in the Arabian Sea seized 1,000 tons of ammonium perchlorate bound for Yemen. Expansion of the trade loop could increase the volume and sophistication of these shipments, overwhelming Western interdiction efforts by the Combined Maritime Forces (CMF)...

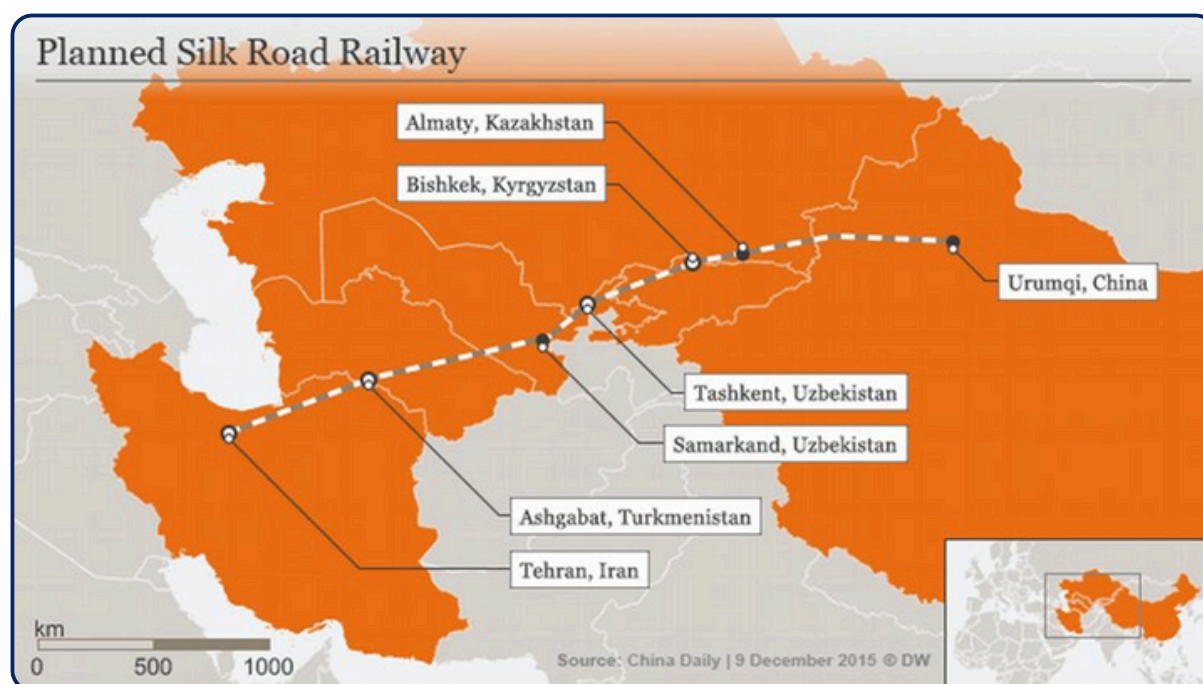
The proliferation of Chinese-supplied weapons also risks arming non-state actors beyond Iran's immediate proxies, with reports of Houthi-sourced drones appearing in Somali pirate networks in 2025, per a UN Security Council report. This has the potential to destabilize more maritime regions, putting additional strain on global security resources.

## 5

### Geopolitical Realignments and Systemic Risks

*Strengthening Non-Western Maritime Blocs: The trade loop aligns with China's Belt and Road Initiative (BRI) and the operational May 2025 China-Iran rail link, which reduces transit times for goods from 40 to 15 days.*

These developments create alternative trade corridors that bypass Western-controlled routes like the Suez Canal. Ports like Gwadar, Pakistan and Chabahar, Iran, both BRI nodes, are poised to become hubs for illicit oil and arms trade, leveraging their strategic locations near the Arabian Sea.



Erosion of U.S.-Led Maritime Security: China's non-recognition of U.S. sanctions, coupled with its support for Iran's \$53–54 billion oil trade, undermines the U.S. Navy and Combined Maritime Forces (CMF) patrols, which secure 30% of global shipping lanes. Allies like India, a CMF member, face increasing pressure to balance ties with the U.S. against economic incentives from China's BRI and Iran's oil discounts. This tension risks fragmenting maritime security coalitions, as evidenced by India's hesitation to join U.S.-led interdictions in the Arabian Sea in 2025, following China's \$2 billion investment pledge in Chabahar...

The CMF, reliant on 39 member states, reported a 15% decline in joint patrol participation in 2025, partly due to China's diplomatic efforts to shield Iran's trade. Furthermore, China's growing naval presence in the Indian Ocean, including deployments near Djibouti, could challenge U.S. dominance. A 2025 IISS report noted a 30% increase in Chinese naval patrols since 2024, partly to protect Iran-bound tankers.

Expansion to Other Actors: Venezuela's emergence as an Iran-China arms/oil hub, as noted in the October 2025 negotiations, could draw in other sanctioned states like Syria and North Korea, increasing illicit tanker traffic by 20%. Venezuela, already supplying 200,000 bpd of discounted oil to China in 2024, mirrors Iran's shadow fleet tactics. Syria's Latakia port, which handles 50,000 barrels per day of Iranian oil, could integrate into this network, with Chinese firms like Shandong Shengxing Chemical Co. processing Syrian crude alongside Iranian supplies. North Korea, with a history of ship-to-ship transfers in the Yellow Sea, could leverage Chinese front companies to acquire missile components bartered for oil.

## 6

### Environmental and Reputational Risks

**Environmental Damage:** Shadow fleet spills could devastate ecosystems in the South China Sea (50% of global fish stocks), with ports like Lanshan facing reputational damage.

**Corporate Exposure:** Western firms, such as BP and Shell, face significant risks from inadvertently handling illicit Iranian oil, which could lead to U.S. sanctions, financial penalties, and exclusion from U.S. markets. For example, in 2024, a European shipping company was fined \$10 million by the U.S. Office of Foreign Assets Control (OFAC) for unknowingly transporting Iranian crude mislabeled as Malaysian, highlighting the due diligence challenges in complex supply chains. The opaque nature of the China-Iran trade loop, facilitated by front companies like Sepehr Energy and falsified certifications from entities like CCIC Singapore Pte. Ltd., increases the likelihood of Western firms inadvertently engaging with sanctioned oil. This risk is particularly acute in Chinese ports like Rizhao Shihua and Huaying Huizhou Daya Bay, which handle millions of barrels of illicit crude annually. Such exposure not only threatens financial losses but also reputational damage, as stakeholders and regulators demand greater transparency in ESG (Environmental, Social, and Governance) compliance.

The fear of sanctions has already deterred major Western energy and shipping firms from investing in Asian ports linked to shadow fleet activities. For instance...



in 2024, a planned \$500 million expansion by a Western oil major in a Shandong port was shelved after U.S. sanctions targeted nearby teapot refineries like Shandong Shengxing. This reduces legitimate investment in critical maritime infrastructure, giving economic power to Chinese state-backed entities and strengthening the shadow trade ecosystem. As Western firms withdraw, ports like Lanshan and Dongying become more reliant on illicit flows, reinforcing the parallel “dark pool” shipping network that bypasses Western oversight. These dynamics risk creating a feedback loop where reduced Western engagement further emboldens non-compliant actors, such as Iran’s IRGC and Chinese firms like Haikan, to expand their operations. A 2025 Bloomberg report estimated that sanctions-related uncertainty has already reduced Western port investments in Asia by 15%, potentially costing \$2 billion in lost economic opportunities by 2026.

*IF THE CHINA-IRAN TRADE LOOP GROWS, THIS TREND COULD ACCELERATE, FRAGMENTING GLOBAL MARITIME TRADE INTO REGULATED AND UNREGULATED SPHERES, WITH LONG-TERM CONSEQUENCES FOR SUPPLY CHAIN TRANSPARENCY AND GLOBAL ENERGY MARKETS.*



## Conclusion

The China-Iran oil-for-weapons trade loop is a sanctions-proof mechanism that empowers Iran's proxy warfare and challenges Western foreign policy objectives.



Facilitated by a complex network of **front companies**, **shadow tankers**, and **Chinese refineries**, the trade generates critical revenue for Iran's military and proxy operations while securing China's energy needs. The October 2025 negotiations underscore the loop's adaptability, leveraging barter systems to bypass Western sanctions and UN snapback measures. Despite extensive sanctions, the trade's persistence highlights **enforcement gaps, exacerbated by China's non-compliance and Iran's resilient smuggling infrastructure**. The second- and third-order effects, ranging from Houthi disruptions to strengthened anti-Western alliances, pose significant risks to regional stability and global trade.



# NEW

# MARITIME INTELLIGENCE BRIEF

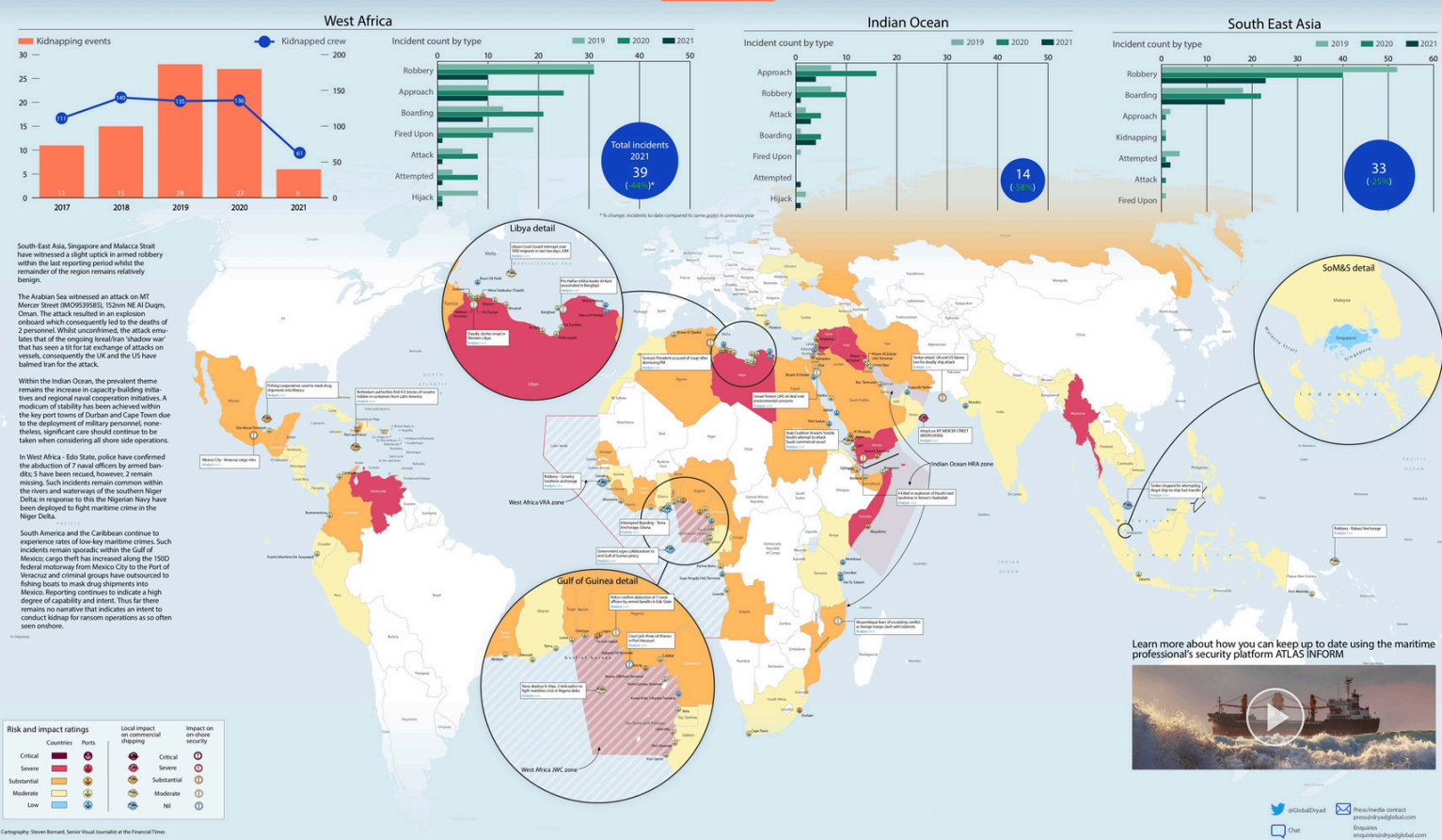
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## Maritime Security Threat Assessment

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Updated 02 August 2021

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