Iran Crude Situation Report

This report is a data-led follow-up to our initial assessment published 28 February 2026. That piece established the risk framework; this update focuses on what Vortexa flow data, voyage tracking, and vessel positioning now show five days into the disruption.

KEY METRICS — AS OF 5 MARCH 2026

~2.08 Mbd Feb 2026 Iran Exports Multi-year high pre-conflict	**~1.55 Mbd** Iran Arrivals – China Feb 2026 — 82% of total arrivals	**23 Vessels** Inbound to Iran Terminals ~6.3M DWT queued — all sanctioned
14 VLCCs Staging at Khor Fakkan Outside Hormuz — shadow fleet holding	**130** Total Ballast Tankers Tracked Dark fleet universe	**84%** Sanctioned Risk Rating 109 of 130 vessels

1. OUTLOOK & SCENARIOS

Three scenarios govern the near-term supply trajectory for Iranian crude:

Building on the scenario framework outlined in our 28 February assessment, Vortexa now assigns the following structure to the near-term outlook as of 5 March 2026:

Scenario A — Short Disruption (1–2 Weeks): Partial Recovery

A ceasefire or de-escalation within 1–2 weeks allows shadow fleet vessels to resume normal Hormuz transits. Critically, even during the current disruption, Iran retains a degree of control over which vessels it permits to move — shadow fleet operators with established IRGC-linked relationships have continued to receive informal clearance to transit, meaning the closure is selective rather than absolute. A short disruption therefore sees the 23-vessel inbound pipeline resume loading with limited attrition, the Khor Fakkan cluster clears, and Iranian exports return to approximately 1.5–1.6 Mbd — below the February peak but above the Q4 2025 average. Floating storage discharges into Chinese ports over 4–6 weeks.

Probability: Moderate.

Scenario B — Prolonged Closure (4–8 Weeks): Inventory Drawdown

Hormuz remains partially or fully closed for 4–8 weeks. Even with selective shadow fleet clearance, sustained conflict conditions make loading operations at Kharg operationally untenable and insurance costs prohibitive for all but the most committed operators. Iranian exports collapse toward near-zero. The inbound loading queue disperses — vessels cannot wait indefinitely. Onshore inventories build as loadings halt. On-water stocks already in transit discharge progressively to Chinese buyers as those voyages complete, but with no new liftings entering the pipeline the refill cycle takes 8–12 weeks post-resumption of Hormuz access. Chinese teapot refiners face tightening Iranian supply but are partially cushioned by continued access to discounted sanctioned Russian barrels — to the extent that mainstream buyers continue to avoid Russian crude and treat it only as emergency backup, teapots are likely to remain relatively calm, absorbing additional Russian volumes to bridge the gap. Iran's export capacity in H1 2026 averages approximately 0.8–1.0 Mbd.

Probability: Moderate-to-High given current conflict dynamics.

Scenario C — Kharg Strike + Extended Conflict: Structural Supply Shock

A direct strike on Kharg Island loading infrastructure, combined with sustained conflict preventing repair operations, removes 1.5–2.0 Mbd from global supply for 3–6+ months. Unlike Scenario B, the Russian substitution buffer is insufficient at this scale — sanctioned Russian volumes cannot absorb a simultaneous structural removal of Iranian supply without exhausting available dark fleet capacity and pushing sanctioned crude discounts tighter. Mainstream buyers seeking replacement barrels from West Africa, the U.S. Gulf, and the North Sea drive freight rates sharply higher across non-sanctioned tonnage. Chinese teapot refiners, stripped of their primary sub-market crude stream with no equivalent-price alternative, face a genuine procurement crisis.

Probability: Lower but non-negligible; tail risk with supply consequences not seen since the Gulf War.

2. STRATEGIC CONTEXT: THE PRE-CONFLICT EXPORT SURGE

As noted in our 28 February assessment, Iran entered the conflict having accelerated export liftings to near post-sanction record highs, effectively pre-positioning barrels at sea ahead of anticipated disruption. Vortexa flow data now allows a fuller breakdown of where those barrels went, who received them, and what the destination-level picture reveals about the structural demand dynamics that will govern the recovery.

GEOPOLITICAL CONTEXT	Iran's export acceleration prior to the strikes is not coincidental. The Feb 16–22 surge exceeds any plausible demand-pull explanation from the Chinese buyer side — Chinese refinery intake was already softening — and is consistent with deliberate supply-push behaviour by the Iranian state ahead of anticipated disruption. This pattern closely mirrors the front-loading strategy observed during the June 2025 escalation, when cargoes were lifted without confirmed buyer nominations, suggesting systematic operational awareness of impending risk windows rather than reactive commercial decision-making.

Monthly Export Flows by Destination (Jan 2025 – Feb 2026) — Vortexa

Iranain crude/condensate exports by origin port (mbd)

3. DARK FLEET STATUS: INBOUND PIPELINE & HORMUZ EXPOSURE

Vortexa voyage data identifies 130 ballast tankers actively operating within the sanctioned/shadow fleet servicing Iranian crude flows as of 5 March 2026. Of these, 109 (84%) carry a Sanctioned risk rating, with the remainder flagged High or Medium risk. The fleet is almost entirely composed of VLCCs (71 vessels, 55%), Aframaxes (26, 20%), and Suezmaxes (15, 12%), with the balance comprising LR1, LR2, MR2 and Panamax tonnage (18 vessels, 14%) — a configuration optimised for Kharg Island's VLCC-primary export infrastructure and the STS transfer requirements of Malaysia's offshore transshipment hubs.

Fleet utilisation data reinforces the disruption signal: the laden share of Iran-linked dark fleet vessels peaked at 47% in February 2026, consistent with the pre-conflict export surge, but the ballast share has been increasing since the strikes – rising from 53% in February to 56% in the first days of March as vessels complete their laden voyages. With loadings at Kharg continuing but at a reduced tempo, the ballast percentage serves as a real-time proxy for stress – a figure to watch closely if conflict conditions tighten further.

Inbound to Iranian Loading Terminals — 23 Vessels (as of 5 March 2026)

Vortexa tracks 23 sanctioned VLCCs and Suezmaxes currently en route to Kharg Island, Bandar Abbas (Shahid Rajaee), Assaluyeh, and Larak STS, representing approximately 6.3 million DWT of loading capacity in the inbound pipeline. All 23 vessels carry a Sanctioned risk rating. The pipeline is almost entirely sourced from the Singapore/Riau STS cluster (16 vessels) and Hong Kong STS (3 vessels), with the remainder from Southeast Asian offshore positions — the standard shadow fleet repositioning pattern following discharge in Shandong-area Chinese ports.

OPERATIONAL RISK	These 23 vessels represent the committed loading queue that was assembled during the February surge. With Hormuz transit effectively closed as of 2 March, this pipeline is now stalled. Vessels with ETAs in the March 6–14 window have likely slowed or are loitering in the Gulf of Oman. If the closure extends beyond 2–3 weeks, vessels will begin to back out of the queue — creating a secondary demand shock for Iran as repositioning costs mount and operators reassess risk.

4. KHOR FAKKAN STS CLUSTER: THE HORMUZ WAITING ROOM

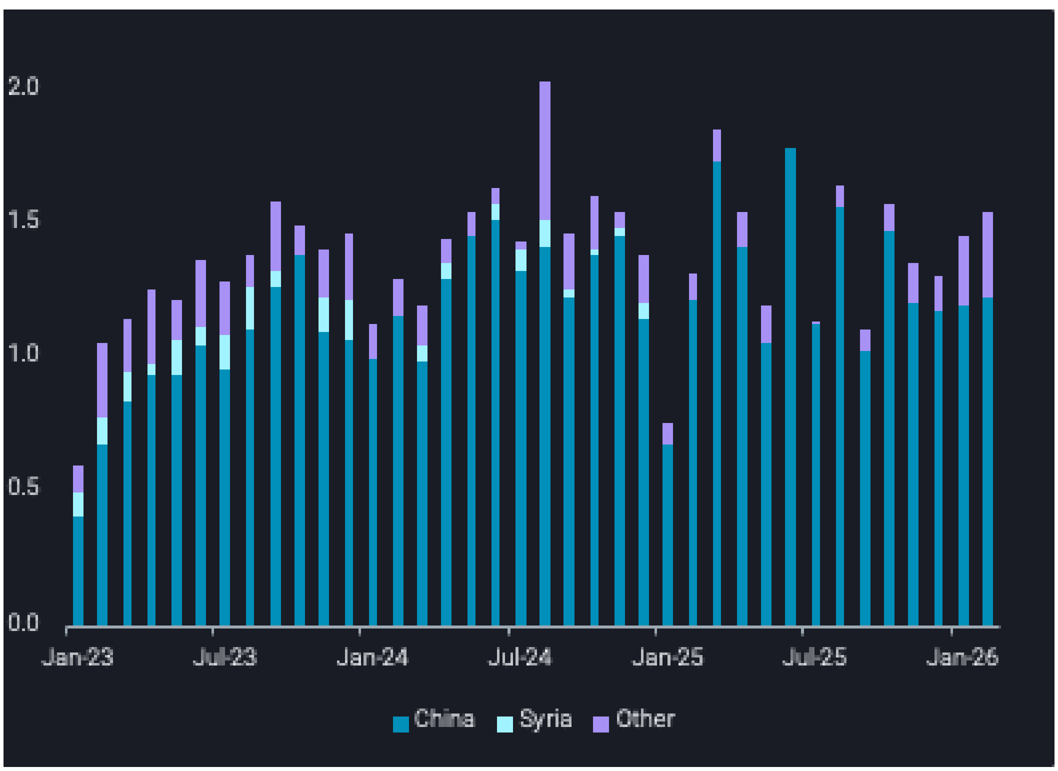
Vortexa identifies 14 tankers — predominantly VLCCs — currently staging at Khor Fakkan STS on the UAE's Gulf of Oman coast, outside the Strait of Hormuz. Khor Fakkan sits in the Fujairah emirate, approximately 130 nautical miles from Hormuz on the open-ocean side, and has functioned for years as the shadow fleet's primary holding anchorage — a position where vessels can await loading orders or Hormuz clearance while remaining technically outside Iranian territorial waters and beyond immediate strike range.

Of the 14 vessels at Khor Fakkan, 10 carry a Sanctioned risk rating and nearly all have most recently transited from the Singapore/Riau STS cluster — completing the standard shadow fleet circuit of: discharge China → STS Riau (re-document) → Khor Fakkan (hold/await) → Hormuz transit → Kharg load → repeat. The cluster size is above typical baseline, consistent with vessels that were already in the circuit when the conflict broke and have now accumulated at the last safe holding point.

GEOPOLITICAL NOTE	Khor Fakkan is UAE sovereign territory. The presence of 10+ OFAC-sanctioned VLCCs staging in UAE waters creates a significant diplomatic exposure for Abu Dhabi, which has calibrated its Iran policy carefully to avoid triggering secondary sanctions while maintaining operational relationships with Tehran. UAE port authority enforcement against this cluster would signal a meaningful policy shift; continued tolerance is the more likely near-term outcome but bears watching as U.S. pressure mounts.

5. CHINA DEMAND: ARRIVALS DIVERGING FROM EXPORTS

Iranian crude arrivals into China tracked by Vortexa reached approximately 1.55 Mbd in February 2026 — well above the monthly average of approximately 1.32 Mbd, but still below the 1.78 Mbd recorded during the June 2025 surge. Arrivals nonetheless ran below the 1.55 Mbd exported specifically to China during the same period, which is directionally consistent with on-water inventory accumulation: barrels loaded and en route but not yet discharged. This floating buffer will grow if Hormuz remains closed, as inbound-to-China VLCCs cannot easily divert while loaded with OFAC-sanctioned cargo.



Iranian crude/condensate imports by destination country (mbd)

The broader China demand picture has been softening in Q4 2025. Vortexa arrival data shows Chinese imports of Iranian crude averaging approximately 1.4 Mbd across 2025, down from peaks above 1.6 Mbd in 2024, reflecting reduced offtake by Shandong independent refiners (teapots) amid margin compression and increasing competition from discounted Russian sanctioned barrels, which have offered an alternative sub-market crude stream to price-sensitive independent refiners. The February 2026 spike in Iranian exports was therefore supply-push driven — Iran loading aggressively ahead of the strikes — rather than a reflection of renewed Chinese demand strength.

6. KHARG ISLAND: INFRASTRUCTURE VULNERABILITY ASSESSMENT

Our 28 February assessment flagged Kharg Island as the primary direct-strike risk, noting reports of explosions near the facility on the day of the strikes. Five days on, with no confirmed strike on loading infrastructure confirmed in Vortexa vessel data, we assess the threat picture as follows.

Kharg Island accounts for the substantial majority of Iran's crude and condensate export capacity, handling operations for VLCCs across multiple jetties. The island's infrastructure — storage tanks, loading arms, and the associated subsea pipelines from mainland fields — represents Iran's single most critical export chokepoint and has historically been the focus of both offensive and defensive military planning.

During the Iran–Iraq War (1980–1988), Iraq conducted sustained aerial bombardment campaigns against Kharg across multiple phases, temporarily degrading throughput but never permanently disabling the facility. Iran demonstrated significant repair capacity and operational resilience during this period. However, the current conflict involves a qualitatively different threat: U.S. and Israeli precision-strike capabilities, including potential targeting of the port and storage infrastructure with munitions specifically designed to create sustained damage rather than recoverable degradation.

The IRGC has ring-fenced Kharg with integrated air defence systems, including Bavar-373 batteries (Iran's domestically produced long-range SAM analogous to S-300), Khordad-3 medium-range systems, and Tor-M1 point-defence assets. Whether this layered defence can withstand a coordinated precision strike campaign by U.S. B-2s or Israeli F-35Is carrying bunker-penetrating munitions is an open question — but the probability of partial degradation requiring weeks to months of repair is meaningfully higher than in prior escalation cycles.

SUPPLY IMPLICATION	A successful strike on Kharg Island's loading infrastructure would remove approximately 1.5–2.0 Mbd of effective export capacity from global supply instantaneously. Unlike Abqaiq (Saudi Arabia, 2019 Houthi attack — restored in weeks), Kharg's repair timeline

under active conflict conditions could extend to 3–6 months, creating a sustained global supply shock of a scale not seen since the Gulf War. This scenario is not priced into current market expectations.

At the time of writing, Kharg Island has not been directly struck. The current disruption reflects the closure of Hormuz to commercial shipping rather than infrastructure destruction — a recoverable scenario on a timeline of days to weeks if conflict de-escalates. The Kharg strike scenario remains a tail risk but one that would materially alter the supply outlook for the remainder of 2026.

7. THE REVENUE WEAPON — IRGC OIL FINANCING

Iran's crude export apparatus operates within a broader state financing architecture that makes the February 2026 surge analytically significant beyond its immediate market impact. Revenue generated through seaborne crude exports represents the Iranian government's primary source of hard currency, and disruptions to that revenue have historically carried consequences that extend beyond the oil market into Iran's broader regional expenditure capacity.

The Export Infrastructure

Iran's export infrastructure is heavily concentrated inside the Persian Gulf, creating a structural dependence on Hormuz transit that the current disruption exposes acutely. Kharg Island handles the substantial majority of crude and condensate liftings — alongside Assaluyeh, Lavan Island, Sirri Island, and Bandar Imam Khomeini — and every barrel loaded at any of these facilities requires a Hormuz crossing.

The Goreh-Jask pipeline and terminal, inaugurated in 2021 specifically as a Hormuz bypass route with an announced capacity of 1 Mbd, has not delivered on that strategic premise. In practice, Iran exported less than 70,000 b/d from Jask during the summer of 2024. Several structural failures account for this: the pipeline's effective capacity was constrained to approximately 300,000 b/d against its 1 Mbd design, and only 10 of the planned 20 storage tanks at the Kooh Mobarak facility had been completed as of mid-2024 with capital shortages from sanctions repeatedly delaying full commissioning. Only one of three planned single buoy moorings ever operated consistently, and throughput remained limited to occasional short-haul liftings rather than the sustained VLCC-scale export operations that Iran's commercial requirements demand. Contrary to the premise that Jask would be insulated from pressure by virtue of its Gulf of Oman location, the facility proved more vulnerable to interdiction and unmanned surveillance than anticipated and the rush to inaugurate it for political optics in 2021 caused pipeline damage that further set back commissioning timelines.

The practical conclusion for the current disruption is stark: Jask does not represent a viable Hormuz workaround at any meaningful scale. Iran has no operational bypass route. Its entire effective export capacity is Hormuz-dependent.

The Pre-Positioning Pattern

The February 2026 export acceleration carries a secondary analytical implication beyond its market impact. Available data on prior escalation periods suggests that Iranian export volumes have tended to increase in the weeks preceding significant regional disruptions — a pattern consistent with deliberate revenue acceleration ahead of anticipated operational constraints. Notably, traders indicate that a significant share of eastbound liftings were initiated without confirmed buyer nominations, suggesting that not all barrels currently on the water have been fully monetised — meaning the revenue acceleration thesis is incomplete, and a portion of the floating inventory represents deferred rather than captured income. Whether the broader pattern reflects systematic risk management by Iranian state institutions or coincidental commercial factors, the effect is clear: Iran entered the conflict period with substantially elevated volumes at sea, though the financial benefit of those barrels remains contingent on successful discharge.

ANALYTICAL ASSESSMENT	A sustained Hormuz closure suppressing Iranian exports below ~0.8 Mbd for 60+ days would place Quds Force operational liquidity under meaningful pressure for the first time since the 2018–2020 maximum pressure campaign — which drove exports below 400 kbd at its trough, demonstrably reduced Hezbollah's operational tempo, and delayed several Houthi procurement cycles. The current disruption, if sustained, creates a strategic window in which Iranian proxy capacity is degraded not by direct military action against those proxies, but by denying the financial oxygen that sustains them. This is the dimension of the Hormuz crisis that oil market participants are not pricing — and that policymakers in Washington and Israeli security establishments almost certainly are.