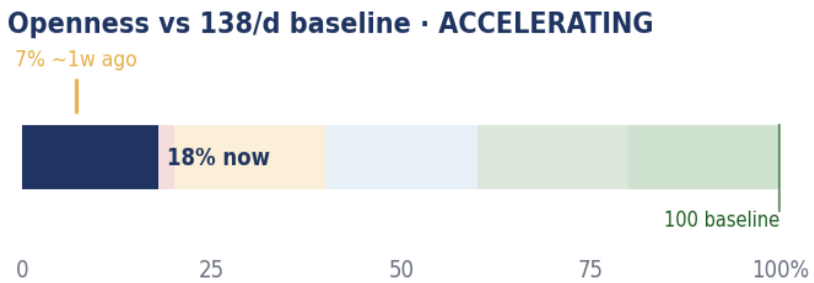
STRAIT OF HORMUZ MONITOR

How open · how fast

The headline question: how open is Hormuz, and how fast is it reopening? We lead with what we can OBSERVE; dark-share hides the rest.

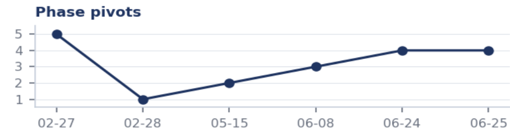
Hormuz ~18% open (observable) · Phase 4/5 — Normalizing flows · ACCELERATING +11.4 pts/wk

True flow is higher but 20% of traffic runs dark. Visible 25 transits/day vs 138 baseline (~18%); estimated total ~26% of 20 mb/d throughput baseline (est., low-confidence).



PHASE 4 of 5

- 5 Normalized
- **4 Normalizing flows**
- 3 Partial reopening
- 2 Fragile ceasefire
- 1 Active closure



SYNTHESIS — three-sentence headline

Phase 4 Normalizing flows HOLDS — transparency improves further (Jun 23: 25 transits, just 3 dark ~12% vs 28% Jun 22) and the post-deal backlog clears fast (>=20 stranded tankers / ~35M bbl out of Hormuz since the deal), while Brent extends to $72.86 (-22.7% 1m, the lowest since pre-war). But the cycle's key positive watch item FLIPS NEGATIVE: IAEA inspector access is now an open US-Iran dispute — Grossi (Jun 24) says inspections of the bombed enrichment sites are MoU-mandated and will occur; Tehran insists access only AFTER a final deal. Volume still lags (~5.1 mb/d, ~25-32% of pre-war). Reopening confirmed and clearing; verification now re-contested. Phase 4 Normalizing flows HOLDS — transparency improves further (3 dark of 25 transits Jun 23) and the post-deal backlog clears fast (~35M bbl out), while Brent extends to $72.86 (-22.7% 1m, a pre-war low). But the cycle's key positive watch item flips negative: IAEA inspector access is now an open US-Iran dispute (Grossi: MoU-mandated, will occur; Tehran: only after a deal), re-arming verification/snapback risk inside the 60-day window. Volume still lags (~5.1 mb/d, ~25-32% of pre-war). Net: reopening confirmed and clearing, refill partial, durability re-contested — watch the IAEA standoff and the enrichment red line for the downgrade; barrels toward 8-12 mb/d and a clean inspector entry for Phase 5. Counts hold and clean up — Jun 23: 25 transits (12 in / 13 out), only 3 dark (~12%, vs 10 of 36 / 28% Jun 22); ~133/week sustained. The post-deal backlog is clearing fast: >=20 stranded tankers and ~35M bbl have exited Hormuz since the deal; ~21M bbl of Iranian crude left in June (CNBC/Kpler).

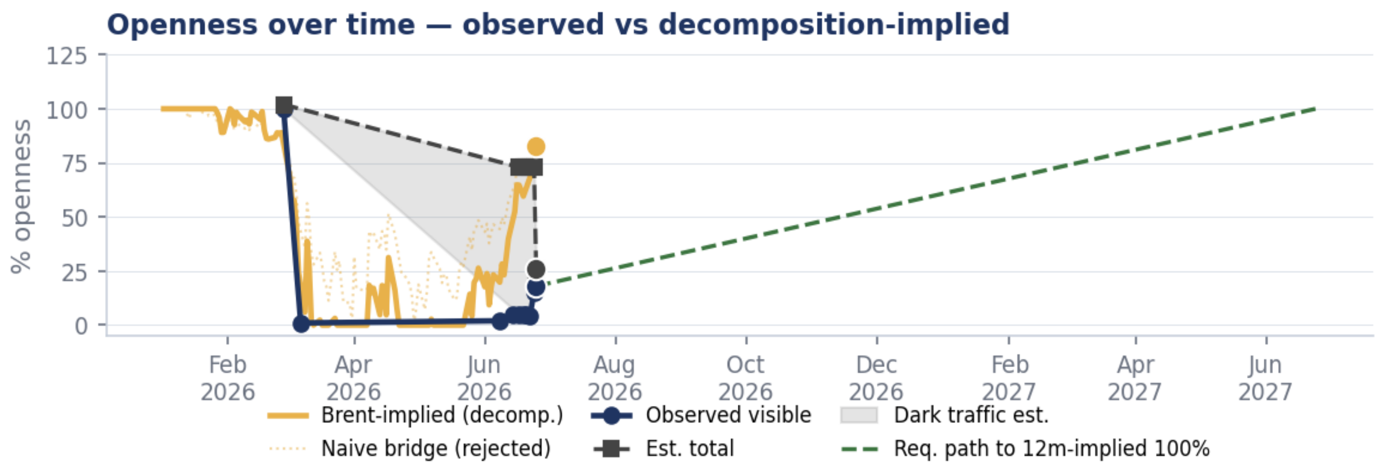
As of 2026-06-25 · **Sources:** visible transits (Windward / hormuzmonitor) · dark-share (Vortexa) · throughput (EIA Q1 avg) · Brent (ICE) · diplomatic (analyst principal-scored). Baselines: 138 ships/day pre-crisis (EIA/IEA 2025) · 20 mb/d throughput.

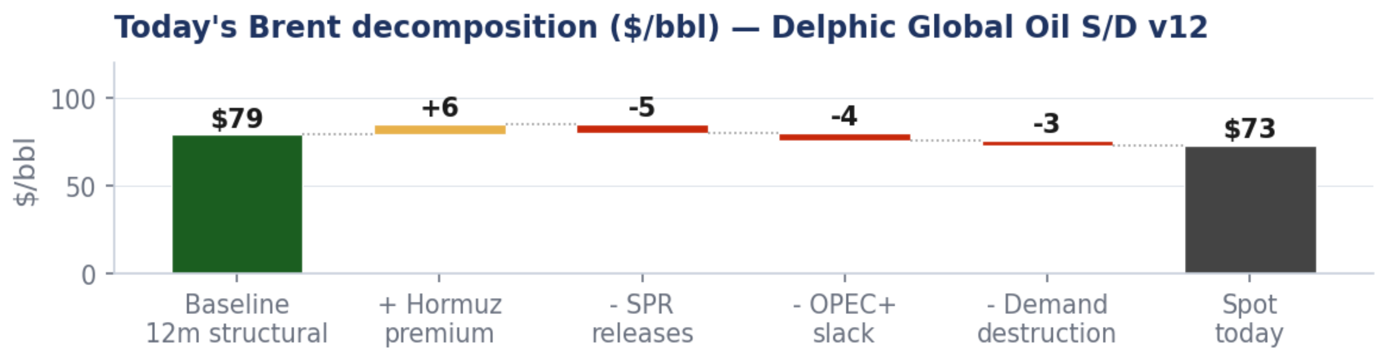
SYNTHESIS

What this means · oil-pricing consistency check

Two readings — the physical openness curve and the oil pricing curve — tell parallel stories. The gap between them is the central tension and the value of the monitor.

Backing out SPR releases, OPEC+ slack and demand destruction ($12/bbl combined, per Global Oil S/D v12), today's Brent implies Hormuz is 83% open, not the 84% the naive bridge would suggest. Observed visible openness is 18%, total flow estimate 26%; the residual Hormuz risk premium in Brent is $6/bbl. Forward Brent has the premium decaying to $-2/bbl by 12m (100% implied openness).





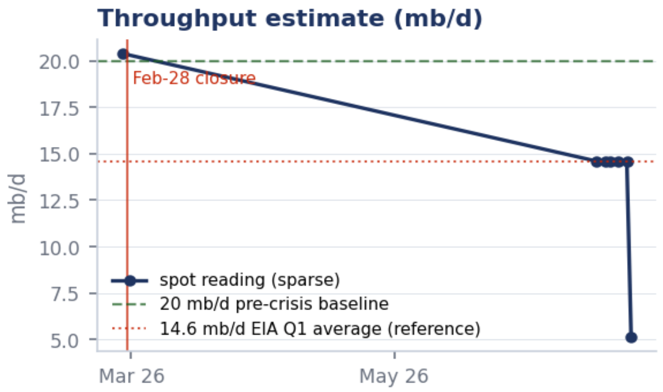
HOW BRENT TRANSLATES TO OPENNESS — Delphic decomposition

- **DECOMPOSITION** — Brent_spot = baseline + Hormuz_premium - non-Hormuz_offset. Baseline = $79/bbl (Delphic 12m structural fair-value, full normalization). Peak Hormuz premium = $34/bbl (Strike scenario vs baseline). Solving for premium and mapping linearly 0..peak gives implied openness 0..100%.
- **NON-HORMUZ OFFSETS TODAY** — $12/bbl backed out of today's Brent (per Global Oil S/D v12): $5 from active US/IEA SPR releases (172 mb US commitment, ~164 mb of 400+ mb deployed by May 8); $4 from deployed OPEC+ slack (UAE coiled-spring flush, Saudi paper quota); $3 from permanent demand destruction (~0.5-0.8 mb/d, teapot exits + electrification).
- **SPOT vs FORWARD** — SPOT $73: implied premium $6/bbl, openness 83%. 12m-FORWARD $72: offsets shrink to $5/bbl (SPR refill demand reverses release pressure above $85; demand recovers +1.0 mb/d by 12m); premium $-2/bbl, openness 100%.
- **WHY NOT THE NAIVE BRIDGE** — A linear bridge from observed crisis-peak ($118) to pre-crisis avg ($64) would imply 84% openness today — attributing 100% of Brent's decline to Hormuz reopening. That is analytically wrong: SPR / OPEC+ / demand destruction have done the heavy lifting. The decomposition method (83%) is the honest answer.

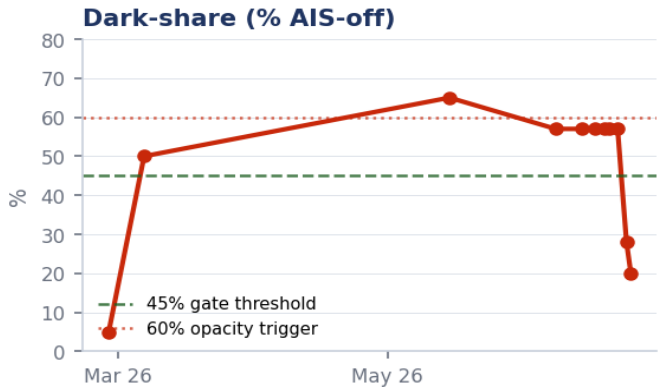
TRAJECTORY

Where we are vs where we have come from

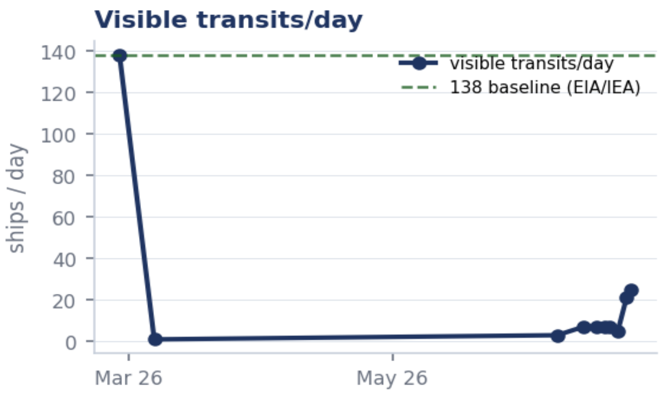
Dark-share and visible transits are the reliable trajectory signals. Throughput is shown as a reference (EIA Q1 average), not a daily spot.



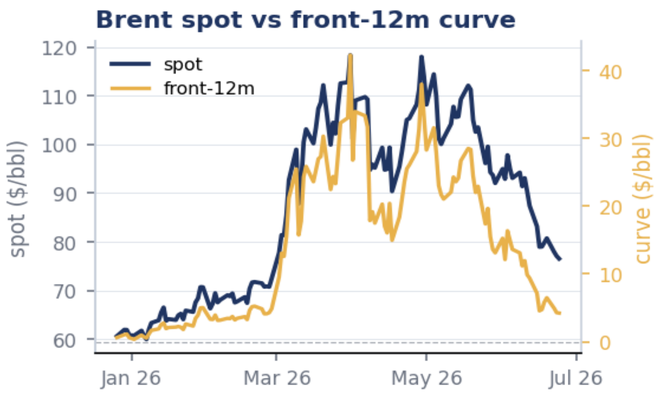
Throughput estimate vs 20 mb/d baseline · 14.6 EIA-Q1 reference line is an average, not a spot. The line is sparse because daily spot is genuinely uncertain while dark-share is high.



% of vessels with AIS off — the observability gap (Vortexa). Falling = visibility returning. Gate clears below 45.



Visible transits/day vs 138 baseline — the reopening curve and the headline openness metric (Windward / hormuzmonitor). The slope is the reopening velocity.



Brent spot + front-12m curve over the last 6 months (ICE, parquet). Falling spot + flattening curve = war-premium discharging.

ANALYSIS

Read · triggers

Thesis. Phase 4 Normalizing flows HOLDS — transparency improves further (Jun 23: 25 transits, just 3 dark ~12% vs 28% Jun 22) and the post-deal backlog clears fast (>=20 stranded tankers / ~35M bbl out of Hormuz since the deal), while Brent extends to $72.86 (-22.7% 1m, the lowest since pre-war). But the cycle's key positive watch item FLIPS NEGATIVE: IAEA inspector access is now an open US-Iran dispute — Grossi (Jun 24) says inspections of the bombed enrichment sites are MoU-mandated and will occur; Tehran insists access only AFTER a final deal. Volume still lags (~5.1 mb/d, ~25-32% of pre-war). Reopening confirmed and clearing; verification now re-contested.

READ — Openness * phase * velocity

- **OPEN** — Counts hold and clean up — Jun 23: 25 transits (12 in / 13 out), only 3 dark (~12%, vs 10 of 36 / 28% Jun 22); ~133/week sustained. The post-deal backlog is clearing fast: >=20 stranded tankers and ~35M bbl have exited Hormuz since the deal; ~21M bbl of Iranian crude left in June (CNBC/Kpler).
- **PHASE** — Phase 4 Normalizing flows HOLDS (prev Phase 4). The opacity gate stays clear (dark ~12-28% < 45) with counts steady and pricing softer — but no Phase-5 upgrade: that needs barrels AND a clean inspector entry, neither yet in hand.
- **VELOCITY** — Steady-to-improving on transparency (dark 28% -> ~12% on the Jun 23 print) and backlog clearance, but FLAT on the binding constraint (barrels). Physical normalisation is now a clean-up phase, not a fresh leg up.
- **ESTIMATE** — VOLUME unchanged and still the caveat: JPMorgan ~5.1 mb/d (Kpler ~4.8) vs ~15 pre-war (~25-32%). Counts and transparency keep normalising faster than throughput — Phase 4 remains a flow-QUALITY confirmation, not a flow-VOLUME one.

OFFICIAL RECORD * SoH — Statements * decisions — as regards the Strait

- **INSPECTORS — WATCH ITEM FLIPS NEGATIVE** — IAEA's Grossi (Jun 24): inspections of the bombed enrichment sites are mandated by the MoU and WILL occur; Tehran says access comes only AFTER a final deal (NPR Jun 23-24). The HEU-verification crack moves from claimed-but-unconfirmed to an OPEN DISPUTE — verification/snapback risk re-armed inside the 60-day window.
- **ENRICHMENT** — Pezeshkian reaffirms the enrichment red line and no HEU transfer abroad (Tehran Times) — unchanged; the durability cap holds. Frontal clash with Trump's zero-enrichment demand persists.
- **SNAPBACK** — The Oct-2025 E3 snapback stays triggered/latent in the background — the stick behind the 60-day road map; a hardening IAEA standoff is the path that activates it.
- **WAIVER / ROAD MAP** — Carry from Jun 22 — the US Treasury 60-day oil waiver and the Switzerland road map + four working groups + the Hormuz de-confliction channel remain the scaffolding of the reopening. No reported reversal.
- **CENTCOM / IRGC** — Quiet — the Geneva communication line (Jun 21) is holding; no new boarding, mine re-lay or interdiction Jun 24-25. CENTCOM maintains Iran does not control the strait; the IRGC Jun-20 closure declaration stays rhetorical.

WHERE WE'VE COME FROM — Trajectory

- **2026-05-15** — Dark-share peaks at 65% in Phase 2 — maximum opacity.
- **2026-06-17** — Versailles MoU signed; toll-free reopening clause starts the recovery.
- **2026-06-22** — Switzerland Round 1: road map + Hormuz de-confliction channel; US Treasury 60-day oil waiver issued.
- **2026-06-23/24** — 21 AIS-visible center-corridor transits (first since the war); dark-share 28%, 133/week. Gate clears -> UPGRADE to Phase 4 Normalizing flows; Brent $76.53.
- **2026-06-25** — Transparency improves (3 dark of 25, Jun 23) and ~35M bbl of backlog clears, but IAEA site access becomes an open US-Iran dispute; Brent to $72.86 (pre-war low). Phase 4 HOLDS — the positive watch item flips negative.

WHERE IT'S HEADED — Direction * accelerants * reversers

- **DIRECTION** — Still STRENGTHENING on flow transparency and pricing (Brent at pre-war lows), but the DURABILITY vector weakens — the IAEA dispute reintroduces verification risk the prior read had as near-resolved. Flow and diplomacy now point in different directions.
- **ACCELERANT** — Barrels catching counts (~5 -> 8-12 mb/d) AND a clean inspector entry to the damaged sites inside the 60-day window — together, the Phase-5 Normalized path.
- **REVERSER (elevated)** — The IAEA access dispute hardening into a standoff, an enrichment-talks collapse, or E3 snapback escalation — any re-arms durability risk and MoU-snapback fear and pulls DOWNGRADE-RISK toward Phase 3/2.

CENTRAL TENSION — Flow/pricing-vs-verification * counts-vs-barrels

- **PRICING** — Brent $72.86 (-22.7% 1m), the lowest since pre-war; OPEC+ adding +188k b/d in July. The market keeps discharging the war premium — pricing the reopening as durable and the IAEA noise as not (yet) flow-relevant.
- **PHYSICAL** — Holds and cleans — dark ~12-28% well under the 45 gate, counts ~25/day, backlog clearing (~35M bbl out). Physical agrees with pricing on REOPENING; the lag is throughput, not transparency.
- **READ** — The new divergence is FLOW/PRICING (normalising) vs DIPLOMACY/VERIFICATION (re-contested). Markets and tankers say open; the IAEA standoff says the durability that underwrites the reopening is not yet secured — and snapback is the stick.

SCENARIOS — Base * Bear * Bull

- **BASE** — Phase 4 holds; the backlog finishes clearing and barrels grind from ~5 toward 8-10 mb/d; the IAEA dispute stays a war of words inside the 60-day window; Brent drifts in the low-70s.
- **BEAR** — The IAEA standoff hardens or enrichment talks collapse; E3-snapback fear returns, dark-share rebounds above 45%, Brent snaps +$5-8; Phase 4 un-confirms to 3/2.
- **BULL** — Iran admits inspectors to the damaged sites + a nuclear annex lands inside the window; dark to 15-20%, flow back above 12 mb/d; Phase 5 Normalized in 3-4 weeks.

Bottom line. Phase 4 Normalizing flows HOLDS — transparency improves further (3 dark of 25 transits Jun 23) and the post-deal backlog clears fast (~35M bbl out), while Brent extends to $72.86 (-22.7% 1m, a pre-war low). But the cycle's key positive watch item flips negative: IAEA inspector access is now an open US-Iran dispute (Grossi: MoU-mandated, will occur; Tehran: only after a deal), re-arming verification/snapback risk inside the 60-day window. Volume still lags (~5.1 mb/d, ~25-32% of pre-war). Net: reopening confirmed and clearing, refill partial, durability re-contested — watch the IAEA standoff and the enrichment red line for the downgrade; barrels toward 8-12 mb/d and a clean inspector entry for Phase 5.

TRIGGERS — open materiality list (name · status · rule · source)

NAME	STATUS	RULE	SOURCE
RE-STRESS	DORMANT	brent_1m > +8%	brent.parquet (ICE)
OPACITY	DORMANT	dark_share > 60%	dark_share.json (Vortexa)
DIPLOMATIC DETERIORATION	DORMANT	durability < 0	diplomatic_scores.json (analyst)
NEAR-CONFIRM	ARMED	throughput > 12 mb/d AND dark_share < 50%	throughput_mbd.json + dark_share.json
DOWNGRADE-RISK	DORMANT	brent_1m > +8% OR durability < -0.5	brent.parquet + diplomatic_scores.json

METHODOLOGY & SOURCES

How the monitor works

Reference page: indicator families, baselines, computed metrics, sources, and the phase state-machine rules. All upstream data lives in the Dropbox store at delphic-market-data/store/.

INDICATOR FAMILIES

- **PRICING (leads / warns)** — Brent spot + front-12m curve from ICE (parquet). War-risk premia from manual entry. Pricing leads the call — can trigger downgrades alone but cannot trigger upgrades without physical confirmation.
- **PHYSICAL (confirms upgrade / lags)** — Throughput estimate (EIA Q1 average, reference only). Dark-share % (Vortexa). Visible transits/day (Windward / hormuzmonitor). The physical gate gates upgrades past Phase 2.
- **DIPLOMATIC (durability)** — Five milestones scored -2..+2 by the principal: navigation freedom, nuclear / ballistic, sanctions / reconstruction, ceasefire compliance, succession stability. Composite is the weighted average.

BASELINES

- **138 ships/day** — Pre-crisis steady-state visible transits (EIA / IEA 2025 reference). Denominator for visible_pct.
- **20 mb/d** — Pre-crisis throughput baseline (EIA). Denominator for est_total_pct.
- **Brent endpoints (Delphic Global Oil S/D v12)** — Structural fair-value baseline $79/bbl (12m, full normalization, no Hormuz premium). Peak Hormuz premium $34/bbl (Strike scenario $113 vs baseline $79). Non-Hormuz offsets today: SPR $5 + OPEC+ slack $4 + demand destruction $3 = $12/bbl. Used by the decomposition on the synthesis page.

COMPUTED METRICS

- **visible_pct** — = visible_transits / 138 — the OBSERVABLE openness headline.
- **est_total_pct** — = throughput_mbd / 20 — estimated total including covert flow. Labelled low-confidence whenever dark-share > 30%.
- **observability_gap** — = est_total_pct - visible_pct — the unobserved share.
- **velocity_pts_per_week** — = visible_pct now minus visible_pct ~7 days ago (nearest non-today entry within +/-3 days), normalised. Labels: ACCELERATING > +3, RECOVERING +0.5..+3, STALLED within +/-0.5, CLOSING < -0.5.
- **implied_openness (Delphic decomposition)** — Brent_spot = baseline + Hormuz_premium - non-Hormuz_offset. Solve for Hormuz_premium, then implied_openness = clamp(100 * (1 - premium / peak_premium), 0, 100). Same formula on 12m-forward Brent with shrunk offsets. The naive linear bridge (without backing out non-Hormuz factors) is REJECTED.
- **phase (state machine)** — UPGRADE requires physical confirmation (throughput > 12 AND dark-share < 45) AND durability >= 0 AND pricing momentum > 0. DOWNGRADE may fire on pricing or durability alone (asymmetric).

SOURCES

- **Visible transits** — Windward and hormuzmonitor public counts; written to store/soh/visible_transits.json
- **Dark-share** — Vortexa AIS-off coverage; written to store/soh/dark_share.json
- **Throughput estimate** — EIA Q1 2026 average mb/d; written to store/soh/throughput_mbd.json. Not a daily spot reading.
- **Brent + front-12m curve** — ICE daily prints, mirrored to store/commodity/brent.parquet and store/commodity/brent_co12.parquet.
- **Diplomatic scores** — Analyst principal-scored, store/soh/diplomatic_scores.json.
- **History** — store/soh/history.jsonl. Seeded with public-record anchors (EIA, Vortexa, Windward, press). Appended every build.