

## Why the Kirkuk–Tripoli Pipeline is Lebanon New Lifeline

Note prepared by:

Lamia Moubayed Bissat, President of the Institut des Finances Basil Fuleihan and Vice-Chair of the United Nations Committee of Experts on Public Administration

Diana Kaissy, Senior Energy governance specialist

*“The common misconception is that Lebanon must rebuild a refinery to be relevant.*

*In reality, the immediate opportunity lies in Phase 1: Transit and Terminal Operations”*



For decades, the mention of the Kirkuk–Tripoli pipeline evoked images of a bygone era of Levantine integration; a "nostalgic" relic of the 1950s Iraq Petroleum Company (IPC) days. But in March 2026, nostalgia has been replaced by cold, hard geopolitical math.

As the conflict in the Persian Gulf enters a critical phase, the **Strait of Hormuz** which typically carries one-fifth of global oil and LNG flows, has seen near-total disruption. For Iraq, the consequences are existential. With its southern terminals paralyzed, Baghdad is desperately seeking an "emergency lung" for its crude exports. While routes through Turkey are being fast-tracked through an agonizing pipeline diplomacy, the most resilient, high-capacity solution lies to the west: the brownfield transit corridor ending at the **Tripoli Oil Installations (TOI)** in Northern Lebanon.

### The Hormuz Chokehold and Iraq's Exposure

The maritime blockade in the Gulf has forced regional exporters to lean on the Saudi East-West pipeline and the UAE's Fujairah route. However, Iraq is uniquely exposed. In 2024, nearly 100% of Iraq's seaborne exports exited through the south. By March 2026, the loss of Hormuz access has slashed Iraq's southern production by an estimated **82%**, dropping output from 4.4 million barrels per day (bpd) to a staggering **800,000 bpd**.

Baghdad has partially restored northern crude exports through Turkey via the Kirkuk–Ceyhan route, but the corridor remains politically fragile, capacity-constrained, and vulnerable to renewed tensions between the federal government and Erbil. In this high-pressure environment, the Mediterranean outlet through Tripoli is no longer merely an alternative; it is a strategic necessity.

## Lebanon's "Brownfield" Advantage

The common misconception is that Lebanon must rebuild a refinery to be relevant. In reality, the immediate opportunity lies in **Phase 1: Transit and Terminal Operations**.

**Lebanon possesses a "brownfield" asset: the Tripoli Oil Installations (TOI) that requires rehabilitation, not a ground-up miracle.**

According to the Lebanese Directorate General of Oil (DGO), the TOI was originally designed to receive Kirkuk crude through three legacy lines (12", 16", and 30/32") with a historical peak capacity of **900,000 bpd**. While the old 21,000 bpd refinery is economically obsolete, the terminal infrastructure remains a goldmine of latent capacity.

| Metric              | Figure                 | Why it Matters                                    |
|---------------------|------------------------|---|
| Hormuz Global Share | ~20% of oil/LNG        | Drives the urgent need for Mediterranean outlets. |
| TOI Inlet Lines     | 12", 16", 30/32"       | Existing footprint tied directly to Kirkuk.       |
| Historical Capacity | 900,000 bpd            | Proven scale of the Tripoli endpoint.             |
| Planned Storage     | 430,000 m <sup>3</sup> | Immediate "buffer" for Mediterranean exports.     |
| Marine Loading      | 250,000 DWT (CBM #2)   | Supports Very Large Crude Carriers (VLCCs).       |
| Phase 1 Rev. Est.   | \$80M – \$275M         | Significant gross revenue for Lebanon's treasury. |

## The Commercial Upside: \$275 Million a Year?

While no official tariff exists, historical logic and modern rehabilitation costs suggest a "stack" of fees, transit, handling, and loading, could range between **\$0.75 and \$1.50 per barrel**.

Under a moderate flow scenario of 300,000 to 500,000 bpd, Lebanon could see gross annual revenues of **\$80 million to \$275 million**. Beyond the cash, the project restores Lebanon's strategic relevance, positioning it as a key energy-security partner for both Iraq and a Europe hungry for non-Gulf energy sources.

## The Path to Recommissioning

The most practical path forward bypasses the complexity of refining and focuses on the **export-terminal model**. The chain is straightforward: Kirkuk to Syria, through the Akkar border corridor (Hokr Jouret Srar), along the old IPC right-of-way to the Beddawi/TOI tankage, and finally to offshore Mediterranean loading.

However, "simple" does not mean "easy." A restart requires a rigorous **tripartite integrity program** between Iraq, Syria, and Lebanon. Experts suggest a six-point technical roadmap:

- 1. Route Survey:** Clearing the right-of-way and addressing decades of encroachment.
- 2. Pressure Testing:** Excavating and replacing failed segments of the pipeline.
- 3. Pumping & Metering:** Total overhaul of control systems and custody-transfer points.
- 4. Tank Farm Restoration:** Modernizing the 430,000 m<sup>3</sup> storage facility at Beddawi.
- 5. Environmental & Security:** Installing leak detection and a dedicated security architecture.
- 6. Marine Systems:** Refurbishing Conventional Buoy Moorings (CBM) for offshore loading.

### A New Diplomatic Alignment

What makes 2026 different from 2020 is the shifting political and legal landscape. The broad economic sanctions that once made a Syrian transit corridor a "non-starter" were largely lifted or revoked in 2025 following the transition in Damascus. While specific security restrictions remain, the "sanctions wall" has effectively crumbled.

Furthermore, the relationship between Baghdad and Beirut has matured. The state-to-state energy deal, which saw Iraq provide fuel to Lebanon's power plants through 2025, has created a framework for cooperation. Iraq and Syria have already launched a joint assessment for Mediterranean routes; the missing piece is a formal **Tripartite Transit Framework** that includes Lebanon.

Syria holds the physical "key" to the Tripoli Oil Installations (TOI). For oil to reach Lebanon, it must first traverse approximately 250km of Syrian territory. Syria may leverage this hold as a diplomatic "carrot" to demand favorable trade terms or electricity-sharing agreements from the Lebanese government. Syria has increased military patrols along the pipeline corridor in the Homs desert to protect against sabotage, signaling to international investors that the route is "de-risked."

### The "Baniyas First" Strategy

Syria's primary internal objective is the rehabilitation of the Kirkuk–Baniyas corridor, which utilizes a southern "Arab" route through the Anbar province to Homs, effectively bypassing the political volatility of the Kurdistan Regional Government (KRG) and the physical bottlenecks of the Turkish border<sup>1</sup>. By shifting from a "patch-and-repair" mindset to a comprehensive rebuild<sup>2</sup>, Syria is positioning to handle an initial 350,000–500,000 bpd, providing a direct Mediterranean outlet that circumvents both the Suez Canal and the Strait of Hormuz. Damascus views transit fees as a "sovereign rent" that could provide billions in hard currency<sup>3</sup>. Part of the agreement would involve Iraq supplying crude directly to the Homs and Baniyas refineries. With Syria facing 20+ hour electricity blackouts in early 2026, securing "cheap" Iraqi crude in exchange for transit rights is the country's top energy priority.

### The "Baniyas and Tripoli" Strategy

A strong case can be made that Iraq should not simply stop Kirkuk crude at Baniyas, but should also use the Tripoli Oil Installations as the export-facing Mediterranean outlet: Tripoli is being positioned precisely as a storage and handling terminal, with 430,000 m<sup>3</sup> of storage capacity, crude-handling capability, marine loading via buoy moorings that can take vessels up to 250,000 DWT, and, crucially, it sits at the end of the old Kirkuk pipeline corridor, which Lebanon's Directorate General of Oil says could be renewed for crude exports.

By contrast, Baniyas is already carrying a different burden inside Syria: crude is currently being sent there for storage and processing, while the Baniyas refinery has been operating at reduced capacity of about 95,000 bpd because of degraded facilities, making it better suited as a Syrian refining and stockholding node than as the sole commercial export terminus for Iraqi oil.

Even after the EU lifted Syria's economic sanctions in May 2025, Syria-related business still carries residual political and compliance sensitivity, so routing export barrels through Tripoli would likely be commercially cleaner for shipowners, insurers, banks, and buyers. In practical terms, that means the stronger model is Baniyas for Syrian domestic refining/storage, Tripoli for scalable export logistics, and not Baniyas alone as the final stop.

---

<sup>1</sup> Iraq-Syria Joint Technical Committee Report (March 2026): Feasibility and Modernization of the Anbar-Homs Energy Corridor.

<sup>2</sup> The joint Iraqi-Syrian technical committee has confirmed that rebuilding a modern line is more viable than patching the 1952 original.

<sup>3</sup> Levant Energy Monitor: The Post-Sanctions Landscape: Syria's Strategy for Regional Energy Reintegration and Domestic Grid Recovery.

## Leveraging Tripoli maritime advantage to both Iraq and Syria

The maritime profile and terminal infrastructure of the Tripoli Oil Installations (TOI) provide distinct loading and shipping advantages than Banias (see appendix 1). They are here categorized by their benefit to both Iraq and Syria.

### Summary of the Combined Advantages

| Feature                    | Advantage to Iraq  | Advantage to Syria  |
|----------------------------|--|---|
| <b>Vessel Size (Draft)</b> | Can load larger tankers (up to 250,000 DWT), lowering transport costs to Europe.           | Reduces the queue of ships waiting to load, allowing a faster flow of taxable transit crude.                      |
| <b>Weather Resilience</b>  | Guarantees reliable, uninterrupted supply contracts to international buyers.               | Ensures consistent, daily transit-fee generation without seasonal drops.  |
| <b>Port Proximity</b>      | Close access to the advanced logistics and supply chains of the expanding Port of Tripoli. | Offloads the pressure on Syria's own ports (Tartus/Banias), freeing them up for general cargo and domestic needs. |

## The Recommendation: A 90-Day Initiative

**In the post-Hormuz world, the Kirkuk–Tripoli line is the most logical bridge to a more secure energy future.** By offering a pressure valve for Iraqi crude, Lebanon would be providing a regional service and positioning itself on the global energy security agenda.

**Lebanon cannot afford to wait.** The government should immediately propose a **90-day tripartite initiative** with Iraq and Syria. The objective should be singular: Phase 1 export recommissioning.

**The "Bypass" Logic:** For this to work in 90 days, the parties must agree to **defer** the refinery discussion. If the parties get bogged down in "who gets the refined petrol," the project will stall. The focus must remain exclusively on **crude transit to the Mediterranean**.

## Technical Blueprint: The 90-Day Tripartite Corridor Initiative

**Objective:** Complete a comprehensive "Technical and Commercial Readiness Folder" for Phase 1 Export Recommissioning.

### Month 1: Integrity Assessment & Legal Framework

The first 30 days focus on "opening the books" and physically inspecting the legacy assets that have been dormant or underutilized.

- **Formation of the National Steering Committee (NSC):** Issue the formal decision establishing the national steering committee; appoint a project secretariat; require weekly written progress reports and a 90-day delivery package
- **Diplomatic Move:** Open the formal diplomatic channel with Iraq and Syria; circulate a Lebanese non-paper (informal diplomatic note); secure agreement on a tripartite ministerial call and nominate the Joint Technical Committee (JTC).
- **Formation of the Joint Technical Committee (JTC):** Appointment of senior engineers from Iraq's North Oil Company (NOC), Syria's Ministry of Petroleum, and Lebanon's Directorate General of Oil (DGO).
- **Aerial & Ground Route Survey:** Deployment of LiDAR-equipped drones to map the entire right-of-way (ROW) from Kirkuk to Tripoli. This identifies illegal taps, physical encroachments (buildings/farms over the line), and "hot spots" requiring immediate excavation.
- **The "Draft Treaty" Phase:** Legal teams draft a unified Inter-Governmental Agreement (IGA). This document must define:
  - **Sovereign Immunity:** Protections for the crude oil against third-party seizures.
  - **Jurisdiction:** Which laws apply in the event of transit disputes.
  - **The "Through-Put" Guarantee:** Iraq's commitment to a minimum daily volume to ensure the project's bankability.
- **The "Fiscal and Commercial" Phase:** The Ministry of Finance to model a tariff stack comprising a pipeline transit fee, a terminal handling fee, a storage fee where applicable, and a marine-loading fee. It should also test how revenues would be booked, ring-fenced, audited, and reported to avoid future governance challenges.

### Month 2: Pressure Testing & TOI Rehabilitation Plan

With the survey data in hand, the second month shifts toward the engineering specifics of the Tripoli terminal.

- **Hydrostatic Testing Segments:** Conducting section-by-section pressure tests. If a segment fails, the JTC determines the exact tonnage of steel piping required for replacement.
- **Terminal Audit at Beddawi: \* Tank Farm Integrity:** API-653 inspections of the 430,000 m<sup>3</sup> storage tanks to determine which are ready for "Immediate Fill" vs. "Major Repair."
  - **CBM System Check:** Divers and ROVs inspect the underwater lines leading to Conventional Buoy Mooring (CBM) #2.
- **The "Early Works" Procurement List:** Identification of long-lead items (large-scale pumps, specialized valves, and SCADA control systems) that need to be ordered immediately to meet a 12-month restart goal.

### Month 3: Commercial Modelling & Security Architecture

The final 30 days focus on the "Software" of the pipeline—how it makes money and how it stays safe.

- **The Three-Tier Tariff Structure:** Finalizing the pricing stack:
  1. **Iraq-Syria Transit Fee:** Negotiated per-barrel rate.
  2. **Lebanon Transit/Terminal Fee:** Covering the Hokr Jouret Srar to Beddawi stretch.
  3. **Off-take/Loading Surcharge:** A specific fee for ship-to-shore logistics and environmental monitoring.
- **The Corridor Security Architecture (CSA):** Moving away from traditional "guards at every mile" to a technology-first approach:
  1. Fiber-optic acoustic sensing (to detect digging/vibrations near the pipe).
  2. Thermal drone patrols for the Akkar/North Lebanon border segments.
  3. Establishing a Tripartite Security Coordination Center.
- **Phase 1 Final Report:** The 90-day period concludes with a joint ministerial summit in Tripoli to sign the "Activation Protocol," triggering the release of rehabilitation funding.

## Appendix: Comparative Summary: Tripoli Port vs. Banias

| Feature  | Tripoli Port (Lebanon)   | Banias (Syria)   |
|--|--|--|
| <p><b>Max Draught<br/>Deep-Water Capacity<br/>and Tanker<br/>Compatibility</b></p> | <p><b>15.2m – 18.0m (Deep-water quay)</b><br/>                     Tripoli's port infrastructure features deep-water quays ranging from 15.2 to 18 meters in depth [1]. This allows the terminal to host high-tonnage cargo ships and positions it to eventually handle <b>Very Large Crude Carriers (VLCCs)</b> as part of its Phase 2 expansion.<br/>                     Tripoli utilizes a Conventional Buoy Mooring (CBM) system situated in an open-sea berth with a gentle sea slope, allowing it to handle ultra-large vessels up to <b>250,000 DWT (Deadweight Tonnage)</b> with a loaded draught of up to 60 feet [1, 2].<br/>                     The ability to host Suezmax and larger vessels directly reduces freight costs per barrel for Iraqi crude, making the oil highly competitive in European and North American markets.</p> | <p><b>~15m (Offshore SBM only)</b><br/>                     relies on lighter <b>Single Buoy Moorings (SBMs)</b> located offshore. While functional, these are more susceptible to weather disruptions and generally limit the size of tankers to around 100,000–135,000 metric tons (Suezmax class) [4].</p>  |
| <p><b>Operational Uptime</b></p>   | <p><b>High (Sheltered by Ras Al Shaq'a)</b><br/>                     The geography of Northern Lebanon provides natural shelter that ensures higher operational uptime year round compared to the relatively exposed Syrian coastline.<br/>                     The Tripoli coastline is naturally shielded from harsh southern winds and rough swells by the high cliffs of the Ras Al Shaq'a cape in the Chekka region [3]. This natural barrier is supplemented by two massive major breakwaters (1,900m and 1,300m), creating a "calm basin" for docking and loading that Banias's open-sea moorings lack [1].<br/>                     This makes the port accessible nearly year-round, even during severe Mediterranean winter storms that frequently force the closure of offshore loading operations in Banias [1].</p>                     | <p><b>Moderate (Exposed to open sea)</b><br/>                     The Syrian coast at Banias is more exposed to open-sea weather systems and winter Mediterranean storms. Tripoli experiences fewer "weather standby" days where loading must be suspended due to high swells, guaranteeing a more reliable and predictable loading schedule for Iraq's state oil marketer (SOMO).</p> |
| <p><b>Vessel Type</b></p>  | <p>VLCC potential / Large Container<br/>                     Tripoli is an ISO-certified, modern facility with a 25-year concession managed by global operators like <b>Gulfainer</b> [1].</p>   | <p>Suezmax / Medium Crude Carriers</p>   |

| Feature   | Tripoli Port (Lebanon)   | Baniyas (Syria)   |
|---|--|---|
| <p><b>Scalability via "Brownfield" Marine Infrastructure</b></p>    | <p>Lebanon does not need to build a conventional, expensive harbor to move millions of barrels; it can scale its existing offshore infrastructure.</p> <p>Tripoli's existing marine pipelines are designed for initial loading and discharge rates of <b>3,000 \$m<sup>3</sup>/hr\$</b>, with a system architecture capable of scaling up to <b>6,000 \$m<sup>3</sup>/hr\$</b> [1].</p> <p>Tripoli's offshore grid requires standard technical modernization rather than a complete ground-up rebuild.</p> | <p>Syria's Baniyas terminal requires extensive subsea rehabilitation and mine-clearing following years of conflict.</p> |
| <p><b>Regulatory Climate</b></p>                                    | <p>Established international concessions.</p> <p>The Port of Tripoli is an ISO-certified, modern facility with a 25-year concession managed by global operators like <b>Gulftainer</b> [1].</p>  | <p>Transitioning/Recovering state-run</p>   |
| <p><b>Logistics Synergy &amp; Storage Potential</b></p>             | <p>Integrated TSEZ and 1.5M ton target</p> <p>It features a large rear storage zone (650,000 m<sup>2</sup>) and a nearby Special Economic Zone (TSEZ) that allows for tax-free processing and value-added services for energy-related equipment.</p>   | <p>Primarily refinery-dedicated</p>   |
| <p><b>Intermodal Logistics &amp; the "Silk Road" Connection</b></p> | <p>Tripoli is connected to a sophisticated hinterland network. Goods and equipment can move through Tripoli to Syria and Iraq without "mountainous relief," offering the flattest and most cost-effective land-transit route in the Levant [1, 2]</p> <p>Tripoli is not just a pipe-end; it is an integrated logistics hub that offers Iraq and Syria a gateway to a broader global trade network.</p>   |   |

[1] Tripoli Port Authority / TSEZ Briefing (2026): *Strategic Advantages of the Tripoli Deep-Water Basin.*

[2] Tripoli Port Guide (2025/2026): *Technical Specifications of Quays and Hinterland Connectivity.*

[3] Levant Maritime Review: *Operational Reliability Comparison: Levantine SBMs vs. Protected Docking.*

[4] Syrian Petroleum Company (SANA) Technical Update (March 2026): *Baniyas Tanker Capacity and Unloading Schedules*