THE BANIYAS DEEP-WATER GATEWAY

Comprehensive Business Plan

An Integrated Phosphate–Energy–Logistics Corridor and Deep-Water Megaport on the Syrian Mediterranean Coast

Mines -> Beneficiation Factories -> Railway -> Deep-Water Megaport at Baniyas

Prepared for strategic planning, investor engagement, government negotiation and pre-FEED deployment

Sponsor: Madain Al Mustaqbal ("Cities of the Future"), Dubai — delivered through the Phoenix Corridor Development Company (PCDC) special-purpose vehicle and its PortCo

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Strictly Private & Confidential

Important Notice and Basis of Preparation

This document (the "Business Plan") has been prepared by Madain Al Mustaqbal (the "Sponsor") to describe the integrated infrastructure opportunity referred to as the **Baniyas Deep-Water Gateway** and to facilitate preliminary discussions with prospective equity investors, lenders, contractors, terminal operators, offtakers and government counterparties. It is provided on a strictly private and confidential basis.

This Business Plan is **not** a securities offering, a bankable feasibility study, a final engineering design or a construction estimate. It is a deployment-ready strategic business plan synthesised from four bodies of work supplied by the Sponsor:

1. The **Phoenix Corridor Investment Proposal** (Madain Al Mustaqbal, June 2026) — the corridor and anchor-cargo commercial logic; 2. The sponsor's **port illustration and GIS masterplan package** (EPSG:3857 / UTM 36N), defining terminal categories, the design-vessel fleet, marine framework, landside zoning, networks and validation layers; 3. The **"Production-Ready Port Layout Design Basis for the Baniyas Deep-Water Gateway"** — the engineering reality-check on bathymetry, berth depths, dredging and breakwaters; and 4. **Independent desk research** (June 2026) used to verify, correct and update the external facts on which the plan depends.

All cost, schedule and return figures are **concept-stage (AACE Class 5)** estimates. They must be validated through bathymetric and hydrographic survey, geotechnical investigation, metocean and wave modelling, navigation simulation, HAZID/QRA, ESIA, FEED, lender due diligence, market sounding, legal due diligence, EPC quotations and government concession negotiation before any engineering or financial freeze.

A note on accuracy. A specific objective of this edition was to identify and correct factual and engineering errors carried in earlier drafts of the project material. Where a previously circulated figure has been found to be wrong, outdated or unsupported, it has been corrected and the correction is recorded transparently in **Section 21 — Corrections & Validation Register**. Figures are in United States dollars unless stated; "t" denotes metric tonnes, "Mtpa" million tonnes per annum, "CD" chart datum, "bpd" barrels per day.

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Executive Summary

The **Baniyas Deep-Water Gateway** is an integrated infrastructure programme that connects Syria's inland phosphate deposits to deep water on the Mediterranean coast and, using that anchor cargo as its foundation, builds a modern multi-terminal energy, bulk, gas, food and logistics gateway alongside Syria's largest oil refinery at Baniyas. It is conceived as a single coordinated investment across three physical systems:

- **Factories at the mines** — a modern phosphate mining and beneficiation complex at Khneifiss (and later Al-Sharqiya), where run-of-mine ore is crushed, washed, dried and upgraded to export concentrate, then loaded directly to rail;
- **A railway corridor** — the renewal of the existing standard-gauge freight line from the Palmyra-district mines, through Homs, to the coast at Baniyas, turning a truck-bound trade into a high-volume rail conveyor; and
- **A deep-water megaport at Baniyas** — a protected multi-terminal harbour combined with offshore deep-water moorings, handling crude oil and refined products, LNG/LPG and other gases, dry bulk and phosphate, grain and food commodities, breakbulk/Ro-Ro/project cargo, tank storage, grain silos, warehouses and cold storage, and a rail-served logistics city.

The organising idea

Single-asset investments in frontier markets fail at their interfaces: a mine without guaranteed haulage, a railway without anchor cargo, a berth without hinterland demand. The Gateway is engineered as **one system with one owner of the critical interfaces**. The mine guarantees the railway's base load; the railway guarantees the port's anchor throughput; the port's shared marine infrastructure (breakwater, channel, dredging, utilities, VTS) lowers the unit cost of every terminal that shares it; and the energy, gas, grain and logistics terminals convert inbound reconstruction cargo — fuel, gas, food, machinery, building materials — into a second, counter-cyclical revenue stream.

Why Baniyas

The choice of **Baniyas** (rather than Tartus, used in the earlier corridor proposal) is the single most important refinement in this edition, and it is grounded in fact. Baniyas already hosts:

- **Syria's largest oil refinery** (~125,000 bpd / ~6 Mtpa design capacity), which needs reliable crude import and a refined-products export outlet;
- **An existing offshore oil terminal** operated by the Syrian Company for Oil Transport (SCOT), with a field of single-buoy moorings roughly 1 km offshore handling crude, products and LPG — the natural nucleus for an upgraded crude **SPM** system; and
- **The historic Kirkuk–Baniyas crude pipeline terminus**, the subject of a 2025 Iraq–Syria rehabilitation agreement and a wider "oil transit hub" ambition.

In other words, the energy-and-bulk gateway proposed here is **not a greenfield bet on an empty coastline** — it is the modernisation and expansion of an existing energy port, complementing (rather than competing with) DP World's container/general-cargo concession at Tartus and CMA CGM's container terminal at Latakia. Tartus and Latakia take boxes; Baniyas takes energy, gas, bulk, grain and project cargo.

The engineering correction at the heart of the plan

Earlier project material envisaged dredging a very deep inner harbour (to roughly -28 m CD) so that ULCC and VLCC crude tankers and Q-Max LNG carriers could berth alongside inside a protected basin. The Baniyas seabed does not support that approach economically: the shelf is narrow and steep, dropping from shallow water to -25/-40 m within roughly 1–2 km of shore. The **production design basis therefore recommends — and this plan adopts — a two-part marine strategy**:

1. **A protected inner basin** (a main breakwater of ~1.8 km plus a lee arm, an approach channel ~180 m wide at -16.5 m CD and a ~700 m turning basin) dredged to roughly -12.5 to -16.5 m CD, serving dry bulk/phosphate, grain/clean bulk, multipurpose/Ro-Ro/feeder, and a products/LPG island jetty; and 2. **Offshore deep-water systems in naturally deep water** — **single-point moorings (SPM/CALM buoys) for VLCC/ULCC crude** (an upgrade of the existing SCOT buoy field) and, when demand and a full safety case justify it, **an offshore or island jetty for Q-Max-class LNG** — rather than dredging a deep trench back to shore.

This is faster, materially cheaper, lower-risk, and fully consistent with the Sponsor's own brief ("crude oil to be filled by SPM"). The steep profile, far from being a liability, is the very feature that makes offshore moorings practical close to shore.

Headline metrics (concept stage)

Metric	Value	Comment
Ultimate programme CAPEX (all phases)	**~US$8.9 billion** (range US$6.7–10.9 bn)	Class 5 concept; benchmarks against Vadhavan, India (~US$9.1 bn greenfield deep-water megaport)
Phase 1 "corridor-enabling" CAPEX (2027–2031)	**~US$3.2–3.8 billion**	Mine/factory, rail renewal, protected basin + bulk/grain berths, products & LPG jetty, crude SPM upgrade, Stage-1 tank farm, compact logistics platform
Phosphate design throughput	**7.0 Mtpa** concentrate (system capacity 8 Mtpa)	Ramp from ~1.2 Mtpa (2029)
Mature programme revenue (2035+)	**~US$3.0 billion / year**	Across energy, gas, bulk, grain, general cargo and logistics
Mature EBITDA (2035+)	**~US$1.5 billion / year**	~50% blended margin; terminal margins vary widely
Phosphate segment FOB cash cost	**~US$58 / t**	Second quartile of the global export cost curve
Unlevered programme IRR	**~11%** (range 7–17% across cases)	25-year project cash flow; before financing
First revenue	**2029–2030**	Service harbour, early bulk/grain, staged tank and crude-SPM operations
Undiscounted payback	**~2038**	Cumulative free cash flow turns positive
Strategic anchor cargoes	Phosphate exports; refinery crude & product flows; reconstruction fuel, gas, grain and project cargo	
Employment	**16,000+ jobs**	~12,000 construction peak; ~4,500 permanent direct

The recommended decision

The first deployment gate is **validation, not construction**. The recommended decision is to approve a **90- to 180-day development budget** (US$150–250 million seed/development tranche) for the survey programme (bathymetry, geotechnical, metocean, navigation simulation), government heads of terms, market sounding with anchor users (the refinery, fuel importers, phosphate offtakers, grain traders), ESIA scoping and a professional pre-FEED — and **not** to commit full construction capital until the critical-path marine, safety, commercial and concession risks have been converted into priced, contractual, financeable packages. The most important rule is to keep the corridor **integrated**: mine, railway, port, tank farm, gas, logistics city and cargo contracts must be negotiated as one investment system, because it is at the interfaces that integrated programmes are won or lost.

1. Strategic Context: Syria, 2026

1.1 A legal landscape transformed — accurately stated

For more than a decade, comprehensive sanctions made institutional investment in Syrian infrastructure effectively impossible. Between January 2025 and December 2025 that architecture was largely dismantled in a sequence of formal, verifiable steps. It is important — for the credibility of any plan presented to lenders and DFIs — to state the position **precisely**, including what has **not** yet changed.

United States. OFAC issued **General License 24** (6 January 2025) authorising transactions with the new transitional governing institutions, broadened by **General License 25** (23 May 2025), which suspended most Syria sanctions in practice. On **30 June 2025 Executive Order 14312** terminated the national emergency and revoked the executive-order framework underpinning the U.S. Syria sanctions programme (OFAC removed the Syrian Sanctions Regulations by final rule on 26 August 2025). Finally, the **Caesar Syria Civilian Protection Act was repealed in the FY2026 National Defense Authorization Act, signed 18 December 2025**.

What remains (and must be disclosed): the Caesar repeal is paired with a **180-day Presidential certification regime** running for four years against eight conditions; critically, this is a *discretionary* trigger — independent legal analysis concludes the NDAA contains **no mandatory "snap-back"** that would automatically re-impose Caesar sanctions. Separately, Syria's **State Sponsor of Terrorism (SST) designation remains in place** (only under review, with informed projections of removal around April 2026), and U.S. **export controls (BIS/EAR)** were not removed by EO 14312. The honest summary is: the *prohibitive* economic framework is gone, but residual items remain and must be actively managed.

European Union and United Kingdom. The **EU** suspended sectoral measures on 24 February 2025 and **formally lifted almost all economic sanctions on 28 May 2025** (de-listing the Central Bank of Syria among others), retaining only the arms embargo and chemical-weapons/repression controls. The **UK** lifted sector-wide economic sanctions via SI 2025/507, **in force 25 April 2025**, unfreezing entities including the Syrian Petroleum Company.

The precedents already set. Global operators moved immediately and with their own balance sheets:

- **DP World – Tartus:** a **30-year, US$800 million** Build-Operate-Transfer concession signed **13 July 2025**, with operations commencing **12 November 2025** (containers, general cargo, breakbulk, Ro-Ro).
- **CMA CGM – Latakia:** a renewed **30-year container concession** with total partnership investment **~US$260 million** (signed 1 May 2025), targeting 1 million+ TEU and 16 m draft; AD Ports took a 20% stake in the terminal operator in November 2025.

Table 1.1 — Sanctions and market-entry timeline (verified)

Date	Event
6 Jan 2025	U.S. OFAC General License 24 — first authorisations for the transitional government
24 Feb 2025	EU suspends principal sectoral sanctions
25 Apr 2025	UK economic sanctions lifted (SI 2025/507 in force)
1 May 2025	CMA CGM renews 30-yr Latakia concession (~US$260 M)
23 May 2025	U.S. General License 25 broadens authorisation
28 May 2025	EU formally lifts principal economic sanctions
30 Jun 2025	Executive Order 14312 revokes the U.S. Syria sanctions programme
13 Jul 2025	DP World signs 30-yr, US$800 M Tartus concession
Nov 2025	DP World commences Tartus operations; AD Ports takes 20% of Latakia terminal
18 Dec 2025	Caesar Act repealed via FY2026 NDAA (180-day certification; no mandatory snap-back)

Date	Event
Feb 2026	World Bank holds **exploratory** technical talks on Syrian railway rehabilitation, incl. the phosphate corridor (no funding committed)

1.2 The infrastructure gap — and the white space

Syria's reconstruction requirement is commonly estimated in the hundreds of billions of dollars, and capital follows sequencing: the sequence begins with trade gateways and the freight arteries that feed them. The container gateways are being addressed (DP World at Tartus, CMA CGM at Latakia). What neither concession covers — and what the State has publicly prioritised — is **heavy freight**: the Ministry of Transport stated in October 2025 that full rail rehabilitation requires roughly **US$5.5 billion over three to five years** and named the phosphate corridor as a priority, against a network of which only ~1,052 of ~2,800 route-km is currently operable. The Baniyas Gateway occupies exactly this white space: the **energy, gas, dry-bulk, grain and logistics layer**, plus the **railway** that makes the coastal system economically coherent.

1.3 Why a corridor, not a collection of assets

The Gateway is structured as one system with one owner of the critical interfaces so that each component de-risks the next. This system logic drives the financial architecture (Sections 12–15) and the single-SPV concession structure (Section 20). It is also the project's competitive moat: a vertically integrated corridor cannot be replicated by any single-asset competitor.

2. Project Identity: Why a Deep-Water Gateway at Baniyas

2.1 Locating and identifying the port

The port at the heart of this plan is a **deep-water, multi-terminal energy-and-bulk gateway on the Mediterranean coast at Baniyas**, in Tartus Governorate, Syria, at approximately **35.18° N, 35.95° E**, immediately adjacent to the **Banias Refinery**. Baniyas lies on the coast **~35 km north of Tartus** and **~55 km south of Latakia**, on the standard-gauge coastal railway that links the two. The GIS masterplan footprint is centred on an Area of Interest (AOI) of approximately **341 hectares** of coastal land with several kilometres of shoreline.

This identification resolves a genuine ambiguity in the source material. The original Phoenix Corridor proposal located the bulk and liquid port at **Tartus**, as a brownfield expansion interfaced with DP World. The sponsor's later masterplan, illustration and design-basis work all describe a **greenfield-scale deep-water gateway at Baniyas**. **This plan adopts Baniyas** — and treats the Tartus material as the commercial template that has now been relocated and re-engineered for the Baniyas site.

2.2 The case for Baniyas is built on existing assets

Baniyas is not an arbitrary stretch of coast; it is already Syria's principal **energy** port, which is precisely why it suits an energy-led multi-terminal gateway:

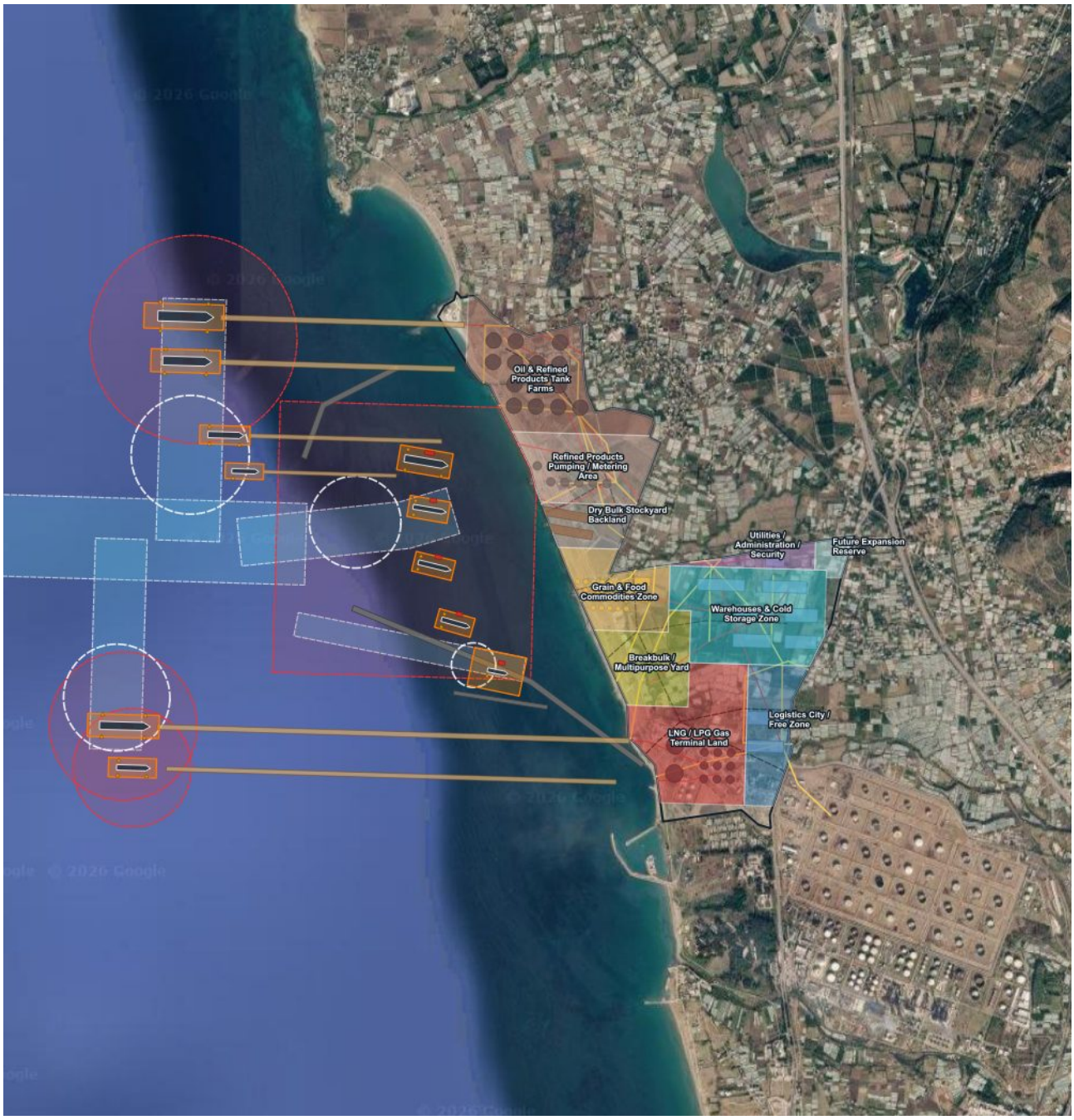
- **Banias Refinery** — Syria's largest, design capacity **~125,000 bpd (~6 Mtpa)**, built by a Romanian contractor in the late 1970s / early 1980s, operated as a state asset (Banias Refinery Company / Syrian Petroleum Company). It produces fuel oil, diesel/gas oil, gasoline, kerosene, LPG, naphtha and bitumen. It **halted in December 2024** when post-Assad disruption cut Iranian crude supply, **restarted from April 2025** on Russian/Iraqi crude, and **resumed full production after maintenance in May 2026**, though degradation currently caps throughput near ~95,000 bpd. The refinery is a permanent, in-place anchor customer for **inbound crude** and **outbound refined products** — exactly the flows the Oil & Refined Products Terminal is designed to serve.
- **Existing SCOT offshore oil terminal** — a field of single-buoy moorings (~6 berths) roughly **1 km offshore**, historically loading/discharging crude tankers up to ~130,000 DWT, with subsea pipelines to the refinery. This is the natural nucleus to be upgraded into a modern **crude SPM system** capable of VLCC/ULCC parcels.
- **Kirkuk–Baniyas crude pipeline terminus** — the historic Iraqi crude line terminates at Baniyas; an **August 2025 Iraq–Syria agreement** envisages its rehabilitation, part of a U.S.-supported ambition to make Syria an oil-transit hub. A revived pipeline would feed both the refinery and crude re-export through the port.
- **Banias thermal power plant** (~680 MW) immediately north — a major existing energy load and potential gas/fuel customer.
- **An operational rail connection** — recent (2026) on-the-ground reporting confirms a working **rail terminal at the Baniyas refinery** loading freight wagons; this is described as "the last operational line," carrying oil, phosphates and wheat. The coastal standard-gauge line physically reaches Baniyas.

Notably, current reporting also describes the existing **public port at Baniyas as small and shallow (~4 m)** and already undergoing dredging and expansion — confirming that a deep-water gateway here is a *real, in-progress upgrade ambition*, not a paper concept.

2.3 Complementarity, not competition

Gateway	Operator	Primary role
Latakia	CMA CGM (+AD Ports)	Containers (1 M+ TEU target)
Tartus	DP World	Containers, general cargo, breakbulk, Ro-Ro
Baniyas (this plan)	PCDC PortCo	**Energy (crude/products via SPM + jetty), LNG/LPG/gas, dry bulk & phosphate, grain & food, tank storage, project cargo, logistics city, rail**

Positioning Baniyas as the **energy, gas, bulk and logistics** gateway avoids head-to-head competition with two of the world's largest container operators and instead fills the national capability gap. The three ports together form a coherent coastal system.



Photorealistic concept of the Baniyas Deep-Water Gateway alongside the refinery, looking inland.

3. The Integrated Corridor Concept

The Gateway is a corridor that runs from the eastern desert to tidewater and back, in five integrated components.

Table 3.1 — The five components

#	Component	Function	Indicative CAPEX (all phases)
1	**Mine & beneficiation "factory" complex**	Mine and upgrade phosphate ore to export concentrate at Khneifiss (later Al-Sharqiya); rapid rail loadout	~US$0.43 bn
2	**Railway corridor**	Renew the standard-gauge freight line mines -> Homs -> Baniyas; block-train operations	~US$0.59 bn
3	**Deep-water megaport**	Protected basin + offshore SPM/island systems; ten terminal families	~US$5.5–6.0 bn
4	**Tank storage & liquid bulk**	Crude/product/LPG tankage, refinery interface, multi-modal distribution	(within Component 3 marine + dedicated tank packages)
5	**Logistics city & free zone**	Warehousing, cold chain, bonded logistics, bagging, customs, intermodal	~US$0.6–0.85 bn

The conveyor logic. Ore is mined and processed *at the mine* (the "factory"), loaded to a 3,000-tonne rapid-loading silo on a balloon loop, and filled into ~3,200-tonne block trains in under 90 minutes. Trains run mines -> Homs -> Baniyas, discharge through a wagon tippler into covered sheds, and the shiploader fills bulk vessels. **Empty-direction capacity is sold, not wasted:** the trains return inland loaded with fuel (in tank wagons from the products terminal), containers, grain, project cargo and aggregates — building the return-haul revenue that fills the corridor in both directions and seeds the wider Syrian rail revival from a working nucleus.

One control philosophy. A single Corridor & Port Operations Centre integrates train control, vessel scheduling (VTS-ready), silo/shed/tank inventory, the logistics-city gate, and a verification-first digital trade platform (scheduling, quality certificates, customs single-window, letters of credit and documentary workflows as structured, auditable data). Every tonne is tracked from pit to ship's hold — the continuous, system-generated transparency that frontier projects rarely offer lenders and a future listing market.

4. The Resource: Syrian Phosphate

4.1 Scale and quality — corrected to current USGS data

Syrian phosphate is the corridor's anchor cargo, and the resource case must be stated **accurately**. Earlier project material claimed national resources of "1.8–2.1 billion tonnes" placing Syria "among the top 3–5 holders globally." **That claim is outdated and is corrected here.**

- The **U.S. Geological Survey (Mineral Commodity Summaries 2025) lists Syrian phosphate-rock reserves at ~250 million tonnes**, ranking Syria roughly **16th globally** (world reserves ~74 billion t; Morocco alone ~50 billion t). The "1.8 billion tonnes" figure was USGS's number only through its 2021 edition and was subsequently revised down by ~86%; it must **not** be attributed to "USGS latest."
- Any larger in-ground figure (e.g. a "billion-tonne resource") may be cited **only** if attributed to a named Syrian government/company *resource* estimate and clearly distinguished from USGS *reserves*. The bankable planning base for this document is **250 Mt of USGS reserves**.

What this means for the mine plan. A 25-year mine life at ~7 Mtpa of saleable concentrate (~9 Mtpa run-of-mine) would consume on the order of ~175–225 Mt of run-of-mine ore — i.e. the project is **reserve-supported for a full 25-year plan on USGS figures, but the earlier claim of "decades of optionality consuming under 12% of resources" is not supportable on reserves alone.** Reserve-to-resource conversion through a confirmatory drilling programme is therefore a value driver and an early-works priority, not a footnote.

Table 4.1 — Resource and production profile (corrected)

Parameter	Value	Notes / source
National reserves	**~250 Mt**	USGS MCS 2025 (~16th globally). *Not* 1.8–2.1 bn t
Primary deposits	Khneifiss; Al-Sharqiya (A & B)	Palmyrides belt, Homs governorate, SW of Palmyra
Run-of-mine grade	~22.5–33.5% P_2O_5	Beneficiates to 31.9% (Khneifiss avg) / 34–36% by flotation
Cadmium	**Low — ~3 ppm**	vs ~20.6 ppm sedimentary average; genuine EU premium (see 4.2)
Uranium	**High — ~60–140 ppm**	A processing/marketing liability to be flagged and managed
Peak historical output	~3.5 Mt (2010)	Collapsed to ~0 in 2016 (ISIS held the mines 2015–16)
2023 / 2024 production (USGS)	0.8 Mt / 2.0 Mt	Recovery underway
Government targets	6 Mt (2026) / 10 Mt (2027)	**Aspirational**; pre-date the new government; rail is the binding constraint

4.2 The cadmium advantage — verified, with a uranium caveat

Syrian rock's **low cadmium content (~3 ppm)** is real and well-sourced, and it is a genuine commercial advantage as the EU's fertiliser cadmium limits bite: EU Regulation 2019/1009 sets a hard cap of **60 mg Cd/kg P_2O_5** (in force since July 2022) and a voluntary "low-cadmium label" threshold of **20 mg/kg**, with a **review due in July 2026** that may tighten limits further. Normalised to grade, Syrian rock sits comfortably under both thresholds — a marketable advantage for Mediterranean and EU processors. (The frequently repeated claim of a *specifically Indian* low-cadmium premium is **not** independently verified and should be treated as commercial inference, not fact.) Against this, Syrian rock's **elevated uranium content** is a known characteristic that must be addressed in product specification, worker dosimetry, tailings management and buyer due diligence.

4.3 Custody, counterparties and the operating position — corrected

The deposits are State property, historically mined and marketed by **GECOPHAM** (the General Company for Phosphate and Mines). A widely cited claim that the 2018 Russian (Stroytransgaz) phosphate concession was *annulled in 2025* is **only partly correct and is corrected here**: what was confirmed cancelled (January 2025) was the **separate Tartus port** contract; the **phosphate** concession was reported to be **under review**, with no documented formal annulment. The 2018 deal is best described accurately as a **50-year contract with a 70/30 *sales-revenue* split** (not a profit split) under which output stagnated near **~650,000 t/yr** against a 2.2 Mt/yr contractual capacity. The practical position for an incoming partner is favourable — a motivated State owner, published production targets unreachable by truck, and a clear precedent (DP World, CMA CGM) for 30-year BOT concessions — but the plan should **not** overstate the legal "clean slate." PCDC's proposed mining joint venture with GECOPHAM is designed to be the credible, capitalised offer the ministry needs; its precise structure must follow legal due diligence on the status of the prior concession.

4.4 Mining method and development plan

Both deposits support shallow, free-dig open-pit mining (strip ratio below ~1.5:1) — among the simplest large-scale mining operations in the world. The plan stages **mining capacity ahead of rail capacity**: ~2 Mtpa ROM at Khneifiss for first rail traffic, scaling to ~9 Mtpa ROM (~7 Mtpa concentrate at ~78% mass yield), with Al-Sharqiya brought on as the rail corridor's eastern capacity matures.

5. Market Analysis

The Gateway is deliberately **not** dependent on a single cargo. It serves six demand pools: phosphate exports, refinery crude/products, gas (LPG now, LNG later), dry bulk, grain/food, and reconstruction general cargo & logistics.

5.1 Phosphate — the world's least dispensable commodity

Phosphate rock is the irreplaceable feedstock of phosphoric acid and phosphate fertilisers (DAP, MAP, TSP, SSP), on which roughly half of global food production depends; there is no substitute and no synthesis route. World mine production is ~**240–250 Mt/yr** (USGS), with seaborne rock trade on the order of **~30 Mt/yr** (indicative). Demand is led by India (a large, import-reliant market), Brazil, the EU/Mediterranean processing industry and South-East Asia — and is increasingly supported by **LFP (lithium-iron-phosphate) battery** chemistry, though that niche pulls on high-purity purified phosphoric acid rather than raw rock.

Pricing (verified, 2026). Benchmark Moroccan rock (~70% BPL, FOB) is assessed around **US$150/t** for 2026 (Fitch), with premium high-grade contract cargoes quoted higher (US$177–282/t during early-2026 disruptions). **DAP** is forecast around **US$650/t** for 2026, with near-term spot having run US$700–725/t. This plan retains a deliberately conservative **US$115/t FOB** realisation for Syrian concentrate — a ~23% discount to the US$150 benchmark — reflecting re-entry marketing, grade mix across the ramp and country-risk pricing, with sensitivities at US$95 and US$135.

Competitive position. The point of the railway is to move Syrian rock from a truck-penalised position (~US$75–85/t today) into the **second quartile of the global cost curve at ~US$58/t FOB**, while geography keeps it in the **first quartile of *delivered* cost** to Mediterranean and Black Sea buyers, who sit days — not weeks — from Baniyas. At US$115/t realisation against US$58/t cash cost the phosphate segment earns a ~50% cash margin; even at the US$95/t stress case it remains cash-positive.

Table 5.1 — Indicative competitive landscape (export rock)

Origin	Indicative FOB cash cost	Freight to E. Med	Position
Morocco (OCP)	~$45–60/t*	$10–15/t	Price-setter; vast scale, premium grades
Jordan	~$55–70/t*	$20–30/t	Established; Asia-oriented
Egypt	~$50–65/t (logistics ~$15–20/t)	$5–12/t	Low-cost; variable grade
Syria — truck (today)	~$75–85/t	$8–15/t	Volume-capped, cost-penalised
Syria — Baniyas rail	**~$58/t**	**$8–15/t**	**2nd-quartile cost, 1st-quartile freight**

* Competitor FOB cash costs are not publicly disclosed at granularity; ranges are indicative and should be confirmed against a CRU/Argus cost-curve dataset.

5.2 Energy — the refinery as anchor

The Banias Refinery is a permanent, in-place demand anchor: it must **import crude** (via SPM and/or the revived Kirkuk–Baniyas pipeline) and **export/distribute refined products**. Reconstruction itself runs on refined fuel, and Syria's import logistics for it are improvised; a purpose-built **Oil & Refined Products Terminal with tank storage** answers the single most critical reconstruction input. Storage is leased under take-or-pay agreements to fuel importers, traders and strategic-reserve customers; the Sponsor's group trading house (One Line Oil Trading FZE) can anchor initial utilisation.

5.3 Gas — LPG now, LNG optionality later

LPG distribution is an immediate need (cooking fuel, autogas) and is served from a dedicated LPG berth and storage in Phase 1. **LNG** import (via an offshore/island jetty or FSRU) is held as **optionality** — gated by demand, a full QRA and SIGTTO-grade siting study — supporting power generation and gas supply as the economy recovers. This staging is both safer and far cheaper than building an inner-harbour LNG berth on day one.

5.4 Dry bulk, grain and general cargo

Beyond phosphate, the dry-bulk terminal can handle cement, clinker, sulphur, aggregates and minerals (export and import). The **grain & food terminal** directly serves national food security — wheat, maize, soybean imports into silos and food warehouses — a counter-cyclical, politically resilient demand pool with humanitarian and

reconstruction logistics support. The **breakbulk/Ro-Ro/project-cargo terminal** handles reconstruction machinery, steel, vehicles and project cargo, feeding the logistics city.

5.5 Offtake and contracting strategy

The marketing plan targets **70–80% of design volume under 3–7-year framework offtakes** (phosphate price formulas linked to published Moroccan benchmarks) across Mediterranean/Black Sea processors and Indian importers, with one or two strategic anchor offtakers invited into the equity. Inbound, the tank terminal and logistics city pursue **take-or-pay** storage/throughput contracts and pre-leases. The commercial discipline is explicit: **sign anchor throughput/storage contracts before committing Phase 1 marine and tank CAPEX**, and avoid merchant-only exposure in the first five years.

6. Component One — The Mine & Beneficiation "Factory" Complex

The "factory at the mine" is the source of the corridor's anchor cargo: ore is mined and fully processed **at the deposit**, then loaded directly to rail. Co-locating beneficiation at the mine (rather than at the coast) minimises the mass hauled — only saleable concentrate rides the railway — and converts mine output into railway velocity.

6.1 Mining operation

Khneifiss is developed as a conventional truck-and-excavator open pit: free-digging sedimentary ore under thin overburden, strip ratio below ~1.5:1, with drill-and-blast only in localised indurated horizons. A deliberately **mid-scale, in-country-maintainable fleet** (representative: four ~6 m^3 excavators, ~eighteen 60 t trucks, ancillary dozers and graders at full rate) is run jointly with GECOPHAM's experienced workforce under a training programme. Run-of-mine capacity stages at ~2 Mtpa, ~5 Mtpa and ~9 Mtpa, feeding a plant designed for **~7 Mtpa of saleable concentrate at ~78% mass yield**.

6.2 Beneficiation plant and product quality

The flowsheet is the industry-standard sedimentary route: primary sizing, scrubbing and attrition, two-stage screening, hydrocyclone desliming to reject clay fines, and gas- or solar-thermal drying to below ~3% moisture, with an **optional calcination module** reserved as a later upgrade for premium low-organic grades. The plant lifts run-of-mine ore to a consistent **31–34% P_2O_5 concentrate** — and *consistency*, more than peak grade, is what re-establishes Syrian rock in buyers' blend books after years of irregular spot parcels. Product specification must explicitly address the **low-cadmium selling point and the elevated-uranium caveat** (Section 4.2), including any radiological handling and documentation buyers require.

Concentrate is conveyed to a **3,000-tonne loading silo astride a balloon loop**, filling a ~3,200-tonne block train in under 90 minutes by batch weighing — the single highest-leverage piece of equipment in the corridor.

6.3 Power, water and camp

The complex is designed to be **energy-self-sufficient**: a ~60 MWp solar plant with battery smoothing covers daytime plant load (desert irradiance is among the region's best), backed by dual-fuel generation for night drying and contingency — cutting diesel logistics and the corridor's carbon intensity per tonne to a level European buyers can book favourably. Process water is **closed-circuit** with thickened-tailings dewatering, fed from licensed wellfields with a long-term pipeline reservation. A ~600-person operations village (~2,500 at construction peak) is built to **IFC worker-accommodation standards** — an auditable commitment that matters to DFI lenders and to the Palmyra-district communities.

7. Component Two — The Railway Corridor to Baniyas

7.1 The corridor is a renewal, not a new build — re-routed to Baniyas

The railway is the corridor's binding constraint and its quiet masterstroke, because it is a **renewal of existing standard-gauge alignment, not a greenfield railway** — a distinction worth hundreds of millions of dollars and years of permitting. The Syrian network (Chemins de Fer Syriens / CFS) is **1,435 mm standard gauge**, historically rated to ~20-tonne axle loads, with the **Homs–Palmyra phosphate freight line opened in 1980** specifically to carry phosphate, and a **coastal line (Latakia–Jableh–Baniyas–Tartus, ~80 km)** completed in the late 1980s/early 1990s.

The critical, verified finding for this plan is that **rail already physically reaches Baniyas and the refinery**: 2026 field reporting confirms a working rail terminal at the Baniyas refinery loading freight wagons, on what is described as the country's "last operational line" carrying oil, phosphates and wheat. **No new mainline is required** to bring phosphate trains to Baniyas — the alignment mines -> Homs -> coast -> Baniyas exists at the correct gauge. Homs is the inland hub where the Palmyra/Khneifiss line meets the coastal lines.

Indicative routing and distances (rail kilometrages are approximate, road-distance-anchored, and to be confirmed by survey):

Segment	Indicative distance	Note
Khneifiss/Al-Sharqiya mines -> Homs	~220 km	Via Palmyra (Tadmur); 1980 freight line + mine spur
Homs -> coast (Tartus/Akkari area)	~95 km	Existing Homs–Tartus line; Akkari junction
Coastal line -> Baniyas	~35 km	North up the coastal line from the Tartus-area junction
Total mines -> Baniyas	**~300–340 km**	Baniyas adds ~35 km of coastal running beyond Tartus

7.2 What the renewal must deliver

Of the national network, only ~1,052 of ~2,800 route-km is operable; the phosphate and coastal segments suffer stripped rail and copper theft, weathered sleepers, ballast fouling, bridge-bearing damage, and total loss of signalling. Crucially, the **earthworks, alignment, structures' substructure and right-of-way survive substantially intact** — the items that consume ~60% of a greenfield railway budget and all of its land-acquisition risk. The renewal is specified **one class above the pre-war line**: continuous-welded UIC60 rail on prestressed concrete sleepers at **22.5-tonne axle load**, full ballast renewal on weak sections, restored/upgraded bridges and culverts, **Centralised Traffic Control with ETCS Level 1**, a fibre-optic backbone along the right-of-way (itself a leasable telecom asset), and GSM-R/TETRA radio. At roughly **US$1.75 million per kilometre all-in** (against US$4–6 million for comparable greenfield desert railways), the renewal economics are decisive.

7.3 The two gaps unique to the Baniyas routing

1. **Track condition / rehabilitation** of the Homs–coast and coastal segments (war damage is the dominant risk, not gauge or alignment); and 2. **Phosphate-specific terminal infrastructure at Baniyas** — the existing rail terminal serves the refinery (outbound fuel), so the port end needs **new dry-bulk rail sidings, a wagon tippler/loop and the bulk berth** (these sit within the port CAPEX, Component 3). This is the principal "new construction" item, and it is port-side, not mainline.

7.4 Train operations — the conveyor belt

Table 7.1 — Operating plan at design throughput

Parameter	Value	Basis
Train consist	2 × ~3,000 kW locos + ~50 hoppers	Distributed braking; ~64 t gross hoppers
Net payload per train	~3,200 t	50 × ~64 t net
Cycle time (round trip)	~12–14 hours	Load ~1.5 h · transit · discharge ~2 h · buffer
Active rakes / spare	4 + 1	Fleet ~ 12 locomotives, ~270 wagons
Delivered capacity	~7 Mtpa (ceiling ~8 Mtpa)	5th rake activated at the ceiling
Cost advantage vs truck	~US$11–15/t	Eliminates ~700 truck movements/day

At seven million tonnes a year the railway removes roughly **700 loaded truck movements per day** from the Homs–coast highways — a road-safety, emissions and pavement-preservation dividend the government can claim publicly, and a per-tonne saving that accrues straight to project margin. **Empty-direction capacity is sold** (fuel in tank wagons, containers, grain, project cargo, aggregates), building the third-party rail revenue line.

8. Component Three — The Baniyas Deep-Water Megaport

This is the core of the programme: a single controlled port estate with common marine access, common safety and environmental systems, dedicated terminal concessions and a shared digital operating platform.

8.1 Design philosophy — the central engineering decision

The defining decision of the masterplan is **how to reconcile the Sponsor's full vision (which includes the very largest crude tankers and LNG carriers) with the physical reality of the Baniyas seabed.** The supplied concept material reads a **steep, narrow offshore profile**: roughly -12 to -17 m within ~1.0–1.3 km of shore, -25 to -40 m by ~1.5–2.0 km, and ~-70/-80 m by ~3 km, with a generally northward/NNE current commonly around 0.25–0.50 m/s.

That profile drives an unambiguous conclusion, adopted throughout this plan: **do not dredge a deep trench from shore to deep water for ULCC/VLCC/Q-Max berthing.** Instead, split the port into two coordinated marine systems:

1. **A protected inner basin** for dry/clean cargo and product/LPG — dredged only to the depths those vessels need (-12.5 to -16.5 m CD), inside a breakwater-sheltered harbour; and 2. **Offshore deep-water systems in naturally deep water** — **SPM/CALM buoys for crude (VLCC/ULCC)** and a **future offshore/island LNG jetty (Q-Max class)** — exploiting the natural depth close to shore rather than fighting it.

This is the Sponsor's own instruction ("crude oil to be filled by SPM"), it matches the existing SCOT buoy field, and it is **substantially cheaper, faster and lower-risk** than a dredged ULCC harbour. The full vision is preserved — every cargo class the brief listed is served — but each is served by the *right* marine structure.

The governing planning principle is separation by hazard and contamination class: crude/product/LPG energy terminals separated from food and clean logistics; dry-bulk dust sources buffered from grain; gas isolated with exclusion zones; the refinery interface managed by dedicated, metered pipeline corridors and separate control rooms rather than mixed traffic.

8.2 Marine framework — the protected basin (corrected design basis)

Table 8.1 — Inner-basin marine parameters (production design basis)

Element	Parameter	Note
Main breakwater	~1.8 km + short lee arm	Piled trestle connection preferred over solid causeway to limit sediment interruption; final geometry by wave-agitation & sediment modelling
Approach channel	~180 m wide, **-16.5 m CD**	Upper source range adopted given cross-current/drift; one-way for largest ships, tug-assisted
Turning basin	**~700 m diameter**	~3.1 × LOA for a 225 m Kamsarmax; confirm by bridge simulation
Capital dredging	**~2.5 million m^3** (range ~1.6–3.4 M m^3)	Confined to channel, turning basin and berth pockets — *not* a shore-to-deep trench
Aids to navigation	Safe-water mark, lateral buoys, breakwater-head lights, leading lights, AIS AtoN, real-time current/met	VTS-ready marine control room from day one

A screening under-keel-clearance check confirms the source depths are sensible: for a 14.5 m-draft Kamsarmax, static draft + squat + motion + dredge tolerance + siltation ~ 15.8 m, so a **-16.0 m berth pocket and -16.5 m channel are reasonable first-pass values** for a tug-assisted basin (to be finalised after survey and wave/current modelling). Capital dredging should target **moving the basin to where natural depth already helps**, minimising cut.

8.3 The design-vessel fleet — from Q-Max and ULCC down to handysize

The port is planned to accept the full range of vessels in the Sponsor's brief, **each routed to the appropriate structure** (basin vs offshore). The catalogue below is the planning fleet; the full table is reproduced in Appendix B.

Table 8.2 — Principal design vessels and how they are served

Class	LOA / beam / draft	Cargo	Served by
Q-Max LNG	345 / 53.8 / 12.0 m (266,000 m^3)	LNG	**Offshore / island jetty (future, gated by QRA & demand)**
Q-Flex / conventional LNG	315 / 300 m	LNG	Offshore / island jetty
ULCC crude	380 / 68 / 24.0 m (320–550k DWT)	Crude	**Offshore SPM (natural deep water)**
VLCC crude	333 / 60 / 21.0 m (200–320k DWT)	Crude	**Offshore SPM**
Suezmax	275 / 48 / 16.5 m	Crude	Offshore SPM / second mooring
Aframax / LR2	245 / 42 / 15.0 m	Crude/products	Products island jetty (L1) / SPM
MR product tanker	183 / 32.2 / 12.0 m	Refined products	Products island jetty (L1)
VLGC LPG	230 / 37 / 12.0 m	LPG	LPG berth (dedicated, basin edge / island)
Newcastlemax	300 / 50 / 18.5 m	Dry bulk	Bulk berth (part-load) / offshore option
Capesize	289 / 45 / 18.0 m	Dry bulk	Bulk berth (part-load)
Panamax / Kamsarmax	229 / 32.3 / 14.5 m	Dry bulk / grain	**Inner basin (B1 / B2)** — design vessel for the basin
Handymax / Supramax	200 / 32.3 / 12.8 m	Dry bulk / grain	Inner basin (B1 / B2)
Ro-Ro / PCTC	200 / 32 / 9.5 m	Vehicles / project	Multipurpose berth (B3)
Heavy-lift / breakbulk	170 / 150 m	Project / general	Multipurpose berth (B3)
Handysize / coaster	100–150 m / 6–9 m	General / feeder food	Inner basin / feeder berth
Service craft	Dredger 140 m; ASD tug 32 m; pilot 18 m	Port support	Service harbour

Important realism note. The inner basin's *alongside* design vessel is **Panamax/Kamsarmax (~-16 m class)**. Capesize/Newcastlemax can be accommodated on a part-load basis or via an offshore bulk option; **full-draft ULCC/Q-Max are served offshore, not alongside in the basin.** This is the corrected, defensible reading of the site — and it still delivers every cargo class the brief requires.

8.4 The terminals — the full programme

The masterplan is organised into the terminal families below. Phase assignment reflects the staging philosophy (basin and corridor-enabling terminals first; offshore gas and the largest crude later, gated by demand and safety case).

(1) Oil & Refined Products Terminal — with crude SPM. The energy heart of the port and the reason Baniyas is the right site. Crude is received/exported through **offshore single-point moorings (SPM/CALM buoys)** in natural deep water — an upgrade and expansion of the existing SCOT buoy field — sized for VLCC/ULCC parcels and connected by subsea pipeline to the tank farm and refinery. Refined products and clean cargoes (Aframax/LR2, MR, coasters) work a **280 m liquid island jetty (L1) at -15.5 m CD** with three marine loading-arm groups, breasting and mooring dolphins, segregated lines and ESD integration. Landside: crude and product tank farms, pump/metering stations, truck and rail loading. *This terminal directly serves the Banias Refinery's crude-in / products-out flows.*

(2) LNG, LPG & Other Gas Terminal. LPG is served in Phase 1 from a dedicated berth and pressurised/refrigerated storage with full safety spacing from oil and from the basin. **LNG** is held as **future optionality** on a **dedicated offshore or island jetty** with exclusion zone, loading platform, mooring dolphins and gas utility corridor — introduced only when demand and a formal QRA / SIGTTO-grade siting study justify it. LNG is explicitly **kept out of the Phase 1 core basin**.

(3) Dry Bulk & Phosphate Terminal. The phosphate export engine and a multi-commodity bulk facility. **Berth B1: 320 m at -16.0 m CD**, a 3,000 t/h shiploader, a tandem wagon tippler on a rail loop, enclosed conveyors and **three covered sheds (3 × 60,000 t = 180,000 t)** — full enclosure and dust suppression throughout (an environmental standard that doubles as product-loss prevention). Practical capacity ~6.5–8.0 Mtpa. Also handles cement, clinker, sulphur, aggregates and minerals.

(4) Grain & Food Commodities Terminal + Grain Silos. Berth B2: 300 m at -14.0 m CD (clean-bulk/grain), with 1,000–1,500 t/h grain handling, **covered food-grade conveyors**, **grain silos of 100,000–150,000 t class**, bagging provision, fumigation/quality-control and food warehouses — physically segregated from mineral dust and petroleum routes. Serves national food security (wheat, maize, soybean) and inland distribution. Practical capacity ~2.0–3.0 Mtpa.

(5) Breakbulk / Multipurpose / Ro-Ro Terminal. Berth B3: 300 m at -12.5 m CD, two mobile harbour cranes, a stern ramp, heavy-lift apron, project-cargo laydown, transit sheds and **support-scale container/Ro-Ro** capability (a flex berth — deliberately *not* a full container gateway, which would overreach the evidence and compete with Tartus/Latakia). Serves reconstruction machinery, steel, vehicles and project cargo.

(6) Tank Storage. A **staged tank farm of 480,000–600,000 m^3** (crude, gasoil/diesel, gasoline, jet, fuel oil and LPG), built to API 650/653, NFPA fire systems, double containment and vapour recovery — leased under take-or-pay storage agreements and interfaced to the refinery by metered pipeline. (Detailed in Section 9.)

(7) Warehouses & Cold Storage. General warehouses, cold stores, food-grade distribution and cross-dock, rail-served — the recurring-revenue logistics backbone linking grain, breakbulk and the logistics city. (Within Component 5.)

(8) Logistics City / Free Zone. Bonded free-zone territory for distribution, customs single-window, bonded warehousing, bagging/re-packaging, an inland container depot and truck marshalling — phased against pre-leases. (Detailed in Section 10.)

(9) Service Harbour. A small protected basin for tugs, pilot craft, workboats, the maintenance dredger and emergency craft — port self-sufficiency and operational resilience, with fast access to all terminals.

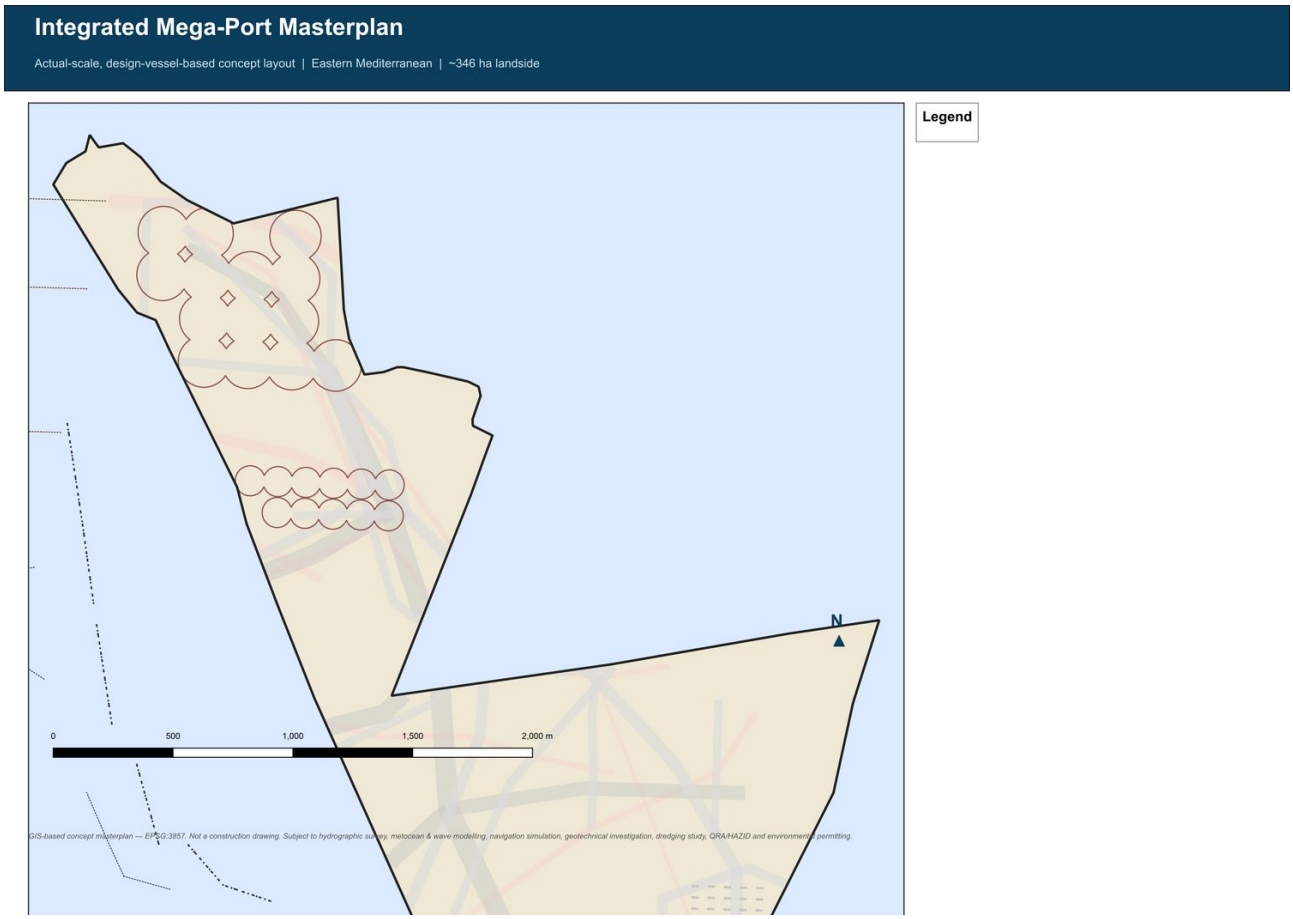
(10) Railway & Intermodal. A double-ended rail spur, receiving/departure tracks compatible with 750–1,000 m loops, wagon tippler/bottom-dump systems, and segregated hazardous (tank-wagon) vs food/dry-bulk yards — the landside spine that ties bulk, grain, tank farm and logistics city to the corridor. (Civil works shared with Component 2.)

Table 8.3 — Berth schedule (Phase 1/2 core; offshore systems separate)

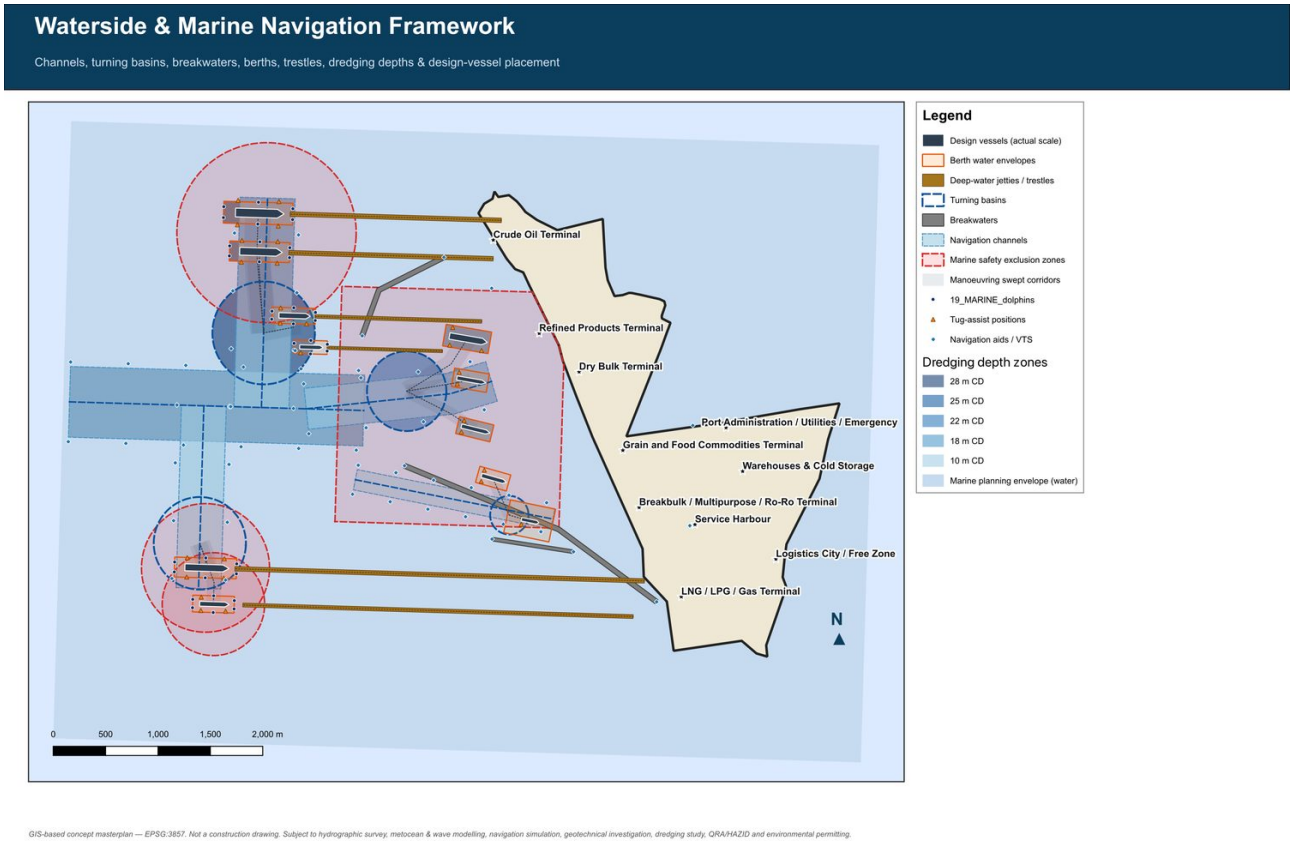
Berth	Service	Length	Design depth	Design vessel	Indicative capacity
B1	Dry bulk / phosphate	320 m	-16.0 m CD	Panamax/Kamsarmax	6.5–8.0 Mtpa
B2	Clean bulk / grain	300 m	-14.0 m CD	Supramax–Panamax	2.0–3.0 Mtpa
B3	MPP / Ro-Ro / feeder	300 m	-12.5 m CD	MPP, feeder, Ro-Ro	1.5–2.5 Mtpa or 120–180k TEU support
L1	Liquid products / LPG	280 m	-15.5 m CD	MR / LR1; semi-ref LPG	4.0–6.0 Mtpa
Offshore SPM	Crude	(mooring)	natural deep water	VLCC / ULCC	Sized to refinery + re-export
Future offshore	LNG / additional crude	(jetty/SPM)	natural deep water	Q-Max LNG; VLCC	Gated by demand & QRA
Service harbour	Tugs/pilots/dredger	—	-10.0 m CD	Dredger/tugs	Support

8.5 Marine structures, equipment and navigation (concept)

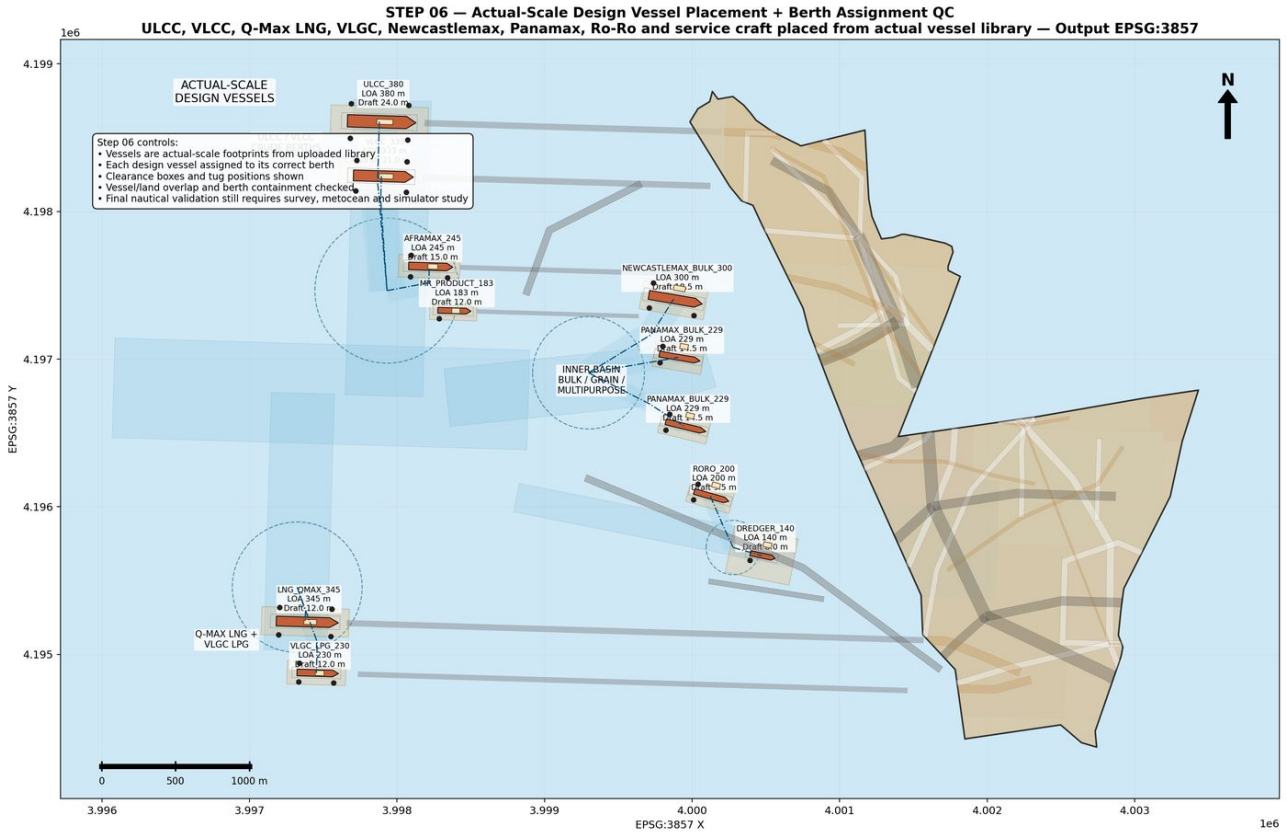
- **Quay structures:** open piled quays for B1/B2 (forgiving of soft soils and seismic), combi-wall or piled for B3 (Ro-Ro tie-in), and a **dolphin island jetty for L1** (clear separation of loading platform, breasting and mooring points).
- **Fendering/mooring (screening):** B1/B2 ~1,500–2,000 kNm fenders and 12–14 quick-release hooks (~150 t SWL); B3 ~1,000–1,200 kNm; L1 ~4 breasting + 6 mooring dolphins with ESD — all subject to formal mooring/berthing analysis (PIANC Fender Guidelines 2024, OCIMF MEG4).
- **Cargo equipment:** 3,000 t/h shiploader + tandem tippler (B1); silo-based grain handling + covered conveyors (B2); two mobile harbour cranes + Ro-Ro ramp (B3); marine loading arms with segregated line groups (L1).
- **Navigation/control:** VTS-ready marine control room (AIS, radar, CCTV, met/current inputs), pilotage with two ASD tugs standard for Panamax/LR1, daylight-only first calls until simulation/pilot familiarisation is complete, and a controlled one-way approach for the largest ships.



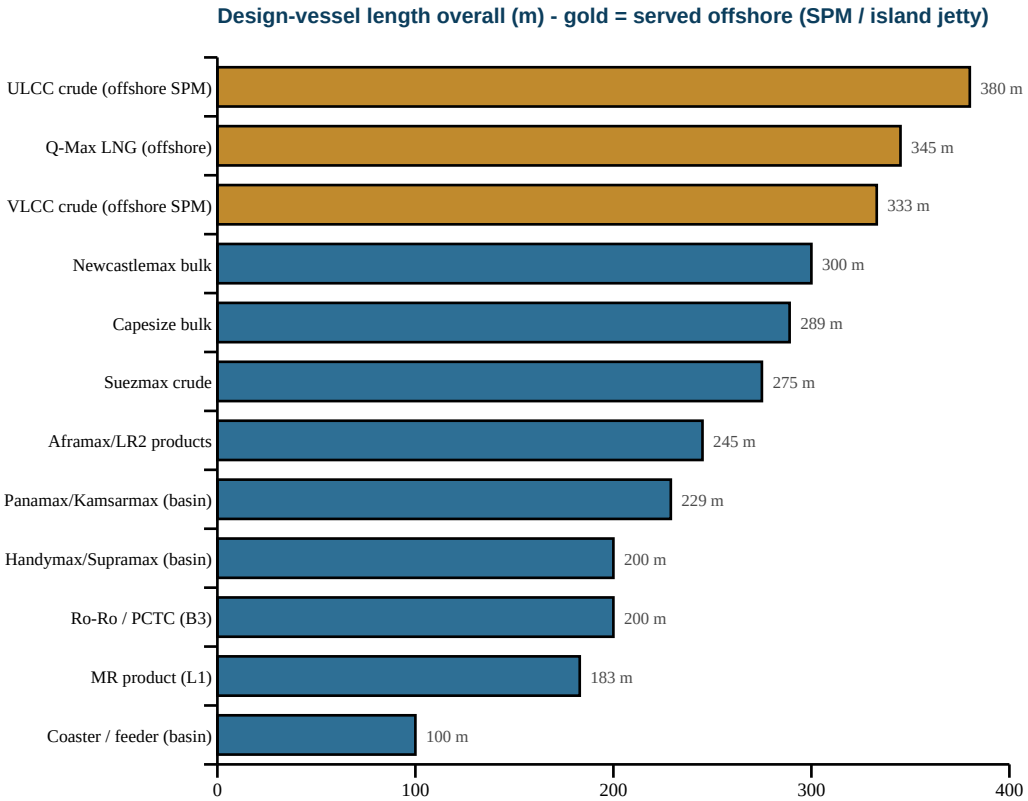
MAP 01 — Integrated masterplan: the ten terminal families, protected basin and offshore systems.



MAP 02 — Marine navigation: approach channel, turning basin, breakwaters, berths and dredging.



Actual-scale design-vessel placement across the terminals (GIS masterplan, step 06).



Every vessel class in the brief is served — the largest (ULCC/VLCC crude, Q-Max LNG) offshore in natural deep water; the basin design vessel is Panamax/Kamsarmax.

9. Component Four — Tank Storage & Liquid Bulk

Reconstruction runs on refined fuel, and the refinery needs crude in and product out — so liquid bulk is a structural, not speculative, business. The tank terminal shares the port's marine infrastructure (SPM for crude, the L1 island jetty for products/LPG) and provides:

- **A staged tank farm of 480,000–600,000 m^3** — representative Stage 1: crude tanks, gasoil/diesel, gasoline, jet, fuel oil and mounded/refrigerated LPG — built to **API 650/653, NFPA fire systems, double containment and vapour recovery** on light products;
- **A pump/metering and manifold area**, with a **dedicated, restricted pipeline corridor** to the refinery and to the SPM/L1 landfalls; and
- **Multi-modal distribution from day one:** automated truck-loading bays and rail tank-wagon spots — the latter feeding the corridor's empty-direction trains and extending the terminal's catchment to Homs and beyond.

The commercial model is conservative infrastructure: capacity leased under **3–5-year take-or-pay storage agreements** with fuel importers, traders and strategic-reserve customers, plus throughput fees, anchored initially by the Sponsor's group trading book. At regional storage rates this is the steadiest cash flow in the programme. Bankability *is* the safety case — full international practice is non-negotiable.

10. Component Five — Logistics City & Free Zone

Behind the port, the logistics city turns a commodity corridor into a trade gateway: a **bonded free-zone** where cargo lands, stores, transforms and re-exports without fiscal friction — the proven Jebel Ali logic applied at the gate of a 23-million-person reconstruction market and the overland corridors beyond it (Iraq, Jordan, the Levant).

A land-reality correction. The supplied AOI (~341 ha) is **smaller than a full first-phase concept with a 300 ha logistics city** (which, with port, rail, utilities and tank farm, would need ~420–460 ha). This plan therefore **phases the logistics city**: a **compact ~110 ha in-AOI early platform** (customs single-window, rail receiving/departure, warehousing, truck staging, container/Ro-Ro support) in Phase 1, with the larger 300 ha ambition developed on **secured external/adjacent backland** as demand and pre-leases mature. Treating the full logistics city as in-AOI on day one would be a planning error; phasing it is the production-feasible reconciliation.

Indicative zoning (full build-out target): open laydown & project cargo; warehousing & distribution (target ~250,000 m^2 GLA, cross-dock, e-commerce ready); **packaging & processing** (bagging lines for fertiliser/grain/cement — converting bulk FOB sales into packaged CFR sales worth US$8–15 more per tonne and opening smaller Mediterranean buyers); inland container depot; cold chain (reefer, food-safety certified); customs & inspection (single-window, scanners, bonded control); and utilities/services. Development is strictly **demand-led** — vertical construction triggered by pre-leases — keeping the city an annuity rather than a speculative land bank.

11. Masterplan, Land Use & Phasing

11.1 Landside zoning logic

The masterplan separates by risk and operational logic: hazardous energy terminals separated from food and clean logistics; bulk dust sources buffered from grain; logistics functions toward the inland/eastern side for simple gate control and road/rail distribution; the refinery interface managed by dedicated pipeline corridors and separate control rooms. Indicative zoning (from the GIS masterplan): oil/product tank farms in the northern/north-eastern backland; dry-bulk stockyards and conveyors central; grain silos and food warehousing central-lower; gas (LNG/LPG) land to the south with safety separation; logistics city, warehouses and cold chain to the east/south-east; and utilities, administration, fire and emergency response centrally placed for all-terminal access without crossing restricted gas berths.

11.2 Critical design principles

Principle	Deployment meaning
Safety separation	QRA-derived distances between oil/gas/chemical storage and food/logistics/public zones
Rail-first bulk logistics	Bulk and grain rail-connected to cut truck congestion and cost per tonne
Energy terminals as anchor cash flow	Oil/products and LPG structured around take-or-pay throughput/storage
Offshore for the largest ships	Crude (SPM) and future LNG offshore in natural deep water — no deep inner-harbour trench
Phased common infrastructure	Breakwater, channel, dredging, gate, rail spine, utilities and VTS phased to unlock multiple terminals together
Operability before capacity	Vessel waiting time, train cycle, storage dwell and gate turn time — not berth count — control revenue

11.3 Phasing

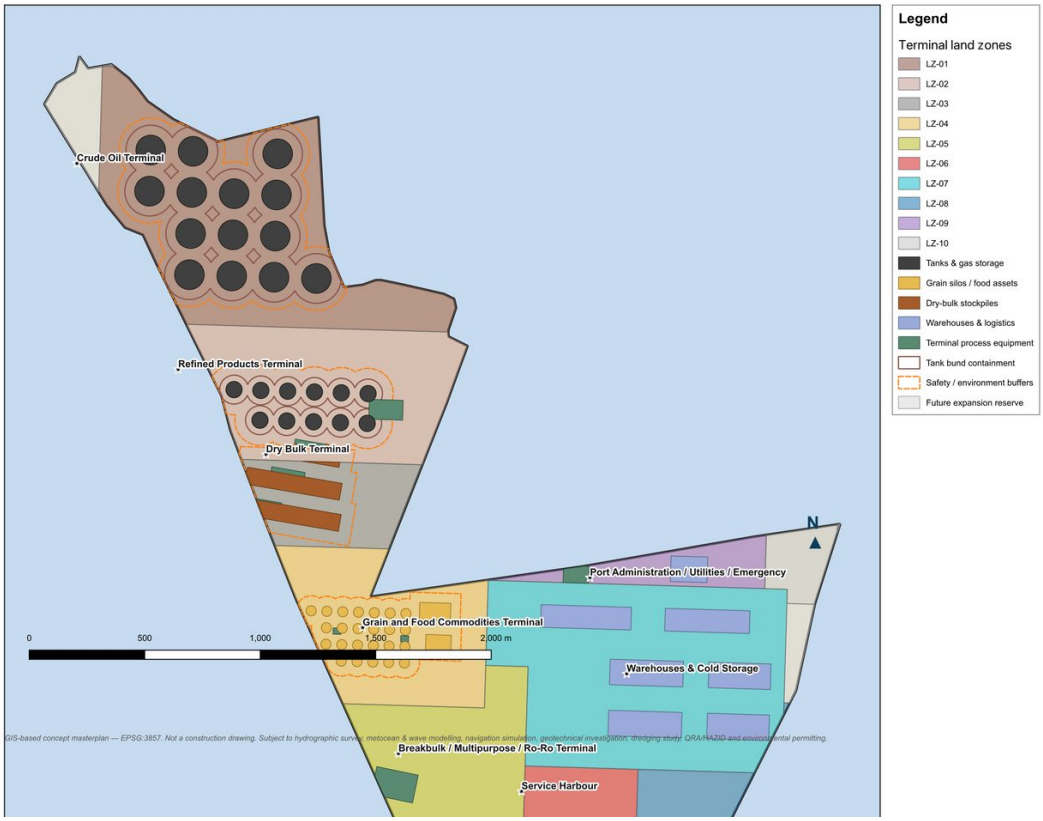
Phase	Timing	Main deliverables
Phase 0 — Validation	H2 2026	Heads of terms; survey programme; pre-FEED; market sounding; ESIA scoping; data room
Phase 1A — Surveys & pre-FEED	2026–Q2 2027	Bathymetry, geotech, metocean, navigation-simulation plan; terminal-capacity freeze; cost-estimate update
Phase 1B — Financial close prep	2027	Anchor agreements; concessions; EPC tenders; lender due diligence; political-risk insurance
Phase 2 — Common marine infrastructure	2028–2031	Breakwater & lee arm; capital dredging; navigation aids; service harbour; main roads/rail/utilities; core security & VTS
Phase 3 — First operating terminals	2029–2032	Dry bulk (B1), grain (B2), products/LPG (L1) & Stage-1 tanks; crude SPM upgrade; compact logistics platform; mine & railway live
Phase 4 — Energy/gas & MPP build-out	2030–2034	MPP/Ro-Ro (B3); additional tankage; **offshore LNG** (if contracted); expanded SPM
Phase 5 — Full ramp & optimisation	2034–2036	Logistics-city expansion; berth productivity; rail integration; digital optimisation

11.4 Critical path

1. Legal access to land and water footprint under concession -> 2. Bathymetric/hydrographic survey and seabed classification -> 3. Metocean model and breakwater optimisation -> 4. Geotechnical campaign (breakwaters, quays, tanks, gas areas) -> 5. QRA/HAZID (crude, products, LPG, future LNG; refinery interface) -> 6. Commercial anchor contracts and tariff approval -> 7. FEED and EPC pricing -> 8. Financial close and notice to proceed. **The most dangerous sequencing error is to complete berth structures before the navigation basis, tank-fire philosophy, rail receiving yard and contaminated-drainage systems are coordinated** — this interface risk is managed centrally by one PMO and one owner's engineer.

Landside Terminal Zoning & Storage

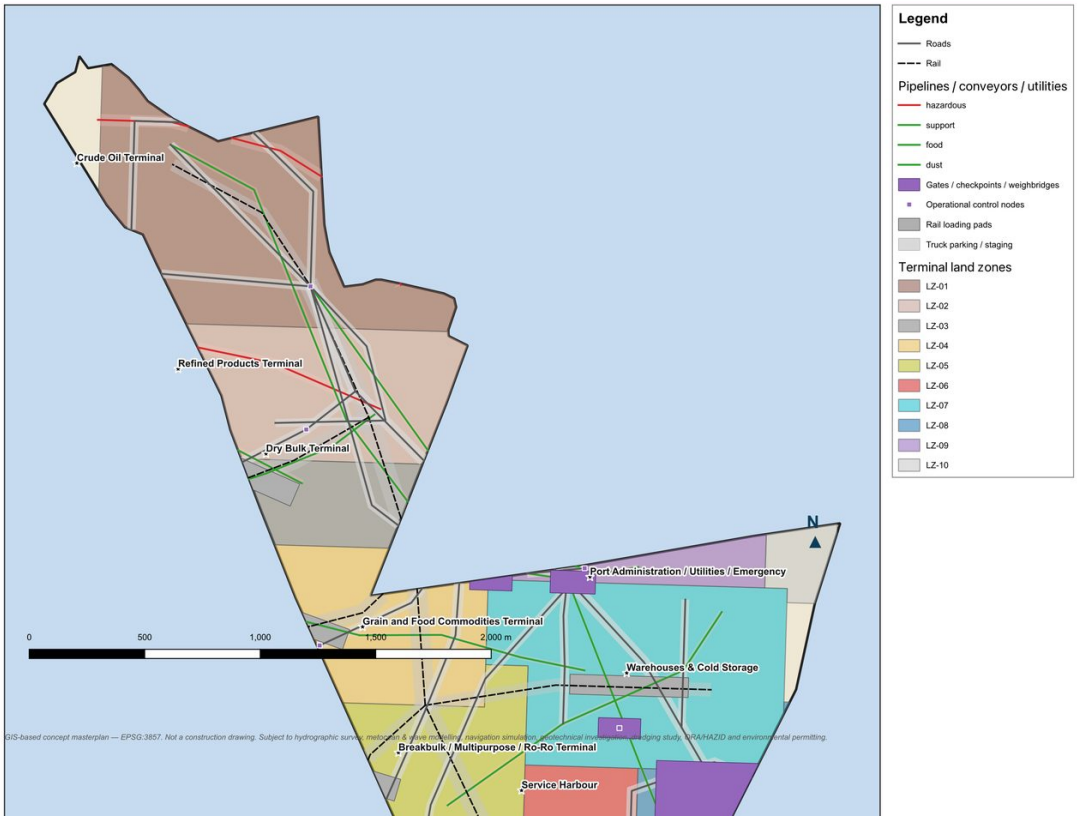
Ten primary terminal land zones, tank farms, gas storage, silos, stockpiles, warehouses & safety buffers



MAP 03 — Landside zoning: tank farms, stockyards, silos, gas land, warehouses and logistics city.

Transport & Utility Networks

Heavy-truck roads, rail spine & sidings, pipeline / conveyor / utility corridors, gates & control nodes



MAP 04 — Transport & utilities: road spine, rail sidings, pipeline/conveyor corridors and gates.

12. Capital Expenditure Programme

12.1 Two views: the ultimate programme and the bankable Phase 1

CAPEX is presented in two layers to avoid the most common mega-port error — treating an ultimate-vision number as a single financing ask. All figures are **AACE Class 5 concept estimates**; the major unknowns (dredge depth/material, breakwater foundation, reclamation, tank and gas safety scope, offsite utilities, external road/rail) have not yet been surveyed or priced by EPC bidders.

The **ultimate programme** (all phases, full vision including offshore LNG and the complete logistics city) is estimated at **~US$8.9 billion P50 (indicative range US$6.7–10.9 bn)**. This is consistent with the prior project estimate and is **benchmarked against Vadhavan, India — a ~US$9.1 billion greenfield deep-water megaport** of comparable multi-terminal scope. Re-basing crude and LNG offshore (SPM/island) *reduces* cost versus a dredged ULCC inner harbour, partially offset by realistic deep-water breakwater pricing (deep, exposed breakwaters run US$50,000–250,000/m, not US$12–15k/m).

Table 12.1 — Ultimate programme CAPEX by package (P50, US$ million)

Package	P50	Scope
Marine civil — dredging, breakwaters, basins, channel	1,500	~1.8 km breakwater + lee arm; ~2.5 M m^3 capital dredge; channel; turning basin; reclamation; slope protection; nav structures
Crude (offshore SPM) & refined-products terminal	600	SPM/CALM system(s) + subsea pipelines (upgrade of SCOT field); L1 island jetty; loading arms; manifolds; firewater; oily-water
Tank farm (480–600k m^3) & refinery interface	550	Crude/product/LPG tankage; pump/metering; restricted pipeline corridor; vapour recovery; hazardous-area systems
LNG / LPG / gas terminal	1,150	LPG berth & storage (Phase 1) + **future offshore LNG jetty, cryogenic storage, ESD** (gated)
Dry bulk & phosphate terminal	760	B1 quay; 3,000 t/h shiploader; tippler; enclosed conveyors; 3 × 60,000 t sheds; stockyards; dust control; rail interface
Grain & food terminal + silos	520	B2 quay; 100–150k t silos; covered conveyors; fumigation/QC; food-grade warehouses
Breakbulk / MPP / Ro-Ro + service harbour	430	B3 quay; mobile harbour cranes; Ro-Ro ramp; project-cargo yard; tug/pilot facilities
Logistics city, warehouses, cold chain, free zone	850	Warehouses; cold stores; bonded city; truck yards; customs; intermodal (phased)
Road, rail, utilities, power, water, wastewater, ICT	720	Internal road spine; rail sidings; substations; water; wastewater; fibre; security
Digital operations, VTS, HSE, environmental	210	Port operating system; VTS; CCTV; access control; fire/HSE; environmental monitoring
Owner's costs, engineering, development, land, permits	320	Owner's engineer; PMO; surveys; FEED; legal; ESIA; permits; financing development
Mine & beneficiation "factory"	430	Pit & fleet; 7 Mtpa wash/dry plant; silo & loop; 60 MWp solar; camp
Railway corridor (renewal to Baniyas)	590	~300–340 km renewal; 22.5 t axle; passing loops; CTC/ETCS L1 & fibre; depot; rolling stock
Contingency & escalation reserve	1,030	Concept-level reserve; released only against FEED/market-tested packages
TOTAL ULTIMATE PROGRAMME	**~8,660**	P50; indicative range US$6.7–10.9 bn

12.2 The bankable Phase 1 ("corridor-enabling core")

The recommended first commitment is **not** the whole programme. It is the integrated minimum that creates revenue and proves the corridor: **mine/factory + railway + protected basin (B1 bulk, B2 grain) + products/LPG jetty (L1) + crude SPM upgrade + Stage-1 tank farm + compact logistics platform + common marine/utilities/VTS.**

Table 12.2 — Indicative Phase 1 envelope (US$ million)

Phase 1 package	Indicative
Mine & beneficiation factory	430
Railway renewal to Baniyas	590
Common marine (breakwater Stage 1, dredge, channel, service harbour)	1,100
Dry bulk/phosphate terminal (B1)	500
Grain & food terminal (B2) + initial silos	350

Phase 1 package	Indicative
Products/LPG island jetty (L1) + crude SPM upgrade	450
Stage-1 tank farm + refinery interface	350
Compact logistics platform (~110 ha) + utilities/VTS/security	450
Owner's/eng/ESIA/dev + contingency	600
Phase 1 total	**~3,200–3,800**

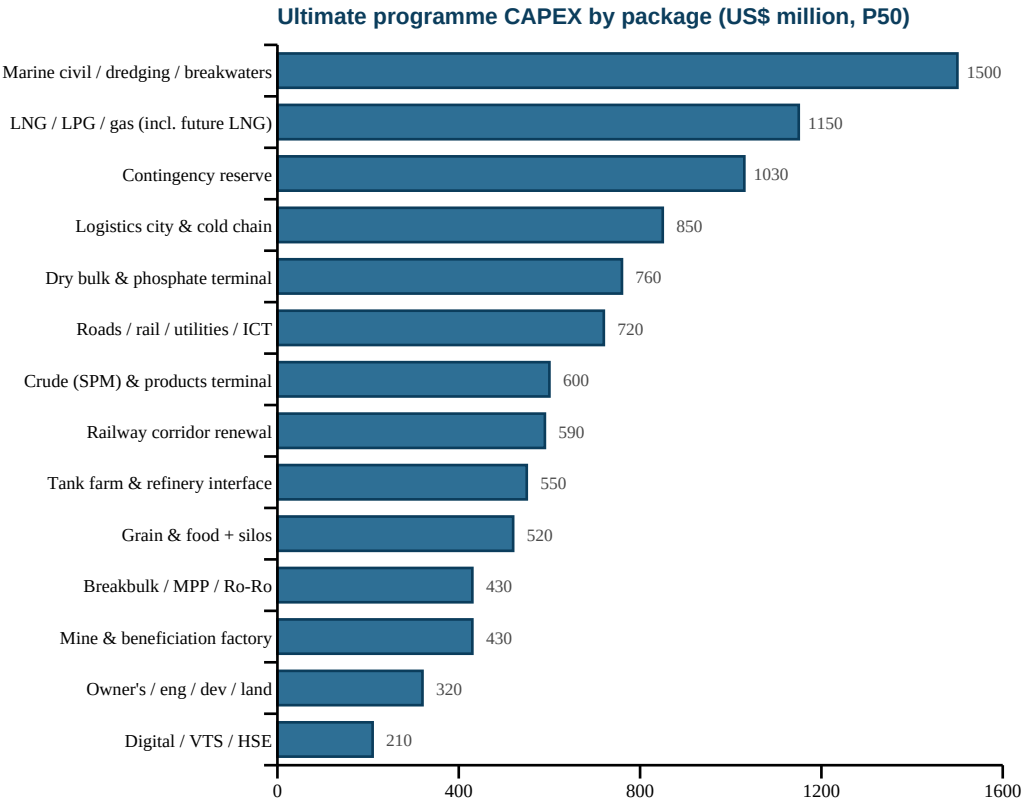
12.3 Phasing of spend (ultimate programme, indicative)

Year	2026	2027	2028	2029	2030	2031	2032	2033	2034
Growth CAPEX (US$ M)	180	900	1,550	1,700	1,500	1,100	700	350	130

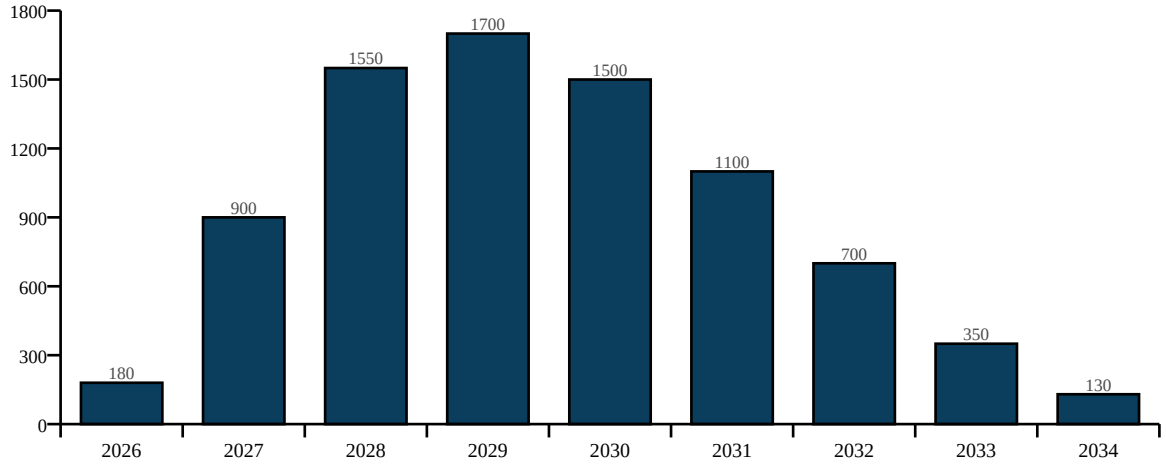
Spend concentrates in 2028–2031 when marine works, breakwaters, dredging, core terminals, tank farm, logistics city and common utilities overlap — a major cash-management issue. **The project must not launch all terminal works without either anchor contracts or committed financing.**

12.4 Cost-control gates

- **Gate 1 (90-day validation):** survey scope, legal heads of terms, market sounding, pre-FEED procurement plan.
- **Gate 2 (Pre-FEED):** freeze design-vessel classes, terminal capacities, channel/basin geometry, safety philosophy, concession architecture.
- **Gate 3 (FEED):** Class 5 -> Class 3 estimate; lender model; EPC tender documents.
- **Gate 4 (Financial close):** concessions, EPC, offtake/storage and debt/equity documentation.
- **Gate 5 (Construction NTP):** release long-lead procurement only after financial close and critical permits.



Indicative growth-CAPEX phasing (US$ million / year)



13. Revenue Model

The port has **six mature revenue engines**, deliberately diversified so the programme is not hostage to any single cargo or price. The mature base case reaches **~US$3.0 billion annual revenue and ~US$1.5 billion EBITDA** after full ramp — a commercial target requiring validation by anchor contracts, tariff regulation and throughput studies, not an engineering guarantee.

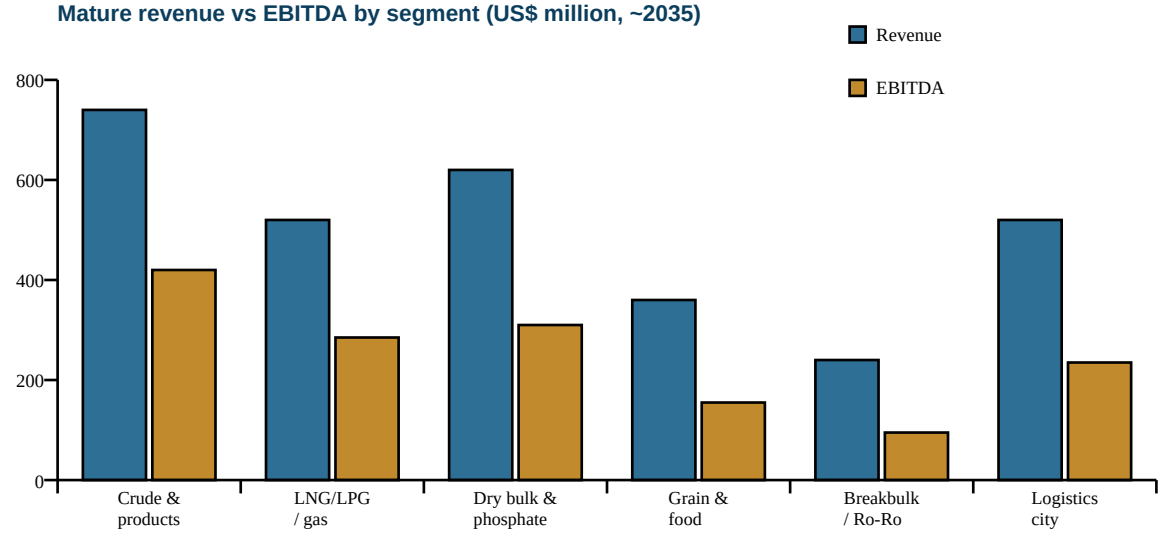
Table 13.1 — Mature revenue by segment (US$ million, ~2035)

Segment	Revenue	EBITDA	Basis
Crude & refined products throughput/storage	740	420	Terminal tariffs, tank storage, SPM/jetty fees, truck/rail loading
LNG/LPG/gas terminal services	520	285	Berthage, storage, handling, safety services (excl. trading margins; LNG gated)
Dry bulk & phosphate/mineral exports	620	310	Bulk handling, stockyard, rail-port interface, third-party bulk
Grain & food commodities	360	155	Grain handling, silo storage, covered conveyors, QC, warehousing
Breakbulk, Ro-Ro, service harbour, project cargo	240	95	General cargo, crane, heavy-lift, laydown, Ro-Ro, marine services
Logistics city, free zone, warehouses, cold chain	520	235	Leases, yard fees, warehouse, intermodal, bonded storage, value-add
Total mature	**~3,000**	**~1,500**	~50% blended margin

Separately, the **phosphate corridor P&L** (mine + rail + bulk berth) is the anchor cash engine: **7.0 Mt at ~US$115/t ~ US$805 million/year of FOB sales** at a ~US$58/t cash cost (~51% margin), the largest single contributor and the base load that justifies the railway and the bulk berth. The phosphate FOB cash-cost stack is reproduced in Appendix A.

Bankability discipline: sign anchor throughput/storage contracts and pre-leases **before** committing Phase 1 marine/tank CAPEX; separate regulated common port tariffs from negotiated terminal-service contracts; use take-or-pay minimums with USD-indexed escalation; retain merchant exposure only above contracted minimums.

Mature revenue vs EBITDA by segment (US$ million, ~2035)



14. Financial Analysis

The model below is a **concept-level base case for the ultimate multi-terminal programme**. It is intentionally separate from, but consistent with, the smaller Phoenix Corridor case (US$3.18 bn, ~13% unlevered IRR), which remains a valid description of the corridor-enabling Phase 1 economics.

Table 14.1 — Ultimate programme base case (US$ million)

Year	Revenue	EBITDA	Growth capex	Maint. capex	Cash tax	Free cash flow	Cumulative FCF
2026	0	0	180	0	0	(180)	(180)
2027	0	0	900	0	0	(900)	(1,080)
2028	0	0	1,550	0	0	(1,550)	(2,630)
2029	250	75	1,700	0	0	(1,625)	(4,255)
2030	650	228	1,500	0	0	(1,272)	(5,527)
2031	1,200	504	1,100	30	0	(626)	(6,153)
2032	1,700	782	700	43	0	39	(6,114)
2033	2,250	1,080	350	56	154	520	(5,594)
2034	2,650	1,325	130	66	189	940	(4,654)
2035	3,000	1,500	0	75	214	1,211	(3,443)
2036	3,045	1,523	0	76	217	1,229	(2,214)
2037	3,091	1,545	0	77	220	1,248	(966)
2038	3,137	1,569	0	78	224	1,267	301
2039	3,184	1,592	0	80	227	1,286	1,587
2040	3,232	1,616	0	81	230	1,305	2,892
2041	3,280	1,640	0	82	234	1,324	4,216

Table 14.2 — Base-case returns

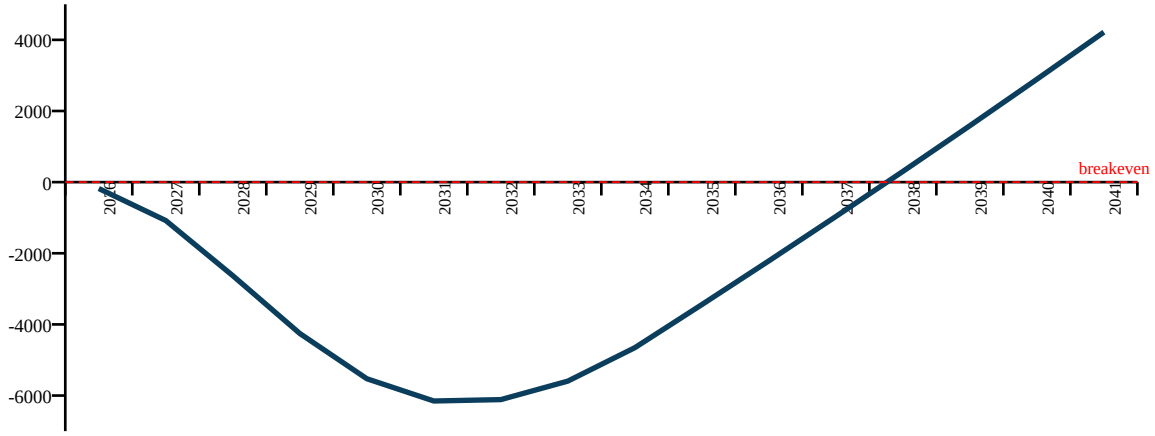
Metric	Value	Comment
Total CAPEX	~US$8.9 bn	Concept P50 (ultimate programme)
Mature revenue / EBITDA	~US$3.0 bn / ~US$1.5 bn	~50% blended margin (2035)
Unlevered IRR	~11%	25-yr project cash flow, before financing
NPV @ 10%	~US$540 M	Indicative, concept stage
Payback (undiscounted)	~2038	Cumulative FCF turns positive
Target gearing	55–65% debt / 35–45% equity	Subject to contracted revenue & political-risk coverage
Target levered equity IRR	14–18%	Depends on debt pricing, grace, tenor, DSCR

Table 14.3 — Sensitivity (ultimate programme)

Case	Main assumption	CAPEX (US$ M)	Mature revenue	Mature EBITDA	Unlevered IRR	Payback
Base	Ramp to US$3.0 bn by 2035; 50% margin	8,900	3,000	1,500	~11%	2038
Downside	2-yr ramp delay, -20% tariffs, +10% CAPEX	9,800	2,400	1,080	7–9%	2042+
Upside	Higher energy/gas use, stronger logistics, faster bulk ramp	8,600	3,600	1,900	14–17%	2036–37

The bank case is the downside case. The base case is investable **only if** the project secures enough contracted revenue to survive the downside. Until pre-FEED, bathymetry, QRA and commercial commitments are complete, the downside case should be treated as the bank case. Price (phosphate), schedule (marine works), and contracted demand are the dominant value drivers; each is structurally mitigated (low cash cost, brownfield rail, take-or-pay contracting, phased build).

Cumulative free cash flow (US$ million) - payback ~2038



15. Funding Strategy & Concession Architecture

15.1 Layered financing

The programme is financed **in layers, not as one undifferentiated corporate debt.** Common infrastructure (breakwater, channel, dredging, utilities, VTS) carries sovereign/strategic characteristics and supports longer-tenor debt or public-sector participation; terminal packages attract strategic investors and offtakers; logistics-city parcels use lease-backed project finance.

Table 15.1 — Indicative funding mix (ultimate programme)

Source	Indicative amount	Role
Sponsor/development equity	US$150–250 M	Pre-FEED, surveys, concession, ESIA, owner's team, advisory
Core equity	US$2.8–3.4 bn	Sponsor, Gulf SWFs, strategic terminal partners, anchor offtakers
Senior debt	US$4.2–5.2 bn	DFIs, ECAs, commercial & infrastructure lenders; sized to DSCR and contracted cash flow
Mezzanine / subordinated	US$0.3–0.6 bn	Only if senior sizing is constrained and returns remain acceptable
Retained cash-flow expansion	US$0.5–0.8 bn	Later logistics/tank/gas expansion from operating cash

The senior-debt strategy is multilateral-led and ECA-anchored: **DFIs** (IsDB, AFESD, OFID; IFC/EBRD as mandates open) for anchor pricing and a political-risk umbrella; **ECA-covered facilities** (SACE, Euler Hermes, K-SURE, Sinosure) tied to equipment/EPC origin (rolling stock, shiploaders, tankage, signalling, dredging); **commercial project finance** with post-completion cash-sweep features; and an optional **sukuk** tranche over terminal assets to deepen Gulf demand. Lender protections are the familiar grammar of project finance: completion guarantees from the EPC stack, a six-month DSRA, cash waterfall, direct agreements with concession grantors, and **MIGA/ICIEC political-risk insurance**. The World Bank's exploratory February-2026 engagement on the railway corridor — while **not** a funding commitment — improves the multilateral conversation.

15.2 Concession architecture

- **Master port concession / BOT** of **35–49 years** with extension options and lender step-in rights; defined land and waterside footprint with expansion rights and clear customs/free-zone status.
- **Tariff framework** covering regulated port dues and negotiated commercial tariffs, with USD-indexed escalation.
- **Mining JV** with GECOPHAM (structure subject to due diligence on the prior concession); **railway BOT** (~35 years) with open-access for third parties at regulated tariffs; **free-zone lease** under Investment Law No. 18 of 2021 (as amended by Decree 114/2025).
- **Investment protection:** stabilisation clauses, ICSID/UNCITRAL arbitration, termination compensation covering senior debt and a return on equity, and force-majeure regime.

15.3 Government value and investor protection

The State's value is engineered to be visible and rising — royalty from the first tonne, JV dividends, corporate tax stepping in over time, asset reversion at concession expiry, ~700 fewer trucks/day on public roads, restored rail, and the country's most bankable export scaled into a multi-hundred-million-dollar engine. Investor protection mirrors it via **Investment Law No. 18/2021** (anti-expropriation — compensation-based, not absolute — and profit/capital repatriation). The legal posture: **structured as if Caesar could return, financed as if it will not.**

15.4 Exit

A realistic public-market window opens **after at least two years of stable EBITDA**, audited IFRS reporting, a safety track record and proven concession compliance — likely after 2035 for the full programme, with the option of an earlier strategic terminal-stake sale. A partial **IPO (25–30%)** on ADX/Tadawul with a secondary Damascus listing converts patient capital into liquid value at an expected step-up, positioned as the funding event for the next growth phase (offshore LNG, downstream chemistry).

16. Implementation Roadmap

Table 16.1 — Critical milestones

Target	Milestone
H2 2026	Concession heads of terms (port, mining JV, rail BOT, free zone); ESIA launch; bathymetric/LiDAR survey; FEED start
2026–Q2 2027	Surveys (bathymetry, geotech, metocean); navigation-simulation plan; terminal-capacity freeze; Class 3 estimate
Q1 2027	Financial close prep: anchor agreements; lender due diligence; political-risk insurance
2027	Financial close (Phase 1); EPC notices to proceed; long-lead procurement (rail steel, locomotives, shiploaders, dredgers)
2028–2031	Breakwater & dredging; quays B1/B2/B3; L1 jetty; tank farm Stage 1; rail renewal; SPM upgrade
Q3 2029	First block train mines -> Baniyas; interim shiploading; first tank fills; crude SPM live
2029–2030	First revenue (service harbour, early bulk/grain, staged tank/crude operations)
2030–2032	>5 Mtpa phosphate run-rate; B3 and compact logistics platform operating
2033–2034	Design throughput 7 Mtpa; offshore LNG FID (if contracted); expansion tranches
2035+	Full ramp; IPO window

Delivery is organised under an **integrated PMO** with an owner's engineer of international standing, **component EPCs bid to pre-qualified consortia** (Chinese, Turkish, Gulf and European groups have signalled Syria appetite since mid-2025), and a **single interface-management office** whose only job is the handful of joints — silo-to-rail, rail-to-tippler, berth-to-shed, SPM-to-tank, refinery-to-pipeline — where integrated programmes are won or lost.

17. Risk Management

Frontier infrastructure succeeds by pricing risk honestly and engineering it down. The register below combines the corridor risks with the **marine/engineering risks** the design basis specifically flags.

Table 17.1 — Principal risks and mitigation

Risk	Rating	Issue	Mitigation & residual position
Bathymetry & dredging	**Critical**	Supplied depth profile is conceptual; wrong dredge volumes/berth line/UKC	Re-survey to IHO S-44 harbour grade before freezing alignment; move basin to natural depth
Breakwater / wave agitation	**Critical**	Unmodelled heads/entrance can make basin inoperable	Metocean data; physical/numerical wave-agitation model; staged design; rounded heads; lee arm
Geotechnical / seismic	**Critical**	Quay/breakwater type unverified	Early CPT/boreholes; seismic basis; avoid over-committing to one wall type
Gas/LNG/LPG safety	**Critical**	QRA may force larger separations or relocate LNG	Keep LNG **out** of Phase 1 basin; offshore/island siting; SIGTTO-grade study; ESD; exclusion zones
Refinery interface	**High**	Shared adjacency raises cumulative hazard	Dedicated pipeline corridors; separate control rooms; joint QRA/HAZID; hazard zoning
Land & concession	**Critical**	No bankability without long-term land/water rights; AOI < full land ask	Heads of terms; lender step-in; arbitration; **freeze compact in-AOI footprint + secure external backland**
Phosphate price	High	Cyclical commodity (base US$115 vs US$150 benchmark)	US$58/t 2nd-quartile cash cost; royalty flexes with price; framework offtakes; non-rock EBITDA; stress case stays positive
Commercial demand	High	Large capacity without committed customers	Anchor offtakes, take-or-pay, pre-leases, phased construction
Security & site	High	Desert corridor sections; legacy ordnance near Palmyra; sabotage	Government corridor-protection agreement; fenced/sensored/drone-patrolled ROW; UXO clearance; political-violence insurance
Political / sanctions	High	Caesar repeal carries 180-day certification; **SST designation still in place**; BIS export controls remain	OFAC/EU/UK-grade screening; compliance officer with veto; MIGA/ICIEC cover; diversified non-U.S. lender base
Construction cost & schedule	High	Multi-component frontier programme	LSTK packages with LDs; ~9.5% contingency; advance long-lead procurement; experienced owner's engineer
Sediment / littoral drift	Medium	Northward drift may shoal entrance/erode downdrift coast	Piled trestle preference; rounded heads; sediment modelling; bypass plan; maintenance-dredge trigger
Interface	High	Separate terminals fail at roads/rail/pipelines/gates/utilities	Master integrator; interface matrix; one PMO; systems engineering
Environmental / permitting	High	Dredging, tankage, fuel/gas, shoreline works	Full ESIA to IFC PS; dredge-management & disposal plan; spill model; community engagement
FX & transfer	Medium	SYP volatility; convertibility	USD offshore revenues; offshore collection & waterfall; Investment Law 18 repatriation guarantee
Commercial overreach	High	Full container mega-port or VLCC inner harbour exceeds the evidence	**Keep B3 support-scale; crude/LNG offshore; reserve deep-water options for contracted demand**

Risk-gate rule. The project should **not** enter full construction unless: government rights secured; bathymetry complete; geotech complete for critical structures; wave model complete; QRA complete; ESIA pathway agreed; anchor contracts signed; EPC tenders market-tested; and financing term sheets received. The two residual risks that cannot be engineered to zero — **marine uncertainty before survey, and land/interface uncertainty before concession** — both require **front-end decisions, not later fixes**.

18. HSE, ESG & National Impact

The programme is designed to be the **reference ESG asset of Syrian reconstruction**, because that positioning is commercially decisive — it unlocks DFI debt, SWF mandates and the listing's governance premium.

Environment. Full **ESIA to IFC Performance Standards** before construction; dredging turbidity control, sediment testing and beneficial-reuse/disposal strategy; oil-spill response sized for crude/products and LPG (and future LNG); full enclosure and dust suppression on dry bulk with a physical buffer to grain; food-grade hygiene for grain and cold chain; segregated wastewater/oily-water/stormwater with a closed firewater ring; a ~60 MWp solar mine; rail substituting for ~700 daily truck movements (cutting transport emissions per tonne by ~75%); and shore power and electrified equipment reserved where practical. The refinery interface and any future LNG carry their own QRA-driven controls.

Social. Construction peak ~12,000 jobs; ~4,500 permanent direct jobs across mine, railway, port, terminals and city; ~12,000 further indirect/induced — **16,500+ livelihoods**, concentrated in Tartus, Homs and the Palmyra district — with a binding target above **85% national workforce**, a corridor training academy run with GECOPHAM and CFS, IFC-standard worker accommodation, and a community development fund indexed to throughput so local benefit scales with success.

Governance. A DIFC/ADGM holding company with independent directors, **Big-Four audit and IFRS from inception**, a sanctions-compliance function with transaction veto, EITI-consistent publication of payments to government, and the digital platform's tonne-by-tonne auditability — transparency as infrastructure.

National benefits. Improves fuel and food security; creates a scalable reconstruction gateway and a regulated free-zone platform; shifts bulk and grain to rail; rebuilds transferable port, marine, rail and safety institutions; and restores Syria's most bankable export.

19. Legal & Regulatory Framework

The investment rests on four legal pillars, stated with the precision lenders require:

1. **Sectoral concessions** — master port concession/BOT, mining JV, rail BOT and free-zone lease — each with stabilisation, arbitration and termination-compensation protections, negotiated as a package so the corridor cannot be dismembered by the failure of any single instrument. 2. **Syria's Investment Law No. 18 of 2021** (as amended by **Decree 114/2025**) — anti-expropriation (compensation-based) and repatriation of profits and capital. Note: 2026 press references to a "new Law 114" are imprecise; the operative instrument is **Law 18/2021 as amended**. 3. **The international layer** — bilateral investment treaties where applicable; ICSID/UNCITRAL arbitration in a neutral venue; MIGA/ICIEC political-risk insurance; lender direct agreements with cure rights. 4. **Post-sanctions compliance architecture** — although EO 14312 and the December-2025 Caesar repeal removed the prohibitive framework, **residual items remain**: the **180-day certification regime**, the still-active **SST designation** (under review), and **U.S. BIS export controls**. PCDC therefore runs U.S./EU/UK-grade screening of every counterparty, bank and cargo, with external sanctions counsel on permanent retainer and lender audit rights over the compliance function.

20. Governance & Operating Model

The estate is controlled by a single **PortCo master operator** with separate terminal companies — avoiding interface failures while allowing strategic partners to invest in specific businesses.

Entity	Role
PCDC HoldCo	Listing vehicle; consolidated financing obligor (DIFC/ADGM)
PortCo / Master Developer	Common marine works, harbour control, utilities, safety, access, security, land
OilCo	Crude (offshore SPM) + products + chemical liquids storage
GasCo	LNG/LPG terminal, gas storage, ESD, gas safety, process utilities
BulkCo	Dry bulk/phosphate, stockyards, shiploaders/unloaders, conveyors, rail loading
GrainCo	Grain silos, food commodities, fumigation, food QC, clean-cargo logistics
MP/RoRoCo	Breakbulk, Ro-Ro, heavy-lift, project cargo, service harbour
CityCo	Logistics city, free zone, warehouses, cold chain, customs, intermodal
RailCo / UtilitiesCo	Rail (mines->Baniyas) at cost-plus; internal roads, pipelines, power, water, ICT
MineCo	Mining JV with GECOPHAM; beneficiation factory

A **Corridor & Port Operations Centre** integrates vessel traffic, berth planning, gate control, rail scheduling, tank/silo/warehouse inventory, emergency response and security — designed from the start for auditable cargo flows, mass balance, customs records, energy-terminal safety and lender reporting. Operational KPIs (selected): berth occupancy <=55–60%; vessel waiting <12 h; effective shiploader rate >=2,200 t/h; wagon-tippler 50 wagons <2 h; zero grain-contamination and zero oily-discharge events; truck turnaround <35–60 min; unit-train cycle <=12–14 h; firewater availability >99%; channel availability >97%.

21. Corrections & Validation Register

This section responds directly to the brief's instruction that *"not all of the prior work is correct."* The table records the material errors, ambiguities and over-reaches found in the earlier project material and how each is corrected in this edition. Each item should be treated as a **validation action** for pre-FEED.

#	Item in prior material	Finding	Correction adopted here
1	Port located at **Tartus** (Phoenix proposal)	Sponsor's vision, illustration and design basis all point to **Baniyas**	**Port relocated to Baniyas**, adjacent to the refinery; corridor re-routed mines->Homs->Baniyas
2	Phosphate reserves **"1.8–2.1 bn t, top 3–5 globally"**	**Outdated.** USGS 2025 = **~250 Mt reserves (~16th)**; 1.8 bn t was a pre-2021 figure	Cite **250 Mt USGS reserves**; label any larger number as a named *resource* estimate; reframe mine life to ~25 yr
3	Dredge a **-28 m inner harbour** for ULCC/VLCC/Q-Max alongside	Not supported by Baniyas's steep, narrow shelf; very costly/slow	**Crude via offshore SPM; LNG offshore/island; basin dredged only to -12.5…-16.5 m**
4	Logistics city **300 ha inside the 341 ha AOI**	Full first-phase needs ~420–460 ha; does not fit	**Compact ~110 ha in-AOI platform now; 300 ha on secured external backland later**
5	Stroytransgaz phosphate concession **"annulled 2025"**	Only the **Tartus port** contract was confirmed cancelled; phosphate concession **under review**	Soften; structure mining JV subject to legal due diligence; "70/30 **sales-revenue** split"
6	**"All sanctions lifted / barriers fell"**	Overstated. SST designation **still active**; BIS export controls remain; 180-day certification	State precisely; manage residual items; compliance function with veto
7	**World Bank funding** for the railway corridor implied	Feb-2026 talks were **exploratory; no funding committed**; "$50 M" is a government claim	Frame as early-stage technical engagement only
8	Low-cadmium premium **"for Indian buyers"**	Low-Cd (~3 ppm) verified as an **EU** advantage; India-specific premium **unverified**	Keep EU premium; treat India as inference; **add uranium (~60–140 ppm) caveat**
9	CRS / projection inconsistency (UTM 36N vs 37N across files)	Minor but real; Baniyas (~35.95°E) sits near the 36/37 zone boundary	Standardise to one CRS at survey; confirm geodetic control
10	Full **container gateway** ambition at the port	Over-reaches the evidence; competes with DP World Tartus / CMA CGM Latakia	Keep B3 **support-scale** feeder/Ro-Ro; position Baniyas as the **energy/bulk** gateway
11	CMA CGM Latakia "$260 M Phase 2" / "Law 114" loose figures	$260 M is the **total**; operative law is **18/2021 as amended by 114/2025**	Corrected throughout
12	Vessel "QMAX" treated loosely	**Q-Max is an LNG class** (266,000 m^3), routed offshore — not an alongside crude berth	Clarified in the design-vessel fleet

Two structural validation truths carried from the design basis: (a) the marine geometry is **conceptual until surveyed** — no berth line, dredge volume or breakwater head should be frozen before IHO S-44 hydrography, metocean and geotechnical campaigns; and (b) all references to PIANC, IMO, IALA, IHO, OCIMF, IFC and SIGTTO are the **international GIIP baseline pending Syrian competent-authority confirmation**, not a substitute for national code adoption.

22. Conclusion & Next Steps

The map of Syria in June 2026 shows a sanctioned decade ended by statute, two of the world's most sophisticated port operators already committed at Tartus and Latakia, a government that has publicly named heavy-freight rail a priority, and — at **Baniyas** — an existing refinery, an existing offshore oil terminal and a pipeline terminus waiting to anchor a modern energy-and-bulk gateway, connected to world-class phosphate deposits by a standard-gauge railway whose embankments, bridges and right-of-way already exist. The Baniyas Deep-Water Gateway assembles that opportunity into a single financeable system — corrected for the realities of the seabed, the reserve base and the legal position — that serves every cargo class the Sponsor envisaged while building each on the *right* marine structure.

The investment thesis in one sentence: **own the integrated phosphate-to-tidewater corridor and the energy-and-bulk gateway beside Syria's largest refinery, build it in validated phases, anchor it with take-or-pay and offtake contracts, and exit through public markets once the corridor is a proven, diversified infrastructure cash machine.**

Proposed 90-day next steps

Weeks	Action
1–2	Execute NDAs; open data room (GIS masterplan, design basis, model, legal memoranda, sanctions opinions); appoint PMO
1–4	Government heads of terms: port concession & free-zone scope; mining JV (Ministry of Energy/GECOPHAM); rail BOT (Ministry of Transport/CFS); refinery interface (Syrian Petroleum Company / SCOT)
2–6	Commercial sounding: the refinery, fuel importers, LPG distributors, phosphate offtakers, grain traders, 3PLs, warehousing tenants
3–8	Procure surveys: **multibeam bathymetry, geotechnical, metocean/ADCP, sediment, ESIA baseline, LiDAR/topography**
4–10	Pre-FEED tender: owner's engineer, port/marine engineer, process-safety/QRA, financial-model adviser
8–12	Subscribe US$150–250 M seed/development tranche; PCDC incorporation (DIFC/ADGM); programme office in Dubai and Damascus; DFI/ECA sounding

The corridor will be built in this decade. The only open question is whose capital earns its returns.

Appendix A — Key Modelling Assumptions

Assumption	Value / basis
Currency & basis	US$ real 2026; unlevered project flows; levered case at ~60/40
Phosphate volume ramp (Mt)	2029: 1.2 · 2030: 2.2 · 2031: 3.3 · 2032: 4.5 · 2033: 5.5 · 2034: 6.3 · 2035+: 7.0 (system ceiling 8.0)
Phosphate realised price	US$115/t FOB base (~23% discount to ~US$150 Morocco benchmark); sensitivities US$95 / US$135
Phosphate FOB cash cost	~US$58/t steady (see below); ramp penalties +14/+10/+6/+2 US$/t in 2029–32
Port mature revenue / EBITDA	~US$3.0 bn / ~US$1.5 bn by 2035 (50% blended margin)
Ultimate CAPEX	~US$8.9 bn P50 (range 6.7–10.9); Phase 1 ~US$3.2–3.8 bn
Maintenance capex	~2.5% of revenue from 2031
Tax	Holiday to ~2031; ~15% thereafter (concession-negotiated); D&A straight-line 25 yr
Royalty	10% of phosphate realisation (within the US$58/t cash cost)
Terminal value	Indicative 8.5× mature EBITDA (EM port/rail comparable)
Reserve base	**USGS 250 Mt** (corrected); resource upside subject to confirmatory drilling

Phosphate FOB cash-cost stack (US$/t): Mining & beneficiation 27.50 · Rail haulage 8.50 · Port handling & loading 6.00 · SG&A & marketing 4.50 · Government royalty (10% of realisation) 11.50 · **Total 58.00**.

Appendix B — Design-Vessel Catalogue (planning fleet)

ID	Type	Cargo	LOA (m)	Beam (m)	Draft (m)	Capacity	Planning depth (m CD)	Served by
ULCC	ULCC crude tanker	Crude	380	68	24.0	320–550k DWT	28.0	Offshore SPM
VLCC	VLCC crude tanker	Crude	333	60	21.0	200–320k DWT	24.5	Offshore SPM
SUEZMAX	Suezmax	Crude	275	48	16.5	150–165k DWT	19.0	Offshore SPM
AFRAMAX	Aframax/LR2	Crude/products	245	42	15.0	80–120k DWT	17.5	L1 jetty / SPM
MR	MR product tanker	Products	183	32.2	12.0	45–55k DWT	14.0	L1 jetty
Q-MAX	Q-Max LNG	LNG	345	53.8	12.0	266,000 m^3	14.0	Offshore/island (future)
Q-FLEX	Q-Flex LNG	LNG	315	50	12.0	210–217k m^3	14.0	Offshore/island (future)
LNG-174	Conventional LNG	LNG	300	46	12.0	174,000 m^3	14.0	Offshore/island (future)
VLGC	VLGC LPG	LPG	230	37	12.0	75–85k m^3	14.0	LPG berth
NEWCASTLEMAX	Newcastlemax bulk	Dry bulk	300	50	18.5	200k+ DWT	21.5	Part-load / offshore
CAPESIZE	Capesize bulk	Dry bulk	289	45	18.0	150–180k DWT	21.0	Part-load
PANAMAX	Panamax/Kamsarmax	Dry bulk/grain	229	32.3	14.5	75–85k DWT	17.0	**B1 / B2 (basin design vessel)**
HANDYMAX	Handymax/Supramax	Dry bulk/grain	200	32.3	12.8	50–60k DWT	15.0	B1 / B2
RORO	Ro-Ro / PCTC	Vehicles/project	200	32	9.5	—	11.5	B3
HEAVYLIFT	Heavy-lift	Project	170	28	10.5	20–35k DWT	12.5	B3
BREAKBULK	Breakbulk	General	150	25	9.0	15–25k DWT	11.0	B3
COASTER	Coaster/feeder	General/food	100	16	6.0	5–8k DWT	8.0	Basin/feeder
DREDGER	TSHD dredger	Support	140	28	8.0	—	10.0	Service harbour
TUG	ASD harbour tug	Support	32	12	5.5	60–80 t BP	7.5	Service harbour

Appendix C — Terminal & Berth Schedule

See **Table 8.3** (berth schedule) and **Section 8.4** (the ten terminal families). Inner-basin berths B1 (bulk/phosphate, 320 m, -16.0 m), B2 (grain, 300 m, -14.0 m), B3 (MPP/Ro-Ro/feeder, 300 m, -12.5 m) and L1 (products/LPG island jetty, 280 m, -15.5 m); offshore crude SPM and future offshore LNG in natural deep water; plus the service harbour. Approach channel ~180 m at -16.5 m CD; turning basin ~700 m; main breakwater ~1.8 km + lee arm; capital dredge ~2.5 M m^3.

Appendix D — Sources & References

External facts in this plan were verified by desk research (June 2026). Principal public sources include:

- **U.S. Geological Survey**, *Mineral Commodity Summaries — Phosphate Rock* (2021, 2024, 2025, 2026 editions) — Syria reserves ~250 Mt; world production/reserves; **van Kauwenbergh / IFA** for grade and cadmium (~3 ppm).
- **EU Regulation 2019/1009** (fertiliser cadmium limits: 60 mg/kg cap; 20 mg/kg low-Cd label; July-2026 review).
- **Phosphate/DAP pricing:** Fitch via Morocco World News (rock ~US$150/t; DAP ~US$650/t, 2026); Platts "Phosphate Rock FOB Morocco CP" methodology (Jul 2025).
- **Sanctions/legal:** OFAC GL 24 (Jan 2025), GL 25 (May 2025); Executive Order 14312 (30 Jun 2025); FY2026 NDAA Caesar repeal (18 Dec 2025); EU acts (28 May 2025); UK SI 2025/507; Syria Investment Law 18/2021 as amended by Decree 114/2025; law-firm client alerts (Cleary, Baker McKenzie, Curtis, Freshfields, Foley Hoag) and Just Security analysis.
- **Port concessions:** DP World–Tartus (30-yr, US$800 M, ops Nov 2025); CMA CGM–Latakia (30-yr, ~US$260 M); AD Ports 20% stake (Nov 2025).
- **Baniyas:** Banias Refinery (~125,000 bpd / ~6 Mtpa) — Wikipedia, Syria Report, Enab Baladi, offshore-technology.com; **SCOT** offshore oil terminal (SBM/CBM moorings ~1 km offshore); **Kirkuk–Baniyas pipeline** terminus and 2025 Iraq–Syria rehabilitation agreement; FAO Levantine-shelf bathymetry; CS Monitor (Jun 2026, Baniyas port dredging).
- **Railway:** *Rail transport in Syria* (Wikipedia); Al Jazeera (May 2026) and New Lines Magazine — operational Baniyas refinery rail terminal; Lengiprotrans (Tartus–Latakia line); Ministry of Transport (Oct 2025, ~US$5.5 bn rehabilitation); SANA (Feb 2026, World Bank talks).
- **Engineering standards (GIIP baseline):** PIANC (harbour approach channels; Fender Guidelines 2024; mooring of large ships); IHO S-44; IMO/IALA (VTS, buoyage); OCIMF MEG4; IFC/World Bank EHS (ports & petroleum terminals); SIGTTO (LNG terminals); USACE Coastal Engineering Manual.
- **CAPEX benchmarks:** Vadhavan, India (~US$9.1 bn greenfield deep-water megaport); King Abdullah Port (KSA); Duqm (Oman); Jebel Ali terminals; Ain Sokhna (Egypt); SPM/CALM and FSRU cost references (EPCM, IEEFA).
- **Sponsor material:** *The Phoenix Corridor Investment Proposal* (Madain Al Mustaqbal, June 2026); the GIS masterplan package (steps 1–10, EPSG:3857); the *Production-Ready Port Layout Design Basis for the Baniyas Deep-Water Gateway*; the sponsor's port illustration.

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