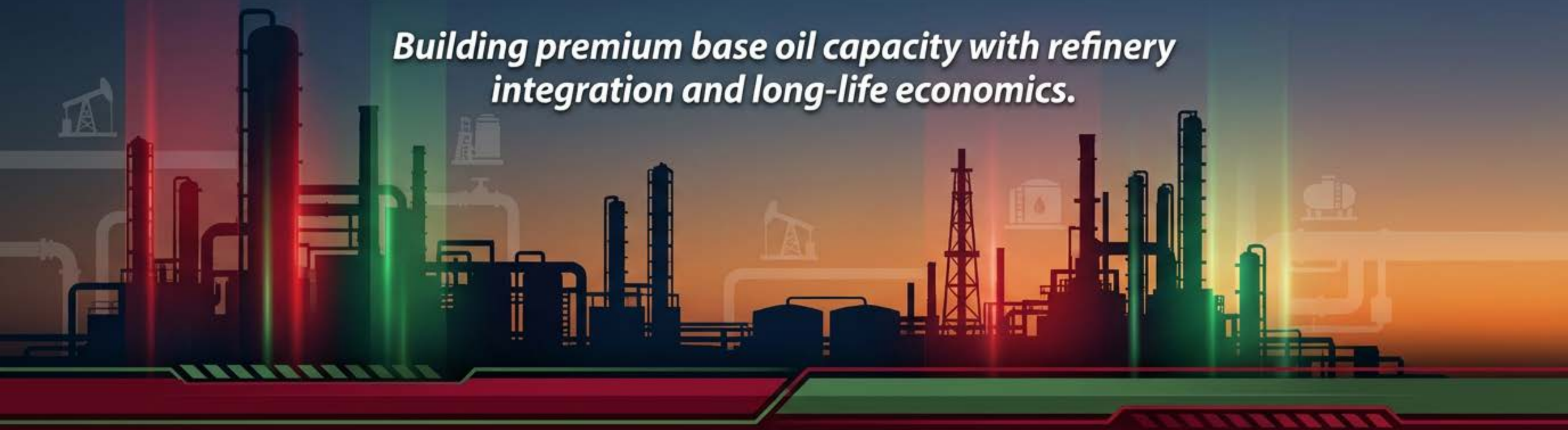
TPACO

Group III Base Oil Production Platform – Abadan, Iran

Building premium base oil capacity with refinery integration and long-life economics.



A project company 100% owned by Ahdaf Investment Group, established to develop and operate a Group III base oil oil production facility in Abadan (Bream Area), adjacent to the Abadan Oil Refinery, based on a long-term feedstock supply understanding for 2,000 barrels per day of Isorecycle / UCO.

Company Profile

Tijarat Pishgaman Ofogh Ahdaf (TPACO) is a project-focused company fully owned by Ahdaf Investment Group. TPACO was established to implement a strategic industrial investment in the lubricants value chain: the development of a Group III base oil production plant in Abadan, Iran.

TPACO's role is to bridge upstream refinery streams and downstream lubricant markets by converting refinery-derived heavy lube feed into premium base oils. The project is defined to support (i) domestic supply reliability, (iireliability, (ii) import substitution of higher-grade base oils, and (iii) export optionality for surplus production—while operating under robust governance, safety, and environmental principles suitable suitable for the Bream area context.

Ownership: 100% Ahdaf Investment Group

Company Type: Project SPV (industrial asset owner/operator)

Sector: Base oils / lubricants value chain

Vision and Strategic Positioning

Vision

To become a credible and stable supplier of premium Group III base oils, recognized for reliability, quality discipline, and operational integrity.

Strategic Positioning

TPACO is designed as more than a single-asset project. The company is positioned to evolve into a base oil platform with a long-life industrial footprint in Southwest Iran. The project's strategic foundation is built on:

- Long-term feedstock security and proximity to a major operating refinery
- Infrastructure-led competitiveness through integration advantages (logistics, hydrogen access, interfaces)
- A product focus aligned with market movement toward higher-performance lubricants
- A delivery model built on stage-gated execution, formal change control, and transparent reporting

Mission

Develop, commission, and operate a Group III base oil plant that meets commercial, HSE, and environmental expectations, and delivers sustainable value for stakeholders and the broader industrial ecosystem.

Project at a Glance

Project Description:

TPACO is developing a Group III base oil base oil production plant in Abadan (Bream Area), adjacent to the Abadan Oil Refinery. The feasibility basis is built around a long-term feedstock understanding for Isorecycle / UCO.

Key FS-based Parameters

- **Feedstock:** Isorecycle / UCO from Abadan Refinery
- **Feed supply basis:** Long-term MoU (20-year horizon)
- **Daily feed rate:** 2,000 bpd
- **Annual feed basis:** ~100,000 t/y
- **Indicative yield:** Base oil yield reported at ~85% (FS basis)

Indicative Annual Products (FS basis)

- **Group III base oil:** ~85 kt/y
- **Diesel:** ~8 kt/y
- **Jet fuel:** ~4 kt/y
- **Naphtha:** ~2 kt/y

Overall Schedule Basis

- **~36 months** from design through start-up (FS basis)

Core Differentiator:

Core differentiator: adjacency and integration with an operating refinery to reduce execution and supply-chain risk.

Location and Integration Advantage

Location: Abadan – Bream Area

The project is planned in the Bream area of Abadan, adjacent to the Abadan Oil Refinery.

This location provides a **structural advantage: it reduces logistics complexity,** strengthens interface stability, and supports a more bankable operating concept.

Refinery Integration (FS concept)

The project is defined with key **interfaces** that support reliability and cost efficiency:

- **Pipeline-based feedstock transfer** from the refinery to the project plot
- **Hydrogen supply** from refinery systems (FS basis)
- **Defined handling of off-gas interfaces** (as applicable to the selected configuration and agreements)

Important FS Implication

Access to refinery hydrogen materially reduces the need for standalonen gedrogen infrastructure

Access to refinery hydrogen materially reduces **the need for standalone hydrogen generation infrastructure** and supports **simpler, more robust operations**

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Technology Concept

Main Description: TPACO's production concept is based on modern hydroprocessing routes that convert heavy lube feed into **premium-quality base oils**. The selected configuration (as described in the feasibility work) applies:

Key Technology Steps

- **Selective upgrading** and **dewaxing/isomerization** to improve base oil quality
- **Hydrofinishing** to achieve the desired stability and specifications
- **Product separation and fractionation** to generate both base oil cuts and saleable by-products

Comparative Advantage:

Compared with legacy solvent-based base oil routes, this configuration is aligned with market demand for higher-grade base oils and supports a modern quality and reliability posture.

Note: Technology provider naming and detailed licensor disclosures should be used only when final selection/contracting is completed and disclosure is permitted.

Products and Value Proposition

Primary Product: Group III Base Oil

Group III base oils are premium base stocks used in higher-performance lubricants. TPACO's core value proposition is the creation of stable domestic capacity to supply such base oils with consistent quality and predictable availability.

Saleable By-Products

The feasibility basis includes monetizable by-products, supporting the overall economics and operational flexibility:

- **Diesel**
- **Jet fuel**
- **Naphtha**

Commercial Value Drivers

- **Domestic substitution:** reducing dependency on imported premium base oils.
- **Reliability:** supply security through refinery adjacency and defined interfaces.
- **Export optionality:** the ability to monetize surplus production in regional markets where commercial conditions are favorable.
- **Value-chain reinforcement:** supporting the lubricants ecosystem with a higher-grade base oil platform.

TPACO Utilities, Facilities, and Operability

Main Description

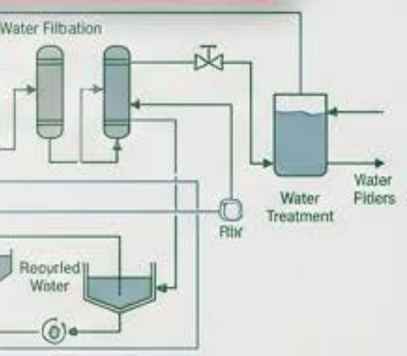
A Group III base oil plant requires more than process reactors and columns; it requires stable utilities, contamination control, and disciplined quality systems. The project scope (FS basis) includes the utility and offsite systems needed to sustain safe and reliable operation, including:

Key Utility Systems

- Power generation / electrical supply concept
- Steam generation
- Cooling water and cooling tower systems
- Instrument air and nitrogen supply
- Water treatment (industrial/DM/RO/BFW basis)
- Wastewater treatment and recycle approach aligned with environmental constraints
- Product storage, handling, and dispatch infrastructure, including vapor control philosophy

Operating Philosophy

TPACO's operating philosophy is built around reliability, maintainability, and quality discipline—critical for premium base oil markets.



HSE and Environmental Commitment

Main Description

TPACO's development approach incorporates a conservative HSE and environmental posture consistent with the project's location context. The feasibility work emphasizes design philosophies such as:

Key HSE and Environmental Measures

- **No routine flaring** operating concept

- **Closed drains** and **controlled management** of oily water streams

- **VOC** and **vapor recovery** measures for relevant emission points (e.g., storage/loading)

- **Monitoring and compliance systems** appropriate for industrial operations

- **Odor** and **noise mitigation** measures to support compatibility with surrounding context

- **Stakeholder and emergency response** alignment with neighboring industrial infrastructure

Core Principle: Environmental protection is treated as a project requirement integrated into design and operation, not a late-stage add-on.

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Execution Roadmap and Timeline

TPACO's execution plan is structured around disciplined stage gates and accountability, with a feasibility schedule basis of approximately 36 months from engineering to start-up.

Stage 1: Definition & Engineering

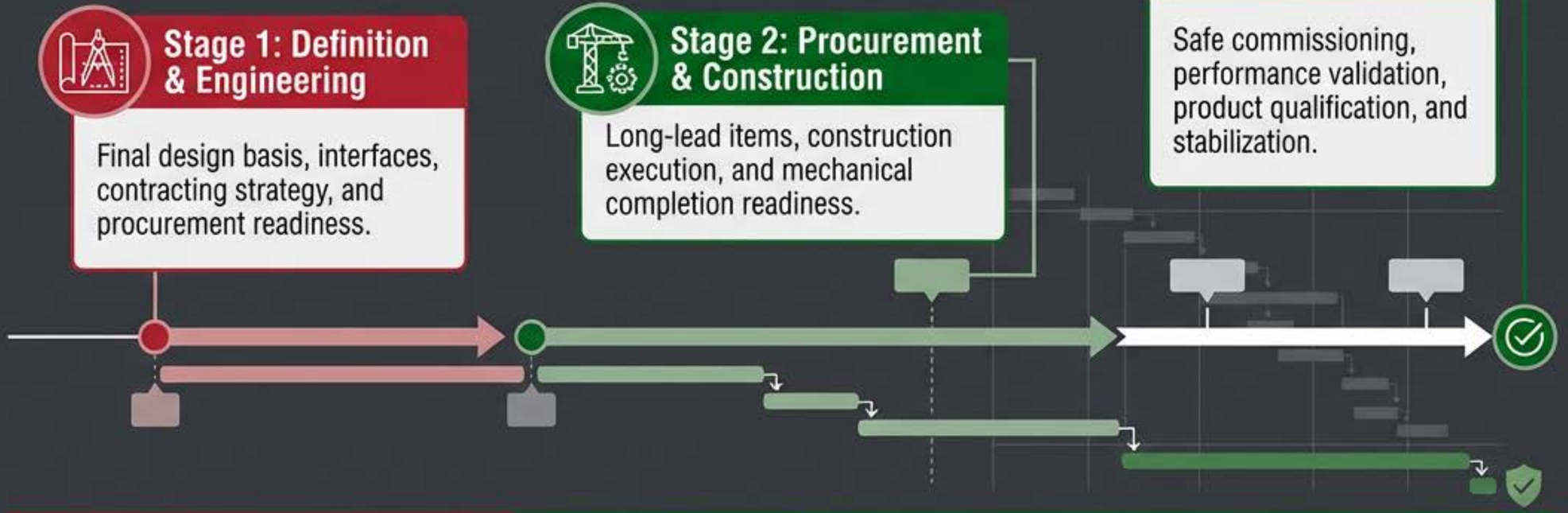
Final design basis, interfaces, contracting strategy, and procurement readiness.

Stage 2: Procurement & Construction

Long-lead items, construction execution, and mechanical completion readiness.

Stage 3: Commissioning & Start-Up

Safe commissioning, performance validation, product qualification, and stabilization.



Governance Commitment: TPACO's project governance will prioritize change control, schedule realism, and quality assurance to protect time and capital outcomes.

Financial Snapshot

The feasibility study provides an indicative economic view under the stated assumptions. These indicators should be interpreted as FS outputs, subject to final contracting, market conditions, and due diligence.

FS Base Case Indicators

- **Fixed investment** (FS basis): **~USD 94.04 million**
- **Total investment** (FS basis): **~USD 97.95 million**
- **NPV** (FS basis): **~USD 96.23 million**
- **Project IRR** (FS basis): **~31.1%**
- **Equity IRR** (FS basis): **~40.71%**
- **Simple payback** (excluding construction): **~2.86 years**
- **Discounted payback** (excluding construction): **~4.22 years**

Revenue basis: sale of Group III base oil and by-products (naphtha/diesel/jet), within the feasibility assumptions.

Governance, Transparency, and Controls

TPACO is committed to building a governance and control environment suitable for an investable industrial asset. The feasibility narrative supports disciplined management practices, including:

Key Governance Practices

- Version-controlled documentation and decision traceability

- Formal change control with cost and schedule impact analysis

- QA/QC gates for engineering integrity and operability

- Transparent reporting to shareholders and key stakeholders

Core Principle: This control environment is essential to minimize execution risk, reduce scope ambiguity, and maintain auditability across the project lifecycle.

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Future Outlook and Platform Potential

TPACO's longer-term outlook is grounded in platform logic: **secure feedstock, refinery integration advantages, premium product focus,** and **disciplined operations.**

- **Expanding the product portfolio and grade diversification** (subject to market and technical validation)
- **Strengthening export capability** through reliable logistics and commercial partnerships
- **Enhancing operational excellence systems** to reach higher benchmarks in safety, reliability, and quality
- Developing **adjacent value-chain linkages** where commercially justified

TPACO's core objective remains stable: build a long-life asset that remains relevant as lubricant specifications tighten and reliability becomes a strategic differentiator.

Key Facts

One-Page Summary

Company:
Tijarat Pishgaman Ofogh Ahdaf (TPACO)

Shareholder:
100% Ahdaf Investment Group

Project:
Group III Base Oil Production Plant

Location:
Abadan, Bream Area – adjacent to Abadan Oil Refinery

Feedstock:
Isorecycle / UCO from Abadan Refinery

Feed basis:
20-year feed MoU (feasibility basis)

Daily feed rate:
2,000 bpd

Annual feed basis:
~100,000 t/y

Products (FS basis):
~85 kt/y Group III base oil + diesel/jet/naphtha by-products

Schedule (FS basis):
~36 months to start-up

Integration advantage:
Hydrogen sourced from refinery systems (FS basis)

Back Cover

TPACO – Tijarat Pishgaman Ofogh Ahdaf

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