



Integrating Technology Across the KNPC Value Chain

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OVERVIEW OF KPC & SUBSIDIARIES



مؤسسة البترول الكويتية
Kuwait Petroleum Corporation
and subsidiaries

Domestic



KUWAIT OIL COMPANY



KUWAIT INTEGRATED PETROLEUM
INDUSTRIES COMPANY



KUWAIT NATIONAL
PETROLEUM COMPANY



KUWAIT OIL TANKER
COMPANY



PETROCHEMICAL
INDUSTRIES COMPANY



KUWAIT GULF OIL
COMPANY

International



KUWAIT FOREIGN
PETROLEUM EXPLORATION
COMPANY



KUWAIT PETROLEUM
INTERNATIONAL




OUR
VISION AND MISSION

*To be a World-Class Refiner Through
Superior Operating and Financial
Performance*

*Add Value to Kuwait Hydrocarbons,
Producing High Quality Fuels to Meet
Local and International Demand*

KNPC VALUE CHAIN

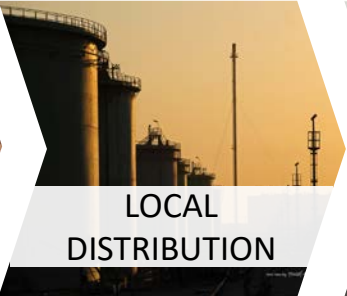
OUR ASSETS



REFINING



GAS PROCESSING









LOCAL
DISTRIBUTION



AVIATION
FUELLING



EXPORT FACILITIES

-  Established in 1960 as the Refining & Local Marketing arm of Kuwait Petroleum Corporation
-  Approximately 6,500 employees
-  Operates two integrated complex Refineries with capacity of 800,000 BPD (post Clean Fuels Project)
-  Manages and Operates five Marine Export facilities
-  Operates LNG Import Facilities
-  Kuwait Aviation Fuelling Company (KAFCO)

KEY CHALLENGES

Key Challenges

⇒ Produce and refine **unconventional oil**

⇒ **Offshore Oil and Gas** Production

⇒ Grow and produce **non associated gas**

⇒ Maximize productivity of **mature reservoirs**

⇒ Increase **domestic & International refining capacity** with complex refining configurations & **petrochemical integration**

⇒ Increase production of **heavy oil, EOR and JLO** and ensure **surface facility integrity** to handle heavy crude

⇒ Essential need for R&D for **products customization**

⇒ Manage **operational complexity**

⇒ Meet **sustainability challenges** in all aspects of the whole oil & gas chain

⇒ Pursue aggressive **reserve replacement**

⇒ Manage HSE risks with **aging infrastructure**

⇒ Meet stringent **international product specification**

⇒ Segregate **crude streams**

⇒ Minimize **production/operation cost** and Operate in a continuously '**safe**' and '**cleaner**' environment

TECHNOLOGY INTEGRATION WITHIN KNPC



1. REFINING TECHNOLOGIES



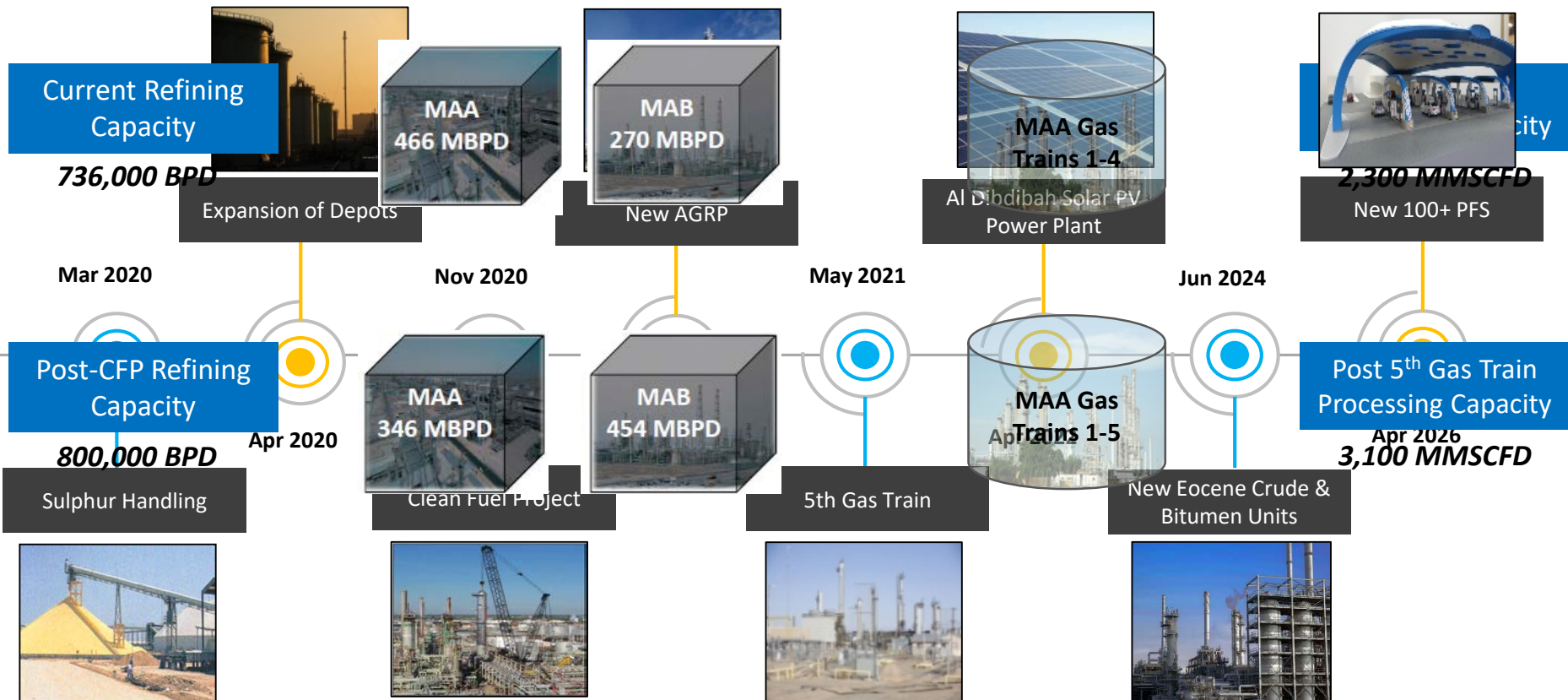
2. OPTIMIZATION SOLUTIONS



3. NEW AGE TECHNOLOGIES

1. REFINING TECHNOLOGIES

KNPC has deployed the latest technologies across the spectrum of Refining & Gas Processing to meet the most stringent specifications



2.OPTIMIZATION SOLUTIONS

1

Planning & Scheduling

Short/mid/long-term planning for feed optimization

2

Refinery Operations & Modeling

Tools to ensure Units performance at the optimum

3

Operations Performance Management

Monitor performance of the company from a financial perspective

4

Infrastructure Integration Framework

Support real-time decision making through online database

5

Production Accounting

Accurately define actual production from Unit/Refinery

3. NEW AGE TECHNOLOGIES

Technology innovation at KNPC is embedded within core and corporate Departments to deliver competitive advantage for the Company

TECHNOLOGY DEPLOYMENT

Scout for the latest technological advancements that add value to KNPC

DIGITALIZATION

Integrate IT with OT to enhance refining performance

INNOVATION

Promote innovation in core and non-core areas

RESEARCH

Facilitate research supporting refining operations

GREEN INITIATIVES

Grow KNPC business in a sustainable manner

THANK YOU



*KNPC's commitment towards development of **Human Capital** is vital for successful implementation of technology integration across our assets*