PROCESSING AND SALE OF PETROLEUM PRODUCTS

Direction: Oil and Gas

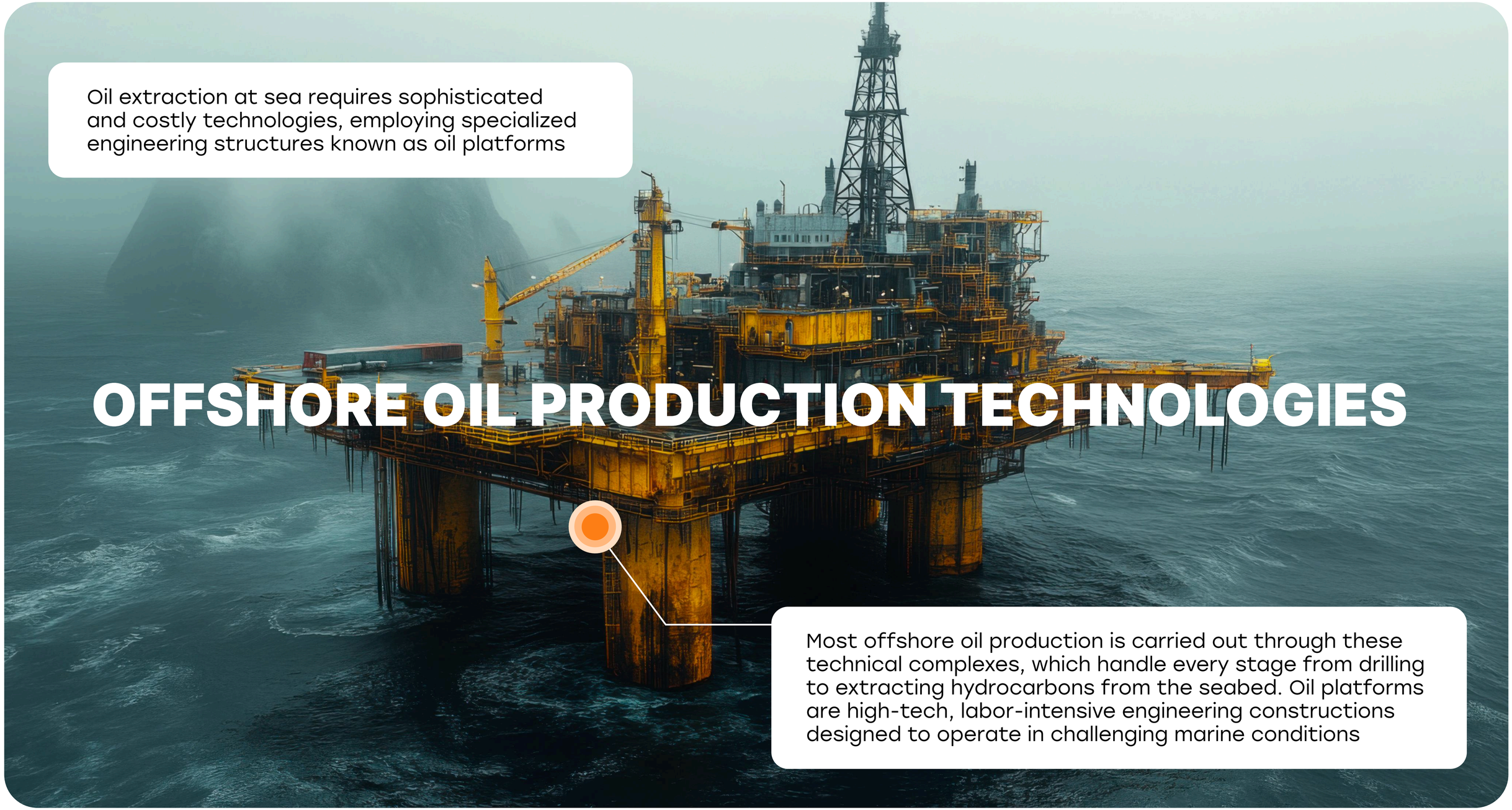
OFFSHORE RESOURCES:

FUTURE PERSPECTIVES

Today, the most promising opportunities for discovering large oil fields lie on the continental shelf, due to the gradual depletion of onshore oil reserves. Offshore field development began relatively recently, yet these sites already account for about 30–35% of global oil production. According to experts, proven offshore oil reserves amount to 280 billion barrels

A shelf is the coastal underwater zone of a continent, adjacent to the land. Its boundary runs along the shoreline of a sea or ocean. Under the 1982 UN Convention on the Law of the Sea, coastal states have exclusive rights to explore and exploit seabed resources within 200 nautical miles (roughly 370 km) of their coastline

The total area of the world’s continental shelves is about 32 million square kilometers. The largest one lies along the northern edge of Eurasia and extends up to 1,500 kilometers in width



Oil extraction at sea requires sophisticated and costly technologies, employing specialized engineering structures known as oil platforms

OFFSHORE OIL PRODUCTION TECHNOLOGIES

Most offshore oil production is carried out through these technical complexes, which handle every stage from drilling to extracting hydrocarbons from the seabed. Oil platforms are high-tech, labor-intensive engineering constructions designed to operate in challenging marine conditions

TYPES OF OFFSHORE PLATFORMS

Offshore oil production platforms are classified as follows:

Fixed platforms

01

Compliant (free-standing) platforms

02

Semisubmersible (exploratory, drilling, and production) platforms

03

Jack-up rigs

04

Tension-leg platforms

05

Floating storage units

06

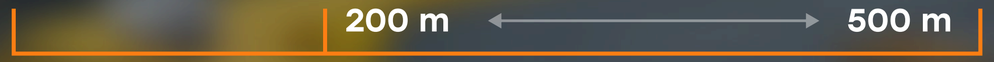
Modern technology allows for drilling deviated (directional) wells if a field is located near the coast

When needed, advanced systems enable remote control of drilling operations, providing high accuracy. Operators can manage equipment across several kilometers by transmitting commands remotely

DRILLING DEPTHS AND METHODS

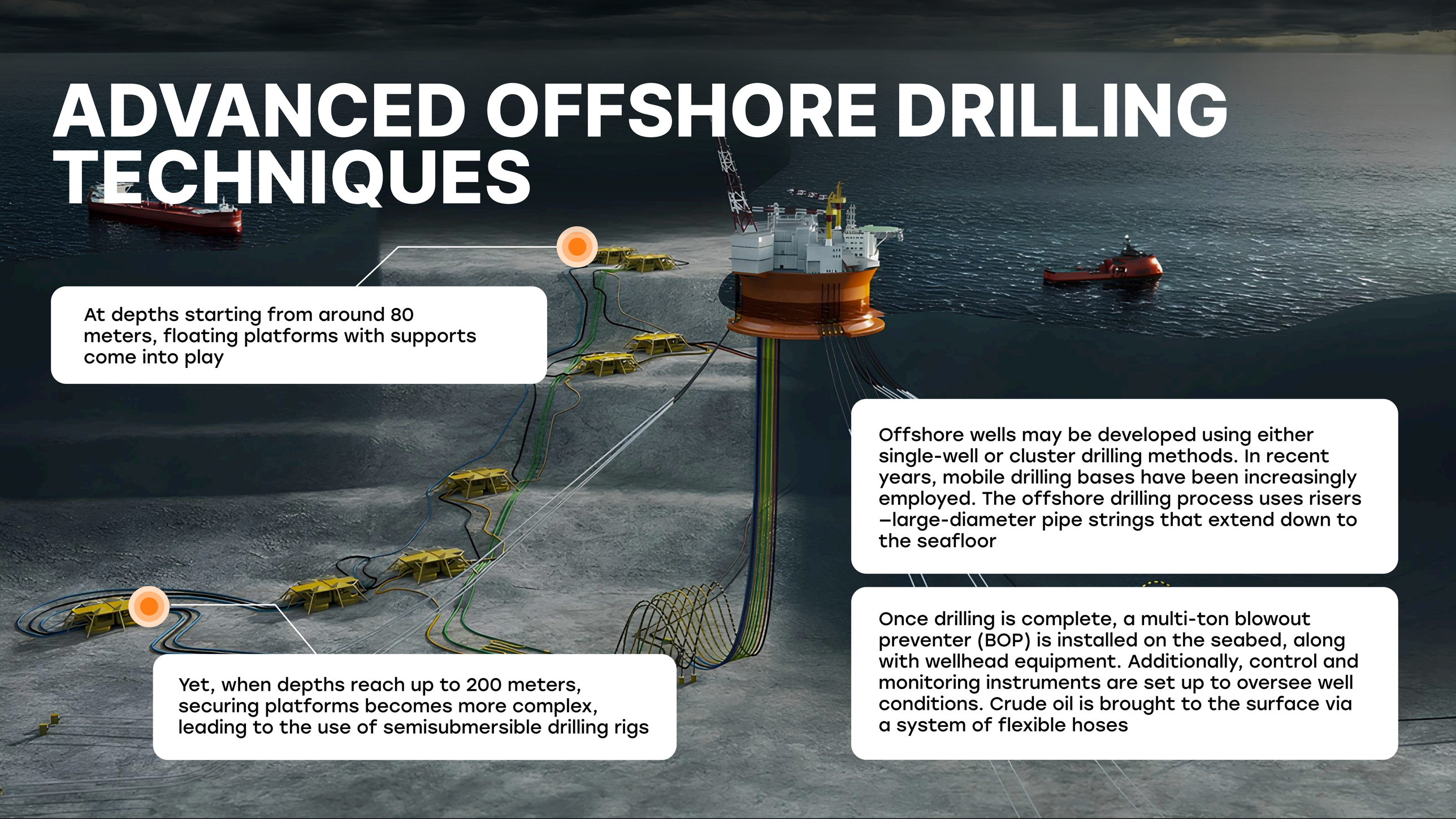
In shallow waters, reinforced foundations are often built—essentially artificial islands—where drilling equipment is installed. Sometimes, a production site is created using dikes, allowing water to be pumped out to form a work area

Offshore shelf drilling typically takes place at depths up to 200 meters, and in some cases can reach 500 meters. The choice of drilling technology depends on how deep the productive layer lies and the distance to shore



When the field is located hundreds of kilometers from the coast, floating oil platforms become essential. Fixed platforms are the simplest structurally but only suitable for shallower depths of several dozen meters, where such a platform can be securely anchored

ADVANCED OFFSHORE DRILLING TECHNIQUES



At depths starting from around 80 meters, floating platforms with supports come into play

Yet, when depths reach up to 200 meters, securing platforms becomes more complex, leading to the use of semisubmersible drilling rigs

Offshore wells may be developed using either single-well or cluster drilling methods. In recent years, mobile drilling bases have been increasingly employed. The offshore drilling process uses risers –large-diameter pipe strings that extend down to the seafloor

Once drilling is complete, a multi-ton blowout preventer (BOP) is installed on the seabed, along with wellhead equipment. Additionally, control and monitoring instruments are set up to oversee well conditions. Crude oil is brought to the surface via a system of flexible hoses

Del Mar Energy Inc. extracts oil on the continental shelf using modern technology and innovative methods that deliver high efficiency while minimizing environmental impact

Depending on the depth and location of a field, the company employs various platform types, including fixed, semisubmersible, and floating drilling rigs. For deepwater operations, cutting-edge remote drilling control technologies enable highly accurate drilling and well monitoring

In shallower areas, Del Mar Energy constructs reinforced bases or artificial islands to support equipment. In waters deeper than 200 meters, semisubmersible platforms and flexible oil-lifting systems are widely used

The company actively uses directional drilling techniques and riser systems to extract hydrocarbons from the seabed. Once drilling is complete, blowout preventers and monitoring instruments are installed to ensure safe and stable production

Additionally, Del Mar Energy implements energy-saving technologies and waste management systems to reduce environmental risks and support sustainable development in extraction zones

3D MODELING FOR ACCURATE EXPLORATION AND ANALYSIS

Del Mar Energy Inc. extensively applies 3D modeling technologies to explore and analyze continental shelf fields. These advanced approaches boost geological survey accuracy, optimize production, and minimize environmental risks

3D MODELING APPLICATIONS:

Geological Modeling: Using seismic data, the company creates high-resolution 3D models of underwater structures. This identifies productive layers, estimates hydrocarbon volumes, and reduces errors in drilling planning

Hydrodynamic Analysis: 3D models simulate how reservoir fluids—oil and gas—behave during extraction. This helps determine optimal drilling points, predict field depletion, and avoid issues like water encroachment in wells

Engineering Solutions Assessment: 3D technologies guide the design and placement of drilling platforms and other offshore infrastructure, lowering construction costs and ensuring operational safety

Monitoring and Control: After field development begins, 3D models are updated in real time with new data. This enables rapid adjustments in production to prevent emergencies

ADVANTAGES OF OFFSHORE EXPLORATION AND INNOVATIVE APPROACHES

BENEFITS FOR SHELF EXPLORATION:

Time and Resource Savings: 3D models help avoid unnecessary drilling in non-viable areas

Reduced Environmental Impact: Precise planning minimizes harm to marine ecosystems

Enhanced Safety: Modeling technologies help identify potential risks related to unstable seabeds or other factors in advance

INNOVATIVE METHODS:

Del Mar Energy integrates AI and machine learning into its 3D modeling systems to automate big data analysis. In partnership with other companies, it also develops virtual reality software for staff training and engineering project reviews

These technologies make exploration and field development more accurate, safer, and more sustainable—an essential advantage in the challenging conditions of offshore operations

OFFSHORE PLATFORM AUTONOMY AND LOGISTICS

A key feature of offshore drilling rigs is their self-sufficiency. These platforms are equipped with powerful generators and seawater desalination systems for autonomous operation. On remote platforms, fuel, freshwater, and other essential resources are replenished by support vessels

Marine transport also plays a crucial role in delivering drilling equipment to the extraction site, as well as supporting rescue operations or firefighting efforts. The extracted raw materials are moved via subsea pipelines, tanker fleets, or floating storage units

Del Mar Energy maintains its own fleet and actively expands its logistics capabilities, enabling efficient support for offshore platforms and oil transportation

STABILIZATION AND ADVANCED DRILLING ON MODERN PLATFORMS

Modern offshore platforms remain anchored in a single position for years, thanks to piles, anchors, and cutting-edge positioning technologies that handle changing marine weather conditions

Subsea robots monitor and control the drilling equipment that breaks through the seabed. The drill consists of 30-meter steel pipe segments. State-of-the-art drilling systems offer high performance. For instance, the EVA-4000 rig can include up to 300 segments, allowing drilling depths of up to 9.5 kilometer

The platform construction process starts by delivering the floating base to the extraction site. The base is then flooded, creating a stable “foundation” on which all necessary structural components are installed

CHALLENGES VS. REWARDS IN OFFSHORE OIL EXTRACTION

It’s evident that developing offshore fields is extremely complex from a technological standpoint, even without delving into technical details. **This raises the question: “Is such expensive oil production worthwhile?” The answer is clear—yes**

Key arguments for offshore oil extraction include the growing demand for petroleum products and the gradual depletion of onshore fields. These factors outweigh the costs and technical challenges, as resources remain in high demand and investments in their extraction prove profitable

Despite the technical hurdles, substantial labor, and capital expenditures, oil harvested from seas and oceans is already a competitive product, holding a stable position in the global hydrocarbons market

LEAN MANAGEMENT AT DEL MAR ENERGY INC

Lean Management is the methodology Del Mar Energy Inc employs to enhance efficiency in business processes by eliminating all forms of waste

resources, time, effort

and creating value for the client. The main goal of Lean Management is to maximize resource utilization, improve product or service quality, and reduce costs

A vital part of Lean involves fostering a culture where employee ideas are valued, efforts are supported, and opportunities for professional growth are provided

Lean Management is applied across various industries, including manufacturing, construction, healthcare, IT, and even government sectors. This universal approach helps organizations adapt to change and stay competitive in the market

CRUDE OIL PROCESSING

Crude oil processing is the technological transformation of raw petroleum into various products for use in industry, transportation, and other sectors

These products include gasoline, diesel fuel, kerosene, fuel oil, bitumen, and chemical components for producing plastics and other materials

STAGES OF OIL REFINING: ATMOSPHERIC DISTILLATION

1. Primary refining (atmospheric distillation)

01 Crude oil is heated in distillation columns to about 350–400°C (662–752°F)

02 Light fractions, such as gasoline, kerosene, and diesel fuel, evaporate and condense at specific temperatures

03 Heavier fractions (fuel oil and tar) remain at the bottom of the column

STAGES OF OIL REFINING: VACUUM DISTILLATION & TREATING

VACUUM DISTILLATION

- Heavy residues (fuel oil) undergo additional processing in a vacuum to prevent thermal decomposition
- Products like vacuum gas oil and bitumen are obtained

UPGRADING (TREATING)

- Impurities such as sulfur, nitrogen, and metals are removed
- Processes include hydrodesulfurization, mercaptan removal, and others

STAGES OF OIL REFINING: CATALYTIC PROCESSES

CRACKING: Breaking down long-chain hydrocarbons into shorter ones, increasing gasoline and other light product yields

HYDROCRACKING: Similar to cracking but performed in the presence of hydrogen to improve product quality

REFORMING: Converting hydrocarbons to boost gasoline's octane rating

ALKYLATION: Creating high-octane components from lightweight hydrocarbons

REFINED PETROLEUM PRODUCTS

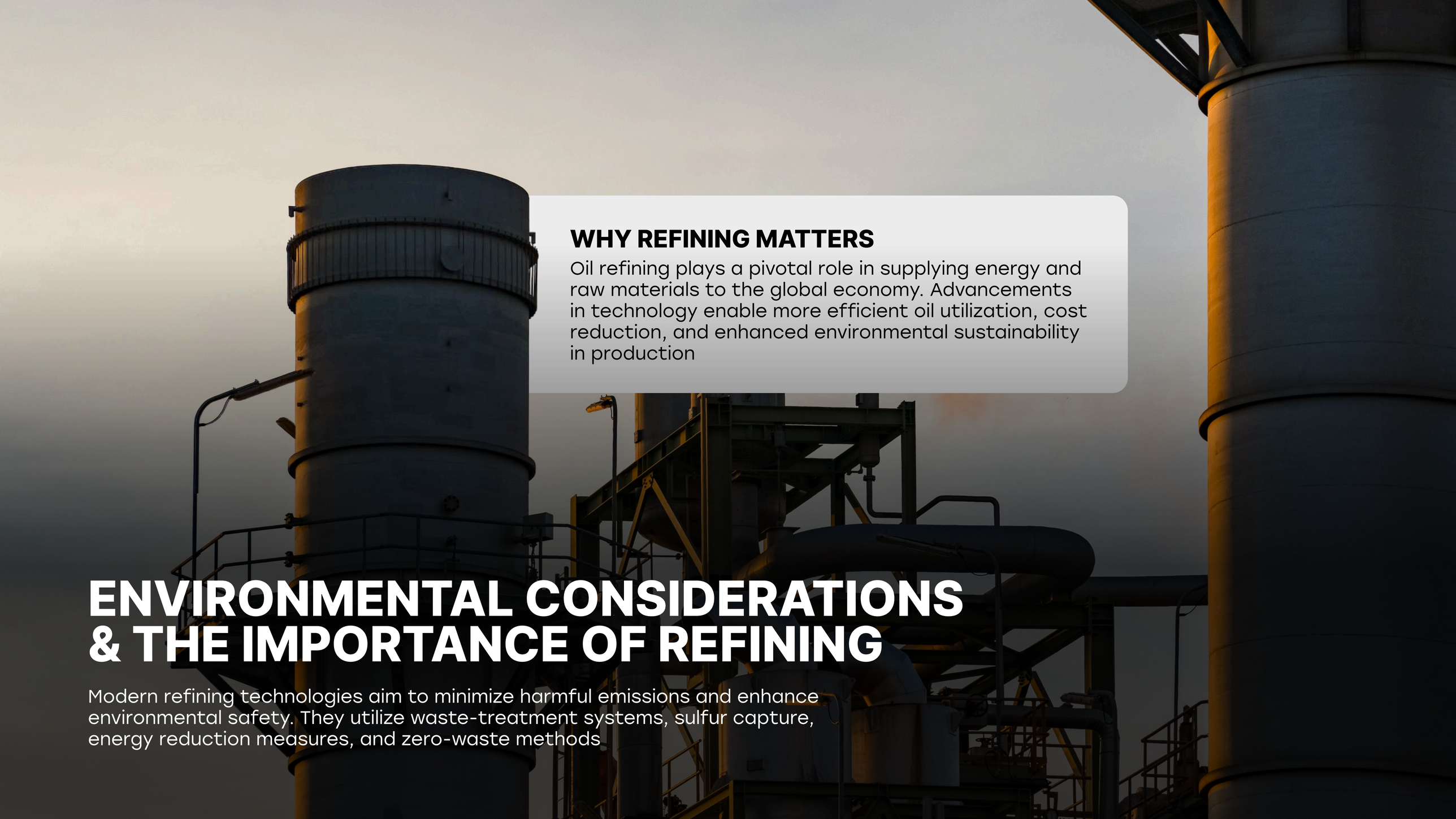
Fuel Products: Gasoline, diesel fuel, kerosene (including jet fuel), and fuel oil

Petrochemical Feedstocks: Propylene, ethylene, and butadiene for plastics, synthetic fibers, and rubber

Lubricants: Engine, industrial, and transmission oils

Specialty Products: Bitumen for road construction, sulfur and sulfur compounds, wax, and paraffin

Gases: Propane, butane (liquefied petroleum gas, or LPG)



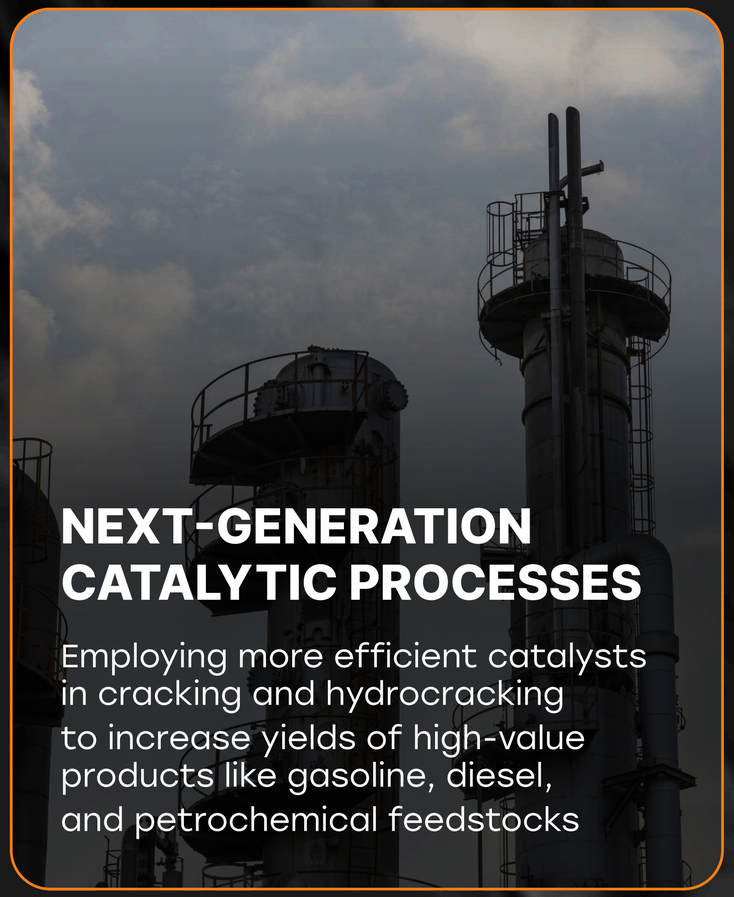
WHY REFINING MATTERS

Oil refining plays a pivotal role in supplying energy and raw materials to the global economy. Advancements in technology enable more efficient oil utilization, cost reduction, and enhanced environmental sustainability in production

ENVIRONMENTAL CONSIDERATIONS & THE IMPORTANCE OF REFINING

Modern refining technologies aim to minimize harmful emissions and enhance environmental safety. They utilize waste-treatment systems, sulfur capture, energy reduction measures, and zero-waste methods

DEL MAR ENERGY INC’S MODERN REFINING TECHNOLOGIES



NEXT-GENERATION CATALYTIC PROCESSES

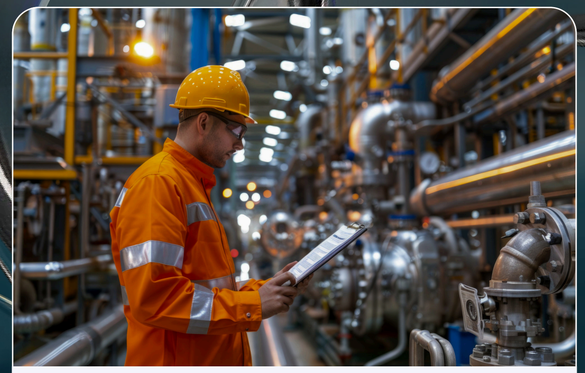
Employing more efficient catalysts in cracking and hydrocracking to increase yields of high-value products like gasoline, diesel, and petrochemical feedstocks

HIGH-LEVEL HYDRODESULFURIZATION

Removing sulfur and other impurities to produce cleaner fuels that meet stringent environmental regulations

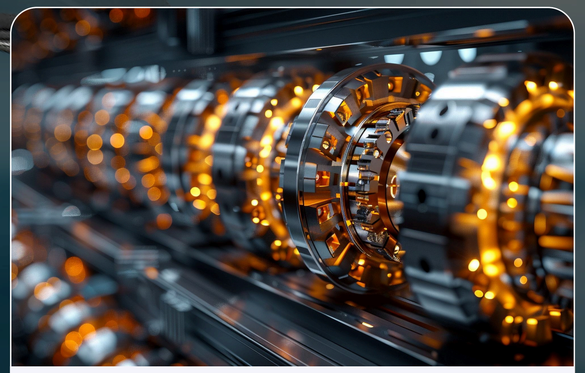
ENERGY-SAVING TECHNOLOGIES

Implementing heat recovery systems and optimizing energy consumption to lower production costs



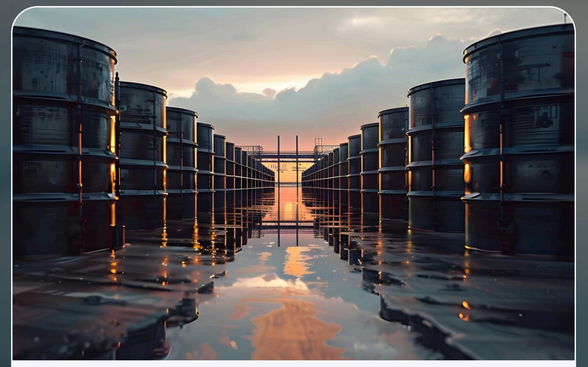
PRODUCTION PROCESS OPTIMIZATION

Utilizing Big Data and AI-driven systems for real-time monitoring and control of refining units, minimizing downtime and boosting equipment efficiency



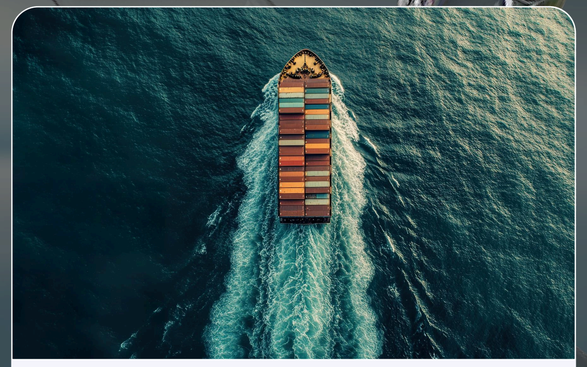
EQUIPMENT MODERNIZATION

Replacing outdated installations with modern ones that require fewer operating expenses and offer higher productivity



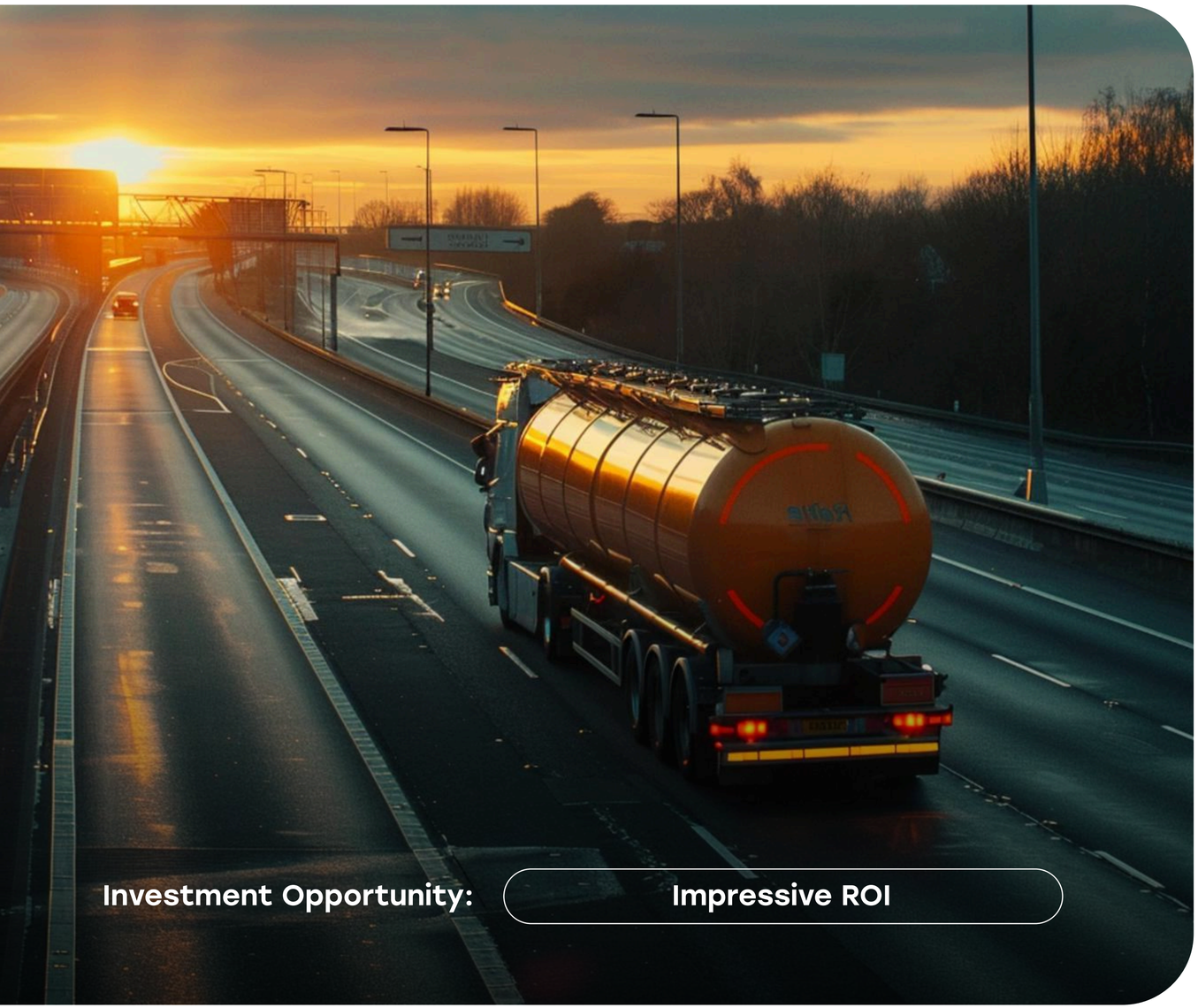
SUPPLY CHAIN OPTIMIZATION

Implementing a mixed storage and distribution system to reduce logistics costs



IN-HOUSE TRANSPORT

Developing and using the company’s own tanker fleet and pipeline systems for product delivery



Investment Opportunity: Impressive ROI

Del Mar Energy Inc.

By opening a deposit with the minimum allowable amount of $50,000, in 212 days your balance will reach $140,980

Term: 212 days

ROI: 267.862%

LEADERSHIP TEAM

Founder/CEO

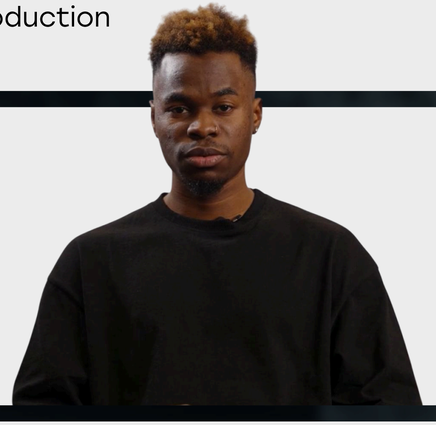
MICHAEL LATHAM

Michael Latham is the founder and CEO of Del Mar Energy. He established the holding company in 2002 in Texas, successfully building and growing industrial sectors

NICK KAUFMAN

COO (Chief Operating Officer)

Nick has served as COO since 2018. A Texas native and graduate of the University of Massachusetts, Nick initially worked in law. He first encountered Del Mar Energy in 2013 and officially became a partner in 2018. Nick introduced many of the modernized technologies now used in production



CIO (Chief Information Officer)

STEFAN RUSSO

Stefan started his internship at Del Mar Energy in 2016. In less than five years, he advanced from intern to company director

THOMAS LIEBERMAN

CMO (Chief Marketing Officer)

Born in 1984 in Nevada, Thomas studied at a local university before moving to New York in 2006 to work in marketing and public relations. He began collaborating with Del Mar Energy in 2011. Prior to joining the company, Thomas worked on promoting brands such as P&G, Gillette, and General Motors