



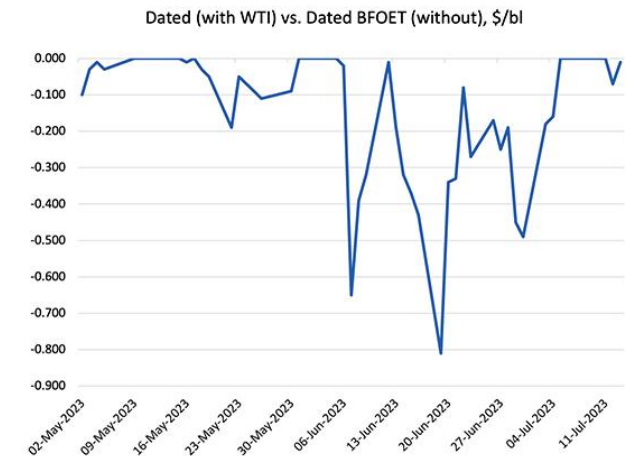
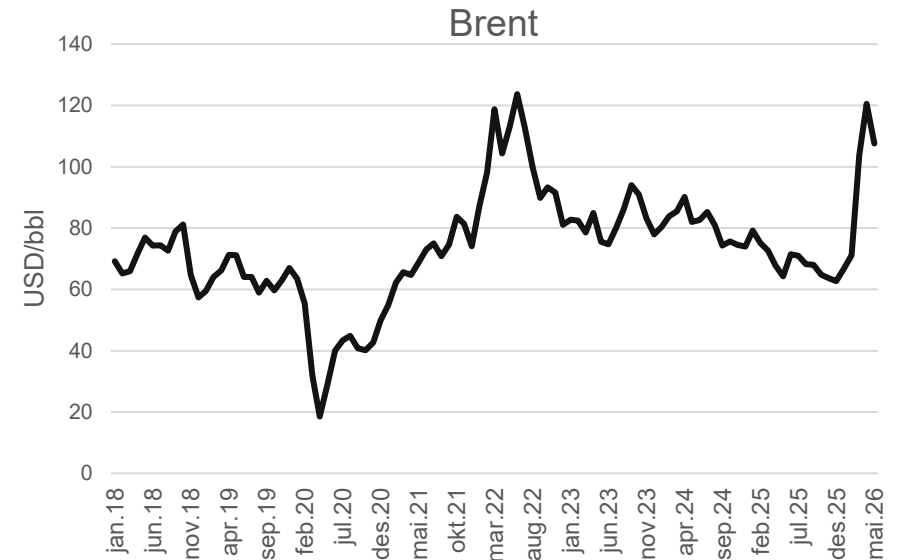
Oil sales and operations

Sarah Bowden
Scandic Stavanger Airport, 9 June 2026

Pricing

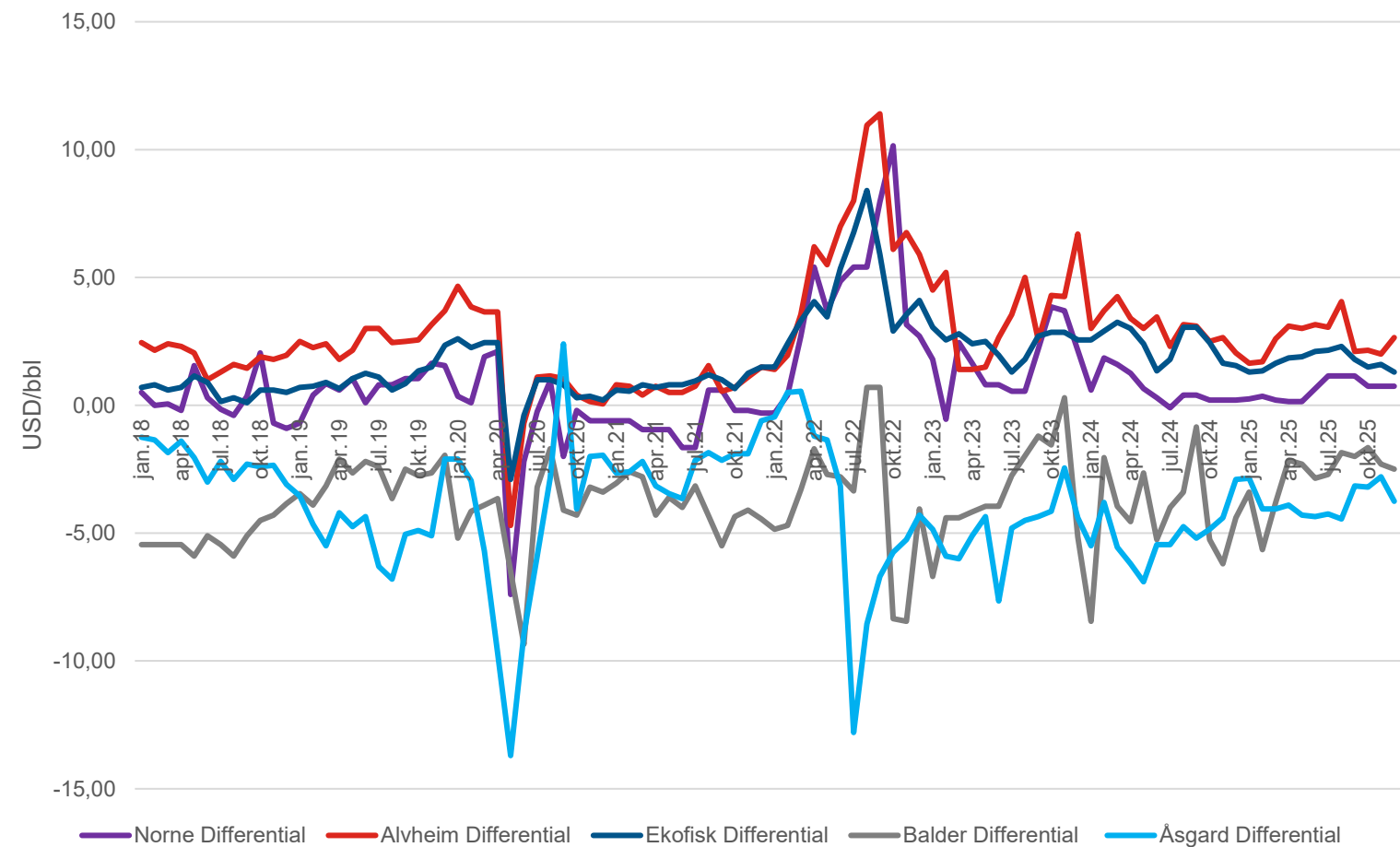
Dated Brent

- Dated Brent is considered as the world's leading benchmark - used to price ~ 80% of global oil production.
- It was established in the 1980s and became an official benchmark for physical cargoes of Brent-grade quality with specific loading dates in the North Sea. As production from the North Sea increased, oil majors established a 15-day forward contract, paving the way for the physical Dated Brent benchmark used today.
- In 1988, the physical market then became the underlying foundation for the ICE Brent futures contract.
- As Brent production declined, from 2002 similar grades were added to the basket (BFOET). Due to the decline in North Sea production, the most recent addition, in 2023 was WTI.
- Freight from Rotterdam to North Sea is deducted from the WTI CIF Rotterdam price, to make it comparable to the North Sea grades.
- The lowest priced grade of the basket sets the daily Dated Brent price. Due to WTI being the cheapest grade (even after freight), there has been an overall reduction in the benchmark.



Source: www.argusmedia.com

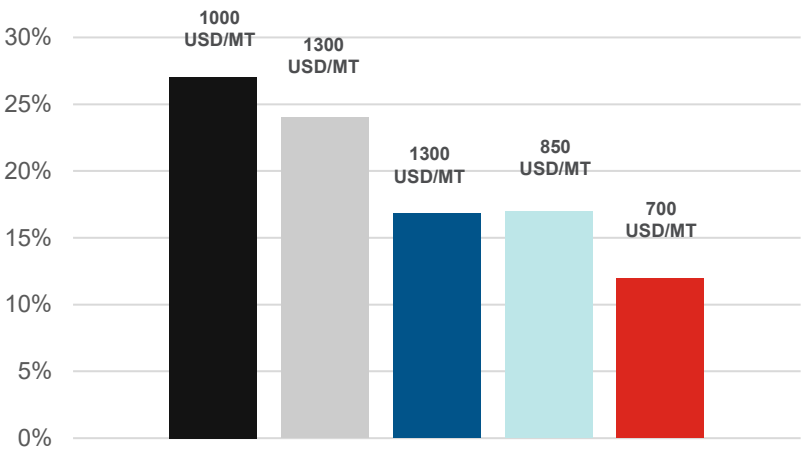
Quality Differentials



Norm Price Differentials 4Q 2025 (\$/bbl)			
	October	November	December
ALVHEIM	2.15	2.00	2.65
BALDER	-1.65	-2.30	-2.50
DRAUGEN	-1.50		
EKOFISK	1.50	1.60	1.30
GRANE	1.45	0.95	0.50
GUDRUN	-5.15	-5.60	-5.75
GULLFAKS	0.15	1.00	1.00
HEIDRUN	2.00	-0.50	0.25
JOHAN SVERDI	-0.30	-1.25	-0.75
MARTIN LINGE	0.80	0.45	2.45
NJORD	-1.70	-1.55	-2.75
NORNE		0.75	0.75
OSEBERG	1.70	2.10	1.70
SKARV		-0.80	
STATFJORD	-0.20	-2.45	-0.30
TROLL	1.75	2.25	2.05
YME	-0.20	-0.70	-1.05
ÅSGARD	-3.20	-2.80	-3.75

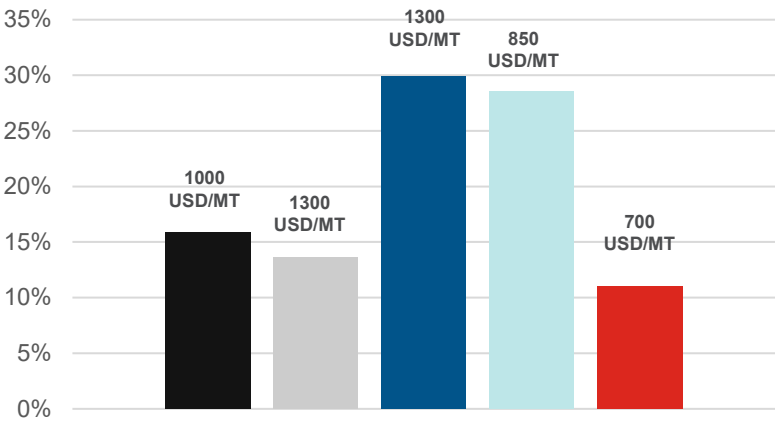
Yields

Ekofisk Yields % volume



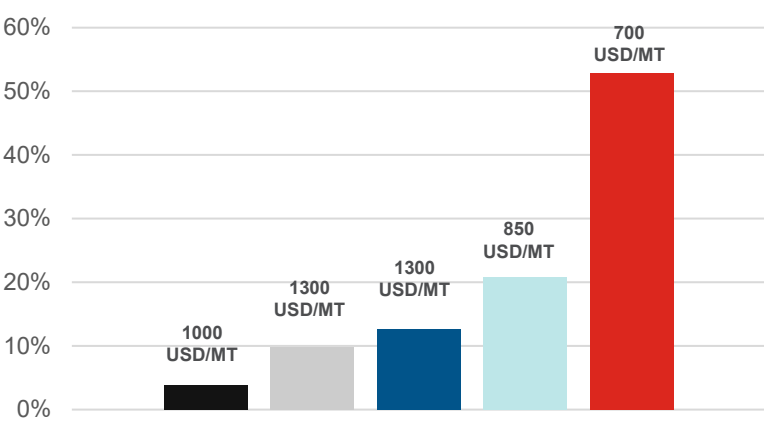
Gravity °API	38.9
Sulphur % wrt	0.207 (sweet)
Tan mgKOH/g	0.10

Alvheim Yields % volume



Gravity °API	34.5
Sulphur % wrt	0.183 (sweet)
Tan mgKOH/g	0.32

Balder Yields % volume



Gravity °API	24.9
Sulphur % wrt	0.61 (sour)
Tan mgKOH/g	1.50 (high acid)

- Naphtha
- Middle Distilates
- Heavy Fuel Oil/Residue
- Kerosene
- Vacuum Gas Oils

Market

Global Refining Capacity

USA:

- Historically, refineries were built to process light/sweet domestic production.
- From 1970s domestic production dropped and refiners looked at buying heavier, cheaper crudes from Venezuela, Mexico and Canada.
- Large investments in upgrades, including residue conversion (coking) to process the heavy ends into valuable light products.
- Since the shale boom in 2008, the light/sweet crude is blended for refining or exported.



Middle East:

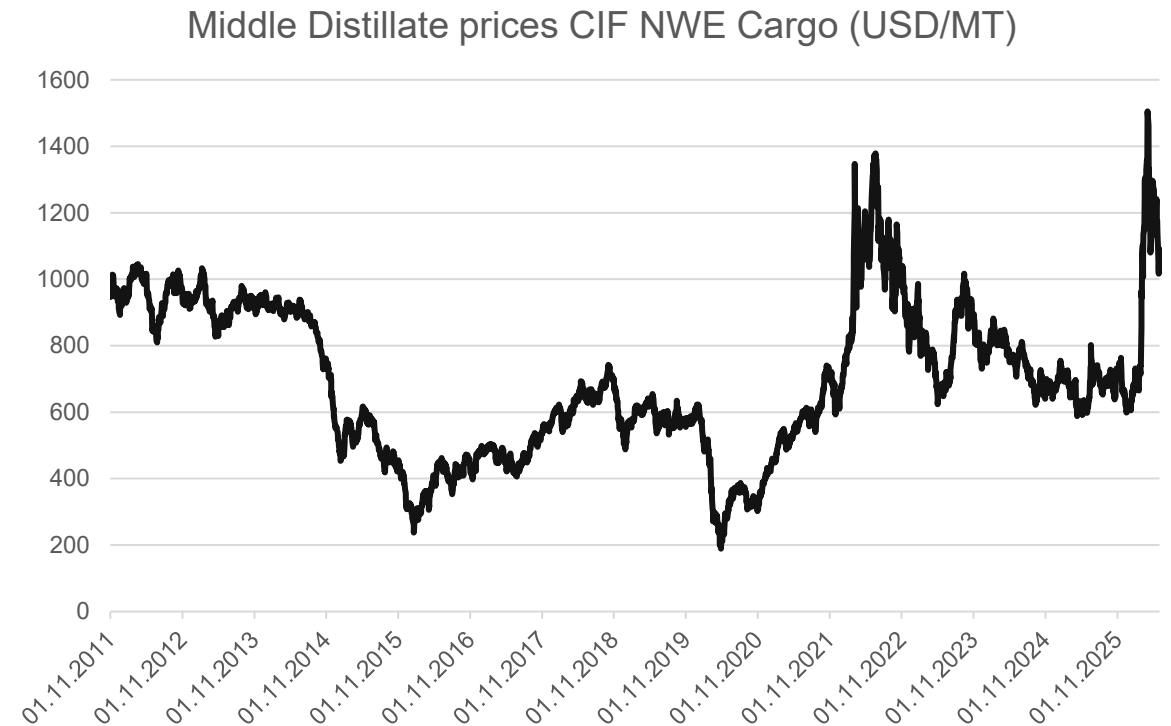
- For many decades, heavy/sour domestic crude was exported and not refined locally, but from 1990s there was a drive to build large modern refineries to process and maximise value from domestic crude.
- Being more modern, the most advanced technology was incorporated from the start.

Europe:

- Originally set up for Middle Eastern crude as a feedstock.
- After North Sea production increased, refineries were updated to process lighter domestic crude for gasoline, diesel and jet fuel, using hydrocracking and desulphurisation.
- Compared to US and Middle East, Europe has fallen behind in terms of feedstock flexibility and lack of residue conversion. Not to mention a 30% capacity reduction since 2000 due to tighter regulations and higher energy costs.

Middle Distillates in Europe

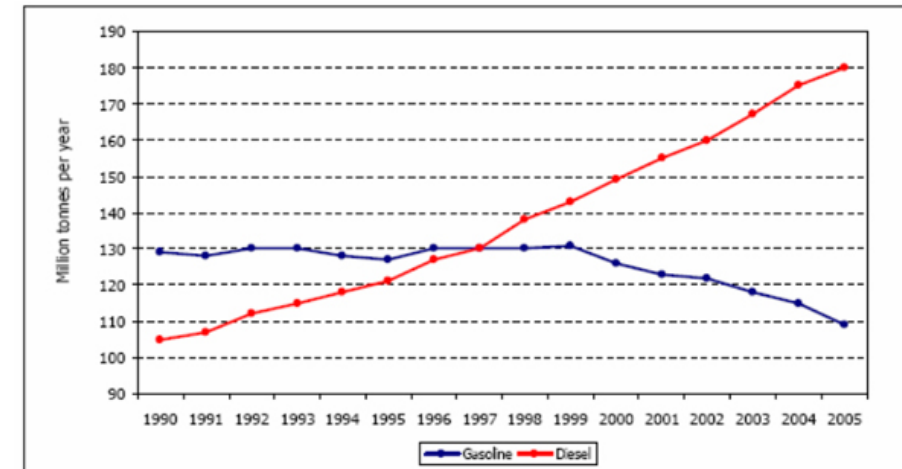
- **Prices:** Middle distillate prices (including jet fuel and diesel) in Europe are trading at near multi-year highs due to geopolitical disruptions in the Middle East and tight global inventories.
- **Supply:** Stocks have hovered around 34 days of demand, sitting near the bottom of historical ranges as Europe copes with a steep drop-off in Middle Eastern imports.
- **Strait of Hormuz Disruptions:** Europe receives over a quarter of its middle distillate imports from the Middle East and India.
- **Loss of Russian Supplies:** Russia supplied 50% of imports. Following sanctions, European buyers were forced to source barrels further away, increasing transit times and costs.



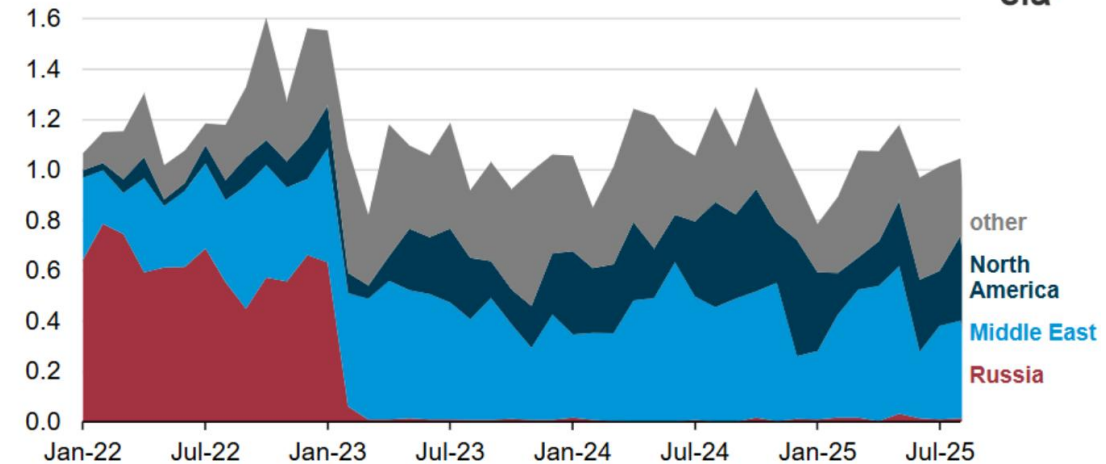
Europe and Diesel

- Currently Europe consumes ~230 million metric tons annually, of this about 30% is imported.
- Historically, demand was driven by gasoline and jet fuel. In 1990, there was a massive shift towards diesel vehicles, for both personal and commercial use.
- Even with increased diesel production, Europe became structurally short but became a net exporter of gasoline.
- 50% of diesel imports came from Russia, as well as significant imports of Urals crude, which has a high middle distillate yield.
- Middle East and India replaced Russia following the sanctions.
- The closure of the Strait of Hormuz has meant Europe has again lost key suppliers. Diesel cargoes initially bound for Europe are being redirected to Asian destinations as buyers there bid aggressively.
- Currently, Europe is heavily relying on the USA, West Africa, and Saudi Arabia's Red Sea ports for diesel to offset the gap.

Diesel vs gasoline demand in Europe



Maritime diesel and gasoil imports into Europe (January 2022–August 2025)
million barrels per day



Data source: Vortexa Analytics

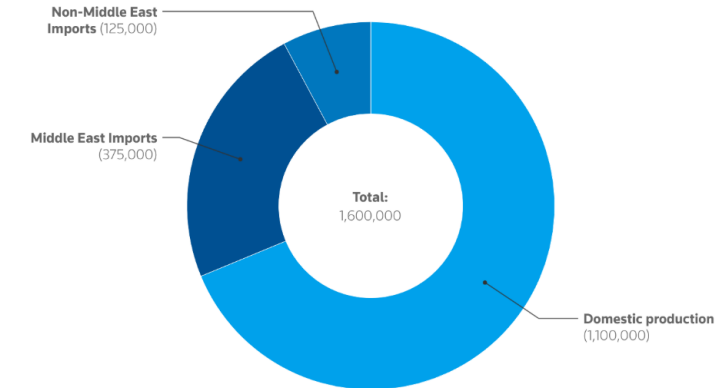
Note: Europe includes countries in the European Union, Norway, Switzerland, and the United Kingdom.

Europe and Jet fuel

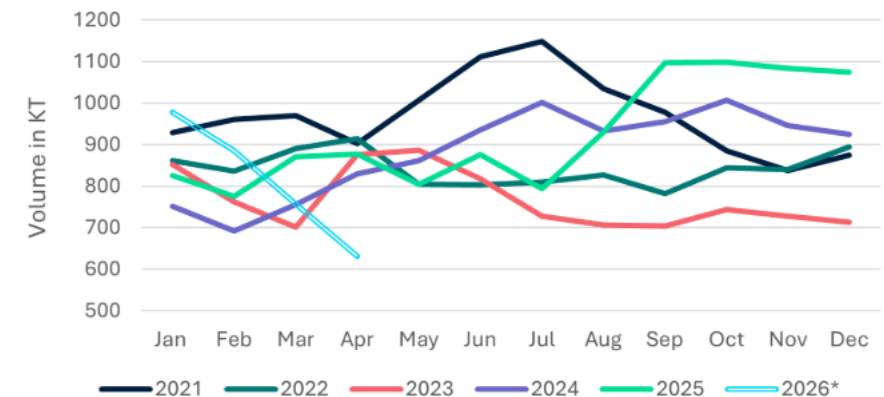
- Currently Europe consumes 74 million metric tonnes/year. Of this, ~ 30% is imported.
- About 60% of imports come from the Middle East
- Globally, the closure of the Strait of Hormuz has led to new and longer jet fuel routes (i.e. Louisiana to Melbourne!), driving up prices across the globe.
- Jet fuel cargoes bound for Europe have been redirected to Singapore and other Asian destinations as buyers there bid aggressively.
- Currently, Europe is heavily relying on the USA and Nigeria for jet fuel to offset the gap.
- The EU has temporarily modified regulation to allow “Jet A” specification from USA, previously only allowing Jet A-1.

OECD Europe: Jet Fuel Supply

Europe refines most of its jet fuel domestically, but imports a significant amount from the Middle East and a smaller chunk from non-Middle East markets. The Iran war has hit Middle East supply.



Jet Fuel inventory levels in ARA hit new lows



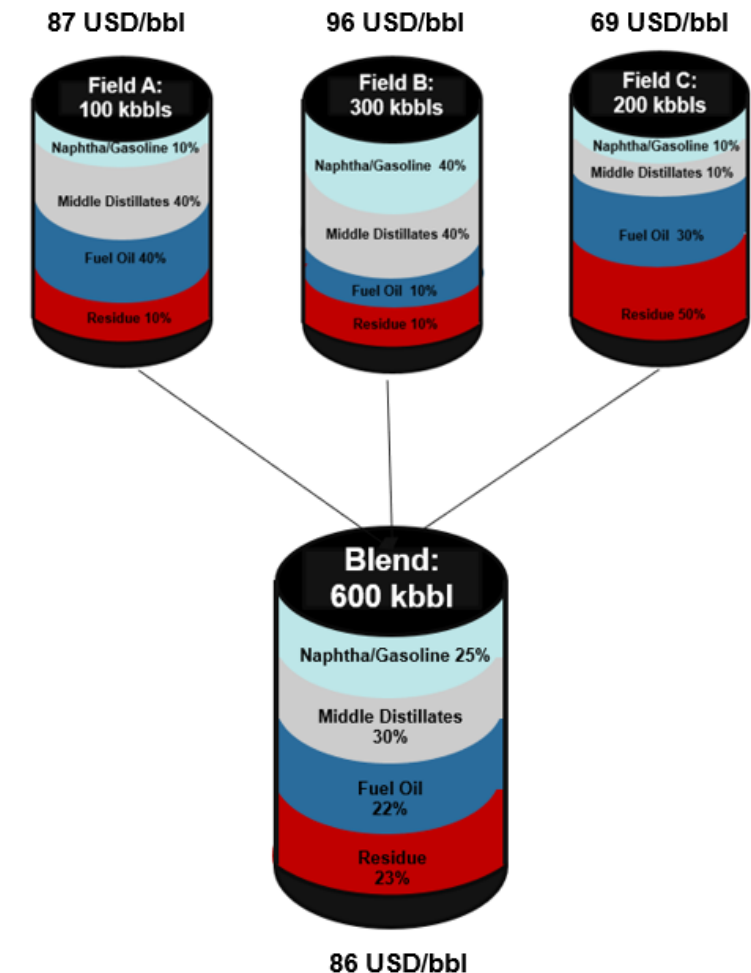
* April values updated as of 24 April

Crude Oil Value Adjustment (COVA)

- A blend is composed of different crude oils (from different fields) with varying refinery yields that make up the blend.
- All field owners that deliver oil into a blend are lifting and selling the blend to the market. All field owners get the same market value for their crude oil.
- To ensure field owners receive the value of their own oil, a Crude Oil Value Adjustment (COVA) is made.

Process:

- **Sampling:** Sample each field stream.
- **Refinery yields:** For each field stream blend, determine the refinery yields (percentages) of each product (Naphtha, Middle Distillates, Fuel Oil, Residue).
- **Refinery value:** Calculate refinery value of fields (based on product prices) and blend. Correct for sulphur and other detrimental contents.
- **COVA price:** Field refinery value minus blend refinery value.
- **Adjustment:** Field owners are credited or debited based on total refinery value of field versus the blend and the crude oil volume in the period. Adjustments can be made in kind or in cash.



Adjustment	Field A	Field B	Field C	Blend
Value Adjustment USD	142,600	3,160,200	- 3,302,800	0
Volume Adjustment bbl	1,662	36,836	-38,499	0

Operations

Incoterms

What are Incoterms?

- Incoterm “international commercial terms”, written by the International Chamber of Commerce, clarify the responsibilities of the buyer and seller in international and domestic trade

Free on Board (FOB):

- Risk and title to the Cargo shall pass from the Seller to the Buyer as the Cargo passes the first permanent manifold flange of the **Buyer's Vessel** at the **Port of Loading**

Cost and Freight (CFR):

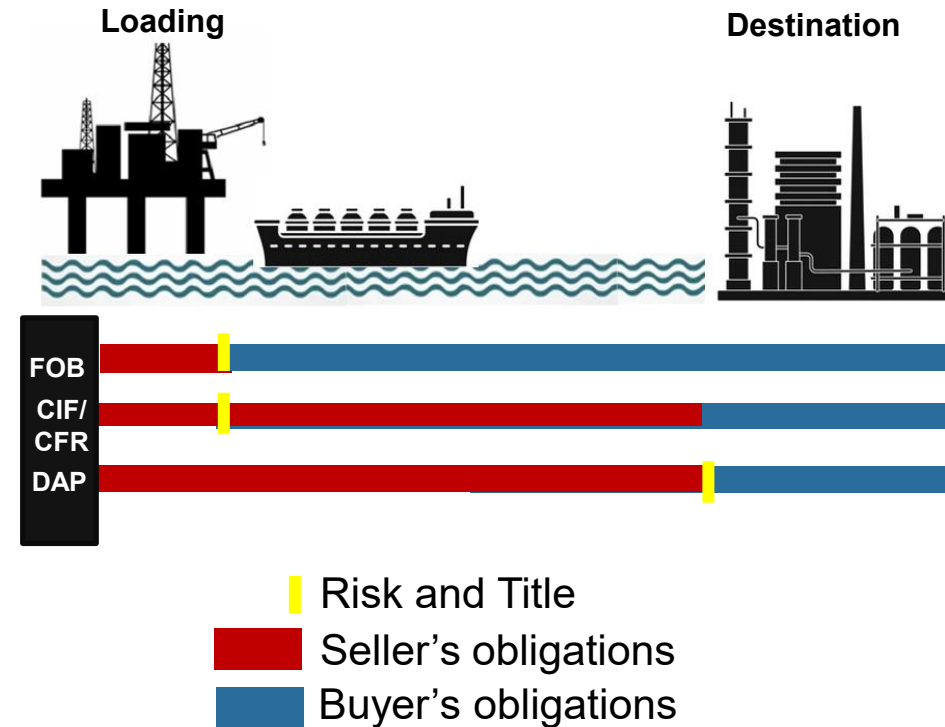
- Risk and title to the Cargo shall pass from the Seller to the Buyer as the Cargo passes the first permanent manifold flange of the **Seller's Vessel** at the **Port of Loading**. Neither Seller nor Buyer is obligated to add insurance. This is less cost and responsibility for the Seller and gives the Buyer more control over the insurance

Cost, Insurance and Freight (CIF):

- Risk and title to the Cargo shall pass from the Seller to the Buyer as the Cargo passes the first permanent manifold flange of the **Seller's Vessel** at the **Port of Loading**. The Seller must also purchase insurance for the cargo. This is better for the Buyer if the provided insurance is sufficient, however, any claim may take time as it is the Seller handling the claim

Delivered at Place (DAP):

- Risk and title to the Cargo shall pass from the Seller to the Buyer as the Cargo passes the last permanent manifold flange of the **Seller's Vessel** upon discharge of the Cargo at the **Port of Destination**.



Vessel Types

Conventional crude oil tankers:

- Terminal loading.
- Five size classes and fleet is global.
- Given the large supply of vessels, the charterer usually charts a vessel for a single (SPOT) journey at prevailing market rates.
- For exports out of Northwestern Europe, larger vessels will be used to lower freight costs.
- Smaller vessels (cargoes) may be transferred onto bigger vessels with other volumes.
- Bigger vessels used for storage (COVID).

	Coastal Tan	450-600 kbbls
	Aframax	600-900 kbbls
	Suez-Max	900-1,200 kbbls
	VLCC	1,200 – 2,400 kbbls
	ULCC	2,400 + kbbls

Shuttle tankers:

- Offshore loading
- Lower availability so the main players are MSL (ex Altera) and Knutsen
- Time charter (TC): The charterer leases a specific vessel for a defined amount of time at an agreed daily rate. The charterer pays every day of the charter period, and therefore a TC makes more sense if lifting frequently
- Contract of Affreightment (COA): An agreement to ship cargoes from and to a defined loading and discharge point(s), at an agreed freight rate. For each loading, the shipowner chooses the ship out of a pool of approved vessels. The charterer pays per voyage and therefore a COA can make more sense if lifting infrequently.



Oil Transport and Lifting

Terminal Loaded:

- **Ekofisk, Grane** and **Oseberg** (for example) and are loaded at terminals
- Bigger volumes
- Terminal loaded grades have a larger market - due to storage flexibility and the availability of tankers
- Operational flexible: cargoes can be advanced/postponed
- Large number of lifters / buyers
- Terminal loaded grades are the most marketable grades on NCS

Offshore Loaded:

- **Norne, Åsgard** and **Njord** (for example) are loaded offshore
- Smaller volumes
- Offshore loaded grades have a smaller market – due to less storage and the less available shuttle-tankers, limiting offloading to within NW Europe
- Little operational flexibility: difficult to move date of allocated cargo
- Small number of lifters / buyers
- Offshore loaded grades are less marketable



Nomination Procedure

