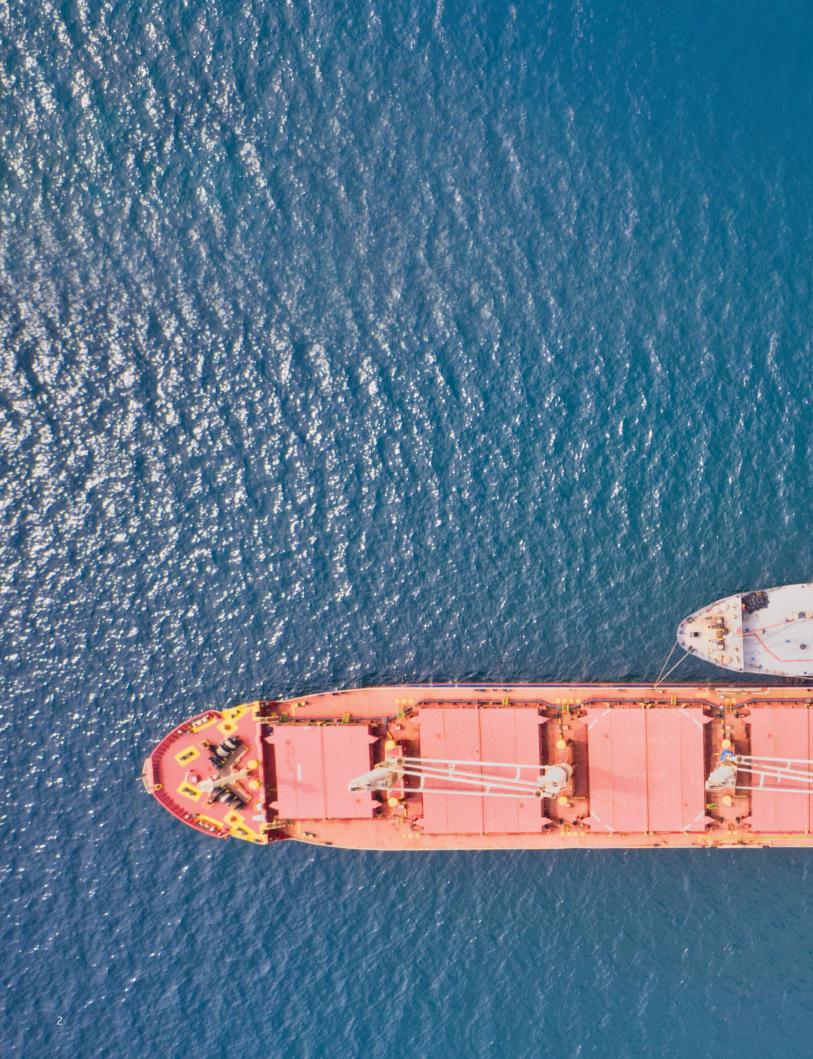




Marine Fuels Modernised



10mmt Global marine fuel supply in 2021

3.2mmt
Global marine fuel procurement in 2021

**700**Vessel fleet

35

Locations

www.tfgmarine.com

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## Who we are

TFG Marine is a leading international marine fuels supply and procurement joint venture providing end-to-end solutions across the world's key bunkering hubs.

TFG Marine provides competitively priced, premium marine fuels at key hubs along the world's major shipping routes. We operate bunkering services that integrate expertise in commodity trading with marine fuel supply, infrastructure and logistics. We source and deliver marine fuel grades and blends in line with shippers' requirements. We supply a full range of high-quality marine fuel blends, including International Sustainability and Carbon Certification ISCC-certified biofuel blends.

We're a growing global business, promoting sustainable shipping and fuelling the vessels that connect our world.

#### Our shareholders

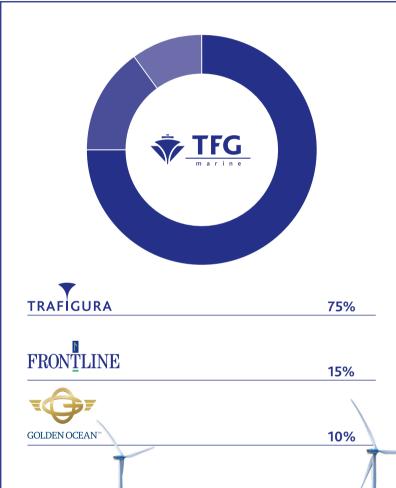
Shipping is at the heart of the global economy. Over 80 percent of all global trade is seaborne. In 2021, international maritime trade accounted for around 11 billion tonnes of goods.

TFG Marine was formed in 2020 as an alliance between Trafigura, a leading global commodities trader, and two of the world's foremost shipping companies, Frontline and Golden Ocean.

Our three founding companies are market leaders with solid credentials in their respective fields and complementary strengths in global commodity trading and shipping. Their wealth of experience across the shipping and marine fuel supply markets underpins our approach and enriches our decision-making.

The combined marine fuel demand from Trafigura, Frontline and Golden Ocean, covering a fleet of some 700 owned and chartered vessels, provides economies of scale and lays the foundation for TFG Marine to become one of the world's largest fuel procurement and supply alliances, generating substantial demand in key bunkering hub ports globally.





#### Trafigura

Our majority shareholder is one of the largest physical commodities trading groups in the world. It has a market-leading position in the supply of fuel oil, middle distillates and biofuels, access to a significant network of terminals worldwide and works with a substantial global network of shipowners. In 2021, Trafigura traded 38.4 million metric tonnes of fuel oil globally.

www.trafigura.com

#### **Frontline**

A world leader in the seaborne transportation of crude oil and refined products, Frontline owns and operates one of the largest and most modern fleets in the industry, consisting of very large crude carriers (VLCCs), Suezmax tankers and LR2/Aframax tankers. The company's 63 vessels have an aggregate carrying capacity of approximately 12.2 million deadweight tonnes.

#### Golden Ocean

A leading international dry bulk shipping company that owns and controls a fleet of 87 vessels, including ships chartered on long-term time charter contracts, with an aggregate carrying capacity of around 10.7 million deadweight tonnes.

www.goldenocean.bm



## Modernising marine fuel supply

TFG Marine acts in partnership with our customers across the globe. We work to simplify and clarify the bunkering process so that shippers can focus on their core business.

#### The TFG Marine difference

We supply fuels in over 75 percent of the world's shipping routes safely, efficiently and transparently. Our services span the supply chain, bridging every stage of the bunkering process, from procurement to post-delivery. We work with partners across the maritime industry to improve transparency and progress decarbonisation of the shipping industry.



#### A global partner for shipping

We have scale and global presence. We serve key shipping routes from over 35 strategic bunkering hub locations, supplying over 10 million metric tonnes of marine fuels to our customers. We source and supply premium, IMO 2020-compliant marine fuels cost-effectively and efficiently around the world.



#### Quality across the supply chain

We physically supply competitively priced and regulatory-compliant refined marine fuels to ships in port and at sea. From digital documentation to detailed, real-time transaction data, our services simplify and streamline the entire procurement process.



#### Backed by industry leaders

We are backed by major market participants. Our joint venture partners, with a combined fleet of around 700 vessels, are our cornerstone customers. We deploy services internationally to meet their demanding requirements. The economies of scale and service capabilities we get from that deliver





#### Transparency, efficiency and trust

We promote transparency and responsible operations across our business, which allows us to better serve our customers. We aim to build trust and raise service levels through increased transparency. We share real-time data, preventing quality issues or quantity disputes that might delay delivery. Orders complete more quickly and business is simpler. This adds up to less risk and lower costs for our customers.



#### Helping customers reduce GHG emissions

Our biofuels help make shipping more sustainable. We offer biofuel blends at key bunkering hubs around the world that can help reduce emissions by up to 30 percent. In the Amsterdam-Rotterdam-Antwerp region we are helping to create the world largest bio-bunkering hub. Our independently verified, accredited carbon compensation scheme supports those wanting to do more to reduce their carbon footprint.



## Working to make shipping more sustainable

The maritime industry is on a path to decarbonisation. Partnerships and networks are mobilising to research, develop, trial and pilot the alternative fuels and new propulsion systems that will be needed. TFG Marine is closely involved. We're ready to meet tomorrow's shipping fuel needs.



## Our global network

The TFG Marine Group is made up of TFG Marine BV,
TFG Marine Inc. and Heron Marine. We've built up one
of the largest physical footprints in the global marine fuel
supplies market, supplying operations in over 35 strategic
locations, at port and offshore across the Americas, Europe,
Africa and Asia.

#### **US Gulf Coast**

Five key lightering areas along the US Gulf Coast cover Galveston, South Sabine Pass, South-West Pass and Louisiana Offshore Oil Port as well as within Corpus Christi export terminal. Additional operations within the Port of Corpus Christi supply VLSFO and LSGO via the 'Takeuchi Sea' barge as well as exclusively at the Magellan terminal.

### 30,000<sub>mt</sub>

Fuel supply capacity per month

#### The Caribbean

The 18,000dwt 'Baltic Prosperity' operates from Trinidad and Tobago supplying vessels in the Caribbean Sea

### 30,000<sub>mt</sub>

Fuel supply capacity per month

#### **Panama Canal**

Operations include terminals in Balboa at the Pacific gateway to the canal, and at the Port of Cristobal at the city of Colon on the Caribbean Sea. Eight barges operating from these two terminals supply vessels at either side of canal anchorages as well as at berth during cargo operations.

### **2** million barrels

Onshore storage capacity

100,000mt

Fuel supply capacity per month

#### **West Coast Latin America**

Our operation in international waters off the coast of Ecuador is the first of its kind in the region, providing marine fuel to customers along the West Coast of Latin America. Our 17,000dwt 'China Spirit' vessel can perform both ship-to-ship and stern line operations.

## 40,000<sub>mt</sub>

Fuel supply capacity per month

#### **New York Harbour**

A full range of quality marine fuels are available from this key shipping hub on the US East Coast.

## 30,000<sub>mt</sub>

Fuel supply capacity per month

#### **South West Pacific**

Supplying marine fuels off the coasts of Peru and Chile in the South Pacific.

### 20,000<sub>mt</sub>

Fuel supply capacity per month

#### **South West Atlantic**

Supplying marine fuels off the coasts of Argentina, Uruguay and Brazil in the South Atlantic.

### 35,000<sub>mt</sub>

Fuel supply capacity per month

# Amsterdam-Rotterdam-Antwerp

### Amsterdam-Rotterdam-Antwerp Substantial onshore storage capacity and three Shell

Substantial onshore storage capacity and three Shel SIRE-approved barges operating out of Amsterdam, Rotterdam, Antwerp, Flushing and Ghent. Our barges can perform both ship-to-ship and stern line operations and include state-of-the-art Yokohama pneumatic fenders and mass flow meters. We also supply FAME B20 and B30 grade biofuels from the Amsterdam, Rotterdam and Flushing ports.

## 300,000mt

Onshore storage capacity

Los Angeles

100,000mt
Fuel supply capacity per month



**New York Harbour** 

**US Gulf** 

Coast

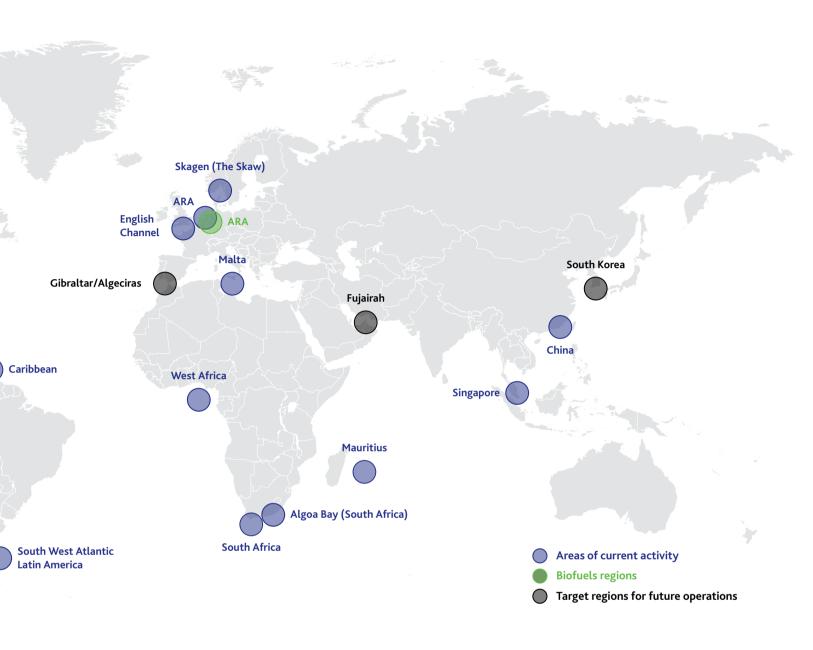
Panama

**West Coast** 

**South West Pacific** 

**Latin America** 

**Latin America** 



#### Mediterranean

Offshore operation off the coast of Malta.

40,000<sub>mt</sub>

Fuel supply capacity per month

#### **English Channel**

Two barges loading from the Falmouth Terminal supply marine fuels to customers across the English Channel. The 5,000dwt 'Naxos II' supplies fuel in waters between France and the United Kingdom.

65,000mt

Fuel supply capacity per month

#### **West Africa**

Our seven-vessel fleet delivers bunkers off the West African coast.

200,000<sub>mt</sub>

Fuel supply capacity per month

#### **South Africa**

A two-vessel operation supplies bunkers off the coast of Algoa Bay in the Eastern Cape.

42,000<sub>mt</sub>

Fuel supply capacity per month

#### Singapore

The Port of Singapore is one of the busiest and most strategically important ports in the world and Trafigura is among the largest cargo operators and logistics providers in the region. Combined with the fuel requirements of its joint venture partners, this provides TFG Marine with both the infrastructure and demand to operate efficiently and competitively. Our growing operations here include access to onshore and offshore logistics and cleanenergy dual-fuel barges.

300,000<sub>mt</sub>

Fuel supply capacity per month

## Transparency and efficiency

More transparent operations make it simpler and safer for our customers to do business. We collaborate with industry partners and adopt technologies that elevate transparency and enhance operational efficiency.

#### Digitalisation

In the past, our industry adopted methods and practices that accepted a level of transactional inaccuracy. This was necessary to reduce operational complexity, but it led to a less formalised approach to transactions that resulted in frequent disagreements between buyers and sellers.

In today's digitalised world, new technologies, such as mass flow meters and blockchain analysis, are transforming the operational efficiency and transparency of marine fuel markets.

TFG Marine is embracing digitalisation and extending transparency to simplify our customers' business operations. We're progressively installing mass flow meters at our international locations and advocate for their mandatory introduction internationally.

We've set up an online portal that allows our customers to place orders digitally, monitor their fuel acquisitions in real time, review historic purchases and calculate emissions.

#### **Digital funding**

Across the maritime industry, digital transformation is extending possibilities for collaborative service delivery. TFG Marine is partnering with DBS Bank, Ocean Network Express, Ascenz and the Maritime and Port Authority of Singapore to introduce digitalised bunker financing capabilities that further enhance the transparency and resilience of Singapore's bunkering sector. Together, we have piloted Singapore's first real-time bunker delivery financing programme using digital bunker delivery notes (BDNs).

Banks currently rely on physical BDN copies to approve bunker financing. However, this can take days. Digital BDNs shorten the process to a few hours. Increased transparency for bunker trades is enhancing efficiency and building trust between banks and shipowners.



## Clarity and control

Precise mass flow measurement greatly simplifies refuelling. With accurate data, shipowners and port authorities have better understanding of fuel consumption and gain more control over emissions.

#### Mass flow metering

We are progressively introducing mass flow meters on delivery barges across our network to improve transactional transparency. We are calling for the industry-wide adoption of this digital monitoring technology, together with SS648-compliant delivery, which preserves integrity through certified calibration and tamper-proof seals.

Traditional meters measure deliveries by volume and use this to estimate the equivalent mass. But since volumes are affected by changes in temperature and pressure this can lead to quantity disputes between customers and their suppliers. Direct mass flow measurement delivers accurate transaction data by eliminating the variability caused by the physical properties of fluids.

Unlike volume, mass remains constant in all atmospheric conditions. Measuring this directly gives the buyer and seller certainty about the size of their transaction.

Mass flow meters measure the rate of flow of mass through a pipe. They use vibration-based sensors and the Coriolis effect to deliver accurate flow, mass, density, viscosity and temperature data.

Mass flow metering allows customers to track trade details in real time. Reliable marine fuel supply data benefits both TFG Marine and our customers. Mass-based fuel delivery makes transactional disputes far less likely, reducing the risk of demurrage expenses. The resulting increased clarity and control leads to lower costs and reduced delays for all parties.



Find out more about mass flow meter technology www.tfgmarine.com/resource-centre/videos

## Sustainability

As a global marine fuel supplier TFG Marine is committed to continued decarbonisation of our industry. We aim to become a leading supplier of sustainable marine fuels. Our biofuel blends and independently verified carbon-compensation products are helping shippers reduce their greenhouse gas (GHG) emissions.

#### **Biofuels**

Reducing GHG emissions is a growing priority for shippers. TFG Marine offers ISCC-certified B20, B30 and B50 biofuel blends from our Amsterdam-Rotterdam-Antwerp hub as well as at other locations in response to demand. Our biofuel blends are sustainably sourced, can be used in existing engines, and comply with the European Union Renewable Energy Directive (RED/II). Customers can use these blends to reduce fossil-fuel consumption and lower their lifecycle GHG emissions.

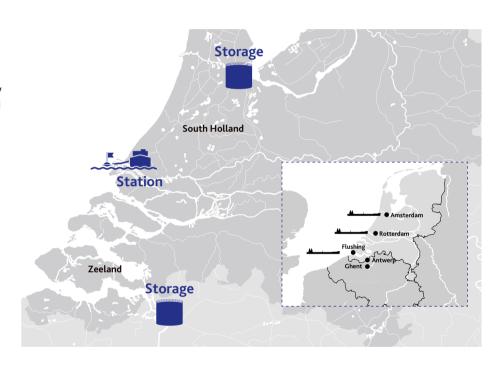
Successive sea trials of our biofuel blends have been undertaken by our customers in real-world conditions. These confirmed GHG lifecycle emissions reductions of 25 to 30 percent versus fossil-fuel alternatives.

#### Carbon offset service

To help our customers meet ambitious sustainability targets, we provide a carbon offset service where customers can choose to compensate for the remaining emissions of their cargoes with high-quality, nature-based carbon offsets.

Offsets can be bundled with cargo, similar to insurance, or sold on a wholesale basis. After delivery, the customer receives a confirmation of retirement from the Verified Carbon Standard, the world's largest voluntary carbon registry.

www.trafigura.com/carbon



#### Plotting the path to decarbonisation

As a global marine fuel supplier, TFG Marine is well placed to help achieve the transition to carbon-free shipping.

Decarbonisation poses enormous challenges for the shipping industry. The IMO is targeting a 50 percent reduction in overall emissions by 2050 and carbon intensity reductions of 40 percent by 2030 and 70 percent by 2050.

Our low-carbon biofuel blends, high-quality data and independently verified carbon-compensation products are helping shippers reduce their GHG emissions.

We are also working with industry partners to develop alternative fuels and put in place the infrastructure needed for a carbon-free future.

www.tfgmarine.com/sustainability-andhsec

## **HSEC** and responsibility

TFG Marine adheres to high safety and responsibility standards in all our operations. We promote international best practice at all locations. We maintain a responsible compliance culture where all staff recognise personal and collective responsibility.

As an entity that is majority-owned by the Trafigura Group, we operate according to the Trafigura Corporate Responsibility Policy, HSEC Business Principles and Code of Business Conduct.

Trafigura's vision is to be recognised as a leader on health, safety, environment and community (HSEC) matters in the commodities trading industry. It encourages all those with whom it does business to apply comparable, comprehensive and complementary standards, principles and policies.

The Trafigura Corporate Responsibility
Policy sets out high-level priorities and
commitments. The HSEC Business Principles
communicate expectations of how the
Trafigura Group and its operating divisions
and subsidiaries should operate and behave.
All our people are required to act and behave
in accordance with the Trafigura Code of
Business Conduct, which is based on best
practice and international law.

www.trafigura.com/HSEC



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10 Collyer Quay #29-00 Ocean Financial Centre Singapore 049315

Tel: +(65) 6319 2960 Fax: +(65) 6734 <u>9448</u>

www.tfgmarine.com info@tfgmarine.com

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For general enquiries:

info@tfgmarine.com

For regional specific equiries:

africa.sales@tfgmarine.com (Africa)
nwe.sales@tfgmarine.com (Europe)
panama.sales@tfgmarine.com (Panama/Caribbean)
singapore.sales@tfgmarine.com (Singapore)

