Shell Trading

–

An overview of Shell’s trading unit

Authored by Sam Leon & Louis Goddard – Feb 28, 2024

WHAT IS SHELL TRADING?

Shell Trading — sometimes referred to as Shell Trading and Supply[1] or Trading and Optimisation[2] — is the name for a coordinated network of legal entities within the Shell group that buy and sell crude oil, gas, refined products, power and CO2 permits across the world.

It is a service provider to other companies in the Shell group and third parties, as well as being a 'proprietary' trader in its own right, speculating on the value of commodities to make a profit. The services it provides to other Shell entities and third parties include transport logistics, financing and hedging — a form of risk management in which commodities are purchased or sold in advance of their delivery to guarantee a specific price and insure against sudden changes in commodity markets.

In Shell's own words:

> Shell Trading & Supply consists of a number of distinct legal entities across multiple jurisdictions within the Royal Dutch Shell group whose primary role is to act as the sole conduit to the global traded commodity markets for Shell's Upstream and Downstream businesses in order to manage the group's supply/demand balances and commodity price risk in hydrocarbons (crude oil, refined oil products, natural gas, LNG), power, freight and emissions.
>
> — Shell response to MIFID II consultation, 2014[3]

Shell's trading activities position it right at the heart of the fossil energy system allowing it to sell not only the oil and gas it extracts but also to act as a middleman, helping the hydrocarbons of others to flow across the globe. As we set out below, on several important fronts, the scale of Shell's trading activities and the earnings it generates from them distinguish it from other European majors, also known for their large trading divisions.

SHELL TRADING'S CORPORATE STRUCTURE

Shell's annual reports contain details about the earnings, activities and performance of specific segments. These segments have evolved over recent years. In 2022,[4] the segments used for Shell's reporting were Integrated Gas, Upstream, Marketing, Chemicals & Products, Renewables & Energy Solutions and Corporate.

---

[1] 'Shell Trading and Supply', Shell.com, accessed 15 February 2024, https://www.shell.com/business-customers/trading-and-supply.html.
[2] 'Shell Third Quarter 2022 Update Note', Shell.com, 6 October 2022, https://www.shell.com/media/news-and-media-releases/2022/shell-third-quarter-2022-update-note.html.
[3] European Securities Market Authorities, 'Shell Reply Form for the Consultation Paper on MiFID II / MiFIR', 2015 2014.
[4] 'Shell Consolidated Financial Statement (Segments)', Shell.com, 2022, https://reports.shell.com/annual-report/2022/consolidated-financial-statements/notes/segment-information.html.

As outlined above, Shell Trading is essentially a network of entities dedicated to trading commodities within the Shell group and with third parties. Shell Trading straddles several segments, so it can be difficult to work out exactly how much Shell's traders earn for the company — more on this below.

Shell Trading is structured around a series of hubs in London, Houston, Singapore, Dubai and the Bahamas. In the table below, we set out some of the key entities that form part of the Shell Trading network based on our research. This is not an exhaustive list.

HUB	SIGNIFICANT TRADING ENTITIES
London, UK	Shell International Trading & Shipping Company Limited
	Shell Trading International Limited
	Shell Energy Europe Limited
Houston, US	Shell Trading (US) Company
Singapore	Shell International Eastern Trading Company
	Shell Eastern Trading Private Limited
	Shell Eastern LNG
Nassau, Bahamas	Shell Western Supply & Trading
Dubai, United Arab Emirates	Shell International Trading Middle East Limited

INTRA-GROUP TRADING

Shell Trading buys and sells to and from operating companies within the Shell group. It does so on the basis of the 'arm's length principle', whereby the two parties agree on a price as if they were unrelated parties, which usually means the market price for the goods being sold.[5]

To give two hypothetical examples:

> Shell International Trading and Shipping Company purchases 200,000 barrels of crude oil from Shell Clair UK, a Shell entity that produces oil from a North Sea field.

> Shell's Pernis refinery purchases 150,000 barrels of crude oil from Shell International Trading and Shipping Company for processing.

The fact that Shell trades commodities within its own corporate group can make it difficult to interpret its rather general statements about the volume of hydrocarbons it trades. For example,

[5] 'Intra-Group Transactions', Shell.com, accessed 22 February 2024, https://reports.shell.com/tax-contribution-report/2022/our-approach/intra-group-transactions.html.

Shell says on its website that it trades “approximately 12 million barrels per day of physical crude and associated oil products and several multiples of that as derivatives.”[6] This is likely to include the oil it buys from its own upstream operating companies and what it sells to its midstream entities that operate refineries, even if these are the same barrels of crude. It may also include the products it then buys from the refineries and sells to its marketing businesses that distribute fuel.

PROPRIETARY TRADER & SERVICE PROVIDER

Shell Trading operates as both a proprietary trader in its own right and as a service provider for Shell’s operating companies that produce or refine hydrocarbons. It also operates as a service provider for third parties that seek to transact on global wholesale energy markets but may not have the access to infrastructure, markets or capital to do so (more on this in the following sections).

As a proprietary trader, Shell’s traders take a view as to the future direction of the price of oil and other commodities and exploit current price differences between markets. It seeks to profit by taking positions in the market by buying and selling volumes of oil and gas on the spot market, signing long-term contracts for the delivery of hydrocarbons or trading derivatives. Here are three hypothetical and simple examples of a trade a Shell entity might make:

- Crude oil prices are very low. Shell Trading entities decide to fill their storage and wait for crude prices to rise again. If the cost of keeping the oil in storage is less than the difference between the price it bought the oil for and can sell it, Shell Trading makes a profit.

- A Shell Trading entity has a contract to supply a refinery with a specific mix of liquid feedstocks with defined chemical properties. It finds that a component to make this mix is trading very cheaply in another part of the world. It deploys one of its tankers — which happens to be in the area producing the cheap component — to bring this feedstock to the refinery, making additional profit by bringing down the cost of what it supplies whilst keeping the price for what it sells stable.

- LNG prices in Europe spike. A Shell Trading entity re-directs a flexible-destination cargo of LNG on its way to China to the Netherlands, where it can sell it on the spot market at a higher price than what is available to it in China.

[6] ‘Shell Fuel Price Risk Management’, Shell.com, accessed 18 January 2024, https://www.shell.com/business-customers/trading-and-supply/trading/fuel-price-risk-management.html.

Bloomberg energy journalists Javier Blas and Jack Farchy[7] report a good real-life example of a Shell Trading position during the pandemic, which turned out to be very profitable:

- Shell traders forecast that jet fuel demand will plummet as the COVID-19 pandemic and government lockdowns prevent people from travelling. Traders instruct one of their major European jet fuel refineries to stop producing jet fuel and instead focus on other petroleum products. Shell traders still have to honour contracts with airports to deliver jet fuel. However, when these deliveries come due, Shell can simply purchase very cheap jet fuel from the spot market as the jet fuel price had fallen by as much as 90% in some parts of northwestern Europe.

Shell Trading also plays an important risk management role for the Shell group by hedging the company's production and supply. It also performs this role for third-party producers and consumers who want to minimise their exposure to fluctuating prices. Producers generally want to insulate themselves from sudden drops in the price of the commodities they sell, or to 'lock in' higher prices for future delivery. Consumers like utility companies that require gas to deliver to homes, or refineries that need specific feedstock to run, also generally want to fix the price of the products they buy to avoid exposure to sharp rises in sourcing costs.

Shell Trading can hedge production in several ways. One is by purchasing and selling contracts on derivative exchanges such as NYMEX (US) and ICE (Europe) that set both a ceiling and floor price for a specific volume of production. For oil, these contracts are generally traded in multiples of 1,000 barrels. The ceiling is set by selling a 'call' option contract, and the floor by purchasing a 'put' option contract. This enables Shell operating companies — and Shell Trading's external customers — to guarantee they will receive and pay prices within a given range. Reducing risk in this way helps the companies using these hedging services to guarantee a certain level of income or hold their costs steady, something that can help them reduce their cost of capital and keep their investors happy.[8]

HOW MUCH DOES SHELL MAKE FROM TRADING?

Shell's traders have been an important driver of Shell's recent bumper profits, and its trading earnings have outstripped its main rivals. In 2020, trading accounted for 43% of earnings in the business segment then called Oil Products.[9] Shell's Integrated Gas segment — within which LNG

---

[7] Javier Blas and Jack Farchy, 'Big Oil's Secret World of Trading', *Bloomberg.Com*, 30 March 2021, https://www.bloomberg.com/news/features/2021-03-30/big-oil-s-secret-world-of-trading-fuels-profits-as-climate-change-worries-rise.
[8] Jim Harren, 'Shell Trading Energy Commodity Trading / OTC Derivatives (Introduction to Recruitment Programme)', https://slideplayer.com/slide/14552978/.
[9] 'Shell Annual Report 2020', Shell.com, accessed 22 January 2024, https://reports.shell.com/annual-report/2020/servicepages/downloads/files/shell-annual-report-2020.pdf.

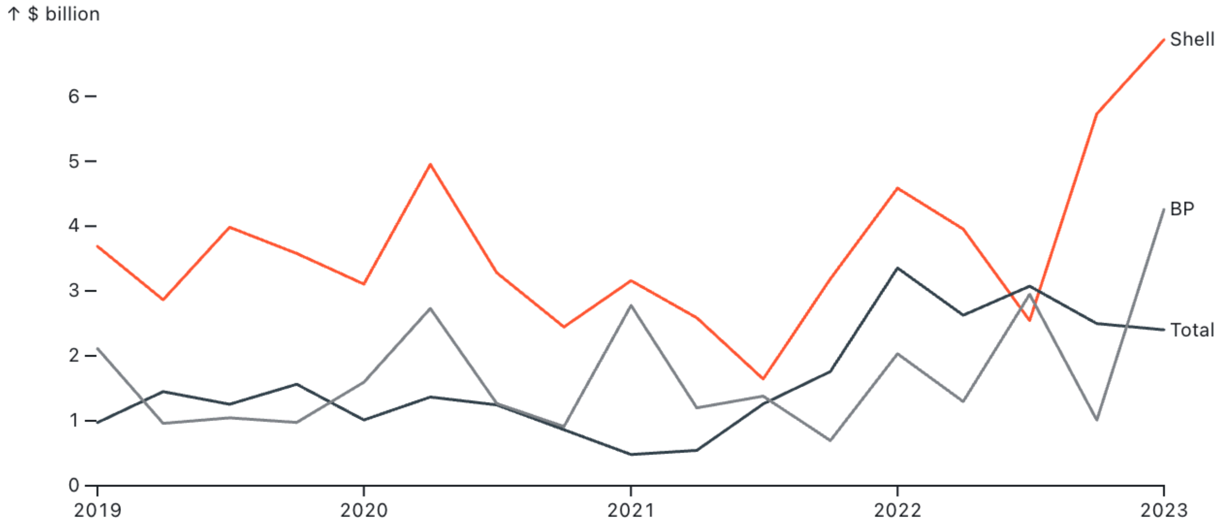
trading plays an outsized role — has been the most profitable segment within the Shell group in four of the last five years.[10]

As set out above, Shell does not directly report how much it makes from its trading division overall. Shell Trading itself straddles the segments by which the corporate group reports its financial results. The most widely cited analysis of Shell's earnings from trading comes from equity research house Bernstein Research. Bernstein's underlying research is not available publicly, but the financial press has reported their calculations in various articles, which we use below.

According to Bernstein's estimates reported by Bloomberg, Shell has consistently earned more from trading than the other European majors. Shell's traders made $16.8 billion in 2022 compared to Total's $11.6 billion and BP's $7.2 billion.[11] Like Total and BP, Shell's earnings from trading have grown in recent years.

European oil major trading division earnings

Quarterly earnings estimations of the European majors by Bernstein Research.



Source: Bernstein Research as reported by Bloomberg, Will Mathis, 2023.

HOW MUCH OIL & GAS DOES SHELL TRADE?

On its website, Shell says it trades "approximately 12 million barrels per day of physical crude and associated oil products and several multiples of that as derivatives".[12] Shell has used this figure

[10] Shotaro Tani and Tom Wilson, 'Shell LNG Push Puts Clean Energy Strategy in Spotlight', *Financial Times*, 5 October 2023, sec. Shell PLC, https://www.ft.com/content/b4112b7d-24b6-476c-89f2-03dd67c742d8.
[11] Will Mathis, 'Traders Make Billions for Big Oil But Leave Investors Uneasy', *Bloomberg.Com*, 5 May 2023, https://www.bloomberg.com/news/articles/2023-05-05/traders-make-billions-for-big-oil-but-leave-investors-uneasy.
[12] 'Shell Fuel Price Risk Management'.

since at least 2016 when it appears in legal filings related to a derivatives price-fixing case brought against Shell and other traders.[13]

Bernstein Research also has its own estimates based on Shell's annual reporting of its combined oil and gas physical trading totals. They estimated that in 2022 Shell traded 14 million barrels of oil equivalent per day (boe/d) of oil and gas compared to BP's 11 boe/d.[14] While some journalists have compared these figures to Shell's production of hydrocarbons,[15] it is important to bear in mind that the numbers used for what Shell trades likely include its sales and its purchases. As explained above, it also will include the trading of crude and the products that result from the refining of that oil. Therefore, we urge some caution when directly comparing how much Shell trades to its production volumes, as there is likely to be double counting in the former figure.

If the aim is to understand the volume of hydrocarbons bought and sold by Shell Trading and how that compares to what Shell itself produces, we can roughly estimate this in two ways.

The first is to use Shell's reported sales and purchasing figures from its annual report. Assuming that the vast majority of the purchases of the Chemicals and Products segment (used for Shell's 2022 annual report) are crude, then we can estimate that Shell purchased around 4.1 million boe/d in 2022. Shell produced around 1.5 million boe/d of crude oil and gas liquids from its upstream segment in 2022, suggesting that its traders purchased almost three times as much crude oil as Shell produced.[16]

The second way of looking at this is through Shell's emissions reporting. In its detailed breakdown of its Scope 3 emissions for 2022, Shell estimates that energy products it sold which were purchased from third parties, will emit approximately 578 million tonnes of CO2 equivalent. This compares to its own production, which it estimates will emit 332 million tonnes of CO2 equivalent. Assuming that the division of products produced by Shell and third parties is roughly similar, then it looks like the total volume Shell produces is just over a third of the total volume it sells.[17]

While neither approach is perfect, both yield a similar result. Shell Trading buys and sells roughly three times the volume of hydrocarbons that the overall group produces.

---

[13] 'Document 398, In Re: North Sea Brent Crude Futures Litigation, United States District Court, Southern District of New York', 7 June 2016.
[14] David Sheppard, 'Europe's Energy Majors Have a Black Box Problem', *Financial Times*, 11 May 2023, sec. Inside Business, https://www.ft.com/content/6e45306d-17cd-4f60-b62d-b6f147df9612.
[15] Blas and Farchy, 'Big Oil's Secret World of Trading'.
[16] Data Desk using Shell annual reports, 'Tabulation of Shell's Crude, Gas and Products Production and Purchases', 2023.
[17] 'Greenhouse Gas Emissions Report (2021-2022)' (Shell, 2022), https://www.shell.com/sustainability/transparency-and-sustainability-reporting/performance-data/greenhouse-gas-emissions.html.

SHELL'S TRADING "DNA"

> Trading and optimisation is a huge competitive advantage we have over many other peers, and it's in our DNA. It's in our culture. Our culture is Shell transport and trading company. So, we've worked like that for over a hundred years... If you look at trading optimisation, we have a very strong mobility business, which we will further improve, but we operate in more than 80 countries. We only have refineries in five of them. So, trading optimisation is trading optimisation distribution, it's terminals, it's road transport. That's what ensures the entire flow of products. So, it's very much integrated between, say, the various businesses that we have, and many of the people in trading optimisation actually do come from the other businesses which we have. So, that's a very natural coordination, and I think a huge competitive strength, particularly in a volatile world.
>
> — Huibert Vigeveno, Director of Downstream and Renewables at Shell, 2023[18]

> There's some really old-fashioned traditional values that do matter in this business, such as trust and relationships. And a lot of these deals we're talking about don't really get done unless people have a track record of delivery and have built relationships where people in the end are willing to take a leap of faith and work with others. It also helps to have a track record of delivery in terms of safety and in terms of infrastructure management. So what I mean by that is a company like mine has the ability to reassure people that we will always be there to ensure that there will not be something as terrible as a production shut-in for example, and we can say that because we have ships on the water everywhere and therefore if a ship breaks down or is running late and that threatens a shut-in of a terminal we can probably pull on one that's in our system one or two days away and that's a very strong reassuring message to people that want to work with us.
>
> — Mike Muller, former Vice President of Crude Trading and Supply, Shell Trading, 2015[19]

Trading — and the revenues from it — appear to be more important for Shell than its European competitors. Shell CEO, Wael Sawan, alluded to this fact at a press conference in 2023 when he said to journalists:

> Trading and, more importantly, optimization in general play a critical role in our business model.
>
> — Wael Sawan, CEO, Shell, 2023[20]

Between 2019 and 2022, Shell's trading earnings, as estimated by Bernstein, accounted for around 26% of the corporate group's overall earnings before interest, taxes, depreciation and amortization (EBITDA) compared to BP's 18% and Total's 15%.[21]

As Vigeveno sets out in his comment above, Shell's competitive advantage in trading is in part based on its control over a vast amount of hydrocarbon transportation infrastructure. According to Shell's website, it owns a 2,000-strong shipping fleet made up of tankers, barges, drilling rigs and

[18] 'Shell Plc Capital Markets Day 2023', Shell.com, 14 June 2023, https://www.shell.com/investors/investor-presentations/capital-markets-day-2023.html.
[19] *Interview with Mike Muller (Shell Trading) at International Oil & Gas Week 2015*, 2015, https://www.youtube.com/watch?v=HNr7j-Wtke4.
[20] Mathis, 'Traders Make Billions for Big Oil But Leave Investors Uneasy'.
[21] Data Desk using LSEG & Bernstein Research, 'Tabulation of Oil Majors' Trading Profits (Refinitiv & Bernstein Research)', 2023.

other offshore vessels.[22] It dominates the global LNG tanker fleet, owning 11% of vessels.[23] In 2017, Shell was estimated to control one in five LNG tankers once time charters are taken into consideration.[24]

When it comes to the energy transition, Shell has explicitly positioned itself as a middleman, trading low-carbon energy sources such as biofuels and green hydrogen rather than investing as much as its peers directly in renewables.[25] It seems plausible that Shell sees its hydrocarbon trading capacity — which is deployed in many of the same venues in which environmental products and power are traded — as a potentially 'transferable skill' that can be applied to green commodities depending on the speed of the transition.

CAPITALISING ON VOLATILITY

Remarks from Shell's executives, such as those from Vigeveno above, suggest that Shell sees trading as the key means through which it can weather current and future volatility in energy markets. Most importantly, Shell's CEO sees energy price volatility as here for the long term as the world adapts to geopolitical shifts and the pressures of climate change and the energy transition.

> Our thesis, as a company, is that unfortunately for the world — fortunately for our trading business — volatility is going to become more and more a feature.
>
> — Wael Sawan, CEO, Shell, 2023[26]

As the Bernstein Research earnings figures show (see above), Shell Trading made significant profits in both times of low commodity prices e.g. during the height of the COVID-19 pandemic, and high commodity prices e.g. in the immediate aftermath of the full-scale invasion of Ukraine. What traders want is volatility, and Shell has done very well out of the recent swings.

Why might volatility be good for traders? While it is no guarantee of success — commodity trading is a zero-sum game, and it depends on how your bets work out — it does present the most adept

---

[22] 'Shell, the (Unlikely) Disruptor', Shell.com, 18 August 2016, https://www.shell.com/business-customers/trading-and-supply/trading/news-and-media-releases/shell-the-unlikely-disruptor.html.
[23] 'LNG Vessels', Shell.com, accessed 13 February 2024, https://www.shell.com/business-customers/trading-and-supply/shell-shipping-and-maritime/our-shipping-fleet/lng-vessels.html.
[24] gCaptain, 'Shell Marks 125 Years in Shipping Business', gCaptain, 9 November 2017, https://gcaptain.com/shell-marks-125-years-in-shipping-business/.
[25] Ron Bousso, 'Shell Targets Power Trading and Hydrogen in Climate Drive', *Reuters*, 2 February 2021, sec. Business, https://www.reuters.com/article/idUSKBN2A10ZY/.
[26] Javier Blas [@JavierBlas], 'Shell CEO Wael Sawan Remarks at Shell Capital Markets Day, 2023 at a Press Conference for Journalists: "Our Thesis, as a Company, Is That Unfortunately for the World -- Fortunately for Our Trading Business -- Volatility Is Going to Become More and More a Feature."', Tweet, *Twitter*, 14 June 2023, https://twitter.com/JavierBlas/status/1669047933939990528.

traders who have the best access to key resources with great opportunity for profit.[27] This is because:

- Extreme price swings enable traders to make profits very quickly provided they've made the right bets on the direction of the market — see the jet fuel switching example reported by Bloomberg above.

- Price volatility in one region may result in arbitrage opportunities, where a trader can buy a commodity in one market where it is cheaper and sell it at a higher price in another. For example, in the aftermath of Russia's full-scale invasion of Ukraine, gas shortages in Western Europe resulted in a massive price differential emerging between the price of gas in the US and in Europe, enabling traders with access to US LNG to make huge profits by shipping it to Europe. One oil and gas expert labelled this trade the "greatest energy arbitrage opportunity of all time", calculating that each LNG cargo shipped from the US Gulf Coast to Europe made $200 million, the price of the ship itself.[28]

- Volatility enables Shell to step up its role as a service provider to smaller companies that may struggle to trade in this environment due to demand on physical infrastructure (lack of storage or tankers) or problems meeting capital requirements set by exchanges.[29] This is discussed in more detail in the following section.

THE PREEMINENT GLOBAL LNG TRADER

Shell's LNG business is one of the best examples of its pivotal role in the global flow of hydrocarbons, with some analysts putting their share of globally traded LNG at 17%.[30] Shell expects global demand for the super-chilled fuel to grow 50% by 2040, driven largely by increasing Asian consumption, and it is positioning its trading business to be a major beneficiary of this.[31]

---

[27] Ron Bousso, 'Energy Giants' LNG Trading Results Reveal Diverging Regional Bets', *Reuters*, 6 November 2023, sec. Energy, https://www.reuters.com/business/energy/energy-giants-lng-trading-results-reveal-diverging-regional-bets-2023-11-03/.

[28] Laurent Segalen [@MegaWattXinfo], 'The Greatest Energy Arbitrage of All Times: US Gulf Coast ➡️ NW Europe. 200mUSD Gain or More per Trip… Which Is Basically the Price of the Ship. Insane! Https://T.Co/arvTkdIxNh', Tweet, *Twitter*, 30 July 2022, https://twitter.com/MegaWattXinfo/status/1553358059895914497.

[29] 'Market Turbulence and Soaring Margins: Lessons from Two Recent Episodes', 27 February 2023, https://www.bis.org/publ/qtrpdf/r_qt2303x.htm.

[30] Ron Bousso, 'Shell's LNG Trading Makes $2.4 Billion in Final 2023 Quarter, Sources Say', *Reuters*, 23 February 2024, sec. Energy, https://www.reuters.com/business/energy/shells-lng-trading-makes-24-bln-final-2023-quarter-sources-say-2024-02-23/.

[31] Marwa Rashad et al., 'Shell Expects 50% Rise in Global LNG Demand by 2040', *Reuters*, 14 February 2024, sec. Energy, https://www.reuters.com/business/energy/global-lng-demand-seen-rising-more-than-50-by-2040-shell-report-2024-02-14/.

LNG plays an outsized role in Shell's portfolio compared to its competitors. Citibank estimates that in 2023, LNG sales made up around 23% of Shell's cash flow, more than any other major.[32] Shell has a particularly strong footing in LNG storage and transportation infrastructure. It owns about 11% of the global LNG shipping fleet[33], and in 2017, it was reported to control around one in five LNG tankers once charters were taken into consideration.[34] According to Shell's website, it also owns the largest number of LNG bunkering vessels in the world.[35]

At Shell's capital markets day in June 2023, the first such event during Sawan's tenure as CEO, he and other executives set out their stall for making LNG a "top priority" for the company, committing to invest $4 billion in LNG assets.[36] As Zoë Yujnovich, the head of Shell's Integrated Gas and Upstream division, set out, trading played a vital role in Shell's LNG activities, and it is an area where Shell's huge portfolio of offtake agreements, supply contracts and extensive physical infrastructure of LNG tankers and regasification terminals gives it a distinct advantage as a middleman.

> LNG is deeply integrated with our trading and optimisation activities which enable us to capture additional value from the scale and breadth of our global LNG portfolio.
> – Zoë Yujnovich, Integrated Gas and Upstream Director, Shell, 2023[37]

Shell is the world's biggest private LNG supplier.[38] Only state-owned QatarEnergy sells more of the super-chilled fuel. But where QatarEnergy is primarily in the business of producing and supplying LNG, Shell complements its own liquefaction capacity with a massive portfolio of long-term contracts for buying LNG from third-party producers, acting as a middleman. Shell also has a large number of long-term contracts to supply LNG to various players. Its portfolio of offtake agreements and activity on the spot market enables it to optimise the way it fulfils these contracts in the most profitable way.[39]

Data Desk's analysis of active long-term LNG contracts from LSEG's database reveals that Shell is by far the largest contracted buyer of LNG, with active contracts for 53 million tonnes per annum

---

[32] Tani and Wilson, 'Shell LNG Push Puts Clean Energy Strategy in Spotlight'.
[33] 'LNG Vessels'.
[34] gCaptain, 'Shell Marks 125 Years in Shipping Business'.
[35] 'Shell Expands LNG Bunkering Network with New Vessel Charter', Shell.com, 4 May 2021, https://www.shell.com/energy-and-innovation/natural-gas/lng-for-transport/news-and-media-releases/shell-expands-lng-bunkering-network-with-new-vessel-charter.html.
[36] Tani and Wilson, 'Shell LNG Push Puts Clean Energy Strategy in Spotlight'.
[37] 'Shell Plc Capital Markets Day 2023'.
[38] Tani and Wilson, 'Shell LNG Push Puts Clean Energy Strategy in Spotlight'.
[39] 'Energy Majors Re-Route LNG Supplies from Europe to Asia', www.euractiv.com, 19 January 2021, https://www.euractiv.com/section/energy/news/energy-majors-re-route-lng-supplies-from-europe-to-asia/.

(mtpa) of liquefaction capacity from third parties. The second largest third-party contracted buyer is Total, with the rights to 33 mtpa, significantly behind Shell.[40]

Shell's annual reports also underscore its role as a major offtaker of LNG from third parties. In 2022, less than half of what it sold came from its own liquefaction facilities.[41] Relative to what it sells, the proportion of LNG produced by the company has declined slightly over the last five years, suggesting that trading third-party volumes has become increasingly important.

YEAR	LIQUEFACTION VOLUMES (MT)	LNG SALES (MT)	LIQUEFACTION / SALES
2018[42]	34.3	70.9	48.37%
2019[43]	35.6	74.12	48.03%
2020[44]	33.2	71.9	46.18%
2021[45]	31	64	48.44%
2022[46]	30	66	45.45%

PROLIFIC THIRD-PARTY OFFTAKER & "ALTERNATIVE SOURCE OF CAPITAL"

> We are an alternative source of capital [for oil companies] as well, but we're not one size fits all. We work with producers and companies in the midstream sectors and processing and refining sector as well... We'll be working with select counterparties and assisting those counterparties and helping their net margins, helping them with their physical offtake, risk management by way of hedging. And really, assisting them also [to] mitigate their GHG footprint by embedding carbon credits.
>
> — Salman Patoli, Head of Business Development, Shell Trading, 2022[47]

Shell is not just a major offtaker of LNG from third parties. It is also a prolific offtaker of oil, helping many independent oil companies get their hydrocarbons to market. Shell leverages its ability as a service provider in order to secure access to more oil, particularly from non-integrated producers that can benefit from Shell's vast global reach through its physical infrastructure and its access to commodity markets and capital.

[40] Data Desk using LSEG data, 'Tabulation of LSEG Long Term LNG Contracts', 2023.
[41] 'Shell Annual Report and Accounts 2022 — Integrated Gas Segment Report', Shell.com, 2023, https://reports.shell.com/annual-report/2022/strategic-report/segments/integrated-gas.html.
[42] 'Integrated Gas — Shell Annual Report 2019', Shell.com, accessed 13 February 2024, https://reports.shell.com/annual-report/2019/strategic-report/segments/integrated-gas.php.
[43] 'Integrated Gas — Shell Annual Report and Accounts 2021', Shell.com, accessed 13 February 2024, https://reports.shell.com/annual-report/2021/strategic-report/segments/integrated-gas.html.
[44] 'Integrated Gas — Shell Annual Report and Accounts 2021'.
[45] 'Integrated Gas — Shell Annual Report and Accounts 2021'.
[46] 'Shell Annual Report and Accounts 2022 — Integrated Gas Segment Report'.
[47] *Upstream Capital Webinar Organised by Energy Council with Salman Patoli, Shell Trading*, 2022, https://vimeo.com/681822999/3c5ebb23db.

> We are the largest offtaker of oil for most independents in any arena you look at. So if you go to the European contexts, North America, West Africa, and Nigeria, we have a very strong footprint, we have a tradition going back more than 10 years of taking oil from independent producers and paying them more than acceptable market terms for that. And the reason we can be good at this and have such a large share of the market is that in aggregating all these volumes, we create efficiencies. And sometimes what we find is we can recycle some of those efficiency gains to those independent producers in the shape of offerings. And those offerings can be helping arrange lending syndicates, they can be risk management services or they can simply be a premium.
>
> — Mike Muller, former Vice President of Crude Trading and Supply, Shell Trading, 2015[48]

Shell Trading has two important capabilities that make it so valuable for the rest of the Shell group and for its third-party clients:

> *Logistics* — As described above, Shell has a huge network of hydrocarbon transport and storage infrastructure, as well as regasification terminals for LNG, enabling it to move oil and gas between geographies and stock up when prices are low.

> *Access to physical wholesale and derivative markets* — Shell's access to over-the-counter and exchange-based markets for spot cargoes and derivatives is the basis on which it buys and sells oil and gas on behalf of others and is able to hedge those same volumes.

On the logistics side, Shell's vast fleet of tankers enables it to provide lifting and delivery services in most parts of the world. Its storage facilities enable it to draw on stocks of oil and gas where fuel retailers or utility companies may require additional volumes and to help producers store their products in times of low commodity demand.

Shell's access to physical wholesale and derivative markets is enabled by its hubs located in major commodity trading venues of the world and its traders' membership of key exchanges such as NYMEX (US) and ICE (Europe). This allows Shell to easily take positions in the full range of commodity markets and to benefit from arbitrage opportunities between markets i.e. where the price of a given commodity is higher in one market and lower in another.

As one of the world's largest companies, Shell takes advantage of the size of its balance sheet when providing trading services to smaller, third-party producers. The recent energy boom also means that the group is flush with cash. Shell's enhanced access to capital means that it can take positions many smaller, independent producers can't. The sale or purchase of futures contracts for instance, requires companies to post deposits in the form of 'margin' in case a company goes bust

[48] *Interview with Mike Muller (Shell Trading) at International Oil & Gas Week 2015*.

or prices change significantly in the interim. Shell's deep pockets enable it to meet such requirements even in the recent periods of significant price volatility where margin requirements were higher.[49][50]

In recent years, Shell executives have also discussed the emerging role the company has as a direct source of capital for third parties investing in upstream activities even where Shell does not have an equity stake in the underlying project.

In 2017, former Vice President of Shell Trading and Supply, Andrew Smith, gave the clearest public explanation of Shell's changing role, moving not just from being a reliable offtaker whose involvement banks will look favourably on to a direct provider of capital acting much like a financial institution.

> Many of these [independent] producers have ended up with lending institutions financing them and providing hedging services. Such lenders like to see Shell as the offtaker for credit reasons, but often these producers need to do more to cover funding shortfalls, so we've chosen to change the way we do business by ourselves offering more innovative and integrated offtake solutions, which can include Shell participation in activity previously associated only with financial institutions.
>
> — Andrew Smith, former Executive Vice President of Shell Trading and Supply, 2017[51]

Mike Muller, Shell Trading's former Vice President of Crude Trading, echoed this in similar statements made at an industry conference in 2015.

> We've also been involved in helping people structure deals in the upstream sector, whereby we get the offtake associated with that, and we provide structured financing alongside banks.
>
> — Mike Muller, former Vice President of Crude Trading, Shell Trading, 2015[52]

He also emphasises how Shell uses its role as an offtaker to facilitate asset sales to buyers of its assets.

> [W]e can say to those buyers of those assets, you work with us as an offtaker, so that you can continue to benefit from our capabilities and our knowledge of the asset.
>
> — Mike Muller, former Vice President of Crude Trading and Supply, Shell Trading, 2015[53]

---

[49] 'Market Turbulence and Soaring Margins'.
[50] 'The Financial Implications of Volatile Commodity Markets', 19 September 2022, https://www.bis.org/publ/qtrpdf/r_qt2209y.htm.
[51] Oil & Gas Council, Andrew Smith, EVP, Shell Trading & Supply, 2017, https://energycouncil.com/articles/andrew-smith-shell-trading-supply/.
[52] *Interview with Mike Muller (Shell Trading) at International Oil & Gas Week 2015*.
[53] *Interview with Mike Muller (Shell Trading) at International Oil & Gas Week 2015*.

There is relatively little public information on Shell's deals where it provides direct financing for non-joint-venture projects, but press releases from some independent producers and legal firms that provided services for these deals help to assemble a picture. In the following cases, Shell acts not just as a contracted offtaker but also as a financier, extending a line of credit to the producing company in return for future crude oil liftings.

- In 2017, Shell sold $3.8 billion of its North Sea assets to independent oil and gas producer Chrysaor. Shell provided $400 million of credit for the transaction as well as continuing to offtake hydrocarbons from the assets.[54]

- In 2020, Shell Western Supply and Trading Limited signed a $3.5 million prepayment agreement with LEKOIL to be repaid in future crude offtake from their Nigerian assets.[55]

- In 2023, Shell Western Supply and Trading Limited signed a $1.2 billion financing deal with the Uruguayan company Julnek.[56]

In the case of the Julnek deal, in 2023, Cobra Group, a Spanish affiliate of Brazilian power company Carmo Energy, completed the purchase of the onshore Carmópolis Cluster assets in Brazil from the state oil firm Petrobras via Julnek.[57] According to what appears to be a press release from a law firm involved in the deal, Shell provided financing of $1.2 billion, "as a prepayment of the quantities of oil to be delivered by Julnek to Shell under an oil sales and marketing agreement between the two parties."[58] The agreement is described elsewhere as a "pre-shipment financing deal".[59] Petrobras received the final payment from Cobra Group under the deal in January 2024.[60] This illustrates how Shell's financing of independent oil producers can facilitate their acquisitions which Shell benefits from in the form of offtake, but in which it has no equity stake.

---

[54] TXF, 'Chrysaor: Rolling out the Barrels', *TXF Chronicle*, n.d., 1 edition, https://txfblob.blob.core.windows.net/assets/TXF_Chronicle_Vol1_2018.pdf.

[55] 'Company Announcement: Lekoil Agrees Prepayment Facility with Shell Subsidiary', *Financial Times*, 2 July 2020, https://markets.ft.com/data/announce/detail?dockey=1323-14600235-1PJ9G1I9F490GKB46RTPS1390G.

[56] L. Giselle Estrada, 'Shell's $1.2bn Financing for Julnek- The Latin American Lawyer', The Latin American Lawyer, 6 January 2023, https://thelatinamericanlawyer.com/ferrere-assists-in-shells-1-2bn-financing-for-julnek/.

[57] 'Cobra Group Finalises Petrobras Assets Buy with Shell Prepayments', accessed 12 February 2024, https://latinlawyer.com/article/cobra-group-finalises-petrobras-assets-buy-shell-prepayments.

[58] Estrada, 'Shell's $1.2bn Financing for Julnek- The Latin American Lawyer'.

[59] 'Further Details Emerge on Cobra Acquisitions', TXF, accessed 12 February 2024, https://www.txfnews.com/news/55245/further-details-emerge-on-cobra-acquisitions.

[60] 'Brazil's Petrobras Says It Received $298 Mln Payment from Carmo Energy', XM – Global Broker in Forex and CFD Trading, 10 September 2014, https://www.xm.com/research/markets/allNews/reuters/brazils-petrobras-says-it-received-298-mln-payment-from-carmo-energy-53735714.

BIBLIOGRAPHY

Blas, Javier, and Jack Farchy. 'Big Oil's Secret World of Trading'. *Bloomberg.Com*, 30 March 2021. https://www.bloomberg.com/news/features/2021-03-30/big-oil-s-secret-world-of-trading-fuels-profits-as-climate-change-worries-rise.

Bousso, Ron. 'Shell Targets Power Trading and Hydrogen in Climate Drive'. *Reuters*, 2 February 2021, sec. Business. https://www.reuters.com/article/idUSKBN2A10ZY/.

———. 'Energy Giants' LNG Trading Results Reveal Diverging Regional Bets'. *Reuters*, 6 November 2023, sec. Energy. https://www.reuters.com/business/energy/energy-giants-lng-trading-results-reveal-diverging-regional-bets-2023-11-03/.

———. 'Shell's LNG Trading Makes $2.4 Billion in Final 2023 Quarter, Sources Say'. *Reuters*, 23 February 2024, sec. Energy. https://www.reuters.com/business/energy/shells-lng-trading-makes-24-bln-final-2023-quarter-sources-say-2024-02-23/.

'Cobra Group Finalises Petrobras Assets Buy with Shell Prepayments'. Accessed 12 February 2024. https://latinlawyer.com/article/cobra-group-finalises-petrobras-assets-buy-shell-prepayments.

Data Desk using LSEG & Bernstein Research. 'Tabulation of Oil Majors' Trading Profits', 2023.

Data Desk using LSEG data. 'Tabulation of LSEG Long Term LNG Contracts', 2023.

Data Desk using Shell annual reports. 'Tabulation of Shell's Crude, Gas and Products Production and Purchases', 2023.

'Document 398, In Re: North Sea Brent Crude Futures Litigation, United States District Court, Southern District of New York', 7 June 2016.

Estrada, L. Giselle. 'Shell's $1.2bn Financing for Julnek- The Latin American Lawyer'. The Latin American Lawyer, 6 January 2023. https://thelatinamericanlawyer.com/ferrere-assists-in-shells-1-2bn-financing-for-julnek/.

European Securities Market Authorities. 'Shell Reply Form for the Consultation Paper on MiFID II / MiFIR', 2015 2014.

Financial Times. 'Company Announcement: Lekoil Agrees Prepayment Facility with Shell Subsidiary'. 2 July 2020. https://markets.ft.com/data/announce/detail?dockey=1323-14600235-1PJ9G1I9F490GKB46RTPS1390G.

gCaptain. 'Shell Marks 125 Years in Shipping Business'. gCaptain, 9 November 2017. https://gcaptain.com/shell-marks-125-years-in-shipping-business/.

'Greenhouse Gas Emissions Report (2021-2022)'. Shell, 2022. https://www.shell.com/sustainability/transparency-and-sustainability-reporting/performance-data/greenhouse-gas-emissions.html.

Interview with Mike Muller (Shell Trading) at International Oil & Gas Week 2015, 2015. https://www.youtube.com/watch?v=HNr7j-Wtke4.

Javier Blas [@JavierBlas]. 'Shell CEO Wael Sawan Remarks at Shell Capital Markets Day, 2023 at a Press Conference for Journalists: "Our Thesis, as a Company, Is That Unfortunately for the World -- Fortunately for Our Trading Business -- Volatility Is Going to Become More and More a Feature."' Tweet. *Twitter*, 14 June 2023. https://twitter.com/JavierBlas/status/1669047933939990528.

Jim Harren. 'Shell Trading Energy Commodity Trading / OTC Derivatives (Introduction to Recruitment Programme)'. 2006. https://slideplayer.com/slide/14552978/.

Laurent Segalen [@MegaWattXinfo]. 'The Greatest Energy Arbitrage of All Times: US Gulf Coast ➡️ NW Europe. 200mUSD Gain or More per Trip... Which Is Basically the Price of the Ship. Insane! Https://T.Co/arvTkdlxNh'. Tweet. *Twitter*, 30 July 2022. https://twitter.com/MegaWattXinfo/status/1553358059895914497.

'Market Turbulence and Soaring Margins: Lessons from Two Recent Episodes', 27 February 2023.

https://www.bis.org/publ/qtrpdf/r_qt2303x.htm.
Mathis, Will. 'Traders Make Billions for Big Oil But Leave Investors Uneasy'. *Bloomberg.Com*, 5 May 2023. https://www.bloomberg.com/news/articles/2023-05-05/traders-make-billions-for-big-oil-but-leave-investors-uneasy.
Oil & Gas Council. Andrew Smith, EVP, Shell Trading & Supply, 2017. https://energycouncil.com/articles/andrew-smith-shell-trading-supply/.
Rashad, Marwa, Emily Chow, Ron Bousso, Marwa Rashad, and Ron Bousso. 'Shell Expects 50% Rise in Global LNG Demand by 2040'. *Reuters*, 14 February 2024, sec. Energy. https://www.reuters.com/business/energy/global-lng-demand-seen-rising-more-than-50-by-2040-shell-report-2024-02-14/.
Shell.com. 'Integrated Gas — Shell Annual Report 2019'. Accessed 13 February 2024. https://reports.shell.com/annual-report/2019/strategic-report/segments/integrated-gas.php.
Shell.com. 'Integrated Gas — Shell Annual Report and Accounts 2021'. Accessed 13 February 2024. https://reports.shell.com/annual-report/2021/strategic-report/segments/integrated-gas.html.
Shell.com. 'Intra-Group Transactions'. Accessed 22 February 2024. https://reports.shell.com/tax-contribution-report/2022/our-approach/intra-group-transactions.html.
Shell.com. 'LNG Vessels'. Accessed 13 February 2024. https://www.shell.com/business-customers/trading-and-supply/shell-shipping-and-maritime/our-shipping-fleet/lng-vessels.html.
Shell.com. 'Shell Annual Report 2020'. Accessed 22 January 2024. https://reports.shell.com/annual-report/2020/servicepages/downloads/files/shell-annual-report-2020.pdf.
Shell.com. 'Shell Annual Report and Accounts 2022 — Integrated Gas Segment Report', 2023. https://reports.shell.com/annual-report/2022/strategic-report/segments/integrated-gas.html.
Shell.com. 'Shell Consolidated Financial Statement (Segments)', 2022. https://reports.shell.com/annual-report/2022/consolidated-financial-statements/notes/segment-information.html.
Shell.com. 'Shell Expands LNG Bunkering Network with New Vessel Charter', 4 May 2021. https://www.shell.com/energy-and-innovation/natural-gas/lng-for-transport/news-and-media-releases/shell-expands-lng-bunkering-network-with-new-vessel-charter.html.
Shell.com. 'Shell Fuel Price Risk Management'. Accessed 18 January 2024. https://www.shell.com/business-customers/trading-and-supply/trading/fuel-price-risk-management.html.
Shell.com. 'Shell Plc Capital Markets Day 2023', 14 June 2023. https://www.shell.com/investors/investor-presentations/capital-markets-day-2023.html.
Shell.com. 'Shell, the (Unlikely) Disruptor', 18 August 2016. https://www.shell.com/business-customers/trading-and-supply/trading/news-and-media-releases/shell-the-unlikely-disruptor.html.
Shell.com. 'Shell Third Quarter 2022 Update Note', 6 October 2022. https://www.shell.com/media/news-and-media-releases/2022/shell-third-quarter-2022-update-note.html.
Shell.com. 'Shell Trading and Supply'. Accessed 15 February 2024. https://www.shell.com/business-customers/trading-and-supply.html.
Sheppard, David. 'Europe's Energy Majors Have a Black Box Problem'. *Financial Times*, 11 May 2023, sec. Inside Business. https://www.ft.com/content/6e45306d-17cd-4f60-b62d-b6f147df9612.
Tani, Shotaro, and Tom Wilson. 'Shell LNG Push Puts Clean Energy Strategy in Spotlight'. *Financial Times*, 5 October 2023, sec. Shell PLC.

https://www.ft.com/content/b4112b7d-24b6-476c-89f2-03dd67c742d8.
'The Financial Implications of Volatile Commodity Markets', 19 September 2022. https://www.bis.org/publ/qtrpdf/r_qt2209y.htm.
TXF. 'Chrysaor: Rolling out the Barrels'. *TXF Chronicle*, n.d., 1 edition. https://txfblob.blob.core.windows.net/assets/TXF_Chronicle_Vol1_2018.pdf.
TXF. 'Further Details Emerge on Cobra Acquisitions'. Accessed 12 February 2024. https://www.txfnews.com/news/55245/further-details-emerge-on-cobra-acquisitions.
Upstream Capital Webinar Organised by Energy Council with Salman Patoli, Shell Trading, 2022. https://vimeo.com/681822999/3c5ebb23db.
www.euractiv.com. 'Energy Majors Re-Route LNG Supplies from Europe to Asia', 19 January 2021. https://www.euractiv.com/section/energy/news/energy-majors-re-route-lng-supplies-from-europe-to-asia/.
XM – Global Broker in Forex and CFD Trading. 'Brazil's Petrobras Says It Received $298 Mln Payment from Carmo Energy', 10 September 2014. https://www.xm.com/research/markets/allNews/reuters/brazils-petrobras-says-it-received-298-mln-payment-from-carmo-energy-53735714.