

Energy Tidbits

Libya Watch: UN Says Headed to Greater Domestic & Regional Instability, House Speaker Warns of Risk for Oil Shut-down

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August 25, 2024

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Matterhorn Express Pipeline Overview





The Matterhorn Express Pipeline is an approximately 580-mile intrastate pipeline designed to transport up to 2.5 billion cubic feet per day of natural gas from the Permian Basin to the Katy area near Houston, Texas. As natural gas production in the Permian Basin continues to grow, the Matterhorn Express Pipeline will provide critical takeaway capacity moving product to market for end use and play a significant role enhancing our nation's energy security, reducing energy costs, and minimizing emissions related to flaring.



Economic Benefits¹

- Designed to deliver energy for up to 2 million homes
- Through the completion of construction, contribute an estimated \$75 million in taxes to state and local governments
- Once fully operational, contribute an estimated \$35 million in taxes to state and local governments annually
- Employ more than 3,500 skilled workers during the construction phase of the project
- Create 50 permanent jobs in Texas once completed

Our Commitment to Landowners

The Matterhorn Express Pipeline is committed to being good neighbors and incorporating feedback from all relevant stakeholders into both the proposed route and the project's overall design.

[1] Words such as "anticipated," "expected," "targeted," "projected," "estimated," and similar expressions are intended to identify forward-looking statements. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of uncertainties, factors and risks, many of which are outside the control of the Company, which could cause results to differ materially from those expected by management of the Company.

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Canada Industrial Relations Board



Conseil canadien des relations industrielles

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Our File: 037943-C

Document No.: 0671627-D

August 24, 2024

BY WEB PORTAL

Richard Charney Senior Partner Norton Rose Fulbright Canada LLP Suite 3000 222 Bay Street Toronto, Ontario M5K 1E7

Michael A. Church Partner CaleyWray Labour/Employment Lawyers Suite 1600 65 Queen Street West Toronto, Ontario M5H 2M5

> In the matter of the Canada Labour Code (Part I-Industrial Relations) and a referral by the Minister of Labour to the Canada Industrial Relations Board pursuant to section 107 thereof involving the Canadian National Railway Company, employer; Teamsters Canada Rail Conference, certified bargaining agent. (037943-C)

Further to the hearing held in the above-noted matter on August 23, 2024, before a panel of the Canada Industrial Relations Board (the Board) composed of Ginette Brazeau, Chairperson, and Elizabeth Cameron and Angela Talic, Members, the Board has issued its bottom-line decision.

Canadä

The parties will find enclosed the Board's letter decision and the Board's order made in accordance with the Ministerial direction.

Sincerely,

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Ginette Brazeau Chairperson

Encl.

c.c.: The Honourable Steven MacKinnon (by Web Portal) Jean-Daniel Tardif Canada Industrial Relations Board



Conseil canadien des relations industrielles

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Our Files: 037943-C; 037944-C

Document No.: 0671624-D

August 24, 2024

2024 CIRB LD 5437

BY WEB PORTAL

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Mr. Ian Campbell Partner Fasken Martineau DuMoulin LLP Bay Adelaide Centre Suite 2400 333 Bay Street Toronto, Ontario M5H 2T6

Mr. Michael A. Church Partner CaleyWray Labour/Employment Lawyers Suite 1600 65 Queen Street West Toronto, Ontario M5H 2M5

Dear Sirs:

In the matter of the *Canada Labour Code (Part I–Industrial Relations)* and a referral by the Minister of Labour to the Canada Industrial Relations Board pursuant to section 107 thereof involving the Canadian National Railway Company, employer; Teamsters Canada Rail Conference, certified bargaining agent. (037943-C)



In the matter of the *Canada Labour Code (Part I–Industrial Relations)* and a referral by the Minister of Labour to the Canada Industrial Relations Board pursuant to section 107 thereof involving the Canadian Pacific Railway Company (now known as Canadian Pacific Kansas City Railway), employer; Teamsters Canada Rail Conference, certified bargaining agent. (037944-C)

On August 22, 2024, the Canada Industrial Relations Board (the Board) received two directions by the Minister of Labour (the Minister) pursuant to section 107 of the Canada Labour Code (the Code), one involving the Canadian National Railway Company (CN) and the Teamsters Canada Rail Conference (TCRC) and a second involving the Canadian Pacific Railway Company (now known as Canadian Pacific Kansas City Railway Company) (CPKC) and the TCRC.

The two ministerial directions are essentially identical and direct the Board to order the two employers to resume operations and the employees to resume their duties, impose final binding interest arbitration to resolve the outstanding terms of the collective agreements and extend the term of the existing collective agreements until the new collective agreements are determined by the arbitrator. The Minister also directs the Board to deal with the directions in an expedited manner as per sections 14 to 16 of the *Canada Industrial Relations Board Regulations, 2012* (the *Regulations*).

Upon receipt of the ministerial directions, the Board held a case management meeting (CMM) with the parties. During the CMM, the TCRC raised questions with respect to the constitutionality of the directions and urged the Board to exercise its discretion and not proceed with its implementation. CN and CPKC took the position that the Board had no authority to review the ministerial directions and was under an obligation to proceed to implement them.

From the discussion with the parties at the CMM, the Board identified two questions:

- 1. Does the Board have the authority to review the Minister's exercise of discretion under section 107 of the *Code*?
- 2. Does the Board have any discretion in the implementation of the direction?

A hearing was convened forthwith as permitted by section 15(2) of the *Regulations*. A panel of the Board composed of Ms. Ginette Brazeau, Chairperson, and Mesdames Elizabeth Cameron and Angela Talic, Members, held the hearing on August 23, 2024, and heard the parties on these questions. For the purpose of addressing these questions, the Board heard the two matters together as the same issues were raised with respect to both ministerial directions.

After hearing from the parties and considering their fulsome and helpful submissions, the Board has determined that it does not have authority to review the Minister's directions or to assess their validity. In the Board's view, the Federal Court has the exclusive jurisdiction to review the Minister's directions pursuant to section 18(1) of the *Federal Court Act*.

Further, and considering the clear statutory language contained in section 107 of the *Code*, the Board has concluded that, in this case, it has no discretion or ability to refuse to implement, in whole or in part, the minister's directions or to modify their terms.

The Board understands the importance and consequences of this decision on the parties' respective rights and obligations under the *Code*. However, given the current circumstances and impact of work stoppages involving Canada's two main rail companies, it has decided to issue its conclusions in the form of a bottom-line decision. The Board will provide the parties with the detailed reasons for this decision as soon as possible.

This is a unanimous decision of the Board, and it is signed on its behalf by

Ginette Brazeau Chairperson

c.c.: The Honourable Mr. Steven MacKinnon (by Web Portal) Mr. Jean-Daniel Tardif Canada Industrial Relations Board



Conseil canadien des relations industrielles

Order No. 1566-NB

IN THE MATTER OF THE

Canada Labour Code

- and -

Canadian National Railway Company, Montréal, Quebec,

employer,

- and -

Teamsters Canada Rail Conference,

certified bargaining agent.

WHEREAS the Canada Industrial Relations Board (the Board) has received a direction by the Minister of Labour (the Minister) pursuant to section 107 of the *Canada Labour Code* (the *Code*) involving the Canadian National Railway Company (CN) and the Teamsters Canada Rail Conference (TCRC);

AND WHEREAS the Minister has directed the Board to i) order CN to resume operations and TCRC employees to resume their duties; ii) assist the parties in reaching a settlement of the outstanding terms of their collective agreement by imposing final binding interest arbitration to resolve the outstanding terms of the collective agreement; and iii) extend the term of the existing collective agreement until the new collective agreement is determined by the arbitrator;

AND WHEREAS the Minister has also directed the Board to deal with the matter in an expedited manner as per sections 14 to 16 of the *Canada Industrial Relations Board Regulations*, 2012;

AND WHEREAS the Board held a hearing with the parties on August 23, 2024, to hear the parties on certain questions raised with respect to the ministerial direction;

AND WHEREAS the Board heard arguments from the parties on the Board's authority to review the Minister's exercise of discretion under section 107 of the *Code* and on whether the Board has any discretion in implementing the ministerial direction in whole or in part;

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AND WHEREAS, the Board has concluded that it has no authority to review the ministerial direction or the exercise of ministerial discretion under section 107 of the *Code* and that it does not have discretion to vary or to not implement the direction (*Canadian National Railway Company and Canadian Pacific Railway Company (now known as Canadian Pacific Kansas City Railway)*, 2024 CIRB LD 5437);

NOW THEREFORE, in accordance with the ministerial direction, the Board makes the following orders:

- CN is directed to resume rail service operations and employees represented by the TCRC are directed to resume their duties by 00:01 EDT on August 26, 2024, and to continue such operations and duties until the final binding interest arbitration process is completed;
- The term of the collective agreement between CN and the TCRC that expired on December 31, 2023, is extended to include the period beginning on January 1, 2024, and ending on the day on which the new collective agreement between the parties comes into effect;
- Final binding interest arbitration is imposed to resolve the outstanding terms of the collective agreement, and the parties are directed to attend a case management meeting with the Board on August 29, 2024, at 11:00 a.m. EDT, to discuss the implementation of the arbitration process.

AND FURTHERMORE, the Board shall remain seized of this matter to resolve any dispute with respect to the implementation of this order.

ISSUED at Ottawa, this 24th day of August, 2024, by the Canada Industrial Relations Board.

Ginette Brazeau Chairperson

Reference No.: File No. 037943-C

Preface

The Norwegian Offshore Directorate's primary objective is to contribute to the greatest possible values for society from the oil and gas activities through efficient and prudent resource management, where due consideration is given to health, the environment, safety, as well as other users of the ocean.

The Norwegian Petroleum Directorate has had responsibility of all of this for more than 50 years. Today's world is vastly different from where we started out. When we changed our name to the Norwegian Offshore Directorate on 1 January 2024 it was, in part, a reflection of the new endeavours and challenges we have taken on, not least those related to CO2 storage and seabed minerals.

Let's focus on the future. The vast resources we still have on the NCS will help supply the energy the world needs in the years to come. In fact, Norwegian oil and gas can be a key factor in addressing very real challenges, such as secure and stable energy for Europe. At the same time, interesting new concepts such as seabed minerals and CO2 storage could possibly be developed into profitable new industries, creating enormous value and bringing important contributions to the energy transition.

A long-term perspective is one of the essential building blocks in our resource management. This report illustrates opportunities, and outlines what's needed to make sure our shared resources continue to generate value for the broader society. We need to be aware of the significant uncertainty linked to long-term value creation and ongoing development. These are broad considerations in every sense of the word – the geopolitical situation, climate policy in the EU and worldwide, developments in the oil and gas markets and in more concrete terms, evolving technology and overall costs.

Keeping all of this in mind, our long-term assessments need to reflect this uncertainty, while standing up to scrutiny in a rapidly changing world.

Our guiding objective is to promote good choices as we stake out a course to create more value in the future. We hope this report can facilitate better dialogue, increase understanding of both challenges and opportunities on the NCS, and can thereby unlock the best path forward. Working together, for the benefit of all.



Kjersti Dahle Director technology, analyses and coexistence

It is with great sadness that we note the passing of two of our colleagues over the past year, Dag Helliksen and Kirsti Veggeland. We want to honour their legacy by dedicating this report to them.

Summary

However, realisation of these resources requires an ambitious path that will need careful consideration and hard work. Forecasts point to an expected decline in overall production on the NCS after 2025. Smart exploration and robust investments will be needed to curb this decline. If investments falter, the stage will be set for a rapid dismantling of our petroleum sector.

Extraction of seabed minerals, CO2 storage and offshore wind could become profitable new industries; assuming they prove themselves cost-effective, and that they can stand up to competition with alternatives. These new industries are also well-suited to reinforce and benefit from already established value chains and the many lessons already learnt.

Oil and gas going forward to 2050

The Norwegian Offshore Directorate seeks to provide data and analyses to support decision making for developing the NCS. The preparation and development of alternative scenarios for total oil and gas production up to 2050 is a key part of these efforts. All three scenarios presented here do indeed indicate production decline, but with very different trajectories.

What this production decline entails will ultimately come down to a number of factors including how much exploration is undertaken and how quickly, as well as the pace of technological progress and development. It's worth noting that this generally accepted production decline is in line with the objectives of the Paris Agreement.

In the basic scenario multiple discoveries are made and brought on stream, accompanied by investments aimed at increasing recovery from existing fields. Despite this, resource growth will not be sufficient to offset the overall gradual decline, due to diminishing production from the major, mature fields.

In contrast, the high scenario will mean vigorous exploration, many discoveries, rapid technological development and eager investors willing to take a chance on the NCS, bolster production and thus help mitigate shrinking government revenues up to 2050.

Finally, a look at the low scenario reveals sluggish exploration activity and investment, thus leading to rapid dismantling of the petroleum sector and the inevitable significant drop in revenue for the government.

Substantial resources still in the ground

The NCS still contains large undiscovered oil and gas resources. To secure our objective to maximise the value of the resources on the shelf, the resources first need to be found. Finding these resources will mean more exploration, both in more frontier areas and close to the extensive infrastructure already in place.

There are interesting opportunities when it comes to undiscovered resources, both in familiar and less-explored areas. More extensive and detailed information, better data coverage, new work methods and pioneering technology open the door for fresh approaches in exploration, which could result in more profitable discoveries in the time ahead.

The ability to consistently incorporate new learning and the will to seek new knowledge and develop new technology are also important contributors that can enable us to unlock the values in challenging reservoirs, and also in smaller discoveries. And development of advanced methods to improve recovery from existing fields represent a very significant upside potential.

Profitable exploration

There is no question that exploration is a profitable activity. The Norwegian Offshore Directorate conducted an analysis of exploration activity over the past 20 years which confirmed that exploration for oil and gas on the NCS helps deliver incredible value for the broader community.

In concrete terms, we're talking about more than 2000 billion Norwegian kroner (net present value). In fact, discoveries have generated value amounting to more than three times the costs devoted to exploration during this period.

Discoveries that have resulted in actual production have already offset total costs for all exploration investments in this period. The current track record shows a respectable 50 of 190 discoveries achieving development and production. That leaves around three-quarters of the discovered resources still waiting. The investments already made will continue to generate revenue as more discoveries come on stream.

Another takeaway from the analysis is that, while larger discoveries contribute most to value creation, a combination of many small discoveries can also deliver very substantial value across the board.

Robust activity

A large number of PDOs (plans for development and operation) were submitted to the Ministry of Energy in 2022, all of which secured approval during the course of 2023. The spike in PDO submissions can mainly be attributed to the temporary changes in petroleum taxation introduced in 2020.

These changes have helped facilitate more developments, paving the way for a swifter path from planning to production. The Directorate's analysis confirms that this has had a substantial positive impact on value creation.

Increased gas export capacity from the Barents Sea

The Norwegian Offshore Directorate's projections indicate that nearly two-thirds of all undiscovered resources are in the Barents Sea. The challenge here is that, without a firmer commitment to increase gas export capacity, these gas resources and values could remain locked in the subsurface for quite some time.

Designing and building more extensive infrastructure in and around this area is a prerequisite for developing oil and gas resources already proven. An increase in gas export capacity would also mean incentives for further gas exploration. There are a number of existing opportunities in the Barents Sea worthy of more detailed study.

Foundation for long-term production

What are Norway's advantages? Vast remaining resources, well-developed infrastructure, low operating costs and stable, practical overall framework conditions. This tried and tested model suggests that Norway has what it takes to continue in its role as a competitive producer and exporter of oil and gas for the foreseeable future.

But there's more. Huge volumes of CO2 resulting from power generation and industrial activity in Norway and Europe can be stored in the subsurface on the NCS. This presents a range of opportunities which are generating substantial interest and activity.

The Norwegian Offshore Directorate has also mapped significant mineral resources on the seabed which could contribute to the global supply of critical minerals. The first licensing round is expected to open in 2024. Time will tell whether this could prove to be an important new industry that can create value for Norway as a whole.

Background

In this chapter:

- Uncertain global landscape
- · The world needs oil and gas
- The Norwegian continental shelf is competitive
- Need for considerable investments moving forward
- New industries on the shelf

The Norwegian continental shelf (NCS) has supplied Europe with oil and natural gas for more than 50 years. The efforts invested on the NCS have brought secure and stable energy to Europe, while simultaneously providing Norway with vast revenues. Norway is currently the largest producer of oil and gas in Europe.

Uncertain global landscape

The global population, as well as business and industry, need energy to function and to reach the UN's Sustainable Development Goals(<u>1</u>). Uninterrupted access to sufficient energy at acceptable prices is a prerequisite for sustainable economic progress and social welfare development. Procuring enough energy for a growing global population poses however a significant challenge.

With the exception of brief periods during economic crises, global energy consumption has increased year-on-year. Particularly rapid energy consumption spikes have been observed in important regions of the global economy during periods of high economic growth. Whereas developing countries are especially vulnerable in terms of underlying energy needs. Their growing populations need energy to meet basic needs and achieve their desire for a better life and higher standard of living.

Significant and rapid emission cuts, in line with the goals of the Paris Agreement, will require an energy transition involving extensive changes in global energy supply. Among other things, this includes energy efficiency measures, more development of renewable energy alongside new lowemission solutions such as carbon capture and storage (CCS). The energy and dimate challenges the world is facing will need a range of simultaneous solutions.

Coal, oil and gas dominate the current, complex global energy system. This dependence leads to substantial greenhouse gas emissions, which have serious and irreversible consequences.

These energy sources have consistently accounted for around 80 per cent of the overall energy supply. More prevalent use of new energy sources has made significant additional contributions to existing sources, a factor which has been crucial in addressing rising energy needs. Furthermore, there is still extensive use of traditional biomass, with the associated challenges this brings for many low-income countries.

It will be challenging to implement the necessary transition of global energy systems quickly and the pace is uncertain. An energy system that is consistent with the goals of the Paris Agreement will however be entirely different from the system in place today. Renewable energy will be an important part of the solution, but as of today, it is difficult to predict which combination of technologies and solutions will prevail and succeed. Particularly when other societal considerations are also taken into account. The uncertainty surrounding future developments has therefore a direct impact on the need for the different energy sources.

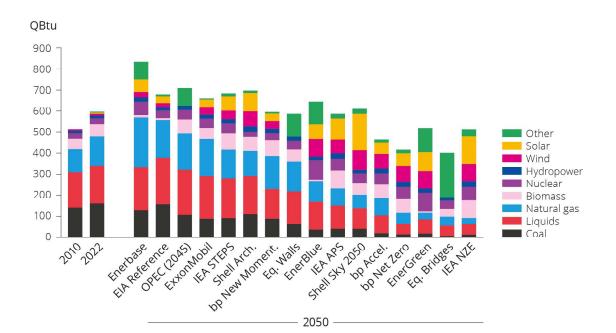
Both commercial and political reasons have led various business sectors in the West to limit their investments in fossil energy, which to a lesser extent, are also being seen in other parts of the world. Many western countries have introduced measures to improve their energy security in the wake of Russia's invasion of Ukraine. At the same time, several major oil companies have tweaked their business strategies to reflect a more balanced split between oil and gas activities on one side and renewable energy on the other.

While European gas prices so far in 2024 remain far lower than the record prices in 2022 and the last half of 2021, prices are still high in a historical and global perspective. In Europe, the lapse of Russian gas deliveries has led to a significant increase in imports of liquefied natural gas (LNG). LNG

represents a link, both physically and in terms of price, between the gas markets in Asia, Europe and the US.

The global balance and competition in the LNG market is one of the most important drivers behind the evolution of European gas prices. Developing countries that import LNG are most vulnerable to the impact of high gas prices, but even in Europe, this is a challenging price level for households, businesses and energy-intensive industry.

The world needs oil and gas



Oil and gas accounted for about 55 per cent of total global primary energy consumption in 2023(2). According to the International Energy Agency (IEA) and other analyst communities, there will still be a need for oil and gas in 2050, see figure 3.1.

Figure 3.1 Global primary energy demand in 2050, different energy forecasts and scenarios. Source: Resources for the Future, 2024; British thermal units – Btu.

This figure was prepared by the US-based independent research foundation Resources for the Future (RFF)(<u>3</u>). Each year, RFF compares various selected long-term energy forecasts and scenarios in an effort to identify primary trends in global energy consumption and production. In most scenarios, global demand for primary energy will either grow modestly or dedine toward 2050. This will be the case despite the substantial expected increase in global population. The main reason for this is a global economy that is becoming more energy efficient.

Six of the scenarios show increased demand for oil/liquids leading up to 2050, while demand for natural gas rises in eight, which is half of the scenarios. Consumption will remain high after 2050, despite a dedine in demand for fossil energy. This will be the case even in normative scenarios where global warming is limited to 1.5 degrees Celsius.

As production from current oil and gas fields is subject to natural decline, considerable investments in new capacity will be needed in order to meet future demand. In relative terms however, the industry(<u>4</u>) expends less capital on new investments than on dividend and share buybacks, see figure 3.2.

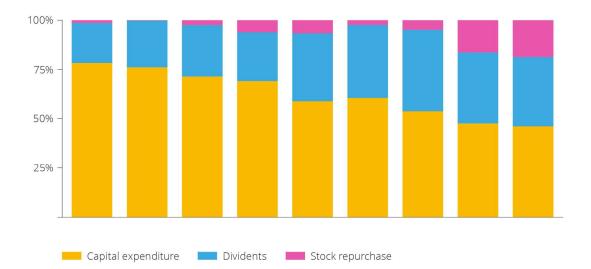


Figure 3.2 Expenditure on investments in exploration and recovery, dividend and share buybacks for the 30 largest oil and gas companies, 2015–2023 (Source: IEA 2024).

Companies will likely lean towards investing capital in oil and gas resources they find most profitable, which generally means oil and gas resources with low costs and low emissions per produced unit. These are often called 'advantaged' resources(<u>5</u>). The companies are therefore expected to seek out such advantaged resources, rather than investing in existing discoveries and fields challenged by high costs and emissions. Heavy oil and shale oil are examples of more challenged resources.

A study conducted by Wood Mackenzie(<u>6</u>) shows that there are few advantaged oil and gas resources available globally to meet future demand. Yet, these resources are plentiful on the NCS.

The Norwegian continental shelf is competitive

Nearly all oil and gas produced on the NCS is exported to Europe. This helps ensure a safe and stable energy supply for Europe.

The removal of Russian gas following the invasion of Ukraine laid bare the importance of stable gas deliveries from Norway to the rest of Europe. In 2022, Norway increased its gas exports by about 8 per cent or 9 billion scm (standard cubic metres). Deliveries from Norwegian fields have helped cover a higher share of Europe's gas needs than before. The volume supplied by Norway now corresponds to about 30 per cent of the EU's and UK's total gas consumption.

Without deliveries of these Norwegian resources, Europe would have a greater need to purchase LNG on the global market. This in return, would lead to a tighter global market, and would also have a greater impact on developing countries in Asia that need to import gas. Without deliveries from Norway, European gas and energy prices could be even higher.

Access to energy have increasingly become part of national security policies. Norwegian presence in the high north and Norway's protection of critical societal functions such as gas infrastructure, will likely only become more important moving forward.

In spite of somewhat higher exploration and development costs compared with other petroleum provinces, the NCS is well-positioned to remain a competitive producer and exporter of oil and gas.

The relatively higher costs are caused in part by the fact that activities take place far out at sea and under challenging weather conditions. Substantial remaining resources, well-developed infrastructure, low operating expenses and stable framework conditions make the NCS an attractive investment opportunity, see figure 3.3(7).

| Expex per boe discovered (USD/boe)* | し West Africa | 0the Offsho | er ore <i>F</i> | 2 South America | 3 NW Europe | Sou SE J | 3 th & Asia | 5 Middle East | NCS | Au | stralia | North- America |
|---|-----------------------|----------------------------|---------------------|-----------------------|-----------------------|-------------------------|-----------------------|-------------------------|----------------------|------------------------|------------------------|----------------------|
| Capex per boe (USD/boe)** | 2 North America | 3 Middle East | 3 Middle East | 4 North America | 4 North America | 5 Australia | 6 South America | 6 South & SE Asia | 9 NW Europe | 9 North America | 9 NCS | 12 West Africa |
| Opex per boe (USD/boe)*** | 3 Middle East | 4 Middle East | 4 NCS | 4 North America | 5 Australia | 7 South & SE Asia | 8 North America | 9 South America | 10 West Africa | 10 North America | 16 North America | 17 NW Europe |

🏯 Offshore 🚆 Shale unconventional 🌇 Onshore conventional 🞆 Oil sands unconventional

Figure 3.3 Unit costs for exploration, development and operations on the Norwegian shelf compared with other petroleum provinces in 2021.

*Exploration expenses per barrel; offshore only. Only includes commercial discoveries where public information is available. Average of 2019 and 2020.

**Greenfield capital expenditures related to sanctioned oil and gas fields in current year. Volume-weighted average of 2019 and 2020.

***Operating expenses do not include transport costs and tax. Only includes opex associated with the production of hydrocarbons in addition to sales, general and administrative expenses (Source: OG21 2021).

The NCS has very low greenhouse gas emissions per produced unit compared with other petroleum provinces, see figure 3.4(8).

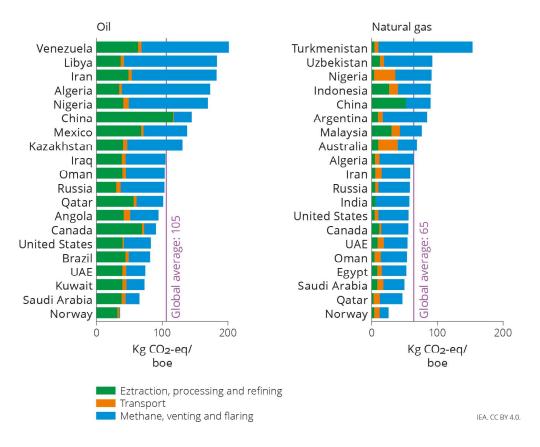


Figure 3.4 Comparison of average emission intensity in kg CO2 equivalent/bbls of oil equivalent in 2022 for the largest oil and gas producers (Source: IEA 2023b).

Need for considerable investments moving forward

Petroleum investments increased sharply in 2023 after dedining for three years straight, see figure 3.5. Investments in field developments were the main contributor to the increase, while the rise in exploration was more moderate.

The increase in 2023 must be viewed in context with high petroleum prices and the temporary changes in the petroleum tax rules that were implemented in connection with the oil price plunge in the spring of 2020. This ensured that plans for development and operation (PDOs) for as many as 13 new field developments were submitted in 2022. Several investment decisions were also made for further development of operating fields and improved recovery on existing fields.

The high number of field developments will contribute to stable activity levels moving forward. In a longer perspective, the decline in remaining resources is eventually expected to lead to lower investments in oil and gas production.

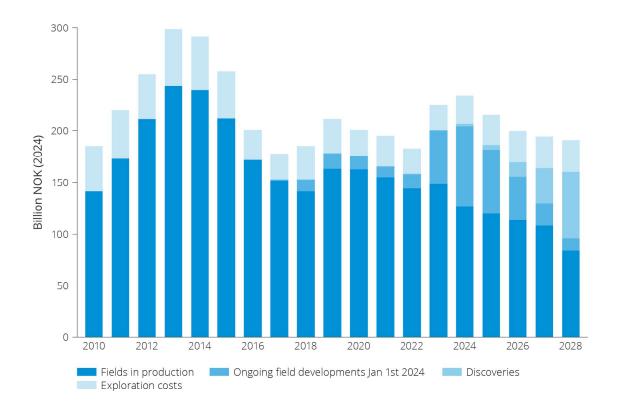
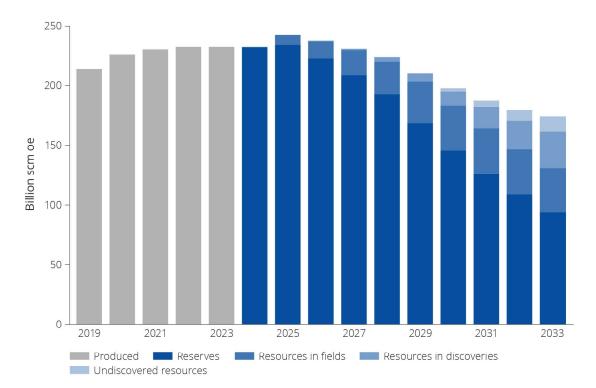


Figure 3.5 Historical petroleum investments and projections for future petroleum investments on the NCS.

Petroleum production on the NCS increased slightly in 2023 in relation to 2022, but has been on plateau more or less since 2021. It is below its highest level in 2010. At the same time, gas production declined somewhat from record-high levels in 2022. The production of petroleum has increased each year starting in 2020 (Figure 3.6) and is expected to increase further in 2024 and 2025. The Norwegian Offshore Directorate projects that the level in 2025 will be the highest since 2006.



Production from existing fields will presumably decline after 2025, and production and exports from the NCS will gradually start to fall if no action is taken.

Figure 3.6 Production history and forecasts by resource class (Resource Accounts as of 31 December 2023(7) RNB 2024),

In order to slow the dedine in production, the companies will need to make more and larger discoveries and complete additional projects for improved recovery. The Norwegian Offshore Directorate's assessments indicate that In 2033, about one-half of total production will be from projects that have not been approved as of June 2024 (see resource dassification below).

Resource classification

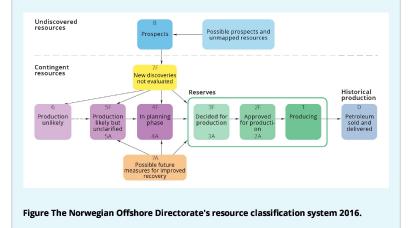
The Norwegian Offshore Directorate's resource classification system is used for petroleum reserves and resources on the NCS (figure). This system is structured in such a way that the authorities receive the most uniform possible reporting from licensees as input to the Directorate's annual updating of the resource accounts.

"Resources" is a collective term for all oil and gas that can be recovered. They are classified in the Norwegian Offshore Directorate's resource classification system according to their level of maturity, with regard to how far they have come in the planning process from discovery to production.

Developed in 1996, the classification system was revised in 2001 and 2016. Changes in 2016 primarily involved language improvements, including new designations for certain resource classes. The classification relates to the total recoverable quantities of petroleum.

The system is divided into three classes: reserves, contingent resources and undiscovered resources. All recoverable petroleum quantities are called resources, and reserves are a special category of these. Reserves are the petroleum quantities covered by a production decision. Contingent resources cover both recoverable quantities which have been discovered but are not yet subject to a production decision, and projects to improve recovery from the fields.

The classification utilises the letters "F" (first) and "A" (additional) respectively to distinguish between the development of discoveries and deposits, and measures to improve recovery from a deposit. Undiscovered resources are petroleum quantities which could be proven through exploration and recovered. The quantities produced, sold and delivered form aggregate historical production(8).



New industries on the shelf

The need to reduce CO_2 emissions means that multiple facilities will be needed to capture and store CO_2 (CCS). CCS involves capturing CO_2 from power generation and industry and transporting and storing it safely in geological formations deep underground. There are several suitable formations on the NCS.

The energy transition will also lead to an increased need for renewable energy, which is dependent on multiple minerals and metals. Some of which can be found on the NCS.



https://www.sodir.no/en/whats-new/news/general-news/2024/high-price-to-pay-for-halting-exploration-for-oil-and-gas/ High price to pay for halting exploration for oil and gas

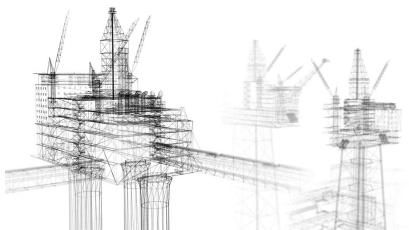


Illustration of a production facility on the Norwegian Continental Shelf.

11/03/2024 Stopping exploration activity on the Norwegian shelf will accelerate the scale-down of the oil and gas industry.

The Climate Change Committee's report was broadly covered when it was published last autumn. The deadline for comments regarding the report has now expired, and the Norwegian Offshore Directorate has submitted a comprehensive consultation response in which we point out significant deficiencies in this report. In light of this, Torgeir Stordal, Director General of the Norwegian Offshore Directorate, wrote this article, which was first published on altinget.no on 11 March.

This will be very harmful for the Norwegian economy and will complicate Europe's situation. Is that truly what we want?

Among other things, the Committee has proposed the development of a strategy for the tail-end phase of Norwegian petroleum activities. Until this strategy is in place, the Committee recommends not awarding new licences for exploration, production or installation and operation.

The Norwegian Offshore Directorate just submitted its input on the report. We believe that the Committee's proposals will have a substantial socio-economic impact if they are adopted. The purpose of a tail-end phase strategy is to discontinue profitable activity faster than what would otherwise have been the case.

The Committee has not addressed the major consequences this will have for value creation, employment around the country and state revenues. It could also weaken the EU's security of supply.

A temporary hiatus will immediately result in reduced exploration activity on the Norwegian shelf, and will weaken the basis for new discoveries that can be developed. Time-critical and profitable oil and gas resources could be lost and existing infrastructure will be shut down earlier than planned.

The 2050 Climate Change Committee has bolstered its mandate and is advocating for an amendment to the Climate Act when it proposes to cut emissions from Norwegian territory by 90-95 per cent by 2050 compared with 1990. This means disregarding the possibility of purchasing emission credits - which are among the most

effective ways to attempt to reach climate targets. The cost of domestic cuts can be much higher than equivalent cuts in the EU.

163,000 jobs in play

Exploration activity on the Norwegian shelf has provided substantial values to society over the last 20 years. Overall net revenues are estimated at more than NOK 3000 billion.

163,000 people were directly or indirectly employed by the petroleum industry in 2020, which means about 6 per cent of total employment in Norway. The industry creates jobs throughout the country and helps maintain less centralised population patterns.

Production is declining on its own

The Committee presumes that activity in the oil and gas industry on the Norwegian shelf is too high leading up to 2050, which means that measures must be implemented to cut production.

On the other hand, the Norwegian Offshore Directorate expects activity in the industry to naturally decline following a production peak in 2025. The production decline towards 2050 is within what the Intergovernmental Panel on Climate Change and the IEA have projected is in line with successfully following up the Paris Agreement.

Despite the decline in activity, the Norwegian Offshore Directorate expects the industry to continue creating significant values leading up to 2050. The net cash flow in 2030-2050 is expected to amount to 4.5 thousand billion 2024-NOK. While the estimate is uncertain, the State's revenues in the form of taxes and ownership will account for close to 90 per cent of this.

Significant values could be lost

The Committee does not want to build new infrastructure that commits us to emissions toward 2050 and beyond. This means that no new export capacity will be built in the Barents Sea. If so, society will be losing out on substantial values.

The Norwegian Offshore Directorate projects that there are significant resources left to discover in the Barents Sea, but the LNG plant on Melkøya has no available export capacity beyond the gas from Snøhvit. This lack of capacity affects the companies' interest in exploration. Gas discoveries are of little value if the gas cannot be transported to the market. Without increased capacity, all other gas resources in the Barents Sea will remain stranded for a long time, which means that society can lose out on substantial values. At the same time, the energy situation in Europe indicates that there will be a need for gas for a long time to come.

Security for Europe

The energy crisis following Russia's invasion of Ukraine demonstrates the importance of stable gas deliveries from Norway to Europe. In 2022, Norway increased its gas exports by about 100 TWh of energy, the equivalent of about 65 per cent of all Norwegian power generation that year. Without Norwegian gas, it would have been more difficult to cover Europe's demand for gas, and the price of energy would have been higher for all Europeans. Norway can be a safe and stable supplier to Europe for many years to come, but security of supply and geopolitics are crucial considerations that the 2050 Climate Change Committee does not appear to emphasise in its assessments.

The Norwegian Offshore Directorate would like to see calculations of the cost of these proposed measures for the petroleum industry for the broader society. As no such calculations have been made, the Committee's recommendations are deficient and misleading, given that socio-economically profitable measures are being replaced by more costly measures.

Updated: 11/03/2024

08/16/2024 08:24:13 [BFW] Bloomberg First Word

Russian Oil Refinery Runs So Far in August Are Highest This Year

By Bloomberg News

(Bloomberg) -- Russia's crude processing rate averaged 5.53 million barrels a day during Aug. 1-14, according to a person with knowledge of industry data.

- That's up by over 102k b/d compared with the average in July
- Average crude processing rate accelerated in the second week of August to 5.58m b/d compared with 5.49m b/d in the first week of the month
- If the processing rate is sustained throughout August, it will be the highest average monthly level since July 2023, according to historical figures
- NOTE: Russia's refinery runs remain one of the key indicators alongside the nation's seaborne export flows for market watchers to follow trends in its oil industry, after the government classified official output data amid Western sanctions
- READ, Aug. 14: Russia's Seaborne Crude Exports Slowly Recover From 11-Month Low
- READ, Aug. 13: Russia's Foreign Oil Sales Climb to 3-Month High as Prices Rise
- READ, Aug. 12: Russia's Crude Oil Output Declined to 9.089m B/d in July: OPEC
- READ, Aug. 9: Russia's Oil Processing in August on Pace for Highest This Year

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08/20/2024 07:12:07 [BN] Bloomberg News

Russia's Oil Exports Maintain Downtrend as Sakhalin Flows Tumble

Weekly shipments fall to the third-lowest level for the year so far

By Julian Lee

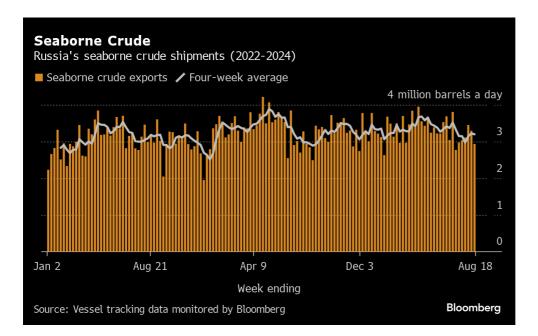
(Bloomberg) -- Russia's seaborne oil flows continued a steady decline, driven by a hefty loss of barrels from its Sakhalin Island terminal in Asia.

The nation's four-week average crude exports edged lower in the week to Aug. 18, dropping by 25,000 barrels a day compared with the previous period. Its weekly shipments, which are far more volatile, fell 360,000 barrels a day. Volumes are almost 500,000 barrels a day below an April high.

The decline comes ahead of a plan by several OPEC+ member countries, including Russia, to ease output curbs from October. A decision may come in early September on whether to proceed with or delay those production increases as prices slide amid concerns over global demand.

While shipments of ESPO crude piped to the Pacific terminal at Kozmino are booming, flows from two projects off Russia's Sakhalin Island have slowed. Eleven Sokol cargoes have been exported since the start of July, compared with 13 in each of the two previous seven-week periods. Just two shipments have been made from the Sakhalin 2 project in the past eight weeks. Until late June, the project was sending that number every three weeks.

Russia's oil refineries have boosted runs in the first half of August. If the processing rate is sustained throughout the month, it will be the highest average monthly level since July 2023.



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Russia continues to put some of its sanctioned tankers back to work. The Belgorod and Bratsk, which have already shipped one cargo while under US sanctions, have taken on second loads at Novorossiysk this month. Their earlier cargoes were transferred onto the supertanker Oxis in the Gulf of Oman and are now off the Chinese port of Dalian. The Liberty, formerly NS Laguna, loaded a cargo at Primorsk and the Nevskiy Prospect is scheduled to moor there today.

Crude Shipments

A total of 27 tankers loaded 20.54 million barrels of Russian crude in the week to Aug. 18, vessel-tracking data and port-agent reports show. The volume was down from 23.04 million barrels on 30 ships the previous week.

| Week ending | August 18 | August 11 | August 4 |
|--------------------------|-----------|-----------|----------|
| Primorsk (Baltic) | 7 | 7 | 10 |
| Ust-Luga (Baltic) | 5 | 5 | 6 |
| Novorossiysk (Black Sea) | 3 | 4 | 5 |
| Murmansk (Arctic) | 2 | 2 | 2 |
| Other Arctic | 0 | 0 | 0 |
| Kozmino (Pacific) | 9 | 9 | 8 |
| De Kastri (Pacific) | 1 | 2 | 1 |
| Prigorodnoye (Pacific) | 0 | 1 | 0 |
| Total | 27 | 30 | 32 |

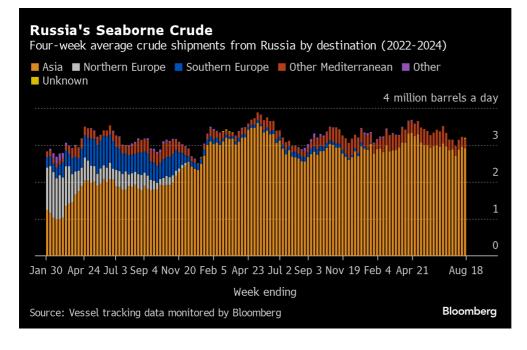
It means Russia's seaborne daily crude flows in the week to Aug. 18 fell by about 360,000 barrels to 2.93 million, the second straight weekly decrease. The drop in the weekly flow was the biggest since early July and took shipments to their third-lowest recorded this year.

Despite the sharp drop, the less volatile four-week average edged lower by only 25,000 barrels a day to 3.2 million from a revised 3.22 million the previous week. That measure had gained 80,000 barrels a day in the prior week.

Crude shipments so far this year are about 40,000 barrels a day below the average for the whole of 2023.

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News Story



Russia terminated its export targets at the end of May, opting instead to restrict production, in line with its partners in the OPEC+ oil producers' group. The country's output target is set at 8.978 million barrels a day until the end of September, after which it is scheduled to rise at a rate of 39,000 barrels a day each month until September 2025, as long as market conditions allow. A decision on whether to proceed with the easing of cuts is expected early next month.

Moscow has also pledged to make deeper output cuts in October and November this year, then between March and September of 2025, to compensate for pumping above its OPEC+ quota earlier this year.

Shipments from the Sakhalin 2 project should recover in the coming weeks. The project was halted for a month for maintenance work on both oil and liquefied natural gas facilities in early July. Production was restarted in early August, the operator said in a statement. One of the project's three shuttle tankers is still out of use and a vessel is being transferred from the Sakhalin 1 project, ship-tracking data compiled by Bloomberg show.

Two cargoes of Kazakhstan's KEBCO crude were loaded at Novorossiysk during the week.

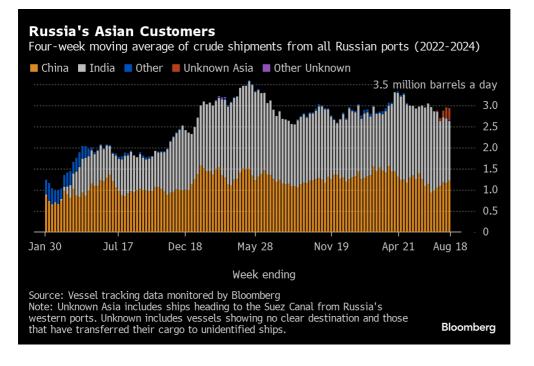
Flows by Destination

Asia

Observed shipments to Russia's Asian customers, including those showing no final destination, edged lower to 2.94 million barrels a day in the four weeks to Aug. 18. That's about 9% below the average level seen in April.

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News Story



About 1.22 million barrels a day of crude was loaded onto tankers heading to China. The Asian nation's seaborne imports are boosted by about 800,000 barrels a day of crude delivered from Russia by pipeline, either directly, or via Kazakhstan.

Flows on ships signaling destinations in India averaged 1.41 million barrels a day, down from a revised 1.53 million for the period to Aug. 11.

Both the Chinese and Indian figures are likely to rise as the discharge ports become clear for vessels that are not currently showing final destinations.

The equivalent of about 250,000 barrels a day was on vessels signaling Port Said or Suez in Egypt. Those voyages typically end at ports in India or China and show up as "Unknown Asia" until a final destination becomes apparent.

The "Other Unknown" volumes, running at about 30,000 barrels a day in the four weeks to Aug. 18, are those on tankers showing no clear destination. Most originate from Russia's western ports and go on to transit the Suez Canal, but some could end up in Turkey. Others may be moved from one vessel to another, with the majority of such transfers now taking place in the Mediterranean, most recently off Egypt, or near Sohar in Oman.

Russia's oil flows continue to be complicated by the Greek navy carrying out exercises in an area that's become associated with the transfer of Russian crude. These naval drills have now been extended to Sep. 15. As a result, cargo switches have moved to the waters off Egypt's Port Said, where two Suezmax cargoes were transferred to a larger vessel for shipment to Asia via the Cape of Good Hope.

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News Story

Crude Shipments to Asia

Shipments of Russian crude to Asian buyers in million barrels a day

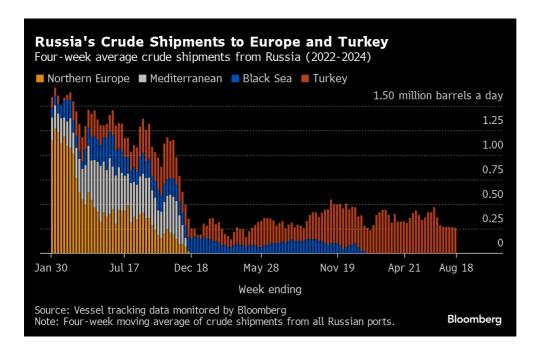
| | | | | Unknown | Other | | | |
|--|-------|-------|-------|---------|---------|-------|--|--|
| 4 weeks ending | China | India | Other | Asia | Unknown | Total | | |
| July 14, 2024 | 0.99 | 1.87 | 0.00 | 0.00 | 0.00 | 2.86 | | |
| July 21, 2024 | 1.05 | 1.79 | 0.00 | 0.04 | 0.00 | 2.88 | | |
| July 28, 2024 | 1.09 | 1.54 | 0.00 | 0.07 | 0.00 | 2.70 | | |
| August 4, 2024 | 1.18 | 1.53 | 0.00 | 0.16 | 0.00 | 2.88 | | |
| August 11, 2024 | 1.16 | 1.53 | 0.00 | 0.26 | 0.00 | 2.96 | | |
| August 18, 2024 | 1.22 | 1.41 | 0.03 | 0.25 | 0.03 | 2.94 | | |
| Source: Vessel tracking data compiled by Bloomberg | | | | | | | | |

• Europe and Turkey

Russia's seaborne crude exports to European countries have ceased, with flows to Bulgaria halted at the end of last year. Moscow also lost about 500,000 barrels a day of pipeline exports to Poland and Germany at the start of 2023, when those countries stopped purchases.

Turkey is now the only short-haul market for shipments from Russia's western ports, with flows in the 28 days to Aug. 18 little changed at about 260,000 barrels a day, the lowest since February.

Shipments to Turkey are down by about 30% from the average level seen between late February and the end of June.



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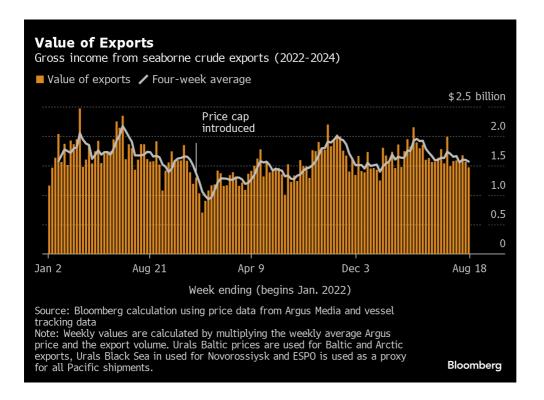
Export Value

The gross value of Russia's crude exports fell to \$1.47 billion in the seven days to Aug. 18, from \$1.56 billion in the period to Aug. 11. The lower weekly flows were partly offset by the first weekly increase in prices for Russia's major crude streams in six weeks.

Export values at Baltic and Black Sea ports were up week-on-week by about \$3.50 a barrel, while key Pacific grade ESPO rose by about \$4 a barrel. Delivered prices in India were also up, increasing by about \$3.50 a barrel, all according to numbers from Argus Media.

Four-week average income was little changed at about \$1.58 billion a week. The four-week average peak of \$2.17 billion a week was reached in the period to June 19, 2022.

During the first four weeks after the Group of Seven nations' price cap on Russian crude exports came into effect in early December 2022, the value of seaborne flows fell to a low of \$930 million a week, but soon recovered.



NOTES

This story forms part of a weekly series tracking shipments of crude from Russian export terminals and the gross value of those flows. The next update will be on Tuesday, Aug. 27.

All figures exclude cargoes identified as Kazakhstan's KEBCO grade. Those are shipments made by KazTransoil JSC that transit Russia for export through Novorossiysk and Ust-Luga and are not subject to European Union sanctions or a price cap. The Kazakh barrels are blended with crude of Russian origin to create a uniform export stream. Since

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Russia's invasion of Ukraine, Kazakhstan has rebranded its cargoes to distinguish them from those shipped by Russian companies.

Vessel-tracking data are cross-checked against port agent reports as well as flows and ship movements reported by other information providers including Kpler and Vortexa Ltd.

If you are reading this story on the Bloomberg terminal, click for a link to a PDF file of four-week average flows from Russia to key destinations.

--With assistance from Sherry Su and Grant Smith.

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https://www.opec.org/opec_web/en/press_room/7361.htm

OPEC Secretariat receives updated compensation plans from Iraq and Kazakhstan

No 11/2024 Vienna, Austria 22 Aug 2024

The 37th OPEC and non-OPEC Ministerial Meeting (ONOMM) held 02 June 2024 reiterated the critical importance of adhering to full conformity and the compensation mechanism.

In light of this, the OPEC Secretariat received updated compensation plans from Iraq and Kazakhstan for their overproduced volumes for the first 7 months of 2024 (January through July 2024), which totaled about 1,440 tb/d for Iraq and 699 tb/d for Kazakhstan, according to assessments made by the independent sources approved in the Declaration of Cooperation (DoC).

The table below, prepared by the OPEC Secretariat, shows in detail that the entire over-produced volumes will be fully compensated for by September 2025.

| | Cumulative overproduction | Compensation Plan | | | | | | |
|------------|---------------------------------------|-------------------|------------|------------|------------|------------|--|--|
| Country | Jan. 2024 thru July 2024 (tb/d) | Aug- 24 | Sep- 24 | Oct- 24 | Nov- 24 | Dec- 24 | | |
| Iraq | 1,440 | 90 | 95 | 95 | 100 | 110 | | |
| Kazakhstan | 699 | 49 | 28 | 265 | 32 | 54 | | |

Table: Overproduction Compensation Plan for Iraq and Kazakhstan

| Country | Compensation Plan | | | | | | | | | |
|------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
| | Jan- 25 | Feb- 25 | Mar- 25 | Apr- 25 | May- 25 | Jun- 25 | Jul- 25 | Aug- 25 | Sep- 25 | |
| Iraq | 120 | 120 | 120 | 120 | 105 | 90 | 90 | 90 | 95 | |
| Kazakhstan | 65 | 52 | 39 | 36 | 33 | 18 | 16 | 13 | 1 | |

07/12/2024 07:33:11 [BN] Bloomberg News

Saudi Arabia Boosts Dirtiest Oil Imports Amid Summer Demand (1)

- Fuel oil imports in June highest since at least November 2020
- World's biggest crude exporter buys fuel oil for power plants

By Anthony Di Paola

(Bloomberg) -- Saudi Arabia boosted imports of the dirtiest type of oil to the highest in more than three years to help meet power demand during the scorching summer.

Shipments of fuel oil rose in June to the most since at least the end of 2020, and are expected to remain elevated this month, according to data from market researchers Kpler and Vortexa. Purchases, which typically jump during the hottest months as air conditioners crank up, have risen as much as fourfold since March to about 350,000 barrels a day, according to Vortexa.



Saudi Arabia is the region's biggest buyer of fuel oil, a type of dirty product that's left over after refineries produce transport fuels like gasoline and diesel. It also burns crude oil directly to produce electricity, which likely contributed to the kingdom's exports dropping to a 10-month low of about 5.6 million barrels a day in June, according to data compiled by Bloomberg. Fuel oil is mostly sold at a discount to crude since it's heavier and more polluting.

Temperatures in Riyadh hovered in the mid-40Cs this week, according to AccuWeather, and can top 50C (122F) in the summer. The heat drives demand for electricity to power air conditioners, which in turn forces the kingdom to burn more oil.

Saudi Aramco, which handles oil shipments for the kingdom, declined to comment on the fuel oil imports.

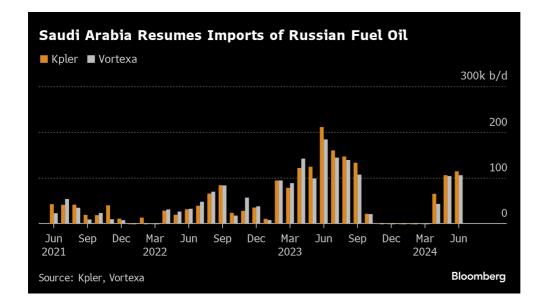
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Time to Stop

Saudi Arabia aims to stop burning liquid fuels for power this decade as it targets net zero emissions by 2060. Crown Prince Mohammed bin Salman, pursuing a breakneck modernization program, has pledged to ramp up solar and wind generation. State oil producer Saudi Aramco last month signed \$25 billion contracts to pump natural gas from the Jafurah field for use including in power plants.

The company plans to provide enough gas to replace all the liquid fuel in power plants by 2030, freeing up roughly 1 million barrels a day of crude used domestically in the summer months for exports.

Saudi Arabia buys most of the fuel oil that Iraq and Bahrain produce, while also importing cargoes from the United Arab Emirates. In April, the kingdom resumed purchases from Russia after a five-month pause. Supplies from there have nearly doubled since then though are still below the levels of last summer.



Overall fuel oil imports are set to remain elevated again in July, with both Kpler and Vortexa already expecting roughly 300,000 barrels a day of purchases so far this month.

(Updates with Aramco declining to comment in the fifth paragraph.)

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https://www.trafigura.com/news-and-insights/insights/five-things-we-can-do-today-to-decarbonise-shipping/

CONNECTING VITAL RESOURCES

Five things we can do today to decarbonise shipping

Published on14 Aug 2024

As one of the world's largest charterers of tankers, we recognise the importance of supporting the decarbonisation of shipping.

To that end, we recently ordered four gas carriers capable of running on low-carbon ammonia. We expect to take delivery of the first vessel in the second half of 2027.

While we continue to advocate for the implementation of a carbon levy and a 'feebate' system to drive long-term decarbonisation in shipping, we also recognise the significance of reducing carbon emissions today given that the industry is responsible for around three percent of global greenhouse gas emissions (GHGs).

It is all the more important because the current disruption to global trade from ships not being able to use the Red Sea is leading to much longer voyages and a dramatic increase in emissions.



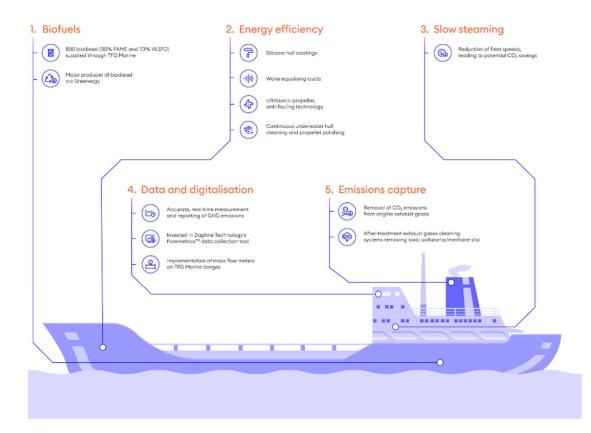
Like the time value of money – one of the fundamental concepts of finance –it is also helpful to consider the time value of GHG emissions.

A tonne of CO_2 reduced today is worth more than a tonne of CO_2 reduced in the future.

That's because it is the cumulative concentration of GHGs in the atmosphere that drives long-term climate change. So, the more we can do now, the better it is for the environment.

The good news is that there are numerous actions we can implement quickly to reduce emissions from shipping.

These include:



Biofuels

Emissions reduction potential from B30: **up to 25%*** lower GHG intensity vs. low sulphur fuel oil.

One option is the use of biofuels. There are several types of biofuels on the market including biodiesel, also known as fatty acid methyl esters (FAME). This is produced from vegetable oil, animal fats or used cooking oils through a process known as transesterification. Although there are feedstock constraints, biofuels are attractive because they can be used with virtually no retrofitting to vessels and infrastructure.

They can also be blended with traditional marine fuels such as very low sulphur fuel oil (VLSFO), to achieve emissions reduction. B30 - a blend of 30% FAME and 70% VLSFO - is expected to be a popular choice and is set to play a significant role in the near term, while the industry transitions to low or zero carbon fuel sources. Trafigura already supplies B30 through our bunkering joint-venture TFG Marine and we are set to become a major producer of biodiesel via our recent purchase of Greenergy, supplier and distributor of transportation fuels and biofuels.

Energy efficiency

(©@

Emissions reduction potential: up to 10% vs. unmodified vessel*

Technical measures such as silicone hull coatings, wake equalising ducts (WED), ultrasonic propeller antifouling technology, and continuous underwater hull cleaning and propeller polishing are another way to quickly reduce emissions.

Indeed, we have already retrofitted a number of our owned vessels with silicon hull coatings and WED.

Slow-steaming

Emissions reduction potential: up to 19% vs. conventional vessel speed

One of the fastest and most cost-effective ways to reduce CO₂ emission is slow-steaming – the practice of operating ships at lower speeds. By travelling more slowly, vessels consume less fuel, which not only reduces operational costs but also reduces GHG emissions.

To be sure, slow-steaming is not an option open to everyone - some vessels are not designed to move slowly while others may need to pick up speed to compensate for lost time if disruptions have forced them to take longer routes. Moreover, by significantly reducing the speed of the fleet, more ships are needed to cover demand. But even when the additional emissions from building and operating new ships are taken into consideration, slow-steaming still leads to CO₂ savings.

According to Transport & Environment, a non-government organisation focused on decarbonising transport in the EU, reducing fleet speeds by an average of 10% leads to overall CO₂ savings of 19%.

Data and digitalisation

Emissions reduction potential from enhanced routing and fuel usage: **up to 10%***

In order to reduce emissions, it is vital that the shipping industry is able to measure them on a vessel-byvessel basis. We cannot rely on industry averages because these estimates may not be an accurate reflection of real world emissions. That is one of the reasons why we have invested in a company called Daphne Technology. The Swiss-based group has developed a system called PureMetrics[™] that can measure and report greenhouse gas emissions (GHGs) from onboard a vessel in real time.

We also need to be able to accurately measure marine fuel supply, which is why TFG Marine has been promoting the use of mass flow meters. When fitted to ships, MFMs can provide computerised records of exact volumes delivered in real time. When all this data is combined with the route and voyage optimisation tools, it can help maximise vessel efficiency and reduce emissions.

Emissions capture

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Emissions reduction potential from onboard emissions capture: **10%-20%***

The use of on-board emission capture to sequester CO_2 and other GHGs such as methane, is another step that can be taken to reduce the environmental impact of shipping. Daphne Technology is developing a cleaning system that targets specifically "methane slip" from engine exhausts. This is particularly relevant as many shipowners and operators have placed orders for LNG-fuelled vessels – from containerships and cruise liners, to LNG carriers themselves. In the final analysis, there is no simple solution when it comes to the decarbonisation of shipping and we will need a range of options to reduce emissions now and in the future. For example, fuel cells and batteries charged with renewable energy are zero-emission sources of propulsion, although they are currently only an option for ships making short or near-shore journeys such passenger ferries. For larger, ocean-going vessels large solid wind assisted ship propulsion (WASP) systems have the potential to reduce fuel consumption and therefore emissions.

To be clear, these near-term measures are not a substitute for the transition to low-emissions shipping fuels. Looking forward, we think low-emission ammonia and methanol will eventually become the primary shipping fuels of the future. In the meantime, we must take every possible measure to reduce, avoid, or mitigate greenhouse gas emissions today to prevent making climate change even more challenging to address in the future. There is no time to lose.

*Trafigura estimates

20 Aug2024

DSRSG Koury's remarks to the UN Security Council - 20 August 2024

Mr. President, (Ambassador Michael Imran Kanu, Sierra Leone),

Over the past two months, the situation in Libya has deteriorated quite rapidly in terms of political, economic and security stability. Unilateral acts by Libyan political military and security actors have increased tension, further entrenched institutional and political divisions and complicated efforts for a negotiated solution. Let me share some of the recent incidents.

On 9 August, the Libyan National Army moved unilaterally toward southwestern parts of Libya sparking Western forces and groups to mobilize and assert their readiness to respond to any attack. While the LNA later clarified its purpose in moving these forces was to secure the southwestern border, this move generated tensions in the West and raised concerns with Libya's neighbour Algeria. These types of unilateral security moves are not confined only to movements of East-West forces but also occur among Western forces and armed groups.

On 23 July, forces affiliated to the GNU moved westward, sparking mobilization by the LNA and among armed groups in that area.

On 9 August, heavy armed clashes broke out in Tajoura, east of Tripoli, between two armed groups resulting in fatalities, injuries to civilians and destruction of property. Local mediation efforts defused the situation.

Mister President,

Unilateral actions by political and security figures are also undermining stability in other ways.

Unilateral attempts to unseat the Central Bank Governor are met with countervailing attempts to maintain him. Attempts to unseat Prime Minister Dbeibah and his Government are met with attempts to maintain them.

On 14 August, tensions escalated and armed groups mobilized in Souk Al Jumma, Tripoli, over reports of some armed movements seeking to take control over the Central Bank. The situation was diffused in the early morning of 15 August.

On 7 August, in a highly close contest - a potentially one vote difference - the results of the vote of President of the High Council of State remain contested and voting for the seats of Vice Presidents and Rapporteur are suspended. The political contest over whether to oppose or maintain Prime Minister and the Government of National Unity have also contributed significantly to the stalemate in the High Council of State. I urge the High Council of State to quickly resolve this issue as it risks further undermining its unity and legitimacy.

On 13 August, some members of the House of Representatives met in Benghazi and voted to end the mandate of the Government of National Unity and the Presidency Council and to transfer the role of Supreme Commander of the Armed Forces to the Speaker of the House of Representatives. These members also endorsed the HoR-designated government in the East as the only legitimate executive. Western leaders rejected these actions.

In response to these and other unilateral actions, UNSMIL reaffirmed to all political leaders and institutions their commitments and obligations under the Libyan Political Agreement and its amendments, in line with all relevant Security Council resolutions, particularly resolution 2702 (2023).

Mr. President, esteemed members of the Security Council,

Unilateral actions in relation to the economic sphere are also causing the problem of instability. Following months of efforts to develop a unified budget with the participation of east, western and southern representatives, on 10 July the House of Representatives adopted a supplementary budget allocation submitted unilaterally by the HoR-designated government. This was denounced by leaders in the West. Moreover, efforts to change the Central Bank Governor continue. The Presidential Council issued a decision to have a new governor and form a Board of Directors over the last couple of days. And this has been rejected by the House of Representatives. These efforts are fueled by perceptions that the CBL Governor is not acting in a manner that is transparent and with far

governance to east and west. Unrelated, but nonetheless important, is a unilateral decision to close the Sharara oil field, under the control of the LNA forces, causing the National Oil Corporation to declare force majeure on 7 August.

Mr. President,

In the midst of this, UNSMIL, along with member states have been actively working to de-escalate the situation. In my interactions with key leaders and public statements I have urged Libyan leaders to refrain from unilateral actions, which will only further exacerbate the situation, and have urged dialogue and a commitment to a political process to move ahead in the interests of the Libyan people. I have conveyed the same messages in my bilateral meetings with Libyan stakeholders. As a first step, UNSMIL is working to help facilitate an overall de-escalation and is proposing talks to develop a set of confidence building measures between all parties to bring an end to unilateral actions and create a more conducive environment for resuming the political process. Among other things, these types of measures would be aimed at ending unilateral actions, commitment to that, and restoring confidence in the Central Bank, ensuring that moves by military and security actors are coordinated so as to prevent mobilization and remove fears by others.

Going further, as a follow on, the success of the political process will require good faith efforts by political and security leaders and actors, an engaged broader public, and a coordinated approach in support of Libyan talks by the international community. The international community's support for Libyan led efforts is indispensable. I will continue to work towards this through engaging the diplomatic community in Libya and coordinating messaging and in capitals abroad in preparation for convening phase two of the political talks.

Last month I launched visits to some regional capitals, to discuss a coordinated approach in support of Libyan and UN facilitated efforts. My interlocutors expressed their commitment to support UNSMIL as it prepares the groundwork for launching these larger political talks. Alongside the holding of political talks in relation to a unified government and the holding of elections in line with current Libyan laws, UNSMIL will continue reinvigorating the economic, security and international humanitarian law and human rights working groups. These are critical issues which need to be progressed alongside the political track and elections. UNSMIL is also working with the Presidency Council and our partners of the African Union, to reactivate the national reconciliation process and the holding of the conference under the auspices of the Presidency Council and this year.

Mr. President,

Against this difficult context, ordinary Libyans are trying to move ahead including with democratic inclusive processes. We are seeing a revived engagement of political parties, trade unions, civil society and independent figures and others to coordinate and pro-actively advance constructive ideas for shaping the political process. The Mission is continuing extensive engagement with Libyans including political parties, women, youth, cultural and linguistic components, academics and others to ensure that they have a say on the future of their country.

Local elections are in fact moving forward on a very positive note. The High National Election Commission, with the Support of UNSMIL, is undertaking the necessary steps. Voter registration was completed for the 60 councils whose mandates expired or due to expire by the end of 2024. Around 210,000 Libyans registered to vote. On 18 August distribution of voter cards and registration of candidates started. The elections are expected to take place in mid-October 2024. Unfortunately, female turnout remains relatively low, constituting only 30 per cent of the registered voters. I am also concerned there will be low participation of women as candidates

The increased number of reserved seats for women for the municipal council elections is a significant step to increase the representation of women in the local government; however more proactive measures are needed as women face many hurdles, including intimidation, online violence, verbal attacks and other obstacles to discourage them from registering as candidates. HNEC, with support from the UN family, is helping to promote the participation of women candidates through a variety of means. Libyan women are also advocating for the establishment of a national committee, representing women throughout Libya, to develop a strategy supporting women's empowerment across all sectors and I urge relevant authorities to facilitate this.

Mr. President,

Moving further south, extremist organizations maintain access and presence in Libya by leveraging their connections with local and transnational organized crime. The growing transnational organized crime and extremist organizations interconnections in Libya are particularly concerning. Weapons have reportedly been coming into Libya, in violation of the arms embargo.

Regarding human rights and respect for rule of law, UNSMIL is working with all stakeholders across Libya, governmental and civil society, to provide technical assistance to strengthen national capacities to advance human rights and the rule of law. In this regard, we have recently enhanced cooperation with the Libyan National Army and reactivated capacity building plans.

I welcome the recent release of some individuals who were arbitrarily detained in the West and the East, including some children. UNSMIL is also engaging with the LNA and authorities to review cases of individuals who remain arbitrarily detained.

However, the challenges are immense, ongoing restrictions on civic space, continued arbitrary detentions, including of women and children, abductions, enforced disappearances, torture, deaths in custody and coerced "confessions", continue to be reported across Libya. UNSMIL will continue to call for the immediate and unconditional release of all those arbitrarily detained, and for transparent and independent investigations into such cases.

On humanitarian developments, on 16 August, flooding occurred in southwestern Libya, primarily in Ghat, displacing an estimated 5,800 individuals. In coordination with the government, the UN Country Team has dispatched humanitarian supplies and continues to do so.

Since the outbreak of fighting in Sudan in 2023, the number of Sudanese refugees in Libya has risen to 97,000 as of 11 August. With most arriving in Kufrah where they face challenging conditions. Full access to refugees is essential to provide effective and increased humanitarian assistance in coordination with local authorities. The UN Response Plan for Sudanese Refugees in Libya is only 21 per cent funded.

Mr. President, Members of the Council

In closing, the status quo is not sustainable. In the absence of renewed political talks leading to a unified government and elections – you see where this is heading - greater political financial and security instability, entrenched political and territorial divisions, and greater domestic and regional instability.

Libyans are frustrated with the status quo and the toll it is taking on their daily lives. People struggle to withdraw money from the banks and to meet their daily needs. Many express fear now about war once again erupting or about clashes between heavily armed groups. They also express fear too share their views freely without threats. Youth do not see a future, except to try to leave. This is not acceptable.

UNSMIL is now focusing its good offices on 1. helping de-escalate tensions, 2. preserving stability and fostering confidence building measures among key stakeholders, and 3. in preparation for convening Libyan led political talks. Advancing the political process, while maintaining stability, is the key priority for UNSMIL. I count on your support to take this forward

Thank you

Saleh threatens oil shutdown over CBL governor dispute

by Safa Alharathy Sat, 24/08/2024 - 11:34



The Speaker of the House of Representatives (HoR), Aguila Saleh, has warned of a potential shutdown of the country's vital oil production if the Central Bank Governor is replaced, following the Presidential Council's (PC) controversial appointment of Mohammed Shukri to the role.

In a television interview on Thursday, Saleh accused the PC of attempting to "loot public funds and perpetuate corruption" by appointing Shukri. <mark>He declared, "We will not allow the continued flow of Libya's wealth to individuals who have come through suspicious means and untrustworthy hands."</mark>

Saleh stressed that any changes to the Central Bank's leadership could trigger a halt in oil production and the suspension of revenue transfers to the Central Bank, a move that could have significant economic repercussions for the country.

He also emphasized that Shukri has no legitimate authority, asserting that both the HoR and the High Council of State (HCS) are committed to keeping Saddek Elkaber in his position as Central Bank Governor to protect Libya's financial stability, insisting that the decision to retain Elkaber is crucial for the ongoing process of unifying the Central Bank.

Saleh criticized the PC's involvement in sovereign positions, arguing that it oversteps its mandate. He pointed out that the PC, established under a political agreement, has specific tasks and is not the head of state as it perceives itself.

Earlier this week, Saleh reiterated that Elkaber and his deputy, Mari al-Barassi, would remain in their positions until an agreement is reached with the HCS on key sovereign roles.

The Presidential Council recently issued decisions appointing Shukri as Acting Central Bank Governor and forming a new board of directors.

Tags: Aqilah Saleh Central bank of Libya

Economic Watch: China's property market harbors great growth potential: ministry

Source: Xinhua

Editor: huaxia

2024-08-24 00:27:00

BEIJING, Aug. 23 (Xinhua) -- There is still great potential and room for China's property sector to expand, bolstered by the country's ongoing urbanization and people's growing demand for good housing, the housing ministry has said.

Speaking at a press conference on Friday, Ni Hong, minister of housing and urban-rural development, said that China will focus on the task of providing the public with good housing, while revamping the housing and urban-rural development sectors in a coordinated manner.

With changes occurring in supply and demand, China's real-estate market is still in the process of adjustment. But positive signals have surfaced as various policy measures have started to take effect, the minister said.

DEMAND FOR GOOD HOUSING

Elaborating on the concept of good housing, Ni said that, while its standards might evolve along with social and economic development, the concept essentially features homes that are green, low carbon, intelligent and safe.

China's housing market has already entered a new development stage, where people in the country are now attaching greater importance to the quality of housing, Ni said.

With new expectations from homebuyers, it is time to leverage new technologies, products and materials in house building, the minister said.

Efforts should be made to encourage property developers and builders to shift from a high-speed, quantity-centered growth model to one focusing on improving quality, technology and services, which will help propel the transformation and growth of the housing and construction sector, Ni added.

Dong Jianguo, vice minister of housing and urban-rural development, said at the press conference that the country has made key progress on creating standards for good housing, and is working to build related mechanisms and optimize services.

China's urban housing market has made substantial strides. By the end of 2023, the per-capita housing construction area in urban areas exceeded 40 square meters, while the urban built-up area reached 64,000 square kilometers in the country.

As part of the urban renewal initiatives, the country has also built over 40,000 pocket parks and more than 100,000 kilometers of urban green paths, providing leisure and recreation venues for people and making cities more livable, said Qin Haixiang, vice minister of housing and urban-rural development.

SECURING SOUND SUPPLY

China has sought to meet the diverse housing demands of consumers with an adequate supply, aiming to stabilize expectations and bolster confidence in the property market.

As one of its latest efforts, the country is transitioning from the traditional pre-sale model to a "sales upon completion" approach, which has been implemented across various regions to mitigate risks associated with unfinished projects.

Under the new approach, houses can only be sold after completion. Developers must promise to do so when acquiring land from local governments, Dong said.

Despite the policy shift, ensuring the timely delivery of housing remains a pressing task for China. According to the housing ministry, nearly 4 million pre-sold homes are scheduled to be handed over to homebuyers by the end of this year.

To achieve this target, the country has launched a "white-list" mechanism to ensure that all qualified property developers have equal access to financing assistance.

Currently, commercial banks have offered approximately 1.4 trillion yuan (about 197.2 billion U.S. dollars) of loans to over 5,300 property projects, effectively boosting housing construction nationwide, according to Dong.

As urbanization continues nationwide, local governments are expanding the supply of affordable housing and rental options to meet the growing demands of the working class, the younger generation and new urban residents.

Data from the ministry shows that during the first seven months of this year, over 440 billion yuan was invested in the construction of affordable housing and makeshift housing for shantytown renovations.

Dong said these houses are integral to people's livelihoods, and the country must ensure they are wellbuilt and of good quality.

Local governments must adhere to the standards for good housing, so that people can live in healthy and convenient residences, he added. ■

Highway oases become new attractions as holiday-goers take to the roads

By Zhang Yiyi Published: Aug 15, 2024 06:14 PM



Travellers visit Yangchenghu Expressway Service Area along the Shanghai-Nanjing Expressway in Suzhou, east China's Jiangsu Province, Oct. 8, 2020. Photo: Xinhua

As self-driving tourism gains popularity in China, highway rest and service oases are drawing crowds and creating new consumption opportunities.

During the summer travel peak, some rest and service oases have upgraded their facilities and worked with local tourism spots, turning "service oasis plus tourism" into a summer travel highlight and a boost for local economic growth.

The Luhun oasis in Central China's Henan Province recently saw a surge in visitors, with parking spots hard to find on weekends.

"Since the summer began, the Luhun rest and service oasis has seen a daily average of more than 13,000 visitors and 4,000 vehicles, with passenger and car traffic up more than 30 percent and revenue rising 10 percent compared with last year," Ge Changbo, the manager of Henan Transport Investment Expressway Service Area Management Co, Lu Hun Service Area told the Global Times on Thursday.

Visitors can enjoy a leisurely stroll along the waterfront boardwalk, watch the sunset from the viewing platform and savor the newly introduced reservoir fish feast, while children use the playground, Ge said.

"Our service oasis is near popular attractions like Baiyun Mountain and Laojun Mountain, so many visitors choose to stop here for a 'mini vacation' for one or two days," Ge added.

"On our drive from Beijing to Henan, this service oasis was most impressive. The sunset over the reservoir was breathtaking, and the fish tasted good. We only planned a short stop but ended up staying for more than four hours," a tourist surnamed Chen from Beijing told the Global Times on Thursday.

Yangchenghu Rest and Service Area in East China's Jiangsu Province, known as the most beautiful oasis

on Chinese social media, draws many visitors with its Jiangnan-style architecture and complete facilities.

"I love this area for its classic Suzhou-style garden designs, which bring back fond memories for those from the region. The outdoor garden is perfect for a peaceful walk to refresh myself and offers great spots for photos," Lu Yu, a resident of Jiangsu, told the Global Times on Thursday.

The area feels like a small shopping mall, with coffee, tea, ice cream and even zongzi (glutinous rice cakes wrapped in leaves), Lu added.

While some service oases are well-known for their natural beauty, some are attractive for their rich cultural content.

After two months of upgrading, the Huanglishu Service Area near Nanjing, Jiangsu Province, features cultural themes from 80 years ago. Walking into the main hall feels like stepping back to the streets of old Nanjing.

More than 50 authentic local dishes, cultural garments and Jiangnan-style specialties have expanded visitors' shopping options, according to a CCTV report.

"China's highway system has expanded, along with the rapid growth of private car ownership, and economic development has fueled the rise of road trips and the popularity of service oases," Jiang Yiyi, a vice president of the School of Leisure Sports and Tourism at Beijing Sport University, told the Global Times on Thursday.

From July 1 to August 12, average daily traffic on national highways reached 34.78 million vehicles, according to the CCTV report.

Highway data reveal that summer travel peaks mostly on weekends, with compact cars accounting for 77 percent of the traffic, a slight increase from 2023, showing that road trips remain a top choice for travelers.

"The combination of transportation and tourism has emerged as an innovative trend in recent years. With the growth of road trips and the transformation of service oases to include tourism features, we can expect more hot spots to appear along national highways," Jiang noted.

08/21/2024 03:42:20 [BN] Bloomberg News

OIL DEMAND MONITOR: Summer Glow Fading as China Drags on Market

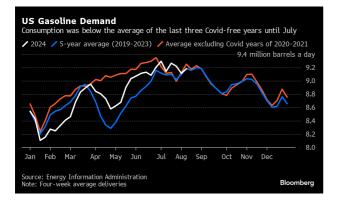
- Autumn dip, China woes put OPEC+ plan to lift output in doubt
- Analysts question whether market has appetite for more barrels

By John Deane and Julian Lee

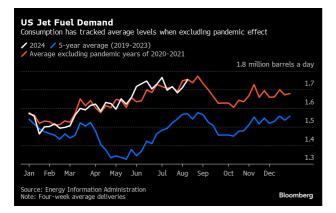
(Bloomberg) -- As the Northern Hemisphere's summer travel season draws to an end and China's stuttering economy drags on oil demand, doubts are growing over whether the OPEC+ alliance will implement its plan to return barrels to the market in the fourth quarter.

In the skies, Flightradar24 data for the week started Aug. 19 showed week-on-week and month-on-month declines in flight numbers, with journeys leveling off after the summer peak. There was a similar pattern in US passenger figures calculated from Transportation Security Administration data. Seat capacity data compiled by OAG Aviation edged lower, with a marked seasonal slide kicking in over the coming weeks.

On the roads, the US driving season will end on Labor Day, Sept. 2. While the annual roadtripping binge delivered the customary fillip for gasoline, the boost hasn't been spectacular. Though consumption has been strong compared with the five-year average, remove the Covid-affected years of 2020 and 2021 and demand has fallen short of recent levels for most of the summer.



There was a similar picture for consumption of jet fuel, the other vacation fuel, with US usage merely tracking recent levels.



Indications of waning consumption in China are multiplying. The country's apparent oil demand fell 8% year-on-year in July. Usage retreated by 110,000 barrels a day in the second quarter from a year earlier, the International Energy Agency said. OPEC trimmed forecasts for global oil demand this year and next, citing factors including "softening expectations" for China's demand.

Indeed, China's demand may be even weaker than many think. Of its slightly more than 10 million barrels a day of seaborne crude imports this year, the nation may have sent as much as 800,000 barrels a day into storage, according to Eurasia Group.

The upshot is that analysts have started to question whether OPEC and its allies will press ahead with their plan, due to begin in October, to start restoring idled output.

Sticking to that program would send global markets swinging from a deficit to a surplus next quarter, IEA data showed. OPEC+ is unlikely to increase production, SEB AB said, as there is "no room for these additional volumes." The plan is likely to be parked at least until the end of the year to avoid oversupply and a price drop, Commerzbank AG suggested.

Read More:

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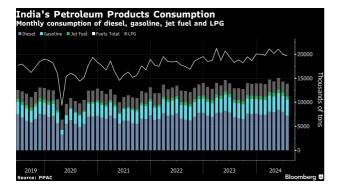
News Story

OPEC+ Supply Hikes Could Send Oil Toward \$60 Next Year: DNB

OPEC+ May Hesitate to Add Supply to Bearish Market: Rystad

DEMAND BY COUNTRY:

| | | %vs | %vs | % vs | % vs | % vs | % | | Latest | | |
|--|----------|-------|------|------|------|------|------|------|-----------------|----------------------|--------|
| Demand Measure | Location | 2023 | 2022 | 2021 | 2020 | 2019 | m/m | Freq | Date | Latest Value | Source |
| Gasoline product supplied | US | +2.2 | -3.2 | -4.1 | +1.8 | -8.9 | +3 | w | Aug. 9 | 9.05m b/d | EIA |
| Distillates product supplied | US | -2.7 | -9.6 | -5 | -8.1 | -8 | -1 | w | Aug. 9 | 3.55m b/d | EIA |
| Jet fuel product supplied | US | +3.4 | -0.2 | +25 | +62 | -21 | +12 | w | Aug. 9 | 1.6m b/d | EIA |
| Total oil products supplied | US | -5.3 | -3.3 | +5.2 | +6 | -6.9 | +5.6 | w | Aug. 9 | 20.5m b/d | EIA |
| Car use | UK | +2.1 | +3.2 | +4.3 | +8.9 | -2 | +2.1 | m | Aug. 12 | 98 | DfT |
| Heavy goods vehicle use | UK | +1.9 | +2.9 | +1 | +5 | +5 | +1.9 | m | Aug. 12 | 105 | DfT |
| All motor vehicle use index | UK | +3 | +5.1 | +5.1 | +11 | +3 | +2 | m | Aug. 12 | 103 | DfT |
| Gasoline (petrol) avg sales per filling station | UK | +3.6 | +11 | +8.3 | +41 | +3.3 | +5.7 | w | Week to June 30 | 7,428 liters/day | BEIS |
| Diesel avg sales per station | UK | -3.3 | -4.5 | -10 | +7.9 | -16 | +7.8 | w | Week to June 30 | 8,735 liters/day | BEIS |
| Total road fuels sales per station | UK | -0.2 | +2.1 | -2.6 | +21 | -8.2 | +6.8 | w | Week to June 30 | 16,163 liters/day | BEIS |
| Gasoline deliveries | Spain | +9.6 | | | | | | m | July | 703k m3 | Exolum |
| Diesel (and heating oil) deliveries | Spain | +6.6 | | | | | | m | July | 2,514k m3 | Exolum |
| Jet fuel deliveries | Spain | +13 | | | | | | m | July | 792k m3 | Exolum |
| Total oil products deliveries | Spain | +8.4 | | | | | | m | July | 4,009k m3 | Exolum |
| All vehicles traffic | Italy | unch. | | | | | +3 | m | July | n/a | Anas |
| Heavy vehicle traffic | Italy | +7 | | | | | +6 | m | July | n/a | Anas |



• READ (Aug. 16 story on 1H August consumption): India State Refiners' Diesel Sales Continue to Drop Amid Rains

More:

- Click here for previously published Mundys data on international toll roads flows (to June)
- Click here for previously published Italian Energy Ministry data on fuel sales (to June)
- Click here for previously published UFIP data on French fuel sales for June
- Click here for data on Portuguese fuels consumption; story on June.
- Click here for more on sources

AIR TRAVEL:

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News Story

| | | | | | VS | | | | | Latest | Latest |
|---|-----------|---------|--------------------|---------|------|---------|------|------|-------|--------------|-------------------|
| Measure | Location | vs 2023 | vs 2022 | vs 2021 | 2020 | vs 2019 | m/m | w/w | Freq. | Date | Value Sou |
| | | | changes shown as % | | | | | | | | |
| All flights | Worldwide | +1.8 | +12 | +29 | +59 | +18 | -5.3 | -4.9 | d | Aug. 19 | 243,035 Fligh |
| Commercial flights | Worldwide | +3.7 | +27 | +53 | +99 | +10 | -3.6 | -1 | d | Aug. 19 | 136,422 Fligh |
| Seat capacity per month | Worldwide | +4.8 | +19 | +60 | +104 | +3.3 | | -0.6 | w | Aug. 19 week | 121.9m OA(|
| Air traffic (flights) | Europe | | | | | -2.7 | -2.5 | +0.8 | d | Aug. 19 | 34,668 Eurc |
| Airport passenger throughput (7-day avg) | US | +5 | +16 | +36 | +257 | +4 | -7 | -3 | w | Aug. 18 | 2.57m TSA |
| Heathrow airport passengers | UK | +4.2 | +26 | +428 | +821 | +2.9 | +7.4 | | m | July | 7.98m Hea stor |

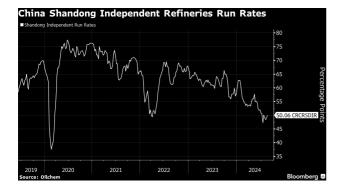
Click here for China air passenger traffic data to June

REFINERIES:

| | | | | | | | | Latest as | | |
|--|---------------|---------|---------|-------------------------|----------|---------|---------|--------------|--------------|--------|
| Measure | Location | vs 2023 | vs 2022 | | vs 2021 | vs 2019 | m/m chg | of Date | Latest Value | Source |
| | | | | Changes are in ppt unle | ss noted | | | | | |
| | | | | | | | | | 16.47m | |
| Crude intake | US | -1.7 | +0.3 | | +1.7 | -4.8 | -2.7 | Aug. 9 | b/d | EIA |
| Utilization | US | -3.2 | -2 | | -0.3 | -3.3 | -2.2 | Aug. 9 | 91.5 | EIA |
| Utilization | US Gulf | +0.4 | -2.2 | | +1.1 | -1.3 | +2 | Aug. 9 | 94.7 | EIA |
| Utilization | US East | -7.7 | -14 | | -7.2 | +13 | -8.8 | Aug. 9 | 84.2 | EIA |
| Utilization | US Midwest | -12 | -6.6 | | -4.1 | -13 | -11 | Aug. 9 | 86.2 | EIA |
| Note: Changes in percentages for crude intake; refinery utilization changes shown in percentage points. | | | | | | | | | | |

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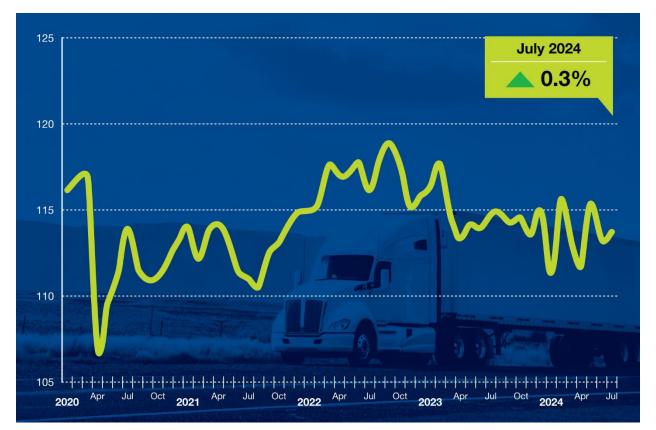
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https://www.trucking.org/news-insights/ata-truck-tonnage-index-rose-03-july

Aug 20, 2024



ATA Truck Tonnage Index Rose 0.3% in July

Washington — American Trucking Associations' advanced seasonally adjusted For-Hire Truck Tonnage Index increased 0.3% in July after declining 1.8% in June. In July, the index equaled 113.7 (2015=100) compared with 113.3 in June.

"While July wasn't a strong month, we see continued evidence that the truck freight market is likely turning a corner, albeit slowly," said **ATA Chief Economist Bob Costello.** "Some of July's small gain was likely due to strong import activity, especially at West Coast seaports. Decent retail sales and factory output growing slightly from a year earlier also helped truck tonnage last month."

June's decrease was revised down from our July 23 press release.

Compared with July 2023, the index decreased 0.9%. In June, the index was down 0.6% from a year earlier.

The not seasonally adjusted index, which represents the change in tonnage actually hauled by the fleets before any seasonal adjustment, equaled 116.7 in July, 3.4% above

June. ATA's For-Hire Truck Tonnage Index is dominated by contract freight as opposed to traditional spot market freight.

In calculating the index, 100 represents 2015.

Trucking serves as a barometer of the U.S. economy, representing 72.6% of tonnage carried by all modes of domestic freight transportation, including manufactured and retail goods. Trucks hauled 11.46 billion tons of freight in 2022. Motor carriers collected \$940.8 billion, or 80.7% of total revenue earned by all transport modes.

ATA calculates the tonnage index based on surveys from its membership and has been doing so since the 1970s. This is a preliminary figure and subject to change in the final report issued around the 5th day of each month. The report includes month-to-month and year-over-year results, relevant economic comparisons, and key financial indicators.



Country Analysis Brief: Norway

Last Updated: August 21, 2024 Next update: August 2026



Independent Statistics and Analysis U.S. Energy Information Administration www.eia.gov U.S. Department of Energy Washington, DC 20585

The U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy (DOE), prepared this report. By law, our data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The views in this report do not represent those of DOE or any other federal agencies.

Overview

Table 1. Norway's energy overview, 2022

| | Crude oil and other petroleum liquids | Natural gas | Coal | Nuclear | Hydro | Other renewables | Total |
|---|--|----------------|------|---------|--------|---------------------|--------|
| Primary energy production (quads) | 3.81 | 4.60 | 0.00 | 0.00 | | 0.49 ^a | 8.91 |
| Primary energy production (percentage) | 42.7% | 51.7% | 0.0% | 0.0% | | 5.5% | 100.0% |
| Primary energy consumption (quads) | 0.45 | 0.17 | 0.02 | 0.00 | | 0.46 ^a | 1.10 |
| Primary energy consumption (percentage) | 40.9% | 15.4% | 2.0% | 0.0% | | 41.7% | 100.0% |
| Electricity generation (TWh) | 0.58 | 0.00 | 0.07 | 0.00 | 127.62 | 15.48 | 143.38 |
| Electricity generation (percentage) | 0.4% | 0.0% | 0.0% | 0.0% | 89.0% | 10.8% | 100.0% |

Data source: U.S. Energy Information Administration, International Energy Statistics

Note: We aggregate hydroelectricity and renewables as *other renewables* for primary energy production and consumption. Quads=quadrillion British thermal units; TWh=terawatthours

^aIncludes hydroelectricity

- In 2022, Norway accounted for 29% of energy production and 2% of energy consumption in OECD Europe (Table 1).
- After Russia's full-scale invasion of Ukraine, Norway increased its natural gas production and exports to Europe in 2022 to help replace Europe's natural gas imports from Russia.
- Norway's last coal-fired power plant, located on a Norwegian island group called Svalbard in the Arctic Ocean, is switching from coal to diesel now that Norway's only coal mine in the islands was closed. However, Russia's state-owned coal mining plant on Svalbard continues to operate (Figure 1).¹
- Norway's top producing oil field, Equinor-operated Johan Sverdrup, is nearing its peak production at 755,000 barrels per day (b/d), likely to be reached this year.² Johan Sverdrup produced 711,000 b/d in 2023 (Table 2 and Figure 2).³
- Europe's largest onshore wind farm project, the Fosen Vind project, includes several central Norwegian wind farms including its largest wind farm Stoheria (288 megawatts (MW) of installed capacity) with 801 MW of installed capacity now excluding Roan (255 MW of installed capacity). In 2021, however, Norway's supreme court determined that the Fosen Vind farms, including Roan, were violating Sami reindeer herding rights. Subsequently, Fosen Vind reached agreements with the herders in December 2023 and in March 2024 to allow operations (Figure 3).^{4,5}
- Equinor's Hywind Tampen in the Norwegian North Sea added the world's largest floating wind farm, at 88 MW in capacity, in late 2022 to aid oil and natural gas production of some of Norway's top fields (Figure 3).⁶



Figure 1. Map of Norway (as of August 2024)

Source: U.S. Energy Information Administration

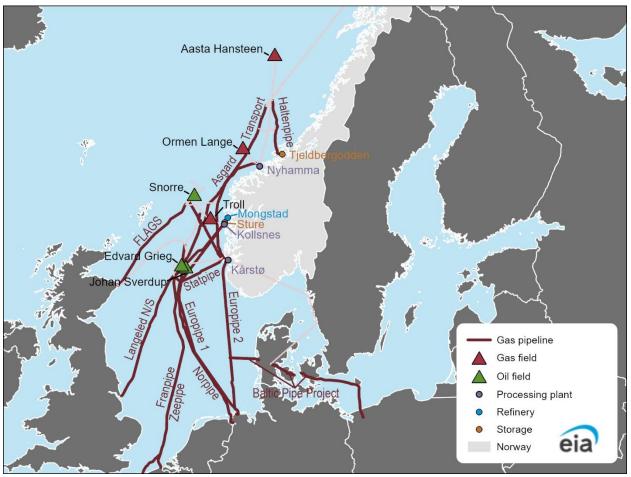


Figure 2. Map of Norway's major energy infrastructure (as of August 2024)

Source: U.S. Energy Information Administration Note: Terminal sites include some natural gas processing, oil refining, and storage facilities among other capabilities.

Petroleum and Other Liquids

- Norway's proved oil reserves totaled 7 billion barrels as of the end of 2023.⁷
- Norway's oil production totaled 2.0 million b/d in 2023 and we expect that it will continue to increase into 2025, after two decades of downward-trending production since its 3.4 million b/d peak in 2001 (Figure 3).
- In 2023, most of Norway's oil and natural gas production was located offshore in the North Sea (88%), the Norwegian Sea (11%), or the Barents Sea (1%). Norway produces many grades of crude oil that have different characteristics, including the following blends, which are generally light and sweet to medium in density and sulfur:^{8,9}
 - Ekofisk (38.9° API and low sulfur)
 - Oseberg (39.6° API and low sulfur)
 - Johan Sverdrup (28.7° API and medium sulfur)

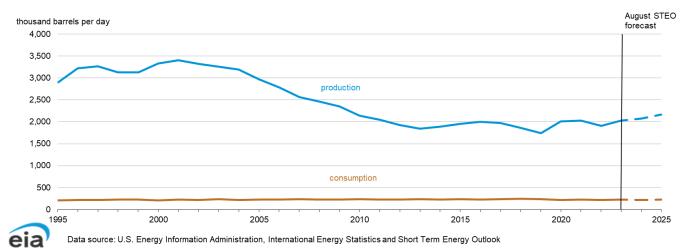
- Gullfaks (39.3° API and low sulfur)
- Statfjord (39.3° API and low sulfur)
- Troll (36.64° API and low sulfur)
- Granne (28.8° API and low sulfur)
- Equinor is a 67% state-owned energy company in Norway that also operates in approximately 30 countries worldwide. Equinor produces 70% of Norway's oil and natural gas, and its operations in Norway accounted for 67% of global Equinor operations in 2021. Equinor produces approximately 2 million barrels of oil a day globally, most of which is produced in Norway, as of 2024.¹⁰
- Equinor-operated Johan Sverdrup was, by a large margin, the top producing field in Norway in 2023. At 712,000 b/d of crude oil production, this field accounted for 40% of Norway's crude oil production that year.¹¹ Johan Sverdrup, with 2.7 billion barrels of reserves, was discovered in 2010 in the North Sea and had an expected production plateau of 660,000 b/d that has since been raised to 755,000 b/d. Johan Sverdrup went through two development phases, one starting in October 2019 and another in December 2022. Currently, Sverdrup is near its production plateau, but production is expected to decline by the end of 2024 or early 2025.^{12,13}
- Norway has one oil refinery, Mongstad, which is also owned and operated by Equinor. Mongstad has a total crude oil distillation capacity of 203,000 b/d.¹⁴ Refining primarily gasoline, diesel, and jet fuel, the refinery produces four times more liquid fuels than Norway's annual consumption. Mongstad refinery is co-located with crude oil terminal DA (MTDA), which facilitates exports via pipelines from Equinor-operated fields Johan Sverdrup, Troll B, and Troll C and houses an approximately 9-million-barrel underground storage facility.¹⁵
- As natural gas production has grown in Norway, the amount of recovered natural gas liquids (NGLs) has increased significantly, reaching a peak of 351,000 b/d in 2017. In 2023, NGL production was 204,000 barrels per day, with Troll (23,000 b/d) and Åsgard (21,000 b/d) as the top NGL-producing fields.
- Kårstø is the largest NGL processing hub in Europe. The site receives rich natural gas and natural gas plant liquids (NGPLs), which are separated into liquid products and dry gas, from about 30 fields, including major developments on the Norwegian continental shelf, by pipeline. The dry gas is primarily transported by pipeline to continental Europe and the United Kingdom.
- Ethane, propane, butanes, and natural gasoline extracted from the rich natural gas at Kårstø are either stored or shipped by tanker or barge. Propane, butanes, and natural gasoline are exported from Kårstø to destinations worldwide, and ethane is shipped to petrochemical users in the North Sea Basin. The two propane caverns at Kårstø, with a combined capacity of more than 1.6 million barrels, are the largest in Europe.
- Norway's petroleum and other liquid consumption has been relatively steady, at approximately 220,000 b/d, since 2020, and we expect it to remain unchanged into 2025 (Figure 3). In 2022, 75% of the country's oil consumption was used in transportation-related activities, and 16% was used in manufacturing, construction, and non-fuel mining industries.¹⁶ Although the transportation sector is the top crude oil consumer, 82% of new vehicles sold in Norway were electric vehicles in 2023.¹⁷

| Fields | First year of production | Operator | Location | Production (thousand barrels per day) |
|----------------|--------------------------------|--------------|-------------|--|
| Johan Sverdrup | 2019 | Equinor | North Sea | 711 |
| Snorre | 1992 | Equinor | North Sea | 95 |
| Edvard Grieg | 2015 | Aker BP | North Sea | 71 |
| Oseberg | 1988 | Equinor | North Sea | 35 |
| Ivaar Assen | 2016 | Equinor | North Sea | 26 |
| Goliat | 2017 | Vår Energi | Barents Sea | 26 |
| Gudrun | 2014 | Equinor | North Sea | 22 |
| Martin Linge | 2021 | Equinor | North Sea | 21 |
| Yme | 2021 | Repsol Norge | North Sea | 19 |
| Solveig | 2021 | Aker BP | North Sea | 18 |
| Total | | | | 1,044 |

Table 2. Norway top 10 oil fields by production, 2023

Data source: Norwegian Offshore Directorate

Figure 3. Norway petroleum and other liquids production and consumption, 1995–2025



Natural Gas

- Norway's proved natural gas reserves were 48.2 trillion cubic feet (Tcf) at the end of 2023.¹⁸
- Norway has steadily increased its natural gas production during the last two decades; production grew from 2.4 Tcf in 2002 to 4.4 Tcf in 2022 (a 181% increase). Natural gas consumption dropped slightly in 2022 to 0.2 Tcf—85% of 2002 levels (Figure 4).
- In March 2022, following Russia's full-scale invasion of Ukraine, the Norwegian government authorized an increase of approximately 50 Bcf in natural gas production, primarily from the Oseberg and Heidrun fields. In addition, the newly reopened Hammerfest liquefied natural gas

(LNG) facility, which processes natural gas from the Snøhvit field in the Barents Sea, was authorized to increase natural gas production by up to 247 Bcf in 2022 (Table 3).

- Gasnor is Norway's primary domestic buyer, distributor, and seller of natural gas to end users.
 Gasnor has LNG production and receiving facilities, where it distributes natural gas via ship and tankers.¹⁹ Lyse Neo is Norway's largest land-based natural gas network.
- Gassco is Norway's state-owned natural gas company, which transports and processes much of Norway and Greater Europe's natural gas. Gassco owns and operates various parts of the related infrastructure, including receiving terminals, riser and compressor platforms, processing plants, and pipelines. Gassco's pipelines deliver natural gas from Norway to Europe, traversing under or around the North Sea, to the United Kingdom, Germany, France, Belgium, the Netherlands, and Denmark (Table 4 and Figure 4 and 10).²⁰
- Equinor is the primary owner and operator of Hammerfest, which is located on Melkøya Island and has been serving as Europe's largest LNG plant since operations began in 2007. The liquefaction facility delivers 0.65 Bcf per day of natural gas, accounting for 5% of Norway's natural gas exports, and connects with the large offshore natural gas field Snohvit, which is located in the Barents Sea, via a 90-mile pipeline.²¹ A fire in the filter housing on natural gas turbine Generator 4 in September 2020 paused operations until March 2022.²² By 2050, Equinor plans to electrify, to lower emissions, and to make the plant more sustainable.²³
- Norway also has two smaller LNG plants, Risavika Liquefaction Plant (RLP) and Tjeldbergodden. RLP began operating in 2010 and can produce 14.6 Bcf of LNG a year for:
 - Vessels (two pumps, each with 35 Bcf-per-hour capacity)
 - Road tankers (two 50% LNG road tanker loading pumps with 2.2 Bcf-per-hour capacity)
 - Its 989 Bcf LNG storage tank
- RLP is connected via the Rogass pipeline to Kårstø Gas Processing Plant, which is the largest natural gas processing plant in Europe. The Tjeldbergodden LNG plant is relatively small with a yearly production capacity of 576,000 cubic feet a year. ^{24,25}

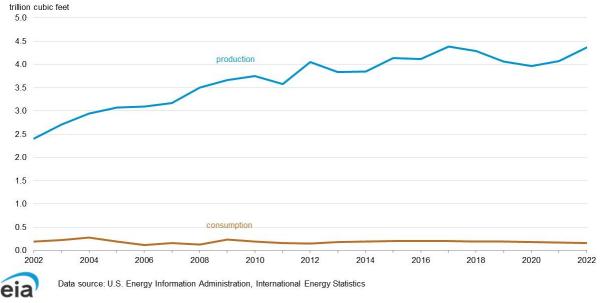
| Fields | First year of production | Location | Production (Tcf) |
|-------------------|--------------------------------|-----------------------|---------------------|
| | | Northern | |
| Troll | 1990 | North Sea | 1.32 |
| Aasta Hansteen | 2018 | Norwegian Sea | 0.25 |
| Ormen Lange | 2007 | Norwegian Sea | 0.24 |
| Skarv | 2013 | Norwegian Sea | 0.23 |
| Oseberg | 1986 | Northern North Sea | 0.21 |
| Snøhvit | 2007 | Barents Sea | 0.21 |
| Visund | 1999 | Northern North Sea | 0.20 |

Table 3. Norway top 10 natural gas fields, 2023

| Gullfaks | | Northern | |
|----------|------|------------------|------|
| Sør | 2021 | North Sea | 0.18 |
| Åsgard | 1999 | Norwegian Sea | 0.17 |
| | | Norwegian | |
| Tyrihans | 2009 | Sea | 0.11 |
| Total | | | 3.11 |

Data source: Norwegian Petroleum Directorate Note: Tcf=trillion cubic feet

Figure 4. Norway dry natural gas production and consumption, 2002-2022



Coal

- Norway had 29 million short tons of coal reserves in 2022.
- Norway has largely ended most of its coal production from its peak of 4.5 million short tons in 2007. Yearly production has been approximately 100,000 short tons since 2019. Coal consumption has been relatively steady for decades and was 901,039 short tons in 2022 (Figure 5).
- Svalbard is an archipelago of Norway that is a midpoint between Norway and the North pole. Norway phased out the Svalbard Islands' coal production in 2023 when it closed Mine 7 on the main island of Spitsbergen, which was producing approximately 100,000 short tons a year in its last few years. At its peak, Norway's production in the Svalbard Islands reached several million short tons a year. Russia's production on Svalbard is scheduled to decrease from 120,000 metric ton (mt) to 40,000 mt by 2032.^{26,27,28}

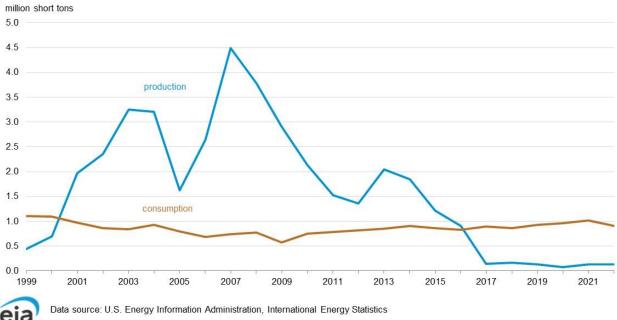


Figure 5. Norway coal production and consumption, 1999-2022

Electricity

- In 2022, Norway generated 143 terawatthours (TWh) of electric power and maintained an installed generation capacity of 41 gigawatts (GW) (Figure 7). Nearly 100% of Norway's generation is renewable; in 2022, hydroelectric generation accounted for 128 TWh of electric power, and wind was the second-largest source, generating 15 TWh (Table 1 and Figure 8). Historically, Norway, as Europe's largest hydropower producer, has predominantly used its ample supply of hydroelectric power for electricity.
- Statkraft AS is Norway's fully state-owned internationally operating hydropower company. It is Europe's largest producer of renewable energy and Norway's largest producer of hydropower and energy. Statkraft AS has major or partial ownership in most of Norway's energy generation. Hafslund, Oslo's fully owned power company, is Norway's second-largest hydropower and energy producer. Statnett is Norway's state-owned primary power grid owner, operator, and producer.
- In 2022, wind generation, at 15 TWh (10% of total generation), and wind capacity, at 5 kW (13% of total capacity), were the highest on record. Late 2022 capacity additions included Equinor's Hywind Tampen, which is the world's largest floating wind farm, at 88 MW. Hywind Tampen's 11 turbines generate a combined 8.6 MW of power to the Snorre and Gullfaks fields.²⁹
- The Fosen Vind project, Europe's largest wind project (with annual production of 2.6 TWh and installed capacity of 801 MW across its five wind farms), halted operations in 2021 due to a dispute with Sami reindeer herders related to grazing rights. The dispute involved two of its farms— Roan wind farm (884 GW of annual production), and Stoheria (1.0 TWh of annual production), previously the largest individual farm in Norway and Europe now behind Øyfjellet (1.2 TWh of annual production).³⁰ Norway's supreme court ruled that the farms violated Sami

rights under international law and were segmented into Fosen South and Fosen North. Fosen South reached an agreement in December 2023, but Fosen North settled in March 2024. Fosen Vind sold Roan wind farm in 2021, which was part of Fosen North (Figure 6).^{31,32,33,34}

- Norway's only operating coal-fired electric power plant in Longyearbyen on Svalbard's only
 populated island, Spitsbergen, switched from coal to diesel for power once the coal mine in
 Svalbard shut down. However, Russia's coal-based power plant, also located on Svalbard, will
 continue operating in Barentsburg, Spitsbergen.³⁵
- Norway is considering preliminary plans submitted by Norsk Kjernekraft AS for a nuclear power plant. The proposed plan would include a number of small modular reactors in the border area between Aure and Heim. The plant would produce approximately 12.5 TWh of electricity, approximately 9% of 2022 total electric power production.³⁶

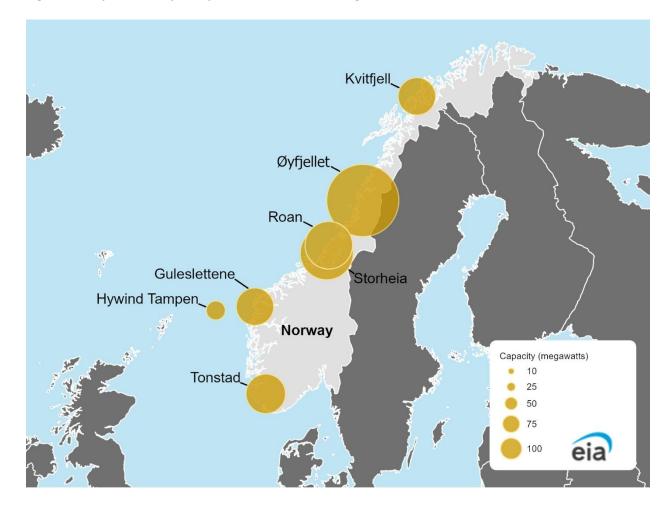


Figure 6. Map of Norway's major wind farms (as of August 2024)

Source: U.S. Energy Information Administration

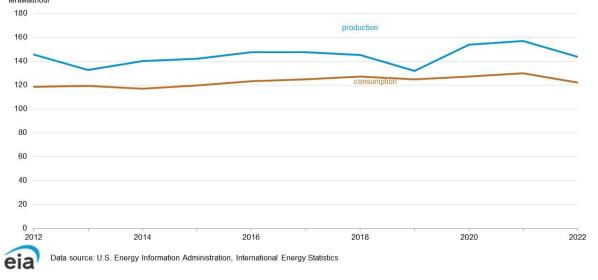
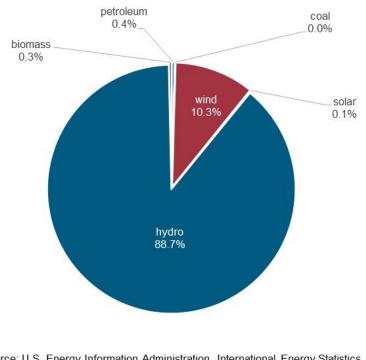


Figure 7. Norway electricity production and consumption, 2012–2022 terawatthour

Figure 8. Norway electricity generation by fuel, 2022



Data source: U.S. Energy Information Administration, International Energy Statistics Note: Less than 0.1% of generation was from coal. Hydroelectric pumped storage decreases hydro total.

Energy Trade

- Norway is Europe's top producer and exporter of oil and natural gas. The country has large oil and natural gas reserves located primarily offshore in the North, Norwegian, and Barents Seas. Norway uses a network of undersea pipelines to ship much of its dry natural gas exports to the UK, France, Belgium, the Netherlands, and Germany, and it uses tankers to ship oil, natural gas liquids, and liquefied natural gas (LNG) primarily to Europe. Norway provides 30% of the European Union's piped and shipped natural gas.³⁷ Norway's piped natural gas has recently entered Denmark's pipeline grid via the commissioned Baltic Pipe project to Poland, deriving from the Europipe II. Denmark imported 7% of Norway's natural gas in 2023.³⁸ Natural gas has outpaced oil as the top energy export from Norway (Figure 11, Figure 13, and Table 4).
- Norway's petroleum and other liquids exports have increased correspondingly with increased production. Exports rose from 1.2 million b/d in 2013 to 1.6 million b/d in 2023 (Figure 9). The UK received the largest portion of those exports at 28%, followed by Poland and the Netherlands at 15% each in 2023 (Figure 12).
- Norway's natural gas exports slightly fell in 2023 to 4,353.9 Bcf from 4,391.0 Bcf in 2022 due to lower production. Although LNG exports increased from 107.8 Bcf to 206.9 Bcf (Figure 10) from 2022 to 2023, this increase was more than offset by the decline in pipeline exports, which fell from 4,283.1 Bcf to 4,147.0 Bcf over the same period.
- Norway is a net exporter of petroleum products, with 64,600 b/d of exports and 45,500 b/d of imports in 2023. However, net exports of 13,000 b/d in 2022 and 19,100 b/d in 2023 are the lowest since 1989.³⁹
- Norway imports a relatively small amount of coal at 571,800 short tons in 2023, although it has been growing to compensate for lower domestic coal production. Norway exported only about 1,000 short tons in 2023 (Figure 15).
- In 2023, Norway exported 31.0 TWh of electricity and imported 13.2 TWh of electricity which was related to its low electricity prices and two new interconnector additions: NordLink with UK and North Sea Link with Germany in 2021.
- Norway has five international interconnectors: North Sea Link with UK (1,400 MW); NordLink with Germany (1,400 MW), which was the longest subsea electrical interconnector in the world; NorNed with the Netherlands (700 MW); Skagerrak with Denmark (1,632 MW); and Boris Gleb with Russia (50 MW).⁴⁰
- Even with multiple interconnectors, Norway's electricity exports are limited by its
 interconnector capacity and have sometimes been limited by the effect of low water levels on
 their hydropower-dominated electricity supply. Also, Norway's grid and interconnectors use
 direct current (DC), which makes Norway's electricity supply unsuitable for immediate response
 to frequency deviations in greater Europe, which uses alternating currency (AC).⁴¹

Table 4. Norway gas pipelines, 2024

| Pipeline | Start date | Operator | From | То | Length (miles) | Diameter (inches) | Capacity (billion cubic feet per day) | Details |
|---|---------------|---------------------|--|--|-------------------|----------------------|--|---|
| Valemon Rich natural gas pipeline | 2015 | Gassco (Equinor) | Northern North Sea (Valemon field) | Central North Sea (Heimdal riser) | 110 | 22 | 0.5 | It is in the process of being decommissioned by 2028. Valemon gas will now be transported to Kvitebjørn and then to Kollsnes for further processing. ⁴² |
| Gjøa gas pipe | 2010 | Gassco | North Sea (Gjøa field) | UK (Flags pipeline system) | 81 | 28 | 0.6 | The gas from Gjøa field continues through the Flags system to St. Fergus terminal in Scotland. |
| Franpipe | 1998 | Gassco | North Sea (Draupner E platform) | France (Dunkirk) | 522 | 42 | 1.9 | Franpipe connects the Draupner E platform in the North Sea to Dunkirk in northern France |
| Flags pipeline system | 1982 | Shell | North Sea (Tampen Link) | UK (St. Fergus, Scotland) | 280 | 36 | 1.2 | Flags exports natural gas from the Tampen Link to the UK continental shelf and to St. Fergus in Scotland. |
| Europipe Europipe II | 1995 1999 | Gassco Gassco | Norwegian Sea (Draupner E platform) Kårstø | Germany (Dornum Europipe Receiving Facilities (ERF)) Germany | 385 | 40 | 2.5 | The final section of the Europipe goes through a tunnel under the protected |
| | 1999 | Gusseo | processing plant | (Dornum Europipe Receiving Facilities (ERF)) | 403 | 72 | 1.0 | Wattenmeer wetlands. |
| Baltic Pipe | 2022 | Gaz- System | Denmark (Europipe II) | Poland | 76/43 | 39 | 1.0 | The pipeline played a key role in mitigating the energy crisis in Europe. ⁴³ |
| Zeepipe | 1993 | Gassco (Equinor) | Kollsnes processing | Belgian (Zeebrugge | 19/506 | 40 | 2.6 | The Zeepipe system transports |
| Zeepipe II A | 1996 | Gassco (Equinor) | plant | terminal) | 186 | 40 | 2.6 | natural gas from the Troll field to |
| Zeepipe II B | 1997 | Gassco | | | 186 | 40 | 1.9/1.5 | Europe. |
| Vesterled (Frigg | 1976 | Gassco | North Sea (Heimdal | UK (St. Fergus, Scotland) | 224 | 32 | 1.3 | Vesterled transports natural gas from fields |

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| Norwegian Pipeline) | | | riser platform) | | | | | connected to the Heimdal riser platform to Scotland. |
|-----------------------------------|------|---------------------|---|---|----------------|----------|------------|--|
| Kvitebjørn Pipeline | 2004 | Gassco (Equinor) | North Sea (Kvitebjørn field) | Kollsnes processing plant and some processed at the fractional plant in Mongstad Refinery | 91 | 30 | 0.9 | The condensate from the Kvitebjørn field is processed at the Mongstad refinery. |
| Tampen link | 2010 | Gassco (Equinor) | North Sea (Norway gas transport system) | UK (Flags pipeline system) | 14 | 32 | 0.9 | Tampen link is in proximity and name with the world's first floating wind farm Hywind Tampen. |
| Statpipe | 1985 | Gassco (Equinor) | Statfjord and Gullfaks fields, via the Kårstø processing plant north of Stavanger, the Draupner S platform and Norpipe | Germany (Emden) | 142/12 6/96 | 28/36/36 | 0.8/1.6/1. | The first pipeline to cross the Norwegian Trench has been approved to operate into 2050. ⁴⁴ |
| Polarled | 2018 | Gassco | Norwegian Sea (Aasta Hansteen field) | Onshore Norway (Nyhamna processing plant) | 300 | 36 | 0.9 | Polarled carries natural gas for processing at Nyhamna processing plant. |
| Ormen Lange | 2007 | Shell | Norwegian Sea (Ormen Lange field) | Onshore Norway (Nyhamna processing plant) | 75 | 30 | NA | Ormen Lange carries natural gas for processing at Nyhamna processing plant. |
| Oseberg gas transport (OGT) | | Gassco (Equinor) | North Sea (Oseberg field) | Heimdal riser platform to Vesterland and Statpipe/Norpipe | 68 | 36 | 1.2 | Increased flows were approved to supply natural gas to Europe. ⁴⁵ |
| Norpipe | 1977 | Gassco | North Sea (Ekofisk field) | Germany | 273 | 36 | 1.6 | The Teeside oil terminal in the UK is also fed by Norpipe's oil and natural gas liquids |
| Norne Gas Transport | 2001 | Gassco (Equinor) | Norwegian Sea (Norne field) | Kårstø terminal via Åsgard Transport pipeline | 80 | 16 | 0.2 | The connected Norne field is in its decline stage. ⁴⁶ |
| Langeled South | 2006 | Gassco (Equinor) | Nyhamna processing | UK (Easington terminal) | 325 | 44 | 2.5 | The world's longest |
| Langeled North | 2007 | Gassco (Equinor) | plant | | 390 | 42 | 2.6 | underwater natural gas pipeline exports gas from the Ormen Lange field to the UK. |

August 2024

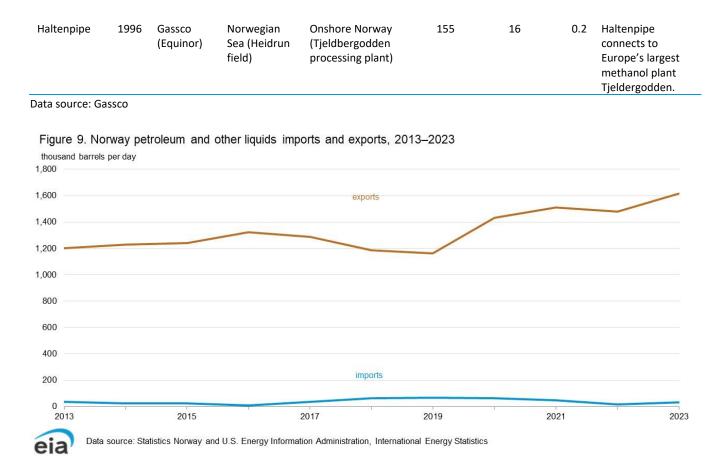
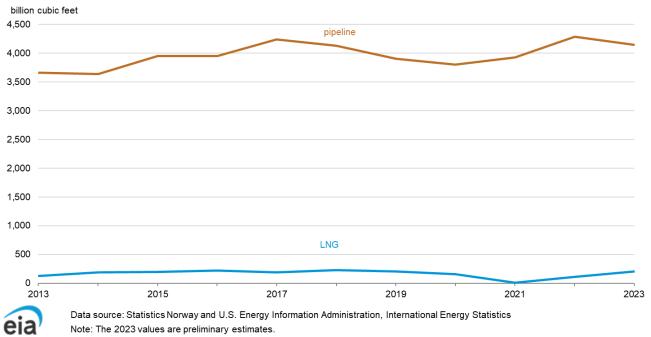


Figure 10. Norway liquified natural gas (LNG) and pipeline natural gas exports, 2013–2023



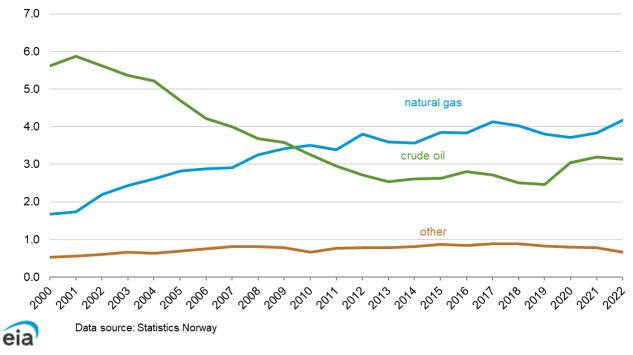
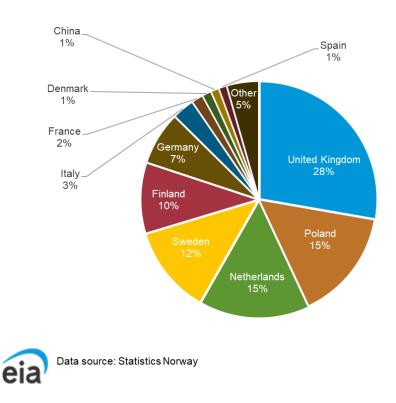


Figure 11. Norway exports by energy source, 2000–2022 guadrillion British thermal units

Figure 12. Norway oil exports by destination, 2023



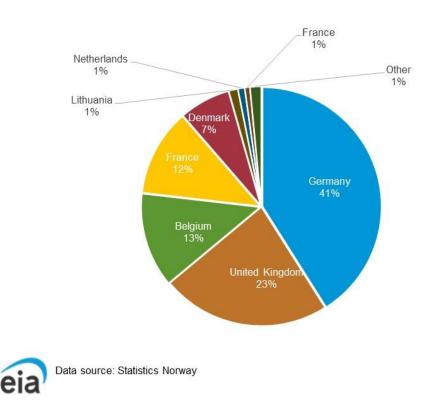


Figure 13. Norway natural gas exports by destination, 2023

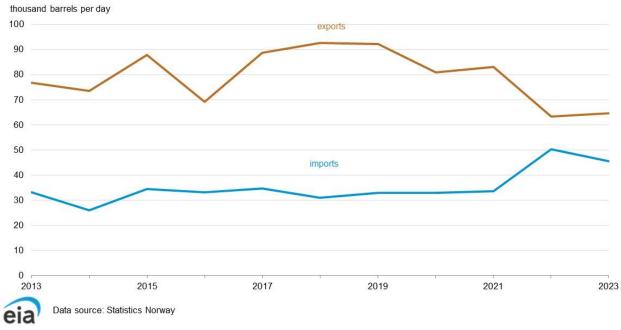


Figure 14. Norway petroleum products imports and exports, 2013-2023

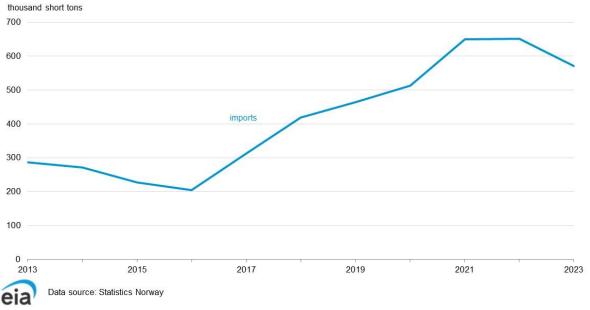


Figure 15. Norway coal imports, 2013-2023

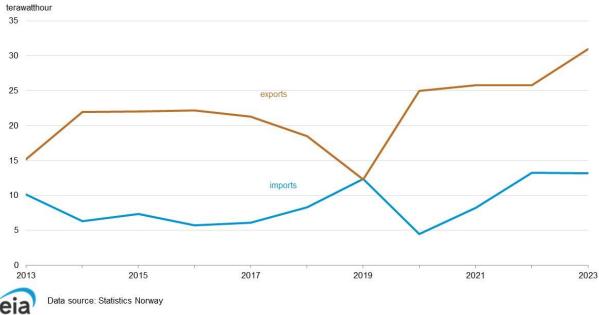


Figure 16. Norway electricity imports and exports, 2013-2023

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"There is no doubt natural gas is cheaper So, it is true without tax incentives you would have a hard time making renewables economic." Enbridge CEO Ebel.



SAF Group created a transcript of comments from Enbridge CEO Greg Ebel on Bloomberg's Matt Miller, Katie Greifeld and Sonali Basak on BloombergTV on August 20, 2024.

Items in "italics" are SAF Group created transcript.

Prepared by SAF Group https://safgroup.ca/news-insights/

Miller: "....We have a viewer writing in with a question. He says "Greg, now that you have experience with solar and wind and the ongoing capital spending, what does the total cost work out to be per kilowatt turn out to be compared to natural gas?"

Ebel: "Well, that is a good question. There is no doubt natural gas is cheaper. So, okay, many of your listeners are everywhere but we are here sitting in New York City. So as a good example, in New York State, twice the energy is provided by natural gas, about 33% of all energy, versus 17% for electricity, which can be renewables, at half the cost. So twice the energy at half the cost. So, it is true without tax incentives you would have a hard time making renewables economic. But, in certain locations it's going to work great, right. In the middle of the continent, a lot of solar is being built. Places like Texas, big on wind, big on solar, but as you know Matt, big on oil and gas too. So, I think it depends but there's no doubt, without some tax incentives, you are going to have a hard time making some of the newer energy technologies work."

Greifeld: ".....According to the electric power research institute, data centers currently make up about 3% of electricity consumption in the US. That could be 9% by 2030. Of course I know that you are positioning to meet that demand but how do you see it balance between renewables and gas?"

Ebel: "Well look I think for the first time in many decades you are going to see growth in electricity demand in the United States, whether that is half a percent or 3 or 3 percent, that is colossal for us, right. And a lot of that is driven by data centers. So, some of it is going to be gas, right, because they need 24/7 power, you know, and there is intermittency with renewables, but at the same time you see a lot of those companies also want to meet their sustainability goals. So just in the last quarter or so you have seen us sign long-term, power purchase agreements of solar with Amazon, with A&T, as well as traditional power companies. So again, I think it comes back to, we better not eliminate any of the elements, because we are going to need them all."

Basak: "....A ChatGPT query, one query, needs nearly 10 times as much electricity to process as a google search. So what does that mean for the cost of energy moving forward?"

Ebel: "Well it depends. If we restrict the sources where you get the energy from, I think it says the electricity price is going to keep going up. And I think consumers have said they have just about had enough with the rising cost of energy. So again, I think it depends what we do. If the policy is all of the above, then I think we can keep those in control in most areas. And if we can get the infrastructure built, we can keep it in control. If we don't get stuff built and we limit where we can get that energy, then think the consumer is going to have a tough time. And I don't think that will be appropriate or successful from a political perspective."

Prepared by SAF Group https://safgroup.ca/news-insights/

https://www1.pilship.com/newsroom/pil-further-renews-fleet-with-order-for-five-13000-teu-lng-dualfuel-container-vessels/

19 August, 2024

PIL further renews fleet with order for five 13,000 TEU LNG Dual Fuel container vessels

Pacific International Lines (PIL) is stepping up on its <mark>fleet renewal programme and has ordered five new container vessels with 13,000 TEU capacity, equipped with liquefied natural gas (LNG) dual-fuel engines. The neo panamax-sized vessels are expected to be delivered progressively from end-2026. Construction of the vessels has been awarded to Hudong Zhonghua Shipyard, a leading Chinese shipbuilder.</mark>

Designed with a focus on efficiency, safety and sustainability, the modern vessels will also have the flexibility to meet the demands of different voyages, weather conditions and load capacities. They will be equipped with dual-fuel engines and auxiliaries to be able to run on both LNG as well as low sulphur fuel oil.

Mr Lars Kastrup, CEO of PIL said, "These latest orders are part of PIL's fleet renewal strategy for larger and more eco-friendly vessel types. Together with another eight vessels we currently have under construction, we now have 13 new vessels that will contribute significantly towards our decarbonisation goal of net zero emissions by 2050.

"As part of our commitment to putting customers first, we are continually optimising our fleet with newer and more advanced vessels to better serve customers in our key markets. For instance, the vessels will have a high refrigerated container capacity payload to support our services for the transport of fresh fruit, vegetables, seafood, meat and pharmaceuticals."

The vessels will incorporate the latest technological and <mark>energy-saving features including an optimised hull-form, variable-frequency drive (VFD) motors for larger pumps and ventilation blowers, lower-energy LED lightings as well as premium hull coatings. When completed, the vessels will be fully compliant with the International Maritime Organisation's (IMO) Energy Efficiency Design Index (EEDI) for newbuilds and the Carbon Intensity Indicator (CII).</mark>

In addition, increased digitalisation such as Artificial Intelligence (AI) and Internet of Things (IoT) has been incorporated in the design and equipment for the automation of tasks. All of these improvements will contribute to more efficient operations, provide a safe and modern working environment as well as enhance the welfare of our seafarers.

The vessels' digital features will further boost the ability of PIL's Centre for Maritime Efficiency to optimise vessel operations and routes, increase safety and security, as well as minimise energy usage.

PIL is currently building four 14,000 TEU and four 8,200 TEU LNG dual-fuel container vessels. The first two of the 14,000 TEU vessels are expected to be delivered later this year. PIL's order of modern innovative vessels demonstrate its approach of leveraging its expertise and technology to provide efficient and sustainable solutions.

The contract was signed on 16 August 2024 at a ceremony between (seated, from left to right) Mr Weng Hongbing, President of Hudong-Zhonghua, Mr Lars Kastrup, CEO of PIL, and Mr Hu Kai President of CSTC, and witnessed by Mr Chen Jianliang, Chairman of Hudong-Zhonghua (standing, 5th from left).

About Pacific International Lines:

Pacific International Lines (PIL) is among the top 12 container shipping lines in the world. Established in Singapore in 1967, we are the largest home-grown carrier in Southeast Asia.

We serve customers in over 500 locations, with a focus on Asia, China, Africa, the Middle East, Latin America, Oceania and the Pacific Islands. Operating a fleet of around 100 container vessels, we provide shipping services and solutions to customers in more than 90 countries worldwide.

We provide shipping services across a variety of products, including dry, refrigerated, breakbulk or special cargo. We harness our network of owned agencies and intermodal services, to bring value to our customers with end-to-end transportation solutions.

At PIL, our people-centric approach puts customers first, by leveraging expertise and technology to provide efficient and sustainable solutions. Guided by a future-focused vision, we are committed to sustainability and making a positive impact on communities. For more information, visit www.pilship.com • 13 July, 2023

Construction of PIL's first 14,000 LNG dual-fuel TEU vessel begins!

The steel-cutting ceremony to mark the start of construction of PIL's first 14,000 TEU container ship was held at Jiangnan Shipyard on the morning of 11 July. PIL CEO Lars Kastrup attended the ceremony to commemorate this significant milestone alongside representatives from American Bureau of Shipping (ABS) and Jiangnan Shipyard. Both Mr Kastrup and Deputy General Manager of Jiangnan Shipyard Hu Hongyu initiated the steel-cutting ceremony, which was followed by a signing ceremony between PIL, Jiangnan Shipyard, and ABS to officially kick off the construction work. Managing Director of PIL China Klaus Ku and General Manager of PIL Fleet Goh Chung Hun were also present at the event.

Mr Kastrup said at the ceremony, "It has been a number of years since PIL took delivery of new ships. Today, we resume our fleet renewal and expansion programme. This ship will be our first LNG dual-fueled container ship, and it represents our commitment to sustainability and our vision for a greener and cleaner future. This ship, along with her three sister ships, forms part of our strategy to decarbonize our fleet and achieve net zero carbon emissions by 2050."

This order of four 14,000 TEU LNG dual-fuel container ships from Jiangnan Shipyard was announced by PIL in March 2022. All four ships will also be equipped with ammonia intermediate ready fuel tank, and they will be progressively delivered from 2H 2024 through to 1H 2025. When delivered, the vessels will become the largest container vessels in PIL's fleet and the first vessels in the fleet to run on LNG. This is in addition to the four 8,000 TEU LNG dual-fuel container ships which we have ordered from Yangzijiang Shipbuilding in July 2022, and will be delivered progressively in 2025.

The construction of this new ship marks the start of PIL's fleet renewal and revitalisation. PIL remains committed to driving a safe, reliable and sustainable shipping industry, and we strive to provide our customers around the world with excellent service and eco-friendly logistics solutions!

MESSAGE FROM CHIEF EXECUTIVE OFFICER



Dear Friends,

With the momentum gained in 2021, 2022 was an exciting year for PIL as we took concrete steps forward in our sustainability journey. With the increasingly challenging global environment, we aim to build and develop PIL into an efficient, future ready, people focused and sustainable shipping line.

In the area of environmental protection, we have set the target of achieving net-zero carbon emissions by 2050, in alignment with the decarbonisation goals of the International Maritime Organisation (IMO). We will continually review this target and drive ourselves to do better as we move forward. We know it will not be an easy journey, but we are confident as we have the support of all colleagues, on shore and at sea, as well as our customers and partners.

To date, we have undertaken a number of key initiatives, these include investing in the necessary equipment and infrastructure – we have placed orders for 8 new LNG dual-fuel vessels equipped with ammonia intermediate ready fuel tanks. These tanks make it possible to retrofit the vessels to run on ammonia when the technology is commercially available.

We are also actively exploring the possibility of using biofuels as a drop-in fuel. We conducted a biofuel trial last year by using a blend of fatty acid methyl esters (FAME) and very low sulfur fuel oil (VLSFO). The results were encouraging.

In addition to vessel technologies, we are also looking at how we operate our vessels so as to optimise their efficiencies and hence reduce their carbon footprint. In 2022, we revamped our fleet monitoring function and upgraded it to a Centre for Maritime Efficiency (CME) which is equipped with a state-of-the-art digital system that houses all relevant operational data and applications in a single platform to facilitate comprehensive, centralised and efficient coordination.

We have also joined the World Shipping Council (WSC) as a member, and I represent PIL on the WSC board. This provides an important platform for us to participate in thoughtful discussions with our industry peers on key topics on sustainability including decarbonisation, safety and security. Another key milestone for us in 2022 was becoming a signatory of the United Nations Global Compact (UNGC). This demonstrates our support and commitment to the principles of UNGC in the key areas of human rights, labour, environment and anti-corruption. 2022 also saw us taking a key step forward in people development. We have planted the seed of initiating our own PIL Academy by working with the Maritime and Port Authority of Singapore (MPA) and other industry partners to establish the Alliance for Future Maritime Talent (AFMT). The AFMT is aligned with our ongoing plan to adopt a more structured approach to meet the diverse needs for training and development within PIL, as we work to achieve our aim of inculcating a continuous learning mindset into our shore staff and seafarers which would propel PIL forward as a future ready organisation.

During the year, we also stepped up efforts to engage with and contribute to the communities in Singapore and around the world where we operate. The support which we receive from the local communities is key to our success as a container shipping line connecting key regions in the world.

Lastly and most importantly, we completed training sessions on the critical anti-bribery and anti-corruption policies as well as the competition compliance policies. We also developed the sustainable procurement policy to provide guidance to PIL's employees in ensuring we incorporate sustainable considerations when we procure goods and services.

Looking ahead, sustainability will continue to be our priority as we seek to drive connectivity to meet the needs of our customers and the market.

Yours sincerely

Lars Kastrup

Chief Executive Officer

Hi. Thank you very much.

Maybe it's a two-part question, so apologies about that. But coming to the Slide 8, where you show your low-end scenario of the freight rate more or less in line with the second quarter for the end of the year, normal seasonality means the volumes are going to be down around 5%, 6% sequentially in September, October versus the peak. You've mentioned we had front-loading, so the decline might be more pronounced than that. So what are the factors that give you confidence that by October, the rates are not going to be back to pre-Red Sea disruption? If you can elaborate a little bit on that.

And so just in connection with this, if I look at your Slide 8 and the other data points that you said, it does seem that your EBITDA Q4, so your exit rate, should be meaningfully above the Q2 for three reasons. First of all, your spot rate in Q4 is more or less aligned with Q2. Secondly, you're no longer going to have the timing of revenue issue that depressed your EBITDA in Q2. And thirdly, you've mentioned throughout the call that you renegotiated higher contract rates, which we don't really see in the Q2 EBITDA So am I understanding this correctly? Your Q4 EBITDA exit rate should be meaningfully above Q2, or am I missing anything? Thank you.

A - Patrick Jany {BIO 7529926 <GO>}

Yeah. Thanks very much, Christian, for highlighting the value of our Slide on 8. So clearly, I think, as you see here, the scenarios, the low end sees a reduction of rates in the Q4, where the uncertainty relies on the volume. So you have the seasonal effect, which we have counted in our simulation, which you highlighted.

But it's really about knowing how much has been pulled forward or not, which will determine ultimately the actual level in the Q4. And that's where the uncertainty lies. So that is, I would say, the unknown effect, which then determines the deterioration of the rates in Q4. But overall, we do not see right now that rates would come back to pre-Red Sea in the Q4.

But we see them coming down sequentially, and then we can debate the rate of the decrease, depending on this volume situation in Q4. But that is the level of uncertainty we see today, having decent visibility, both on volumes and the contracted rates, which we have, as you know as you know, we are not totally exposed fully spot, which is a delay in profitability we have now, but that gives us also a certain buffer when we look into Q4, so more sequential reduction of rates should they deteriorate more on the spot rate. Now when we look at the EBITDA on Q4, so clearly, just to put everybody on the page and that we highlighted as well in our presentation here, is that Q3 will be the peak of the year, but clearly building momentum from the Q2, both because of increased contract rates and the revenue recognition effect, so we have longer transit times, you have a delay because of contracted versus spot, those two effects push profitability more into Q3 versus Q2, and then we have the uncertainty in Q4. So as we see today, Q4 will be lower than but for the above stated reasons as well, I would agree to your statement that Q3 is probably higher than Q2 in terms of EBITDA I hope that answers your question.

than not, we've seen very high charter rates. As more new tonnage comes in, then this will also slowly taper off.

Q - Dan Togo Jensen {BIO 7480447 <GO>}

Understood.

Thanks a lot.

Operator

The next question from Alex Irving, Bernstein. Please go ahead.

Q - Alex Irving {BIO 19089987 <GO>}

Hi, good morning.

Thanks for taking my question. Mine's on volumes. So, to what extent do you think the strong performance in Q2 with the result of an early peak season, shipments coming out of tariffs or just demand recovering? You called out all those factors, but where do you see the balance lying and are you expecting another peak season at the more normal late summer time, please?

A - Vincent Clerc {BIO 15177428 <GO>}

That's a good question, Alex. I wish I had a really good answer.

Unfortunately, it's not like we can put a sticker on the containers that have been preponed and the ones that are normal demand. What I can give you in terms of colour is the following. What is driving the markets that are driving most of the growth right now are actually Europe and emerging markets. It is not North America.

North America is actually sequentially quite stable, but it is Europe and emerging markets, Latin America, Africa, India that are actually driving a lot of the imports. And there I think that there are two things that are playing. Since the Ukraine invasion by Russia, there has been an expectation that Europe would go into possibly a big recession and a lot of customers have held back on orders and tried to work their inventory as far down as possible in expectations of much lower demand. What seems to have happened so far, what has happened so far and seems to be happening is actually the European consumer is withstanding the situation the situation better than had been expected.

And therefore, there is like a cyclical replenishment of inventory in Europe and an adjustment of the traffic to what is underlying demand in Europe. That's what we're seeing at the moment. The second was that a lot of the economies, the emerging economies, came out of COVID in not as good shape as some of the more mature economy because of the lack of ability from government to provide stimulus and stimulate consumption. So last year, demand was fairly subdued in most of these markets.

Now that everybody has gone back to work and is earning again, we're seeing a rebound in consumption in those emerging markets that is driving some of the yearon-year growth. So some of that part, I think, in Europe is going to kind of slow down a little bit because the higher demand will stay with us. The replenishment of inventory will eventually go away. And whether it's half and half or what it is, I don't know.

The other part into North America is a bit more complicated because their market is fairly stable. We're seeing that inventory levels in the US Are a bit higher today than they were at the beginning of the year, but they're not abnormally high. So whereas there could be some bring forward of orders out of fear of possible tariffs into next year or fear of delay from a strike or labor action on the East Coast, whereas this could be the case, it does not seem to be the case to an extent that is very significant or would cause significant concern for the lull that would follow this. So at least at this stage, our bet is – and what we're seeing from what we have done so far in the quarter and the purchase orders we can see from customers is continuous strong volumes in the third quarter and a normal seasonal taper-off in the fourth quarter, but not much more than that.

Q - Analyst

Really helpful color. Thank you.

Operator

Next question from Lars Heindorff, Nordea. Please go ahead.

Q - Lars Heindorff {BIO 22572161 <GO>}

Yes, good morning. Thank you for taking my question. It's on the balance sheet. I'm just trying to get a sense.

I know you're probably not going to say anything about next year, but I'll give it a try anyway. So consensus for next year expect you to make around DKK5 billion to DKK6 billion in EBITDA, which also implies probably a small positive cash flow. And given the current guidance that you give for this year, you're probably likely to end up with a net cash position by the end of the year. So the question is just how strong a balance sheet do we need sort of to withstand a prolonged downturn in the ocean part of the business in order, sort of, before you start to make or announce a possible new buy-back?

A - Patrick Jany {BIO 7529926 <GO>}

Thank you, Lars.

As we try to explain, as you well know, clearly it's a good situation we are in to have a strong balance sheet and we are aware of it. But we also have to look at the still unclear balance of supply and demand looking forward, right? So, as we said, we will know more about Q4 in a few weeks' time and Q4 will then shed a bit of light on 2025 and we will start to remodel the years ahead. Clearly, you have different

A - Unidentified Speaker

Let me take this. So if you look at the press release that we published in connection with the Fleet Renewal Program, we are recommitting to having a fleet that stays around the 4.3 million TEUs. So we will match the phasing in of this new tonnage with scrapping of ships that are coming to the end of economic life.

And therefore, this order is not going to contribute in any way, shape or form to an overcapacity across the industry or anything like that. But it is really what it is, which is a renewal program as we have ships that are getting old. And we need to make those investments. It's in line with what we communicated in 2021.

It's about 160,000 TEUs a year that we just had to batch now because the delivery times are starting to get clogged up with the yards. And we need to place multiple years of orders at once. But the delivery will be pretty regular also with the ships that we already have from now all the way up to 2030 at around these 160 that we had guided at the time. Most of these ships are already ordered.

We expect about 500,000 TEUs to be on long-term charter and 300,000 TEUs to be owned. And most of it, the orders are already placed or will be in the coming weeks.

Q - Analyst

Okay, thank you. And I forgot a final part here about the fuel choice of the newbuilding.

So it's been a bit of writing that you are now using or going to place orders for the conventional dual-fuels and not the methanol ships. Could you shed some light on why doing that change now?

A - Unidentified Speaker

Yes, let me do that. So we've been clear for a while that I think the future in shipping is going to be with a lot of different technologies living side by side at the same time. We will, of course, continue to have bunker fuel for the next many years being part of the mix.

We will have methanol. We have started to have methanol. And this will grow. We have already in the market a lot of LNG And this will also continue to grow if you look also at the order book.

And I'm sure that at some time soon, we will see also ammonia coming online as a new propulsion technology that will enable the decarbonization. For us, the assessment has been the following. There is high level of uncertainty about both availability of fuel and price of fuel in the future, price of green fuels in the future. And there is a high level of uncertainty on how the regulatory and how the regulatory regime is going to shape up.

And therefore, there is a necessity for us in order to be able to reach the decarbonization agenda that we have in a way that is economically competitive. There is a need for us to hedge some of the bets that we're making on technology and not taking only one way or only one bet and then depend on assumptions that we have very little influence into making happen. So our view was that this was the opportunity for us to balance the bets. We are very happy that thanks to the work that we have done with methanol today, this is a viable and scaling technology across the segment and has a lot of momentum, but we also need to make sure we are exposed to some of the other propulsion technologies so that we don't have all of a sudden risk to have a significant disadvantage for a reason or another.

Q - Analyst

Sounds wise. Thank you so much, Gregor. I hope you're on.

Operator

The next question from Jacob Lacks, Wolfe Research.

Please go ahead.

Q - Jacob Lacks {BIO 19879839 <GO>}

Hey, thanks for your time. I just wanted to get your thoughts on any color around the potential East Coast strike and the likelihood of it happening and what impacts this would have on your business.

A - Vincent Clerc {BIO 15177428 <GO>}

Okay, let me take that, Jacob.

So I will say that I still look at the likelihood of having really strong industrial action as in a strike or something like that as being highly unlikely. It has not been the case, whereas we have had lockdowns and strikes and a lot of disruptions sometimes in connection with negotiations on the West Coast, it has never been the case on the East Coast. So it is still our expectation that the contract expires in September. There may be some extension of the contracts as there is a lot that still needs to get negotiated, but I hope that we can get to see eye to eye with the ILA without having to get there.

If this was to happen, the impact of such a strike could be potentially quite significant in terms of the congestions that it would create, the delay and the absorption of capacity that it would suddenly create. I mean, that would be a really big bottleneck in a very, very traveled trading route.

Q - Jacob Lacks {BIO 19879839 <GO>}

I appreciate the time. Thank you.





Ford Broadens Electrification Strategy to Reach More Customers, Improve Profitability, Continue to Reduce CO₂

- Ford broadens electrification choices for customers and adjusts its rollout of pure electric vehicles to deliver a capital-efficient, profitable electric vehicle business, while continuing to significantly reduce carbon emissions over time
- Ford focuses its next generation of electrified and digitally advanced vehicles where it has competitive advantages – commercial vans, mid-size and large pickup trucks, and long-range SUVs – and will offer a range of electrification options designed to speed customer adoption, including lower prices and longer ranges
- In its fully electric portfolio, Ford plans to introduce an all-new commercial van that will begin production in 2026 in Ohio, closely followed in 2027 by two new pickup trucks – a medium-sized pickup based on the platform designed by Ford's California skunkworks team and a next-generation truck to be assembled in Tennessee
- Ford's new affordable electric vehicle platform marks a major step forward in the company's strategy to bend the cost curve on electric vehicles, allowing the company to introduce multiple vehicle styles for both retail and commercial customers at a faster pace, with more personal digital customization
- Company realigns battery sourcing to be more efficient and contribute to lower overall costs in its electric vehicle portfolio
- Ford will provide an update on electrification, technology, profitability and capital requirements in the first half of 2025

DEARBORN, Mich., Aug. 21, 2024 – Ford Motor Company is taking additional actions to deliver a profitable, capital-efficient and growing electric vehicle business and add even more propulsion choices for customers that generate lower CO₂ emissions.

The plan includes adjusting the company's North America vehicle roadmap to offer a range of electrification options designed to speed customer adoption – including lower prices and longer ranges. In its fully electric portfolio, Ford will prioritize the introduction of a new digitally advanced commercial van in 2026, followed by two new advanced pickup trucks in 2027 and other future affordable vehicles. Ford also realigned its U.S. battery sourcing plan to reduce costs, maximize capacity utilization, and support current and future electric vehicle production.

"We are committed to innovating in America, creating jobs and delivering incredible new electric and hybrid vehicles that make a real difference in CO₂ reduction," said Ford President and CEO Jim Farley. "We learned a lot as the No. 2 U.S. electric vehicle brand about what customers want and value, and what it takes to match the best in the world with cost-efficient design, and we have built a plan that gives our customers maximum choice and plays to our strengths."

The electric vehicle market is rapidly evolving as Chinese competitors leverage advantaged cost structures including vertical integration, low-cost engineering, multi-energy advanced battery technology and digital experiences to expand their global market share.

In addition, today's electric vehicle consumers are more cost-conscious than early adopters, looking to electric vehicles as a practical way to save money on fuel and maintenance, as well as time by charging at home. This, coupled with scores of new electric vehicle choices hitting the market over the next 12 months and rising compliance requirements, has amplified pricing pressures. These dynamics underscore the necessity of a globally competitive cost structure while being selective about customer and product segments to ensure profitable growth and capital efficiency.

"We're committed to creating long-term value by building a competitive and profitable business," said John Lawler, Ford vice chair and chief financial officer. "With pricing and margin compression, we've made the decision to adjust our product and technology roadmap and industrial footprint to meet our goal of reaching positive EBIT within the first 12 months of launch for all new models."

In addition to adjusting the cadence of product launches and realigning battery sourcing, Ford now plans to leverage hybrid technologies for its next three-row SUVs. As a result of this decision, the company will take a special non-cash charge of about \$400 million for the write-down of certain product-specific manufacturing assets for the previously planned all-electric three-row SUVs, which Ford will no longer produce. These actions may also result in additional expenses and cash expenditures of up to \$1.5 billion and the company will reflect those in the quarter in which they are incurred, as a special item.

Lawler said an important enabler to improve profitability is accelerating the mix of battery production in the U.S. that will qualify for the Advanced Manufacturing Tax Credit. Also, given the propulsion options, and increasing demand for hybrids, Ford's mix of annual capital expenditures dedicated to pure electric vehicles will decline from about 40% to 30%.

Electric commercial vehicles

The rollout of Ford's next generation of electric vehicles begins with a commercial van that will be assembled at Ford's Ohio Assembly Plant starting in 2026.

Ford has a strong commercial electric vehicle presence, led by E-Transit, which is America's best-selling electric van suitable for businesses of all sizes. Commercial customers are transitioning more quickly to electric vehicles as they value the total cost of ownership and the productivity benefits that electric vehicles can provide. For them, vehicles, software and charging solutions are tools, and they want the best tools for the job and their bottom line, whether it is an E-Transit or an F-150 Lightning Pro.

Low-cost, highly efficient electric vehicle platform

In 2022, Ford established a skunkworks team in California focused on changing the company's approach to next-generation vehicle development and bending the cost curve on electric vehicles. The team takes a systems-integration approach across design, engineering, supply

chain and manufacturing to fundamentally rethink the full vehicle. Managed to reduce cost and complexity, the approach will go deeper into the supply chain and benchmark cost against the best competitors in the world.

"We recruited the most technically skilled and creative professionals from inside and outside Ford to drive a radical change in how we develop an electric vehicle," Farley said. "The work of this highly talented team has evolved into a critical enabler of our electric vehicle strategy. These electric vehicles will be lower cost, and not compromised in any way."

The first affordable vehicle off this new platform will be a mid-sized electric pickup launching in 2027 that is expected to cater to customers who want more for their money – more range, more utility, more useability.

With a globally competitive electric vehicle cost structure, the platform is designed with minimal complexity to scale quickly by underpinning multiple vehicle styles – for both retail and commercial customers. It is designed to deliver personalized digital experiences that are expandable, always updating and building on Ford's best features, like BlueCruise and Ford Pro Telematics. This will increase the installed base for software and services – improving Ford's mix of sticky, profitable revenue over time.

Next-gen electric truck

Ford's next-generation electric truck will build on the company's century-long heritage of truck leadership and the No. 1 best-selling electric truck in the U.S., the F-150 Lightning.

Ford is retiming the launch of its groundbreaking electric truck code-named "Project T3" to the second half of 2027. Taking all the learnings from F-150 Lightning customers, the truck will offer features and experiences never seen on any Ford truck, including upgraded bi-directional charging capability and advanced aerodynamics. The truck will be assembled at BlueOval City's Tennessee Electric Vehicle Center.

Retiming the launch allows the company to utilize lower-cost battery technology and take advantage of other cost breakthroughs while the market continues to develop.

Broader electrification choices

For some commercial applications and for larger vehicles, the battery cost of a pure electric vehicle remains challenging.

Therefore, Ford will develop a new family of electrified three-row SUVs which will include hybrid technologies that can offer breakthrough efficiency, performance benefits and emissions reductions versus pure gas vehicles and extend the range of the vehicle on road trips relative to pure electric vehicles.

In addition, the next-generation F-Series Super Duty pickup will have a range of propulsion options, building on Ford's hybrid truck sales leadership with the F-150 and Maverick.

"As the global leader in pickup trucks, we are future-proofing this valuable franchise across all sizes with hybrid, electric and other electrified propulsion options, giving individual customers and businesses choice based on how they use their trucks," Farley said.

Smart capacity utilization and localization key to achieving cost reductions

Ford realigned battery sourcing to support both electric vehicle and other emerging electrified vehicle applications to unlock cost reductions, improve capital efficiency, and qualify for Inflation Reduction Act production and consumer tax credits.

"An affordable electric vehicle starts with an affordable battery," Farley said. "If you are not competitive on battery cost, you are not competitive."

- Ford and LG Energy Solutions are targeting to move some Mustang Mach-E battery production from Poland to Holland, Michigan, in 2025 to qualify for Inflation Reduction Act benefits.
- The BlueOval SK joint venture's Kentucky 1 plant will manufacture cells for the current E-Transit with enhanced range and F-150 Lightning beginning mid-2025, delivering significant cost improvements coming online earlier than planned.
- BlueOval SK at BlueOval City in Tennessee will produce cells starting in late 2025 for Ford's new electric commercial van to be built at Ford's Ohio Assembly Plant. Those same cells will be sourced to later power the next-generation electric truck to be assembled at BlueOval City and future emerging technology electrified vehicles. This common cell strategy gives Ford significant sourcing flexibility for manufacturing across multiple segments and electrified platforms as the market continues to evolve.
- Lithium iron phosphate (LFP) battery production is on track to begin in 2026 at BlueOval Battery Park Michigan – America's first automaker-backed LFP battery plant – qualifying for Inflation Reduction Act benefits and giving Ford one of the lowest-cost battery cells in North America.

Ford will provide an update on its electrification, technology, profitability and capital requirements in the first half of 2025.

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About Ford Motor Company

Ford Motor Company (NYSE: F) is a global company based in Dearborn, Michigan, committed to helping build a better world, where every person is free to move and pursue their dreams. The company's Ford+ plan for growth and value creation combines existing strengths, new capabilities and always-on relationships with customers to enrich experiences for customers and deepen their loyalty. Ford develops and delivers innovative, must-have Ford trucks, sport utility vehicles, commercial vans and cars and Lincoln luxury vehicles, along with connected services. The company does that through three customercentered business segments: Ford Blue, engineering iconic gas-powered and hybrid vehicles; Ford Model e, inventing breakthrough electric vehicles along with embedded software that defines exceptional digital experiences for all customers; and Ford Pro, helping commercial customers transform and expand their businesses with vehicles and services tailored to their needs. Additionally, Ford provides financial services through Ford Motor Credit Company. Ford employs about 175,000 people worldwide. More information about the company and its products and services is available at corporate.ford.com.

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Cautionary Note on Forward-Looking Statements

Statements included or incorporated by reference herein may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on expectations, forecasts, and assumptions by our management and involve a number of risks, uncertainties, and other factors that could cause actual results to differ materially from those stated, including, without limitation:

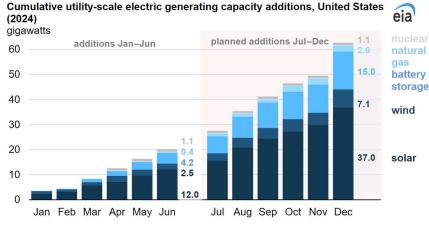
- Ford is highly dependent on its suppliers to deliver components in accordance with Ford's production schedule and specifications, and a shortage of or inability to acquire key components or raw materials, such as lithium, cobalt, nickel, graphite, and manganese, can disrupt Ford's production of vehicles;
- To facilitate access to the raw materials and other components necessary for the production of electric vehicles, Ford has entered into and may, in the future, enter into multi-year commitments to raw material and other suppliers that subject Ford to risks associated with lower future demand for such items as well as costs that fluctuate and are difficult to accurately forecast;
- Ford's long-term competitiveness depends on the successful execution of Ford+;
- Ford's vehicles could be affected by defects that result in recall campaigns, increased warranty costs, or delays in new model launches, and the time it takes to improve the quality of our vehicles and services could continue to have an adverse effect on our business;
- Ford may not realize the anticipated benefits of existing or pending strategic alliances, joint ventures, acquisitions, divestitures, or business strategies;
- Ford may not realize the anticipated benefits of restructuring actions and such actions may cause Ford to incur significant charges, disrupt our operations, or harm our reputation;
- Operational information systems, security systems, vehicles, and services could be affected by cybersecurity incidents, ransomware attacks, and other disruptions and impact Ford and Ford Credit as well as their suppliers and dealers;
- Ford's production, as well as Ford's suppliers' production, and/or the ability to deliver products to consumers could be disrupted by labor issues, public health issues, natural or man-made disasters, adverse effects of climate change, financial distress, production difficulties, capacity limitations, or other factors;
- Failure to develop and deploy secure digital services that appeal to customers could have a negative impact on Ford's business;
- Ford's ability to maintain a competitive cost structure could be affected by labor or other constraints;
- Ford's ability to attract, develop, grow, and reward talent is critical to its success and competitiveness;
- Ford's new and existing products and digital, software, and physical services are subject to market acceptance and face significant competition from existing and new entrants in the automotive and digital and software services industries, and its reputation may be harmed if it is unable to achieve the initiatives it has announced;
- Ford's results are dependent on sales of larger, more profitable vehicles, particularly in the United States;

- With a global footprint and supply chain, Ford's results and operations could be adversely affected by economic or geopolitical developments, including protectionist trade policies such as tariffs, or other events;
- Industry sales volume can be volatile and could decline if there is a financial crisis, recession, public health emergency, or significant geopolitical event;
- Ford may face increased price competition or a reduction in demand for its products resulting from industry excess capacity, currency fluctuations, competitive actions, or other factors, particularly for electric vehicles;
- Inflationary pressure and fluctuations in commodity and energy prices, foreign currency exchange rates, interest rates, and market value of Ford or Ford Credit's investments, including marketable securities, can have a significant effect on results;
- Ford and Ford Credit's access to debt, securitization, or derivative markets around the world at competitive rates or in sufficient amounts could be affected by credit rating downgrades, market volatility, market disruption, regulatory requirements, or other factors;
- The impact of government incentives on Ford's business could be significant, and Ford's receipt of government incentives could be subject to reduction, termination, or clawback;
- Ford Credit could experience higher-than-expected credit losses, lower-than-anticipated residual values, or higher-than-expected return volumes for leased vehicles;
- Economic and demographic experience for pension and OPEB plans (e.g., discount rates or investment returns) could be worse than Ford has assumed;
- Pension and other postretirement liabilities could adversely affect Ford's liquidity and financial condition;
- Ford and Ford Credit could experience unusual or significant litigation, governmental investigations, or adverse publicity arising out of alleged defects in products, services, perceived environmental impacts, or otherwise;
- Ford may need to substantially modify its product plans and facilities to comply with safety, emissions, fuel economy, autonomous driving technology, environmental, and other regulations;
- Ford and Ford Credit could be affected by the continued development of more stringent privacy, data use, data protection, and artificial intelligence laws and regulations as well as consumers' heightened expectations to safeguard their personal information; and
- Ford Credit could be subject to new or increased credit regulations, consumer protection regulations, or other regulations.

We cannot be certain that any expectation, forecast, or assumption made in preparing forwardlooking statements will prove accurate, or that any projection will be realized. It is to be expected that there may be differences between projected and actual results. Our forward-looking statements speak only as of the date of their initial issuance, and we do not undertake any obligation to update or revise publicly any forward-looking statement, whether as a result of new information, future events, or otherwise. For additional discussion, see "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023, as updated by our subsequent Quarterly Reports on Form 10-Q and Current Reports on Form 8-K.

August 19, 2024

U.S. power grid added 20.2 GW of generating capacity in the first half of 2024



Data source: U.S. Energy Information Administration, Preliminary Monthly Electric Generator Inventory, June 2024

According to our latest <u>Preliminary Monthly Electric Generator Inventory</u>, developers and power plant owners added 20.2 gigawatts (GW) of utility-scale electric generating capacity in the United States during the first half of 2024. This new capacity is 3.6 GW (21%) more than the capacity added during the first six months of 2023. Based on the most recently reported data, developers and owners expect to add another 42.6 GW of capacity in the second half of the year.

Operational capacity additions: As in 2023, solar accounted for the largest share of newly operating generating capacity in the United States during the first half of 2024. Solar additions totaled 12 GW, 59% of all additions. Texas and Florida made up 38% of U.S. solar additions. The 690-megawatt (MW) solar and storage Gemini facility in Nevada and the 653-MW Lumina Solar Project in Texas were the largest solar projects that came online in the first six months of 2024.

The second-most capacity additions so far this year were battery storage, which made up 21% (4.2 GW). Battery additions were concentrated in four states: California (37% of the U.S. total), Texas (24%), Arizona (19%), and Nevada (13%). The 380-MW battery storage capacity at Gemini and the 300-MW Eleven Mile Solar Center in Arizona were the two largest projects that came online in the first half of 2024.

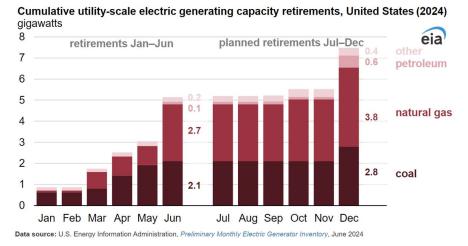
Wind power made up 12% (2.5 GW) of U.S. capacity additions. Canyon Wind (309 MW) and Goodnight (266 MW), both located in Texas, were the largest wind projects that came online in the first half of the year.

Nuclear power increased in the United States during 2024 as well. Unit 4 (1,114 MW) at Georgia's <u>Vogtle</u> <u>nuclear power plant</u> began commercial operations in April, making Vogtle the largest nuclear facility in the United States and the only one with four nuclear power reactors.

Retired capacity: Retirement of U.S. electric generating capacity has slowed in 2024. Operators retired 5.1 GW of generating capacity in the first half of the year. During the first six months of 2023, operators retired 9.2 GW of generation. In the first half of 2024, more than half (53%) of the retired capacity had used natural gas as its fuel, followed by coal at 41%.

The largest U.S. coal retirements include Seminole Electric Cooperative's Unit 1 (626.0 MW) in Florida, which retired in January, and <u>Homer City Generating Station's Unit 1</u> (626.1 MW) in Pennsylvania, which

retired in April. The six-unit, 1,413-MW <u>Mystic Generating Station</u> combined-cycle facility in Massachusetts was the largest natural gas retirement this year and had been the third-largest power plant in New England.



Plans for changes in capacity: Developers plan to add 42.6 GW of new capacity in the United States in the second half of 2024. Nearly 60% of that planned capacity is from solar (25 GW), followed by battery storage (10.8 GW) and wind (4.6 GW).

If utilities add all the solar capacity they are currently planning, solar capacity additions will total 37 GW in 2024, a record in any one year and almost double last year's 18.8 GW.

Utilities could also add a record amount of battery storage capacity this year (15 GW) if all planned additions come online. Plans for storage capacity in Texas and California currently account for 81% of new battery storage capacity in the second half of the year.

About 2.4 GW of capacity is scheduled to retire during the second half of 2024, including 0.7 GW of coal and 1.1 GW of natural gas.

Principal contributor: Suparna Ray



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IFIC Monthly Investment Fund Statistics – July 2024 Mutual fund and exchange-traded fund (ETF) assets and sales

August 22, 2024 (Toronto) – The Investment Funds Institute of Canada (IFIC) today announced investment fund net sales and net assets for July 2024.

Mutual fund assets totalled \$2.137 trillion at the end of July, up by \$65.2 billion or 3.1 per cent since June. Mutual fund net sales were \$5.2 billion in July.

ETF assets totalled \$458.1 billion at the end of July, up by \$17.9 billion or 4.1 per cent since June. ETF net sales were \$5.0 billion in July.

July insights

- Mutual fund assets reached an all-time high in July, surpassing the previous record set in December 2021.
- Mutual fund sales saw their largest single-month inflows since February 2022.
- Bond funds accounted for the majority of net sales, while equity, specialty, and money-market asset categories also experienced positive inflows.
- Equity funds made up close to half of ETF net sales, while all other major asset categories had positive inflows.

Mutual fund net sales/net redemptions (\$ millions)*

| Asset class | Jul 2024 | Jun 2024 | Jul 2023 | YTD 2024 | YTD 2023 |
|--------------------------|----------|----------|------------------|----------|----------|
| Long-term funds | | | | | |
| Balanced | (1,025) | (4,048) | (4,571) | (19,983) | (26,251) |
| Equity | 2,088 | (2,614) | (1,848) | 482 | (11,432) |
| Bond | 3,307 | 1,188 | 414 | 13,405 | 9,017 |
| Specialty | 800 | 473 | 262 | 4,583 | 2,276 |
| Total long-term funds | 5,169 | (5,002) | (5 <i>,</i> 744) | (1,514) | (26,390) |
| Total money market funds | 31 | 2,487 | 958 | 2,614 | 8,840 |
| Total | 5,200 | (2,515) | (4,786) | 1,100 | (17,550) |

Mutual fund net assets (\$ billions)*

| Asset class | Jul 2024 | Jun 2024 | Jul 2023 | Dec 2023 |
|-----------------|----------|----------|----------|----------|
| Long-term funds | | | | |
| Balanced | 962.9 | 936.2 | 902.6 | 904.4 |
| Equity | 821.5 | 792.5 | 707.3 | 714.4 |
| Bond | 264.2 | 256.0 | 235.2 | 242.3 |
| Specialty | 33.6 | 32.6 | 25.0 | 27.0 |

| Total long-term funds | 2,082.2 | 2,017.3 | 1,870.1 | 1,888.1 |
|--------------------------|---------|---------|---------|---------|
| Total money market funds | 54.8 | 54.5 | 44.1 | 50.7 |
| Total | 2,137.0 | 2,071.8 | 1,914.3 | 1,938.8 |

* See below for important information about this data.

ETF net sales/net redemptions (\$ millions)*

| Asset class | Jul 2024 | Jun 2024 | Jul 2023 | YTD 2024 | YTD 2023 |
|--------------------------|----------|----------|----------|----------|----------|
| Long-term funds | | | | | |
| Balanced | 558 | 399 | 133 | 2,842 | 962 |
| Equity | 2,380 | 2,806 | 880 | 21,081 | 6,446 |
| Bond | 1,463 | 5,462 | 986 | 12,183 | 6,444 |
| Specialty | 271 | 387 | 39 | 320 | 1,327 |
| Total long-term funds | 4,672 | 9,053 | 2,037 | 36,426 | 15,179 |
| Total money market funds | 310 | 1,114 | 754 | 957 | 5,813 |
| Total | 4,981 | 10,167 | 2,791 | 37,383 | 20,992 |

ETF net assets (\$ billions)*

| Asset class | Jul 2024 | Jun 2024 | Jul 2023 | Dec 2023 |
|--------------------------|----------|----------|----------|----------|
| Long-term funds | | | | |
| Balanced | 19.6 | 18.5 | 13.9 | 15.1 |
| Equity | 286.6 | 274.3 | 222.1 | 232.5 |
| Bond | 107.7 | 104.4 | 86.2 | 94.6 |
| Specialty | 17.7 | 17.0 | 12.2 | 14.4 |
| Total long-term funds | 431.7 | 414.1 | 334.4 | 356.7 |
| Total money market funds | 26.4 | 26.1 | 22.0 | 25.3 |
| Total | 458.1 | 440.2 | 356.4 | 382.0 |

* See below for important information about data.

IFIC direct survey data (which accounts for approximately 87 per cent of total mutual fund industry assets and approximately 80 per cent of total ETF industry assets) is complemented by estimated data to provide comprehensive industry totals.

IFIC makes every effort to verify the accuracy, currency, and completeness of the information, however, IFIC does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current.

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* Important information about investment fund data

- 1. Mutual fund data is adjusted to remove double counting arising from mutual funds that invest in other mutual funds.
- Starting with January 2022 data, ETF data is adjusted to remove double counting arising from Canadian-listed ETFs that invest in units of other Canadian-listed ETFs. Any references to IFIC ETF assets and sales figures prior to 2022 data should indicate that the data has not been adjusted for ETF of ETF double counting.
- 3. The balanced funds category includes funds that invest directly in a mix of stocks and bonds or obtain exposure through investing in other funds.
- 4. Mutual fund data reflects the investment activity of Canadian retail investors.
- 5. ETF data reflects the investment activity of Canadian retail and institutional investors.

About IFIC

The Investment Funds Institute of Canada is the voice of Canada's investment funds industry. IFIC brings together 150 organizations, including fund managers, distributors and industry service organizations to foster a strong, stable investment sector where investors can realize their financial goals. By connecting Canada's

savers to Canada's economy, our industry contributes significantly to Canadian economic growth and job creation. Learn more about IFIC

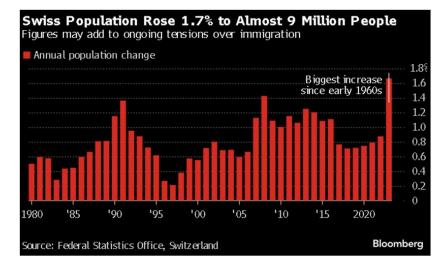
For more information

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Swiss Population Jumps Most Since 1960s Amid Immigration Tension

2024-08-22 14:48:51.102 GMT By Levin Stamm (Bloomberg) -- Switzerland's population rose the most in more than half a century, adding to a increasingly tense debate on whether the country should keep the doors open for immigrants.

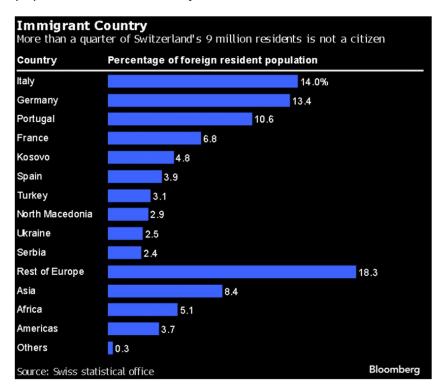
The number of Swiss residents is close to 9 million, according to data from the Federal Statistical Office released on Wednesday. It increased by 146,900, or 1.7%, in 2023, the biggest percentage increase since the early 1960s, driven largely by refugees from Ukraine being reclassified after a year in the country.



The numbers are likely to amplify long-running tensions in the country over immigration and strains on public finances and services. Immigration played a role in elections last year, when the conservative Swiss People's Party (SVP) cemented its position as the biggest party, and it's a contentious issue in talks between Switzerland and the European Union on a new economic deal.

This year, the SVP collected enough signatures to force a plebiscite on a proposal to put a 10-million limit on Switzerland's population. The threshold is currently expected to be crossed around 2035.

Such positions have angered Swiss businesses, which say an aging population and the booming post-Covid economy led to a drastic shortage of workers, with about 111,000 job vacancies at the end of 2023. Shortages were particularly pronounced in the manufacturing and care sector. Ukrainian refugees were the main driver of the sharp increase in the population in 2023, partly due to a change in categorization. Fleeing their country following Russia's invasion in 2022, they arrived in Switzerland under a special protection status. They were only included in the permanent population statistics one year after arrival.



Of the arrivals in 2023, Germans were the second biggest group, accounting for 10% of immigrants, with French and Italians around 7.5%, the statistics office said. In total, the number of non-citizens in Switzerland grew by 5.3%, and the number of Swiss citizens only edged up 0.4%. *T

To contact the reporter on this story: Levin Stamm in Zurich at <u>lstamm2@bloomberg.net</u> To contact the editors responsible for this story: Alessandro Speciale at <u>aspeciale@bloomberg.net</u> Fergal O'Brien, Levin Stamm

To view this story in Bloomberg click here: https://blinks.bloomberg.com/news/stories/SIM7Z8DWLU68

In Russia 09:59, 20 August 2024

The Ministry of Internal Affairs has issued advice on information security measures in the Belgorod, Bryansk and Kursk regions

Citizens were advised not to use surveillance cameras due to the risk of the enemy connecting to them

Moscow. August 20. INTERFAX.RU - The Department for Combating the Illegal Use of Information and Communication Technologies of the Ministry of Internal Affairs of Russia has issued a memo on information security in the Bryansk, Kursk and Belgorod regions for the population and representatives of law enforcement agencies.

"The enemy massively detects IP bands in our territories and connects to unprotected video surveillance cameras remotely, viewing everything from private courtyards to roads and highways of strategic importance. In this regard, if there is no urgent need, then it is better not to use CCTV cameras," the department told reporters.

"The use of online dating services is highly discouraged. The enemy actively uses such resources for the legendary collection of information," the department continued.

The ministry advised military personnel not to open any links (hyperlinks) coming from strangers in messengers or SMS messages and, if possible, to avoid using phones with a large amount of both official and personal information in situations "when the enemy can gain physical access to them."

"It is necessary to control and moderate chats, as well as to promptly delete from them the accounts of persons captured by the enemy, as well as the accounts of persons whose phones the enemy has gained access to," the police said.

In addition, the Ministry of Internal Affairs asks citizens not to post on social networks and instant messengers video recordings of trips made on a dashcam or to conduct broadcasts/streams when driving on highways, where military equipment is also moving, due to the danger of publishing "objects significant to the enemy."

Military personnel and representatives of law enforcement agencies in the police were advised to disable the "People nearby" function in the Telegram messenger, remove all photos indicating departmental affiliation, change nicknames by which a citizen can be identified as a serviceman or a representative of a law enforcement agency, check their subscriber numbers through specialized resources that parse phone books.

"If in the search results your number comes out as recorded by third parties in the form of "Lyosha FSB", "Pasha Rosgvardiya", "Misha 123 regiment", this number needs to be changed, it is compromised," the press service explained.

Employees in the Kursk, Bryansk and Belgorod regions are advised to close their personal data, remove all geotags and links to geolocations in social networks so that the enemy cannot identify the actual location of the military and security forces.

Employees of the energy industry, including the nuclear industry, need to remove their professional affiliation from social networks in order not to get into the field of view of the enemy's special services, the police added.

On 10 August, a counter-terrorist operation <u>regime was introduced</u> in these three regions.

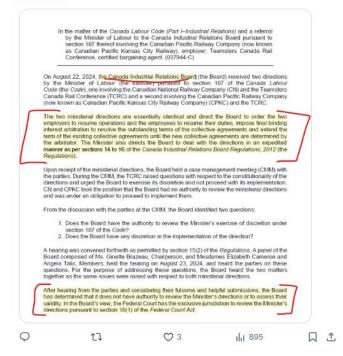
Interior Ministry Rosgvardia FSB Belgorod Region Kursk Region Bryansk Region

SAF

Dan Tsubouchi 🤡 @Energy_Tidbits · 3h No rail stoppage at CN/CPKC for now.

See CIRB. Didn't have authority to not follow Ministers direction. So order resume operations, impose binding arbitrations, extend existing collective agreements until new one determined by arbitrator.

@TeamstersRail will comply but will Show more

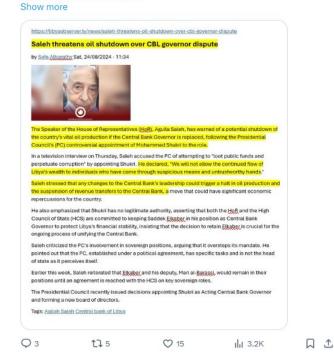


•••



Dan Tsubouchi 🤣 @Energy_Tidbits · 14h Libya #Oil watch.

Speaker of House Saleh warns any changes to Central Bank leadership could lead to halt in oil production. "We will not allow the continued flow of Libya's wealth to individuals who have come through suspicious means and untrustworthy hands." reports



...

saF Dan Tsubouchi 🤡 @Energy_Tidbits · 19h Updated @NOAA 6-10 & 8-14 day temperature outlook. ••••

Normal to below normal temp to start Sept in Midwest & NE US.

Absent unusual events, HH #NatGas price likely stuck ~\$2 with storage +221 bcf YoY, which would be way higher if EQT, Coterra, etc hadn't shut-in production.





Dan Tsubouchi 🤣 @Energy_Tidbits · 23h

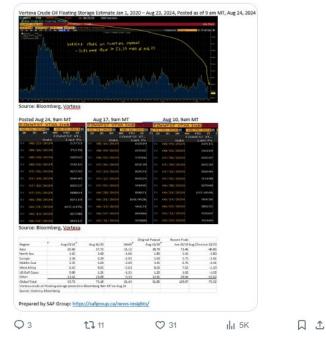
Headline is @Vortexa crude #Oil floating storage down a whopping 24.13 mmb WoW to 53.75 mmb. Lowest since Covid & only been 4 wks <60.

...

But a big +13.36 mmb revision to Aug 16 to 75.18.

Even still, last 4 wks average 63.10 mmb, solid trend as only been 18 wks ${<}70$ mmb since







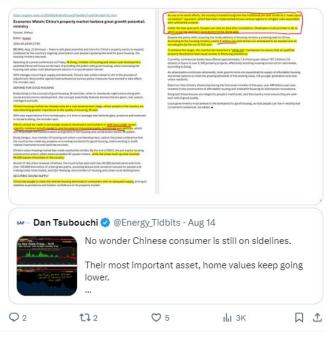
Dan Tsubouchi 🤣 @Energy_Tidbits · 23h

Biggest holdback to Chinese consumer is crashing value of their homes. Aug 14 tweet.

China trying to stop this decline.

New policy "transitioning from the traditional pre-sale model to a "sales upon completion approach" ... under the new approach, houses can only be sold after

Show more



Dan Tsubouchi 🤣 @Energy_Tidbits · Aug 24

SAF US gasoline prices keep drifting lower as summer driving season is ending.

...

•••

AAA National average prices -0.06 WoW to 3.36 on Aug 24, -0.15 MoM and -0.48 YoY.

California at \$4.60 on Aug 24, which was flat WoW, -\$0.06 MoM & -\$0.66 YoY.

Thx @AAAnews

#OOTT



SAF

Dan Tsubouchi 🤡 @Energy_Tidbits · Aug 24 Daily Europe air traffic still stuck below pre-Covid

7-day moving average as of: Aug 22: -2.8% below pre-Covid. Aug 15: -2.2% Aug 8: -1.3% Aug 1: -1.9% Jul 25: -2.2% Jul 18: -2.6% Jul 18: -2.6% Jul 11: -2.9%... Show more

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SAF

Dan Tsubouchi 🤣 @Energy_Tidbits · Aug 23

Started wine of the week for opening 15-35 yr old wines that would have been opened if Covid hadn't happened.

•••

Clarendon Hills 2004 Hickinbotham Vineyard Cabernet Sauvignon.

Still drinking well.

Use to put Parker info on back to help our guests pick out wines to try.



SAF

Dan Tsubouchi 🤣 @Energy_Tidbits · Aug 23 ... Big WoW drop in 321 crack spreads being -\$3.65 WoW to \$17.10 on Aug 23.

WTI -\$1.82 WoW to \$74.83.

There are other factors but \$17.10 crack spread points to drifting WTI as won't incentivize refiners to take more crude.

Thx @business

#OOTT



Dan Tsubouchi 🤡 @Energy_Tidbits · Aug 23

Another week of negative Waha (Permian) spot #NatGas prices, closed at -\$1.93.

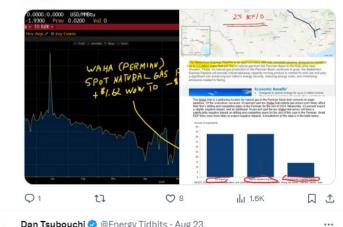
...

But help is on the way. EnLink CEO 2.5 bcfd Matterhorn Express expected in-service around mid-Sept.

Should get Waha back to normal & small Permian players back to drilling. @DallasFed.

#OOTT

SAF



SAF

Dan Tsubouchi 🤡 @Energy_Tidbits · Aug 23 Data Center 101 from \$ENB CEO Ebel.

#NatGas will be baseload #Electricity but renewables wanted for ESG scorecard.

"no doubt natural gas is cheaperSo, it is true without tax incentives you would have a hard time making renewables economic"

"some of it is going to be Show more



...

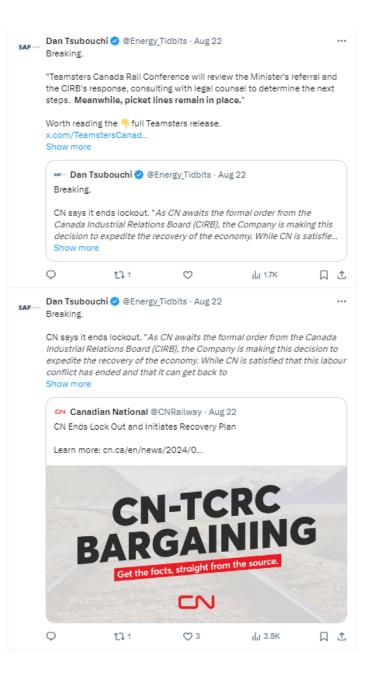
@TeamstersRail served strike notice to CN rail, which would start Mon Aug 26

#OOTT

Rail Conference @TeamstersRail · Aug 23 The TCRC has served Strike Notice to CN Rail at 09:52 eastern time, August 23rd. teamstersrail.ca/news-details/n...



| SAF | Dan Tsubouchi ♀ @Energy_Tidbits · I+I rail stoppage is partially over says | Aug 23 s @TeamstersCanada at 10:42pm MT. | |
|-----|---|---|--|
| | "Lockout at @CNRailway is now over" | | |
| | "work stoppage at @CPKCrail is ongo cpkcr.com/en/media/CIRB #OOTT #Oil | ving". See CPKC response | |
| | Constraint Constraint Despite the state sta | WDRK STO PAGE AT CPKC IS ON 601116 | |
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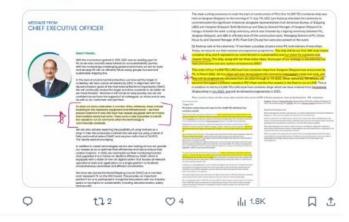


SAF-Da

Dan Tsubouchi 🤡 @Energy_Tidbits · Aug 22 Another shipper backing off green fuel/ammonia bet??

Inclusion by omission?

PIL CEO 2022 sustainability report key initiatives incl "we have placed orders for 8 new LNG dual-fuel vessels equipped with ammonia intermediate ready fuel tanks. These tanks make it possible to Show more



SAF Dan Tsubouchi 🤡 @Energy_Tidbits · Aug 22 CN/CPKC rail lockout.

Cdn crude #Oil by rail exports.

@CER_REC: 89,204 b/d in June 2024. flat MoM. +19.1% YoY vs 74,910 b/d in June 2023

These are likely most oil railed thru US for export loading in Gulf Coast.

Excludes propane by rail to west coast.... Show more

| I+I 8 | puters an D | nde l'invergie mace | | | | Canada | |
|------------|--------------|------------------------|-------------------------|--------------|-------------------------|---|--|
| Canadian (| Trade Oil Ex | ports by Rail - M | outhly Data | | 24 | Numbers last repland on 2006. August 2024 | |
| ter | Month | Talanar (mil) | Volense Gef per diet | Talsese (140 | Talensi f5M per dari | | |
| 2624 | June | 415,265 | 181.5 | 2,576,000 | 85,214 | | |
| | Mar | 409,150 | 14140 | 2,760,384 | 38,341 | | |
| | April | 419,281 | 12,397 | 2,510,417 | M325 | | |
| | Masch | 427,428 | 10,708 | 2,689,794 | 88,766 | | |
| | Falemany | 415,306 | 84,324 | 151,86 | PLAT | | |
| | diama ty | 340,413 | 17,403 | 3.400,739 | 108,741 | | |
| 2025 | Becenher | MURE | 19,003 | 3,715,144 | 100.01 | | |
| and . | Normhar | 408,804 | 20,295 | 5,890,623 | 127,125 | | |
| | Ovalue | 542,500 | 17.50 | 1414,854 | 189,002 | | |
| | September | 411,278 | 18374 | 3.090,277 | 110,041 | | |
| | August | 411,000 | 10,000 | 2,718,491 | 81,041 | | |
| | Jub | 190.172 | 12,683 | 2474.016 | 78.511 | | |
| | June | 167,128 | 11,994 | 224730 | 74,510 | | |
| | Max | 187,804 | 10,714 | 2,442,149 | 78,747 | | |
| | April | 141,508 | 12,727 | 2,400,714 | 81,124 | | |
| | Marsh | 411,565 | 15.544 | 3-000,308 | FUET | | |
| | Telusary | 440,221 | 13.794 | 1.782,835 | 59,367 | | |
| | Jaseaty | 101,51.0 | 18,001 | 1,770,0M | 128,079 | | |
| 2072 | Describer | 61,5% | 29,354 | \$962,089 | 126,088 | | |
| | Normator | 552.044 | 19.372 | 1.687,094 | 12.80 | | |
| | Omber | 488,214 | 20,214 | 4,031,518 | 138,915 | | |
| | September | 405,704 | 20.181 | 3.851,797 | 127,040 | | |
| | Autori | 154,250 | 28,554 | 4,808,527 | 155,346 | | |
| | -740 | 714,540 | 24,744 | 4,748,945 | 155,86 | | |
| | June | 811 162 | 27,008 | 3.104,401 | 178,347 | | |
| | Max | 102,508 | 27,510 | 5.566,797 | 179,021 | | |
| | April | 687,299 | 22,518 | 4,325,073 | 144,009 | | |
| | Masch | 128,248 | 24,308 | 4,708,701 | 151,894 | | |
| | Talomaty | 355,21.4 | 19,829 | 3,891,000 | 124,793 | | |
| | diamary. | 652,560 | 21.000 | 4,106,409 | 132,461 | | |
| 2628 | Becenter | 472,318 | 21,893 | 4.100JRf | 132,367 | | |
| | Neember | 440,684 | 21,823 | 1.948,058 | 112,214 | | |
| | Overlan | 453,555 | 21,362 | 4,112,128 | 112,665 | | |
| | September | 187,256 | 28,342 | 4,854,089 | 145,134 | | |
| | August | 810,807 | 28,968 | 1,260,039 | 189,893 | | |
| | July | 108,521 | 22,855 | 4308,291 | 110,848 | | |
| | June | 600,252 | 21,048 | 3.984,963 | 112,003 | | |
| | May | 481,879 | 20,304 | 1.978,917 | 128,288 | | |
| | April | 429,536 | 29,62 | 1,010,712 | 129,919 | | |
| | Marrin | 104,246 | 27,001 | 1,442,819 | 115,980 | | |
| | Telosasy | 491,787 | 10,000 | 1,152,377 | 11,971 | | |
| | James | 448.003 | 15,854 | A2012391 | 194,911 | | |

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SAF → Dan Tsubouchi 🤍 @Energy_Tidbits · Aug 22 ···· "recession in Germany's manufacturing sector deepened in Aug, with no recovery in sight, in fact new orders took a shaper dive.." @CyrusdelaRubia

There are other factors but the big one hammering DEU manufacturing was cutting off cheap Russian #NatGas via Nord Stream 1 post Show more



saf Dan Tsubouchi @ @Energy_Tidbits · Aug 22 Let's hope it's hope for the best, plan for the worst.

Have to agree with @andrewrsorkin that would like to know who is the undisclosed European country that put in large order for Bavarian Nordic's MonkeyPox (MPox) vaccine.

Earnings call at 6am MT



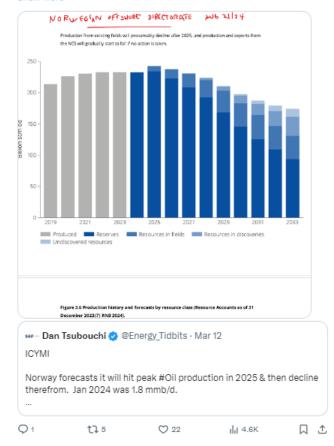
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SAF Dan Tsubouchi 🤡 @Energy_Tidbits · 3h

Norway still forecasts peak #Oil production in 2025 & then decline.

EVEN WITH "multiple discoveries are made and brought on stream, accompanied by investments aimed at increasing recovery from existing fields. Despite this, resource growth will not be sufficient to offset the Show more



•••

| @EIAgov just rel | eased #Oil #Gasoline | #Distillates inventory | as of Aug 16 |
|-------------------|---------------------------|---------------------------|--------------|
| <u> </u> | | usiness expectations | 0 |
| | - | or to release, WTI was \$ | |
| C | | | |
| Oil/Products Inv | entory Aug 16: EIA, Blo | omberg Survey Expectat | tions, API |
| (million barrels) | EIA | Expectations | AP |
| Oil | -4.65 | -2.20 | 0.3 |
| Gasoline | -1.61 | -1.80 | -1.0 |
| Distillates | -3.31 | -1.00 | -2.2 |
| | -9.57 | -5.00 | -2.8 |
| Note: Oil is comm | ercial. So excludes a +0. | 7mmb build in SPR for the | Aug 16 week |
| Note: Included in | the oil data, Cushing had | a 0.56 mmb draw for Aug | 16 week |
| Source EIA, Bloo | mberg | contration to the local | |
| | Group https://safgroup | .ca/news-insights/ | |

Ford also reminds why pace of EVs adoption is slower previously expected.

"In addition, today's electric vehicle consumers are more cost-conscious than early adopters"

ie. low/middle income consumer can't pay up like high income consumer.

#OOTT #EVs s201.q4cdn.com/693218008/file... Q tl₁ ♡1 ilii 880 Д ±

SAF Dan Tsubouchi 🤡 @Energy_Tidbits · 9h

¹⁷ F150 Lightning only right for urban cowboys.

Today "As the global leader in pickup trucks, we are future-proofing this valuable franchise across all sizes with hybrid, electric and other electrified propulsion options, giving individual customers and businesses choice based on

...

Show more

🗤 – Dan Tsubouchi 🤣 @Energy_Tidbits · Apr 27, 2022

#EV trucks #F150Lightning are not good for heavry users ie. ranchers, contactors. But perfect for urban cowboy & commuting to work, so will need mix of #ICE & #BEV says #Ford CEO to @sonalibasak.So why feature towing so prominently in commercials? Thx @kropija for flagging. #OOTT

SAF Group created transcript of except from Bloomberg Technology Interview with Ford CED Jim Farley on April 26, 2022. <u>https://www.youtube.com/watch?v=?#EPXUSM97</u>

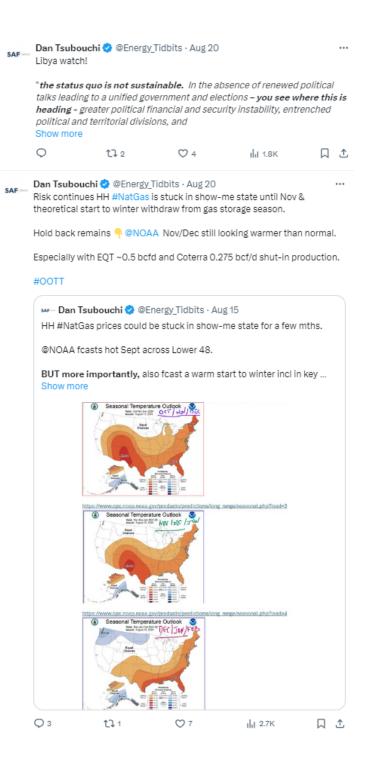
Items in "Italics" are SAF Group created transcript

Bloomberg's Sanall By By "Aim, loak out into the future for a second here, can you see all the F150's going electric? And what would it take for that to happen?" Farley 'Ne way, i don't see that happening, if you're towing a fifth wheel in Wyaming, ary you knew with a hapter taking: there is no way. Are electric whiche in not ago adsultatio for super dity castomers. We're 50% of a commercial light duty whicise in the US so we know. And the technology is not right for that. For stell customer who is don's going given boiling or commuting to work, it's perfect. But for heavy duty usage, It's not the right solution. So you're going to see a mix of ICE and BEV."

Prepared by SAF Group https://safgroup.ca/news-insights/



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SAF ----

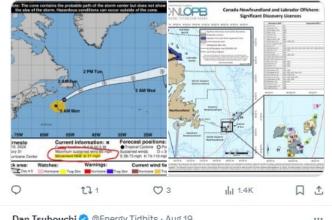
Dan Tsubouchi 🤣 @Energy_Tidbits · Aug 19

Ernesto moved a little south so hopefully no major impact on Newfoundland.

Ernesto is very fast moving at 21 mph so shouldn't be a lengthy time impact.

But offshore Newfoundland oil and gas may be impacted.

Thx @NHC_Atlantic #OOTT



SAF-

Dan Tsubouchi 🤣 @Energy_Tidbits · Aug 19 CN Railway issues lockout notice starting Aug 22.

"Despite negotiations over the weekend, no meaningful progress has occurred, and the parties remain very far apart".

CER crude-by-rail exports was 89,000 b/d in May. BUT TMX started up in May, hasn't been full so hopefully that Show more

