Oil Markets Weekly

Offsetting dynamics: demand and price elasticities at work

- **A potential trade war could reduce 2025 US and global GDP by 0.5%-pt, lowering global oil demand by 250 kbd**
- **US recession probability is now 40%, but demand impact should be relatively contained if it's a non-financial recession**
- **Supporting demand, oil prices are down ~10%, which could lead to an increase of up to 80 kbd in global oil demand**
- **A ~10% lower US gasoline prices could also potentially boost gasoline demand by 180 kbd**
- **Venezuelan barrels could be offered at a deep discount to US Gulf Coast refiners, potentially displacing some of the Canadian heavy crude**

Global Commodities Research

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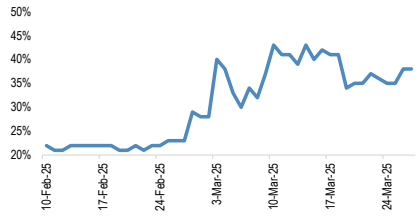
Crude prices have been oscillating between gains and losses since the start of the year, and with Brent at $74 currently, the gap between fair value and spot prices has narrowed to $4/bbl, down from as much as $8 earlier this month and more than $10 in December. Brent options volumes have also surged to the highest level since early January, boosted by trading in $85 and $100 calls. Still, despite a roughly 5% rally in the past three weeks, oil prices remain about $5 below their mid-January peak. Our pricing model, suggests higher prices ahead, followed by a decline by year-end, when supply-demand imbalances swell inventories.

Oil is in a holding pattern for now, as the market navigates numerous crosscurrents. Trump's Tariff D-Day is nearly here, when the US is set to announce new and higher tariffs on a wide range of imports on April 2. The impact could be outright recessionary, or the trade partners might attempt to negotiate down their tariff rates, or try to replace lost US demand by stimulating their domestic economies **(Figures 1 & 2)**. Meanwhile, supporting prices, the Trump administration continues to escalate sanctions on oil-producing nations, rasing the potential for supply disruptions.

Figure 1: Probability of US recession in 2025

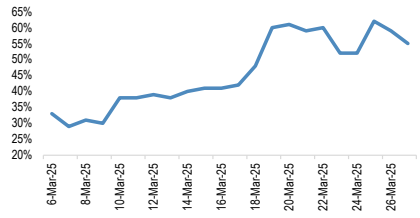
Percent



Source: Polymarket

Figure 2: Probability Trump impose large tariffs in his first 6 months in the office

Percent



Source: Polymarket

See page 35 for analyst certification and important disclosures.

In short, the market is dazed and confused.It's not just investors who are concerned. A survey report of 130 oil and gas firms from Texas, northern Louisiana, and southern New Mexico, released by the Federal Reserve of Dallas, reveals that industry insiders (speaking anonymously) also find the administration's trade and energy policies to be sowing confusion and undermining its goal to boost America's energy production.

To navigate this complexity, we offer a mathematical approach. A natural starting point for such an analysis is to assess the growth impact across countries and globally that could arise from various forms of tariffs. This negative impact should be somewhat offset by higher demand resulting from ~10% lower oil and gasoline prices. Additionally, the analysis should account for the likelihood of reduced output and export volumes from Venezuela and possibly Iran.

1. Trade war impact: 0.5%-pt drag on 2025 US and global GDP or 250 kbd lower global demand

As Donald Trump's trade "liberation day" approaches, investors are increasingly concerned about whether the escalating tariff war could trigger a US, or even global, recession. With Trump's trade experts now in place, the administration is set to announce new and higher tariffs on a wide range of imports on April 2. While the details are complex, the net effect is expected to be roughly that of the universal 10% tariff that Trump promised during his campaign. The impact of these tariffs is pegged at around 0.5%-pt drag on 2025 US and global GDP, with an especially large hit to Mexico, which we now expect to slide into a recession this quarter.

- **The US stands as the largest demand center globally, with a beta of oil demand to GDP at 0.32 in a 20 mbd market, implying a minimal 30 kbd negative impact on demand.**
- **We estimate the sensitivity of global oil demand to world's GDP at 0.46, suggesting a 240 kbd negative impact on demand.**

2. Probability of a recession raised to 40%

As the US president takes aggressive steps to cut trade deficits, the likelihood of a recession increases, and earlier this month, our economists raised their assessment of the probability of a 2025 US or global recession to 40%. Concerns about a trade war, coupled with elevated US policy uncertainty, are weighing heavily on sentiment. A slide in US consumer confidence is now well-established—US consumer confidence plunged to the lowest level in more than four years in March—and last week saw Euro area confidence reverse a rise during the first two months of the year. Not surprisingly, a pronounced sentiment drop is evident in Canada, where the 12-month ahead business barometer index dropped to the lowest level in its 25 year history this month.

Figure 3: Macro performance and oil demand in recessions

Highlighted in yellow are financial recessions

Period	Duration	US GDP	Global GDP	US Oil Demand Change	Global Oil Demand Change
	(months)	% y/y	% y/y	kbd	kbd
1969-70	11	-0.7%	-0.3%	654	3451
1973-75	16	-3.1%	-1.8%	-498	-612
1980	6	-2.2%	-1.1%	-1466	-2791
1981-82	16	-2.5%	-0.5%	-879	-1713
1990-91	8	-1.4%	0.4%	-308	633
2001	8	-0.1%	-0.1%	-52	710
2007-09	18	-3.8%	-3.9%	-956	-921
2020	2	-9.6%	-7.6%	-2353	-9058
Average	**10**	**-2.6%**	**-1.8%**	**-732**	**-1288**

Source: IEA, BRSR, NBER, J.P. Morgan Commodities Research

The nature of recession matters immensely. While all recessions are bad for oil demand, those accompanied by or propagated by financial crises are particularly detrimental. Historical analysis indicates that contagion in financial markets tends to penetrate deeper and last longer in the physical economy, significantly reducing consumer spending and knocking oil demand hard **(Figure 3)**. Analyzing oil demand data from 1963 to 2022, we estimate that, excluding the COVID-induced recession of 2020, the magnitude of the loss in demand during the two financial crisis—the savings and loans crisis in the 1980s and the GFC—is two-

to-three times greater than during non-financial recessions, averaging a 1 mbd contraction in oil demand.

In contrast, non-financial-recessions appear to have a much smaller impact. The deep recession of 1973-75 led to a 500 kbd reduction in US oil demand and a 600 kbd drop in global oil consumption. The 1990-91 recession dented US demand by ~300 kbd, but global demand actually increased by about 600 kbd. Similarly, the 2001 recession saw flat US demand and a 700 kbd growth in global demand.

So far, while the recession risk is elevated, the high-frequency oil demand indicators don't point to an imminent break. US oil demand outlook remains healthy despite lower air travel passenger volume and global oil demand is growing at a robust 1.5 mbd pace in March, aligning with our projections (*Oil Demand & Inventory Tracker: Reduced US travel activity does not signal broader weakness in demand outlook*, 19 March 2025).

3. ~10% lower oil and gasoline prices should provide a boost to GDP, consumer spending and oil demand

Lower oil prices this year—Brent oil prices have averaged about 10% below the same period last year, while gasoline prices are about 11% lower—should have a direct impact on purchasing power and, consequently, consumer spending.

- Based on our economists' analysis, a 10% decline in the price of oil can increase global GDP growth by about 0.06%-pt over the course of the year, or about 0.25%-pt on annualized growth if the impact falls in one quarter. The logic of the model is straightforward: a 10% drop in oil prices reduces the price of the consumer basket by roughly 0.7% qoq. This 0.7% decline in consumer prices, in turn, boosts consumer spending by about 0.35%, all else equal. Since consumer spending accounts for about 70% of GDP, this 0.35% increase in spending translates to a 0.25% boost in annualized quarterly total GDP. **The impact on global oil demand is estimated to be around 30 kbd, annualized.**
- A more sophisticated model from the IMF estimates a larger impact. According to the IMF, a 10% drop in oil prices can boost global economic growth by 0.15% to 0.2%, if sustained for a year. Importantly, the IMF model distinguishes between the impact of oil prices on DM and EM growth. A 10% drop in the price of oil boosts DM GDP by 0.15% after one year but only increases EM GDP by 0.1%, reflecting the region's status as a net exporter of oil. **The impact is about 80 kbd of additional oil demand globally.**
- In the US, the price elasticity of gasoline demand, while not perfectly inelastic, is relatively low. The Federal Reserve of Dallas estimates a long-run price elasticity of around -0.2, meaning that a 1% increase in price leads to a 0.2% decrease in gasoline demand, and vice versa. Consequently, a 10% drop in gasoline prices equates to about 180 kbd of additional demand.

4. Buyers of Venezuelan crude are starting to pause procurement, but a significant loss of Venezuelan barrels is unlikely

There are signs that importers of Venezuelan crude have begun to pause procurement ahead of the April 2 deadline, aiming to avoid the sweeping 25% tariffs on all trade with the US announced by President Trump on March 24. Venezuela currently exports 0.7 mbd of crude, including about 0.3 mbd to each China and the US, 60 kbd to each India and Spain and 20 kbd to other nations **(Figures 4 & 5)**. India's Reliance Industries has reportedly paused its purchases of Venezuelan crude, while China's independent refiners have also halted deliveries of oil from the South American nation.

The impact on Venezuelan exports and production is likely to be muted :

- Indian refiners would most likely be able to replace lost Venezuelan volumes with crude from Russia
- Meanwhile, Chinese independent refiners, who purchased about 300 kbd of Venezuelan crude in 2024, face potential threats to these volumes as China's Central government is unlikely to protect independent refiners in the face of additional punitive measures by the US . The loss of Venezuelan barrels would likely compel the refiners to switch to alternative, more expensive heavy grades, which could challenge refining margins and potentially impact refinery runs.
- The White House could potentially issue waivers to traders of Venezuelan oil who currently hold licenses to conduct business with PDVSA, allowing them to sell Venezuelan barrels to US refiners, while also extending Chevron's operating license beyond May 27. Venezuelan oil would likely be offered at a significant discount, making it attractive to US Gulf Coast

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refiners, and potentially displacing some of the 0.4-0.5 mbd of Canadian heavy crude.

Figure 4: Venezuela crude oil exports by destination

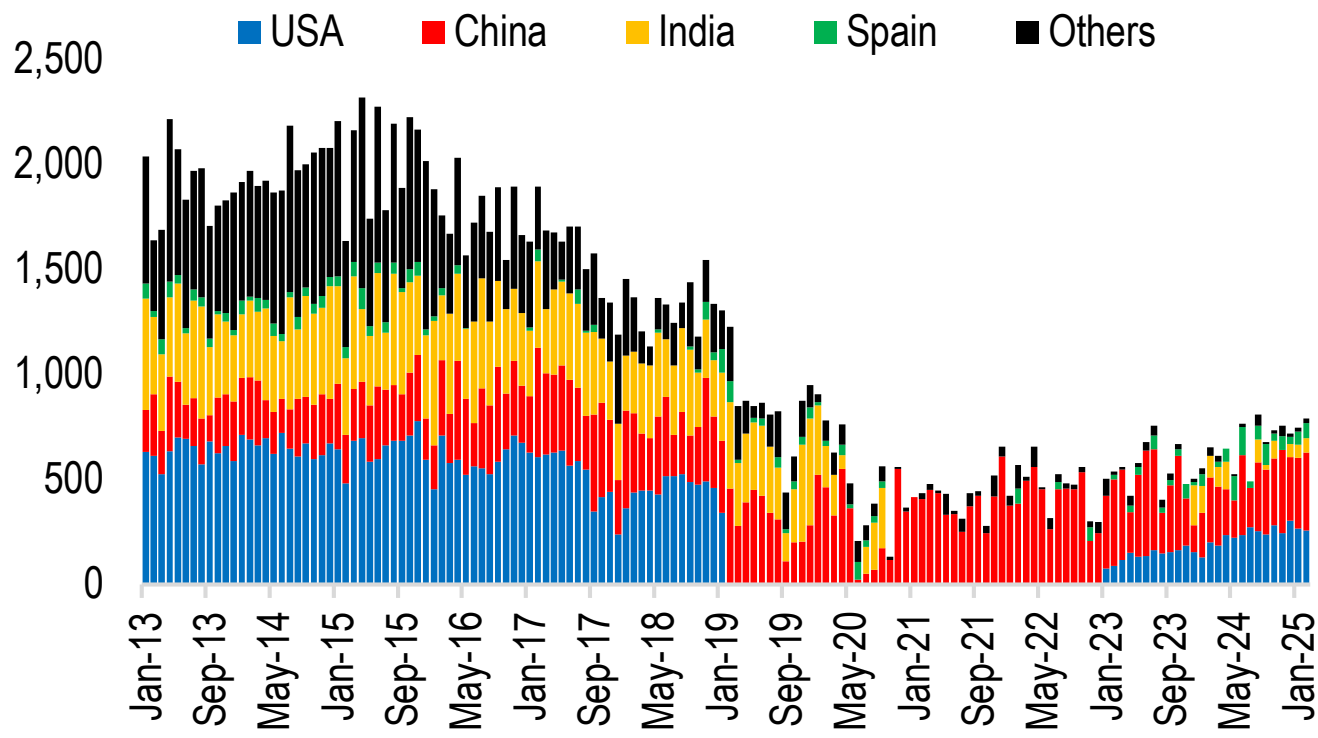
Kbd, annual average

	USA	China	India	Spain	Others
2013	632	238	403	43	571
2014	660	238	400	47	641
2015	650	270	423	53	655
2016	593	324	420	8	418
2017	522	374	357	16	307
2018	466	328	321	14	200
2019	29	316	328	40	161
2020	0	297	119	24	65
2021	0	391	0	0	43
2022	0	407	0	14	44
2023	139	339	16	27	31
2024	233	285	61	60	23

Source: Kpler

Figure 5: Venezuela crude oil exports by destination

Kbd



Source: Kpler

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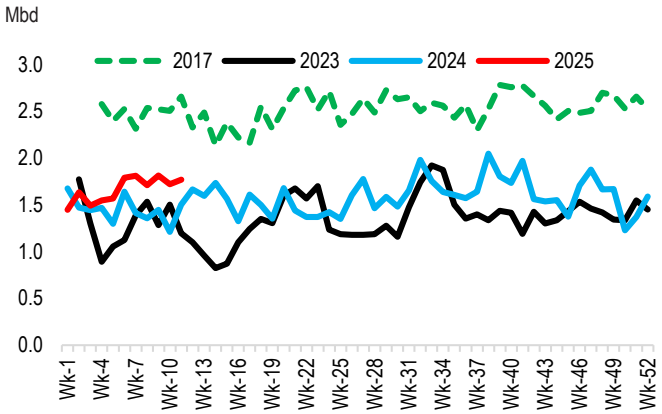
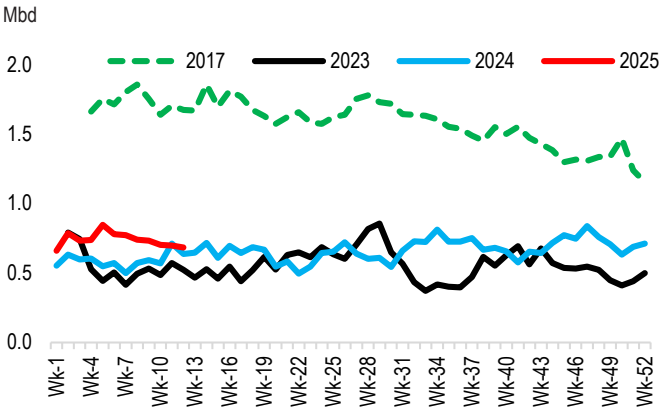
Figure 6: Iran crude exports



Source: Kpler

Figure 7: Venezuela crude exports



Source: Kpler

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Table 1: Global oil supply and demand balance, 2023E

mbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Total Oil Demand	**97.8**	**101.5**	**100.8**	**100.0**	**102.0**	**103.0**	**102.2**	**103.6**	**102.3**	**101.6**	**102.1**	**101.6**	**100.0**	**101.7**	**102.7**	**101.8**	**101.5**
Total Oil Supply	**101.4**	**102.3**	**102.2**	**101.9**	**101.9**	**102.5**	**102.1**	**101.7**	**103.6**	**102.7**	**103.7**	**103.3**	**102.0**	**102.1**	**102.4**	**103.2**	**102.4**
OPEC Crude	29.2	29.2	29.3	29.0	29.1	29.1	28.7	28.0	29.3	28.5	28.7	28.6	29.2	29.1	28.7	28.6	28.9
OPEC Other Liquids	6.1	6.3	6.1	6.1	6.1	6.1	5.9	6.0	6.1	6.0	6.0	6.0	6.2	6.1	6.0	6.0	6.1
Non-OPEC Crude + Other	63.9	64.5	64.6	64.4	64.5	65.0	65.2	65.3	65.8	66.0	66.7	66.4	64.3	64.7	65.5	66.4	65.2
Processing Gain	2.3	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3
Stock Change To Balance	+3.6	+0.8	+1.4	+1.9	-0.1	-0.4	-0.0	-2.0	+1.2	+1.1	+1.6	+1.6	+2.0	+0.4	-0.3	+1.4	+0.9
Stock Change To Balance, mb	+112	+22	+44	+56	-4	-13	-0	-61	+37	+35	+48	+51	+178	+39	-25	+133	+326
Global SPR release, mbd	+0.0	+0.0	+0.0	+0.2	+0.3	+0.2	-0.0	-0.1	-0.0	+0.0	-0.0	-0.1	+0.0	+0.3	-0.0	-0.0	+0.0
Stock Change (Adjusted for SPR, Iran and Russia), mbd	*+3.5*	*+0.2*	*+2.3*	*+1.9*	*+0.2*	*-0.6*	*-0.0*	*-2.1*	*+1.2*	*+1.1*	*+1.6*	*+1.6*	+2.0	+0.5	-0.3	+1.4	+0.9

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

Table 2: Global oil supply and demand balance, 2024F

mbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Total Oil Demand	**100.0**	**101.9**	**100.5**	**102.0**	**103.0**	**103.3**	**104.1**	**103.8**	**103.2**	**104.5**	**103.5**	**104.1**	**100.8**	**102.8**	**103.7**	**104.0**	**102.8**
Total Oil Supply	**100.9**	**102.5**	**103.0**	**103.0**	**103.0**	**103.1**	**103.7**	**104.2**	**102.6**	**103.2**	**104.2**	**104.1**	**102.1**	**103.0**	**103.5**	**103.9**	**103.1**
OPEC Crude	28.4	28.8	29.0	29.0	29.2	28.6	29.3	29.5	28.4	28.5	29.1	29.2	28.7	28.9	29.1	28.9	28.9
OPEC Other Liquids	6.1	6.2	6.1	6.1	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.2	6.2	6.2
Non-OPEC Crude + Other	64.2	65.4	65.8	65.7	65.5	66.1	66.0	66.2	65.6	66.3	66.6	66.4	65.1	65.8	66.0	66.4	65.8
Processing Gain	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.2	2.2	2.2	2.3	2.2
Stock Change To Balance	+0.8	+0.6	+2.5	+1.0	-0.0	-0.2	-0.4	+0.4	-0.6	-1.3	+0.7	+0.1	+1.3	+0.3	-0.2	-0.2	+0.3
Stock Change To Balance, mb	+26	+18	+77	+29	-0	-5	-11	+14	-18	-40	+21	+2	+121	+24	-15	-16	+113
Global SPR release, mbd	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Stock Change (Adjusted for SPR, Iran and Russia), mbd	*+0.7*	*+0.5*	*+2.4*	*+0.9*	*-0.1*	*-0.3*	*-0.4*	*+0.3*	*-0.7*	*-1.4*	*+0.6*	*+0.0*	+1.2	+0.2	-0.3	-0.3	+0.2

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

Table 3: Global oil supply and demand balance, 2025F

mbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Total Oil Demand	**101.5**	**103.1**	**102.0**	**102.7**	**104.2**	**104.5**	**104.9**	**105.1**	**104.3**	**105.5**	**104.9**	**105.3**	**102.2**	**103.8**	**104.7**	**105.2**	**104.0**
Total Oil Supply	**103.5**	**104.1**	**104.2**	**104.4**	**104.9**	**105.2**	**106.0**	**106.0**	**106.0**	**106.5**	**106.8**	**106.5**	**103.9**	**104.8**	**106.0**	**106.6**	**105.3**
OPEC Crude	28.8	28.8	29.0	29.1	29.2	29.4	29.5	29.5	29.5	29.5	29.5	29.5	28.9	29.3	29.5	29.5	29.3
OPEC Other Liquids	6.1	6.3	6.1	6.2	6.2	6.2	6.2	6.3	6.4	6.3	6.3	6.3	6.2	6.2	6.3	6.3	6.3
Non-OPEC Crude + Other	66.2	66.7	66.7	66.7	67.2	67.3	67.9	67.8	67.8	68.4	68.6	68.4	66.5	67.0	67.8	68.4	67.5
Processing Gain	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.3	2.3	2.4	2.3	2.3
Stock Change To Balance	+1.9	+1.0	+2.1	+1.6	+0.7	+0.7	+1.2	+0.9	+1.7	+1.0	+1.9	+1.2	+1.7	+1.0	+1.3	+1.4	+1.3
Stock Change To Balance, mb	+60	+27	+67	+49	+23	+21	+36	+29	+52	+31	+56	+39	+154	+93	+117	+126	+490
Global SPR release, mbd	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.0	-0.0	-0.0	-0.1	-0.1	-0.1	-0.0	-0.1
Stock Change (Adjusted for SPR, Iran and Russia), mbd	*+1.8*	*+0.9*	*+2.0*	*+1.5*	*+0.6*	*+0.6*	*+1.1*	*+0.9*	*+1.7*	*+1.0*	*+1.8*	*+1.2*	+1.6	+0.9	+1.2	+1.3	+1.3

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

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Table 4: Global oil supply and demand balance, 2026F

mbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Total Oil Demand	**102.4**	**104.5**	**103.2**	**103.8**	**105.3**	**106.0**	**106.4**	**106.6**	**105.6**	**106.8**	**106.5**	**106.6**	**103.4**	**105.0**	**106.2**	**106.6**	**105.3**
Total Oil Supply	**106.3**	**106.2**	**106.2**	**105.9**	**105.9**	**106.1**	**107.0**	**106.8**	**106.5**	**106.9**	**107.3**	**107.2**	**106.2**	**106.0**	**106.8**	**107.1**	**106.5**
OPEC Crude	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5	29.5
OPEC Other Liquids	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.4	6.4	6.5	6.4	6.4	6.4	6.4	6.4
Non-OPEC Crude + Other	68.1	68.1	68.0	67.7	67.6	67.8	68.7	68.5	68.2	68.6	69.0	68.9	68.1	67.7	68.5	68.8	68.3
Processing Gain	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.3	2.3	2.4	2.4	2.4
Stock Change To Balance	+3.8	+1.7	+3.0	+2.2	+0.6	+0.1	+0.5	+0.2	+0.9	+0.1	+0.8	+0.6	+2.9	+1.0	+0.6	+0.5	+1.2
Stock Change To Balance, mb	+119	+47	+94	+65	+18	+4	+16	+7	+28	+2	+25	+18	+260	+88	+51	+46	+445
Global SPR release, mbd	+0.0	+0.0	+0.0	+0.0	+0.0	-0.0	-0.0	-0.0	-0.1	-0.1	+0.0	+0.0	+0.0	-0.0	-0.1	-0.0	-0.0
Stock Change (Adjusted for SPR, Iran and Russia), mbd	*+3.9*	*+1.7*	*+3.1*	*+2.2*	*+0.6*	*+0.1*	*+0.5*	*+0.2*	*+0.9*	*+0.0*	*+0.8*	*+0.6*	+2.9	+1.0	+0.5	+0.5	+1.2

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

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Table 5: J.P. Morgan crude oil price forecasts (US$/bbl)

		2023	1Q24	2Q24	3Q24	4Q24	2024	1Q25	2Q25	3Q25	4Q25	2025	1Q26	2Q26	3Q26	4Q26	2026
Brent	Avg	**81**	79	84	84	74	**82**	74	77	73	69	**73**	64	63	59	57	**61**
	EoP	**86**	80	81	88	76	**76**	74	74	74	68	**68**	62	61	60	57	**57**
WTI	Avg	**76**	75	80	80	70	**76**	70	73	69	65	**69**	60	59	55	53	**57**
	EoP	**81**	76	77	84	72	**72**	70	70	70	64	**64**	58	57	56	53	**53**
WTI - Brent Spread	Avg	**-4.8**	-4.5	-4.5	-4.0	-4.5	**-4.4**	-4.3	-4.3	-4.0	-4.3	**-4.2**	-4.3	-4.3	-4.3	-4.3	**-4.3**
Realized Avg/ Forward Curve	Brent	**82**	82	85	79	74	**80**	76	70	69	68	**71**	67	67	67	67	**67**
	WTI	**78**	77	81	75	70	**78**	72	67	66	64	**66**	64	63	63	63	**63**
Realized EoP/ Forward Curve	Brent	**77**	87	86	72	73	**73**	76	70	69	68	**68**	68	67	67	67	**67**
	WTI	**72**	83	81	68	71	**71**	69	67	66	65	**65**	64	64	63	63	**63**

Source: ICE, NYMEX, Bloomberg Finance L.P., J.P. Morgan Commodities Research. Actuals till 3Q24. Forward curve for Brent from 4Q24 and WTI from 4Q24 onwards. Price forecasts last updated on November 22, 2024

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Table 6: Global crude oil and products balance, 2023E

mbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Crude and Condensate Production	83.4	84.1	84.0	83.2	83.0	83.4	82.9	82.3	84.0	83.4	84.4	84.4	83.8	83.2	83.1	84.0	83.5
Refinery Runs	81.7	82.1	81.6	82.0	81.6	81.7	83.1	84.5	83.9	80.1	81.1	83.1	81.8	81.7	83.8	81.5	82.2
Direct Crude Burn	0.7	0.7	0.6	0.5	0.8	0.9	0.9	1.1	1.0	0.9	0.7	0.6	0.6	0.7	1.0	0.7	0.8
Other Direct Crude Demand	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Crude Oil Demand	**82.7792**	**83.2**	**82.6**	**83.0**	**82.7**	**83.0**	**84.5**	**86.0**	**85.3**	**81.4**	**82.2**	**84.2**	**82.9**	**82.9**	**85.3**	**82.6**	**83.4**
Crude Balance Change	**0.7**	**0.9**	**1.4**	**0.2**	**0.3**	**0.5**	**-1.5**	**-3.7**	**-1.3**	**2.0**	**2.2**	**0.2**	**1.0**	**0.3**	**-2.2**	**1.4**	**0.1**
Crude Balance Change, mb*	**20**	**26**	**42**	**7**	**9**	**14**	**-47**	**-115**	**-39**	**61**	**65**	**6**	**88**	**30**	**-201**	**132**	**49**
Refinery Processing Gains	**2.3**	**2.2**	**2.2**	**2.3**	**2.2**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.3**	**2.2**	**2.2**	**2.3**	**2.3**	**2.3**
Refined Products Supply	84.0	84.3	83.8	84.3	83.7	83.9	85.4	86.9	86.2	82.4	83.4	85.5	84.0	84.0	86.2	83.8	84.5
Global NGLs and Non-conventional Oils	18.0	18.1	18.2	18.7	18.9	19.1	19.2	19.3	19.5	19.4	19.3	18.9	18.1	18.9	19.4	19.2	18.9
Global Products & Liquids Supply	99.7	100.3	99.9	100.7	100.4	100.8	102.3	103.9	103.4	99.5	100.5	102.0	99.9	100.6	103.2	100.7	101.1
Global Oil Demand ex Direct Crude Use	96.7	100.4	99.8	99.0	100.8	101.7	100.8	102.1	100.9	100.3	101.0	100.6	98.9	100.5	101.3	100.7	100.4
Product Balance Change	**2.9**	**-0.1**	**0.1**	**1.6**	**-0.4**	**-0.9**	**1.5**	**1.8**	**2.5**	**-0.8**	**-0.6**	**1.4**	**1.0**	**0.1**	**1.9**	**0.0**	**0.8**
Product Balance Change, mb*	**91**	**-4**	**2**	**49**	**-13**	**-27**	**46**	**54**	**75**	**-26**	**-17**	**45**	**89**	**9**	**176**	**1**	**277**
Total Balance Change	**3.6**	**0.8**	**1.4**	**1.9**	**-0.1**	**-0.4**	**0.0**	**-2.0**	**1.2**	**1.1**	**1.6**	**1.6**	**2.0**	**0.4**	**-0.3**	**1.4**	**0.9**
Total Balance Change, mb*	**111.612**	**22**	**44**	**56**	**-4**	**-13**	**0**	**-61**	**37**	**35**	**48**	**51**	**178**	**39**	**-25**	**133**	**326**

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

Table 7: Global crude oil and products balance, 2024F

mbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Crude and Condensate Production	83.1	84.0	84.3	83.9	83.5	83.5	84.0	84.4	82.8	83.4	84.2	84.5	83.8	83.6	83.7	84.1	83.8
Refinery Runs	81.8	81.2	82.4	81.3	82.8	83.2	83.4	84.2	82.7	81.5	83.2	84.3	81.8	82.4	83.4	83.0	82.7
Direct Crude Burn	0.6	0.6	0.5	0.6	0.7	0.9	1.1	1.2	0.8	0.6	0.6	0.6	0.6	0.7	1.0	0.6	0.7
Other Direct Crude Demand	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Crude Oil Demand	**82.8154**	**82.3**	**83.3**	**82.3**	**83.9**	**84.5**	**84.9**	**85.8**	**83.9**	**82.5**	**84.2**	**85.4**	**82.8**	**83.6**	**84.9**	**84.0**	**83.8**
Crude Balance Change	**0.3**	**1.8**	**1.0**	**1.6**	**-0.4**	**-1.0**	**-1.0**	**-1.4**	**-1.1**	**0.9**	**0.1**	**-0.8**	**1.0**	**0.1**	**-1.1**	**0.0**	**0.0**
Crude Balance Change, mb*	**8**	**51**	**31**	**49**	**-13**	**-30**	**-30**	**-43**	**-33**	**28**	**2**	**-26**	**91**	**5**	**-106**	**4**	**-5**
Refinery Processing Gains	**2.2**	**2.1**	**2.2**	**2.2**	**2.2**	**2.2**	**2.2**	**2.3**	**2.3**	**2.3**	**2.3**	**2.4**	**2.2**	**2.2**	**2.2**	**2.3**	**2.2**
Refined Products Supply	84.0	83.3	84.5	83.5	85.0	85.4	85.6	86.5	84.9	83.8	85.5	86.7	84.0	84.6	85.7	85.3	84.9
Global NGLs and Non-conventional Oils	17.8	18.5	18.7	19.1	19.5	19.6	19.7	19.8	19.8	19.8	20.0	19.6	18.3	19.4	19.8	19.8	19.3
Global Products & Liquids Supply	99.6	99.7	101.1	100.3	102.3	102.8	103.1	104.1	102.5	101.3	103.2	103.9	100.1	101.8	103.2	102.8	102.0
Global Oil Demand ex Direct Crude Use	99.0	100.8	99.6	101.0	101.9	102.0	102.5	102.2	101.9	103.5	102.5	103.0	99.8	101.6	102.2	103.0	101.7
Product Balance Change	**0.6**	**-1.1**	**1.5**	**-0.7**	**0.4**	**0.8**	**0.6**	**1.8**	**0.5**	**-2.2**	**0.6**	**0.9**	**0.3**	**0.2**	**1.0**	**-0.2**	**0.3**
Product Balance Change, mb*	**18**	**-33**	**46**	**-21**	**13**	**25**	**18**	**57**	**15**	**-68**	**19**	**28**	**31**	**18**	**91**	**-21**	**119**
Total Balance Change	**0.8**	**0.6**	**2.5**	**1.0**	**0.0**	**-0.2**	**-0.4**	**0.4**	**-0.6**	**-1.3**	**0.7**	**0.1**	**1.3**	**0.3**	**-0.2**	**-0.2**	**0.3**
Total Balance Change, mb*	**26**	**18**	**77**	**29**	**0**	**-5**	**-11**	**14**	**-18**	**-40**	**21**	**2**	**121**	**24**	**-15**	**-16**	**113**

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

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Table 8: Global crude oil and products balance, 2025F

mbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Crude and Condensate Production	84.3	84.8	85.0	84.9	85.0	85.1	85.7	85.7	85.7	86.3	86.6	86.7	84.7	85.0	85.7	86.6	85.5
Refinery Runs	83.1	82.7	81.7	81.2	82.7	83.8	84.2	83.8	83.6	82.5	84.6	85.7	82.5	82.6	83.9	84.2	83.3
Direct Crude Burn	0.6	0.6	0.5	0.6	0.7	0.9	1.1	1.2	0.8	0.6	0.6	0.6	0.6	0.7	1.0	0.6	0.7
Other Direct Crude Demand	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Crude Oil Demand	**84.1297**	**83.8**	**82.6**	**82.2**	**83.8**	**85.1**	**85.7**	**85.4**	**84.8**	**83.5**	**85.6**	**86.7**	**83.5**	**83.7**	**85.3**	**85.3**	**84.4**
Crude Balance Change	**0.2**	**1.0**	**2.4**	**2.7**	**1.2**	**0.0**	**0.0**	**0.2**	**1.0**	**2.8**	**1.1**	**0.0**	**1.2**	**1.3**	**0.4**	**1.3**	**1.0**
Crude Balance Change, mb*	**6**	**29**	**74**	**81**	**37**	**-1**	**0**	**8**	**29**	**88**	**32**	**0**	**109**	**116**	**36**	**119**	**381**
Refinery Processing Gains	**2.3**	**2.3**	**2.3**	**2.3**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**2.3**	**2.4**	**2.4**	**2.3**	**2.3**	**2.4**	**2.3**	**2.3**
Refined Products Supply	85.4	85.0	84.0	83.5	85.0	86.2	86.6	86.2	85.9	84.8	86.9	88.1	84.8	84.9	86.2	86.6	85.6
Global NGLs and Non-conventional Oils	19.2	19.3	19.2	19.5	20.0	20.1	20.4	20.3	20.3	20.1	20.2	19.8	19.2	19.9	20.3	20.0	19.9
Global Products & Liquids Supply	102.2	102.0	100.9	100.7	102.6	104.0	104.5	104.2	103.8	102.6	104.7	105.5	101.7	102.4	104.2	104.3	103.2
Global Oil Demand ex Direct Crude Use	100.5	102.1	101.1	101.7	103.1	103.2	103.4	103.5	103.0	104.4	103.9	104.3	101.2	102.7	103.3	104.2	102.9
Product Balance Change	**1.8**	**0.0**	**-0.3**	**-1.1**	**-0.4**	**0.7**	**1.2**	**0.7**	**0.8**	**-1.8**	**0.8**	**1.3**	**0.5**	**-0.3**	**0.9**	**0.1**	**0.3**
Product Balance Change, mb*	**54**	**-1**	**-8**	**-32**	**-13**	**22**	**36**	**21**	**23**	**-56**	**24**	**39**	**45**	**-23**	**81**	**7**	**110**
Total Balance Change	**1.9**	**1.0**	**2.1**	**1.6**	**0.7**	**0.7**	**1.2**	**0.9**	**1.7**	**1.0**	**1.9**	**1.2**	**1.7**	**1.0**	**1.3**	**1.4**	**1.3**
Total Balance Change, mb*	**60**	**27**	**67**	**49**	**23**	**21**	**36**	**29**	**52**	**31**	**56**	**39**	**154**	**93**	**117**	**126**	**490**

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

Table 9: Global crude oil and products balance, 2026F

mbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Crude and Condensate Production	86.7	86.7	86.6	86.1	85.5	85.6	86.2	86.1	85.9	86.3	86.7	86.9	85.7	85.7	86.0	86.6	86.3
Refinery Runs	83.5	82.9	82.3	82.3	82.9	83.9	85.0	85.6	84.3	82.6	84.3	85.4	82.0	83.0	85.0	84.1	83.8
Direct Crude Burn	0.6	0.6	0.5	0.6	0.7	0.9	1.1	1.2	0.8	0.6	0.6	0.6	0.6	0.7	1.0	0.6	0.7
Other Direct Crude Demand	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Crude Oil Demand	**84.5383**	**83.9957**	**83.2107**	**83.3291**	**83.9694**	**85.1921**	**86.5529**	**87.1525**	**85.5401**	**83.665**	**85.2701**	**86.4532**	**83.0**	**84.2**	**86.4**	**85.1**	**84.9**
Crude Balance Change	**2.2**	**2.7**	**3.3**	**2.7**	**1.6**	**0.4**	**-0.4**	**-1.1**	**0.4**	**2.6**	**1.5**	**0.4**	**2.7**	**1.6**	**-0.4**	**1.5**	**1.4**
Crude Balance Change, mb*	**67**	**75**	**104**	**82**	**49**	**13**	**-11**	**-34**	**11**	**81**	**44**	**13**	**245**	**144**	**-35**	**138**	**493**
Refinery Processing Gains	**2.3**	**2.3**	**2.3**	**2.3**	**2.4**	**2.4**	**2.4**	**2.4**	**2.4**	**2.3**	**2.4**	**2.4**	**2.3**	**2.3**	**2.4**	**2.4**	**2.4**
Refined Products Supply	85.8	85.2	84.6	84.6	85.2	86.3	87.4	88.0	86.7	85.0	86.7	87.8	84.3	85.4	87.4	86.5	86.1
Global NGLs and Non-conventional Oils	19.6	19.6	19.7	19.9	20.4	20.5	20.8	20.8	20.6	20.6	20.6	20.3	19.4	20.2	20.7	20.5	20.3
Global Products & Liquids Supply	103.1	102.509	101.988	102.19	103.223	104.359	105.815	106.327	104.973	103.211	104.879	105.742	101.4	103.3	105.7	104.6	104.0
Global Oil Demand ex Direct Crude Use	101.4	103.492	102.3	102.767	104.195	104.655	104.923	104.997	104.404	105.755	105.485	105.599	101.2	103.9	104.8	105.6	104.2
Product Balance Change	**1.7**	**-1.0**	**-0.3**	**-0.6**	**-1.0**	**-0.3**	**0.9**	**1.3**	**0.6**	**-2.5**	**-0.6**	**0.1**	**0.2**	**-0.6**	**0.9**	**-1.0**	**-0.1**
Product Balance Change, mb*	**52**	**-28**	**-10**	**-17**	**-30**	**-9**	**28**	**41**	**17**	**-79**	**-18**	**4**	**15**	**-56**	**86**	**-93**	**-48**
Total Balance Change	**3.8**	**1.7**	**3.0**	**2.2**	**0.6**	**0.1**	**0.5**	**0.2**	**0.9**	**0.1**	**0.8**	**0.6**	**2.9**	**1.0**	**0.6**	**0.5**	**1.2**
Total Balance Change, mb*	**119**	**47**	**94**	**65**	**18**	**4**	**16**	**7**	**28**	**2**	**25**	**18**	**260**	**88**	**51**	**46**	**445**

Source: IEA, EIA, Wood Mackenzie, Rystad, Genscape, FlightAware, MariTrace, Google, TomTom, US Department of Transportation, J.P. Morgan Commodities Research

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Table 10: OPEC crude oil production, 2023E

kbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Algeria	950	1,007	1,008	1,000	1,000	890	975	975	975	1,000	975	1,000	988	964	975	992	980
Angola	1,242	1,099	964	1,061	1,135	1,083	1,253	1,145	1,146	1,197	1,205	1,290	1,102	1,094	1,182	1,231	1,153
Congo	275	273	285	277	285	277	282	272	252	265	253	260	278	280	269	259	271
Eq. Guinea	55	50	48	49	61	67	62	56	55	54	53	52	51	59	58	53	55
Gabon	206	207	190	197	218	193	193	200	200	210	220	220	201	203	198	217	205
Iran	2,805	2,841	2,669	2,717	3,123	2,940	2,903	3,074	3,089	3,002	3,242	3,221	2,769	2,929	3,022	3,154	2,970
Iraq	4,385	4,482	4,426	4,124	4,246	4,351	4,505	4,506	4,517	4,594	4,371	4,520	4,430	4,241	4,509	4,497	4,419
Kuwait	2,725	2,850	2,650	2,638	2,728	2,738	2,625	2,575	2,650	2,625	2,713	2,488	2,738	2,701	2,616	2,607	2,665
Libya	1,025	1,075	1,000	975	1,075	1,025	1,050	1,000	1,025	975	1,010	1,050	1,032	1,026	1,025	1,012	1,023
Nigeria	1,411	1,457	1,536	1,261	1,356	1,537	1,238	1,339	1,514	1,491	1,388	1,593	1,468	1,384	1,362	1,492	1,426
Neutral Zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	9,850	9,750	10,375	10,638	9,813	9,875	9,500	8,625	9,550	8,800	8,938	8,713	10,000	10,105	9,221	8,815	9,531
UAE	3,450	3,500	3,450	3,300	3,350	3,375	3,275	3,475	3,500	3,450	3,450	3,475	3,466	3,342	3,416	3,458	3,420
Venezuela	775	650	675	800	725	775	825	775	850	825	875	675	702	766	816	791	769
Azerbaijan	533	531	515	512	500	500	499	498	491	489	492	482	526	504	496	488	503
Bahrain	105	196	206	204	204	202	118	190	199	202	199	165	168	203	169	189	182
Brunei	74	73	69	75	45	66	76	68	62	71	80	82	72	62	69	77	70
Kazakhstan	1,689	1,638	1,643	1,661	1,613	1,613	1,535	1,478	1,630	1,649	1,584	1,633	1,657	1,629	1,547	1,622	1,614
Malaysia	400	405	401	374	345	372	371	338	365	375	377	376	402	363	358	376	375
Mexico	1,675	1,669	1,681	1,694	1,702	1,699	1,663	1,690	1,678	1,655	1,664	1,641	1,675	1,699	1,677	1,653	1,676
Oman	838	836	838	840	813	802	801	802	802	802	802	801	837	818	802	802	815
Russia	9,750	9,911	9,779	9,724	9,722	9,666	9,545	9,503	9,542	9,603	9,555	9,548	9,810	9,704	9,530	9,569	9,652
Sudan	49	48	47	45	39	36	34	33	31	25	13	13	48	40	33	17	34
S. Sudan	125	130	110	135	160	130	155	105	145	120	180	140	121	142	135	146	136
OPEC 10	24,550	24,675	24,932	24,545	24,191	24,386	23,908	23,168	24,359	23,686	23,565	23,610	24,721	24,372	23,806	23,621	24,126
OPEC 13	29,155	29,241	29,277	29,037	29,113	29,126	28,686	28,018	29,323	28,488	28,692	28,556	29,224	29,092	28,669	28,577	28,888
Non-OPEC	15,237	15,437	15,289	15,264	15,143	15,085	14,796	14,704	14,946	14,990	14,947	14,881	15,317	15,164	14,814	14,939	15,057
OPEC+	**39,787**	**40,113**	**40,222**	**39,809**	**39,333**	**39,471**	**38,704**	**37,872**	**39,305**	**38,676**	**38,512**	**38,491**	**40,038**	**39,535**	**38,620**	**38,560**	**39,183**

Source: Rystad, Platts, Refinitiv, J.P. Morgan Commodities Research

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Table 11: OPEC crude oil production, 2024F

kbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Algeria	1,025	950	950	1,050	875	1,025	950	1,000	950	1,025	1,000	1,050	976	982	967	1,025	988
Angola	1,027	1,176	1,151	1,103	1,141	1,173	1,174	1,195	1,115	1,116	1,205	1,122	1,117	1,139	1,162	1,147	1,141
Congo	258	243	250	259	264	259	257	268	265	265	268	270	250	261	263	268	261
Eq. Guinea	52	51	50	60	62	50	59	55	52	52	52	55	51	57	55	53	54
Gabon	220	210	220	220	220	220	220	220	200	220	220	220	217	220	213	220	218
Iran	2,961	2,979	3,318	3,109	3,028	3,099	3,377	3,089	3,052	2,946	3,015	3,224	3,088	3,078	3,174	3,062	3,101
Iraq	4,462	4,439	4,523	4,543	4,607	4,687	4,778	4,738	4,505	4,392	4,326	4,419	4,476	4,612	4,676	4,380	4,536
Kuwait	2,650	2,513	2,575	2,650	2,688	2,588	2,588	2,525	2,638	2,638	2,625	2,563	2,581	2,642	2,583	2,608	2,603
Libya	925	1,000	1,000	1,125	1,100	1,100	975	1,025	550	850	1,050	1,160	974	1,108	853	1,020	989
Nigeria	1,575	1,453	1,473	1,364	1,445	1,480	1,502	1,534	1,421	1,499	1,464	1,582	1,502	1,430	1,486	1,516	1,483
Neutral Zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	9,025	9,563	9,325	9,175	9,413	8,538	8,938	9,350	9,063	9,138	8,950	9,063	9,298	9,046	9,117	9,051	9,128
UAE	3,525	3,475	3,425	3,550	3,400	3,350	3,700	3,675	3,650	3,500	3,925	3,550	3,475	3,433	3,675	3,655	3,560
Venezuela	675	750	725	825	925	1,025	800	875	975	900	1,000	925	716	925	882	941	866
Azerbaijan	474	476	481	476	461	483	482	478	478	482	486	487	477	473	480	485	479
Bahrain	197	148	158	188	185	178	177	153	156	176	184	186	168	184	162	182	174
Brunei	85	77	77	73	53	69	90	91	90	80	80	80	80	65	90	80	79
Kazakhstan	1,641	1,648	1,614	1,606	1,509	1,602	1,608	1,510	1,626	1,370	1,492	1,468	1,634	1,571	1,581	1,443	1,557
Malaysia	346	363	354	371	355	359	359	357	274	340	349	347	354	362	331	345	348
Mexico	1,618	1,613	1,600	1,564	1,568	1,569	1,560	1,565	1,556	1,525	1,489	1,506	1,611	1,567	1,560	1,507	1,561
Oman	772	762	760	759	759	760	760	760	760	759	752	755	765	759	760	755	760
Russia	9,498	9,471	9,522	9,379	9,275	9,307	9,244	9,206	9,246	9,247	9,213	9,196	9,498	9,320	9,232	9,219	9,316
Sudan	13	13	13	10	17	17	17	17	17	15	15	15	13	15	17	15	15
S. Sudan	165	65	75	60	65	85	45	60	80	40	60	45	102	70	61	48	70
OPEC 10	23,820	24,073	23,943	23,973	24,115	23,370	24,165	24,561	23,858	23,845	24,035	23,893	23,942	23,822	24,198	23,923	23,972
OPEC 13	28,381	28,802	28,986	29,032	29,168	28,594	29,317	29,550	28,435	28,541	29,100	29,202	28,721	28,934	29,108	28,946	28,928
Non-OPEC	14,809	14,636	14,654	14,485	14,246	14,428	14,343	14,197	14,284	14,034	14,120	14,084	14,701	14,385	14,274	14,079	14,359
OPEC+	**38,629**	**38,708**	**38,597**	**38,459**	**38,360**	**37,798**	**38,508**	**38,758**	**38,141**	**37,879**	**38,155**	**37,977**	**38,643**	**38,207**	**38,472**	**38,002**	**38,331**

Source: Rystad, Platts, Refinitiv, J.P. Morgan Commodities Research

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Table 12: OPEC crude oil production, 2025F

kbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Algeria	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975
Angola	997	1,052	1,052	1,050	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,034	1,084	1,100	1,100	1,079
Congo	270	275	270	270	265	280	270	268	265	270	268	275	272	272	268	271	270
Eq. Guinea	60	70	63	70	68	74	74	73	67	66	65	68	64	71	71	66	68
Gabon	210	200	220	220	220	220	220	220	220	220	220	220	210	220	220	220	218
Iran	3,106	2,812	3,162	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,034	3,100	3,100	3,100	3,084
Iraq	4,518	4,550	4,536	4,615	4,631	4,744	4,821	4,838	4,809	4,775	4,776	4,770	4,534	4,663	4,823	4,774	4,699
Kuwait	2,538	2,525	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,564	2,625	2,625	2,625	2,610
Libya	1,160	1,175	1,044	1,042	1,040	1,038	1,035	1,033	1,031	1,029	1,027	1,025	1,125	1,040	1,033	1,027	1,056
Nigeria	1,631	1,625	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,601	1,550	1,550	1,550	1,563
Neutral Zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	8,913	8,875	8,975	9,030	9,085	9,140	9,195	9,250	9,305	9,360	9,415	9,470	8,922	9,085	9,249	9,415	9,170
UAE	3,525	3,700	3,600	3,650	3,650	3,650	3,675	3,675	3,675	3,700	3,700	3,700	3,605	3,650	3,675	3,700	3,658
Venezuela	925	1,000	950	950	925	900	858	817	775	733	692	650	957	925	817	692	847
Azerbaijan	480	474	482	477	461	483	481	472	469	465	469	470	479	474	474	468	474
Bahrain	159	185	190	195	190	180	190	185	190	190	190	180	178	188	188	187	185
Brunei	85	91	90	106	99	94	78	95	85	80	90	90	89	99	86	86	90
Kazakhstan	1,621	1,835	1,843	1,847	1,778	1,686	1,747	1,658	1,785	1,662	1,748	1,819	1,764	1,771	1,729	1,743	1,752
Malaysia	340	345	327	330	330	335	334	340	342	338	330	330	337	332	339	333	335
Mexico	1,509	1,518	1,504	1,494	1,493	1,486	1,478	1,471	1,462	1,450	1,439	1,425	1,510	1,491	1,470	1,438	1,477
Oman	755	755	755	762	765	767	769	772	774	776	778	781	755	765	772	778	767
Russia	9,217	9,094	9,100	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,138	9,200	9,200	9,200	9,185
Sudan	15	15	15	15	15	15	20	20	20	20	20	20	15	15	20	20	18
S. Sudan	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
OPEC 10	23,636	23,848	23,866	24,055	24,168	24,358	24,505	24,574	24,591	24,641	24,694	24,753	23,781	24,194	24,556	24,696	24,310
OPEC 13	28,827	28,834	29,022	29,147	29,233	29,396	29,499	29,524	29,497	29,504	29,513	29,528	28,897	29,258	29,507	29,515	29,296
Non-OPEC	14,254	14,387	14,380	14,501	14,405	14,321	14,373	14,287	14,402	14,256	14,340	14,389	14,339	14,409	14,353	14,328	14,357
OPEC+	**37,891**	**38,235**	**38,247**	**38,556**	**38,573**	**38,679**	**38,878**	**38,862**	**38,993**	**38,897**	**39,034**	**39,142**	**38,120**	**38,602**	**38,910**	**39,024**	**38,667**

Source: Rystad, Platts, Refinitiv, J.P. Morgan Commodities Research

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Table 13: OPEC crude oil production, 2026F

kbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Algeria	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975	975
Angola	1,098	1,096	1,094	1,092	1,090	1,088	1,085	1,083	1,081	1,079	1,077	1,075	1,096	1,090	1,083	1,077	1,086
Congo	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271	271
Eq. Guinea	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68	68
Gabon	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Iran	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100
Iraq	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770	4,770
Kuwait	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625	2,625
Libya	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025	1,025
Nigeria	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550	1,550
Neutral Zone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470	9,470
UAE	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700	3,700
Venezuela	648	646	644	642	640	638	635	633	631	629	627	625	646	640	633	627	636
Azerbaijan	463	458	466	462	446	469	467	459	456	452	457	458	463	459	461	456	459
Bahrain	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190	190
Brunei	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
Kazakhstan	1,848	1,844	1,824	1,828	1,746	1,677	1,727	1,625	1,788	1,654	1,722	1,808	1,838	1,750	1,713	1,728	1,757
Malaysia	325	300	314	315	325	300	290	300	314	314	314	314	313	313	301	314	310
Mexico	1,414	1,405	1,399	1,390	1,387	1,382	1,379	1,384	1,381	1,370	1,359	1,344	1,406	1,386	1,381	1,358	1,383
Oman	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781	781
Russia	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200	9,200
Sudan	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
S. Sudan	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
OPEC 10	24,747	24,745	24,742	24,740	24,738	24,736	24,734	24,732	24,730	24,728	24,726	24,724	24,745	24,738	24,732	24,726	24,735
OPEC 13	29,520	29,515	29,511	29,507	29,503	29,499	29,495	29,490	29,486	29,482	29,478	29,474	29,375	29,503	29,490	29,478	29,462
Non-OPEC	14,405	14,362	14,358	14,350	14,259	14,182	14,218	14,124	14,295	14,146	14,207	14,279	14,368	14,264	14,211	14,211	14,263
OPEC+	**39,152**	**39,107**	**39,101**	**39,091**	**38,997**	**38,918**	**38,952**	**38,856**	**39,025**	**38,874**	**38,932**	**39,003**	**38,711**	**39,002**	**38,943**	**38,936**	**38,899**

Source: Rystad, Platts, Refinitiv, J.P. Morgan Commodities Research

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Table 14: Global crude oil supply, 2023E

mbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**46.4**	**46.7**	**46.6**	**46.1**	**46.0**	**46.4**	**46.4**	**46.3**	**46.7**	**46.8**	**47.6**	**47.6**	**46.6**	**46.2**	**46.5**	**47.3**	**46.6**
Africa	1.0	1.0	1.0	1.1	1.1	1.0	1.1	1.0	1.1	1.0	1.1	1.0	1.0	1.1	1.1	1.1	1.1
Asia	6.0	6.0	6.0	5.9	5.9	6.0	5.7	5.8	5.7	5.7	5.9	5.8	6.0	5.9	5.7	5.8	5.9
China	4.1	4.1	4.1	4.1	4.1	4.1	3.9	4.0	4.0	3.9	4.1	4.0	4.1	4.1	4.0	4.0	4.0
FSU	12.2	12.3	12.2	12.1	12.1	12.0	11.8	11.7	11.9	12.0	11.9	11.9	12.2	12.1	11.8	11.9	12.0
Russia	9.8	9.9	9.8	9.7	9.7	9.7	9.5	9.5	9.5	9.6	9.6	9.5	9.8	9.7	9.5	9.6	9.7
Latin America	5.5	5.5	5.4	5.4	5.5	5.7	5.8	5.7	5.9	5.8	6.1	6.1	5.5	5.5	5.8	6.0	5.7
Brazil	3.2	3.2	3.0	3.1	3.1	3.3	3.4	3.4	3.6	3.5	3.6	3.5	3.1	3.1	3.5	3.5	3.3
Middle East	1.6	1.8	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7
Europe	2.7	2.7	2.8	2.7	2.6	2.7	2.7	2.6	2.4	2.6	2.7	2.8	2.7	2.7	2.6	2.7	2.7
Norway	1.7	1.7	1.8	1.7	1.7	1.8	1.8	1.7	1.6	1.7	1.7	1.8	1.7	1.7	1.7	1.8	1.7
North America	17.3	17.3	17.5	17.1	17.0	17.3	17.6	17.7	17.8	17.8	18.2	18.2	17.4	17.1	17.7	18.1	17.6
United States	11.2	11.2	11.4	11.3	11.3	11.4	11.5	11.6	11.7	11.7	11.8	11.8	11.3	11.3	11.6	11.8	11.5
Canada	4.4	4.4	4.4	4.1	4.0	4.2	4.5	4.5	4.4	4.4	4.7	4.8	4.4	4.1	4.4	4.6	4.4
OECD Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OPEC	**29.2**	**29.2**	**29.3**	**29.0**	**29.1**	**29.1**	**28.7**	**28.0**	**29.3**	**28.5**	**28.7**	**28.6**	**29.2**	**29.1**	**28.7**	**28.6**	**28.9**
East of Suez	23.2	23.4	23.6	23.4	23.3	23.3	22.8	22.3	23.3	22.5	22.7	22.4	23.4	23.3	22.8	22.5	23.0
Africa	5.2	5.2	5.0	4.8	5.1	5.1	5.1	5.0	5.2	5.2	5.1	5.5	5.1	5.0	5.1	5.3	5.1
Latin America	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.9	0.8	0.9	0.7	0.7	0.8	0.8	0.8	0.8
Total	**75.6**	**75.9**	**75.9**	**75.2**	**75.1**	**75.5**	**75.1**	**74.3**	**76.0**	**75.3**	**76.3**	**76.2**	**75.8**	**75.3**	**75.1**	**75.9**	**75.5**

Source: Rystad, J.P. Morgan Commodities Research

Table 15: Global crude oil supply, 2024F

mbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**46.5**	**46.9**	**47.1**	**46.8**	**46.1**	**46.7**	**46.4**	**46.7**	**46.1**	**46.6**	**46.8**	**47.0**	**46.8**	**46.5**	**46.4**	**46.8**	**46.6**
Africa	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	**1.0**
Asia	5.9	5.9	6.0	6.0	5.9	6.0	5.9	5.9	5.7	5.8	5.9	5.9	5.9	6.0	5.8	5.8	5.9
China	4.1	4.1	4.2	4.1	4.1	4.2	4.1	4.1	4.0	4.1	4.1	4.1	4.2	4.2	4.1	4.1	4.1
FSU	11.8	11.8	11.9	11.7	11.5	11.6	11.6	11.4	11.6	11.3	11.4	11.4	11.8	11.6	11.5	11.4	11.6
Russia	9.5	9.5	9.5	9.4	9.3	9.3	9.2	9.2	9.2	9.2	9.2	9.2	9.5	9.3	9.2	9.2	9.3
Latin America	6.1	6.0	5.9	5.8	5.9	5.9	5.6	6.0	6.1	5.9	6.0	6.1	6.0	5.9	5.9	6.0	5.9
Brazil	3.4	3.4	3.3	3.1	3.2	3.3	3.1	3.3	3.4	3.2	3.2	3.3	3.4	3.2	3.3	3.2	3.3
Middle East	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.7	1.7
Europe	2.7	2.7	2.8	2.7	2.6	2.5	2.7	2.5	2.4	2.7	2.6	2.6	2.7	2.6	2.6	2.6	2.6
Norway	1.8	1.7	1.8	1.8	1.6	1.7	1.8	1.7	1.5	1.7	1.7	1.6	1.8	1.7	1.7	1.7	1.7
North America	17.1	17.8	17.9	17.9	17.5	17.8	17.9	18.1	17.5	18.1	18.1	18.3	17.6	17.7	17.8	18.2	17.8
United States	11.1	11.7	11.7	11.8	11.7	11.8	11.7	11.9	11.7	11.9	11.8	11.9	11.5	11.8	11.8	11.9	11.7
Canada	4.3	4.5	4.6	4.5	4.2	4.5	4.6	4.7	4.3	4.7	4.8	4.9	4.5	4.4	4.5	4.8	4.6
OECD Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OPEC	**28.4**	**28.8**	**29.0**	**29.0**	**29.2**	**28.6**	**29.3**	**29.5**	**28.4**	**28.5**	**29.1**	**29.2**	**28.7**	**28.9**	**29.1**	**28.9**	**28.9**
East of Suez	22.6	23.0	23.2	23.0	23.1	22.3	23.4	23.4	22.9	22.6	22.8	22.8	22.9	22.8	23.2	22.8	22.9
Africa	5.1	5.1	5.1	5.2	5.1	5.3	5.1	5.3	4.6	5.0	5.3	5.5	5.1	5.2	5.0	5.2	5.1
Latin America	0.7	0.8	0.7	0.8	0.9	1.0	0.8	0.9	1.0	0.9	1.0	0.9	0.7	0.9	0.9	0.9	0.9
Total	**74.9**	**75.7**	**76.1**	**75.8**	**75.3**	**75.3**	**75.7**	**76.2**	**74.5**	**75.1**	**75.9**	**76.2**	**75.6**	**75.5**	**75.5**	**75.7**	**75.6**

Source: Rystad, J.P. Morgan Commodities Research

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Table 16: Global crude oil supply, 2025F

mbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**47.2**	**47.7**	**47.7**	**47.5**	**47.5**	**47.4**	**47.9**	**47.8**	**47.9**	**48.5**	**48.7**	**48.8**	**47.5**	**47.5**	**47.9**	**48.6**	**47.9**
Africa	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.1	1.1	1.0
Asia	5.9	5.9	5.9	6.0	6.0	6.0	5.9	6.0	5.9	5.9	5.9	5.9	5.9	6.0	5.9	5.9	5.9
China	4.1	4.1	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.2	4.2	4.2	4.2
FSU	11.6	11.6	11.7	11.8	11.7	11.6	11.7	11.6	11.7	11.6	11.6	11.7	11.6	11.7	11.6	11.6	11.6
Russia	9.2	9.1	9.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.1	9.2	9.2	9.2	9.2
Latin America	6.0	6.1	6.1	6.2	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.8	6.1	6.2	6.5	6.8	6.4
Brazil	3.3	3.3	3.4	3.4	3.5	3.5	3.6	3.6	3.6	3.7	3.7	3.8	3.3	3.5	3.6	3.7	3.5
Middle East	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Europe	2.7	2.7	2.8	2.8	2.7	2.6	2.9	2.8	2.6	2.9	2.9	3.0	2.7	2.7	2.8	2.9	2.8
Norway	1.7	1.7	1.8	1.8	1.7	1.7	1.9	1.9	1.7	1.9	1.9	2.0	1.7	1.7	1.8	2.0	1.8
North America	18.3	18.5	18.4	18.0	18.1	18.1	18.2	18.2	18.2	18.4	18.5	18.5	18.4	18.1	18.2	18.5	18.3
United States	12.0	12.0	12.0	12.0	11.9	11.9	11.9	12.0	12.0	12.1	12.1	12.1	12.0	11.9	12.0	12.1	12.0
Canada	4.8	5.0	4.9	4.6	4.7	4.7	4.8	4.8	4.7	4.9	5.0	4.9	4.9	4.7	4.7	4.9	4.8
OECD Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OPEC	**28.8**	**28.8**	**29.0**	**29.1**	**29.2**	**29.4**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**28.9**	**29.3**	**29.5**	**29.5**	**29.3**
East of Suez	22.6	22.5	22.9	23.0	23.1	23.3	23.4	23.5	23.5	23.6	23.6	23.7	22.7	23.1	23.5	23.6	23.2
Africa	5.3	5.4	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.3	5.2	5.2	5.2	5.2
Latin America	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	1.0	0.9	0.8	0.7	0.8
Total	**76.1**	**76.5**	**76.7**	**76.7**	**76.7**	**76.8**	**77.4**	**77.4**	**77.4**	**78.0**	**78.2**	**78.3**	**76.4**	**76.7**	**77.4**	**78.2**	**77.2**

Source: Rystad, J.P. Morgan Commodities Research

Table 17: Global crude oil supply, 2026F

mbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**48.8**	**48.8**	**48.7**	**48.2**	**47.7**	**47.7**	**48.3**	**48.2**	**48.0**	**48.4**	**48.8**	**49.0**	**48.7**	**47.9**	**48.2**	**48.7**	**48.4**
Africa	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Asia	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.9	5.9
China	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.2	4.2	4.2	4.3	4.2
FSU	11.7	11.7	11.7	11.7	11.6	11.6	11.6	11.5	11.7	11.5	11.6	11.7	11.7	11.6	11.6	11.6	11.6
Russia	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
Latin America	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7.0	7.1	7.2	7.2	7.3	6.9	6.9	7.0	7.2	7.0
Brazil	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.9	3.9	3.8	3.8	3.8	3.9	3.8
Middle East	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Europe	2.9	2.9	2.9	2.8	2.7	2.6	2.7	2.6	2.5	2.7	2.8	2.8	2.9	2.7	2.6	2.8	2.7
Norway	1.9	1.9	1.9	1.8	1.7	1.7	1.8	1.8	1.6	1.8	1.8	1.8	1.9	1.7	1.7	1.8	1.8
North America	18.5	18.6	18.5	18.1	17.8	18.0	18.3	18.4	18.1	18.2	18.5	18.5	18.5	18.0	18.3	18.4	18.3
United States	12.2	12.2	12.1	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.1	12.1	12.2	12.0	12.0	12.1	12.1
Canada	4.9	5.0	4.9	4.7	4.4	4.6	4.9	5.0	4.8	4.8	5.0	5.1	5.0	4.5	4.9	5.0	4.8
OECD Pacific	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
OPEC	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**
East of Suez	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
Africa	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Latin America	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total	**78.3**	**78.3**	**78.2**	**77.7**	**77.2**	**77.2**	**77.8**	**77.7**	**77.5**	**77.9**	**78.3**	**78.4**	**78.3**	**77.4**	**77.7**	**78.2**	**77.9**

Source: Rystad, J.P. Morgan Commodities Research

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Table 18: Global liquids supply, 2023E

mbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**63.9**	**64.5**	**64.6**	**64.4**	**64.5**	**65.0**	**65.2**	**65.3**	**65.8**	**66.0**	**66.7**	**66.4**	**64.3**	**64.7**	**65.5**	**66.4**	**65.2**
Africa	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Asia	6.6	6.6	6.7	6.5	6.5	6.6	6.4	6.4	6.4	6.4	6.5	6.5	6.6	6.6	6.4	6.5	6.5
China	4.2	4.2	4.2	4.2	4.2	4.2	4.0	4.1	4.1	4.0	4.2	4.1	4.2	4.2	4.1	4.1	4.1
FSU	14.1	14.4	14.1	14.1	14.0	13.9	13.7	13.5	13.9	13.9	13.8	13.9	14.2	14.0	13.7	13.9	13.9
Russia	11.1	11.5	11.2	11.1	11.1	11.0	10.8	10.8	11.0	11.0	11.0	11.0	11.3	11.1	10.9	11.0	11.0
Latin America	5.9	5.9	5.8	5.8	5.9	6.1	6.2	6.1	6.3	6.2	6.4	6.4	5.9	5.9	6.2	6.4	6.1
Brazil	3.3	3.3	3.1	3.1	3.2	3.4	3.5	3.4	3.7	3.5	3.7	3.6	3.2	3.2	3.5	3.6	3.4
Middle East	3.1	3.3	3.3	3.3	3.2	3.2	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.3	3.2	3.3	3.2
Europe	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.0	2.8	3.0	3.1	3.2	3.2	3.1	3.0	3.1	3.1
Norway	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.9	2.0	2.1	2.0	2.0	1.9	2.0	2.0
North America	26.3	26.4	26.9	26.6	26.4	26.7	27.2	27.4	27.6	27.8	28.2	28.1	26.6	26.6	27.4	28.0	27.1
United States	18.7	18.7	19.2	19.1	19.2	19.3	19.4	19.7	20.0	20.0	20.1	20.0	18.8	19.2	19.7	20.0	19.4
Canada	5.6	5.6	5.7	5.3	5.0	5.3	5.7	5.7	5.5	5.7	6.0	6.1	5.6	5.2	5.6	5.9	5.6
OECD Pacific	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other Liquids	3.0	3.0	3.1	3.3	3.8	3.9	4.0	4.0	4.0	3.8	3.7	3.4	3.0	3.6	4.0	3.6	3.6
OPEC	**35.3**	**35.6**	**35.4**	**35.2**	**35.2**	**35.2**	**34.6**	**34.0**	**35.4**	**34.5**	**34.7**	**34.5**	**35.4**	**35.2**	**34.7**	**34.6**	**35.0**
East of Suez	23.2	23.4	23.6	23.4	23.3	23.3	22.8	22.3	23.3	22.5	22.7	22.4	23.4	23.3	22.8	22.5	23.0
Africa	5.2	5.2	5.0	4.8	5.1	5.1	5.1	5.0	5.2	5.2	5.1	5.5	5.1	5.0	5.1	5.3	5.1
Latin America	0.8	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.9	0.8	0.9	0.7	0.7	0.8	0.8	0.8	0.8
NGL & other liquids	6.1	6.3	6.1	6.1	6.1	6.1	5.9	6.0	6.1	6.0	6.0	6.0	6.2	6.1	6.0	6.0	6.1
Processing gains	2.3	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.3	2.3
Total	**101.4**	**102.3**	**102.2**	**101.9**	**101.9**	**102.5**	**102.1**	**101.7**	**103.6**	**102.7**	**103.7**	**103.3**	**102.0**	**102.1**	**102.4**	**103.2**	**102.4**

Source: Rystad, J.P. Morgan Commodities Research

Table 19: Global liquids supply, 2024F

mbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**64.2**	**65.4**	**65.8**	**65.7**	**65.5**	**66.1**	**66.0**	**66.2**	**65.6**	**66.3**	**66.6**	**66.4**	**65.1**	**65.8**	**66.0**	**66.4**	**65.8**
Africa	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.1	1.2	1.1	1.1
Asia	6.6	6.6	6.7	6.6	6.5	6.7	6.5	6.5	6.4	6.5	6.5	6.5	6.6	6.6	6.5	6.5	6.6
China	4.2	4.2	4.3	4.2	4.2	4.3	4.2	4.2	4.1	4.2	4.2	4.2	4.3	4.3	4.2	4.2	4.2
FSU	13.8	13.8	13.9	13.7	13.5	13.6	13.6	13.4	13.5	13.4	13.4	13.4	13.9	13.6	13.5	13.4	13.6
Russia	10.9	10.9	11.0	10.8	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.6	10.9	10.8	10.7	10.7	10.8
Latin America	6.4	6.4	6.3	6.2	6.3	6.3	6.0	6.4	6.4	6.3	6.4	6.5	6.4	6.3	6.3	6.4	6.3
Brazil	3.5	3.4	3.4	3.2	3.3	3.4	3.2	3.3	3.5	3.3	3.3	3.4	3.4	3.3	3.3	3.3	3.4
Middle East	3.2	3.1	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Europe	3.1	3.1	3.2	3.2	3.0	2.9	3.1	2.9	2.7	3.1	3.0	3.0	3.1	3.0	2.9	3.0	3.0
Norway	2.0	1.9	2.0	2.0	1.9	1.9	2.0	1.9	1.7	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9
North America	26.2	27.7	27.9	28.0	27.7	28.0	27.9	28.3	27.9	28.6	28.7	28.7	27.3	27.9	28.0	28.7	28.0
United States	18.6	19.9	20.0	20.2	20.3	20.3	20.1	20.4	20.3	20.7	20.7	20.6	19.5	20.2	20.3	20.7	20.2
Canada	5.6	5.8	5.9	5.8	5.5	5.8	5.9	5.9	5.6	6.0	6.1	6.2	5.8	5.7	5.8	6.1	5.8
OECD Pacific	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other Liquids	3.0	3.1	3.1	3.3	3.8	3.8	4.1	4.0	4.0	3.8	3.7	3.4	3.1	3.7	4.0	3.7	3.6
OPEC	**34.4**	**35.0**	**35.1**	**35.1**	**35.3**	**34.8**	**35.5**	**35.7**	**34.7**	**34.7**	**35.3**	**35.4**	**34.8**	**35.0**	**35.3**	**35.2**	**35.1**
East of Suez	22.6	23.0	23.2	23.0	23.1	22.3	23.4	23.4	22.9	22.6	22.8	22.8	22.9	22.8	23.2	22.8	22.9
Africa	5.1	5.1	5.1	5.2	5.1	5.3	5.1	5.3	4.6	5.0	5.3	5.5	5.1	5.2	5.0	5.2	5.1
Latin America	0.7	0.8	0.7	0.8	0.9	1.0	0.8	0.9	1.0	0.9	1.0	0.9	0.7	0.9	0.9	0.9	0.9
NGL & other liquids	6.1	6.2	6.1	6.1	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.2	6.2	6.2
Processing gains	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.2	2.2	2.2	2.3	2.2
Total	**100.9**	**102.5**	**103.0**	**103.0**	**103.0**	**103.1**	**103.7**	**104.2**	**102.6**	**103.2**	**104.2**	**104.1**	**102.1**	**103.0**	**103.5**	**103.9**	**103.1**

Source: Rystad, J.P. Morgan Commodities Research

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Table 20: Global liquids supply, 2025F

mbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**66.2**	**66.7**	**66.7**	**66.7**	**67.2**	**67.3**	**67.9**	**67.8**	**67.8**	**68.4**	**68.6**	**68.4**	**66.5**	**67.0**	**67.8**	**68.4**	**67.5**
Africa	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Asia	6.5	6.5	6.5	6.6	6.5	6.6	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
China	4.2	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.3	4.3	4.3	4.3
FSU	13.6	13.6	13.7	13.7	13.7	13.6	13.6	13.5	13.6	13.5	13.6	13.7	13.6	13.7	13.6	13.6	13.6
Russia	10.7	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.6	10.6	10.6	10.7	10.6
Latin America	6.5	6.5	6.6	6.6	6.7	6.7	6.8	6.9	7.1	7.2	7.3	7.3	6.5	6.7	6.9	7.3	6.8
Brazil	3.4	3.4	3.5	3.5	3.6	3.6	3.7	3.7	3.7	3.8	3.8	3.9	3.4	3.6	3.7	3.8	3.6
Middle East	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.3	3.3	3.2
Europe	3.1	3.2	3.2	3.2	3.2	3.0	3.3	3.2	3.0	3.3	3.4	3.4	3.2	3.1	3.1	3.4	3.2
Norway	2.0	2.0	2.0	2.0	2.0	1.9	2.2	2.1	1.9	2.2	2.2	2.2	2.0	2.0	2.1	2.2	2.1
North America	28.7	28.9	28.8	28.4	28.5	28.6	28.6	28.7	28.7	29.0	29.1	29.1	28.8	28.5	28.7	29.1	28.8
United States	20.7	20.7	20.6	20.6	20.6	20.6	20.7	20.7	20.8	20.9	21.0	21.0	20.7	20.6	20.7	21.0	20.7
Canada	6.2	6.4	6.3	5.9	6.0	6.0	6.1	6.1	6.0	6.3	6.3	6.3	6.3	6.0	6.1	6.3	6.1
OECD Pacific	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other Liquids	3.1	3.1	3.2	3.4	3.9	4.0	4.2	4.1	4.1	3.9	3.8	3.5	3.1	3.8	4.1	3.7	3.7
OPEC	**35.0**	**35.2**	**35.2**	**35.4**	**35.4**	**35.6**	**35.7**	**35.8**	**35.9**	**35.8**	**35.8**	**35.8**	**35.1**	**35.5**	**35.8**	**35.8**	**35.5**
East of Suez	22.6	22.5	22.9	23.0	23.1	23.3	23.4	23.5	23.5	23.6	23.6	23.7	22.7	23.1	23.5	23.6	23.2
Africa	5.3	5.4	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.3	5.2	5.2	5.2	5.2
Latin America	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	1.0	0.9	0.8	0.7	0.8
NGL & other liquids	6.1	6.3	6.1	6.2	6.2	6.2	6.2	6.3	6.4	6.3	6.3	6.3	6.2	6.2	6.3	6.3	6.3
Processing gains	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.3	2.3	2.4	2.3	2.3
Total	**103.5**	**104.1**	**104.2**	**104.4**	**104.9**	**105.2**	**106.0**	**106.0**	**106.0**	**106.5**	**106.8**	**106.5**	**103.9**	**104.8**	**106.0**	**106.6**	**105.3**

Source: Rystad, J.P. Morgan Commodities Research

Table 21: Global liquids supply, 2026F

mbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
Non-OPEC	**68.1**	**68.1**	**68.0**	**67.7**	**67.6**	**67.8**	**68.7**	**68.5**	**68.2**	**68.6**	**69.0**	**68.9**	**68.1**	**67.7**	**68.5**	**68.8**	**68.3**
Africa	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Asia	6.5	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.4	6.4	6.4	6.4
China	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.4	4.3
FSU	13.7	13.7	13.7	13.7	13.6	13.6	13.6	13.5	13.6	13.5	13.6	13.7	13.7	13.6	13.6	13.6	13.6
Russia	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.7	10.6	10.7	10.7	10.7	10.7
Latin America	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.5	7.6	7.7	7.7	7.3	7.3	7.4	7.7	7.5
Brazil	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.0	4.0	3.9	3.9	3.9	4.0	3.9
Middle East	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.3	3.3	3.3	3.4	3.3
Europe	3.3	3.3	3.3	3.2	3.1	3.0	3.1	3.0	2.8	3.1	3.2	3.2	3.3	3.1	3.0	3.2	3.1
Norway	2.2	2.1	2.1	2.1	1.9	1.9	2.0	2.0	1.8	2.0	2.0	2.1	2.1	2.0	1.9	2.0	2.0
North America	29.2	29.2	29.1	28.7	28.4	28.6	29.0	29.1	28.8	29.0	29.3	29.4	29.2	28.6	29.0	29.2	29.0
United States	21.1	21.1	21.1	21.0	20.9	21.0	21.0	21.0	21.0	21.1	21.2	21.2	21.1	21.0	21.0	21.2	21.1
Canada	6.3	6.3	6.3	6.0	5.7	5.9	6.3	6.3	6.1	6.2	6.4	6.4	6.3	5.8	6.2	6.3	6.2
OECD Pacific	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Other Liquids	3.2	3.2	3.3	3.5	4.0	4.0	4.2	4.2	4.1	4.0	3.9	3.5	3.2	3.8	4.2	3.8	3.8
OPEC	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**	**35.9**
East of Suez	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7	23.7
Africa	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Latin America	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NGL & other liquids	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.4	6.4	6.5	6.4	6.4	6.4	6.4	6.4
Processing gains	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.3	2.3	2.4	2.4	2.4
Total	**106.3**	**106.2**	**106.2**	**105.9**	**105.9**	**106.1**	**107.0**	**106.8**	**106.5**	**106.9**	**107.3**	**107.2**	**106.2**	**106.0**	**106.8**	**107.1**	**106.5**

Source: Rystad, J.P. Morgan Commodities Research

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Table 22: US crude and condensate production table, 2023E

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23
US crude and condensate production (kbd)	**12,611**	**12,591**	**12,815**	**12,680**	**12,730**	**12,866**	**12,935**	**13,047**	**13,177**	**13,149**	**13,281**	**13,308**
inclusive of												
Offshore Gulf of Mexico	1,914	1,854	1,877	1,750	1,721	1,845	1,925	1,876	1,974	1,935	1,856	1,852
Alaska	448	446	435	434	430	423	397	396	415	426	428	433
US tight oil basin crude and condensate production (kbd)	**8,623**	**8,715**	**8,831**	**8,898**	**8,989**	**9,134**	**9,220**	**9,327**	**9,413**	**9,402**	**9,467**	**9,470**
Anadarko	350	350	354	357	357	362	366	364	361	357	353	351
Bakken	1,102	1,167	1,144	1,156	1,170	1,200	1,221	1,267	1,329	1,310	1,307	1,312
Eagle Ford	1,152	1,158	1,176	1,180	1,205	1,246	1,273	1,272	1,259	1,242	1,226	1,210
Rockies	631	629	651	668	690	714	726	725	718	719	728	727
Permian Midland	2,470	2,477	2,510	2,507	2,532	2,555	2,575	2,585	2,583	2,581	2,582	2,578
Permian Delaware TX	1,195	1,204	1,230	1,249	1,260	1,282	1,317	1,351	1,365	1,383	1,395	1,395
Permian Delaware NM	1,723	1,732	1,764	1,782	1,775	1,775	1,741	1,763	1,798	1,809	1,876	1,898
US tight oil basin rig counts	**575**	**568**	**563**	**557**	**534**	**512**	**499**	**482**	**470**	**464**	**462**	**466**
Anadarko	66	66	63	57	50	44	42	39	37	38	39	42
Bakken	41	41	41	40	37	35	35	34	32	33	33	32
Eagle Ford	78	78	77	73	66	61	58	55	53	55	55	55
Rockies	35	31	32	32	31	30	30	31	30	28	26	26
Permian Midland	160	155	153	154	149	146	141	134	136	130	131	132
Permian Delaware TX	94	92	91	98	93	90	83	80	80	80	77	81
Permian Delaware NM	101	105	105	104	107	106	111	110	102	102	103	98
US tight oil basin active frac counts	**188**	**196**	**196**	**190**	**188**	**186**	**174**	**165**	**167**	**162**	**157**	**149**
Anadarko	18	20	20	19	19	17	17	16	13	15	14	14
Bakken	14	17	14	17	17	20	21	15	14	14	14	14
Eagle Ford	29	32	30	25	25	25	17	21	20	20	20	20
Rockies	15	16	17	17	17	18	17	14	17	16	14	12
Permian Midland	52	55	55	52	51	49	48	46	45	42	43	41
Permian Delaware TX	26	23	33	31	29	27	25	25	26	24	21	21
Permian Delaware NM	32	33	27	28	29	29	30	28	32	31	31	28
US tight oil basin drilled, uncompleted (DUC) well inventory	**4,486**	**4,536**	**4,551**	**4,511**	**4,495**	**4,441**	**4,534**	**4,524**	**4,557**	**4,478**	**4,558**	**4,755**
Anadarko	296	277	278	277	246	211	203	181	171	155	153	162
Bakken	530	541	567	575	574	540	503	478	459	440	418	402
Eagle Ford	751	743	760	746	722	665	695	686	699	707	720	747
Rockies	645	705	690	643	651	709	778	810	853	837	826	874
Permian Midland	1,199	1,186	1,172	1,175	1,173	1,177	1,177	1,174	1,156	1,141	1,208	1,281
Permian Delaware TX	627	660	663	680	690	679	695	676	703	704	715	755
Permian Delaware NM	438	423	421	415	439	460	483	519	515	494	518	534

Source: EIA, Rystad, Baker Hughes, J.P. Morgan Commodities Research

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Table 23: US crude and condensate production table, 2024F

	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
US crude and condensate production (kbd)	**12,554**	**13,102**	**13,171**	**13,249**	**13,201**	**13,240**	**13,192**	**13,364**	**13,185**	**13,450**	**13,396**	**13,491**
inclusive of												
Offshore Gulf of Mexico	1,743	1,790	1,815	1,826	1,777	1,804	1,806	1,788	1,573	1,763	1,655	1,858
Alaska	427	432	433	430	417	399	408	396	408	427	439	434
US tight oil basin crude and condensate production (kbd)	**9,007**	**9,336**	**9,404**	**9,445**	**9,489**	**9,537**	**9,585**	**9,638**	**9,697**	**9,744**	**9,783**	**9,815**
Anadarko	351	356	358	359	359	360	357	354	353	350	346	343
Bakken	1,136	1,279	1,294	1,283	1,265	1,249	1,237	1,234	1,239	1,243	1,247	1,249
Eagle Ford	1,193	1,190	1,206	1,226	1,234	1,235	1,236	1,238	1,241	1,243	1,245	1,247
Rockies	692	706	697	696	700	706	712	717	721	725	728	731
Permian Midland	2,493	2,537	2,555	2,570	2,586	2,600	2,612	2,624	2,635	2,646	2,656	2,664
Permian Delaware TX	1,349	1,379	1,384	1,389	1,399	1,413	1,430	1,447	1,464	1,478	1,490	1,497
Permian Delaware NM	1,792	1,889	1,909	1,922	1,946	1,974	2,000	2,024	2,043	2,059	2,072	2,084
US tight oil basin rig counts	**465**	**469**	**474**	**477**	**467**	**454**	**447**	**450**	**456**	**455**	**456**	**461**
Anadarko	42	43	44	45	44	36	34	36	40	40	41	44
Bakken	34	34	34	34	34	35	35	35	34	34	35	36
Eagle Ford	57	56	58	59	55	54	52	52	52	52	52	51
Rockies	23	23	23	22	21	21	21	22	24	25	26	25
Permian Midland	134	135	134	136	133	131	129	128	133	131	128	129
Permian Delaware TX	80	80	78	77	75	73	72	73	70	76	76	75
Permian Delaware NM	95	98	104	105	105	105	105	104	103	97	98	100
US tight oil basin active frac counts	**170**	**171**	**164**	**161**	**165**	**164**	**167**	**166**	**163**	**163**	**161**	**161**
Anadarko	14	12	12	12	12	11	11	11	9	9	9	9
Bakken	10	14	10	10	10	10	13	13	13	13	13	13
Eagle Ford	29	31	27	22	24	24	24	24	24	24	24	24
Rockies	14	14	14	14	14	14	14	14	14	14	14	14
Permian Midland	52	50	46	47	47	47	47	47	47	47	47	47
Permian Delaware TX	23	24	24	26	28	28	28	28	28	27	25	25
Permian Delaware NM	28	27	30	30	30	30	30	29	29	29	29	29
US tight oil basin drilled, uncompleted (DUC) well inventory	**4,736**	**4,623**	**4,585**	**4,571**	**4,507**	**4,438**	**4,332**	**4,234**	**4,163**	**4,092**	**4,037**	**3,985**
Anadarko	137	121	114	106	98	94	87	75	80	82	86	92
Bakken	415	400	417	434	448	463	458	453	445	437	432	429
Eagle Ford	726	669	637	643	625	604	578	553	527	500	474	446
Rockies	860	828	808	785	758	732	704	683	667	654	646	634
Permian Midland	1,282	1,270	1,276	1,282	1,282	1,277	1,268	1,258	1,258	1,254	1,245	1,236
Permian Delaware TX	774	778	786	782	764	744	720	698	673	663	664	662
Permian Delaware NM	542	556	546	539	531	523	515	515	513	501	492	485

Source: EIA, Rystad, Baker Hughes, J.P. Morgan Commodities Research

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Table 24: US crude and condensate production table, 2025F

	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
US crude and condensate production (kbd)	**13,543**	**13,567**	**13,544**	**13,497**	**13,461**	**13,484**	**13,513**	**13,535**	**13,583**	**13,656**	**13,698**	**13,734**
inclusive of												
Offshore Gulf of Mexico	1,814	1,847	1,862	1,839	1,807	1,827	1,836	1,841	1,830	1,869	1,887	1,905
Alaska	411	416	415	410	397	374	368	359	391	403	406	409
US tight oil basin crude and condensate production (kbd)	**9,825**	**9,813**	**9,780**	**9,764**	**9,775**	**9,801**	**9,827**	**9,852**	**9,879**	**9,899**	**9,918**	**9,933**
Anadarko	343	345	348	351	355	358	359	360	362	365	367	369
Bakken	1,253	1,255	1,251	1,247	1,244	1,243	1,244	1,244	1,242	1,236	1,231	1,225
Eagle Ford	1,248	1,243	1,232	1,228	1,228	1,230	1,232	1,233	1,235	1,237	1,238	1,238
Rockies	732	730	725	720	717	716	717	717	718	718	719	719
Permian Midland	2,663	2,656	2,647	2,642	2,643	2,647	2,653	2,658	2,665	2,670	2,675	2,680
Permian Delaware TX	1,498	1,497	1,495	1,494	1,495	1,500	1,504	1,508	1,513	1,518	1,522	1,526
Permian Delaware NM	2,088	2,086	2,082	2,083	2,092	2,106	2,119	2,132	2,144	2,156	2,167	2,175
US tight oil basin rig counts	**456**	**462**	**469**	**472**	**472**	**472**	**472**	**469**	**469**	**469**	**467**	**465**
Anadarko	45	47	47	50	50	50	50	50	50	50	50	50
Bakken	35	33	35	35	35	35	35	32	32	32	32	32
Eagle Ford	49	53	55	55	55	55	55	55	55	55	55	55
Rockies	24	25	25	25	25	25	25	25	25	25	25	25
Permian Midland	128	131	130	130	130	130	130	130	130	130	130	130
Permian Delaware TX	74	71	75	75	75	75	75	75	75	75	75	75
Permian Delaware NM	100	103	102	102	102	102	102	102	102	102	100	98
US tight oil basin active frac counts	**154**	**156**	**159**	**159**	**159**	**159**	**159**	**158**	**158**	**158**	**158**	**157**
Anadarko	11	11	11	12	12	12	12	12	12	12	12	12
Bakken	12	12	12	12	12	12	12	11	11	11	11	11
Eagle Ford	20	21	22	22	22	22	22	22	22	22	22	22
Rockies	12	13	13	13	13	13	13	13	13	13	13	13
Permian Midland	47	47	47	47	47	47	47	47	47	47	47	47
Permian Delaware TX	25	24	25	25	25	25	25	25	25	25	25	25
Permian Delaware NM	28	28	28	28	28	28	28	28	28	28	28	27
US tight oil basin drilled, uncompleted (DUC) well inventory	**4,028**	**3,998**	**3,985**	**3,971**	**3,953**	**3,944**	**3,934**	**3,917**	**3,899**	**3,882**	**3,864**	**3,847**
Anadarko	87	78	78	77	76	84	93	92	92	92	91	91
Bakken	429	429	433	437	437	437	436	436	436	436	436	435
Eagle Ford	459	454	449	444	439	434	429	424	419	414	409	404
Rockies	634	620	620	620	620	620	620	620	620	620	620	620
Permian Midland	1,255	1,247	1,239	1,231	1,223	1,215	1,207	1,199	1,191	1,183	1,176	1,167
Permian Delaware TX	660	652	650	648	646	645	643	641	639	637	635	633
Permian Delaware NM	505	517	515	513	510	508	506	504	501	499	497	495

Source: EIA, Rystad, Baker Hughes, J.P. Morgan Commodities Research

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Table 25: US crude and condensate production table, 2026F

	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26
US crude and condensate production (kbd)	**13,787**	**13,796**	**13,750**	**13,675**	**13,608**	**13,605**	**13,615**	**13,598**	**13,577**	**13,647**	**13,692**	**13,750**
inclusive of												
Offshore Gulf of Mexico	1,908	1,912	1,891	1,843	1,793	1,810	1,839	1,811	1,729	1,770	1,790	1,832
Alaska	444	449	451	444	428	397	367	365	408	422	433	434
US tight oil basin crude and condensate production (kbd)	**9,947**	**9,946**	**9,923**	**9,909**	**9,913**	**9,931**	**9,949**	**9,964**	**9,982**	**9,996**	**10,009**	**10,021**
Anadarko	370	370	369	369	369	369	368	366	366	367	369	369
Bakken	1,222	1,219	1,212	1,204	1,197	1,192	1,189	1,184	1,178	1,171	1,165	1,159
Eagle Ford	1,237	1,232	1,225	1,221	1,221	1,221	1,222	1,222	1,223	1,224	1,224	1,224
Rockies	718	716	710	705	702	701	701	701	702	702	702	702
Permian Midland	2,681	2,679	2,675	2,671	2,673	2,678	2,683	2,689	2,695	2,701	2,706	2,710
Permian Delaware TX	1,533	1,541	1,544	1,546	1,550	1,554	1,559	1,564	1,569	1,574	1,578	1,582
Permian Delaware NM	2,186	2,190	2,189	2,192	2,201	2,214	2,227	2,238	2,248	2,257	2,266	2,273
US tight oil basin rig counts	**449**	**449**	**449**	**449**	**449**	**449**	**445**	**445**	**445**	**445**	**445**	**445**
Anadarko	50	50	50	50	50	50	50	50	50	50	50	50
Bakken	30	30	30	30	30	30	28	28	28	28	28	28
Eagle Ford	53	53	53	53	53	53	53	53	53	53	53	53
Rockies	23	23	23	23	23	23	23	23	23	23	23	23
Permian Midland	128	128	128	128	128	128	128	128	128	128	128	128
Permian Delaware TX	70	70	70	70	70	70	70	70	70	70	70	70
Permian Delaware NM	95	95	95	95	95	95	93	93	93	93	93	93
US tight oil basin active frac counts	**151**	**151**	**151**	**151**	**151**	**151**	**150**	**150**	**150**	**150**	**150**	**150**
Anadarko	12	12	12	12	12	12	12	12	12	12	12	12
Bakken	11	11	11	11	11	11	10	10	10	10	10	10
Eagle Ford	21	21	21	21	21	21	21	21	21	21	21	21
Rockies	12	12	12	12	12	12	12	12	12	12	12	12
Permian Midland	47	47	47	47	47	47	47	47	47	47	47	47
Permian Delaware TX	23	23	23	23	23	23	23	23	23	23	23	23
Permian Delaware NM	26	26	26	26	26	26	26	26	26	26	26	26
US tight oil basin drilled, uncompleted (DUC) well inventory	**3,890**	**3,859**	**3,845**	**3,830**	**3,813**	**3,804**	**3,795**	**3,778**	**3,761**	**3,743**	**3,726**	**3,708**
Anadarko	85	75	75	74	73	81	90	90	89	89	89	88
Bakken	435	435	439	442	442	442	442	442	441	441	441	441
Eagle Ford	418	413	409	404	399	394	389	384	379	374	369	364
Rockies	620	607	607	607	607	607	607	607	607	607	607	607
Permian Midland	1,186	1,179	1,171	1,163	1,154	1,147	1,138	1,130	1,122	1,114	1,106	1,098
Permian Delaware TX	631	624	622	620	618	616	615	613	611	609	607	605
Permian Delaware NM	514	526	524	522	519	517	515	513	511	509	507	505

Source: EIA, Rystad, Baker Hughes, J.P. Morgan Commodities Research

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Table 26: Regional oil demand, 2023E

mbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**23.4**	**24.0**	**24.3**	**24.0**	**24.5**	**25.2**	**24.5**	**25.2**	**24.4**	**24.8**	**24.8**	**24.5**	**23.9**	**24.6**	**24.7**	**24.7**	**24.5**
United States	19.4	19.9	20.2	20.0	20.3	20.8	20.0	20.8	20.2	20.6	20.7	20.4	19.8	20.3	20.3	20.6	20.3
Canada	2.3	2.4	2.3	2.3	2.5	2.6	2.7	2.7	2.5	2.5	2.3	2.3	2.3	2.5	2.6	2.4	2.5
Mexico	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.7	1.7	1.8	1.7	1.7
Latin America	**6.3**	**6.6**	**6.8**	**6.6**	**6.8**	**6.7**	**6.8**	**6.8**	**6.8**	**6.7**	**6.8**	**6.7**	**6.6**	**6.7**	**6.8**	**6.7**	**6.7**
Brazil	3.0	3.1	3.3	3.1	3.3	3.2	3.3	3.4	3.3	3.3	3.4	3.3	3.1	3.2	3.3	3.3	3.2
Other Latin America	3.3	3.5	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.4	3.4	3.5	3.4	3.5	3.5	3.4	3.4
Europe	**13.0**	**14.6**	**14.1**	**13.8**	**14.4**	**14.8**	**14.4**	**14.4**	**14.6**	**14.6**	**14.2**	**13.7**	**13.9**	**14.3**	**14.5**	**14.2**	**14.2**
FSU	**4.7**	**5.0**	**4.9**	**4.9**	**4.9**	**5.0**	**5.2**	**5.2**	**5.2**	**5.0**	**5.2**	**5.1**	**4.9**	**4.9**	**5.2**	**5.1**	**5.0**
Russia	3.7	3.8	3.8	3.7	3.8	3.8	4.0	4.0	3.9	3.7	3.9	3.9	3.7	3.8	4.0	3.8	3.8
Other FSU	1.1	1.2	1.2	1.2	1.1	1.2	1.1	1.2	1.2	1.3	1.3	1.2	1.1	1.2	1.2	1.3	1.2
Middle East	**9.0**	**9.0**	**9.1**	**9.0**	**9.3**	**9.4**	**9.7**	**9.8**	**9.8**	**9.2**	**9.0**	**9.1**	**9.1**	**9.2**	**9.8**	**9.1**	**9.3**
Africa	**4.3**	**4.4**	**4.5**	**4.3**	**4.3**	**4.2**	**4.2**	**4.3**	**4.3**	**4.3**	**4.4**	**4.4**	**4.4**	**4.3**	**4.3**	**4.4**	**4.3**
Asia Pacific	**37.0**	**37.8**	**37.1**	**37.4**	**37.8**	**37.7**	**37.3**	**37.7**	**37.1**	**36.8**	**37.6**	**37.9**	**37.3**	**37.6**	**37.4**	**37.4**	**37.4**
Australia	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.2	1.1
China	15.4	15.4	15.1	16.6	16.8	16.7	16.8	17.0	16.5	16.0	16.1	15.6	15.3	16.7	16.8	15.9	16.2
India	5.2	5.7	5.7	5.3	5.6	5.5	5.0	5.2	5.3	5.4	5.4	5.6	5.5	5.5	5.2	5.4	5.4
Japan	3.7	3.9	3.5	3.1	3.0	3.0	3.0	3.1	3.1	3.0	3.4	3.7	3.7	3.0	3.1	3.4	3.3
Korea	2.5	2.5	2.6	2.3	2.4	2.3	2.5	2.4	2.4	2.4	2.5	2.6	2.6	2.3	2.4	2.5	2.5
Other Asia Pacific	9.1	9.2	9.1	8.9	8.8	9.0	8.8	8.9	8.8	8.8	9.0	9.3	9.1	8.9	8.8	9.1	9.0
World oil demand	**97.8**	**101.4**	**100.7**	**100.0**	**102.0**	**103.0**	**102.1**	**103.5**	**102.3**	**101.5**	**102.0**	**101.5**	**99.9**	**101.6**	**102.6**	**101.7**	**101.5**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 27: Regional oil demand, 2024F

mbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**23.7**	**24.1**	**23.9**	**23.9**	**24.9**	**24.5**	**24.9**	**25.0**	**24.4**	**25.1**	**24.4**	**24.6**	**23.9**	**24.4**	**24.8**	**24.7**	**24.5**
United States	19.6	19.9	19.9	20.0	20.8	20.2	20.5	20.7	20.3	21.0	20.2	20.4	19.8	20.4	20.5	20.6	20.3
Canada	2.4	2.4	2.3	2.1	2.3	2.5	2.5	2.5	2.4	2.4	2.5	2.5	2.4	2.3	2.5	2.5	2.4
Mexico	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7
Latin America	**6.6**	**6.7**	**6.6**	**6.9**	**6.7**	**6.8**	**7.0**	**6.8**	**6.8**	**6.9**	**6.8**	**6.8**	**6.6**	**6.8**	**6.9**	**6.8**	**6.8**
Brazil	3.2	3.2	3.2	3.4	3.3	3.3	3.5	3.4	3.4	3.5	3.3	3.3	3.2	3.3	3.4	3.4	3.3
Other Latin America	3.4	3.4	3.3	3.5	3.4	3.4	3.5	3.4	3.4	3.4	3.4	3.5	3.4	3.4	3.5	3.4	3.4
Europe	**13.4**	**13.9**	**13.7**	**14.4**	**14.3**	**14.7**	**14.9**	**14.7**	**14.8**	**14.9**	**14.3**	**14.0**	**13.6**	**14.5**	**14.8**	**14.4**	**14.3**
FSU	**4.8**	**5.2**	**5.1**	**5.0**	**5.0**	**5.1**	**5.1**	**5.2**	**5.2**	**5.2**	**5.2**	**5.2**	**5.0**	**5.1**	**5.2**	**5.2**	**5.1**
Russia	3.8	4.0	3.9	3.8	3.9	3.9	4.0	3.9	4.0	3.8	3.9	4.0	3.9	3.9	4.0	3.9	3.9
Other FSU	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.2
Middle East	**9.1**	**9.1**	**8.9**	**9.2**	**9.3**	**9.6**	**9.9**	**10.0**	**9.9**	**9.3**	**9.4**	**9.2**	**9.0**	**9.4**	**9.9**	**9.3**	**9.4**
Africa	**4.3**	**4.4**	**4.4**	**4.2**	**4.3**	**4.3**	**4.3**	**4.4**	**4.4**	**4.4**	**4.3**	**4.4**	**4.3**	**4.2**	**4.4**	**4.3**	**4.3**
Asia Pacific	**38.0**	**38.4**	**37.7**	**38.6**	**38.6**	**38.6**	**37.9**	**37.8**	**37.7**	**38.8**	**39.1**	**39.3**	**38.0**	**38.6**	**37.8**	**39.1**	**38.4**
Australia	1.1	1.2	1.1	1.1	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.2	1.2	1.2
China	15.9	16.1	15.7	16.8	16.9	16.9	16.8	16.7	16.9	17.0	16.8	16.8	15.9	16.9	16.8	16.8	16.6
India	5.5	5.8	5.8	5.7	5.8	5.7	5.6	5.1	5.1	5.6	5.9	5.7	5.7	5.7	5.3	5.7	5.6
Japan	3.4	3.5	3.4	3.1	2.9	2.9	2.9	3.0	2.9	3.0	3.3	3.5	3.4	3.0	2.9	3.3	3.1
Korea	2.7	2.5	2.5	2.5	2.5	2.6	2.4	2.6	2.5	2.6	2.5	2.5	2.6	2.5	2.5	2.6	2.5
Other Asia Pacific	9.3	9.3	9.1	9.4	9.4	9.4	9.2	9.2	9.1	9.4	9.3	9.6	9.2	9.4	9.2	9.5	9.3
World oil demand	**99.8**	**101.7**	**100.3**	**102.2**	**103.2**	**103.4**	**104.1**	**103.8**	**103.2**	**104.5**	**103.4**	**103.6**	**100.6**	**102.9**	**103.7**	**103.8**	**102.8**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 28: Regional oil demand, 2025F

mbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**24.1**	**24.4**	**24.1**	**24.1**	**25.1**	**24.5**	**24.7**	**25.1**	**24.5**	**25.2**	**24.7**	**24.9**	**24.2**	**24.5**	**24.8**	**24.9**	**24.6**
United States	20.0	20.2	20.0	20.1	20.8	20.2	20.3	20.7	20.4	21.0	20.4	20.7	20.0	20.4	20.5	20.7	20.4
Canada	2.4	2.4	2.3	2.2	2.4	2.4	2.6	2.5	2.4	2.4	2.5	2.5	2.4	2.3	2.5	2.5	2.4
Mexico	1.7	1.8	1.8	1.9	1.8	1.8	1.9	1.8	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.8
Latin America	**6.6**	**6.8**	**6.7**	**7.0**	**6.9**	**6.9**	**7.1**	**7.0**	**6.9**	**7.0**	**6.9**	**6.9**	**6.7**	**6.9**	**7.0**	**6.9**	**6.9**
Brazil	3.2	3.3	3.3	3.5	3.4	3.4	3.5	3.5	3.4	3.6	3.4	3.4	3.3	3.4	3.5	3.5	3.4
Other Latin America	3.4	3.4	3.4	3.5	3.5	3.5	3.6	3.5	3.5	3.4	3.5	3.5	3.4	3.5	3.5	3.5	3.5
Europe	**13.9**	**14.3**	**14.0**	**14.3**	**14.3**	**14.6**	**14.9**	**14.5**	**14.5**	**14.7**	**14.2**	**13.9**	**14.1**	**14.4**	**14.6**	**14.2**	**14.3**
FSU	**4.9**	**5.1**	**5.1**	**5.1**	**5.1**	**5.2**	**5.3**	**5.4**	**5.3**	**5.3**	**5.3**	**5.4**	**5.0**	**5.2**	**5.3**	**5.3**	**5.2**
Russia	3.8	3.9	3.9	3.9	4.0	4.0	4.1	4.1	4.0	3.9	4.0	4.1	3.9	3.9	4.1	4.0	4.0
Other FSU	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.3	1.2	1.3	1.3	1.3	1.2	1.2	1.2	1.3	1.2
Middle East	**9.1**	**9.1**	**9.2**	**9.3**	**9.5**	**9.5**	**9.9**	**10.0**	**10.0**	**9.4**	**9.1**	**9.3**	**9.1**	**9.4**	**10.0**	**9.3**	**9.5**
Africa	**4.4**	**4.5**	**4.4**	**4.4**	**4.4**	**4.4**	**4.5**	**4.5**	**4.5**	**4.5**	**4.4**	**4.5**	**4.4**	**4.4**	**4.5**	**4.5**	**4.4**
Asia Pacific	**38.6**	**39.0**	**38.4**	**38.5**	**39.0**	**39.5**	**38.6**	**38.4**	**38.4**	**39.3**	**40.0**	**40.2**	**38.6**	**39.0**	**38.5**	**39.8**	**39.0**
Australia	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2
China	16.4	16.4	16.0	16.3	16.9	17.3	17.1	16.9	17.1	17.2	17.5	17.1	16.3	16.8	17.0	17.3	16.9
India	5.7	5.8	6.0	5.9	6.0	5.9	5.8	5.4	5.3	5.9	6.1	5.9	5.9	5.9	5.5	6.0	5.8
Japan	3.4	3.4	3.1	2.9	2.7	2.7	2.7	2.8	2.8	2.8	3.1	3.4	3.3	2.8	2.8	3.1	3.0
Korea	2.4	2.6	2.6	2.6	2.5	2.7	2.4	2.6	2.6	2.7	2.6	2.6	2.5	2.6	2.6	2.6	2.6
Other Asia Pacific	9.5	9.5	9.4	9.6	9.6	9.6	9.4	9.5	9.4	9.5	9.5	9.8	9.5	9.6	9.4	9.6	9.5
World oil demand	**101.6**	**103.1**	**101.8**	**102.7**	**104.2**	**104.6**	**105.0**	**104.8**	**104.1**	**105.4**	**104.7**	**105.0**	**102.1**	**103.8**	**104.7**	**105.0**	**103.9**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 29: Regional oil demand, 2026F

mbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**24.1**	**24.4**	**24.2**	**24.1**	**25.1**	**24.9**	**25.2**	**25.4**	**24.8**	**25.4**	**24.8**	**24.9**	**24.2**	**24.7**	**25.1**	**25.0**	**24.8**
United States	19.9	20.2	20.0	20.1	20.9	20.5	20.7	21.0	20.6	21.2	20.5	20.6	20.0	20.5	20.8	20.8	20.5
Canada	2.4	2.4	2.3	2.2	2.4	2.5	2.6	2.5	2.4	2.4	2.5	2.5	2.4	2.3	2.5	2.5	2.4
Mexico	1.7	1.8	1.8	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Latin America	**6.7**	**6.8**	**6.8**	**7.1**	**7.0**	**7.0**	**7.2**	**7.1**	**7.0**	**7.1**	**7.0**	**7.0**	**6.8**	**7.0**	**7.1**	**7.0**	**7.0**
Brazil	3.3	3.4	3.4	3.5	3.5	3.5	3.6	3.6	3.5	3.6	3.5	3.5	3.4	3.5	3.6	3.5	3.5
Other Latin America	3.4	3.4	3.4	3.5	3.5	3.5	3.6	3.5	3.5	3.4	3.5	3.5	3.4	3.5	3.5	3.5	3.5
Europe	**13.5**	**14.4**	**14.1**	**14.3**	**14.2**	**14.4**	**14.8**	**14.4**	**14.6**	**14.7**	**14.4**	**14.2**	**14.0**	**14.3**	**14.6**	**14.4**	**14.3**
FSU	**5.0**	**5.2**	**5.2**	**5.3**	**5.3**	**5.3**	**5.5**	**5.5**	**5.4**	**5.4**	**5.5**	**5.5**	**5.2**	**5.3**	**5.5**	**5.5**	**5.4**
Russia	3.9	4.0	4.0	4.0	4.1	4.1	4.2	4.2	4.1	4.0	4.1	4.2	4.0	4.0	4.2	4.1	4.1
Other FSU	1.1	1.2	1.2	1.3	1.2	1.3	1.2	1.3	1.3	1.4	1.4	1.3	1.2	1.3	1.3	1.4	1.3
Middle East	**9.2**	**9.2**	**9.3**	**9.4**	**9.6**	**9.7**	**10.1**	**10.2**	**10.1**	**9.5**	**9.3**	**9.4**	**9.2**	**9.6**	**10.1**	**9.4**	**9.6**
Africa	**4.5**	**4.6**	**4.5**	**4.5**	**4.5**	**4.5**	**4.6**	**4.6**	**4.6**	**4.6**	**4.6**	**4.6**	**4.5**	**4.5**	**4.6**	**4.6**	**4.6**
Asia Pacific	**39.3**	**39.8**	**38.9**	**39.1**	**39.6**	**40.1**	**39.3**	**39.1**	**39.1**	**40.0**	**40.7**	**40.8**	**39.3**	**39.6**	**39.2**	**40.5**	**39.7**
Australia	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.2	1.2	1.2	1.2	1.3	1.2
China	16.6	16.6	16.2	16.5	17.1	17.5	17.3	17.2	17.3	17.5	17.8	17.4	16.5	17.0	17.3	17.6	17.1
India	6.0	6.3	6.2	6.1	6.2	6.1	6.0	5.6	5.5	6.1	6.3	6.2	6.2	6.2	5.7	6.2	6.1
Japan	3.2	3.3	3.0	2.8	2.6	2.6	2.6	2.7	2.7	2.7	3.0	3.3	3.2	2.7	2.7	3.0	2.9
Korea	2.8	2.7	2.6	2.6	2.6	2.7	2.5	2.7	2.7	2.7	2.6	2.7	2.7	2.6	2.6	2.7	2.7
Other Asia Pacific	9.7	9.7	9.6	9.8	9.8	9.9	9.7	9.7	9.6	9.7	9.7	10.0	9.6	9.8	9.6	9.8	9.7
World oil demand	**102.4**	**104.5**	**103.0**	**103.7**	**105.3**	**105.9**	**106.6**	**106.3**	**105.6**	**106.8**	**106.3**	**106.4**	**103.2**	**105.0**	**106.1**	**106.5**	**105.2**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 30: Regional oil demand by product, 2023E

mbd		2023F												2023F				2023F
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
United States																		
	LPG	1.4	1.3	1.0	0.9	0.8	0.9	1.0	0.9	1.0	1.2	1.4	1.4	1.2	0.9	0.9	1.3	1.1
	Naphtha	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
	Gasoline	8.3	8.7	9.1	8.9	9.1	9.4	9.0	9.2	8.8	9.1	8.9	8.8	8.7	9.1	9.0	8.9	8.9
	Jet and Kerosene	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.7	1.7	1.7	1.6	1.7	1.6	1.7	1.7	1.7	1.7
	Diesel/Gasoil	4.0	4.0	4.1	3.9	3.9	4.0	3.6	4.1	3.9	4.1	4.0	3.6	4.0	3.9	3.8	3.9	3.9
	Fuel Oil	0.3	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3
	Other Products	3.7	4.0	4.1	4.3	4.5	4.4	4.4	4.4	4.4	4.2	4.3	4.4	3.9	4.4	4.4	4.3	4.3
	Total Oil	**19.4**	**19.9**	**20.2**	**20.0**	**20.3**	**20.8**	**20.0**	**20.8**	**20.2**	**20.6**	**20.7**	**20.4**	**19.8**	**20.3**	**20.3**	**20.6**	**20.3**
Europe																		
	LPG	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.0
	Naphtha	0.9	0.9	0.9	0.9	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	0.9	0.8	0.7	0.8	0.8
	Gasoline	2.0	2.3	2.2	2.3	2.4	2.5	2.4	2.4	2.4	2.4	2.3	2.2	2.2	2.4	2.4	2.3	2.3
	Jet and Kerosene	1.4	1.5	1.5	1.5	1.6	1.8	1.8	1.8	1.8	1.8	1.6	1.6	1.4	1.6	1.8	1.6	1.6
	Diesel/Gasoil	5.7	6.7	6.5	6.0	6.5	6.5	6.4	6.2	6.4	6.6	6.5	6.2	6.3	6.4	6.3	6.4	6.3
	Fuel Oil	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8
	Other Products	1.2	1.3	1.3	1.3	1.3	1.5	1.3	1.4	1.5	1.4	1.4	1.1	1.2	1.4	1.4	1.3	1.3
	Total Oil	**13.0**	**14.6**	**14.1**	**13.8**	**14.4**	**14.8**	**14.4**	**14.4**	**14.6**	**14.6**	**14.2**	**13.7**	**13.9**	**14.3**	**14.5**	**14.2**	**14.2**
China																		
	LPG	2.4	2.4	2.2	2.4	2.5	2.6	2.6	2.6	2.5	2.3	2.7	2.4	2.3	2.5	2.6	2.5	2.5
	Naphtha	1.8	1.8	1.8	1.9	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.1	1.8	1.9	1.9	2.0	1.9
	Gasoline	3.8	3.8	3.6	4.1	4.2	4.1	4.2	4.3	4.1	4.0	3.8	3.7	3.7	4.1	4.2	3.8	4.0
	Jet and Kerosene	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.7	0.7	0.6	0.8	0.9	0.7	0.8
	Diesel/Gasoil	3.9	3.8	3.9	4.3	4.1	4.1	4.1	4.1	4.1	4.0	4.0	3.9	3.9	4.2	4.1	4.0	4.0
	Fuel Oil	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.5	0.6
	Other Products	2.4	2.4	2.3	2.5	2.6	2.6	2.6	2.5	2.4	2.3	2.3	2.3	2.4	2.5	2.5	2.3	2.4
	Total Oil	**15.4**	**15.4**	**15.1**	**16.6**	**16.8**	**16.7**	**16.8**	**17.0**	**16.5**	**16.0**	**16.1**	**15.6**	**15.3**	**16.7**	**16.8**	**15.9**	**16.2**
World																		
	LPG	10.8	10.7	10.0	9.8	9.9	10.1	10.3	10.3	10.1	10.1	10.7	10.9	10.5	9.9	10.2	10.6	10.3
	Naphtha	6.8	6.6	6.7	6.6	6.4	6.3	6.4	6.4	6.5	6.5	6.7	6.9	6.7	6.4	6.4	6.7	6.6
	Gasoline	25.0	26.1	26.3	26.5	27.2	27.5	27.0	27.7	26.8	26.7	26.5	26.4	25.8	27.1	27.2	26.5	26.6
	Jet and Kerosene	7.2	7.3	7.0	7.1	7.3	7.6	7.7	7.8	7.7	7.7	7.4	7.7	7.2	7.3	7.7	7.6	7.5
	Diesel/Gasoil	27.4	29.4	29.5	28.6	29.4	29.5	28.7	29.1	29.0	29.5	29.6	28.5	28.7	29.2	28.9	29.2	29.0
	Fuel Oil	6.3	6.6	6.4	6.4	6.4	6.5	6.6	6.6	6.6	6.3	6.1	6.5	6.4	6.4	6.6	6.3	6.4
	Other Products	14.3	14.7	14.9	14.9	15.4	15.6	15.5	15.6	15.5	14.7	14.8	14.7	14.6	15.3	15.5	14.7	15.1
	Total Oil	**97.8**	**101.4**	**100.7**	**100.0**	**102.0**	**103.0**	**102.1**	**103.5**	**102.3**	**101.5**	**102.0**	**101.5**	**99.9**	**101.6**	**102.6**	**101.7**	**101.5**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 31: Regional oil demand by product, 2024F

mbd		2024F												2024F				2024F
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
United States																		
	LPG	1.5	1.3	1.1	0.8	0.8	0.8	0.8	0.8	1.0	1.1	1.0	1.5	1.3	0.8	0.9	1.2	1.0
	Naphtha	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
	Gasoline	8.2	8.6	8.9	8.8	9.4	9.1	9.3	9.3	9.0	9.1	8.8	8.8	8.6	9.1	9.2	8.9	8.9
	Jet and Kerosene	1.5	1.6	1.7	1.7	1.8	1.7	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.7	1.8	1.7	1.7
	Diesel/Gasoil	3.9	3.9	3.7	3.8	3.8	3.6	3.7	3.9	3.7	4.1	3.7	3.7	3.8	3.7	3.8	3.8	3.8
	Fuel Oil	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Other Products	4.0	4.2	4.1	4.4	4.6	4.6	4.5	4.6	4.6	4.7	4.6	4.3	4.1	4.5	4.5	4.5	4.4
	Total Oil	**19.6**	**19.9**	**19.9**	**20.0**	**20.8**	**20.2**	**20.5**	**20.7**	**20.3**	**21.0**	**20.2**	**20.4**	**19.8**	**20.4**	**20.5**	**20.6**	**20.3**
Europe																		
	LPG	1.0	1.1	1.1	1.0	1.0	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Naphtha	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.8	0.8	0.9
	Gasoline	2.2	2.3	2.2	2.4	2.4	2.5	2.6	2.6	2.5	2.4	2.4	2.3	2.2	2.4	2.5	2.4	2.4
	Jet and Kerosene	1.5	1.5	1.5	1.7	1.7	1.8	1.9	1.9	1.9	1.9	1.6	1.6	1.5	1.7	1.9	1.7	1.7
	Diesel/Gasoil	5.9	6.1	5.9	6.2	6.1	6.3	6.4	6.4	6.4	6.6	6.4	6.1	5.9	6.2	6.4	6.4	6.2
	Fuel Oil	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8
	Other Products	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.5	1.4	1.4	1.3	1.3	1.4	1.4	1.3	1.3
	Total Oil	**13.4**	**13.9**	**13.7**	**14.4**	**14.3**	**14.7**	**14.9**	**14.7**	**14.8**	**14.9**	**14.3**	**14.0**	**13.6**	**14.5**	**14.8**	**14.4**	**14.3**
China																		
	LPG	2.3	2.6	2.4	2.4	2.6	2.6	2.8	2.7	2.7	2.7	2.9	2.9	2.4	2.5	2.7	2.8	2.6
	Naphtha	2.0	1.9	1.9	2.1	2.2	2.1	2.2	2.2	2.1	2.2	2.0	2.0	1.9	2.1	2.2	2.1	2.1
	Gasoline	3.8	3.8	3.6	4.1	4.2	4.1	4.3	4.3	4.1	4.1	4.0	4.0	3.8	4.2	4.2	4.0	4.0
	Jet and Kerosene	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	Diesel/Gasoil	3.8	3.7	3.8	4.1	4.0	4.0	3.8	3.8	4.0	4.0	4.1	4.1	3.8	4.0	3.9	4.0	3.9
	Fuel Oil	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.5	0.6	0.5	0.5	0.7	0.6	0.5	0.5	0.6
	Other Products	2.5	2.5	2.5	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.5	2.5	2.5	2.4	2.5
	Total Oil	**15.9**	**16.1**	**15.7**	**16.8**	**16.9**	**16.9**	**16.8**	**16.7**	**16.9**	**17.0**	**16.8**	**16.8**	**15.9**	**16.9**	**16.8**	**16.8**	**16.6**
World																		
	LPG	10.9	11.1	10.5	10.0	10.2	10.2	10.5	10.3	10.3	10.4	10.8	11.4	10.8	10.1	10.4	10.8	10.5
	Naphtha	6.9	7.0	6.7	7.0	6.8	6.8	6.7	6.9	6.7	6.9	6.8	6.8	6.9	6.8	6.8	6.8	6.8
	Gasoline	25.3	25.9	26.0	26.7	27.5	27.3	27.8	28.1	27.3	27.2	26.8	27.0	25.7	27.1	27.7	27.0	26.9
	Jet and Kerosene	7.8	7.7	7.7	7.8	7.7	7.9	8.0	8.0	8.0	8.0	7.9	8.2	7.8	7.8	8.0	8.0	7.9
	Diesel/Gasoil	27.7	28.4	27.9	29.1	28.9	29.0	28.8	28.9	28.8	30.0	29.3	28.9	28.0	29.0	28.8	29.4	28.8
	Fuel Oil	6.5	6.3	6.3	6.4	6.3	6.7	6.6	6.2	6.4	6.3	6.4	6.4	6.4	6.5	6.4	6.4	6.4
	Other Products	14.7	15.3	15.2	15.3	15.8	15.7	15.7	15.3	15.7	15.8	15.6	14.8	15.1	15.6	15.6	15.4	15.4
	Total Oil	**99.8**	**101.7**	**100.3**	**102.2**	**103.2**	**103.4**	**104.1**	**103.8**	**103.2**	**104.5**	**103.4**	**103.6**	**100.6**	**102.9**	**103.7**	**103.8**	**102.8**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 32: Regional oil demand by product, 2025F

mbd		2025F												2025F				2025F
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
United States																		
	LPG	1.7	1.3	1.1	0.9	0.9	0.8	0.7	0.8	1.0	1.1	1.1	1.4	1.4	0.9	0.8	1.2	1.1
	Naphtha	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
	Gasoline	8.2	8.5	8.8	8.7	9.3	9.0	9.2	9.2	8.9	9.0	8.7	8.7	8.5	9.0	9.1	8.8	8.8
	Jet and Kerosene	1.6	1.6	1.7	1.8	1.8	1.8	1.8	1.9	1.7	1.7	1.7	1.8	1.6	1.8	1.8	1.7	1.7
	Diesel/Gasoil	3.9	3.9	3.7	3.8	3.8	3.6	3.7	3.8	3.7	4.0	3.7	3.7	3.8	3.7	3.7	3.8	3.8
	Fuel Oil	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Other Products	4.3	4.4	4.3	4.5	4.7	4.6	4.5	4.6	4.7	4.8	4.7	4.6	4.3	4.6	4.6	4.7	4.6
	Total Oil	**20.0**	**20.2**	**20.0**	**20.1**	**20.8**	**20.2**	**20.3**	**20.7**	**20.4**	**21.0**	**20.4**	**20.7**	**20.0**	**20.4**	**20.5**	**20.7**	**20.4**
Europe																		
	LPG	1.0	1.1	1.0	1.1	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Naphtha	0.9	1.0	0.9	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9
	Gasoline	2.2	2.4	2.3	2.5	2.5	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.3	2.5	2.6	2.4	2.5
	Jet and Kerosene	1.6	1.6	1.7	1.7	1.8	1.9	2.0	1.9	1.8	1.8	1.6	1.6	1.6	1.8	1.9	1.7	1.7
	Diesel/Gasoil	6.2	6.3	6.0	6.0	6.0	6.1	6.2	6.1	6.2	6.4	6.2	6.0	6.2	6.0	6.2	6.2	6.1
	Fuel Oil	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8
	Other Products	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.3	1.3
	Total Oil	**13.9**	**14.3**	**14.0**	**14.3**	**14.3**	**14.6**	**14.9**	**14.5**	**14.5**	**14.7**	**14.2**	**13.9**	**14.1**	**14.4**	**14.6**	**14.2**	**14.3**
China																		
	LPG	2.4	2.8	2.5	2.4	2.6	3.0	3.0	2.9	2.9	2.7	3.2	2.9	2.5	2.7	2.9	2.9	2.8
	Naphtha	2.1	2.3	2.1	2.1	2.4	2.3	2.4	2.3	2.3	2.6	2.6	2.7	2.2	2.2	2.4	2.6	2.3
	Gasoline	4.0	3.6	3.7	3.8	4.0	4.0	3.9	4.0	4.1	4.0	3.9	3.8	3.8	3.9	4.0	3.9	3.9
	Jet and Kerosene	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.9	1.0	0.9	0.9
	Diesel/Gasoil	3.8	3.5	3.5	3.8	3.8	3.8	3.7	3.7	3.8	3.8	3.9	3.8	3.6	3.8	3.7	3.8	3.7
	Fuel Oil	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.5	0.6	0.5	0.5	0.7	0.6	0.5	0.5	0.6
	Other Products	2.6	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.7	2.6	2.6	2.5	2.6
	Total Oil	**16.4**	**16.4**	**16.0**	**16.3**	**16.9**	**17.3**	**17.1**	**16.9**	**17.1**	**17.2**	**17.5**	**17.1**	**16.3**	**16.8**	**17.0**	**17.3**	**16.9**
World																		
	LPG	11.1	11.2	10.6	10.3	10.5	10.7	10.7	10.6	10.6	10.7	11.3	11.5	11.0	10.5	10.6	11.2	10.8
	Naphtha	7.0	7.4	7.0	7.0	7.2	7.0	7.2	7.2	7.0	7.4	7.5	7.6	7.1	7.1	7.1	7.5	7.2
	Gasoline	25.6	25.9	26.3	26.5	27.4	27.3	27.5	28.0	27.4	27.2	26.8	27.0	25.9	27.0	27.6	27.0	26.9
	Jet and Kerosene	7.9	8.0	8.0	8.1	8.1	8.4	8.5	8.5	8.1	8.1	7.9	8.4	7.9	8.2	8.4	8.2	8.2
	Diesel/Gasoil	28.3	28.7	28.0	28.6	28.8	28.7	28.8	28.7	28.6	29.6	29.1	28.7	28.3	28.7	28.7	29.2	28.7
	Fuel Oil	6.4	6.4	6.5	6.6	6.4	6.6	6.5	6.3	6.5	6.4	6.1	6.4	6.4	6.5	6.4	6.3	6.4
	Other Products	15.3	15.6	15.5	15.6	16.0	15.9	15.9	15.6	15.9	15.9	15.8	15.4	15.5	15.8	15.8	15.7	15.7
	Total Oil	**101.6**	**103.1**	**101.8**	**102.7**	**104.2**	**104.6**	**105.0**	**104.8**	**104.1**	**105.4**	**104.7**	**105.0**	**102.1**	**103.8**	**104.7**	**105.0**	**103.9**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 33: Regional oil demand by product, 2026F

mbd		2026F												2026F				2026F
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
United States																		
	LPG	1.6	1.3	1.1	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.3	1.3	0.9	1.0	1.2	1.1
	Naphtha	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
	Gasoline	8.1	8.4	8.7	8.6	9.2	8.9	9.1	9.0	8.8	8.9	8.6	8.6	8.4	8.9	9.0	8.7	8.7
	Jet and Kerosene	1.5	1.6	1.7	1.8	1.8	1.9	2.0	2.0	1.9	1.9	1.8	1.8	1.6	1.8	2.0	1.8	1.8
	Diesel/Gasoil	3.9	3.9	3.7	3.7	3.7	3.5	3.6	3.8	3.6	4.1	3.7	3.7	3.8	3.6	3.7	3.8	3.7
	Fuel Oil	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Other Products	4.3	4.4	4.4	4.7	4.9	4.8	4.7	4.8	4.9	4.9	4.8	4.6	4.4	4.8	4.8	4.8	4.7
	Total Oil	**19.9**	**20.2**	**20.0**	**20.1**	**20.9**	**20.5**	**20.7**	**21.0**	**20.6**	**21.2**	**20.5**	**20.6**	**20.0**	**20.5**	**20.8**	**20.8**	**20.5**
Europe																		
	LPG	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0
	Naphtha	0.9	1.0	0.9	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9
	Gasoline	2.4	2.5	2.4	2.5	2.4	2.4	2.6	2.5	2.6	2.6	2.6	2.6	2.4	2.5	2.6	2.6	2.5
	Jet and Kerosene	1.6	1.7	1.7	1.8	1.8	1.9	2.0	2.0	1.9	1.9	1.8	1.8	1.7	1.8	2.0	1.8	1.8
	Diesel/Gasoil	5.7	6.2	5.9	5.9	6.0	6.0	6.2	6.0	6.1	6.3	6.1	5.9	5.9	6.0	6.1	6.1	6.0
	Fuel Oil	0.8	0.7	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8
	Other Products	1.2	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.4	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.3
	Total Oil	**13.5**	**14.4**	**14.1**	**14.3**	**14.2**	**14.4**	**14.8**	**14.4**	**14.6**	**14.7**	**14.4**	**14.2**	**14.0**	**14.3**	**14.6**	**14.4**	**14.3**
China																		
	LPG	2.5	2.9	2.6	2.6	2.8	3.2	3.1	3.0	3.0	2.8	3.4	3.1	2.7	2.9	3.1	3.1	2.9
	Naphtha	2.3	2.5	2.3	2.2	2.6	2.5	2.7	2.6	2.5	2.9	2.8	2.9	2.4	2.4	2.6	2.9	2.6
	Gasoline	3.9	3.6	3.6	3.8	3.9	3.9	3.8	3.9	4.0	4.0	3.8	3.7	3.7	3.9	3.9	3.8	3.8
	Jet and Kerosene	0.8	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.0	1.0	1.0	1.0	0.9	1.0	1.1	1.0	1.0
	Diesel/Gasoil	3.7	3.4	3.4	3.7	3.7	3.7	3.6	3.6	3.7	3.7	3.8	3.7	3.5	3.7	3.6	3.7	3.7
	Fuel Oil	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.4	0.5	0.6	0.5	0.5	0.7	0.6	0.4	0.5	0.6
	Other Products	2.6	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.6	2.6	2.6	2.5	2.6
	Total Oil	**16.6**	**16.6**	**16.2**	**16.5**	**17.1**	**17.5**	**17.3**	**17.2**	**17.3**	**17.5**	**17.8**	**17.4**	**16.5**	**17.0**	**17.3**	**17.6**	**17.1**
World																		
	LPG	11.3	11.5	10.9	10.5	10.7	11.1	11.1	11.0	10.9	10.9	11.6	11.7	11.2	10.8	11.0	11.4	11.1
	Naphtha	7.4	7.7	7.2	7.3	7.4	7.3	7.4	7.5	7.3	7.7	7.8	7.9	7.5	7.3	7.4	7.8	7.5
	Gasoline	25.8	26.0	26.4	26.5	27.3	27.1	27.4	27.8	27.4	27.3	26.9	27.2	26.0	26.9	27.5	27.1	26.9
	Jet and Kerosene	7.9	8.1	8.2	8.4	8.4	8.9	9.1	9.2	8.6	8.7	8.5	8.8	8.1	8.6	9.0	8.7	8.6
	Diesel/Gasoil	28.0	28.8	28.2	28.6	28.8	28.8	28.8	28.7	28.6	29.7	29.3	28.8	28.3	28.7	28.7	29.3	28.8
	Fuel Oil	6.5	6.4	6.5	6.6	6.4	6.6	6.5	6.3	6.5	6.4	6.1	6.4	6.5	6.6	6.4	6.3	6.5
	Other Products	15.5	15.9	15.7	15.8	16.2	16.2	16.2	15.9	16.2	16.1	16.0	15.6	15.7	16.1	16.1	15.9	15.9
	Total Oil	**102.4**	**104.5**	**103.0**	**103.7**	**105.3**	**105.9**	**106.6**	**106.3**	**105.6**	**106.8**	**106.3**	**106.4**	**103.2**	**105.0**	**106.1**	**106.5**	**105.2**

Source: Wood Mackenzie, IEA, FlightAware, EIA, MariTrace, Google, TomTom, US Department of Transportation, Various company reports and government statistics, J.P. Morgan

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Table 34: Global Refinery Runs, 2023F

mbd	2023F												2023F				2023F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**17.8**	**17.7**	**18.2**	**18.4**	**18.7**	**19.2**	**19.3**	**19.3**	**18.9**	**17.4**	**18.4**	**19.3**	**17.9**	**18.8**	**19.1**	**18.4**	**18.5**
United States	15.1	15.1	15.5	15.8	16.2	16.4	16.6	16.7	16.2	15.4	15.9	16.5	15.2	16.2	16.5	15.9	16.0
Canada	1.8	1.7	1.7	1.6	1.7	1.8	1.9	1.8	1.7	1.5	1.7	1.9	1.8	1.7	1.8	1.7	1.7
Mexico	0.9	0.8	1.0	1.0	0.9	1.0	0.8	0.7	0.9	0.5	0.8	0.9	0.9	0.9	0.8	0.7	0.8
Latin America	**3.9**	**3.9**	**3.9**	**4.0**	**4.0**	**3.8**	**3.9**	**3.9**	**4.0**	**4.0**	**4.0**	**3.8**	**3.9**	**3.9**	**4.0**	**4.0**	**3.9**
Brazil	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.1	2.0	2.0
Other Latam	2.0	2.0	2.0	2.1	2.0	1.7	1.9	1.9	2.0	1.9	2.0	1.8	2.0	1.9	1.9	1.9	1.9
Europe	**12.3**	**12.0**	**11.4**	**11.9**	**11.6**	**11.7**	**12.2**	**12.7**	**12.4**	**11.8**	**11.9**	**12.4**	**11.9**	**11.7**	**12.4**	**12.0**	**12.0**
Eurasia	**6.6**	**6.6**	**6.4**	**6.3**	**6.2**	**6.6**	**6.7**	**6.7**	**6.4**	**6.3**	**6.7**	**6.8**	**6.5**	**6.3**	**6.6**	**6.6**	**6.5**
Russia	5.6	5.6	5.4	5.3	5.3	5.6	5.7	5.7	5.4	5.3	5.7	5.7	**5.6**	**5.4**	**5.6**	**5.6**	5.5
Middle East	**7.8**	**7.7**	**8.3**	**8.1**	**8.1**	**8.2**	**8.2**	**8.2**	**8.7**	**7.7**	**7.6**	**8.0**	**7.9**	**8.1**	**8.3**	**7.8**	**8.0**
Africa	**2.1**	**2.1**	**2.1**	**2.0**	**1.9**	**2.0**	**2.0**	**2.0**	**2.0**	**1.9**	**1.9**	**2.0**	**2.1**	**2.0**	**2.0**	**1.9**	**2.0**
Asia Pacific	**31.2**	**32.1**	**31.4**	**31.3**	**31.0**	**30.3**	**30.8**	**31.7**	**31.5**	**31.0**	**30.7**	**30.9**	**31.5**	**30.9**	**31.4**	**30.9**	**31.2**
Australia	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
China	14.6	15.3	15.1	15.2	15.1	15.2	15.4	15.8	16.0	15.6	14.8	14.7	15.0	15.2	15.7	15.0	15.2
India	5.4	5.5	5.5	5.3	5.4	5.3	5.2	5.2	5.0	4.9	5.3	5.4	5.5	5.3	5.1	5.2	5.3
Japan	2.9	2.8	2.6	2.6	2.3	2.2	2.4	2.7	2.5	2.4	2.5	2.7	2.8	2.4	2.5	2.5	2.6
Korea	2.8	2.9	2.8	2.9	3.0	2.4	2.7	2.6	2.7	2.8	2.8	2.9	2.8	2.7	2.6	2.8	2.8
Taiwan	0.8	0.9	0.8	0.8	0.9	0.8	0.8	0.8	0.9	0.8	0.7	0.7	0.8	0.8	0.8	0.7	0.8
Thailand	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.0	1.1	1.1
Other APAC	3.4	3.3	3.3	3.2	3.1	3.1	3.0	3.3	3.2	3.2	3.3	3.2	3.3	3.1	3.2	3.2	3.2
World	**81.7**	**82.1**	**81.6**	**82.0**	**81.6**	**81.7**	**83.1**	**84.5**	**83.9**	**80.1**	**81.1**	**83.1**	**81.8**	**81.7**	**83.8**	**81.5**	**82.2**

Source: EIA, IEA, WoodMackenzie, IIR, PPAC, ANP, NBS, METI, Ministry of Economic Affairs Taiwan, KNOC, Thailand Ministry of Energy, Australian Government, J.P. Morgan Commodities Research.
Note: Any long-form nomenclature for references to China and Taiwan within this research material is Mainland China and Taiwan (China).

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Table 35: Global Refinery Runs, 2024F

mbd	2024F												2024F				2024F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**18.2**	**17.7**	**18.7**	**18.3**	**19.3**	**19.5**	**19.6**	**19.8**	**18.9**	**18.7**	**19.2**	**19.5**	**18.2**	**19.1**	**19.4**	**19.1**	**19.0**
United States	15.4	14.9	15.9	15.9	16.7	16.8	16.6	16.8	16.2	16.1	16.6	16.8	15.4	16.5	16.5	16.5	16.2
Canada	1.8	1.8	1.8	1.4	1.6	1.8	1.9	1.9	1.7	1.8	1.9	1.9	1.8	1.6	1.8	1.9	1.8
Mexico	1.0	1.0	1.1	1.0	0.9	0.9	1.1	1.1	1.0	0.8	0.8	0.9	1.0	1.0	1.1	0.8	1.0
Latin America	**3.9**	**3.9**	**3.9**	**3.9**	**3.8**	**3.9**	**4.1**	**4.1**	**4.0**	**4.0**	**3.9**	**4.0**	**3.9**	**3.9**	**4.1**	**4.0**	**3.9**
Brazil	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.0
Other Latam	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.0	2.0	1.9	2.0	1.9	1.9	2.0	1.8	2.0
Europe	**12.2**	**12.1**	**11.7**	**11.5**	**11.4**	**12.1**	**12.4**	**12.2**	**11.6**	**11.5**	**12.2**	**12.1**	**12.0**	**11.7**	**12.1**	**11.9**	**11.9**
Eurasia	**6.6**	**6.4**	**6.3**	**6.1**	**6.4**	**6.6**	**6.5**	**6.6**	**6.3**	**6.1**	**6.4**	**6.6**	**6.4**	**6.4**	**6.5**	**6.4**	**6.4**
Russia	5.5	5.3	5.2	5.1	5.3	5.5	5.4	5.5	5.3	5.0	5.4	5.5	**5.3**	**5.3**	**5.4**	**5.3**	5.3
Middle East	**8.0**	**8.2**	**8.4**	**8.6**	**9.0**	**8.5**	**8.5**	**8.8**	**8.7**	**8.5**	**8.2**	**8.3**	**8.2**	**8.7**	**8.7**	**8.3**	**8.5**
Africa	**2.0**	**2.0**	**2.1**	**2.1**	**2.2**	**2.3**	**2.2**	**2.2**	**2.2**	**2.3**	**2.3**	**2.5**	**2.0**	**2.2**	**2.2**	**2.4**	**2.2**
Asia Pacific	**30.9**	**30.9**	**31.2**	**30.8**	**30.8**	**30.1**	**30.1**	**30.6**	**30.9**	**30.4**	**30.9**	**31.2**	**31.0**	**30.6**	**30.5**	**30.8**	**30.7**
Australia	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
China	15.0	15.0	15.3	15.1	14.9	14.3	14.5	14.7	14.9	14.7	14.6	14.3	15.1	14.8	14.7	14.5	14.8
India	5.4	5.3	5.3	5.3	5.5	5.5	5.4	5.1	5.2	5.1	5.3	5.7	5.3	5.4	5.2	5.4	5.3
Japan	2.6	2.5	2.5	2.5	2.3	2.0	2.0	2.2	2.4	2.3	2.4	2.6	2.5	2.3	2.2	2.5	2.4
Korea	2.9	2.9	2.8	2.9	2.9	2.7	2.7	2.9	2.8	2.7	2.8	2.7	2.8	2.8	2.8	2.8	2.8
Taiwan	0.8	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.8
Thailand	1.0	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.1
Other APAC	3.0	3.0	3.1	2.9	3.1	3.4	3.4	3.6	3.6	3.6	3.6	3.7	3.0	3.1	3.5	3.6	3.3
World	**81.8**	**81.2**	**82.4**	**81.3**	**82.8**	**83.2**	**83.4**	**84.2**	**82.7**	**81.5**	**83.2**	**84.3**	**81.8**	**82.4**	**83.4**	**83.0**	**82.7**

Source: EIA, IEA, WoodMackenzie, IIR, PPAC, ANP, NBS, METI, Ministry of Economic Affairs Taiwan, KNOC, Thailand Ministry of Energy, Australian Government, J.P. Morgan Commodities Research.
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Table 36: Global Refinery Runs, 2025F

mbd	2025F												2025F				2025F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**18.7**	**18.3**	**18.6**	**18.3**	**19.0**	**19.3**	**19.2**	**19.2**	**18.9**	**18.5**	**19.2**	**19.3**	**18.6**	**18.9**	**19.1**	**19.0**	**18.9**
United States	15.9	15.5	15.7	15.7	16.4	16.6	16.4	16.4	16.1	15.8	16.3	16.4	15.7	16.2	16.3	16.2	16.1
Canada	1.9	1.8	1.9	1.6	1.6	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.9	1.7	1.8	1.8	1.8
Mexico	0.9	1.0	1.1	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Latin America	**3.9**	**3.8**	**3.9**	**3.7**	**3.8**	**3.9**	**4.0**	**3.7**	**3.8**	**3.9**	**3.8**	**4.0**	**3.9**	**3.8**	**3.8**	**3.9**	**3.9**
Brazil	2.0	1.9	2.1	1.9	1.9	2.0	2.1	1.8	1.9	2.0	1.9	2.1	2.0	1.9	1.9	2.0	2.0
Other Latam	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9
Europe	**12.1**	**11.6**	**11.4**	**11.8**	**11.7**	**11.8**	**12.2**	**12.4**	**12.1**	**11.9**	**12.0**	**12.2**	**11.7**	**11.8**	**12.3**	**12.0**	**11.9**
Eurasia	**6.5**	**6.3**	**6.2**	**6.1**	**6.1**	**6.4**	**6.6**	**6.6**	**6.2**	**6.1**	**6.5**	**6.5**	**6.3**	**6.2**	**6.5**	**6.4**	**6.4**
Russia	5.4	5.2	5.2	5.1	5.1	5.4	5.5	5.5	5.2	5.1	5.4	5.4	**5.3**	**5.2**	**5.4**	**5.3**	5.3
Middle East	**8.6**	**8.8**	**8.6**	**8.4**	**8.8**	**9.0**	**8.7**	**8.6**	**8.8**	**8.3**	**8.7**	**8.8**	**8.7**	**8.7**	**8.7**	**8.6**	**8.7**
Africa	**2.5**	**2.5**	**2.5**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.7**	**2.5**	**2.6**	**2.6**	**2.6**	**2.6**
Asia Pacific	**31.2**	**31.4**	**30.5**	**30.3**	**30.7**	**30.8**	**30.9**	**30.7**	**31.0**	**31.1**	**31.8**	**32.2**	**31.0**	**30.6**	**30.9**	**31.7**	**31.0**
Australia	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2
China	14.6	14.9	14.5	14.6	14.8	15.1	15.2	15.0	15.3	15.3	15.3	15.3	14.7	14.8	15.1	15.3	15.0
India	5.7	5.5	5.5	5.4	5.4	5.3	5.5	5.2	5.2	5.4	5.6	5.7	5.6	5.4	5.3	5.6	5.5
Japan	2.5	2.4	2.3	2.3	2.1	1.9	2.1	2.5	2.3	2.2	2.4	2.6	2.4	2.1	2.3	2.4	2.3
Korea	2.7	2.9	2.8	2.8	2.9	2.6	2.8	2.9	2.8	2.8	2.9	2.9	2.8	2.8	2.8	2.9	2.8
Taiwan	0.9	0.8	0.7	0.7	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.8
Thailand	1.1	1.1	1.2	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.2	1.1	1.1	1.1
Other APAC	3.5	3.4	3.2	3.0	3.3	3.6	3.1	3.0	3.3	3.4	3.5	3.4	3.3	3.3	3.1	3.4	3.3
World	**83.5**	**82.7**	**81.7**	**81.2**	**82.7**	**83.8**	**84.2**	**83.8**	**83.6**	**82.5**	**84.6**	**85.7**	**82.7**	**82.6**	**83.9**	**84.2**	**83.3**

Source: EIA, IEA, WoodMackenzie, IIR, PPAC, ANP, NBS, METI, Ministry of Economic Affairs Taiwan, KNOC, Thailand Ministry of Energy, Australian Government, J.P. Morgan Commodities Research.
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Table 37: Global Refinery Runs, 2026F

mbd	2026F												2026F				2026F
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	1Q	2Q	3Q	4Q	
North America	**18.5**	**17.9**	**18.5**	**18.5**	**18.9**	**19.3**	**19.3**	**19.3**	**18.8**	**18.1**	**18.8**	**18.9**	**18.3**	**18.9**	**19.2**	**18.6**	**18.7**
United States	15.5	14.8	15.4	15.6	16.0	16.3	16.2	16.3	15.8	15.4	15.9	16.0	15.2	16.0	16.1	15.8	15.8
Canada	1.8	1.8	1.7	1.6	1.6	1.8	1.8	1.8	1.7	1.7	1.8	1.8	1.8	1.7	1.8	1.8	1.7
Mexico	1.2	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.3	1.1	1.1	1.1	1.3	1.2	1.3	1.1	1.2
Latin America	**3.9**	**3.9**	**3.9**	**3.8**	**3.8**	**3.9**	**4.0**	**4.0**	**4.0**	**4.0**	**3.9**	**4.0**	**3.9**	**3.9**	**4.0**	**4.0**	**3.9**
Brazil	2.0	2.0	2.0	1.9	2.0	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.0
Other Latam	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Europe	**11.7**	**11.6**	**11.4**	**11.8**	**11.7**	**11.8**	**12.2**	**12.4**	**12.1**	**11.9**	**12.0**	**12.1**	**11.5**	**11.8**	**12.2**	**12.0**	**11.9**
Eurasia	**6.5**	**6.5**	**6.3**	**6.1**	**6.1**	**6.5**	**6.6**	**6.6**	**6.3**	**6.2**	**6.6**	**6.6**	**6.5**	**6.3**	**6.5**	**6.5**	**6.4**
Russia	5.4	5.4	5.2	5.1	5.1	5.4	5.5	5.5	5.2	5.1	5.5	5.4	**5.3**	**5.2**	**5.4**	**5.3**	5.3
Middle East	**8.9**	**8.7**	**8.8**	**8.7**	**8.8**	**8.9**	**8.8**	**8.9**	**9.0**	**8.4**	**8.4**	**8.5**	**8.8**	**8.8**	**8.9**	**8.5**	**8.7**
Africa	**2.9**	**2.7**	**2.7**	**2.7**	**2.7**	**2.6**	**2.6**	**2.8**	**2.6**	**2.7**	**2.6**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**	**2.7**
Asia Pacific	**31.2**	**31.6**	**30.8**	**30.7**	**30.9**	**30.9**	**31.4**	**31.5**	**31.6**	**31.4**	**31.9**	**32.6**	**31.2**	**30.8**	**31.5**	**32.0**	**31.4**
Australia	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3
China	14.7	15.1	14.7	14.7	14.9	15.2	15.3	15.1	15.4	15.4	15.4	15.5	14.8	14.9	15.3	15.4	15.1
India	5.7	5.7	5.7	5.6	5.6	5.5	5.7	5.5	5.5	5.6	5.8	6.0	5.7	5.6	5.5	5.8	5.7
Japan	2.4	2.3	2.2	2.2	2.0	1.9	2.0	2.4	2.2	2.1	2.3	2.5	2.3	2.0	2.2	2.3	2.2
Korea	2.9	2.9	2.8	2.9	2.9	2.7	2.9	2.9	2.8	2.8	2.9	3.0	2.9	2.8	2.9	2.9	2.9
Taiwan	0.8	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.8
Thailand	1.2	1.1	1.2	1.2	1.1	1.2	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1
Other APAC	3.2	3.3	3.2	3.1	3.2	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.2	3.2	3.4	3.4	3.3
World	**83.5**	**82.9**	**82.3**	**82.3**	**82.9**	**83.9**	**85.0**	**85.6**	**84.3**	**82.6**	**84.3**	**85.4**	**82.9**	**83.0**	**85.0**	**84.1**	**83.8**

Source: EIA, IEA, WoodMackenzie, IIR, PPAC, ANP, NBS, METI, Ministry of Economic Affairs Taiwan, KNOC, Thailand Ministry of Energy, Australian Government, J.P. Morgan Commodities Research.
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