# Oil Market Review in Japan No. 46/2022

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# Overview

The key WTI (West Texas Intermediate) crude oil futures contract on NYMEX (New York Mercantile Exchange) in the February 16 - February 22 week moved within a range of \$73.95 per barrel and \$78.49/bbl.

On February 23, the key contract rebounded for the first time in seven trading days. Market players expected that Russia, which had already decided to reduce its crude oil production by 0.5 million bbl/d from March 2023 as one of the countermeasures against economic sanctions, would cut its crude production additionally. However, on this day the U.S. EIA (Energy Information Administration) announced a high level of the U.S. domestic inventory for crude oil the last weekend, which restricted oil price hikes. The April contract closed at \$75.39/bbl up \$1.44/bbl from the previous trading day.

On February 24, the key contract rose further continued from the previous trading day due to strengthened concerns about oil supply from Russia. Russia would reportedly reduce its crude oil export by 25%. However, the U.S. Consumer Price Index for January 2023 announced on this day increased by 5.4% compared to the same period of the previous year, accelerating for the first time in seven months. The oil price rise was restricted by a sense of a continuation of interest rate rise. The April contract closed at \$76.32/bbl up \$0.93/bbl from the previous trading day.

On February 27, the key contract turned down for the first time in three trading days due to strengthened concerns about a continuation and prolongation of interest rate rise by the U.S. FRB (Federal Reserve Board) on the background of the various robust U.S. economic indicators announced in the previous week. However, the key contract temporally rose during the morning trading-hours due to the announcement of shutdown of crude oil pipeline bound for Poland (transport capacity: about 0.3 million bbl/d) by Russia on February 25. The April contract closed at \$75.68/bbl down \$0.64/bbl from the previous trading day.

On February 28, the key contract rebounded by the expectations for China's economic recovery in the background of announcement of an increase in Russia's crude oil export to China in February 2023. However, the oil price rise was restricted by persistent concerns about a continuation and prolongation of an interest rate rise by the U.S. FRB. The April contract closed at \$77.05/bbl up \$1.37/bbl from the previous trading day.

On March 1, the key contract rose further to the strengthened expectations for China's economic recovery. The China's PMI (Purchasing Managers' Index) for February 2023 logged above the milestone of 50 for the Government and private sector. Furthermore, the U.S. domestic inventory increased for crude oil the last weekend from the previous week and decreased for gasoline. The market players recognized the tightening of oil demand and supply. The April contract closed at \$77.69/bbl up \$0.64/bbl from the previous trading day.

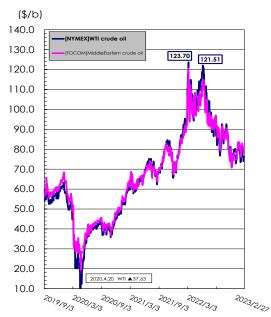
The Asian benchmark crude oil of Dubai for April delivery on the Tokyo market ranged from \$81.00/bbl to \$84.30/bbl on February 16 – February 22 week. It closed at \$81.40/bbl on February 24, at \$81.10/bbl on February 27, at \$81.10/bbl on February 28, at \$81.90/bbl on March 1.

On the foreign exchange market in the February 16- February 22 week, the dollar moved within a range of 134.15 yen and 134.90 yen. It changed hands at 134.19 yen in late trading on February 24, at 136.27 yen on February 27, at 136.33 yen on February 28, at 136.41 yen on March 1

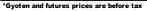
According to preliminary 10-day trade statistics released by the Ministry of Finance on February 24, the average crude oil import CIF price for Japan in the early February period stood at 70,712 yen/kl (kiloliter), down 864 yen/kl from the previous 10-day period. In dollars, the price was \$86.96/bbl, down \$0.16/bbl. The average exchange rate was 129.28 yen to the dollar.

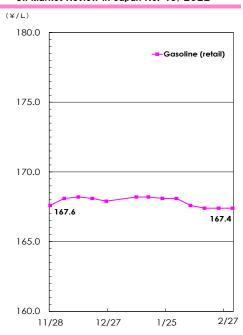
Japan's average retail price on February 27 leveled off from a week earlier for gasoline, decreased by 0.1 yen/l for diesel oil, and decreased by 2 yen/l for kerosene on an 18-liter tank basis. The gasoline price leveled off for the second straight week. Diesel oil price decreased for the first time in two weeks. Kerosene price decreased for the first time in two weeks. The national average gasoline price was 167.4yen/l and mitigation measures against the extreme change in fuel oil were invoked again. The subsidy for the next week was 17.0 yen/l.

Crude oil		This week		From a week earlier	From a year earlier	
	Crude oil runs	(1,000 kl)	2/19 ~ 2/25	3,096	<b>△</b> 36	
Supply/ Demand	Topper capacity utilization rate	(%)	"	83.5	<b>1</b> .0	
	Crude oil inventories	(1,000 ki)	2/25	10,589	-246	
	Middle Eastern crude oil (TOCOM)	(\$/bbl)	2/27	79.47	-1.35	<b>▼</b> -13.7
	WTI crude oil (NYMEX)	(\$/bbl)	2/27	75.68	-0.48	-20.0
Prices	Crude oil import CIF price	(\$/bbl)	Early Feb	86.96	-0.16	▲ 0.21
Prices	①Crude oil import CIF price	(yen/kl)	"	70,712	-864	<b>A</b> 8,052
	②Yen-dollar exchange rate	(yen/dollar)	"	129.28	1.34	-14.45
	TTS exchange rate	(yen/dollar)	2/27	137.27	-1.82	-20.72



(Unit: 1,000 kl, yen/l)						
Gasoline		This week		From a week earlier	From a year earlier	
	Production		2/19 ~ 2/25	969	<b>▼</b> -31	
	Imports		11	n.a.	n.a.	n.a.
Supply/ Demand	Shipments		11	842	<b>A</b> 79	
	Exports		11	141	<b>▼</b> -118	<b>▼</b> -
	Inventories		2/25	1,692	<b>▼</b> -13	
	Gyoten (spot) [4-district average lorry rack price]	(RIM)	2/21 ~ 2/27	71.8	<b>△</b> 0.2	<b>▼</b> -7.4
Prices	Futures [front-month contract/closing price] (TOCOM/ Tokyo Bay) (TOCOM/ Chubu)	2/21 ~ 2/27	73.0	0.0	-8.1	
		2/27	73.6	<b>▼</b> -1.1	-9.4	
	Retail prices [weekly trend]	(published by ANRE)	2/27	167.4	• 0.0	<b>▼</b> -5.4

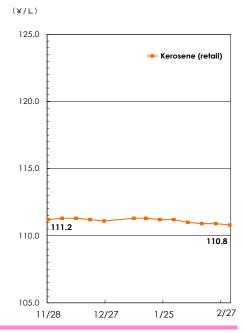




(Unit: 1,000 kl, yen/l)						
Diesel oil		This week		From a week earlier	From a year earlier	
	Production		2/19 ~ 2/25	817	<b>^</b> 74	
	Imports		11	n.a.	n.a.	n.a.
Supply/ Demand	Shipments		11	663	<b>A</b> 78	
	Exports		"	214	<b>1</b> 42	
	Inventories		2/25	1,239	<b>▼</b> -61	<b>—</b> –
	Gyoten (spot) [4-district average lorry rack price]	(RIM)	2/21 ~ 2/27	74.6	<b>△</b> 0.2	-6.6
Prices	(TOCOM/ Futures [front-month Tokyo Bay	(TOCOM/ Tokyo Bay)	2/21 ~ 2/27	76.1	<b>-</b> 0.5	<b>▼</b> -9.7
	contract/closing price]	(TOCOM/ Chubu)	2/27	-	1	_
	Retail prices [weekly trend]	(published by ANRE)	2/27	147.5	<b>▼</b> -0.1	<b>▼</b> -5.0

(¥/L)		
160.0		
	Diesel oil	(retail)
155.0		
150.0		
145.0	147.8	147.5
140.0 11	/28 12/27 1/25	2/27

(Unit: 1,000 kl, yen/l)						
Kerosene		This week		From a week earlier	From a year earlier	
	Production		2/19 ~ 2/25	319	<b>4</b> 5	<b>▼</b> -
	Imports		11	n.a.	n.a.	n.a.
Supply/ Demand	Shipments		11	411	<b>△</b> 39	<b>▼</b> -
	Exports		"	31	<b>1</b> 6	
	Inventories		2/25	1,339	-123	
	Gyoten (spot) [4-district average lorry rack price]	(RIM)	2/21 ~ 2/27	75.6	<b>△</b> 0.5	-5.5
Prices	(TOCOM/ Futures [front-month Tokyo Bay)	•	2/21 ~ 2/27	75.3	-0.2	-5.8
	contract/closing price]	(TOCOM/ Chubu)	2/27	76.3	-0.2	<b>▼</b> -3.7
	Retail prices [weekly trend]	(published by ANRE)	2/27	110.8	-0.1	<b>▼</b> -2.1



## Relevant Information

### Overseas crude oil prices

On the crude oil futures market for this week (from February 23 to March 1), WTI end price logged \$75.39/bbl on February 23 and rose almost steadily except for a decline on February 27 by the expectations for Russia's additional crude oil production cut and China's economic recovery. WTI end price logged \$77.69/bbl on March 1.

According to the U.S. EIA Weekly Report announced on February 23, one working day delay due to consecutive holidays, the U.S. domestic inventory as of February 17 increased by 7.6 million bbl for crude oil from the previous week, which was much more than the market expectations, increasing for the ninth straight week and hitting a record high since May 2021. In addition, according to the U.S. EIA Weekly Report announced on March 1, the U.S. domestic inventory as of February 24 increased by 1.2 million bbl for crude oil from the previous week, which was more than the market expectations but decreased by 0.9 million bbl for gasoline, which was against the market expectations. The market players recognized the tightening of oil demand and supply in the future.

According to the EIA, the average U.S. retail price of gasoline as of February 27 decreased by 3.7 cents per gallon from a week earlier to \$3.342/gal (121.0 yen/l), decreasing for the fourth straight week. The average U.S. retail price of diesel oil decreased by 8.2 cents per gallon from a week earlier to \$4.294/gal (155.5 yen/l), decreasing for the fourth straight week.

Baker Hughes reported on February 24 that the number of operating U.S. oil-drilling rigs decreased by seven units from a week earlier to 600 units, decreasing for the second straight week.

### 2 Petroleum products supply and demand in Japan (1) Shipments

According to a weekly report by the PAJ (Petroleum Association of Japan), inactive topper capacity in the February 19 - February 25 week in 2023 stood at 105,000 barrels per day, decreasing by 64,000 bpd from the previous week (total capacity remained at 3,331,000 bpd).

Crude oil throughput in the week increased by 36,000 kl from the previous week to 3,096,000 kl. From a year earlier, it increased by 71,000 kl. The topper capacity utilization rate stood at 83.5%, up 1.0 points from the previous week and up 4.9 points from a year earlier.

Production increased from the previous week for kerosene, diesel oil and Fuel Oil C and decreased for other petroleum products. Output was down 3.1% for gasoline, down 10.9% for jet fuel, up 16.2% for kerosene, up 10.0% for diesel oil, down 14.8% for Fuel Oil A, and up 34.4% for Fuel Oil C. Fuel Oil C imports in the week totaled 0 kl, down 6,000 kl from the previous week. Diesel oil exports aggregated 214,000 kl, up 142,000 kl from the previous week.

Shipments (excluding imports) in the week increased from the previous week for gasoline, kerosene, and diesel oil and decreased for other oil products. From a year earlier, shipments expanded for gasoline and diesel oil and declined for other oil products. Gasoline shipments increased by 10.4% from the previous week to 842,000 kl, increasing for the first time in two weeks. Shipments totaled 28,000 kl for jet fuel (down 144.8%

from the previous week), 411,000 kl for kerosene (up 10.6% from the previous week), 663,000 kl for diesel oil (up 13.4% from the previous week), 234,000 kl for Fuel Oil A (down 10.6% from the previous week), and 183,000 kl for Fuel Oil C (down 16.0% from the previous week).

(Unit: 1,000 kl)

	This week	Previous week	From a week earlier
	(2/19 ~ 2/25)	$(2/12 \sim 2/18)$	
Gasoline	842	763	<b>A</b> 79 (10%)
Jet fuel	-28	62	<b>-</b> 90 (-145%)
Kerosene (heating Oil)	411	372	<b>39</b> (10%)
Diesel oil	663	585	<b>A</b> 78 (13%)
Fuel oil A	234	262	-28 (-11%)
Fuel Oil C	183	218	-35 (-16%)
Total	2,305	2,262	43 (2%)

This week's shipments = (Previous weekend inventories + This week's production + This week's imports) - (This week's exports + This weekend inventories)

### 2 Petroleum products supply and demand in Japan (2) Inventories

Inventories as of February 25 increased for jet fuel and decreased for other petroleum products. From a year earlier, inventories decreased for diesel oil and Fuel Oil A and increased for other petroleum products.

Gasoline inventories totaled 1,692,000 kl, down 13,000 kl from a week earlier and up 30,000 kl from a year earlier.

Kerosene inventories totaled 1,339,000 kl, down 123,000 kl from a week earlier and up 10,000 kl from a year earlier.

Diesel oil inventories totaled 1,239,000 kl, down 61,000 kl from a week earlier and down 205,000 kl from a year earlier.

Fuel Oil A inventories totaled 681,000 kl, down 7,000 kl from a week earlier and down 5,000 kl from a year earlier.

Fuel Oil C inventories totaled 1,663,000 kl, down 49,000 kl from a week earlier and up 29,000 kl from a year earlier.

(Unit: 1,000 kl)

		(Unit: 1,000 kl)			
	This week	Previous week	From a week earlier		
	(2/25)	(2/18)			
Gasoline	1,692	1,705	<b>▼</b> -13 (-1%)		
Jet fuel	771	736	<b>△</b> 35 (5%)		
Kerosene (heating Oil)	1,339	1,462	-123 (-8%)		
Diesel oil	1,239	1,300	-61 (-5%)		
Fuel oil A	681	688	<b>▼</b> -7 (-1%)		
Fuel Oil C	1,663	1,712	-49 (-3%)		
Total	7,385	7,603	-218 (-2.9%)		

### Petroleum products wholesale prices in Japan (1) Wholesale price revision trend

During February 21 - February 27, crude oil cost in yen decreased by 2.0 yen/l from a week earlier with a decrease in crude oil price partly offset by the depreciation of the yen to the U.S. dollar and a decrease in adjustment fees of the Middle East crude oil for February 2023 shipment.

For the next week of March 2- March 8, Motouri companies decreased their real wholesale prices for gasoline, kerosene, and diesel oil by 0.3 yen/l from a week earlier, because a subsidy of 17.0 yen/l from this week was added to an increase in the cost of 16.7 yen/l including the previous week's subsidy of 18.7 yen/l.

#### Petroleum products wholesale prices in Japan (2) Spot (Gyoten) and futures price trend 3

Spot petroleum products prices in the February 21-February 27 week increased for all oil products in all trading except for the leveled off offshore kerosene and gasoline futures prices, and the decreased kerosene and diesel oil futures prices compared to the period of February 14-February 20.

The latest onshore cargo spot price (the average onshore rack price for four districts -- Chiba, Kawasaki, Chukyo, and Hanshin -- for February 21- February 27) increased by 0.2 yen/l from the previous week for gasoline and increased by 0.5 yen/l for kerosene and increased by 0.2 yen/l for diesel oil.

The average offshore barge spot price in Tokyo Bay increased by 0.2 yen/l for gasoline, leveled off for kerosene and increased by 0.1 yen/l for diesel oil on February 21- February 27 week from the previous week. The key average futures price leveled off for gasoline and decreased by 0.2 yen/l for kerosene and decreased by 0.5 yen/l for diesel oil from a week earlier.

	(RIM) [4-district			(Unit: yen/l)	
	average lorry rack price]	This week (2/21 ~ 2/27)	Previous week (2/14 ~ 2/20)	From a week earlier	
	Regular	71.8	71.6	▲ 0.2	
ot ices	Kerosene	75.6	75.1	▲ 0.5	
	Diesel oil	74.6	74.4	▲ 0.2	

	(TOCOM) [Front-month			(Unit: yen/l)
	contract/closing price] [Average]	This week (2/21 ~ 2/27)	Previous week (2/14 ~ 2/20)	From a week earlier
	Regular	73.0	73.0	→ 0.0
Futures Price	Kerosene	75.3	75.5	▼ -0.2
	Diesel oil	76.1	76.6	<b>▼</b> -0.5

ve prices are before tax

### Reference (February 21 - February 27 actual data)

			(=====
Products	Spot	Futures	Average
Gasoline	▲ 0.2	→ 0.0	▲ 0.1
Kerosene	▲ 0.5	▼ -0.2	▲ 0.2
Diesel oil	▲ 0.2	▼ -0.5	▼ -0.1
Fuel Oil A	▲ 0.3		

(Unit: ven/I)

(Source) Spot: RIM 4-district average lorry rack price (Chiba, Kawasaki, Chukyo, Hanshin)

Futures: TOCOM average offshore barge spot price for Keihin District

#### 4 Retail prices of petroleum products in Japan

The average retail service station price as of February 27 leveled off from a week earlier at 167.4 yen/l for gasoline, decreased by 0.1 yen/l to 147.5 yen/l for diesel oil and decreased by 2 yen to 1,995 yen for kerosene on an 18-liter tank basis (decreased by 0.1 yen/l to 110.8 yen/l) from a week earlier. The gasoline price leveled off for the second straight week. Diesel oil price decreased for the first two in three weeks. Kerosene price decreased for the first time in two weeks.

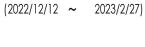
Gasoline prices increased in 17 prefectures, leveled off in 13 prefectures, and decreased in 17 prefectures. The lowest gasoline price among the prefectures was 160.1 yen/l in Tokushima. The second lowest was 160.4 yen/l in Miyagi. The highest price was 180.8 yen/l in Nagasaki. Kyoto logged the largest price hike of 0.7 yen/l from the previous week. The price leveled off in Kochi and 12 other prefectures. Hyogo logged the largest price fall of 0.9 yen/l.

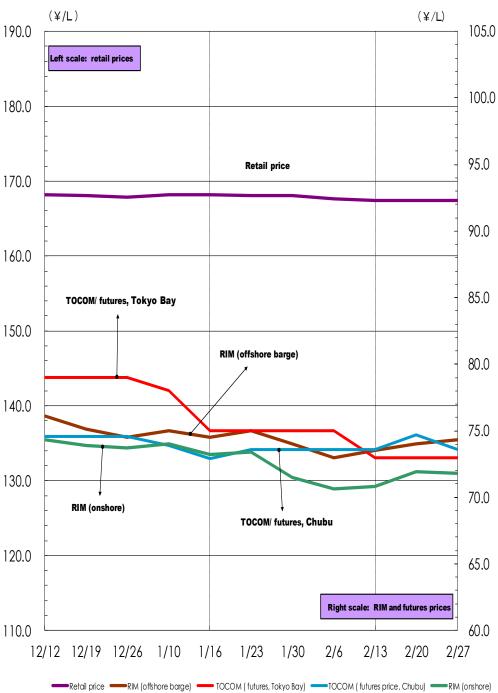
Retail gasoline price on the next price survey day March 6 is expected to level off or fluctuate slightly from a week earlier.

	(Published by				(U	nit: yen/l)
	ANRE)[Weekly trend]	This week (2/27)	Previous week (2/20)	From a week earlier	Latest	high
	Regular	167.4	167.4	● 0.0	08/8/4	185.1
tail ice	Kerosene	110.8	110.9	<b>-</b> 0.1	08/8/11	132.1
	Diesel oil	147.5	147.6	-0.1	08/8/4	167.4

Nationwide average cash retail price (including consumption tax) Since April 2007, 2,000 service stations have been covered. Latest highs are highest levels since October 2003.

# **Gasoline price trend**





(Note) ① Retail price includes consumption Tax, RIM, TOCOM prices are before tax.  $\ensuremath{{\mbox{\Large 2}}}$  RIM (onshore) is the aberage of four district .

### Announcement

This report is available at the center's website (<a href="https://eneken.ieej.or.jp/en/">https://eneken.ieej.or.jp/en/</a>). The next issue (No. 47 for 2022) will be announced on March 17.

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### Weekly Oil Market Review

In an interim report compiled in May 2004 by a petroleum products market trend study panel sponsored by the Petroleum Distribution and Retail Division of the Natural Resources and Fuel Department at the Agency for Natural Resources and Energy, the panel stated, "We hope that the Japanese oil industry will solidify its market and price-finding functions and that the oil industry as a mainstay industry in Japan will further enhance its rationality and vitality over a medium term as industry people deepen their understanding of the need for rational price recognition based on market and price-finding functions to be established in the oil industry and for business decisions based on recognition under the principle of self-responsibility."

In response to the report, this Center has published the Weekly Oil Market Review as a tool for oil-related people, business administrators (particularly service station managers) and ordinary consumers to accurately understand crude oil and petroleum products supply and demand and price trends, in cooperation with relevant organizations such as the Petroleum Association of Japan and the Zensekiren (Japan's Dealers Association) since May 2005.

### Sources of data provided in this report

① [Crude oil and petroleum products supply and demand] (weekly PAJ report)

Data in weekly statistics on crude oil and petroleum product supply by the Petroleum Association of Japan are calculated in terms of 1,000 kiloliters. Shipments are estimated by this Center.

② [Crude oil and futures prices] (WTI crude and Middle Eastern crude)

For the WTI crude, the front-month WTI crude futures contract's daily closing price on the New York Mercantile Exchange (NYMEX) is adopted.

For the Middle Eastern crude, the front-month Middle Eastern crude futures contract's closing price on the Tokyo Commodity Exchange (TOCOM) is adopted. \* "Second-month (next-month) contract"

Underlying the Middle Eastern crude price is the average price for the Dubai and Oman crude oil. The telegraphic transfer middle rate (TTM) released by the MUFG Bank is adopted as the foreign exchange rate.

The crude oil import CIF price is a dollar-denominated reference price estimated by the PAJ based on the average crude oil price (on a 10-day basis) in the Ministry of Finance trade statistics.

③[Motouri wholesale prices of petroleum products in Japan]

Motouri wholesale prices are prices for transactions between Motouri petroleum products wholesalers (primary wholesalers) and their affiliates (secondary wholesalers).

Motouri companies modified their new pricing system in April 2010 to decide specific policies in comprehensive consideration of crude oil and petroleum products market prices, each other's prices and other data. In June 2014, they modified the system further to give greater priority to crude oil cost.

(A) [Gyoten spot prices of petroleum products in Japan](RIM gyoten)

Onshore cargo spot prices are the average onshore lorry rack prices for the four districts of Tokyo, Kawasaki, Chukyo and Hanshin in the Lorry Rack Report of RIM Intelligence Co.

⑤ [Futures prices of petroleum products in Japan] (TOCOM)

Front-month petroleum products futures contracts' daily closing prices for TOCOM Tokyo Bay and Chubu are adopted.

TOCOM Tokyo Bay prices are the average offshore barge prices for the Keihin district. TOCOM Chubu prices are the average lorry rack prices in the Chubu district.

(6) [Retail prices of petroleum products in Japan] (Weekly trend survey)

Average cash retail prices at some 2,000 service stations subject to a weekly nationwide survey are adopted (as released by the Agency for Natural Resources and Energy). The survey covers prices on Monday and is released at 14:00 on Wednesday (available on the website of the Agency for Natural Resources and Energy).