energy API
Statistics Department
Monthly Statistical Report
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USA

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EXECUTIVE SUMMARY

In Olympic fashion, U.S. crude oil production scored another perfect "10" in January—10.2 million barrels per day of output (MBD), that is. U.S. crude oil and refined product exports of 6.3 MBD in January helped narrow the price difference between U.S. and international crude prices and also moderate U.S. inventories, which in total remained near the top of the 5-year range. Interesting sub-plots emerged in January with rising refinery and petrochemical demand for "other oils," which advanced to more than 27 percent of U.S. petroleum demand, and refinery throughput that remained at record levels. U.S. drilling activity also responded to higher prices, with more than 230 additional rigs deployed as of early February, compared with one year ago.

Strongest oil demand for January since 2007. U.S. petroleum demand, as measured by total domestic petroleum deliveries, rose to 20.3 MBD in January, which was an increase of 5.5 percent compared with January 2017 but a seasonal decrease of 1.8 percent versus December. It was the strongest January monthly demand since 2007. Product highlights:

- Consumer gasoline demand rose by 3.0 percent y/y to 8.8 MBD, which reflected how increases in economic growth and income have trumped the rise in crude oil and gasoline prices.
- With indicators of solid industrial activity and freight transportation, January distillate demand eclipsed 4.1 MBD, which was an increase of 0.8 percent versus December and 9.0 percent compared with January 2017. The 9.0 percent y/y increase marked a reversal of three years of declines for the month.
- Residual fuel oil, which is used for electric power production, space heating, vessel bunkering and other industrial applications, fell to 284 thousand barrels per day (KBD) in January. This represented decreases of 35.2 percent from December and 38.3 percent versus January 2017 and suggested increased natural gas substitution.
- "Other oils" – liquid petrochemical feedstocks, naphtha and gasoil – demand of 5.5 MBD was the highest monthly demand on record and second highest share of total monthly deliveries since 1965.

WTI prices converged toward global levels; NGL prices highlighted rising demand. WTI crude prices averaged $63.70/Bbl. in January, an increase of 10.1 percent from December and 21.3 percent versus January 2017. The price rise reflected solid global market fundamentals. Brent crude oil traded at an average premium of $5.38/Bbl. above WTI crude in January, narrowing from $6.50/Bbl. in December. Composite natural gas liquids (NGL) prices remained above $8.00 per million BTU for the third consecutive month in January, which indicated strong refinery and petrochemical demand.

Solid economic growth has supported market fundamentals; market volatility posed risks. Global economic growth appeared to sustain a pace of 2.9 percent y/y in 2017 on a market exchange rate basis, and based on IMF country estimates should remain at this same pace in 2018. With U.S. tax reform, the Bloomberg consensus upgraded the 2018 U.S. outlook in February to 2.5 percent y/y from 2.2 percent y/y in Q4 2017. Main U.S. economic indicators – from the manufacturing PMI, freight transportation measures, the employment and wage situation, and consumer sentiment each held up well in January, but one key driver of future consumer sentiment and spending – stock market performance – fell as volatility spiked in early February. The real economy is distinct from financial markets but could pose risks to the 2018 outlook.

RECORD U.S. OIL PRODUCTION SCORES ANOTHER PERFECT 10

In the Olympic spirit, U.S. crude oil production in January scored another perfect 10 – 10.2 MBD, to be precise and the highest monthly output on record. This was an increase of 1.1 percent versus December and 15.1 percent from January 2017. Natural gas liquids (NGL) production, a co-product of natural gas production, sustained near-record output in January at 4.0 MBD, which was an increase of 18.4 percent versus January 2017.

The rise in oil and gas production followed with a lag between drilling and production. According to current reports from Baker-Hughes, Inc., the U.S. rig count averaged 921 rigs during Q4 2017, down from 946 rigs during Q3 2017. So far through Q1 2018, the rig count has risen to 975 – its highest level since April 2015 – and should position the U.S. for continued growth.

High refinery utilization drove record January throughput. In January, total refinery gross inputs rose by 3.8 percent y/y to 17.1 MBD for the strongest January throughput on record. Gasoline, distillate, and jet fuel production each set new monthly records for January. The refinery utilization rate in January was 92.4 percent, which also was the strongest January utilization rate on record.

Strong sustained U.S. exports helped narrow the gap between Brent and WTI prices. In January, the U.S. exported 6.3 MBD of crude oil and refined products, which was an increase of 10.8 percent y/y. These were the strongest January exports on record and coincided with narrowing of the Brent-WTI crude price differential to $3.50/Bbl. as of February 5th from $5.38/Bbl. at the end of January and $6.50/Bbl. in December.

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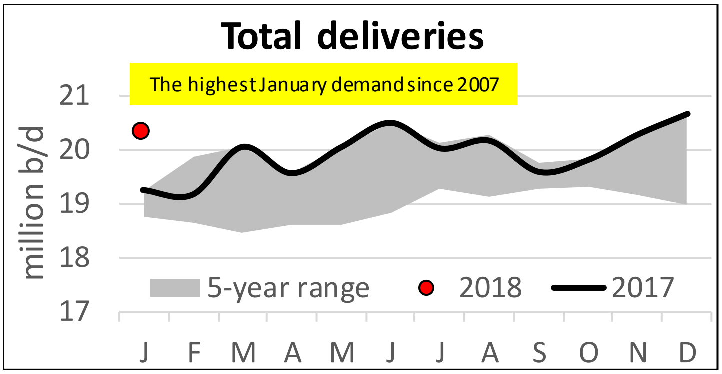
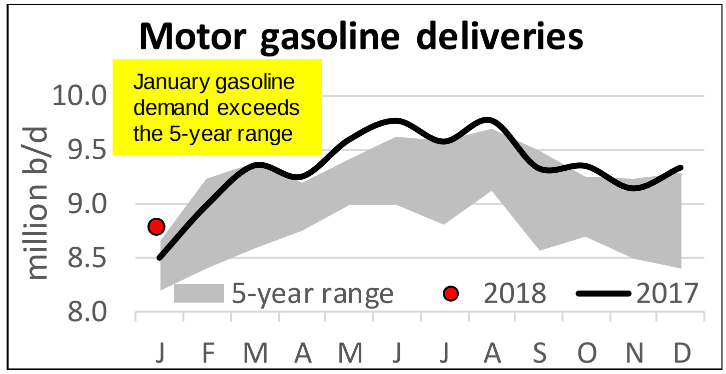
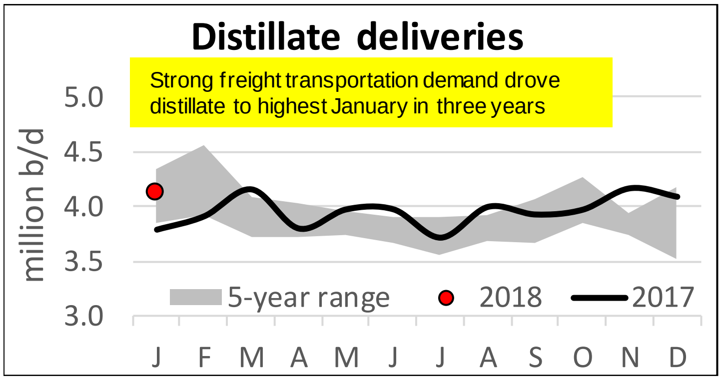
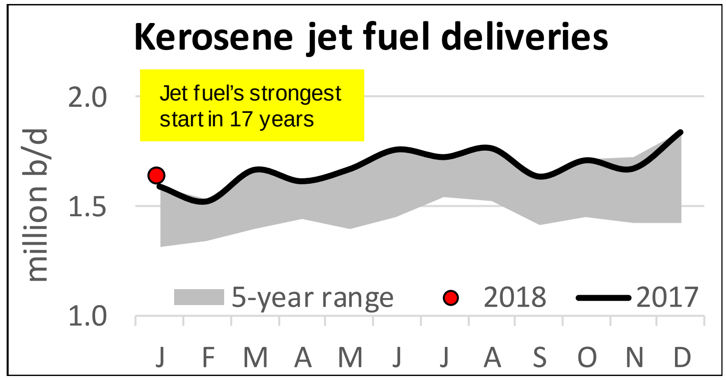








	API ESTIMATES JANUARY		YEAR TO DATE	
	Million B/D	Percent Change	Million B/D	Percent Change
Total domestic deliveries	20.3	5.5		
Crude production	10.2	15.1		
Total imports	10.4	(2.8)		
Stocks (million bbl)	1,343.8	(0.7)		

Falling U.S. crude oil imports more than offset rising product imports. Imports of crude oil and refined products were 10.4 MBD in January, an increase of 6.8 percent from December but a decline of 2.8 percent compared with January 2017. January crude oil imports fell by 6.8 percent y/y, while refined product imports increased by 12.1 percent y/y. Notably, gasoline imports were down by 130 KBD (20.6 percent) y/y in January, while imports of all other refined products were up by 400 KBD (25.2 percent) y/y. Distillate imports more than doubled to 426 KBD in January from 204 KBD one year ago.

Total inventories remained near 5-year highs and masked drawdowns in crude oil and some major products. Total crude and refined product inventories remained atop the 5-year range in January. However, crude oil inventories in January were down 17.0 percent y/y and 1.0 percent m/m, placing them in the middle of the 5-year range. At the same time, however, January stocks of gasoline, distillate, jet fuel and residual fuel oil each decreased year-over-year. Consequently, stocks of other oils grew in January despite the record demand for other oils.

DETAILED PRODUCT REPORT

Gasoline

STRONGEST JANUARY GASOLINE DEMAND SINCE 2008 REFLECTED ECONOMIC MOMENTUM.

Consumer gasoline demand, as measured by total motor gasoline deliveries, rose by 3.0 percent y/y to 8.8 MBD, which was the highest January demand since 2008 and likely reflected how gains in economic growth and income have trumped the rise in crude oil and gasoline prices.

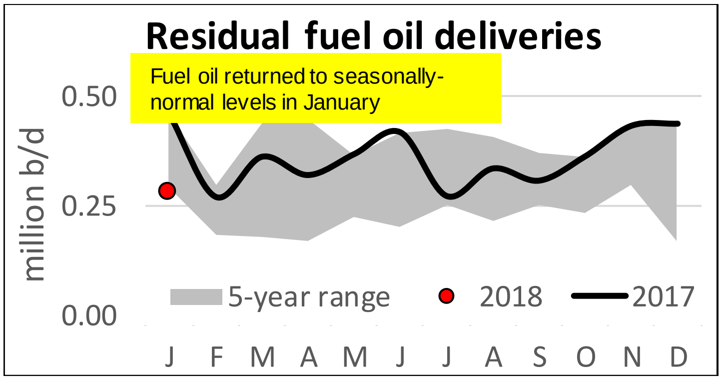
WTI crude oil prices averaged in December averaged $1.517 per gallon ($63.70 per barrel), up by 13.9 cents from December's price of $1.378 ($57.88 per barrel) and up by 26.7 cents (21.3 percent) from January 2017's price of $1.250 ($52.50 per barrel), according to the latest EIA price data. In tandem with the increase in crude oil prices, the average price of regular-grade gasoline increased by 7.7 cents from December to $2.671 per gallon in January.

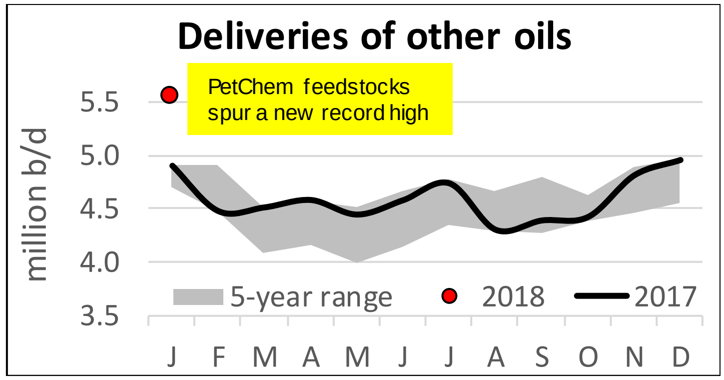
Reformulated-type gasoline, which is consumed primarily in urban areas, grew by 7.1 percent y/y in January to 3.0 MBD – the highest January demand since 2008. By contrast, conventional gasoline is used more in rural areas and rose by 1.0 percent y/y in January to 5.8 MBD.

Distillate Fuel Oil

FREIGHT TRANSPORTATION DROVE A 9.0 PERCENT RISE IN DISTILLATE DEMAND.

Distillate deliveries are a measure of industrial activity and freight transportation. In January, distillate deliveries exceeded 4.1 MBD, which was an increase of 0.8 percent versus December and 9.0 percent compared with January 2017. For each of the past three years, each consecutive January exhibit-





ed declines from the prior year, so the 9.0 percent y/y increase last month marked a reversal, likely with a solid grounding in the economy. About 93 percent of distillate demand in January was for ultra low sulfur distillate (ULSD), and ULSD deliveries exceeded 3.8 MBD in January. This was the second highest January ULSD demand on record. The remaining 7 percent of distillate deliveries was for high sulfur distillate fuel (HSD), which is a heating fuel in the residential and commercial sectors and a marine fuel when blended to upgrade heavy fuel oil. In January, HSD deliveries increased seasonally by 14.0 percent compared with December and 27.3 percent versus January 2017.

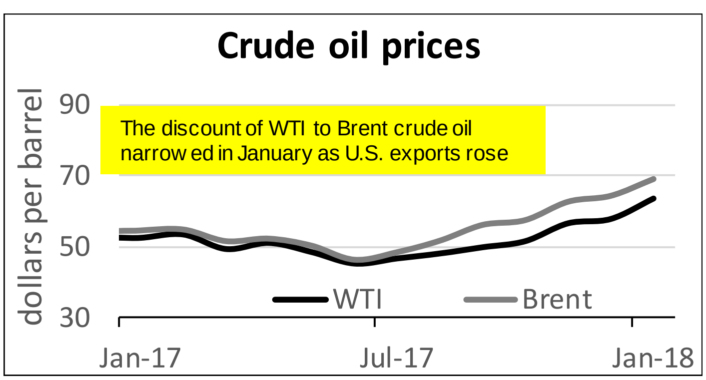
Economic indicators suggested solid underlying road freight transportation and industrial activity. The U.S. Bureau of the Census' reported the value of manufacturers' shipments for manufacturing industries rose by nearly 6.4 percent y/y in Q4 2017 compared with the same period in 2016 and reached its highest level since Q3 2014. The shipments were corroborated by the U.S. Bureau of Transportation Statistics' freight transportation services index, which increased by 5.7 percent y/y in Q4 2017.

Kerosene Jet Fuel

JET FUEL DEMAND SUSTAINED 17-YEAR HIGHS.

Kerosene jet fuel deliveries fell by 11.4 percent m/m compared with December but rose 2.4 percent y/y versus January 2017. The monthly decline appears to have been seasonal, and jet fuel demand for January was at its highest level in 17 years.

The International Air Transport Association (IATA) reported that U.S. domestic revenue passenger kilometers increased by 3.9 percent y/y in December, and North American airlines had their fastest demand growth since 2011, with full year traffic rising 4.8 percent compared with 2016. Also, IATA reported North American airlines' capacity climbed 4.5 percentage points, and the load factor increased by 0.3 percentage points to 81.7 percent. The solid economic backdrop supported outbound passenger demand but was partially offset by slowing inbound travel due to new immigration and security restrictions put in place for travel to the U.S., as well as regional winter weather in Q4 2017.



Residual Fuel Oil

FUEL OIL DEMAND FALLS TO ITS LOWEST JANUARY ON RECORD.

Residual fuel oil is used in electric power production, space heating, vessel bunkering and other industrial applications. Despite the EIA's estimation that heating degree days rose in January compared with the prior month and year, residual fuel oil demand in January 2018 fell to 284 KBD. This represented decreases of 35.2 percent from December and 38.3 percent versus January 2017. The fall in fuel oil demand came after two months of exceptionally strong winter seasonal demand, but also reflected the lowest January fuel oil demand on record. Residual fuel demand has declined in recent years due to environmental restrictions and competition with low-priced natural gas, and the decline last month may indicate a rise in gas substitution.

Other Oils

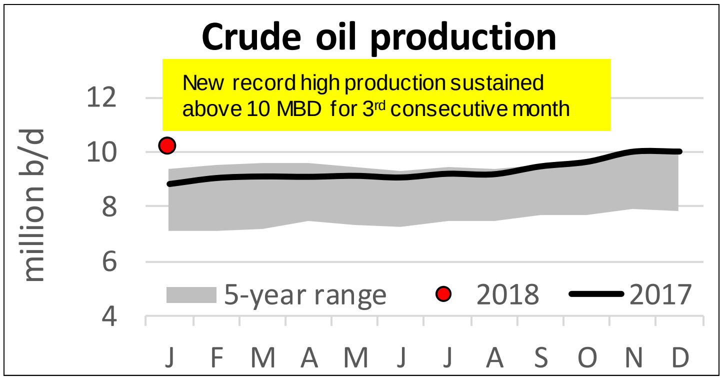
PETROCHEMICAL FEEDSTOCKS SUSTAINED SOLID GROWTH IN 2017.

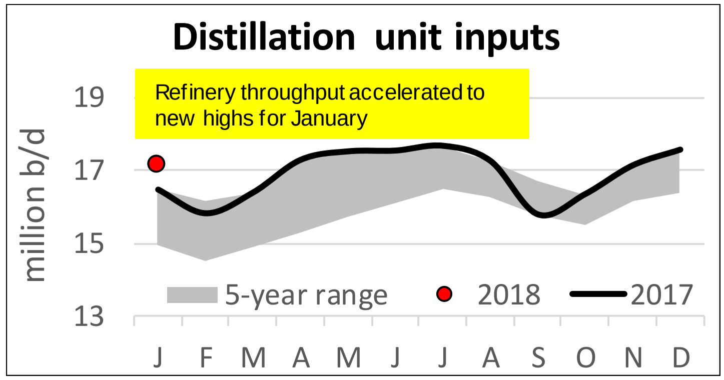
"Other oils" – liquid petrochemical feedstocks, naphtha and gasoil – of 5.5 MBD represented 27.3 percent of total deliveries in January. This was the highest monthly demand on record and second highest share of total monthly deliveries since 1965. In January, other oils' demand increased by 4.5 percent from December and 12.8 percent compared with January 2017. Consistent with the rise in other oils' demand, the American Chemistry Council's Chemical Activity Barometer was up by 0.7 percent compared with December and 4.2 percent versus January 2017.

PRICES

WTI PRICES CONVERGED TOWARD GLOBAL LEVELS; NGL PRICES HIGHLIGHTED RISING DEMAND.

WTI crude prices averaged $63.70/Bbl. in January, which was an increase of 10.1 percent from December and 21.3 percent versus January 2017. The rise in WTI prices reflected solid glob-





al market fundamentals. Brent crude oil traded as an average premium of $3.50/Bbl. in February, down from $5.38/Bbl. in January and $6.50/Bbl. in December. The shrinking of the price differential was consistent with rising U.S. crude oil exports. Separately, composite natural gas liquids (NGL) prices remained above $8.00 per million BTU in January for the 3rd consecutive month, which offered further corroboration with indicators that highlighted strong refinery and petrochemical demand.

MACROECONOMY

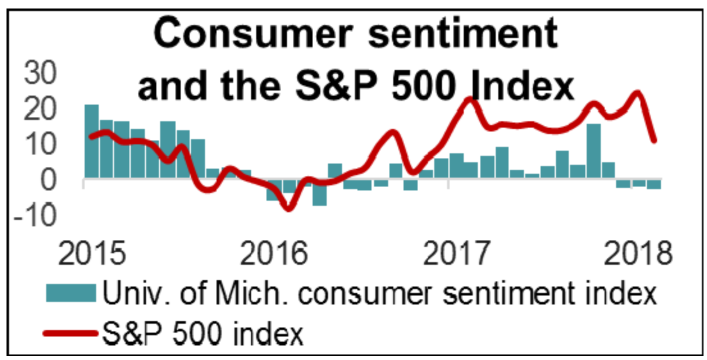
EQUITY MARKET TREMORS THREATEN SOLID UNDERLYING ECONOMIC GROWTH

Global economic growth appeared to be poised for another strong year. Based on individual country growth rates reported by the IMF, global GDP growth in 2017 was 2.9 percent y/y on a market exchange rate basis, on par with the average for the past 20 years, and could expand by another 2.9 percent y/y in 2018. The Bureau of Economic Analysis reported that U.S. economy grew at a seasonally adjusted annualized rate of 2.6 percent in Q4 2017, which slipped from a pace above 3.0 percent in Q2 and Q3. The EIA and Bloomberg consensus expect 2018 U.S. real GDP growth of 2.5 percent and 2.6 percent, respectively, which due to U.S. tax reform were upgraded from estimates made in Q4 2017 of around 2.2 percent.

Leading indicators of economic growth continued to suggest expanding business conditions. The Institute for Supply Management's Purchasing Managers Index (PMI) registered 59.1 percent in January, a decrease of 0.2 percentage points from the seasonally adjusted December reading of 59.3 percent but still strongly indicative of expansion. Comments from the panel reflected business growth, with new orders and production maintaining high levels of growth; employment expanding but at a slowing rate; order backlogs increasing at a faster rate; and, export orders and imports accelerating in January. Additionally, supplier deliveries slowed (improved) at a faster rate as prices increased across all industry sectors. Out of 18 manufacturing industries, 14 reported growth in January in the following order: Textile Mills; Fabricated Metal Products; Plastics & Rubber Products; Primary Metals; Machinery; Transportation Equipment; Apparel, Leather & Allied Products; Chemical Products; Computer & Electronic Products; Paper Products; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; and Food, Beverage & Tobacco Products. Four industries reported contraction during the period: Printing & Related Support Activities; Wood Products; Furniture & Related Products; and Nonmetallic Mineral Products.

Separately, U.S. non-farm payrolls grew by 200,000 jobs in January, and according to the Bureau of Labor and Statistics (BLS), and the nation's unemployment rate remained unchanged at 4.1 percent for the fourth consecutive month. A four-week average of initial claims for unemployment insurance fell by 2.1 percent m/m in January.

Equity performance is a key leading indicator of consumer sentiment and spending – and therefore economic growth. U.S. financial markets rose by 5.6 percent in January to new highs, but as markets gained perspective on the likely compound stimulating effects of U.S. tax reform, prospective infrastructure spending and prolonged federal budget deficit spending, price volatility spiked in early February and spurred a S&P 500 selloff and 7.2 percent price decline. The underlying economy and corporate profits appear to be on firm grounds, but market volatility could erode consumer confidence. The University of Michigan's consumer sentiment index slipped by 0.2 percent m/m In January. Watch this space for more on sentiment.

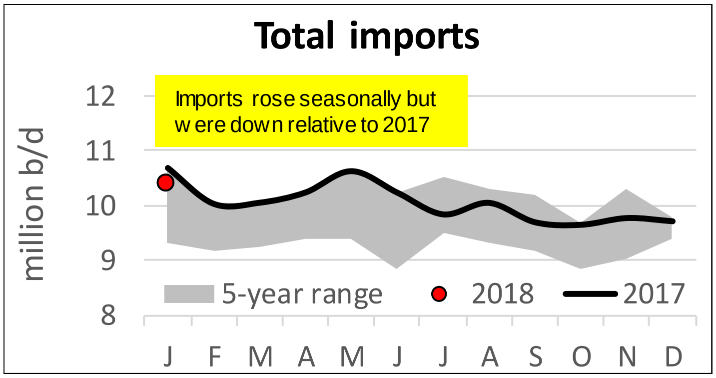


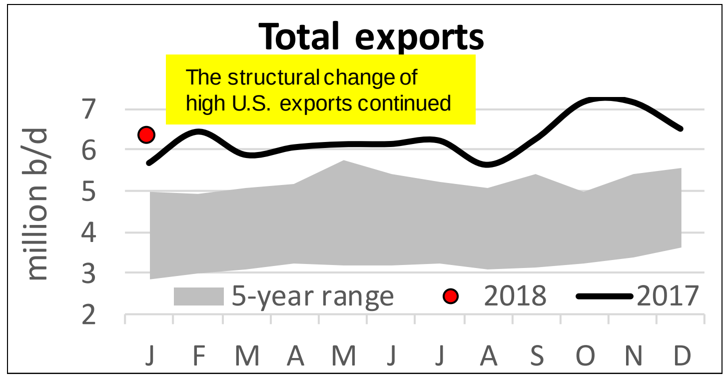
SUPPLY

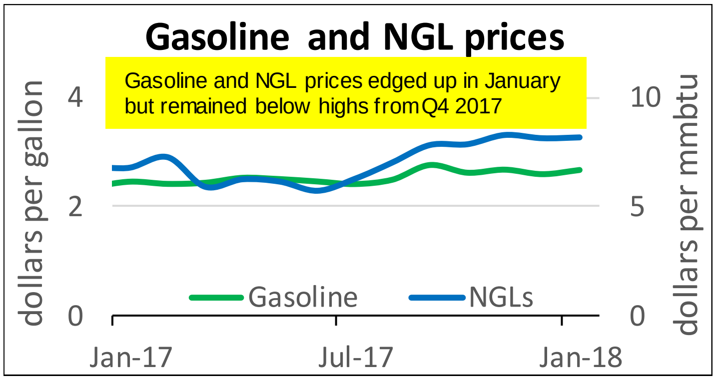
Production

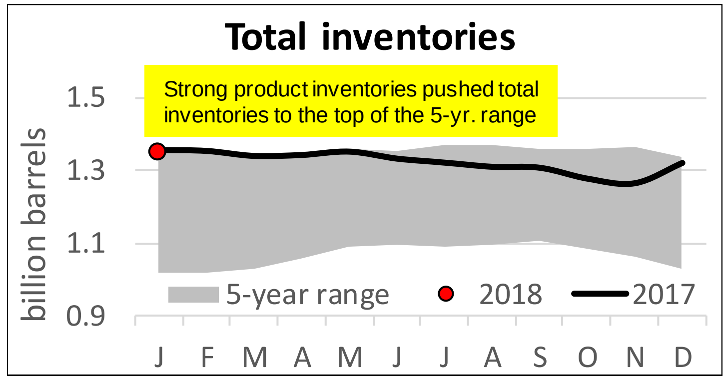
RECORD U.S. OIL PRODUCTION SCORED ANOTHER PERFECT 10.

In the Olympics, a score of "10" represents perfection. In January, U.S. crude oil production rose to 10.2 MBD – the highest monthly output on record. This was an increase of 1.1 percent versus December and 15.1 percent from January 2017. The growth was attributable to onshore production in the lower 48 U.S. states. Regionally, Texas crude oil production averaged 4.2 MBD in January, which was nearly 1.0 MBD above the









Crude Oil Production (Thousand B/D)

	January	Year Ago	Percent Change
Lower 48	9,633	8,309	15.9
Alaska	522	516	1.2

level in January 2017. North Dakota crude oil production averaged approximately 1.2 MBD in January, which was an increase of 240 KBD above the level in January 2017.

Natural gas liquids (NGL) production, a co-product of natural gas production, sustained near-record output in January at 4.0 MBD, which was an increase of 18.4 percent versus January 2017. According to the EIA's Short-Term Energy Outlook (STEO), released February 6, 2018, U.S. dry natural gas production averaged 77.6 billion cubic feet per day (Bcf/d) during January, which was up 9.9 percent from January 2017. With NGL output growth having outpaced that of dry gas, it appears that increased gas fractionation came in response to higher NGL demand and prices, as previously discussed.

The recent rise in oil and gas production follows with a lag between most drilling and production. According to current reports from Baker-Hughes, Inc., the U.S. rig count averaged 921 rigs during Q4 2017, down from 946 rigs during Q3 2017. So far through Q1 2018, the rig count has risen to 975 – its highest level since April 2015 – and should position U.S. production for continued growth.

Product Output (Thousand B/D)

	January	Year Ago	Percent Change
Finished gasoline	9,452	9,316	1.5
Distillate	5,033	4,797	4.9
Kerosene jet	1,707	1,615	5.7
Resid	433	473	(8.5)

Imports

FALLING U.S. CRUDE OIL IMPORTS MORE THAN OFFSET RISING PRODUCT IMPORTS.

In January, imports of crude oil and refined products were 10.4 MBD, which was an increase of 6.8 percent from December but a decline of 2.8 percent compared with January 2017. Within the January total, crude oil imports fell by 6.8 percent y/y, while refined product imports increased by 12.1 percent y/y. Notably, gasoline imports were down 130 KBD (20.6 percent) y/y in January, while imports of all other refined products were up by 400 KBD (25.2 percent) y/y. Distillate imports more than doubled to 426 KBD in January from 204 KBD one year ago. Residual fuel oil imports rose by about 50 KBD in January compared one year ago. Canadian imports made up 33.1 percent of total petroleum imports in January and fell by 2.6 percent y/y to 3.4 MBD.

Product Imports (Thousand B/D)

	January	Year Ago	Percent Change
Gasoline and Components	513	646	(20.6)
Distillate	426	204	108.8
Kerosene jet	149	140	6.4
Resid	228	176	29.5

Exports

U.S. EXPORTS HELPED NARROW THE GAP BETWEEN BRENT AND WTI CRUDE OIL PRICES

In January, the U.S. exported 6.3 MBD of crude oil and refined products, which was an increase of 10.8 percent y/y. These were the strongest January exports on record and appear to have reflected a continued structural market change for U.S. exports that was consistent with narrowing of the Brent-WTI crude price differential.

Industry Operations

HIGH REFINERY UTILIZATION DROVE RECORD JANUARY THROUGHPUT.

In January, total refinery gross inputs rose by 3.8 percent y/y to 17.1 MBD for the strongest January throughput on record. Gasoline production of 9.5 MBD in January rose by 1.5 percent y/y. Distillate production of 5.0 MBD increased by 4.9 percent y/y, and kerosene jet fuel production of 1.7 MBD was up by 5.7 percent y/y. Each of these – gasoline, distillate and jet fuel production – set new monthly records for January production.

The refinery utilization rate in January was 92.4 percent, 2.4 percentage points below December but 4.0 percentage points above that of January 2017 for the strongest January utilization rate of record.

Inventories

TOTAL INVENTORIES NEAR 5-YEAR HIGHS MASK DRAWDOWNS IN CRUDE OIL AND MAJOR PRODUCTS.

Total crude and refined product inventories declined by 0.7 percent compared with January 2017 but were up by 2.0 percent versus December. Consequently, total inventories remained atop the 5-year range in January. However, crude oil inventories in January were down 17.0 percent y/y and 1.0 percent m/m, placing them in the middle of the 5-year range. At the same time, however, January stocks of gasoline, distillate, jet fuel and residual fuel oil each decreased -over-year in January. Consequently, the stocks of other oils appear to have grown despite the record demand for other oils.

The API **Monthly Statistical Report** is available via IHS Global (www.global.ihs.com). For more information, go to http://www.api.org/statistics or contact IHS at 1-800-854-7179.

ESTIMATED UNITED STATES PETROLEUM BALANCE[1]
(Daily average in thousands of 42 gallon barrels)

Disposition and Supply	January			Year-to-Date		
	2018[2]	2017	% Change	2018[3]	2017	% Change
Disposition:						
Total motor gasoline	8,755	8,501	3.0			
Finished reformulated	2,966	2,768	7.1			
Finished conventional	5,789	5,733	1.0			
Kerosine-jet	1,632	1,593	2.4			
Distillate fuel oil	4,120	3,781	9.0			
≤ 500 ppm sulfur	3,826	3,550	7.8			
≤ 15 ppm sulfur	3,823	3,546	7.8			
> 500 ppm sulfur	294	231	27.3			
Residual fuel oil	284	460	(38.3)			
All other oils (including crude losses)	5,547	4,916	12.8			
Reclassified[4]	(43)	(8)	na			
Total domestic product supplied	20,295	19,244	5.5			
Exports	6,306	5,691	10.8			
Total disposition	26,601	24,935	6.7			
Supply:						
Domestic liquids production						
Crude oil (including condensate)	10,155	8,825	15.1			
Natural gas liquids	3,983	3,365	18.4			
Other supply[5]	1,250	1,196	4.5			
Total domestic supply	15,388	13,386	15.0			
Imports:						
Crude oil (excluding SPR imports)	7,863	8,435	(6.8)			
From Canada	3,435	3,525	(2.6)			
All other	4,428	4,910	(9.8)			
Products	2,521	2,250	12.1			
Total motor gasoline (incl. blend.comp)	513	646	(20.6)			
All other	2,008	1,604	25.2			
Total imports	10,384	10,685	(2.8)			
Total supply	25,772	24,071	7.1			
Stock change, all oils	(829)	(864)	na			
Refinery Operations:						
Input to crude distillation units	17,091	16,458	3.8			
Gasoline production	9,452	9,316	1.5			
Kerosine-jet production	1,707	1,615	5.7			
Distillate fuel production	5,033	4,797	4.9			
Residual fuel production	433	473	(8.5)			
Operable capacity	18,503	18,621	(0.6)			
Refinery utilization[6]	92.4%	88.4%	na			
Crude oil runs	16,772	16,129	4.0			

1. Total supply, i.e., production plus imports adjusted for net stock change is equal to total disposition from primary storage. Total disposition from primary storage less exports equals total domestic products supplied. Information contained in this report is derived from information published in the API *Weekly Statistical Bulletin* and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2. Based on API estimated data converted to a monthly basis.

3. Data for most current two months are API estimates. Other data come from U.S. Energy Information Administration (including any adjustments).

4. An adjustment to avoid double counting resulting from differences in product classifications among different refineries and blenders.

5. Includes unaccounted-for crude oil, withdrawals from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol, and downstream blending of ethanol.

6. Represents "Input to crude oil distillation units" as a percent of "Operable capacity".

R: Revised. **na:** Not available.

ESTIMATED UNITED STATES PETROLEUM BALANCE[1]
(Daily average in thousands of 42 gallon barrels)

	January 2018	December 2017	January 2017	% Change From Month Ago	% Change From Year Ago
Stocks (at month-end, in millions of barrels):					
Crude oil (excluding lease & SPR stocks).........	418.6	423.0	504.5	(1.0)	(17.0)
Unfinished oils...	87.8	84.5	87.8	3.9	0.0
Total motor gasoline......................................	244.3	233.4	260.1	4.7	(6.1)
Finished reformulated.................................	0.1	0.1	0.0	0.0	8.7
Finished conventional..................................	24.6	24.8	28.5	(0.8)	(13.7)
Blending components..................................	219.6	208.5	231.6	5.3	(5.2)
Kerosine-jet..	42.2	40.3	42.4	4.7	(0.5)
Distillate fuel oil..	140.2	138.3	168.9	1.4	(17.0)
≤ 500 ppm sulfur..	129.0	128.7	156.0	0.2	(17.3)
≤ 15 ppm sulfur....................................	122.4	122.3	147.3	0.1	(16.9)
> 500 ppm sulfur..	11.2	9.6	13.0	16.7	(13.6)
Residual fuel oil..	33.9	30.8	40.5	10.1	(16.2)
All other oils..	376.8	367.7	249.8	2.5	50.8
Total all oils...	1,343.8	1,318.0	1,353.9	2.0	(0.7)