

Weber US Product Trade Report

Q1 2018



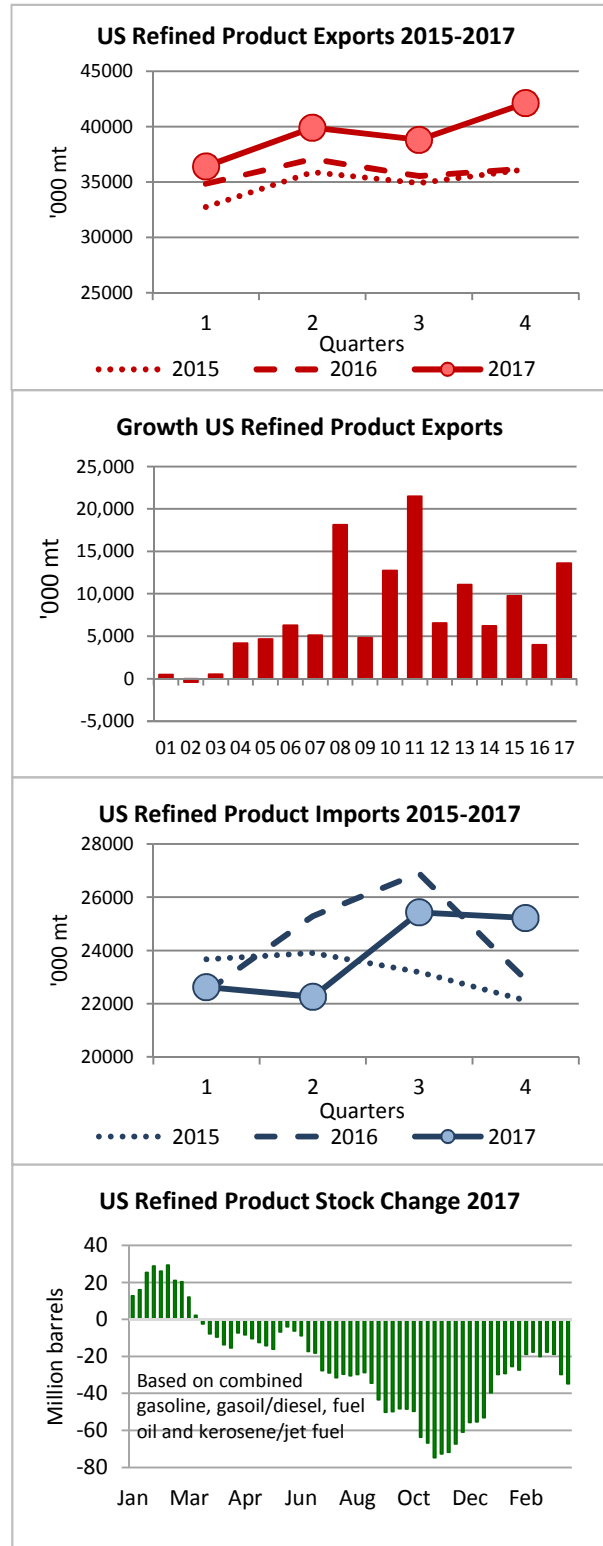
In this quarter's Charles R. Weber US product trade report we provide readers with the latest developments in the US seaborne products trade, **based on trade data up to the end of the fourth quarter 2017**. This includes identifying the fastest growing trades by commodity and country. The primary focus of the report is to allow market participants to keep up to date with changes in a rapidly developing, "oil and gas shale revolution" fuelled, export market.

Exports



- US refined product export growth surged in 4Q17 (+16.4% y/y), posting the highest quarterly gain since 1Q14. Overall exports in 2017 were up by 9.5% y/y to 157 million mt, the highest annual rate of growth since 2013. The export surge could have been higher but for the impact of Hurricane Harvey in late-August, and reflects in part the revitalisation of the US shale sector.

- Naphtha was by far the best performing product export up 44% y/y in 2017. Gasoil/diesel was the next best performer, up 13.8% y/y followed by fuel oil (+8.5% y/y), gasoline (+7.3% y/y), and kerosene/jet fuel (+5.1% y/y).
- South America accounted for 67% of total US product exports in 2017. This is up from 61% in 2016 and 58% in 2015. Focusing on the top 30 largest trades of 2017, the four fastest growing trades were fuel oil exports to Bahamas 1.2 million mt (+143% y/y), gasoil/diesel exports to Guatemala 2.6 million mt (+74% y/y), gasoil/diesel exports to Brazil 10.3 million mt (+71% y/y), and naphtha exports to Venezuela 1.4 million mt (+49% y/y). The fastest growing long haul trade from the top 30 was fuel oil exports to Singapore 5.4 million mt (+29% y/y). Outside of the top 30, there were also a number of fast growing long haul naphtha trades to North East Asia e.g. China, Japan.
- There are a number of factors underlying the strength of US product exports, including the continued discount of WTI to other international benchmarks like Brent, but the resurgence of US shale production against a background of stable oil prices has of course been a key factor. The latest US production figures for the third week of March hit a new all-time high of 10.41 million b/d.
- The latest EIA estimates (STEO March 2018) suggest US crude oil production this year will average 10.7 million b/d, up from 9.32 million b/d in 2017, which in turn suggests that US product export growth might have further to run.
- In March, Exxon announced tentative plans to add a total of 400 million b/d of capacity to its three giant Gulf Coast refineries by 2025. Exxon plans to upgrade existing refineries in Houston (Baytown) and Baton Rouge, LA, to increase production of higher-value products and to add a new crude distillation unit to its 362 million b/d Beaumont plant after 2020. A final decision is expected later this year.



Fastest growing export commodities

3. Gasoil/diesel

2017 62.9 million mt, +13.8% y/y

Export growth gains further momentum

- The largest US refined product export with 40% of the market. Export growth has fluctuated between positive and negative territory since 2014, contracting by 1.2% in 2016. However, export growth has gained momentum through 2017, increasing by almost 25% y/y in 4Q17.
- Latin America accounts for 7 countries in the top 10 destination list. A failure to deliver refinery plants continues to underpin its import requirements.
- Mexico (2017 +21% y/y) and Brazil (+61% y/y) - the two most important export markets - remain among the best performing trades. Meanwhile European trades have mainly disappointed.

4. Fuel Oil

2017 21.9 million mt, +8.5% y/y

Not seen as a long term growth prospect, but developing niche markets

- Singapore is by far the largest export trade with 25% market share. This trade performed well in 2017, up 29% y/y.
- The next seven largest trades have also expanded. Bahamas +143% y/y and Aruba +394% y/y have been star performers. Netherlands, Malta and Egypt are among trades going backwards.

X. Propane & Butane

2017 31.1 million mt, +15.3% y/y

Competing with naphtha in the petrochemical feedstock export market

- Butane exports outshone propane again in 4Q17, up 35% y/y for the year to date, while propane was up 13% y/y.
- LPG included here as its story overlaps with export growth in the product sector - both driven by shale.
- The top 4 largest trades are to Asian destinations. All four trades are growing rapidly: Japan +44% y/y, China +31% y/y, South Korea +10% y/y and Singapore +39% y/y.

2. Lubricating Oil

2017 6.5 million mt, +14.5% y/y

Revival in fortunes continues after a disappointing 2016

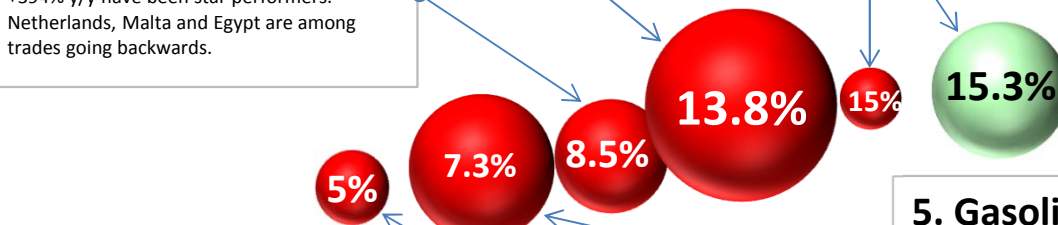
- More usually considered as part of the chemical rather than product family in terms of seaborne transportation.
- Having been the No.1 fastest growing trade in 2015, and second fastest in 2014, it declined by 26% last year.
- It accounts for just 4% of the US refined product export trade.

1. Naphtha

2017 9.8 million mt, +44% y/y

Finding a way to compete with other feedstocks

- Up to 1H15, naphtha was a star growth trade, but thereafter growth was curtailed by competition from abundant cheap ethane and LPG as a petrochemical feedstock.
- However, having invested in new condensate crackers, naphtha producers have a strong incentive to fight back and have started to recapture market share with exports breaking through the 3 million mt barrier for the first time in 4Q17. It is also the case, that condensate is finding its way into the export market as a blending component for crude oil.
- Canada, Colombia and Venezuela are the largest export markets, but emerging trades to Japan, Taiwan, South Korea and Oman are among the fastest growing.



7. Other Products

2017 10.7 million mt, -18.6% y/y

Dominated by trade to Canada

- Having posted a record 1H16, exports fell by 13% y/y in 2H16, and have fallen even further in 2017.
- Dominated by natural gasoline (plant condensate as diluent).

6. Kerosene/jet fuel

2017 9.1 million mt, +5.1% y/y Smaller trades gaining strength

- It had been one of the fastest growing export trades up until 1Q15, but is now towards the back of the pack.
- It is still recovering from the collapse of Nigerian trade in 2015, and was hit by a fall in Canadian exports (-27%) in 2016. 4Q17 trade was virtually unchanged y/y.
- Canada (2017, -6% y/y) remains the largest trade. Trade growth is dependent on second tier export destinations e.g. Mexico +20% y/y, Panama +25% y/y, Chile +30% y/y, Netherlands +13% y/y and Peru +30% y/y.

5. Gasoline

2017 36.2 million mt, +7.3% y/y

Star performing trade in 2016 +22%, gaining momentum again 2H17

- Exports accelerated through 2017, peaking at +12% y/y in 4Q17.
- Mexico (2017, 56% market share, +14% y/y) dominates this trade and is a major factor in its recent revival.
- Guatemala +20% y/y, Brazil +40% y/y, and Peru +66% y/y were the most impressive growth markets in 2017.

How to read the chart:
Size of sphere for each commodity indicates total export volume Ytd, while percentage number within sphere indicates % change y/y

Figures based on US exports up to fourth quarter 2017

Fastest growing export regional destinations

Established regional markets (NAMr, LAMr, Europe), **90%** Mkt Share, **+8.2%** y/y (16-17)

South America

106 million mt, +20% y/y (16-17)

South America accounted for 67% of total US product exports in 2017. This is up from 61% in 2016 and 58% in 2015.

Kerosene and fuel oil are relatively minor components of the US/South America trade, accounting for 15% market share, but both were star performers 2017.

Gasoline and gasoil/diesel remain the dominant export commodities with 76% market share, and both performed strongly during 2017 - up a combined 18% y/y.

Europe

OECD Europe: 15.8 million mt, -16% y/y

Non-OECD Europe: 2.1 million mt, -42% y/y

OECD Europe's share of total US product exports fell to 11% in 2017 from 13% in 2016 and 16% in 2015.

Gasoil/diesel accounts for 68% of products imports from the US. This trade struggled in 2017 (-9% y/y, -1.2 million mt). The contraction compounded an even sharper fall (-24% y/y) in 2016. France, UK and Gibraltar all saw falls in gasoil/diesel imports in 2017, while Netherlands and Spain posted gains.

US Exports by Region and Commodity 2017

Figures in '000 mt

Figures based on US exports up to fourth quarter 2017

region_code	Fuel oil	Gasoil/ diesel	Gasoline	Kerosene /jet fuel	Lubricating oil	Naphtha	Other Products	Total
Australasia	0	51	1	0	24	19	18	113
East/South Africa	60	150	36	39	95	0	2	381
Former Soviet Union	0	0	0	0	7	0	3	10
South America	10545	47326	33217	5545	2997	4519	1572	105721
Middle East	991	92	3	211	221	105	68	1691
North Africa	230	1091	0	148	16	0	1	1486
North America	2206	1042	1578	1925	502	2659	7882	17794
North East Asia	343	87	235	2	195	1575	779	3215
OECD Europe	1080	10699	482	925	1772	616	256	15829
South Asia	84	0	0	0	139	55	130	408
South East Asia	5986	702	110	1	151	255	15	7219
West Africa	22	289	515	276	136	4	10	1252
Other Europe	434	1428	51	0	222	0	0	2136
Other	1	2	1	0	1	0	0	4
Total	21981	62958	36229	9071	6480	9805	10735	157258

Colour key:

>=30% >=15,<30% >=10,<15% >=5,<10% >=0,<5% <0%

How to read the table: The colours show growth rates 2016/2017 y/y for trades >=1 million mt

Emerging regional markets

10% Mkt Share, **+22%** y/y (16-17)

South East Asia

7.2 million mt, +24% y/y (16-17)

South East Asia recovered somewhat in 2017 with its share of total US exports increasing to 4.6% from 4.0% in 2016 and 4.3% in 2015.

Fuel oil - The US refined product export trade to South East Asia is almost entirely dependent on fuel oil, with a market share of 83%. Singaporean imports are responsible for most of the trade. The fortunes of this market fluctuated in 2016, but in 2017 it was up 1.2 million mt, +24% y/y. Meanwhile, gasoil/diesel imports into the region grew rapidly last year, but were offset by declining gasoline imports.

North East Asia

3.2 million mt, +78% y/y (16-17)

In 4Q17, North East Asia emerged as a dynamic growth market for US exports.

Naphtha - After a lackluster year, US exports to North East Asia surged in 4Q17 (+141% y/y to 1.4 million mt). Much of the increase was down to naphtha, but there were also significant increases for gasoline and other products. The surge in trade was spread across China, Japan and South Korea.

If you have questions or comments, please contact Charles R Weber Research
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Fastest growing export country destinations

1. Brazil +61%

Trade 2017: 13.1 million mt

Gasoi/diesel (10.3 million mt, +71% y/y)

Gasoline (1.4 million mt, +40% y/y)

Brazil - the 3rd largest US export trade after Mexico and Canada - was the fastest growing top 20 trade in 2017. Gasoi/diesel (78% market share) grew by 71% y/y. Almost all other trades also expanded strongly.

2. Guatemala +42%

Trade 2017: 4.8 million mt

Gasoi/diesel (2.6 million mt, +74% y/y)

Gasoline (1.8 million mt, +21% y/y)

Guatemala has moved up from 3rd to 2nd fastest growing US export trade this quarter. Its economy remains buoyant with the latest IMF WEO report forecasting GDP growth of +3.4% in 2018 up from 3.2% in 2017.

3. Singapore +28%

Trade 2017: 6.6 million mt

Fuel Oil (5.4 million mt, +29% y/y)

Gasoi/diesel (0.7 million mt, >+100% y/y)

Despite trade contracting by 7.9% in 4Q17 y/y, Singapore dropped just one place to 3rd in our rankings. Fuel oil continues to dominate the trade, but gasoi/diesel is an emergent, rapidly growing trade.

4. Peru +26%

Trade 2017: 4.9 million mt

Gasoi/diesel (3.6 million mt, +20% y/y)

Gasoline (0.8 million mt, +66% y/y)

Another trade dependent in large part on gasoi/diesel, which performed strongly in 2017. However, gasoline and kerosene/jet fuel are emerging trades, both up over 60% respectively last year.



How to read the map: The map highlights the 8 best performing US export trades 2017 y/y based on the top 17 countries

5. Mexico +21%

Trade 2017: 38.8 million mt

Gasoline (20.4 million mt, +14% y/y)

Gasoi/diesel (11.2 million mt, +36% y/y)

While relations remain fractious, exports remain buoyant across the board. Gasoi/diesel was the star performer in 2017. The latest IMF WEO report has revised up its 2018 GDP forecast by 0.4% to 2.3%.

6. Costa Rica +13%

Trade 2017: 2.6 million mt

Gasoi/diesel (1.2 million mt, +21% y/y)

Gasoline (1.0 million mt, +9% y/y)

Still a small trading partner but up to 6th from 8th last quarter. Export trade is dependent on gasoline and gasoi/diesel where trade growth continues to be consistent but unspectacular.

7. Panama +13%

Trade 2017: 5.3 million mt

Gasoi/diesel (2.1 million mt, -0.5% y/y)

Fuel oil (1.2 million mt, +36% y/y)

One of the fastest growing economies in Central America. It imports a wide range of products from the US. Performance has been mixed with fuel oil up strongly in 2017, while gasoi/diesel and gasoline have been sluggish.

8. Venezuela +7%

Trade 2017: 4.0 million mt

Naphtha (1.4 million mt, +49% y/y)

Gasoline (0.7 million mt -17% y/y)

Venezuela's problems appear to be accelerating. One by product of this struggle is an increasing dependence on US imports, particularly naphtha, used as a diluent in the manufacture of its crude oil blends.

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