



Oil Industry Segment Update

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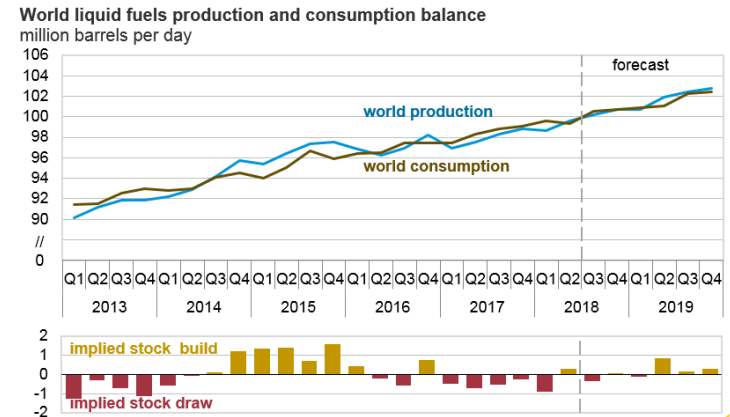
**Rail Energy Transportation Advisory Committee
Surface Transportation Board**

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Oil Industry Segment Market Environment

- Global consumption exceeds production
 - Global production June 2018 99.9 MBPD
 - Global consumption June 2018 100.7 MBPD
 - Global days of supply June 2018 58.7 Days

[Source: EIA]

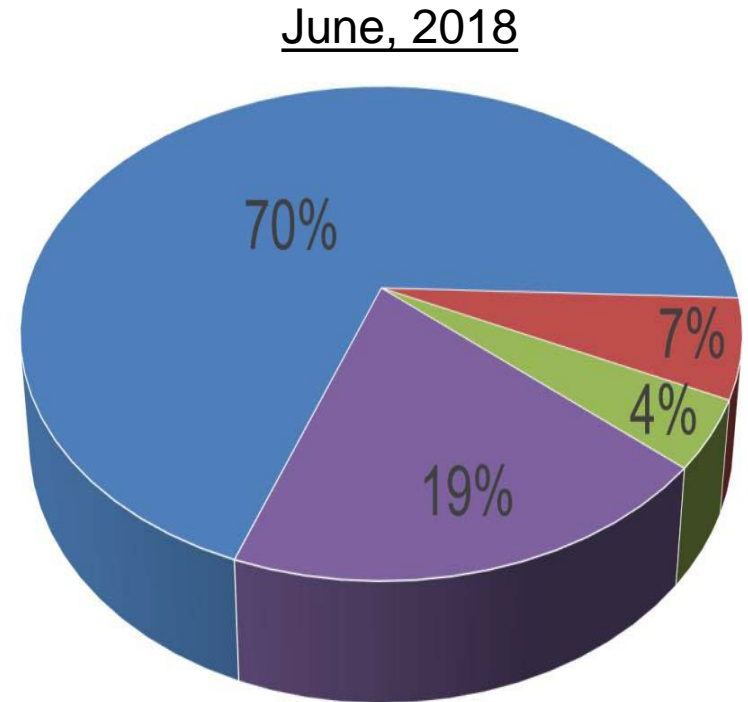
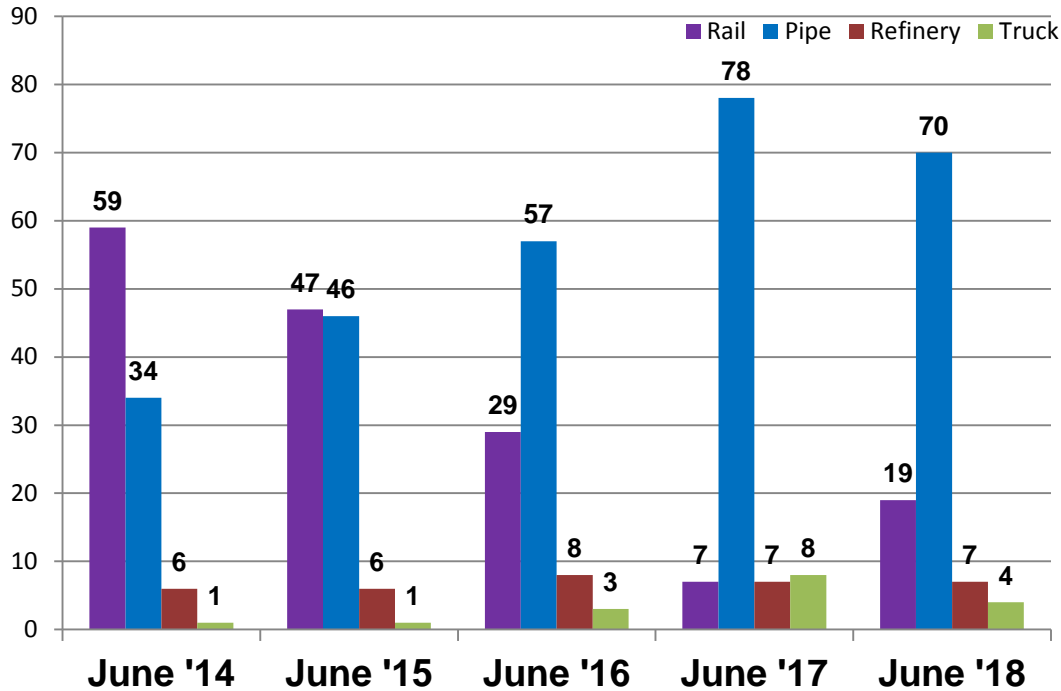


Source: Short-Term Energy Outlook, August 2018



- WTI average price remains flat [Source: EIA]
 - May \$69.98 June \$67.87 July \$71.13 August \$68.06
- US crude oil production and exports are trending upward [Source: EIA]
 - US production June 10.7 MBPD (forecast average 10.7 for 2018 and 11.5 for 2019)
 - US imports June 8.5 MBPD
 - US exports June 2.2 MBPD
- US land rig count is trending upward [Source: Baker Hughes]
 - August - 2016 = 362 (Texas 50%); 2017 = 672 (Texas 59%); 2018 = 1,034 (Texas 51%)
- CBR volumes have declined on an annual basis from 2014 to 2017 [Source: EIA]
 - Annual originated US C/L's (000's) – '14 493, '15 410, '16 212; '17 129; [Source: AAR]
 - 1st half 2018 47.7 MB moved by rail within US [Source: EIA] (approximately 75K C/L)

Williston Basin Crude Oil Modal Share



- Pipeline Export
- Refined
- Truck to Canadian Pipelines
- Estimated Rail

CBR Destinations, 1st half 2018

| | |
|------------|-------|
| West Coast | 60.2% |
| East Coast | 37.5% |
| Gulf Coast | 2.3% |

[Source: EIA]

| | Average Production/BOPD | Rail/BOPD est. |
|---------------|-------------------------|----------------|
| 6/2014 | 1,092,519 | 644,586 |
| 6/2015 | 1,211,328 | 569,324 |
| 6/2016 | 1,027,131 | 297,868 |
| 6/2017 | 1,032,873 | 72,301 |
| 6/2018 | 1,225,510 | 232,847 |

Permian Oil Production

- Frac sand now in surplus [Source: WSJ]
- Crude oil production volumes continue to grow [Source: EIA]
- August production 3.4 MBPD [Source: EIA]
- Estimated pipeline and local refining capacity 3.6 MBPD [Source: EIA]
- Pipeline capacity being increased to meet demand [Source: EnSys NA Logistics Review]
- Some expected to see an increase in rail market share
 - 1st half 2018 1.8 MB moved rail within PADD 3 (approximately 2.7K C/L's) [Source: EIA]
 - 1st half 2018 0.43 MB moved PADD 3 to 5 (approximately 660 C/L's) [Source: EIA]
- Potential barriers to CBR
 - Cost differential
 - Increasing pipeline capacity
 - Limited rail loading terminal capacity
 - Availability of rail unloading capacity depends on market
 - Availability of new DOT 117 tank cars

Summary

- Global crude oil demand is growing and currently outpacing production
- US crude oil production and exports trending upward; imports relatively flat
- Crude oil prices remain volatile but within a relatively narrow range
- US land based rig count is trending upward
- Much US onshore E&P growth remains in pipe centric Texas
 - Permian capacity (pipeline and refining)/production gap is narrowing [Source: Goldman Sachs]
- Texas frac sand capacity development has eliminated Permian shortage
- US production trending upward now exceeding 10.7 MBD
- Permian production trending upward now exceeding 3.4 MBD
- No apparent growth in Permian CBR through June
- Bakken production trending upward now exceeding 1.2 MBPD
- CBR volume showing some growth; primarily from the Bakken