















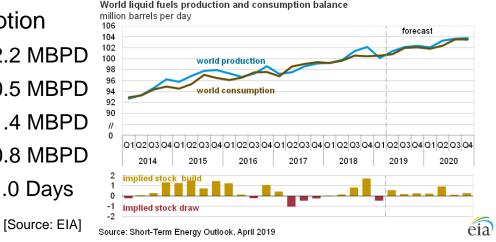
# **Oil Industry Segment Update**

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Rail Energy Transportation Advisory Committee Surface Transportation Board

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## Oil Industry Segment Market Environment

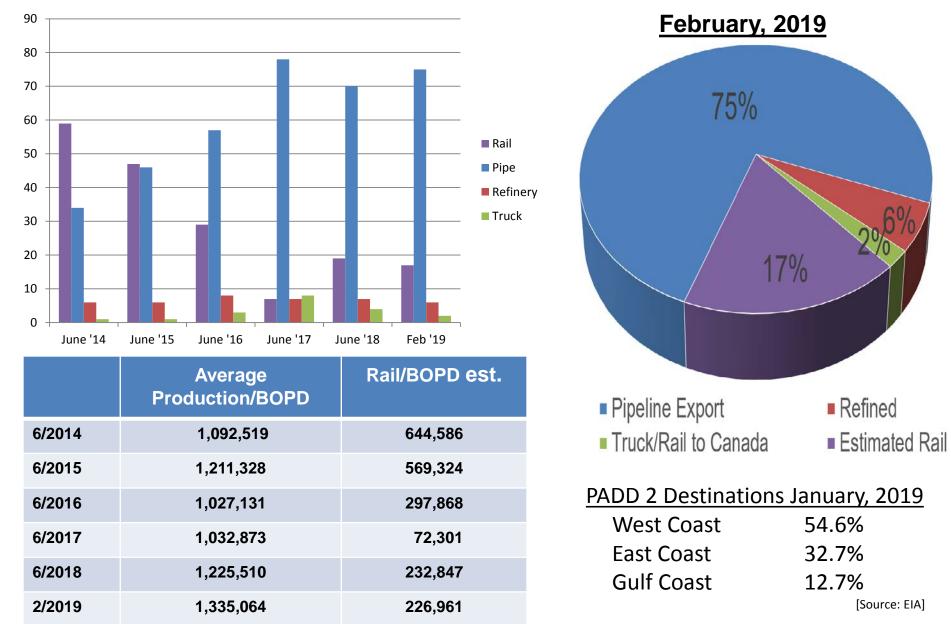


- Global production exceeds consumption
  - Global production 4Q 2018 102.2 MBPD
  - Global consumption 4Q 2018 100.5 MBPD
  - Global production April 2019 101.4 MBPD
  - Global consumption April 2019 100.8 MBPD
  - Global days of supply April 2019 61.0 Days
    - .
- WTI average price is variable [Source: EIA]
  - Oct \$70.75 Nov \$56.96 Dec \$49.52 Jan \$51.38 Feb \$54.95 Mar \$58.15
- US crude oil production and exports are trending upward [Source: EIA]
  - US production January 11.87 MBPD (avg. 10.96 for 2018 and forecast avg. 12.38 for 2019)
  - US imports January 7.52 MBPD
  - US exports January 2.58 MBPD
- US land rig count trended slightly downward in Q1 [Source: Baker Hughes]

- March - 2017 = 614 (Texas 60%); 2018 = 787 (Texas 57%); 2019 = 812 (Texas 56%)

- CBR volumes have been trending upward since Q3 2017 [Source: EIA]
  - Annual originated US C/L's (000's) '15 410, '16 212, '17 129, '18 152 (est.) [Source: AAR]

#### Williston Basin Crude Oil Modal Share



Source: ND Pipeline Authority

### Permian Oil Production

- Frac sand remains in surplus [Source: WSJ]
- Crude oil production volumes continue to grow [Source: EIA]
- April production 4.1 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]
- Rail market share increased due to lack of available pipe capacity
  - 2<sup>nd</sup> half 2018 12.2 MB moved within PADD 3 (approximately 17K C/L's) [Source: EIA]
    - January 2019 2.5 MB moved within PADD 3 (approximately 3.6K C/L's) [Source: EIA]
  - 2<sup>nd</sup> half 2018 0.63 MB moved PADD 3 to 5 (approximately 900 C/L's) [Source: EIA]
- Potential barriers to long term CBR
  - Cost differential
  - Increasing pipeline capacity
  - Limited rail loading terminal capacity
  - Availability of rail unloading capacity depends on market

#### Summary

- Global crude oil production surpassed demand with the gap closing
- US crude oil production and exports trending upward; imports relatively flat
- Crude oil prices remain volatile but once again increasing
- US land based rig count trended downward slightly during Q1
- Much US onshore E&P growth remains in pipe centric Texas
  - Permian capacity (pipeline and refining)/production gap has narrowed [Source: Goldman Sachs]
- Texas frac sand capacity development has eliminated Permian shortage
- US production trending upward now exceeding 11.9 MBD
- Permian production trending upward now exceeding 4.1 MBD
- Upward trend in Permian CBR started 2<sup>nd</sup> half 2018; continued in January
- Bakken production trending upward but down slightly in February to 1.3 MBPD
- CBR volumes up during 2<sup>nd</sup> half of 2018; primarily in the Permian and Bakken.