MacroVoices
July 10, 2019

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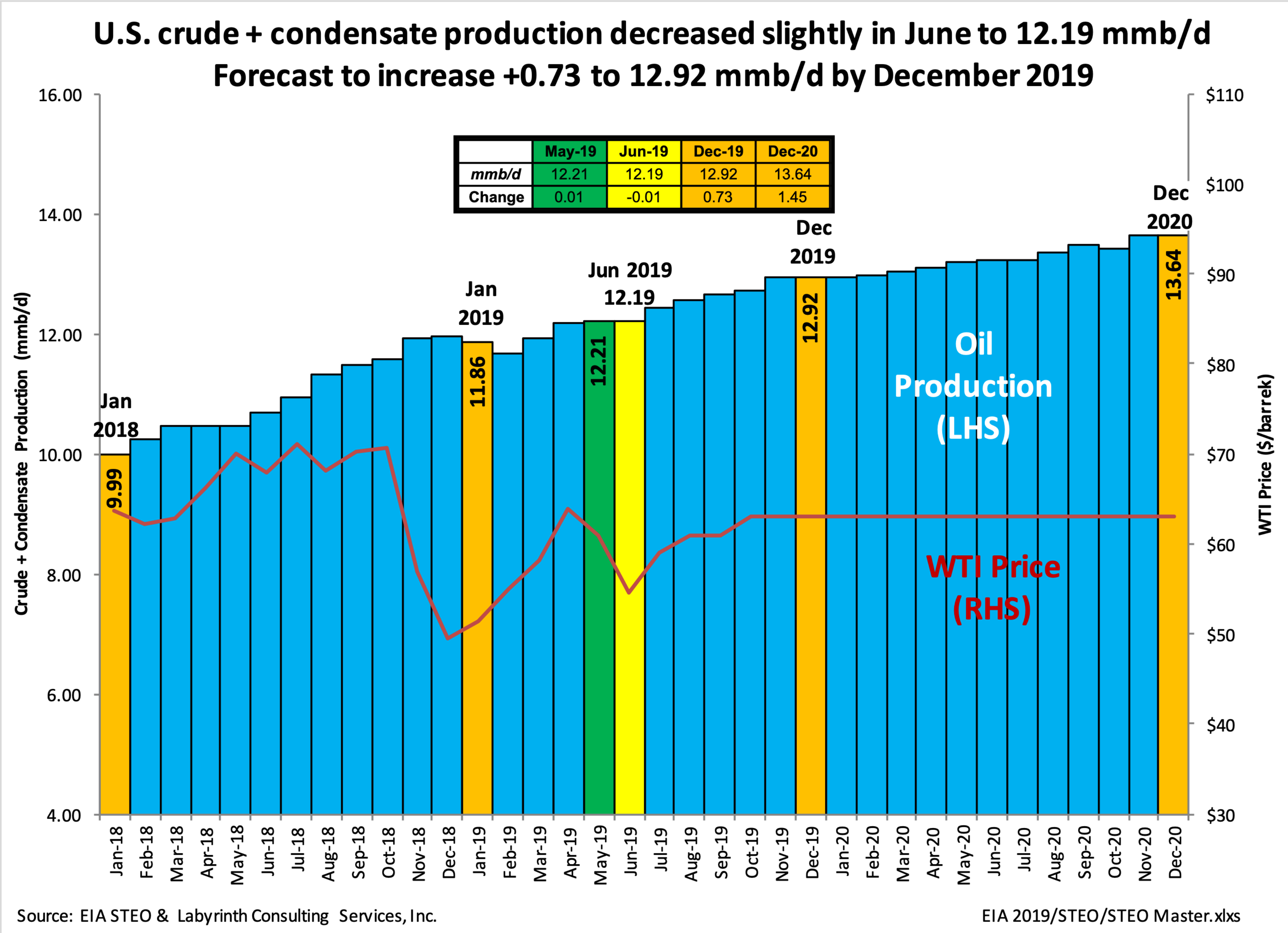
Labyrinth Consulting Services, Inc.


U.S. crude + condensate production decreased slightly in June to 12.19 mmb/d
Forecast to increase +0.73 to 12.92 mmb/d by December 2019
	May-19	Jun-19	Dec-19	Dec-20
mmb/d	12.21	12.19	12.92	13.64
Change	0.01	-0.01	0.73	1.45
Crude + Condensate Production (mmb/d)
WTI Price ($/barrek)
Jan 2018
9.99
Jan 2019
11.86
12.21
Jun 2019 12.19
Dec 2019
12.92
Dec 2020
13.64
Oil Production (LHS)
WTI Price (RHS)
16.00
14.00
12.00
10.00
8.00
6.00
4.00
$110
$100
$90
$80
$70
$60
$50
$40
$30
Jan-18
Feb-18
Mar-18
Apr-18
May-18
Jun-18
Jul-18
Aug-18
Sep-18
Oct-18
Nov-18
Dec-18
Jan-19
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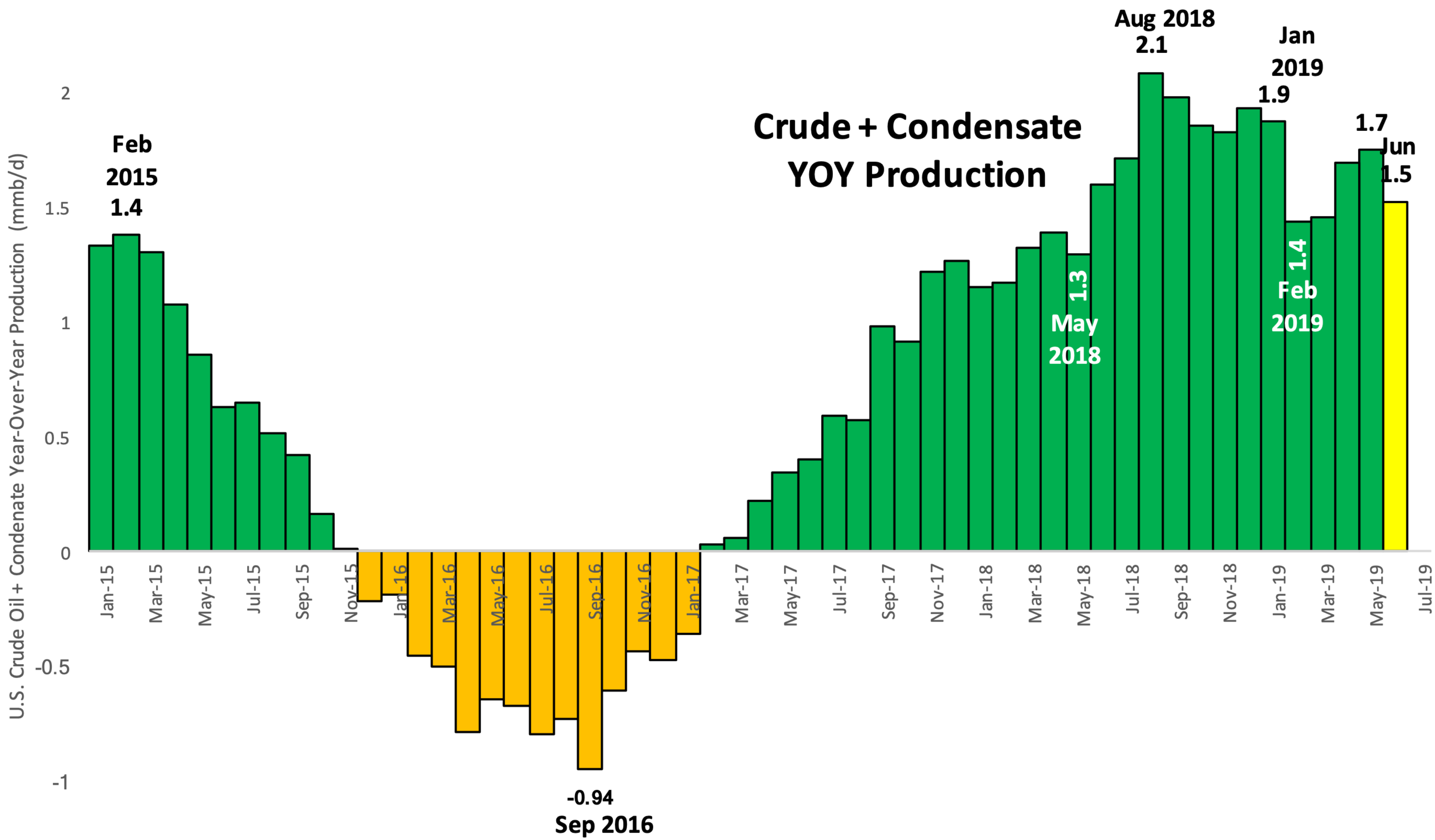
Dec-20
Source: EIA STEO & Labyrinth Consulting Services, Inc.
EIA 2019/STEO/STEO Master.xlxs

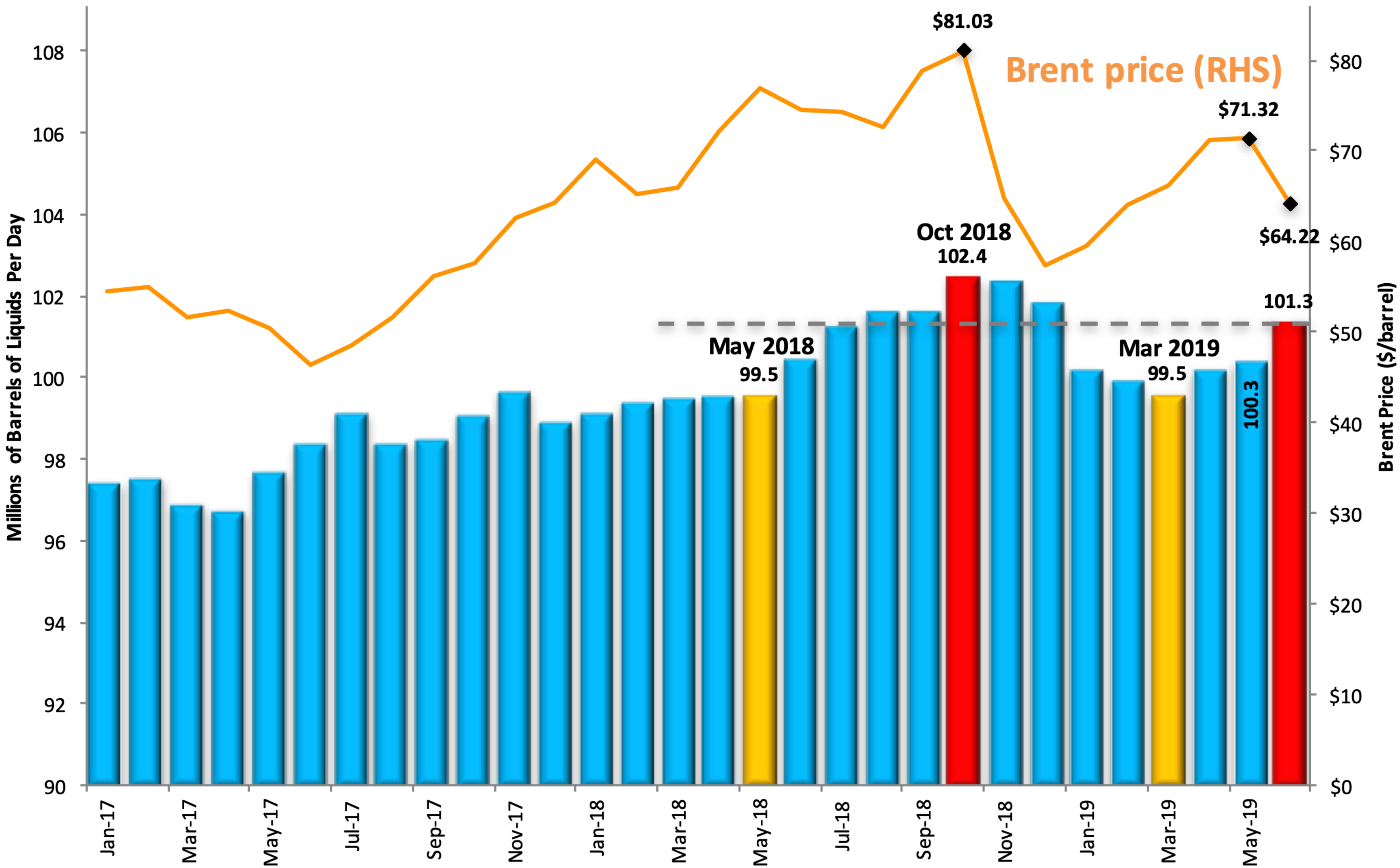
Year-over-year U.S. crude + condensate production decreased to 1.5 mmb/d in June
1.4 mmb/d YOY in February was the lowest growth since May 2018



Source: EIA STEO & Labyrinth Consulting Services, Inc.

EIA 2019/STEO/STEO Master.xlxs

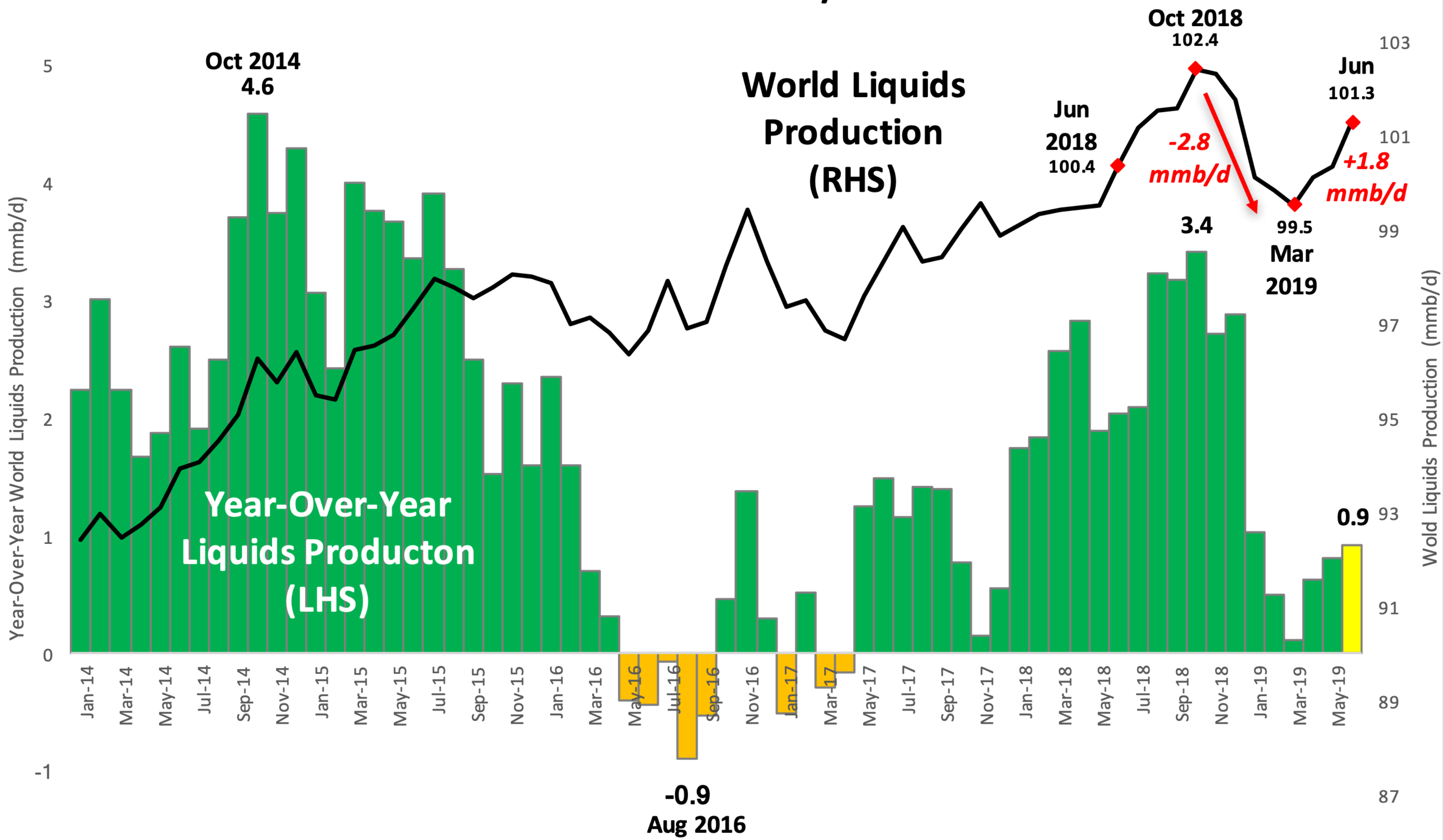
World oil production increased +0.97 mmb/d to 101.3 mmb/d in June
It has increased +1.77 mmb/d since March



Source: EIA STEO & Labyrinth Consulting Services, Inc.

EIA 2019/STEO/STEO Master.xlxs

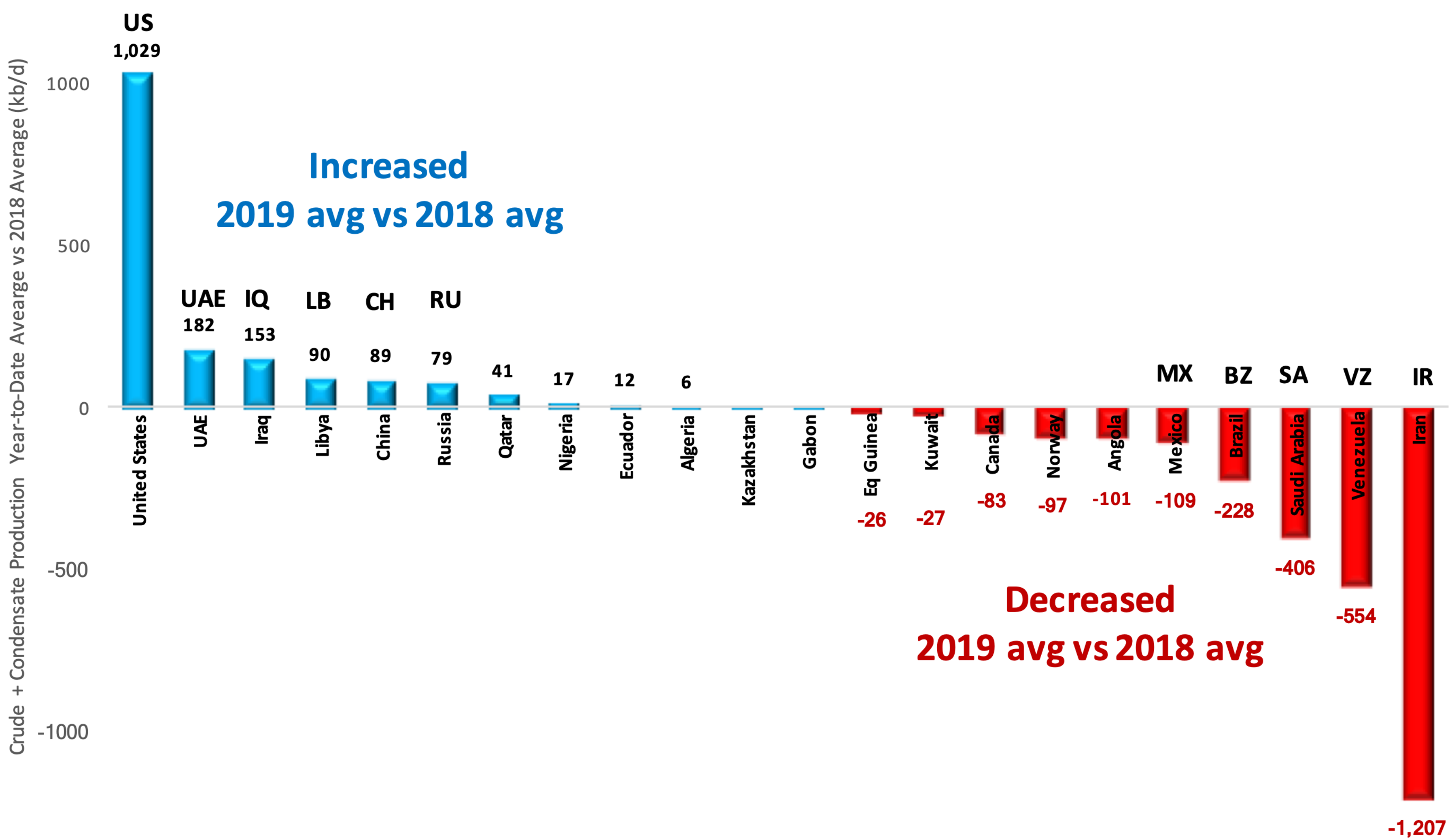
Year-over-year world liquids production increased to +0.9 mmb/d in June Production fell -2.8 mmb/d from October 2018 to March 2019 but has increased +1.8 mmb/d since March



Source: EIA STEO & Labyrinth Consulting Services, Inc.

EIA 2019/STEO/STEO Master.xlxs

U.S., UAE, Iraq Libya, China & Russia have increased production in 2019
Iran, Venezuela, Saudi Arabia, Brazil & Mexico have decreased production

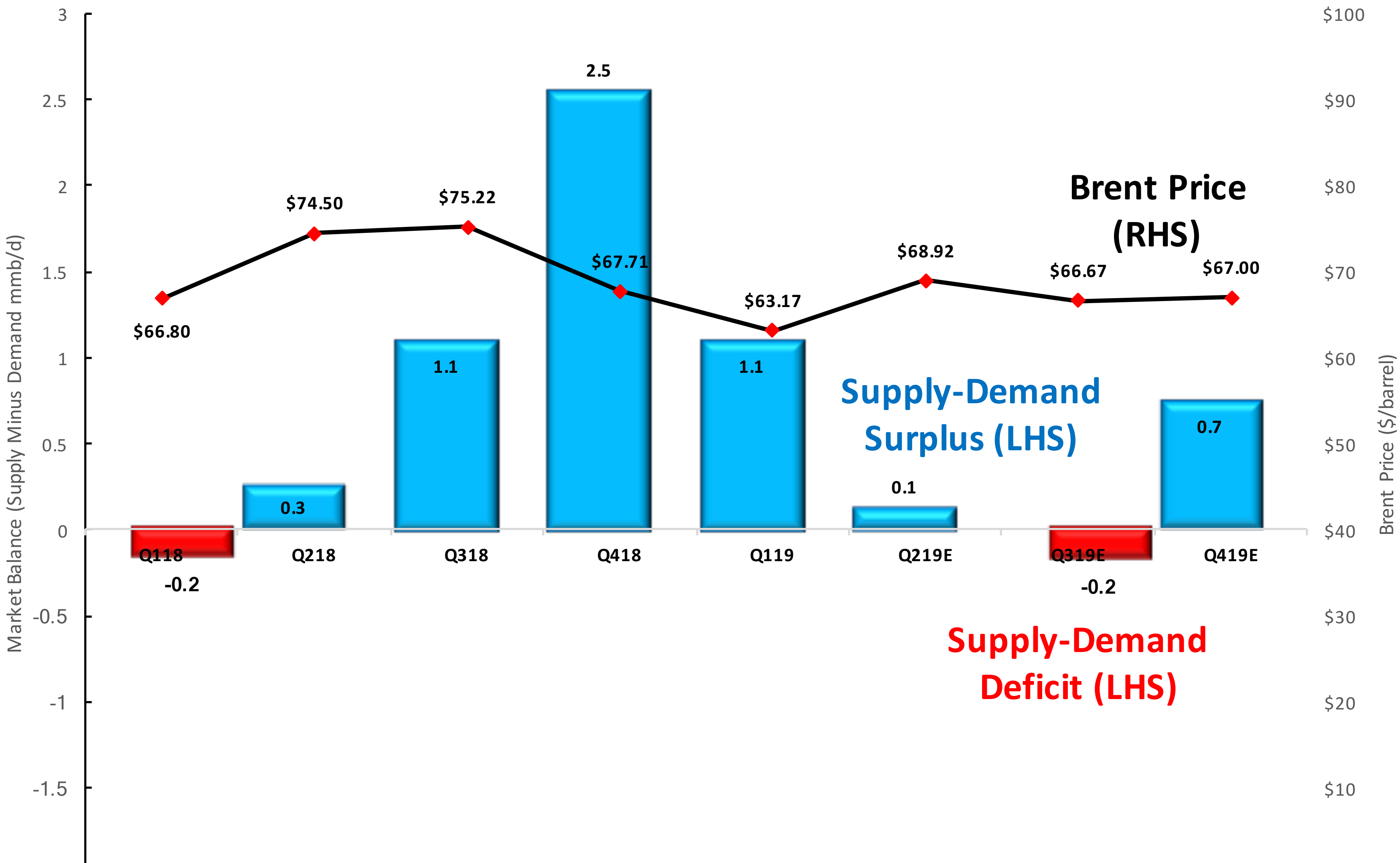


Source: EIA & Labyrinth Consulting Services, Inc.

EIA/EIA International/International_data MASTER.xlsx

World liquids supply-demand balance is +0.1 mmb/d in Q1 2019
Forecasts suggest -0.2 mmb/d in Q3 and +0.7 mmb/d in Q4

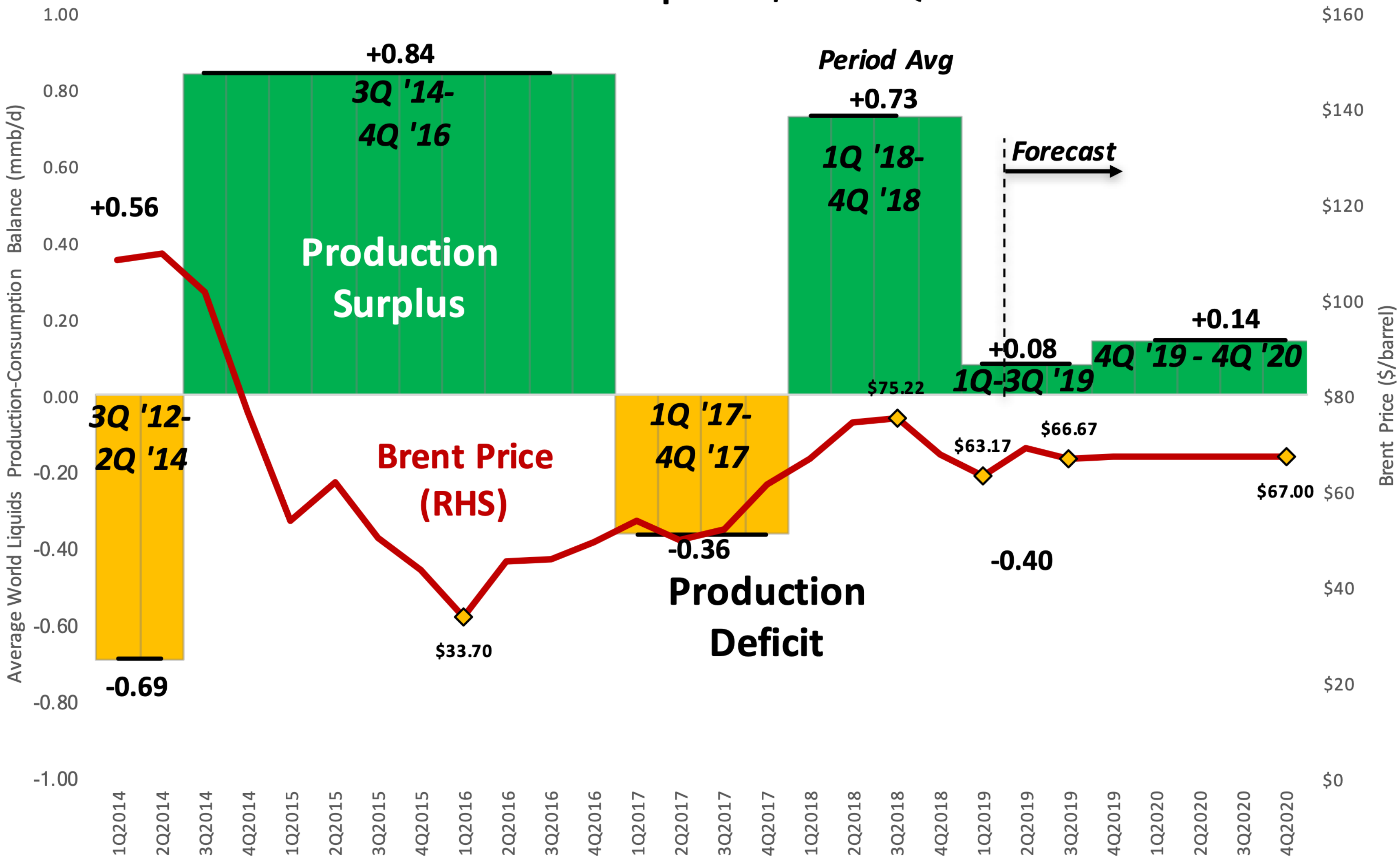
All demand data from IEA, supply & price forecast data from EIA



Source: IEA, EIA & Labyrinth Consulting Services, Inc.

IEA/IEA MASTER FILES/IEA MASTER.xlsx

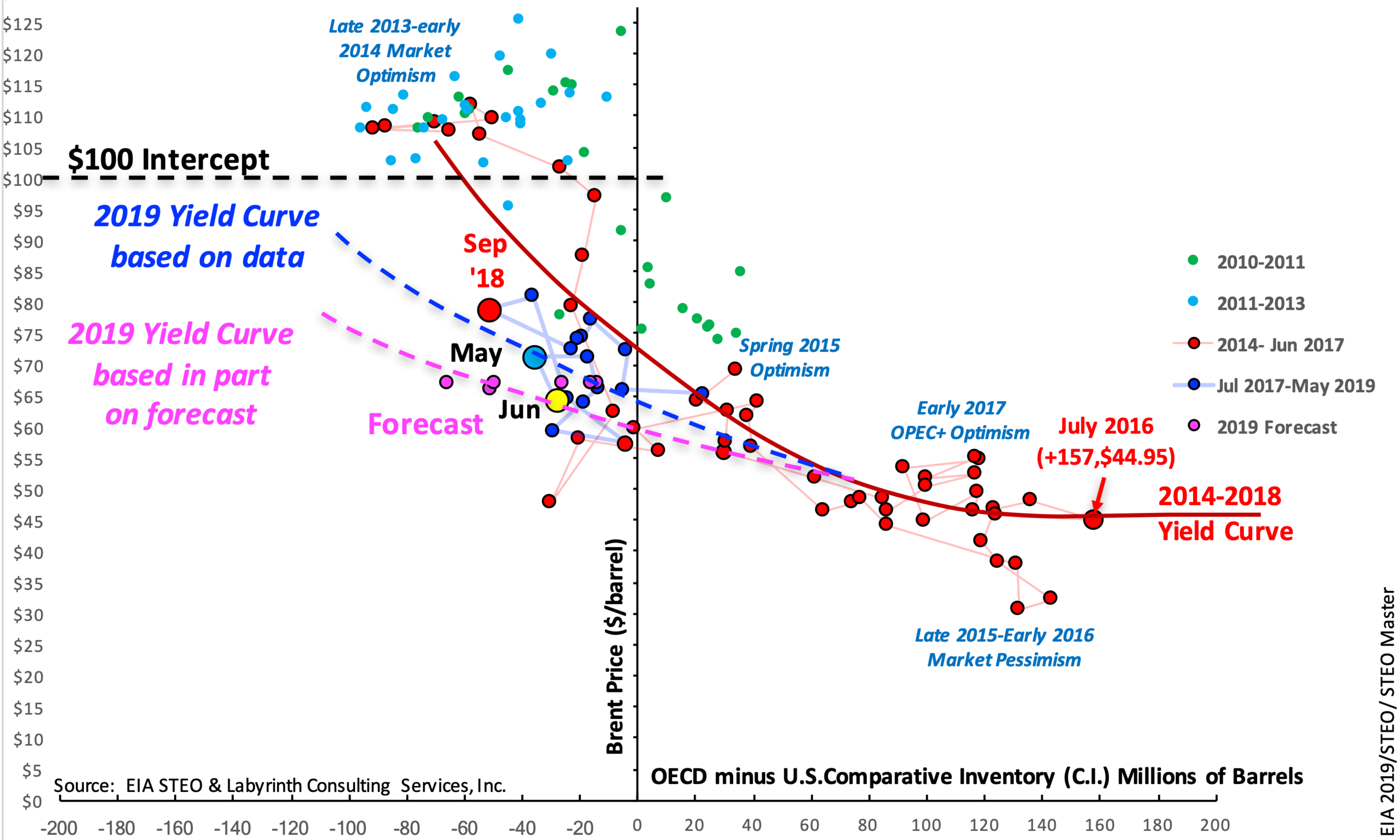
EIA forecast indicates period-average approximate supply balance through 3Q 2019 followed by modest surplus in 4Q 2019 thru 2020
Maximum Brent price ~$67 in 3Q 2019



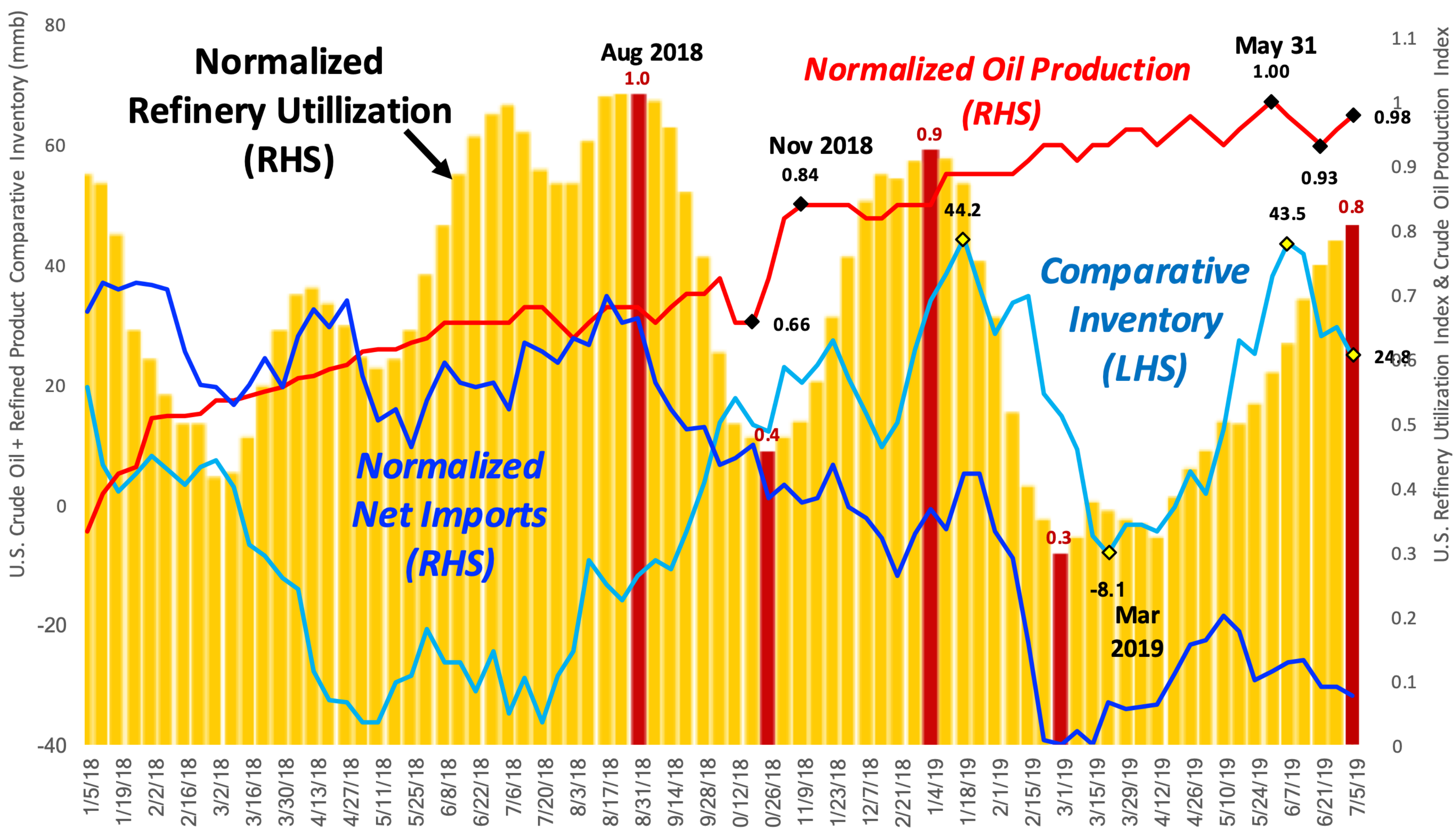
Source: EIA STEO & Labyrinth Consulting Services, Inc.

EIA 2019/STEO/STEO Master.xlxs

OECD minus U.S. comparative inventory (C.I.) increased +15 mmb in June to -26 mmb
For Brent to reach $100 on 2019 yield curve would require lowest C.I. in 21st century
Most likely maximum Brent price is $75 in 2019



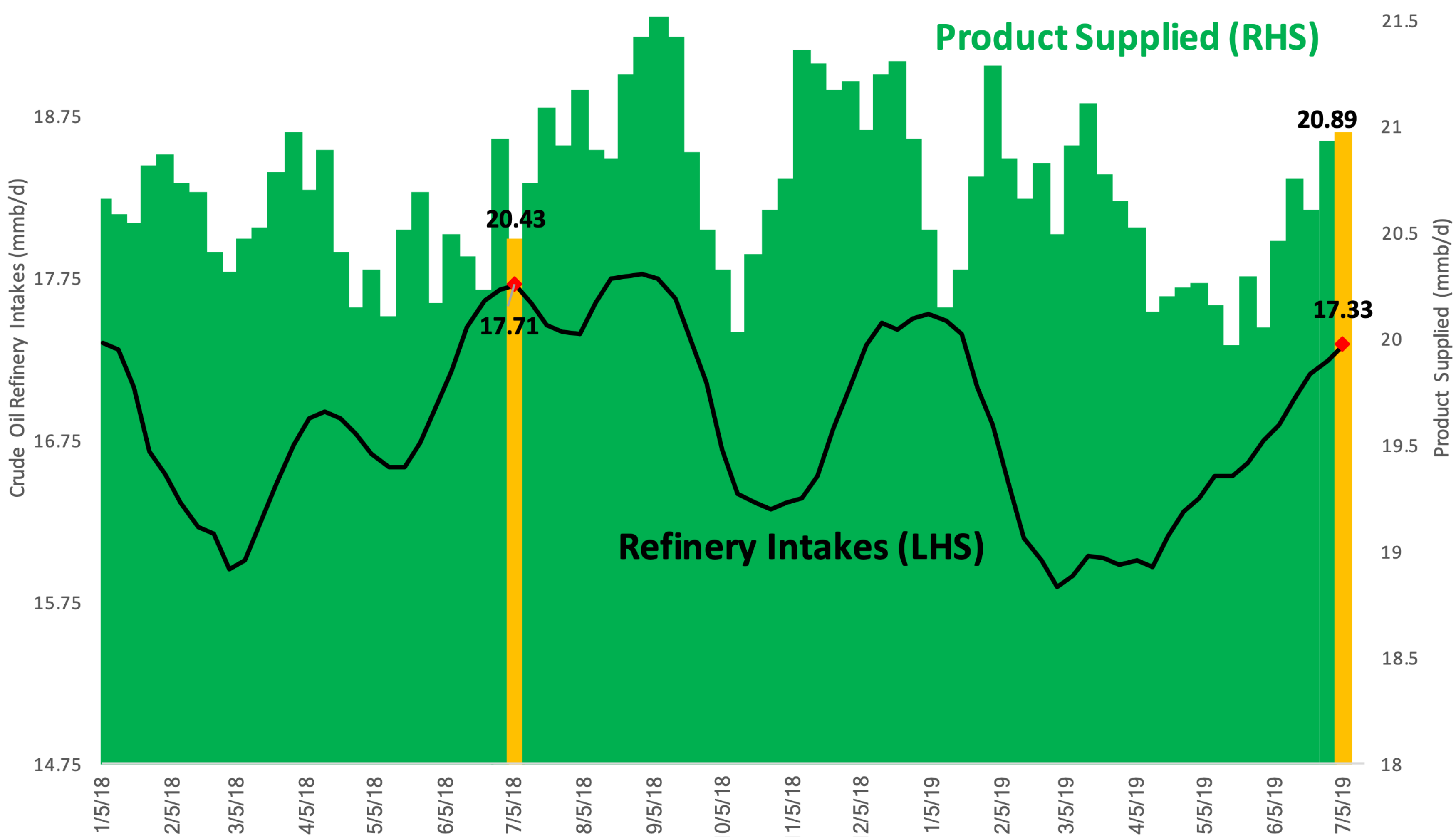
U.S. stocks built March-May despite consistently increasing refinery utilization
Stocks have only begun to decrease in the last few weeks



Source: EIA & Labyrinth Consulting Services, Inc.

EIA 2019/Weekly Updates/Crude Oil & Refined Products Inventories & CI

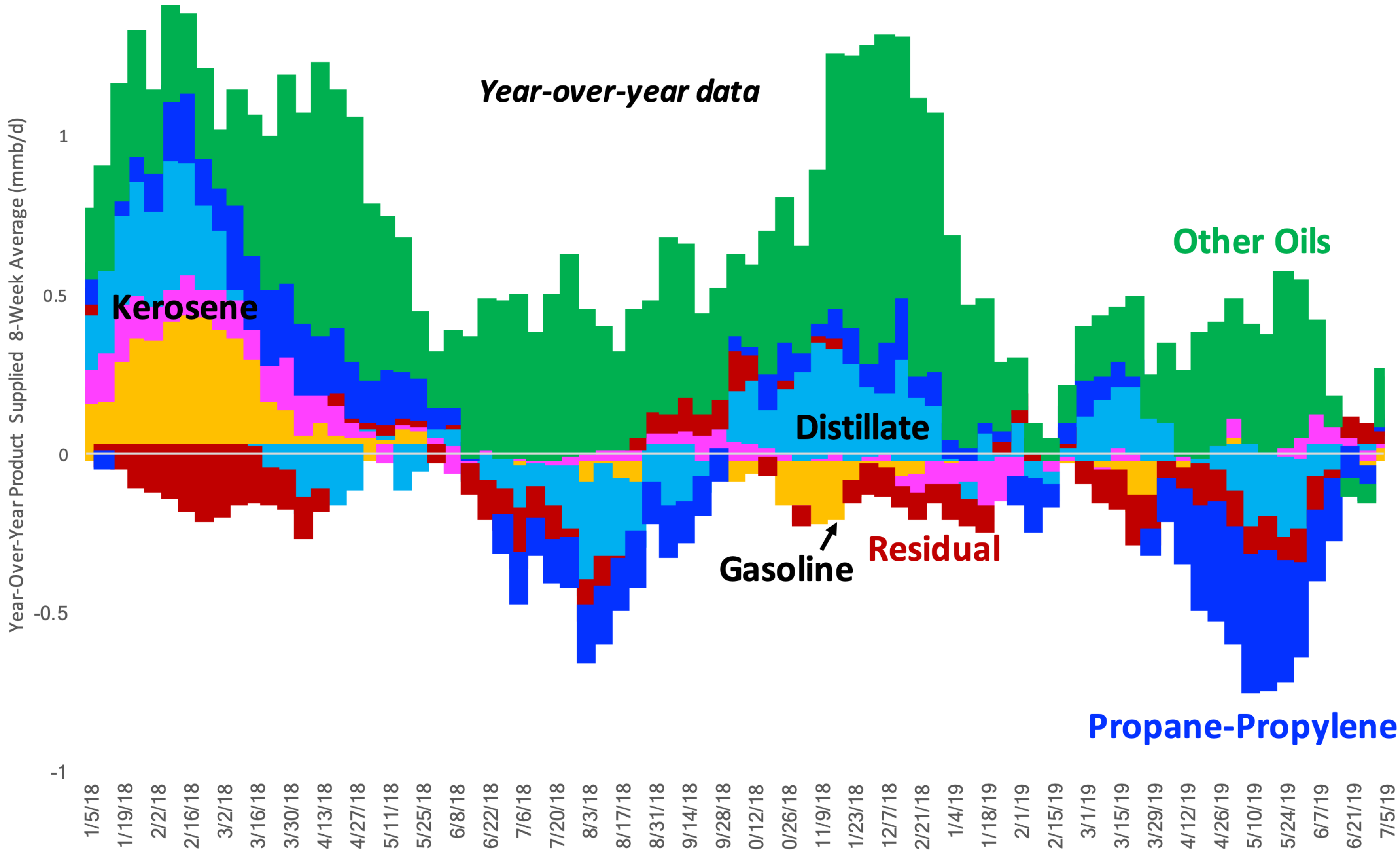
U.S. refinery efficiency is higher following 2019 maintenance
July 5 intakes were -374 kb/d less than during the same week in 2018
but product supplied was +468 kb/d higher



Source: EIA & Labyrinth Consulting Services, Inc.

EIA 2019/Weekly Updates/U.S. Weekly Inputs & Utilization & Net Imports_MASTER

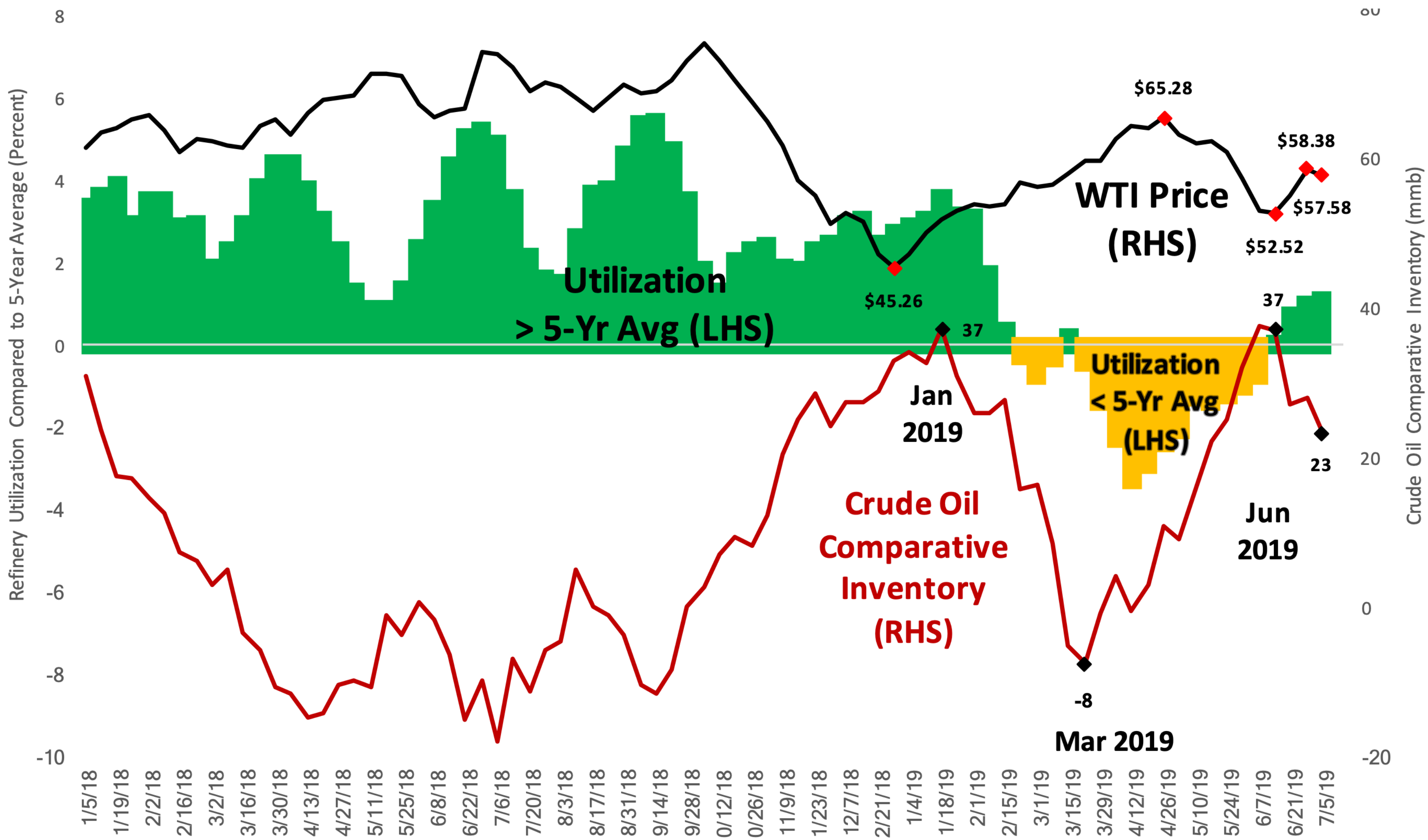
Other oils and propane-propylene growth have declined since early 2018
Distillate & gasoline growth have not declined as much



Source: EIA & Labyrinth Consulting Services, Inc.

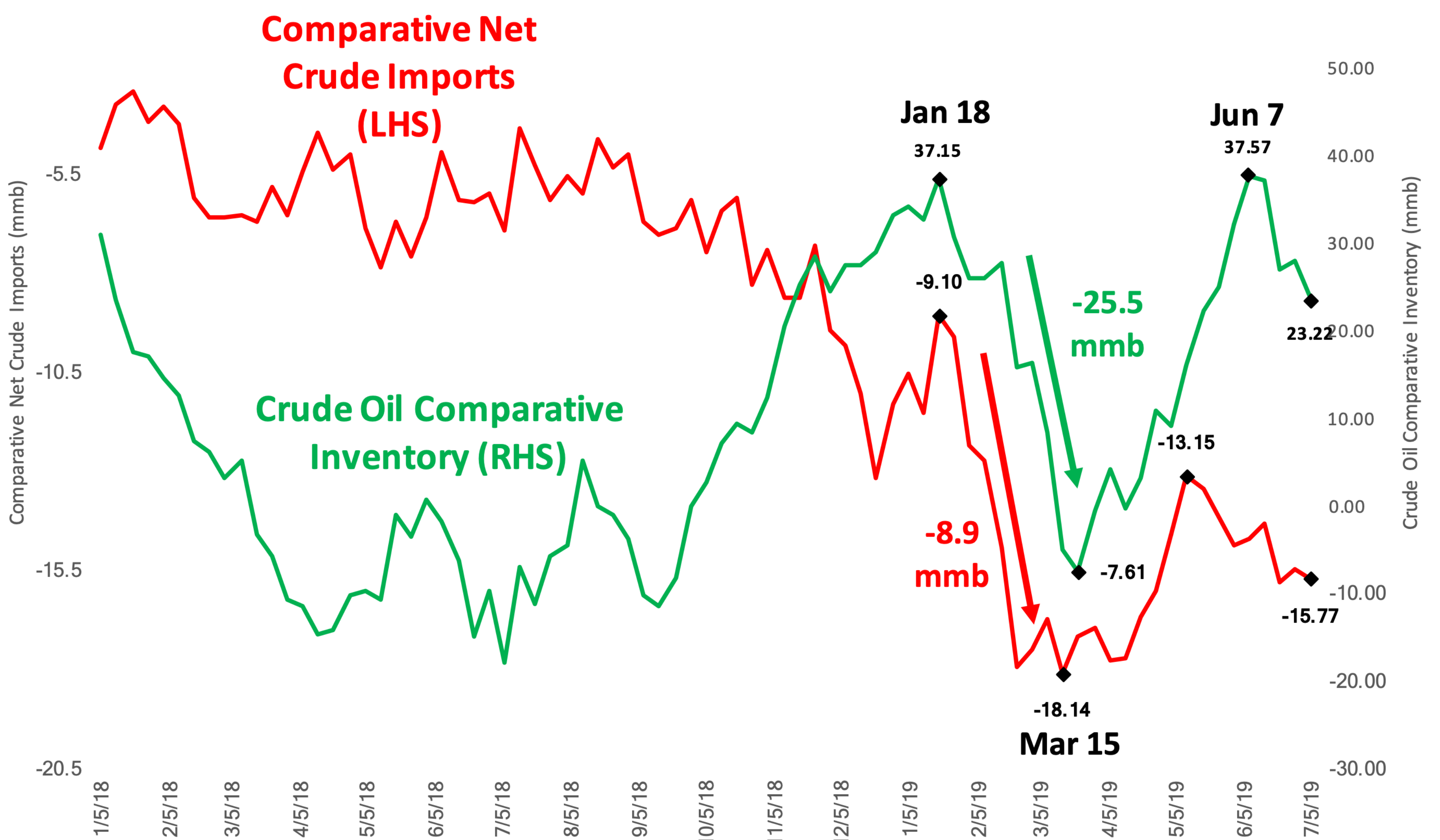
EIA 2019/Weekly Updates/U.S. Weekly Product Supplied_MASTER

Anomalous positive correlation of U.S. refinery utilization & crude stock levels in 2019
Low comparative inventory during extreme January-March refinery maintenance and higher C.I. with recovering refinery utilization March thru June



Source: EIA & Labyrinth Consulting Services, Inc. EIA 2019/Weekly Updates/U.S. Weekly Inputs & Utilization & Net Imports_MASTER

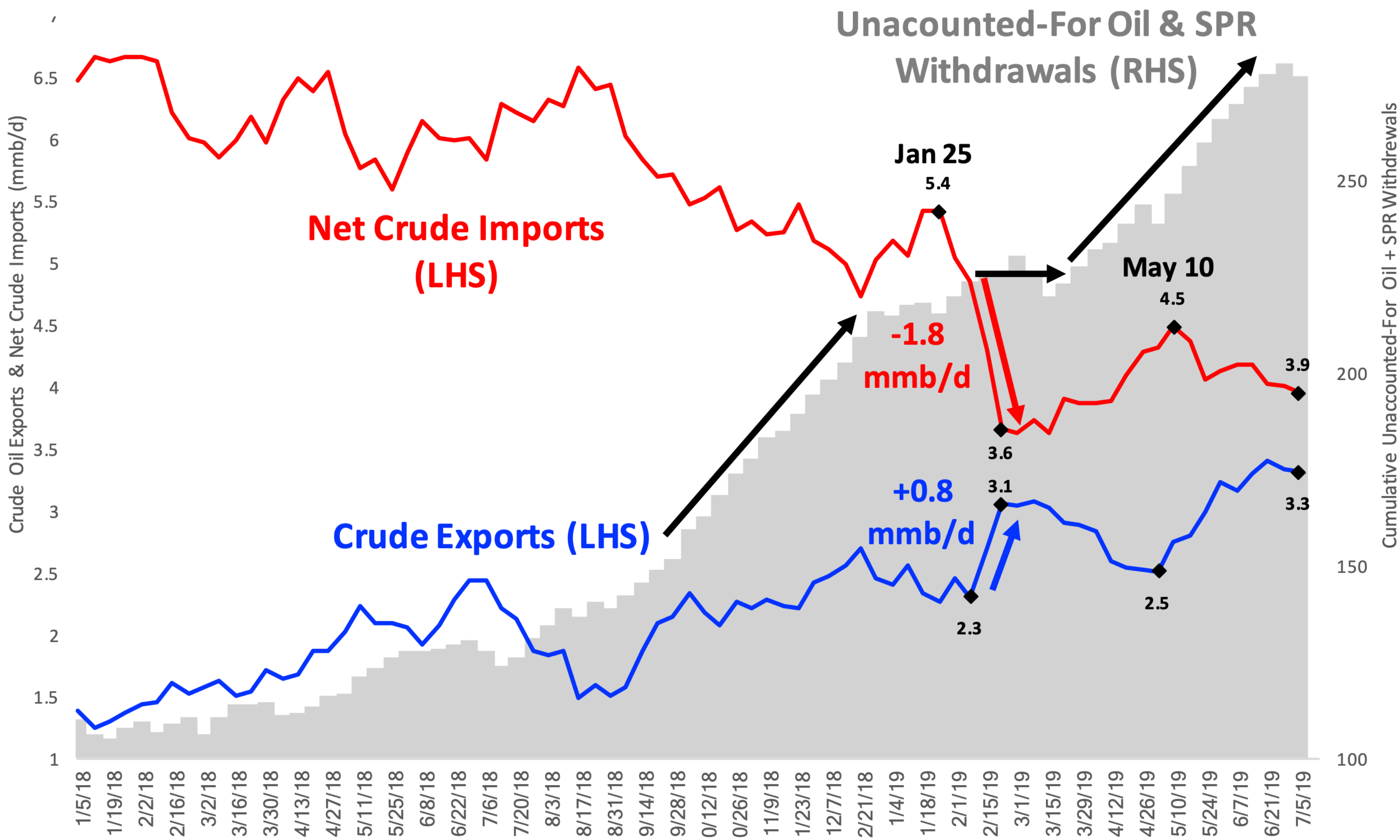
-26 mmb fall in U.S. crude oil comparative inventory January-March 2019 accompanied by -9 mmb decrease in comparative net crude oil imports



Source: EIA & Labyrinth Consulting Services, Inc.

EIA 2019/Weekly Updates/PSW Master.xlsx

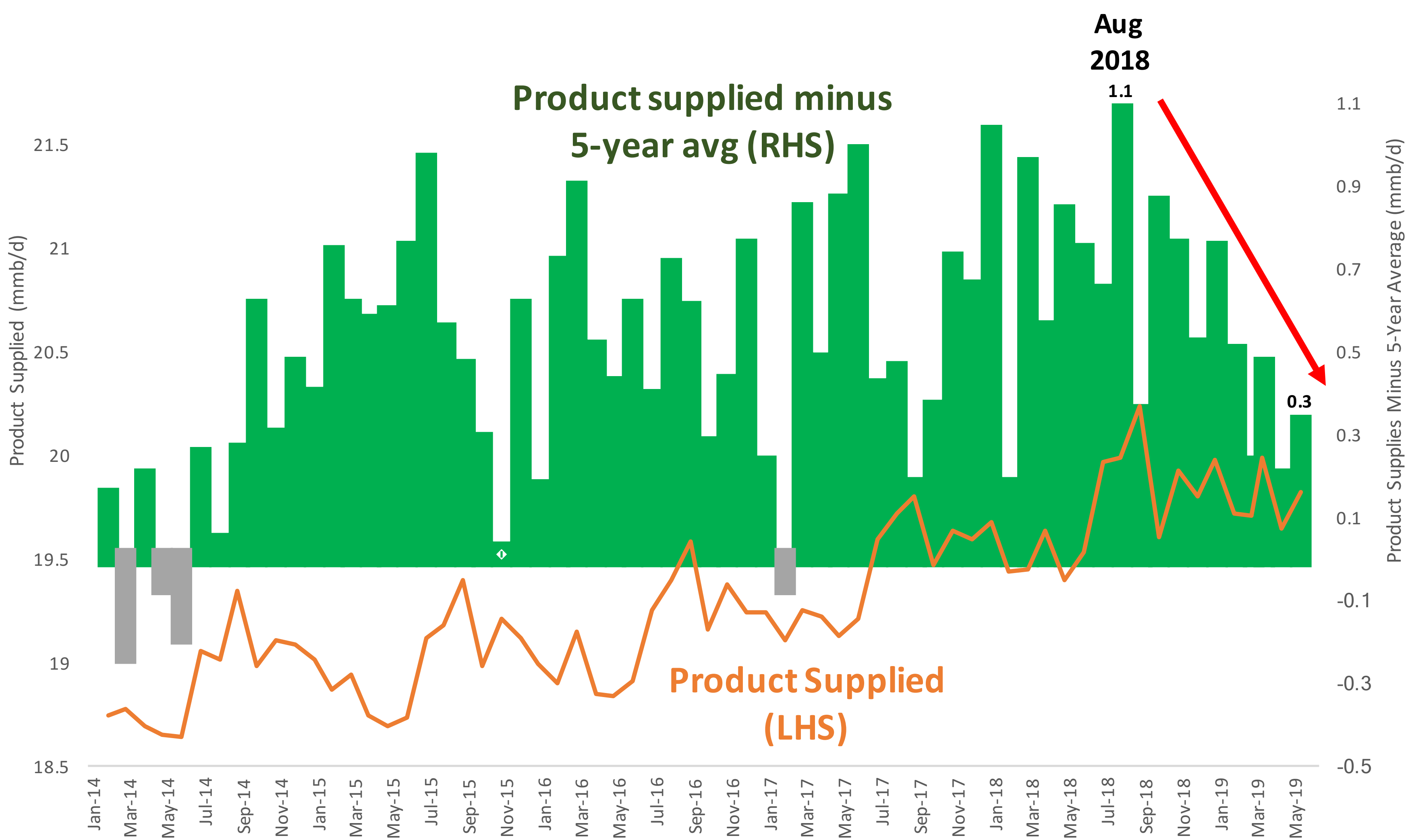
Extraordinary +1.8 mmb/d decrease in net crude imports Jan 18 - Feb 22 2019
+0.8 mmb/d increase in crude exports & flattening of unaccounted-for oil releases



Source: EIA & Labyrinth Consulting Services, Inc.

EIA 2019/Weekly Updates/PSW Master.xlsx

U.S. consumption (product supplied) of refined products minus its 5-year average has decreased -750 kb/d (-70%) since August 2018



- Source: EIA & Labyrinth Consulting Services, Inc.

EIA 2019/Monthly Updates/U.S. Product Supplied Master