

June 17, 2019

Heavy Crude Oil Supply Outlook Quarterly Q2 2019

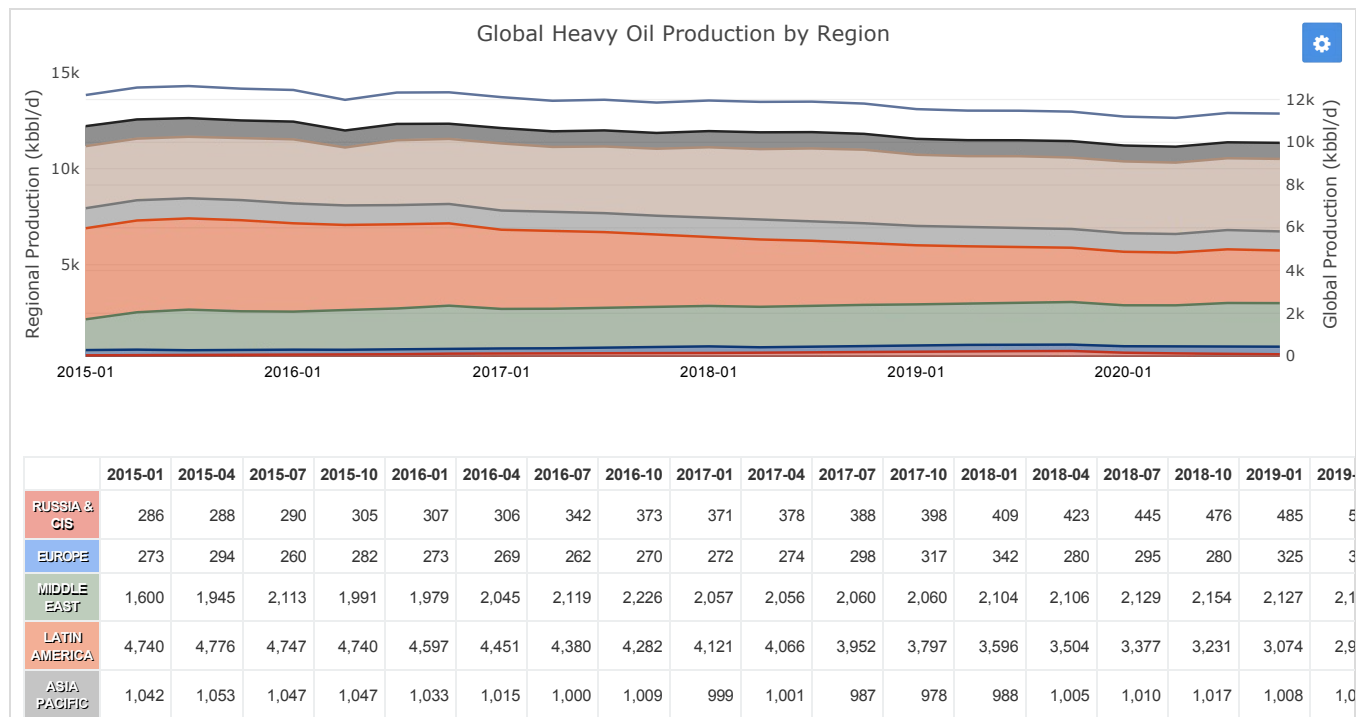
Stratas Advisors

Sanctions, Curtailments, and Contamination Will Further Tighten and Sweeten Global Heavy Crude Mix

Global Heavy Crude Oil production Overview

Global heavy crude oil production in 1Q19 was 11.6 million b/d, down 254,000 b/d due to production disruptions in Venezuela as well as mandatory production curtailment in Alberta, Canada.

Looking forward, global heavy oil production decline will slow down as Alberta government scales back the curtailment requirement and Venezuela recovers from the power outages in March. Iraq is expected to ramp up heavy oil production in 2019 and 2020, offsetting the output drop in Iran due to US sanctions. Global heavy oil supply is expected to average 11.4 million b/d in 2019. Starting from 1Q20, the new IMO sulfur cap will drag down heavy oil production in Russia, which has the highest refinery high sulfur fuel oil (HSFO) yield in the world. Other major heavy oil producing regions—Latin America and Middle East—will experience minimal impact from the new IMO regulation because supply has already tightened in these regions due to production disruptions.



NORTH AMERICA	3,231	3,207	3,199	3,205	3,336	3,014	3,372	3,388	3,491	3,355	3,469	3,487	3,673	3,696	3,794	3,828	3,704	3,6
AFRICA	1,039	998	974	939	922	885	850	789	800	811	835	821	841	874	850	824	828	8
Global	12,211	12,560	12,630	12,507	12,447	11,985	12,326	12,338	12,111	11,942	11,989	11,857	11,953	11,890	11,901	11,810	11,551	11,4

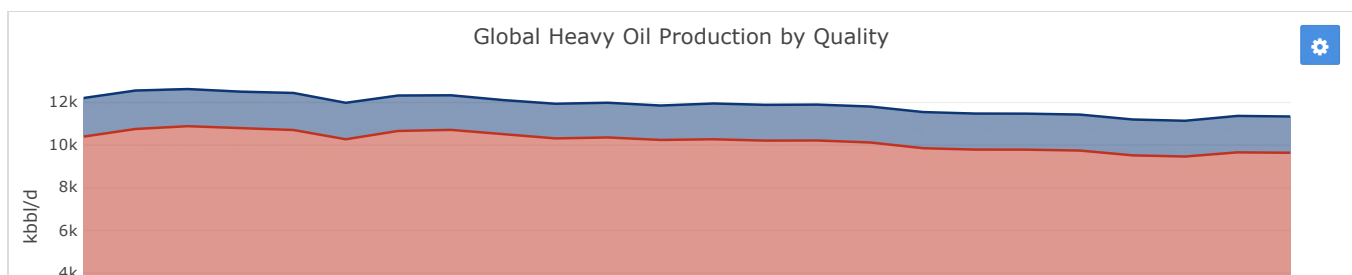
Of all the top 10 heavy oil producing countries, Canada contributes the most of heavy oil to global supply through its oil sands deposits. Heavy oil production in Venezuela, once over 1 million b/d, is expected to drop by nearly 430,000 b/d in 2Q19 compared to 2Q18 due to ongoing political and economic crisis exacerbated by US sanctions and mounting inflation. By 2035, Canada, Iraq, and Iran will be the top contributors to world heavy oil supply. Venezuela on the other hand, will require extensive period of time to restore its heavy crude production despite huge deposits available for extraction.

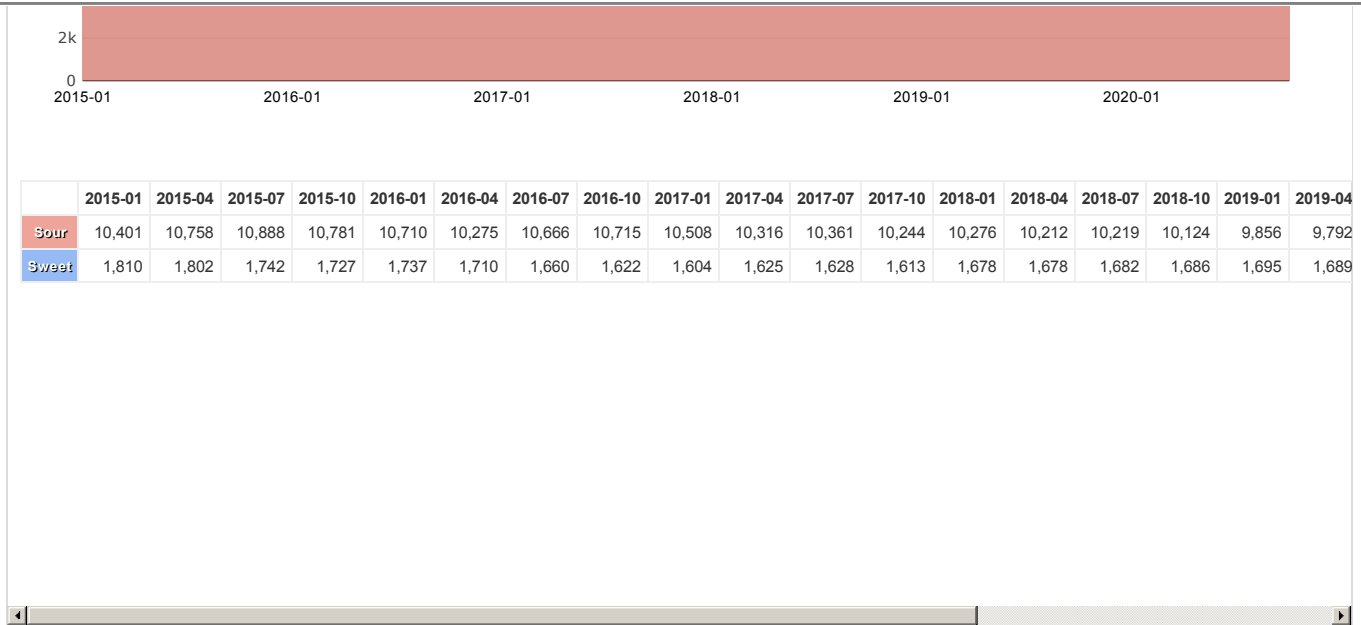
Table 1. List of World Top 10 heavy oil producers

Country	2019 Q2 Production (Mb/d)	2018 Q2 Production (Mb/d)	YoY Change (Mb/d)	EUR through 2035 (Million bbls)	Proved Heavy Oil Reserve (Billion bbls)
CANADA	3194	3200	-6	67	163
MEXICO	906	947	-41	15	3
IRAQ	842	789	53	23	32
CHINA	807	792	16	12	7
IRAN	647	678	-31	18	42
VENEZUELA	642	1070	-427	10	246
BRAZIL	529	618	-89	13	3
USA	491	496	-6	7	2
COLOMBIA	434	456	-22	7	1
OMAN	422	430	-8	6	2

Global Heavy Crude Oil Quality Overview

Global heavy crude quality in 1Q19 was sweeter than the previous quarter because the reduced barrels from Venezuela and Canada are mostly sour oil. In the coming quarters, the sweetening trend in world heavy crude supply will continue as sour oil output extends decline.





Major Projects

No major heavy oil projects came online during 1Q19. We expect that new heavy oil fields in Iraq such as Sheike Adi, Najmah, and Qayara will be brought on stream by the end of 2020. Meanwhile, several oil sands projects in Canada such as the Sepiko Kesik and Jackfish East Expansion projects that were scheduled to start up between 2018 and 2020 are now postponed to post 2023.

The rest of this report is available to subscribers of [Global Heavy Crude Oil Outlook Service](#). Not a subscriber? [Create a account](#).