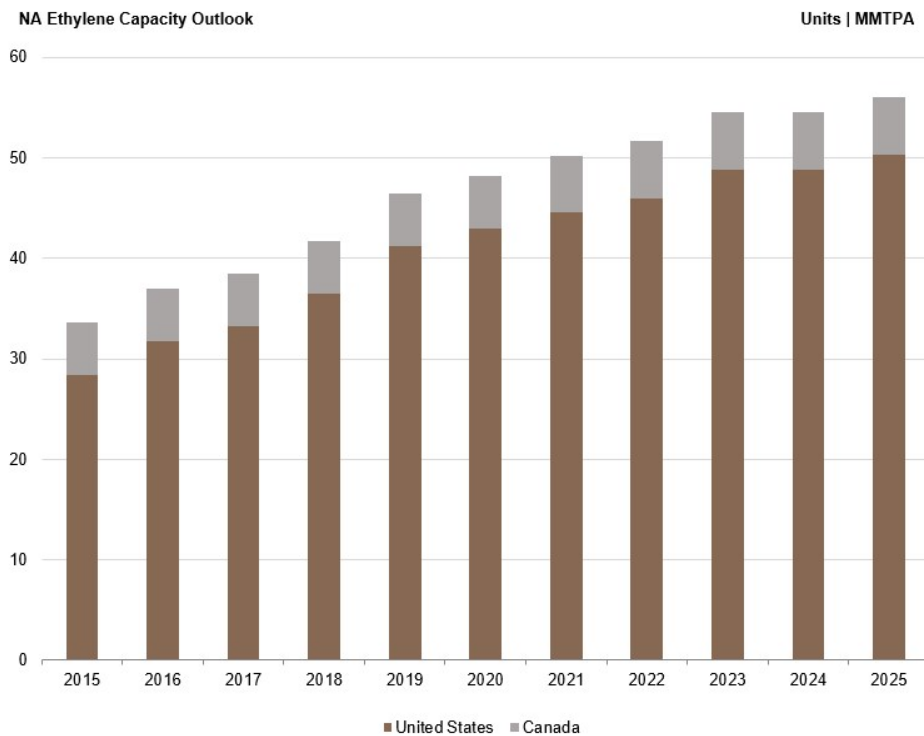


April 11, 2019

North America - Upcoming Cracker Projects and Capacity Outlook

Stratas Advisors

Between 2018 and 2025 North America is expected to add 14 MMTPA steam cracker capacity. The US will add 97% of the capacity, remaining will be in Canada. Approximately 80% of the upcoming capacity will be located in USGC.



Source: Stratas Advisors

The information in tables below includes the North America region's major announced steam cracker projects.

Country	Location	Company	Capacity	Completion
United States	Lake Charles, LA	Indorama Ventures Olefins LLC	0.4	2019
United States	Lake Charles, La.	Sasol North America Inc.	1.5	2019

United States	Point Comfort	Formosa Plastics Corp. USA	1.3	2019
United States	St. Charles, LA	Westlake Petrochemicals Corp. (Axial/Lotte (LAAC LLC))	1.0	2019
United States	Plaquemine Parish, LA	Shintech Inc	0.5	2019
United States	Orange, TX	Dow Chemical Co.	0.1	2019
United States	Freeport (LHC 9), TX	Dow Chemical Co.	0.5	2020
United States	Port Arthur, TX	Total SA	1.0	2020
United States	Monaca, PA	Shell Chemicals Ltd.	1.5	2021
United States	St. James Parish, LA	Formosa Plastics Corp. USA	1.2	2022
United States	Belmont County, OH	PTT Global Chemical/Marubeni/Daelim chemical	1.0	2023
United States	San Patricio County, TX	SABIC, Exxonmobil Chemical Company	1.8	2023
United States	Orange, TX	Chevron Phillips Chemical Co. LP	1.5	2025
Canada	Corunna	Nova Chemicals Corp.	0.5	2021

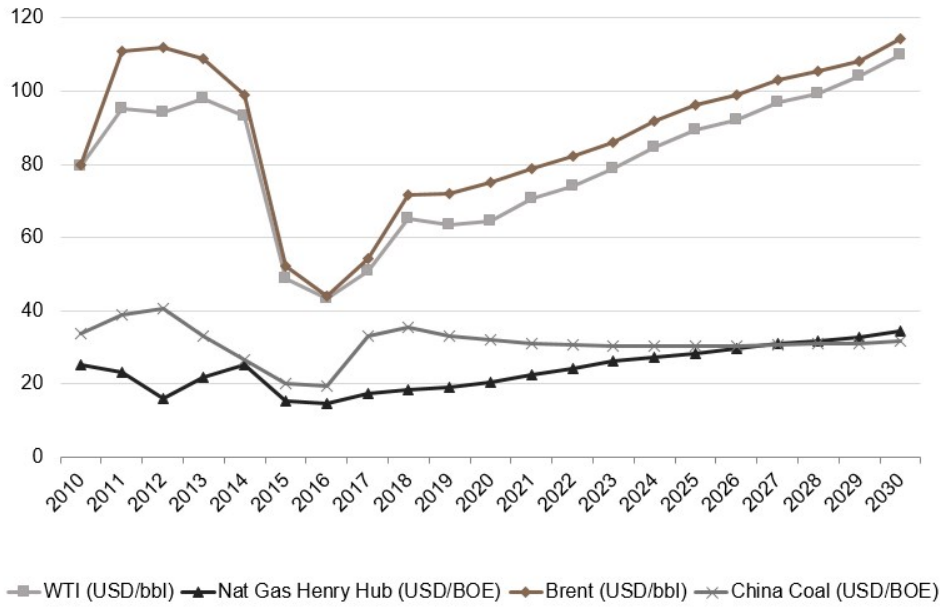
Source: *Stratas Advisors*

North American supply is estimated to increase from 38 MMTPA in 2018 to 50 MMTPA by 2025.

Gas prices in the US are expected to remain below \$30 USD/boe (\$ 5/MMBTU) until 2025, keeping ethane projects profitable. The delta between Henry Hub natural gas prices and WTI is expected to widen from \$44 USD/bbl in 2019 to \$75 USD/bbl in 2030, making steam cracker projects more profitable than naphtha crackers.

Commodity Price Outlook

Units | USD/bbl, USD/BOE



Source: Stratas Advisors

A detailed report with regional-level analysis is available to subscribers of our [Global Petrochemicals service](#). Complete data for the analysis can be found on [Stratas Advisors' Data Tool](#). Not a subscriber? [Create an account](#).