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# Polyethylene Production by Borealis' Borstar® 3G PE Multimodal Process

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## Abstract

This review presents an economic analysis of PE production by Borealis' Borstar® 3G PE multimodal process. Bayport Polymers LLC (Baystar™), a JV between Total and Borealis, will start up a 625,000-ton-a-year facility based on this process in 2022; it will be in Pasadena, Texas, the United States. The plant will be capable of producing enhanced PE products ranging from bimodal to multimodal PE. The Borstar® 3G PE process features two loop reactors and one gas-phase reactor in series. The additional loop reactor enables the production of premium-grade products with improved properties. This review will evaluate the estimated capital cost for the new PE plant utilizing the Borstar® 3G PE technology. The production costs to produce bimodal HDPE and bimodal LLDPE are also assessed.

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