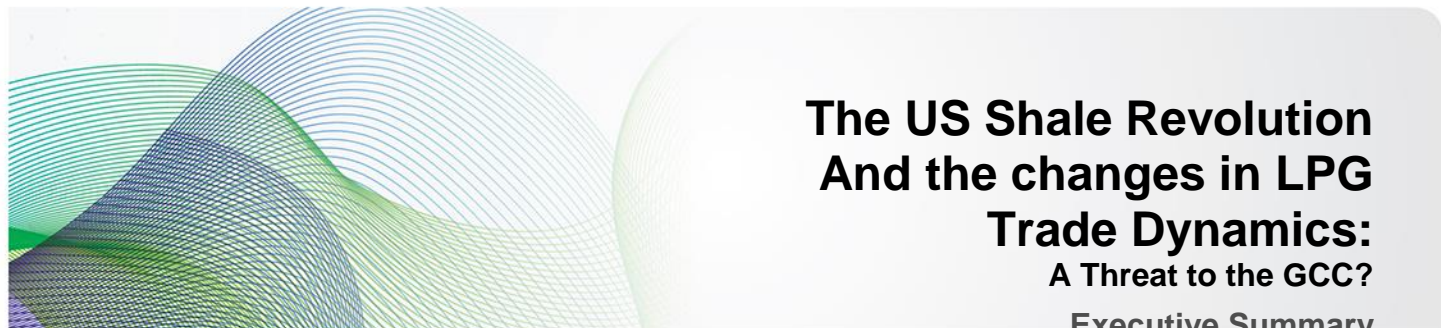


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## The US Shale Revolution And the changes in LPG Trade Dynamics: A Threat to the GCC? Executive Summary

One of the major developments associated with the US shale revolution and that has attracted little attention from market analysts is the sharp expansion in US liquefied petroleum gas (LPG) exports. Substantial increase in domestic supply has not only meant that US imports of LPG have dwindled, but the US has now become one of the world's biggest exporters of LPG. The sharp rise in US LPG exports is already having wide repercussions on global LPG market dynamics and trade flows. It is widely believed that the impact of higher US LPG exports will undermine the position of traditional exporters, mainly those in the Gulf Cooperation Council (GCC). First, as Asian consumers increase their purchase of US LPG in an attempt to diversify their sources of supply and gain access to cheaper LPG, GCC's share of LPG exports to Asia is expected to fall. Second, LPG prices and the existing pricing mechanism may come under pressure from intense competition from US supplies. This paper argues that while US exports are a powerful force shaping LPG markets, it is also important to examine some of the internal dynamics within the key GCC producers, especially the rapid growth in domestic demand for LPG driven by the petrochemical sector. The drive towards diversification implies that a large percentage of the increment in production from the GCC will be used domestically. Liquid cracking could also offer opportunities for GCC producers to capture a larger share of the higher value petrochemical specialty products, which fits within GCC governments' policies. These internal dynamics would lower the volumes of LPG available for exports from the region, and along with the expected growth in Asian demand for LPG, will moderate the impact of higher US LPG exports on prices. Furthermore, the cost of arbitrage between the US and Asia is likely to limit the impact on regional LPG prices, as prices in the US will have to fall substantially before the impact is felt in Asia. The biggest uncertainty however remains as to whether access to cheaper US LPG will induce Asian petrochemicals to start seeking alternative feedstock away from Middle East naphtha, which will have dramatic effect on LPG and naphtha markets and consequently on petrochemicals trade.

