

# Impact of Panama Canal Expansion on LNG Shipping

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## Abstract

Because natural gas supply points are far away from the location of the demand, this gap creates a monetary opportunity for the shipping industry. Indeed, LNG shipping has become the most profitable in the shipping industry [4]. In 2012, the standard shipment size of LNG was 155,000 m<sup>3</sup> [2]. The day rent for LNG tankers rose to \$150,000/day in 2012, up from \$125,000/day in 2011. LNG shipping costs involve the LNG carrier's capital, operating cost, and voyage cost. However, the total capacity of LNG tankers is only 54.0 million cubic meters in LNG form with 378 vessels in operation at the end of 2012 [2]. To balance such growing demand/supply, the infrastructure underpinning global trade in LNG will need to grow and develop. Therefore, the future capacity requirements of LNG tankers, liquefaction terminals, and regasification plants are currently being questioned.

The objective of this research is to analyze optimal future LNG capacity requirements, including regasification and liquefaction capacity, in the next 30 years. In particular, this research looks at how development of growing demands and emergence of unconventional production will influence global LNG markets and future capacity requirements. Using a mixed complementarity (market equilibrium) approach, the World Gas Model (WGM) provides insightful results for natural gas production level, consumption, prices, and future natural gas infrastructure capacity expansion given different market conditions. These results offer a better understanding for policy planning and decision makers.

## References

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