## The Future of Upgraded Biogas Production for BIO-LNG



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End date: 07-2014

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## **Description of Research**

Liquefied natural gas (LNG) is becoming a more popular fuel (for cars, trucks, and ships) due to its clean combustion and higher energy density than natural gas or biogas (Cuijck, Dorp, & Velde, 2013). Even better than fossil-LNG is Bio-LNG, Bio-LNG in comparison to fossil-LNG has an even higher energy density. The main advantage of Bio-LNG is the amount of CO2 produced from Well-To-Wheel which is considerable less than that of fossil fuels (Verbeek & Kampman, 2012).

It is expected that in 2030 10% of the total biogas production is used for for the production of Bio-LNG. However there are a few hurdles that have to be overcome before this is reality. My research is focused on multiple aspects of the Bio-LNG production chain.

## **Bibliography**

Cuijck, P., Dorp, R., & Velde, B. (2013). *Een nieuwe horizon: Productie van Bio-LNG, kansen in een opkomende LNG-markt.* Leeuwarden: Groen Gas Nederland.

Verbeek, R., & Kampman, B. (2012). *Brandstoffen voor het wegverkeer*. Den Haag: TNO/CE Delft.



