

GasRich Transport

Preparing a cargo of liquefied gas such as ethylene that is co-transported with LNG entails many prior operations and subsequent handling. The Synfuels engineering team is ready and willing to help in evaluating projects for shipment of co-transported liquefied gases as well as the engineering of those projects. Our GASRICH TRANSPORT™ services include storing, transporting, and delivering gas and LNG for customers. As part of the storage and transportation services, we treat gas and LNG to produce formulations of natural gas and natural gas products for processing, containing, and moving liquids. Our GASRICH TRANSPORT™ services also include technology consultation services for the construction of new facilities and for integrating facilities for creating LNG derived products.

As shown in United States Patent Applications 20110041518 and 20120017639, creating cargos of mixtures or separate components entails many steps and decisions. Figures 1 and 2 in application 20120017639 show these steps in general for when a pre-existing ethylene or other high value gas source is brought to an LNG manufacturing site and a blend is created or a natural gas to ethylene conversion plant is built alongside an LNG manufacturing site. Figures 4 through 6 in application 20120017639 reveal that there are many commonalities between LNG and Synfuels GTE which can be taken advantage of, including integration of several unit operations such as the ASU (nitrogen and oxygen), refrigeration, CO₂ handling, sulfur removal, utilization of natural gas hydrocarbons heavier than methane, water production and other utilities such as steam, electricity and fuel gas. If a blend is transported, it must be separated into individual components at the delivery site. Figures 8 and 9 in application 20120017639 depict methods to make those separations easily and practically. If the different components are transported in separate compartments it is not necessary to load and unload the liquids at the same locations, offering flexibility in sourcing and sales. Synfuels can help assess the methods that permit licensees to make maximum advantage of their gas value chain and strategy.