

## Transporting Natural Gas Around the Caribbean

*M. Kromah, S. Thomas & R.A. Dawe*

### **Abstract**

Many Caribbean islands have expanding tourist industries that will need increasing quantities of electricity. Gas is seen as the premium fuel particularly for electricity generation, but only if it can be delivered cheaper per energy unit (excluding environmental premium costs) rather than the conventional fuels. There are a number of possible methods of exporting gas from Trinidad's oil and gas fields for use as a fuel elsewhere – pipelines, LNG, gas to liquids (GtL) with a wide range of possible products including a clean fuel oil or methanol, gas to wire (GtW) i.e., electricity, compressed natural gas (CNG) and gas to solids (GtS). i.e., hydrates. However, an expanded Caribbean tourist industry would have only a 'small' energy demand that is not currently economically attractive to any major gas seller. Transportation of natural gas as hydrate, or CNG, is believed feasible at costs less than for LNG and where pipelines are not possible. The competitive advantage of the GtS or CNG processes over other non-pipeline gas technologies is that they are intrinsically simple processes and, as a concept, far easier to implement and feasible at lower capital costs. GtS and CNG technologies are options for handling niche markets for gas reserves which are stranded (no market), associated gas (on- or off-shore) which cannot be flared or re-injected, or small reservoirs which cannot otherwise be economically exploited. These options, particularly hydrates, are discussed in technical and economic terms.