

## Progress in Paradise: Growing Plans for Natural Gas in the Caribbean

For many decades, the predominant energy source for the Caribbean region has been oil. With limited natural resources, infrastructure and expertise, Caribbean nations were forced to rely on energy that was both dirty and expensive; pollution threatened the area's greatest asset, its natural beauty, while the high costs of an inefficient fuel source stressed one of the world's poorest regions. According to a recent McKinsey publication, 85% of electricity in the Caribbean is generated from oil.

However, recent technological advancements combined with growth in the liquefied natural gas (LNG) industry have opened the possibility for evolution in the Caribbean energy sector. It is now possible to supply natural gas on a small scale, allowing island nations like Jamaica and the Dominican Republic to meet their energy needs in an exchange that makes economic sense for all parties. As the region responds to the increasing availability of LNG, more and more governments, companies and aid organisations have begun work on new energy projects in Caribbean nations:

1. **Dominican Republic** - In early 2018, senior Dominican officials reported the government's intention to double the nation's LNG imports in an effort to diversify the country's energy portfolio. Long dependent on oil, the Dominican Republic aims to convert existing plants and build new infrastructure to convert LNG to power.

One notable highlight in the Dominican Republic's progress has been the development of the Andres LNG Terminal by AES Corporation to perform LNG reloads. The Andres terminal performed its first reload in February 2017.

2. **Jamaica** - Like the Dominican Republic, the government of Jamaica also sought to reduce its dependency on oil and diversify its power portfolio. In collaboration with New Fortress Energy, Jamaica introduced LNG to its 120MW power plant in Bogue, Montego Bay in 2016. The efforts to supply the plant with natural gas were bolstered by New Fortress Energy's decision to deploy Golar LNG's Golar Arctic vessel to serve as a floating storage unit.

In addition to converting existing infrastructure like the Bogue plant, Jamaica has also committed to building new LNG projects. The Jamaica Public Service Company is working with New Fortress Energy to create a new 190MW plant at Old Harbour Bay which will be supplied with natural gas. The new Old Harbour Bay plant is expected to be completed in early 2019.

3. **Trinidad and Tobago** - While many Caribbean nations must rely on imported natural gas to supply their power needs, Trinidad and Tobago is able to draw resources from offshore fields to the north and east of the dual-island country. One of the most important facilities in Trinidad and Tobago is the Point Fortin Refinery, where LNG trains were first

connected in 2000. Since then, growing alongside the global market for LNG, the refinery has expanded to four trains.

While the Point Fortin facility holds an important place in the LNG landscape in Trinidad and Tobago, its share of LNG production has decreased as other projects come on line. Most notable among these new developments is BP's Juniper project, an unmanned platform located 50 miles off the coast of Trinidad. The Juniper facility began producing LNG in 2017.

- 4. Puerto Rico** - Following the devastating 2017 hurricane season, Puerto Rico's energy industry was faced with how to overcome a humanitarian and industrial crisis. With millions left without access to reliable electricity, government leaders, aid organisations and corporations were faced with the decision of how to quickly and effectively restore power.

While the immediate impact of Hurricanes Irma and Maria posed significant logistical challenges, it also presented an opportunity to build a more resilient power infrastructure to withstand future storms. Companies like PowerSource and Crowley are working together to develop LNG microgrids, distributing power in a nation previously reliant on a central grid. With multiple combined gigawatts of microgrid capacity, the companies are currently focused on restoring reliable power and improving resiliency in the cities and municipalities most affected by the recent hurricanes.