

## High Cost Energy Creates Major Challenges for the Caribbean

Many countries in the Caribbean struggle to meet their energy needs and spend far more than other parts of the world for their needed fuel and power generation. Additionally, many are not meeting their own sustainability goals due to a reliance on

oil products.

- > NATIONS SUFFER FROM HIGH COST ENERGY
- > RELIANT ON OIL-BASED FUELS
- > COST OF PRODUCING ELECTRICITY CAN BE TWICE WHAT IT IS IN THE U.S.
- > PETROLEUM IMPORTS OFTEN 25% OF GDP
- FUEL REQUIRES GOVERNMENT SUBSIDIES
- > NOT REACHING SUSTAINABILITY GOALS



### **Completely Different Energy Landscape in the United States**

The United States has abundant and affordable natural gas supply, allowing us to keep our cost of energy low. However, we need a more efficient delivery system to enable the Caribbean economic access to this fuels supply so they can benefit as well.



## **Current Delivery Methods For Natural Gas and Natural Gas Liquids (NGLs)**



Viable where applicable and available



Ideal for transporting large volumes of natural gas. However, cost overruns and long lead times for separate production and regas facilities are problematic. Very costly to expand



LPG ships are available but NGLs currently require a separate supply chain from natural gas

#### **WHAT'S NEEDED:**

A low cost, flexible, safe, environmentally-friendly system for the delivery of the natural gas needed for power generation <u>and</u> the NGLs required for other energy uses *together in one cargo* 

## Delivering Natural Gas and NGLs Together: Compressed Gas Liquid "CGL"™

#### A Better Way for Delivering Both

Combining natural gas and NGLs into a solvated product, Compressed Gas Liquid (CGL), is SeaOne's answer for more efficiently and affordably delivering these products to consumers. This method is *patented worldwide* and owned by SeaOne Holdings, LLC.

Using a Solvent (NGL - propane) and injecting a non-Solvent (methane) at the right pressure and temperature, the Solvent (propane) absorbs the non-Solvent (methane) molecules into the same area occupied by each propane molecule



Similar to how natural gas is cooled to -260° F (-169°C) degrees to be able to deliver it long distances in the form of Liquefied Natural Gas, CGL is also cooled. However, CGL is only cooled to -40° C/F and maintained at a moderate pressure of 1400 psi (100 bar).

This process uses standard gas plant and pipeline components, not cryogenic equipment, which is why CGL's production cost is significantly lower than LNG producers', resulting in a reduced delivered natural gas and NGL price for SeaOne's customers.

### The Advantage of CGL Compared to LNG

What is Delivered:







CGL

**Cost of Production & Export Terminal:** 

3 MTPA CGL Equivalent Greenfield Development

\$3 billion \$1000/Metric Ton per annum Large Cost Overruns

\$450 million \$133/Metric Ton per annum Flexible Expansions – Lower Cost

**Time for Greenfield Development:** 

3MTPA CGL Equivalent Greenfield

**5-12 Years** 

3 Years

At times, can provide bridge fue within 6 months

Pricing:



LNG pricing fluctuates, tied to oil or spot LNG, many times priced below diesel CGL tied to U.S. gas prices, not oil, and can hedge with long term contracts

Adapts Easily to Smaller Markets:

NO

YES A

Acreage Requirement for Production and Export Facility:



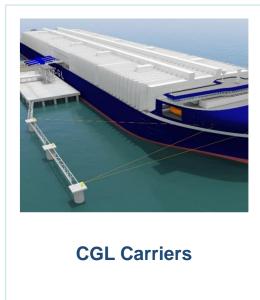


### SeaOne Caribbean, LLC

SeaOne Caribbean is dedicated to the mission of delivering the lowest cost, clean fuels to the Caribbean, Central and South America. This is accomplished by using our patented delivery method, CGL, which is more cost effective, safe, reliable, and robust than other current delivery methods.



CGL Production and Export Terminal in Gulfport, MS, USA





Project. The production and export terminal in Gulfport, MS USA will export natural gas and NGLs in the form of CGL to the Dominican Republic, Colombia, and surrounding areas. SeaOne provides direct access to the U.S. natural gas and NGL market and enables affordable power supply in the countries we serve with no up-front capital required from these governments.

## **CGL Production and Export Terminal Gulfport, Mississippi USA**

SeaOne's terminal in Gulfport receives natural gas and NGLs and uses our patented CGL system to combine them into one liquid product for export and delivery as a single cargo.



- 40 Year Lease on 37 acre Site with MS Port Authority
- Facility Connected to Natural Gas & NGL supply
- ✓ Phase 1 Production: 400,000 Mcf/Day
- Phases 1-4 Production: 1.6 Bcf/Day

- Usage of Standard Gas Plant Technology and Patented CGL Containment System
- ✓ FEED Completed
- U.S. DOE Approved for Export to FTA Countries
- No Adverse Environmental Impact

### **CGL** Transportation

SeaOne has developed designs for Articulated Tug Barges (AT/B) and Compressed Gas Liquid Carriers (CGLCs) for shipment of CGL to market. Vessels will be built at Sembcorp's shipyard in Singapore and owned and operated by a third party.







- ✓ ABS Classed
- ✓ Marshall Islands Flagged
- ✓ Vessels owned and operated by publicly traded shipping company
- ✓ Low-emissions vessels with hybrid power components will burn propane for fuel

### **CGL** Receiving Terminals in the Caribbean

SeaOne's receiving terminals will receive, store and fractionate CGL into the customer's ordered products - U.S. natural gas and NGLs, or a blend – for their end use.

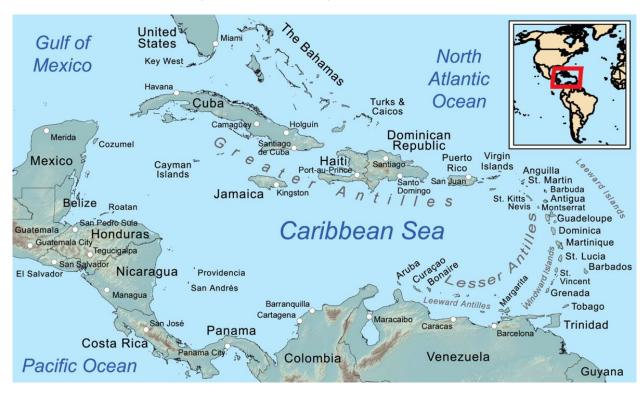
SeaOne's CGL receiving terminals will provide these areas with clean, affordable fuels and reliable power supply. They will also serve as hubs for the distribution and export of natural gas and NGLS to other parts of the country and nearby areas.

#### ✓ Dominican Republic

San Pedro de Macorís

#### ✓ Colombia

- Cartagena serving the Atlantic and Caribbean coast of Colombia
- Puerto Solo serving Buenaventura and the Pacific coast of Colombia

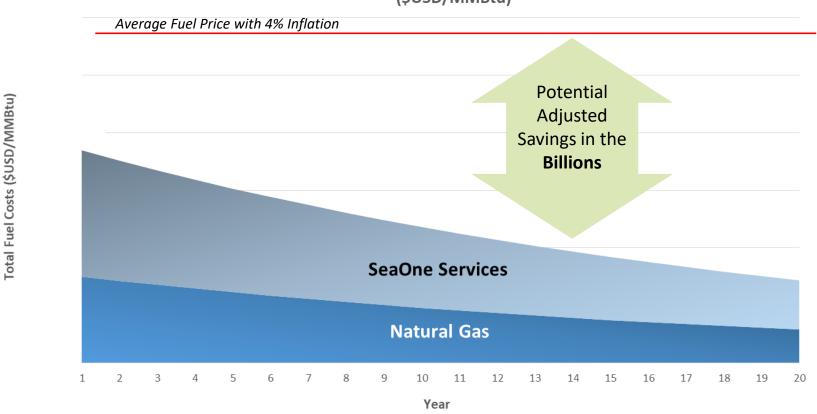


### SeaOne's Fuel Cost in the Caribbean Adjusted for Inflation

As a result of SeaOne Caribbean's flat fee pricing and U.S. natural gas futures, SeaOne's inflation adjusted cost continues to go down every year, saving the countries we serve billions of dollars in long term fuel expenses.

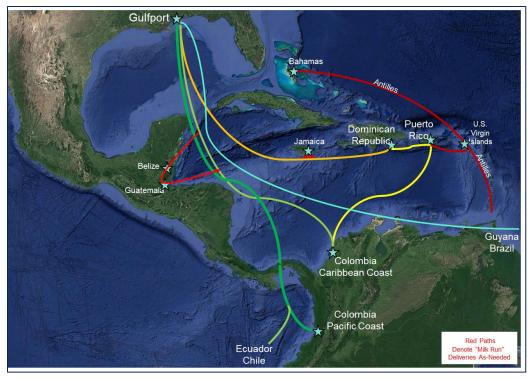
#### **Caribbean Real Fuel Costs**

(\$USD/MMBtu)



# Clean Fuels Supply Project Impact in the Caribbean

Customers of SeaOne Caribbean will significantly benefit both financially and environmentally from this project. For many, this is the first time they will have access to affordable, reliable, clean fuel supplies and it will enable them to better regulate costs and reach their sustainability goals. It has the potential to remake the Caribbean. Come discuss your projects and energy needs with us!





SeaOne's system will create billions in fuel and electricity cost savings. Prices can be hedged for 10-20 years providing stability for future planning.



SeaOne's business plan is similar to a that of a U.S. gas pipeline, and charges a flat fee for delivery of products. This leaves major upside with the customer.



The usage of CGL as a fuels delivery method creates an opportunity for customers to experience a 60% reduction in emissions vs. oil and a lower cost of power generation

For more information please visit: www.seaonecaribbean.com