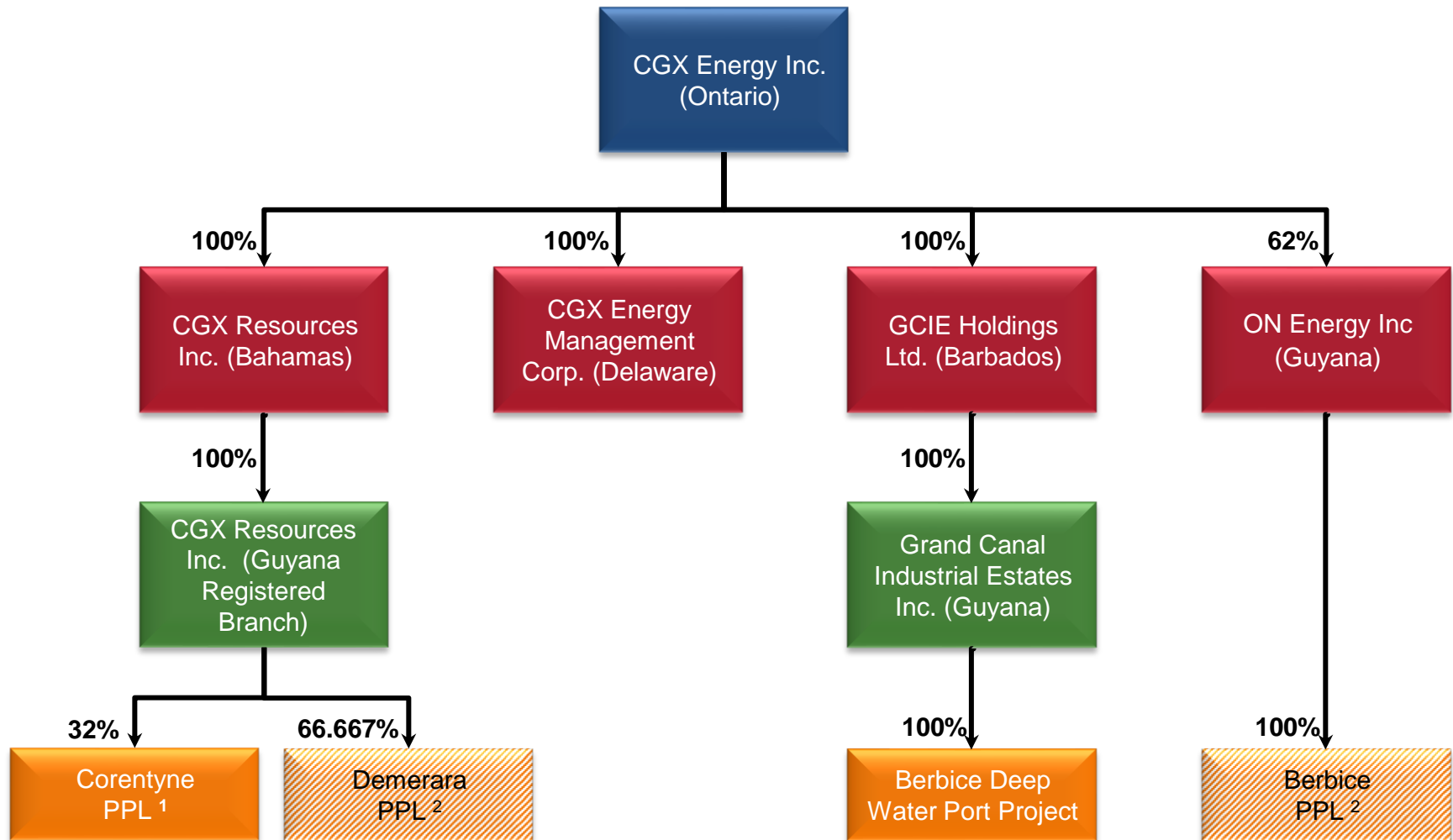


# Grand Canal Industrial Estates Inc. Berbice Deep Water Port



*August 2022*



<sup>1</sup> The Company signed an agreement with Frontera on July 21, 2022 to transfer 34.667% interest in the Corentyne block to FEC: after closing, the Company will hold 32% Working Interest in the Corentyne block. The closing of the agreement is subject to certain precedent conditions including TSX-V and Government of Guyana approval.

<sup>2</sup> The Company has, in principle, reached agreements with the Government of Guyana to relinquish the Demerara and Berbice blocks through mutual termination agreements which terms remain to be defined and documented

## Berbice Deep Water Port

- Grand Canal Industrial Estates Inc. incorporated in Guyana June 30, 2010
- Office registered at 234 Lance Gibbs and Irving Streets, Georgetown
- Principal objectives are to build and operate the Berbice Deep Water Port on the Berbice River in Guyana
- The original lease from Government of Guyana for 55 Acres of Berbice River Front Land adjacent and North of “Crab Island” was acquired by CGX Resources Inc. on February 4, 2010, for a period of 50 years
- In August 2012, GCIE acquired the lease from CGX Resources Inc.
- GCIE currently holds 30 acres of the Berbice River Front Land
- GCIE has expended a total of US \$21.8 million to date, on the development of the Berbice Deep Water Port



## Multi-Service Port

Oil and Gas Exploration  
and Production Services

Commodity Import/Export

Regional Shipping

### **Phase 1 Target: 2023**

- 90m x 30m wharf platform build-out, channel access via a 49m long x 12m wide trestle
- Access channel intended draft 7m and basin alongside wharf 8.5m at low tide
- Facility Targets: fuel, oil-field service, agriculture, and commodities (water & electricity)
- Facility Includes: Warehouse, Workshop, Office Block, Open Logistics Yard at Port Site, and Waste Management Facility

### **Phase 2 Expansion Target: 2024 - 2025**

- Expansion Deliverables: Incorporate Container Stackers, Expand Container Yard, Increase Silo Capacity, Wharf Expansion Project, and Traffic Optimization

# Berbice Deep Water Port in Guyana

## Factors Motivating



- Two functional Commercial Oil and Gas Ports available in Guyana
- Berbice Port located East of Georgetown Harbour
- Strong desire for local ports in region
- New port being built on Demerara River
- Congested Georgetown Harbour has little room for expansion
- Stabroek Block Partners utilize majority of current Guyanese ports and surrounding international ports
- Exploration activities in Guyana basin are increasing rapidly with limited local shorebase availability
- Significant exploration expansion planned in both Guyana and Suriname in near term
- Government of Guyana has prioritized the development of the Deep Water Port in Berbice
- Agricultural products in Regions 5 and 6 produce approximately 65% of the national rice crop
- There is a 20% additional transportation cost on Guyana commodities to ship to Port Georgetown



Build and operate initial phase of the **Berbice Deep Water Port** to service the highly active offshore oil and gas exploration industry and agricultural sector in the Guyana-Suriname Area

- 90x30 meter wharf platform and 49x12 meter approach trestle from shoreline into the Berbice River
- Capable of accommodating 2 Platform Supply Vessels or Anchor Handlers simultaneously
- Site is flood protected
- World-class compact yard, covered warehousing, and tubular storage on site
- Construction of access road and bridges and utility services
- Full range of services: water, bulk dry and liquid mud supply, cement, electricity, telecommunications, fuel, container mobilization of agriculture products
- Full range of security services and secure bonded area for controlled customs accountability (fenced and protected)
- Dredging of an access channel to 7m at low tide and basin alongside wharf to 8.5m at low tide, complete shoreline protection
- Full-service wharf support for offshore drilling
- Administrative offices and customs administration offices
- Workshop and covered warehouse
- Fire protection system
- Completely contained waste management
- Facility targeted to be fully operational 2023
- Full indemnification insurance will be procured to protect environment, existing infrastructure, public and client property

## Targeted Expansion

Oil and Gas Exploration  
and Production Services

Agricultural Export

Commodity Import/Export

Regional Shipping



### **GCIE Selection Criteria for Site Location (Shore-base and Port Facility)**

- Berbice River is one of three major rivers in Guyana, spanning 600 km long, and 2.3 km wide at project location
- Berbice River channel was dredged and maintained at a depth of 8.3 m at low tide up until 2019
- GCIE site is a sheltered area, 4.8 km from the river mouth, with no interferences to open sea
- The site location is 11–13 hours sailing to the Stabroek Block and shorter times to the Corentyne, Kanuku, Orinduik and Demerara Blocks (compared to 2.5 days from Trinidad)
- No congestion and significant land available for expansion projects contiguous to the site (> 200 acres)
- Well-maintained service roads connect site to the existing highway system
- Minimal exposure to environmentally sensitive or residential areas
- 15.6 acres decanting logistics yard available 3.2 km from port site
- Locally abundant and accessible skilled labor force



### **In 2010, Guyana Lands and Surveys Commission, in its land use planning map for Region 6, listed the area for development of a Deep-sea Port, New Airport Runway of 1.2km, and an Industrial Park**

- The GCIE location can service import/export of agricultural products and other goods which are transported from the landlocked state of Roraima in Brazil, once the Brazil/Guyana road is completed
- A report prepared by the study team of the Ministry of Shipping, Government of India <sup>(1)</sup>, on the construction of a deep-sea port in Guyana, identified the eastern bank of the Berbice River as the preferred location
- Quote from this Report: *“The aforementioned factors strongly suggest need for a deep sea port with a modern container terminal in Guyana. This will greatly improve Guyana’s maritime access, reduce its dependence on transshipment of its cargo at a Caribbean port resulting in savings in freight/handling costs and also help Guyana reap economic benefits from its integration into North East Brazil. The ideal location for this purpose appears to be New Amsterdam near the mouth of Berbice River considering the available channel depth and large tract of available land suitable for multi user terminals with ancillary facilities.”*

<sup>(1)</sup> “Report Of The Study Team On Construction Of Deep Water Port In Berbice River Of Guyana”  
- Prepared by Ministry of Shipping on the Request of Ministry of External Affairs, Government of India (April 2010)

# Berbice Deep Water Port Project

STATUS UPDATE

## Contract Summary

Component Name: **Construction of Access Bridge**

Progress: **100% Completed**

Timeline: **6<sup>th</sup> April 2021 to 23<sup>rd</sup> December 2021**

Contractor: **Home Designs Engineering Associates (Berbice)**

Particulars: **Connects Corentyne highway to access road**



## Specifications

- 40 tons per axle capacity
- 8m x 15m prestressed concrete
- 1m dedicated pedestrian walkway



## Contract Summary

Component Name: **Quayside Laydown Yard**  
Progress: **100% completed**  
Timeline: **10<sup>th</sup> June 2021 to 15<sup>th</sup> July 2022**  
Contractor: **BK International Inc.**

## Specifications

- **5 tons per sq meter (load capacity)**
- **200 meters x 200 meters**
- **40,000 square meters**





## Contract Summary

Component Name: **Rip Rap Flood Protection**

Progress: **100% completed**

Timeline: **10<sup>th</sup> June 2021 to 5<sup>th</sup> August 2022**

Contractor: **BK International Inc.**

## Specifications

- **400m Rip Rap flood protection**
- **56m Northern flood protection**
- **20m Southern flood protection**





## Contract Summary

Component Name: **Water to Port**

Progress: **100% completed**

Timeline: **4<sup>th</sup> October 2021 to 15<sup>th</sup> November 2021**

Contractor: **Mohamed Ahmad Construction Works (Berbice)**

## Specifications

- **2.7km of 150mm Pipeline**
- **Installed to GWI specifications**
- **Verified and approved by GWI**



## Contract Summary

Component Name: **Power to Port**

Progress: **100% completed**

Timeline: **16<sup>th</sup> October 2020 to 15<sup>th</sup> December 2021**

Contractor: **Guyana Power and Light Inc.**



## Specifications

- 70 KVA transformer
- Installed by GPL
- 3-phase capacity with stepdown to 110/220 2-phase



## Contract Summary

Component Name: **Seawell Road Rehabilitation**

Progress: **100% completed**

Timeline: **5<sup>th</sup> November 2020 to 2<sup>nd</sup> February 2022**

Contractor: **KP Jagdeo General Contractors (Berbice)**



## Specifications

- **ASHTO Standards**
- **2.6 km from access bridge to port site**
- **5 m wide with 2 pullover**

# Concrete Drain and Residents' Concrete Bridges



The First **200 meters** of the access road, adjacent to the Seawell village residents, was fully paved with the construction of a **concrete drain** and **concrete bridges** for each resident. The contract for Access Road was amended to include this component.



## Specifications

Concrete Drain:  
**length 200m**  
**width 2m**  
**depth 1.5m**

Concrete Driveway/Bridge:  
**width 2.5m**





The CGX Laydown Yard has been fully operational since 2010 with zero safety incidents. Furthermore, in July 2005, August 2005, and June 2005 CGX staged three onshore wells, and in January 2012, one offshore well from this Laydown Yard, with zero incidents. Located along the Corentyne highway at Bramfield Region 6, Berbice.



## Specifications

- 15.6 acres of Freehold land**
- 10 acres to be developed**
- 3.2km from the port site**
- Fully fenced and secured**
- Fully permitted as laydown yard**



# Bramfield Logistics Yard to Port



Completed road connecting the GCIE's Berbice Deep Water Port site to the Bramfield Logistics Yard 3.2km away



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# Thank You