

Gasoline Optimisation

Petrotrin's Gasoline Optimization Upgrade is one of several strategic initiatives being implemented to ensure the Company's survival in the face of changing market demands. The project, which is currently underway, involves the construction of revamping of several major units in the Pointe-a-Pierre refinery, aimed at increasing gasoline quality and quantity.

This upgrade is crucial if Petrotrin is to remain a competitive supplier in the future. The project's success would help Petrotrin to offset losses in Caricom by getting into other markets.

The programme consists of the following five projects:

Fluid Catalytic Cracking Unit (FCCU) Upgrade- This unit known as the Cat Cracker is considered the heart of the refinery. The upgrade of this unit which incorporates an increased capacity of 35,000 BPD will enable Petrotrin to produce more gasoline with improved octane ratings for its gasoline pool and reduce the production of less heavier distillates. Other benefits include reduced compressor maintenance cost, improvement in the energy efficiency and environmental compliance levels due to reduced carbon monoxide and particle emissions.

New Alkylation/ Acid Plant- The new 8,700 BPD Alkylation Unit replaces the existing BPD Alkylation Unit, and is of sufficient capacity to handle the increased feedstock generated by the upgraded FCCU. The Alkylate product is a premium high-octane, environmentally friendly gasoline-blending component, which will add to the pool of high-octane gasoline, helping to maintain an increased refinery product market share and eliminate an earlier need to construct bigger storage and shipping facilities for LPG. The existing 60 TPD Acid Plant is to be replaced by a 215 Tonnes Per Day Unit which will be required to support the operations of the new Alkylation unit and provide for sales to the local market.

New Prefractionation Unit/Isomerisation Unit- The Prefractionation Unit will produce feed for the Isomerisation Unit and remove benzene-forming compounds from gasoline. The Isomerisation unit will improve the octane of light gasoline. The product, Isomerate, is an environmentally friendly blending component that will enhance the motor gasoline pool, enabling Petrotrin to better supply premium markets. It will also reduce hydrogen export to the fuel system, thereby making more hydrogen available for reaction processes.

New Continuous Catalytic Regeneration (CCR) Platforming Unit- this will replace the aging and soon to be retired Catalytic Reforming Unit with a new Continuous Catalytic Regeneration Unit so as to maintain our ability to produce high octane gasoline. Additional benefits include reduced operating and maintenance costs, improved product yield and quality and better environmental compliance.

Utilities and Offsites - Additional facilities for water treating, steam generation, electrical power, air and nitrogen are required to support the new units and to improve reliability of supply to existing plants. Furthermore, additional storage and loading infrastructure is required to handle the additional gasoline production.

Sustained operations at the Pointe-a-Pierre refinery would provide significant tax benefits to the Government. It would also ensure the security of fuel supply to Trinidad and Tobago. Most importantly, this project would ensure that at least 30% local content would be maintained throughout the project since the work of local sub-contractors would be maximized. At peak construction there will be employment opportunities for approximately 3000 people and skills development opportunities for some 700 persons.