



7



Pipeline of PPP projects in Tunisia

Bizerte bulk terminal

General presentation

The Project (TND 300 million) is aimed for construction of a bulk terminal in Bizerte intended for unloading, storage and handling of Pet Coke for the use of the cement industry in the first place and any other industry having reconverted to Pet Coke.

At present the only commercial port facilities able to receive and store Pet Coke in Tunisia is the port of Gabès for the Gabès Cement Company (Société des Ciments Gabes), Enfidha and Jebel El Ouest Cement Plants.

For storage at Bizerte an open-air storage is planned with a capacity of 80,000 tons. The storage area will be laid out near the future berth of the company 50 m away from the planned storage station.

- a. **Unloading at berth:** Pet Coke is hauled in bulk carriers specially designed for construction materials (clinker, sand, gravels, etc...) with Deadweight tonnage ranging 10 000 - 20 000 DWT.

As a general rule, the bulk carriers concerned are fitted with their own cranes and gantry cranes for unloading from ship to berth. In view of the large volumes handled and the cost of berthing fees the ships unload in bulk. Usually the cement plants have their own depots at the wharf and supply the plant by trucking.

- b. **Supplying the storage zone:** Conveying the pet coke from berth to storage station will be by enclosed conveyor belts. The coke will access the 5m high unloading dike along a ramp and unload at the reception dike. The whole facilities including unloading dikes and storage areas is confined within a 3m high net raising above the dike level.
- c. **Storage area arrangement:** A concrete slab is provided over the whole storage area with dimensions governed by the zone area, the maximum storage load, the loaded truck weight and the weight of the front-end loaders. The slab will be designed with a slope of 2 %, to prevent from stagnation of rain water, dedusting and possibly firefighting effluents.
- d. **Handling of PETCOKE inside the storage area:** Unloading is done from the protection dike, such that the pet coke owing to its granular properties will slide over the dike embankment. As the coke piles up it is compacted using front-end loader operating from the dike. Trucks will further extend the stockpile by unloading laterally around the dike with adequate compaction.



Location:
Bizerte



Company:
OMMP



Mission:
Construction of a new
bulk terminal



Cost:
TND 300 million



Besides limiting the height of the stockpile to 5 m, compaction would reduce the volume of air trapped between the pet coke particles, thus reducing the risks of fire.

- e. *Forwarding and hauling to the sites:* Pet Coke is hauled to the cement plant storage by land transport, either by railways or by semi-trailer trucks with 32t. of payload.

Project rationale

The Ministry of Industry has embarked in finding alternatives to petroleum coke because of the problems to import this product used as fuel for cement manufacturing, mentioned a communiqué issued 12 May by the said department.

Director General of manufactures at Ministry of Industry, Brahim Chébili, stated during a meeting held the previous day with Tunisian and foreign operators of the cement sector, that everything will be undertaken in coordination with the Ministry of transport, Office of the Merchant Marine and Ports to “overcome this conjunctural difficulty”.

Chairman of the National Chamber of cement manufacturers, Mustapha Hamrouni, expressed the worries of professionals facing deepening deficit of operation. The port of El Fouledh company, temporarily in charge of imports of the product is unable to accommodate the desired ships and required volumes causing a risk of shortage of petroleum coke required for manufacturing cement.

In turn the shortage of petroleum coke may cause several cement plants to close down or to resort to natural gas as alternative fuel, which would raise the price of one cement bag from 7.5 dinars to 13 dinars, according to the participants to the meeting convened by the Ministry.

While there is world-wide surge in energy prices, energy cost makes an increasing share of the price structure of construction

materials, cement in particular, lime and red products. Manufacturers of non OPEP countries are paying much attention to the fluctuations of fuel prices and research for alternatives allowing them to sustain competitiveness.

Energy cost amounts to 34 - 40 % of the cost of cement manufacturing. The use of natural gas increases the production cost as much for the manufacturer (148 DT/TEP) as for the State Compensation Fund (104 DT/TEP).

In view of this double constraint, Tunisia Cement manufacturers have introduced the alternative Pet Coke since year 2003. This has granted benefit at micro-economics scale of a better price per TEP i.e., 89 DT purchasing price on a basis of US\$ 50 per Ton thereby saving heavy state subsidies (non-compensated Product).

In this context OMMP proposes to solve this national issue through the creation of a berth and storage facilities for pet coke.

Legal and institutional framework

The Concession will be entrusted by the Office of the Merchant Marine and Ports (OMMP) acting as Port Authority.

Its role consists of ensuring performance, competitive tariffs, safety and security in ports Including shipping regulation and inspection.

The PPP contract will be ruled by the general port laws defining the role of OMMP and series of decrees on procedures and regulations on Public-Private Partnership Contracts and Concessions.

Regulations

- *Office of the Merchant Marine and ports*
 - Law n° 65-2 dated 12 February 1965, on creation of the office of national



ports, modified by law n° 72-5 dated 15 February 1972

- Law n° 98-109 dated 28 December 1998, on the Office of the Merchant Marine and ports

- *Sea-ports*

- Law n° 2009-48 dated 8 July 2009, on promulgation of the code of the sea-ports
- Government Decree n° 2016-98 dated 11 January 2016, setting the list of commercial sea-ports

- *Concessions*

- Law n°2008-23 dated 1st April 2008, on the status of concessions
- Decree n° 2010-1753 dated 19 July 2010, on the conditions and procedures for entrusting concessions.
- Decree n° 2013-4631 dated 18 November 2013, modifying and complementing Decree n° 2010-1753 dated 19 July 2010, on the conditions and procedures of entrusting concessions.
- Decree n° 2013-4630 dated 18 November 2013, on the creation of a Concession follow-up Unit as part of the Presidency of the Government.

Project scope

The project will be a BOT Concession for design, financing, implementation and operation of a bulk terminal (berth, infrastructure and superstructure over an area of 13 ha)

The concession scope consists of one berth, unloading dikes and storage area for 80,000 T in addition to administrative, security and maintenance buildings.



Completed technical studies

A bidding was launched in 2007 to carry out a PPP opportunity study including financing, implementation and operation of a bulk terminal at Bizerte. The bidding was declared unfruitful owing to under estimation of the budget of the study.

A new bidding process is expected to take place in 2019. The studies that must be carried out starting in 2018 include in particular

- Opportunity studies for entrusting of a concession including financing, implementation and operation of a bulk terminal at Bizerte.
- Feasibility Study (technical, economic and financial)
- Preliminary Design and Environmental/Social impact assessments.

Prospective implementation schedule

- Engineering phase: 2018-2019
- Bidding process: 2019
- Construction Phase: 2020-2021
- Operation Phase: 2021