

# LP Gas

Mott MacDonald Ireland Limited



LP Gas storage facility, Gujarat, India.

**Mott MacDonald Ireland, a wholly owned subsidiary of the Mott MacDonald Group, operates as a multi-disciplinary consultancy. Mott MacDonald Ireland, through C.I. Services, have an expertise in LP Gas consultancy, particularly at the downstream end, with emphasis on LG Gas import/export terminals, mounded storage, market & infrastructure studies and benchmarking.**

C.I. Services, formerly Calor International services, have provided LP gas consultancy to the oil & gas industry since 1994. C.I. Services became part of Mott MacDonald Ireland in 2006.

LP Gas consultancy is a specialised area of the oil & gas industry. For the downstream elements of LP Gas infrastructure, Mott MacDonald Ireland can deliver every aspect of a project from initial market assessments, through business case, feasibility, project planning, front end and detailed design, procurement support, project management and supervision.

Our capabilities in the LP Gas industry are enhanced and supported by the wide range of expertise available within other sections of the Mott MacDonald Group. In particular, our oil & gas division, based in Croydon, UK, can provide support in the interface areas between our specific expertise and other areas in the oil & gas industry. Separately, the Group's expertise in other aspects of project infrastructure means that we can readily access complementing skills, such as foundations, environment, marine construction, within the Group.

Traditionally LP Gas was often seen as a niche element in larger projects, not readily interfacing with the main project objectives. Now, with C.I. Services LP Gas expertise embedded within the Mott MacDonald Group, that overall interface is readily bridged.

## Key LP Gas services

- Project feasibility
- Project planning
- Basic design / front end engineering design
- Detailed design
- Mounded storage
- Marine import / export terminals
- Business case review
- Safety and standards review
- Support to operator training and operations start-up
- Market studies



**LP Gas storage facility, Usar, India - Mounded storage construction.**



**LP Gas facility, Ilorin, Nigeria.**

### Our services

We are a specialist LP Gas consultancy within a major global engineering services provider, delivering high quality management, technical and advisory services which add value to our customer's business.

Our capabilities in the LP Gas industry are enhanced and supported by the wide range of expertise within the Group, particularly the oil & gas division.

### Key strengths

- Project feasibility
- Project planning
- Basic design / front end engineering design
- Detailed design
- Mounded storage
- Marine import/export terminals
- Business case review
- Safety and standards review.
- Support to operator training and operations start-up

### Track record

Through CI Services, Mott MacDonald Ireland have a significant track record in LP Gas infrastructure project end engineering services. Typical projects and commissions include:

- **LP Gas terminal, Mauritius** Client's engineer for 15,000 tonne LP Gas import & export terminal in Port Louis, Mauritius.
- **LP Gas supply & market study, Kenya** Technical and logistics input into KBC's report for KPRL.
- **Nigerian LP Gas sector improvement study** Study of the ongoing development of the LP Gas industry in Nigeria.
- **LP Gas storage & bottling facility, Doha, Qatar** We provided feasibility and preliminary engineering for a €30m facility in Qatar, constructed via EPIC.
- **LP gas mounded storage, Medinah, Kingdom of Saudi Arabia** Specialist technical review services for new mounded LP Gas storage in an existing refinery.
- **LP Gas export, Odessa, Ukraine** Feasibility assessment of the available options for export of LP Gas from an existing refinery.
- **Turkmenistan** Technical review of an existing LP Gas terminal.
- **LP Gas storage facility, Gujarat, India** Detailed construction design for the contractor responsible for an LP Gas storage & handling facility.
- **BOC (British Oxygen Co)** Assessment and benchmarking of BOC's internal LP Gas standards and risk assessment software. This provided BOC with an independent technical assessment of the suitability of their LP Gas standards for application to these new businesses.



LP Gas import facility Mombasa, Kenya



LP Gas terminal, Syria.

- **Port upgrade feasibility, Port of Moa, Cuba** We undertook the liquids handling element of a feasibility study for a major port upgrade.
- **LP Gas storage depot, Madurai, India** Specialist back-up consultancy to Indian Oil Company.
- **LP Gas filling plant, Albania** Detailed engineering and post commissioning support for this LP Gas filling plant in Tirana.
- **LP Gas import and storage terminal, Port Qasim, Pakistan** Feasibility, preliminary engineering, for this marine facility in Pakistan. We also reviewed EPIC design and construction.
- **Port Sudan, feasibility study for Trafigura** Feasibility study for the export through Port Sudan of LP Gas, which was available in Khartoum, an approximate distance of 670 kilometres.
- **LP Gas mounded storage, Vietnam** Expert design review for the EPIC contractor for a small facility in Vietnam.
- **LP Gas terminal, Syria** Feasibility, preliminary and detailed engineering for a pipeline to storage to rail LP Gas facility for Conoco.
- **LP Gas terminal, Ukraine** Site evaluation study for Conoco for a LP Gas terminal development at Odessa.
- **LP Gas terminal, Batumi, Georgia, for Conoco** Feasibility, FEED and detailed design for a €30m LP Gas export terminal. This project required benchmarking of a western design philosophy against Russian codes and standards.
- **LP Gas terminal, Mombasa, Kenya for Pacific** Feasibility, FEED, detailed design and construction supervision for a €25m LP Gas import terminal in Mombasa. Project included design of temporary jetty and transport of 8.8m diameter x 50 long vessels from Germany.
- **LP Gas storage and bottling facility, India, for Indian Oil** Feasibility, tender and construction stage engineering for €30m facility in India.
- **WLGPA** We were responsible for drafting guidelines for LP Gas use in rural energisation for the World LP Gas Association. We also provided a background report on the South Africa LP Gas industry and a report on new technologies for the manufacture of LP Gas tanks and cylinders.
- **LP Gas filling plant in refinery in Jordan** Safety review of this LP Gas filling plant following fire incidents.
- **LP Gas terminal, Nigeria** FEED study for a proposed LP Gas import / export terminal at Port Harcourt for Addax.



**LP Gas import facility, Mombasa, Kenya - tank off-loading.**

#### Contact us

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SG/06/11

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- **LP Gas operation & maintenance contract, Lagos, Nigeria**  
Following construction of the Nigerian Butanisation Project, NNPC commissioned the firm to provide operation and maintenance support at Lagos to their new operatives for the first two years post EPIC contract.
- **Butanisation project, Nigeria** This five year project comprised nine LP Gas storage and handling facilities, including marine import at Lagos and Calabar. Feasibility, FEED engineering, EPC tendering, review of EPIC design, monitoring of construction, certification of EPIC payments.



**LP Gas terminal, Mauritius - Tanks being fabricated in Italy.**