

# The Future of Liquid Hydrocarbon Logistics

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Spain has one of the most effective and admired hydrocarbon logistics systems in the European Union. The Spanish system contributes to guaranteeing the distribution of oil products in Spain, and represents an exportable model for other countries that have recently embarked on the liberalisation of their oil sector.

Demand for oil products in Spain encompasses over half of primary energy consumption, which in 2006 exceeded 144 million tonnes of oil equivalent, positioning the country as the third consumer market for petroleum products in the EU, behind only Germany and France.

The percentage is even greater in the case of final energy consumption, since the consumption of oil products covers 58 per cent of this, equivalent to 60 million tonnes of oil products.

Although the demand for oil products saw a slight decrease in 2006 compared to 2005, due to improvements in energy intensity in Spain, the growth of demand experienced over recent years alongside the escalating dieselisation of the automobile fleet and growth expectations for coming years, have led refining companies operating in Spain to launch new development plans to increase their capacity.

In parallel to the growth in demand, there has also been an increasing need for more storage capacity to satisfy logistics requirements and to maintain minimum security supplies and strategic reserves of oil products, managed by the Corporación de Reservas Estratégicas (Strategic Reserves Corporation, Spanish acronym Cores) and producers. According to the Spanish legislation, these reserves should be equivalent to 90 days of consumption or sale of oil products.

Furthermore, the 2005-2010 National Plan for Renewable Energies (Spanish acronym PER), endorsed by the Council of Ministers in August 2005 with a view to reducing CO<sub>2</sub> emissions and attempting to cut down the dependence of the transport sector on petroleum products, establishes that

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for the duration of the Plan the consumption of biofuels should represent 5.83 per cent of total gasoline and gas oil consumption for transport. This involves a progressive adaptation of hydrocarbon storage and transport infrastructures so that operators can respond to the immediate demand for these services.

These three issues – the rise in production capacity in Spanish refineries, the need to increase the current storage volume, and the introduction of biofuels – are therefore the main future challenges facing the logistic sector for oil products, where CLH is the clear leader.

In order to address these three important challenges, the CLH Group has created a Strategic Plan that hopes to strengthen the current logistics network, and to adapt it to the new needs of both customers and society through major investments.

At present, Spain has one of the safest and most efficient logistic systems for refined oil products in the EU, made up of a vast network of oil pipelines, owned by CLH, and over 80 storage facilities, owned by CLH and other logistic operators, with total storage capacity of over 10 million cubic metres, in which the most important facilities are connected to the company's oil pipeline network.

Specifically, the CLH Group oil pipeline network of more than 3,500 kilometres, and 38 storage facilities, alongside 28 airport facilities, with a combined storage capacity amounting to 6.5 million cubic metres.

This pipeline network services the eight Spanish refineries in mainland Spain, and maritime terminals that receive Spanish imports of oil products such as gas oil and kerosene, as well as other storage facilities owned by other companies.

During 2007, the CHL Group network transported some 25 million tonnes of oil products to its clients, managing over 40 million tonnes through its logistic system.

### **An exportable model**

Compared to other EU countries, the CLH Group's hydrocarbon logistics system stands out in terms of its integrated nature and excellent optimisation, which allows the use of available resources and assets, thus providing greater safety and effectiveness in the storage and transport of oil products, with positive effects on consumers as a whole.

The system's efficiency is demonstrated by the average cost of fuel storage and transport services offered by CLH, currently standing at under one cent of a euro per litre, less than one per cent of the price of fuel.

Furthermore, estimates suggest that the use of the company's pipeline network to optimise fuel transport prevents the emission of some 400,000

tons of CO<sub>2</sub> a year, which would be released into the atmosphere if bulk liquid carriers were used instead.

Consequently, and with a view to take advantage of the company's vast expertise in managing the complex Spanish logistic system which is open to different operators, one of the possible lines of growth considered by the CLH Group is to undertake international expansion projects in neighbouring countries, as well as projects in companies transiting from a monopoly to a market system, where the implementation of CLH's know-how will allow a substantial improvement of the hydrocarbon logistics business.

### **Strengthening the logistic system**

In order to strengthen the current logistic system and prepare for new future challenges whilst maintaining its essential characteristics, the CLH Group will invest a total of 734 million euros over the five years of its Strategic Plan, marking the greatest investment commitment in the company's history.

During 2007, the first year of the new Strategic Plan was, the company carried out 20 per cent of the investments planned for the whole period, focusing primarily on increased storage capacity and development of the pipeline network.

The Strategic Plan foresees the investment of 205 million euros throughout the entire period, for strengthening the pipeline network via the construction of new sections to guarantee supply to areas with greater consumption levels, mainly the central regions, and to make the network flexible enough to face the changes in the sources of supply that are expected to occur.

This will require the duplication of several pipeline sections, constructing 700 kilometres of new lines, and involve an increase of over 20 per cent of the network from the time the new Strategic Plan was launched.

The line splitting envisaged in the Strategic Plan will affect the main Atlantic-Mediterranean line, both to the north and the south of Madrid, corresponding to the Zaragoza-Torrejón and Puertollano-Loeches sections, as well as other sections further South. These expansions will allow the company to service future demand and adapt to changes in the supply structure far beyond the horizon set by the Strategic Plan.

Almost two thirds of the 734 million euros that will be invested in the 2007-2011 Strategic Plan will be allocated to improving logistic facilities and extending the strategic and operative storage capacity by over 2 million cubic metres.

The Strategic Plan also envisages a 25 million euro investment to address for the possible increase in demand for biofuels, adapting company facilities to ensure they will be able to handle these new products efficiently and safely.

Along these lines, the company has already carried out the complete adaptation of three of its storage facilities, which cover important consumption areas (Villaverde, Barcelona and Santurce), so as to be able to combine biodiesel with vehicle gas oil. In 2008, the company will adapt another 10 facilities, with a geographical distribution that covers mainland Spain and the Balearic islands, thus maintaining the economic and environmental efficiency of the current Spanish fuel distribution system.

### **Commitment to excellence**

In recognition of the importance of the CLH logistic system to the efficient operation of Spain's energy system, the 2007-2011 Strategic Plan also strengthens the CLH Group's commitment to excellence.

In this respect, the company strives to implement the EFQM model of the European Foundation for Quality Management, which involves the consolidation of existing quality systems and global management of the company, thus meeting all needs and perspectives of customers, shareholders and employees.

Furthermore, the 2007-2011 Strategic Plan adopts serious commitments in terms of corporate social responsibility in order to satisfy the expectations of the company's different interest groups, which have been taken into account when defining the Plan.

CLH's lines of action in terms of corporate responsibility will focus on environmental management and protection of the environment, safety in its facilities, occupational health and safety, and relationships with the community.

An example of the actions carried out to improve the life of the community is the removal of several facilities from urban areas, allowing new uses for the liberated land.

The Strategic Plan envisages the relocation of storage facilities currently situated in Burgos, Salamanca and Mahón to cater to these cities' new urban needs, as well as the deactivation of storage tanks in Barajas airport, which will be relocated to Torrejón, far from the urban area that they are currently close to.

By performing these actions, derived from the Strategic Plan, the CLH Group aims to address the future challenges of a logistic system that is essential to the optimal operation of the energy sector, contributing simultaneously to the improvement of our environment and our society's quality of life.