The Impact of WLPGA on Global LPG Markets





Good Safety Practices and the LPG Market in Oman

LPG is a clean, modern fuel that brings comfort to tens of millions of consumers worldwide. However, as with any fuel, safety in operations and handling is imperative for consumers and for the industry. As the global voice of the LPG industry, The World LPG Association (WLPGA) aims to inform the principle stakeholders in the LPG industry of the hazards that exist at different stages of the distribution chain, as well as recommend good safety practices in order to minimize any associated risks. The WLPGA has long promoted the importance of good safety practices when handling LPG to the industry, its customers, and communities through its widely available safety expertise and guidelines.

This case study looks at the critical role of WLPGA in helping the once unstable LPG market in Oman to grow and adapt to good safety practices.

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1. The LPG Market in Oman

The LPG industry in Oman has grown from its first bottling plant, set up by National Gas Company (NGC), in Rusayl in 1981, to its current status of serving the entire domestic population and industry throughout the Sultanate. The main sector of LPG consumption is the domestic household sector, which uses LPG packaged in cylinders for cooking purposes. The supply chain for these domestic cylinders consists of the following: Producer, Bottling Company, Distributor and Consumer.

2. An LPG Market at Risk

In the mid 1990's the LPG market in Oman experienced a transition from being fully serviced by two bottling companies, to the emergence of several other bottling companies. By 2007, there were eleven bottling companies operating twenty-five plants across the Sultanate. Due to this major influx in bottling companies, a quota system was put in place, causing differential pricing between bottlers and producers, thus ensuing unhealthy competition in the market between the bottling companies.

As a result of this competition, coupled with weak enforcement of regulations, some bottlers resorted to malpractices that could potentially compromise the rights and wellbeing of consumers. Some bottling companies specifically lacked good safety practices when handling cylinder maintenance.





LPG cylinders are pressurised containers that need to be maintained in perfect working condition.

3. Cylinder Maintenance

In order to maintain good working condition Of LPG cylinders and safeguard consumers, they must be re-tested, repaired or replaced on a regular basis.

Omani Standard OS 201/1990 states that LPG cylinders need to be scrapped after 15 years of use. Despite this requirement, most bottling companies do not scrap cylinders after this designated life span and do not replace them as a way to avoid the expense of new ones. The bottling companies do not even implement cylinder testing or scrapping facilities. Instead, they recycle the unsafe cylinders by refilling them and pushing them back onto the distribution chain, often diverting the liability onto other bottlers. This causes the cross-filling of cylinders, which leads to unscrupulous players adopting unfair practices such as under-filling of cylinders and non-adherence to cylinder replacement.

These malpractices directly affect the end users, who suffer from unsafe gas cylinders and risk of accident.

4. WLPGA Involvement

WLPGA member, National Gas Company (NGC), requested a visit from WLPGA officials in 2008 to evaluate the condition of the Omani LPG Industry and to interact with the local LPG stakeholders as well as meet with key government officials. During their visit, WLPGA met with a series of local industry and government officials from LPG companies in Oman, National Gas, The Ministry of Oil and Gas, The Ministry of Finance, The Ministry of Commerce & Industry and the Royal Oman Police.

The purposes of these interactions were to identify key factors that had emerged as being responsible for the current state of the LPG industry in Oman. It was found that cylinder maintenance was one of the major key factors responsible for negatively affecting the LPG industry.

It was concluded that the existing provision of replacing a cylinder after fifteen years, irrespective of its condition, is a clear case of over-regulation and contributes an add-on cost to the operations cost. In addition, not only are the advanced technologies available for testing cylinders, but the life of the cylinder can be extended through the use of testing until such a time it fails to meet the qualifying norms during the periodic testing. This means that the life of the cylinder may be well over fifteen years, as long as it is consistently tested, showing no signs of risk.



5. WLPGA Recommendations

The first recommendation was that the LPG industry in Oman was fragmented and needed to unite on a common platform through the formation of a national association in order to outline the common industry issues to be addressed by the industry itself.

To facilitate the process of self-regulation within the industry, WLPGA recommended that the local LPG industry engage the services of a professional consultant who has the experience of tackling similar situations in various global LPG markets. In addition, WLPGA would play a supportive role throughout the entire process, providing:

- •Inputs regarding the good business practices and good safety practices prevalent in mature LPG markets.
- Assistance with access to information regarding prevalent global practices on cylinder maintenance and re-testing of cylinders.
- •Inputs on automated equipments for filling cylinders.
- •Inspection formats for safety audits of all bottling plants by regulators.
- •Share examples of similar market corrections where the local LPG industry, with the support of WLPGA, could rectify the existing malpractices in the LPG market.

The WLPGA Guidelines for Good Safety Practices in the LPG Industry also value and ensure the importance of safe cylinder maintenance in addition to other safety practices. It is the policy of the WLPGA that the safety expertise is available within the international LPG industry and should be shared as widely as possible in the interests of participants, consumers and the community.

WLPGA recommendations resulted in enhanced safety and value for consumers.

6. WLPGA Impact

The recommendations made by WLPGA encouraged and empowered the NGC to take the lead in liaising with the concerned ministries and regulators to implement the suggested improvements.

Although the creation of an LPG association in Oman faced resistance from the ministries, the leadership role was taken by NGC, who unilaterally fronted most of the issues to find suitable solutions. Over the years, NGC benefited from inputs provided by the WLPGA in streamlining processes, following best practices and having examples from similar markets in other countries.

The LPG market in Oman also benefitted from WLPGA's recommendation because it provided them with assistance in the form of global standards for retesting cylinders. The LPG industry in Oman was burdened by the cost of unnecessarily scrapping cylinders that had reached their fifteen year lifetime. But after years of negotiation, in 2014, the Directorate General of Specification and Measurement under the Ministry of Industry and Commerce issued Cylinder Regulation OS201. This new regulation allowed cylinders to be retested after fifteen years and every five years thereafter, to be used until perpetuity as long as they passed the required tests. As a result, there have been huge savings for the industry and unscrupulous suppliers who bent the law by changing the manufacturing date on the cylinder shroud to avoid scrapping after a fifteen year lifetime are no longer tolerated. This eventually resulted in enhanced safety and value for consumers.



WLPGA is ready to contribute to the growth of LPG markets around the world. Seeks to act as a support and help make the necessary changes for individual markets to advance. The willingness of the LPG market in Oman to work with WLPGA helped them to transform their unbalanced market into one that is working towards and achieving safety, value and affordability for all levels of the supply chain. Helping to change and impact LPG markets around the world is of great importance to WLPGA, serving as the backbone, support and catalyst to the improvement of LPG industries.

7. Acknowledgements

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