

Background Memo
WLGA Industry Council Meeting, Cape Town – 19th November 2024
Safety and Business Improvement Goal
Partial/cross filling of cylinders

A growing trend has been observed, particularly in Africa, but also in other parts of the world, to partially fill or cross-fill cylinders. This presents significant safety concerns but also contributes to reduced investment in these countries. The IC is asked to consider the WLGA activities and interventions in 2025 that can address the challenge of partial/cross filling of LPG cylinders

Background

LPG is a unique product where the packaging – the cylinder – costs more than the product itself. The contents of a 6kg LPG cylinder in Africa today will retail for up to US\$12, with the cylinder costing up to US\$20. But unlike other products, this packaging is reused many times when cylinders are refilled. With regular inspection, maintenance and requalification, an LPG cylinder will have a life measured in decades and during that period will have been refilled over a hundred times.

There are an estimated 2+bn cylinders in circulation globally – with a replacement value exceeding \$50bn – and the ownership and maintenance of these assets is critical to the ongoing safety, viability and reputation of the industry. Anything that compromises the integrity of LPG cylinders threatens to undermine the safety of the industry. This is especially important in developing markets where consumers may already have a perception that LPG is unsafe, and be apprehensive of switching from traditional dirty fuels such as charcoal, wood and kerosene.

Briefing Note

In developing markets, where the disposable income of consumers is limited, it is not uncommon for commodities such as sugar and washing powder to be repackaged and sold in smaller, more affordable, sizes.

This concept has been copied in the LPG industry by allowing LPG cylinders to be partially filled. Instead of exchanging empty cylinders for full ones, consumers take their cylinder to a retailer and buy a few grams of LPG. This practice of partial filling can undermine the integrity of the cylinder. Instead of the cylinder being returned to the filling plant to be thoroughly checked before being refilled, it circulates between the consumer and retailer with no proper inspection. The cylinder then deteriorates and threatens the safety of the industry.



An example of partial filling

This practice of partial filling also increases the risk of cylinders not being filled by their owner (cross filling). Cross filling will deter investment in the industry which is vital for developing markets. No investors will inject new cylinders into a market where they are likely to be used by others.

There have been several documents published by the WLGA about the management of cylinders and all of them stress the importance of these assets being properly inspected, maintained and requalified when necessary, before they are refilled. Refer ([Simply Safety - World Liquid Gas \(WLGA\)](#))

David Tyler
November 2024