

Sustainability with LPG

Expectations from Stakeholders

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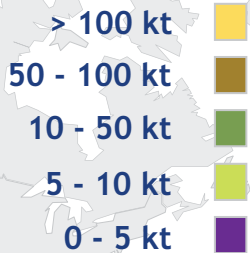
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TOTAL LPG Retailing : 2,2 MT in 44 Countries

LPG Production of TOTAL : 4,8 MT: E&P 2,8 MT + Refining 2 MT

Sales of LPG in KT
Cylinders-Bulk-Autogas



| | Number of affiliates | Number of LPG Filling Plants | Bulk depot Capacity |
|---------------------------|----------------------|------------------------------|---------------------|
| EUROPE | 7 | 22 | 28KT |
| AFRICA | 25 | 45 | 53KT |
| LATIN AMERICA - CARIBBEAN | 7 | 17 | 8KT |
| ASIA PACIFIC | 8 | 10 | 16KT |
| GLOBAL | 47 | 94 | 105KT |

● Filling center and/or depot

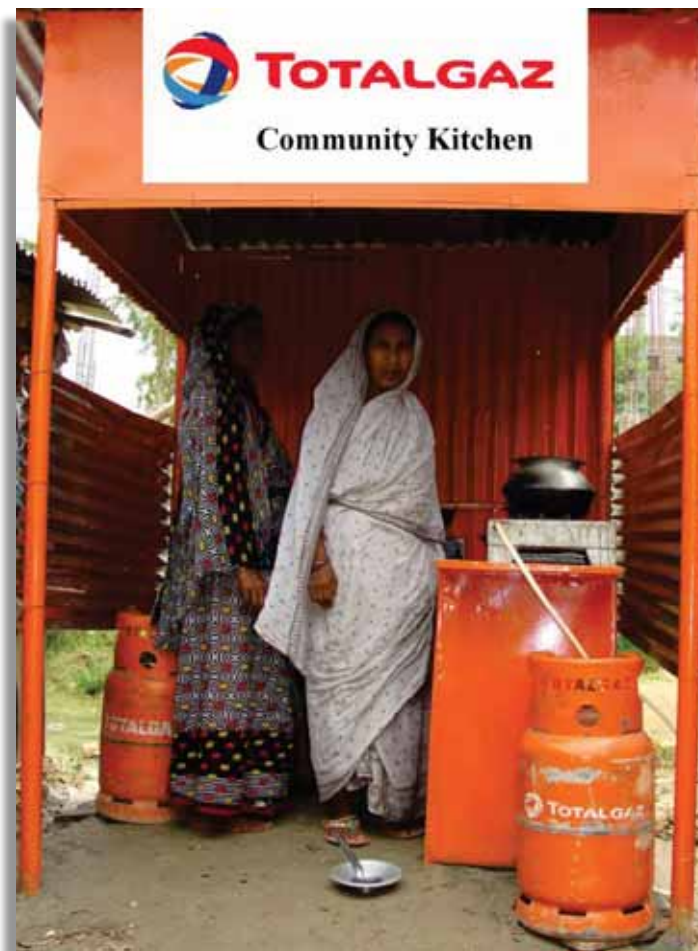
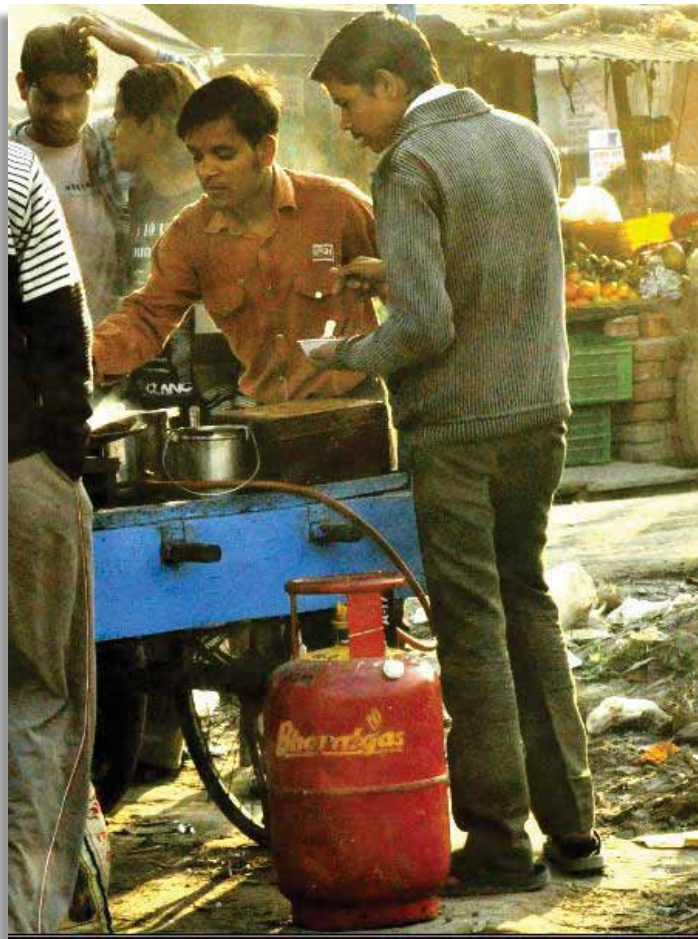


What makes LPG attractive ?

- ▶ **UNIVERSAL** : the only energy with so many usages : from cooking, heating, cutting, drying, power generation etc.. with low contaminant and CO2 emissions
- ▶ **ACCESSIBLE everywhere** : easy to store, to transport
- ▶ **AFFORDABLE INFRASTRUCTURE COST** for a country
- ▶ Provides **SAVINGS** : High Energy efficiency, due to the high temperature of the flame. (530°C)
- ▶ The **BEST ECONOMICAL OPTION** for **COOKING**. consumptions (80-100kg/year per household)



LPG is very useful and found everywhere, Street Restaurants, Community Kitchens...



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Street Restaurants



Everywhere...

Which Biomass ???



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Factors of Development of LPG in Cylinders

(a part from the price)

- ▶ **The availability of Cylinders**
(sustainability of the Distribution Model)
- ▶ **The easy in getting the refill of LPG**
(the higher presence at lowest distribution cost)
- ▶ **The constant supply of LPG**
- ▶ **With “Safety First”**
 - Safety of the Cylinders and Valves
 - Safety of the refilling operation
 - Quality : no under-filling
 - Safety when re-certifying Cylinders
- ▶ **Replacement of bad cylinders cost free for the Customer**



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The « Cylinder INVESTMENT » driver

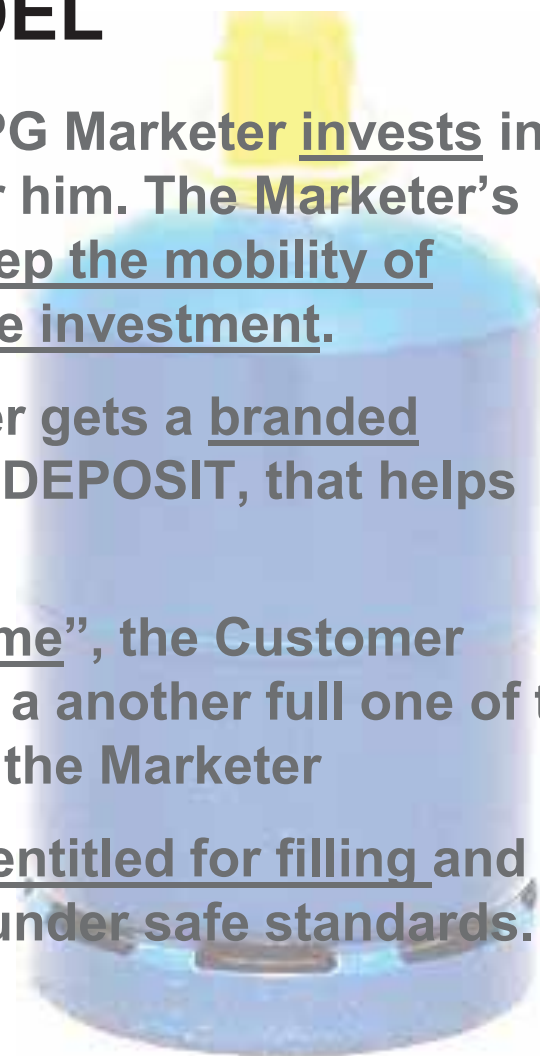
- ▶ 2 types of Investment
(example for of 500kT of LPG pa)
- ▶ the « Mobile Investment » :
the Cylinders
between 250 and 400m\$
- ▶ the « stationary Investment » :
the industrial assets
the receiving terminal,
the filling plants, the trucks...
about 220m\$,
- ▶ Altogether from 470 to 620 m\$ for
500kT/year



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The MARKETER-owned Cylinder and the DEPOSIT SCHEME MODEL

1. **Incentive for additional Cylinders** : The LPG Marketer invests in the branded Cylinders, becoming an asset for him. The Marketer's identification (Brand) . The Capacity to keep the mobility of Cylinders under control will incentivize the investment.
2. **Lower Cost of the Cylinder** : The Customer gets a branded Cylinder against payment of a refundable DEPOSIT, that helps secure the mobile asset (cylinder).
3. **Convenient refill** : with the "Deposit Scheme", the Customer exchanges an empty branded cylinder for a another full one of the same brand, in any retail outlet served by the Marketer
4. **No Safety Issues** : The Marketer is solely entitled for filling and responsible for maintaining its cylinders under safe standards.



Marketer – Distributor – Retail Outlets



The **MARKETER**
invests in Bottles and in filling Plants
He is the one to inject new bottles



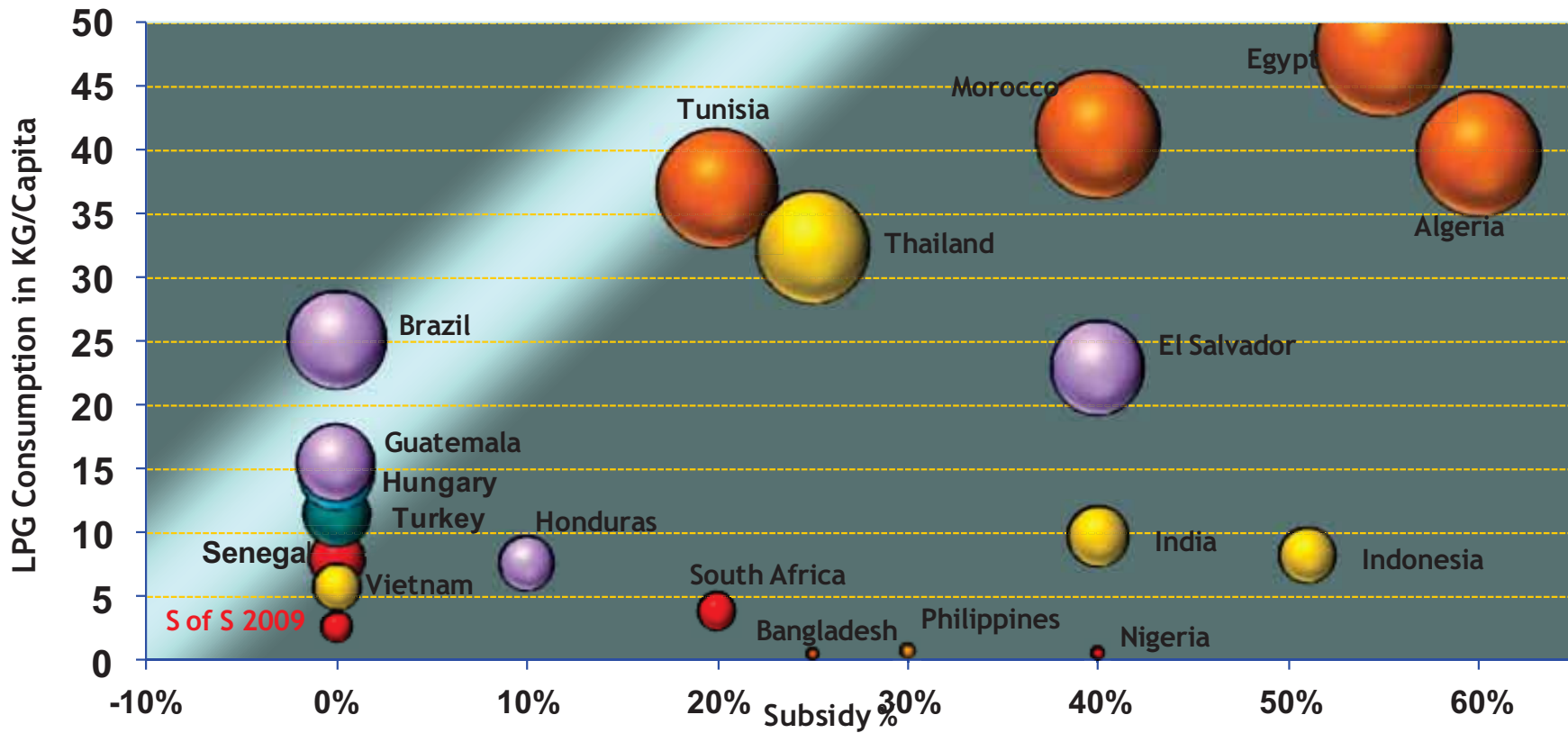
The **DISTRIBUTOR**
of the Marketer
with its delivery Trucks



The **OUTLET**
of the Distributor



Target Size for Cooking : 10 to 15kg kg/capita about 80-100kg pa per Household (830kg of Charcoal equivalent/pa)



What the Industry fails to get from the Authorities.

1. the selection of the **Distribution Model** that endeavors investment in safe **Cylinders** available at 10mn walking from home
2. a **Legal Framework** defining the **Distribution Model**
 1. Licensing with obligations of investing a minimum of Cylinders per annum (250,000 cylinders in 5 years ?)
 2. Enforcing Safety Liabilities : no cross refilling
 3. Restricting access to LPG and filling to the Investor in Cylinders only
 4. comprehensive Rules and obligations on Safety
3. a visibility on the **Supply conditions**



Resources and Support Needed (1/2)

▶ Reducing the Deposit :

A Public-Private Partnership signed by a Fund Institution, a given Country and the Marketers, transfers the funds to the Marketers to reduce the investment in cylinders and reduce the Deposit to the poor, under an audited procedure.

▶ Implementing the Distribution Model :

a partnership between institutional Stakeholders and the WLPGA could be the vehicle to help States how and why to implement the Distribution Model (regulatory framework, education to the Marketers)



Resources and Support Needed (2/2)

- ▶ **Accessing the Poor :**
partnerships between Marketers and ONG, could facilitate the creation of distributors and retail outlets right from the inside of the urban poor communities (ongoing program with EDM in Haiti). ONGs need probably financial support.
- ▶ **Financing Common Filling Infrastructure :**
A common Filling infrastructure (JV between Marketers) ensures low Capex and no cross filling risk for the investor in Cylinders. Specific support should be provided by International Institutions.

Because children need to gather knowledge
not collect firewood



شكرا
merci
gracias
thank you



