Cleaner Energy for Poor Households

The Partnership: The LP Gas Rural Energy Challenge

The Goal: Reduce indoor air pollution by having households switch from firewood and charcoal to liquefied petroleum gas (LP Gas) for cooking and heating.

The Result: In Ghana, for example, more than 200,000 households have switched to LP Gas over the last fifteen years. Overall, Ghana's domestic consumption of LP Gas has reached over 50,000 tons a year, covering about six percent of Ghanaian households.

How they did it: The United Nations Development Programme (UNDP) and the World LP Gas Association - in a public-private partnership called the LP Gas Rural Energy Challenge - worked closely with the Ghanaian government to promote LP Gas as an alternative household fuel. In an extensive public campaign, they explained the benefits of switching to LP Gas and communicated environmental, health and safety regulations. The project strategy focused on engaging local authorities and the private sector. By adapting the design of LP Gas stoves to resemble traditional Ghanaian wood-burning stoves and fit typical rounded pans, local entrepreneurs were able to significantly reduce initial resistance to LP Gas among residents. One hundred percent of appliance fabrication, installation and LP Gas supply are currently delivered by local entrepreneurs.

Outlook: The LP Gas Rural Energy Challenge partnership is now working on widening the penetration of LP Gas in rural areas, which still account for only about one percent of total national consumption. Making smaller, more affordable gas cylinders is one way to allow more rural households to switch to the cleaner fuel. The partnership is also expanding rural delivery systems and exploring small-scale financing solutions to overcome the high up-front cost of LP Gas cylinders and appliances. Eventually, UNDP and the World LP Gas Association hope to extend their success in promoting LP Gas for cooking and heating to wider use for lighting and transportation in Ghana.

Background: The toxic smoke from burning firewood and charcoal in poorly vented houses often causes respiratory illnesses and vision problems among women and children, who spend the most time in the house. Exposure to indoor air pollution is also a major cause of infant mortality, which is as high as 60 per 1000 in Ghana.

LP Gas - consisting of propane or butane, or a mixture of the two - burns without smoke, is portable, safe and extremely efficient in generating heat. "LP Gas is of immediate value to households: it significantly improves indoor air quality and liberates women and children to pursue education or value-added economic activities rather than collecting fuel wood," explains Andrew Yager, a Sustainable Energy Policy Adviser for UNDP. "In addition, switching from traditional fuels to LP Gas has wider environmental impacts such as less deforestation and lower greenhouse gas emissions."

For more information:

www.worldlpgas.com / www.undp.org/energy/lpg

http://webapps01.un.org/dsd/partnerships/public/partnerships/197.html



