

ENERGIA

INTERNATIONAL NETWORK ON
GENDER AND SUSTAINABLE ENERGY

A GENDER PERSPECTIVE ON SUSTAINABLE LPG – WHY WOMEN WANT IT AND HOW IT CAN BE DONE

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Mission of organisation

- ENERGIA
- WLPGA
- GLPGA
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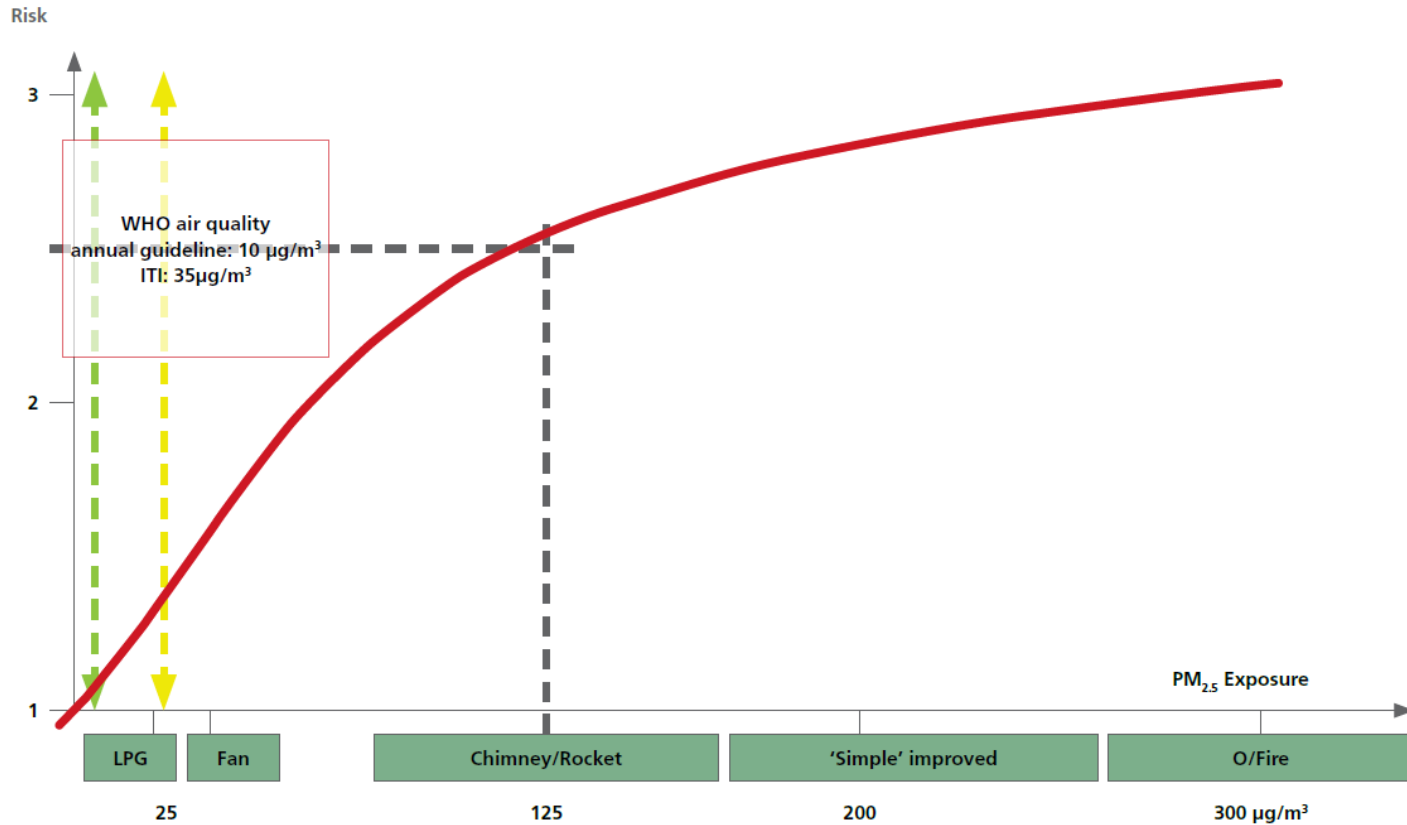
The ENERGIA-WLPGA study

- ENERGIA-WLPGA partnership
- Rationale: How are the following impacted by switching from solid fuels to LPG:
 - Long and short term health benefits
 - Women's livelihoods (economic participation and opportunity costs)
 - Increase literacy rates and educational attainment
 - The role of women in the supply chain of LPG (More than just consumers)
 - Constraints and challenges of switching to LPG (safety training, risk perceptions affordability of product and equipment, product availability).
 - Policy recommendations for incentivizing switching.

Why women want and need lpg?

- TIME – Time poverty remains one of the major barriers to gender equity
- SELF-ESTEEM AND SOCIAL INCLUSION – Rarely discussed but a critical angle in social exclusion
 - Aspirational, modernity
 - Changing gender roles – Men tend to respond to domestic technologies that do not challenge their masculinity. And women do benefit
 - Health and survival - Health, safety, environmental benefits

Health, domestic safety, the environment



How prevalent are LPG Accidents?

LPG vs Paraffin accidents, injuries and deaths in South Africa, 2002

	Homes	Injuries	Deaths
Paraffin	16700	1700	1000
LPG	9	9	5

Lloyd, 2002

If all two billion solid fuels users shifted to LPG, it would add less than 2% to GHG from fossil fuels (Smith, 2002).

**How can the public and private
sector do it?**

Knowledge as empowerment: from scared to dared

- **Supply side accidents:** in storage, transport, filling and maintenance
- **User side accidents:** defective cylinders, accessories and improper use – **Perhaps the most important barrier to making the switch to LPG !**
- **Perception is key:** 400 households in Pemba, Mozambique, 79% believed LPG to be toxic, explosive or dangerous (Sprague, 2007)
 - :Kojima, et al.,(2011): “a very dangerous fuel capable of burning down houses” as in Togo.
- **Traditions:** Some are ok (if you love smoked salmon or smoky beans!); others need change
- **It takes a try:** USAID Mozambique (2005): *A very large percentage of respondents believe that it is a dangerous or toxic fuel, and many believe it is expensive. It is only the actual users who see clear benefits of using LPG*
 - : Tait (2013), South Africa: Those that LPG often had had some exposure to it elsewhere, for example at a place of work, which had served to familiarise them with its ease and safety
- **Education and awareness:** demonstration, multi-media, local champions, first-try support
- **Very important: Let the transition take its course!**

EVIDENCE MATTERS: Reported accidents In Indonesia

Region	2007		2008		2009		2010 as per June
	Cumulative distribution	# Incidents	Cumulative distribution	# Incidents	Cumulative distribution	# Incidents	Cumulative distribution
Sumatra	50,000	N/A	776,051	5	4,419,903	2	4,720,351
West Java	2,722,862	N/A	12,063,751	32	17,128,323	16	17,307,730
Central Java	445,247	N/A	2,970,016	7	10,318,294	8	10,318,294
East Java	758,341	N/A	3,244,326	17	9,929,525	23	10,242,420
Sulawesi,	0	N/A	0	-	1,613,454	1	1,875,713
Kalimantan							
Total	3,976,450	-	19,054,144	61	43,409,499	50	44,464,508

Source: (Budya & Arofat, 2011) based on Pertamina analysis

LPG AS A LIVELIHOOD OPPORTUNITY FOR WOMEN

Make LPG an income generator: In Malawi, charcoal provides over 60,000 jobs! But in Morocco there are over 40 000 LPG outlets!

- **On demand side:** Women overwhelming involved in informal food sector and thermal energy intensive businesses
 - 1,000 tofu and tempeh producers in Jarkata moving to LPG could save 1.5-2 hours a day in each factory, 25 000 tons CO2 per year (down 75%) and increase profitability by €500/yr
 - In Himachal Pradesh, India, the use of LPG in *chai dhaba* and sweet shops improved work environment, input costs smoke and time cleaning blackening of cooking utensils and walls
 - In Accra, women viewed LPG as a business growth fuel: volume growth, allowing quicker response to customer needs and product consistency
- **On supply side:** Women are overwhelming under represented as LPG suppliers
 - In Indonesia, LPG switching program (8 LPG terminals, 10 LPG Depots, 67 cylinder factories, 27 stove factories, 6 regulator producers, 360 filling stations could employ 38,000 new employees
 - Examples exist: Lambark, M38, Hills Oil are run by women in Ghana
 - LPG allows women to be involved in high-value energy supply chains as well

LPG & livelihoods support for women

- **Morocco:** an LPG and microfinance program (WLPGA and the UNDP) provided loans for stimulating LPG entrepreneurship. 27% of the loans did go to women-owned rural tourism businesses;
- **India:** aimed for 50% of 2,000 dealers in the Rajiv Gandhi Gramin LPG Vitrak Yojana to be women (mostly used by men!)
- **Why women in LPG supply is needed:** 75% of domestic LPG users are women, woman-to-woman sales works!
- **So what is needed:** Financing, networking, business development skills

What have the successful countries done differently?

	Growth rate/yr	Y10 LPG penetration	Country example	Typical reforms
Low	1%	10-15%	Senegal Morocco	Government subsidies, equipment micro-credit, good regulation of distribution, private sector and local industry development
Med.	2%	18%	India	Direct subsidies to users Strict regulation to prevent misuse
High	3-5%	50%	Peru, Vietnam	Decrease in VAT and import tax, retail price ceiling, taxing biomass consumption
	18%	84% (Y4)	Indonesia	Infrastructure, PPP for LPG, education and promotion of LPG

What about cost barriers?

- **Senegal:** Subsidies to support the dissemination of 3 kg and 6 kg LPG cylinders with supported for pots and pans and including burners, 85% of households in Dakar and 66% of those in other main urban areas now own LPG stoves
- **Kenya:** 60% of all households using any LPG earn less than 20,000 KES per month (US\$100). Prima Gas is testing a model in Nairobi that provides refills for one kg of gas at dispensaries close to customers
- **Brazil:** 98% of households (including 93% of rural households) have access to LPG, due to government policy subsidies to LPG users
- **Thailand:** the LPG promotion program focused on improving availability beyond Bangkok
- **Ghana:** Promotion of “tasters” (free cylinders) to overcome initial costs and facilitate transition

LESSONS LEARNT – WHY ARE OTHERS DOING WELL?

- Good, often medium term subsidies do prime the market: Ghana, Senegal, Indonesia
- Safety education works and decreases fear while increasing consumption: Indonesia, Peru
- Distribution and sizing strategies do improve access among poorer households: Kenya, Indonesia, Ghana
- Emerging unapproved distributors indicate growing and unmet demand. Build their capacity!
- “Small customer needs” matter : cylinders with windows, partial fill for the *kidogo* economy, local stoves for local pots
- Targeting women as users and entrepreneurs is important – not because they are women but because they are the main users (Here is a clue: Lipstick is mostly sold to women)!
- Still a marginalised fuel in development circles: financing LPG businesses, advocacy, impact evaluations, data, networks etc are missing

FOR More about the study

- <http://energia.org/wp-content/uploads/2015/04/01.-WLPGA - Cooking with LP Gas Report - FINAL PbP.pdf>
- Or
- <http://www.wlpga.org/publication/cooking-with-gas-why-women-in-developing-countries-want-lpg-and-how-they-can-get-it/>
- Also check out:
- <http://energia.org/2015/09/latest-energia-news-lpg-increasing-the-energy-options-benefitting-women-worldwide/>