

CSD-15 IPM Partnerships Fair – February 2007

The LP Gas Rural Energy Challenge

Michael Kelly, Director, Market Development,
World LP Gas Association (WLPGA)

Andrew Yager, Sustainable Energy Policy Advisor,
United Nations Development Programme (UNDP)



PARTNERSHIPS
for SUSTAINABLE
DEVELOPMENT



WORLD LP GAS ASSOCIATION

WWW.WORLDPGAS.COM

Introduction

- Access to affordable, reliable energy services is a prerequisite for sustainable development and for achieving the MDGs
- Two billion people worldwide lack access to electricity and a further two billion people depend on traditional fuels (wood, dung) for cooking and heating
 - 1.6 billion live on less than \$1/day
 - 2.6 billion live on less than \$2/day
 - 2.0 billion people worldwide lack access to electricity
 - 2.0 billion depend on traditional fuels (wood, dung) for cooking and heating
- Energy distribution to rural areas is often difficult or not in place



Energy for Subsistence

- Energy is key for meeting basic needs
 - Domestic uses (heating and cooking)
 - Household tasks (water pumping, grinding and milling)
 - Productive purposes (brick and ceramics firing, metal working, fish smoking)
 - Social services (health care, education)



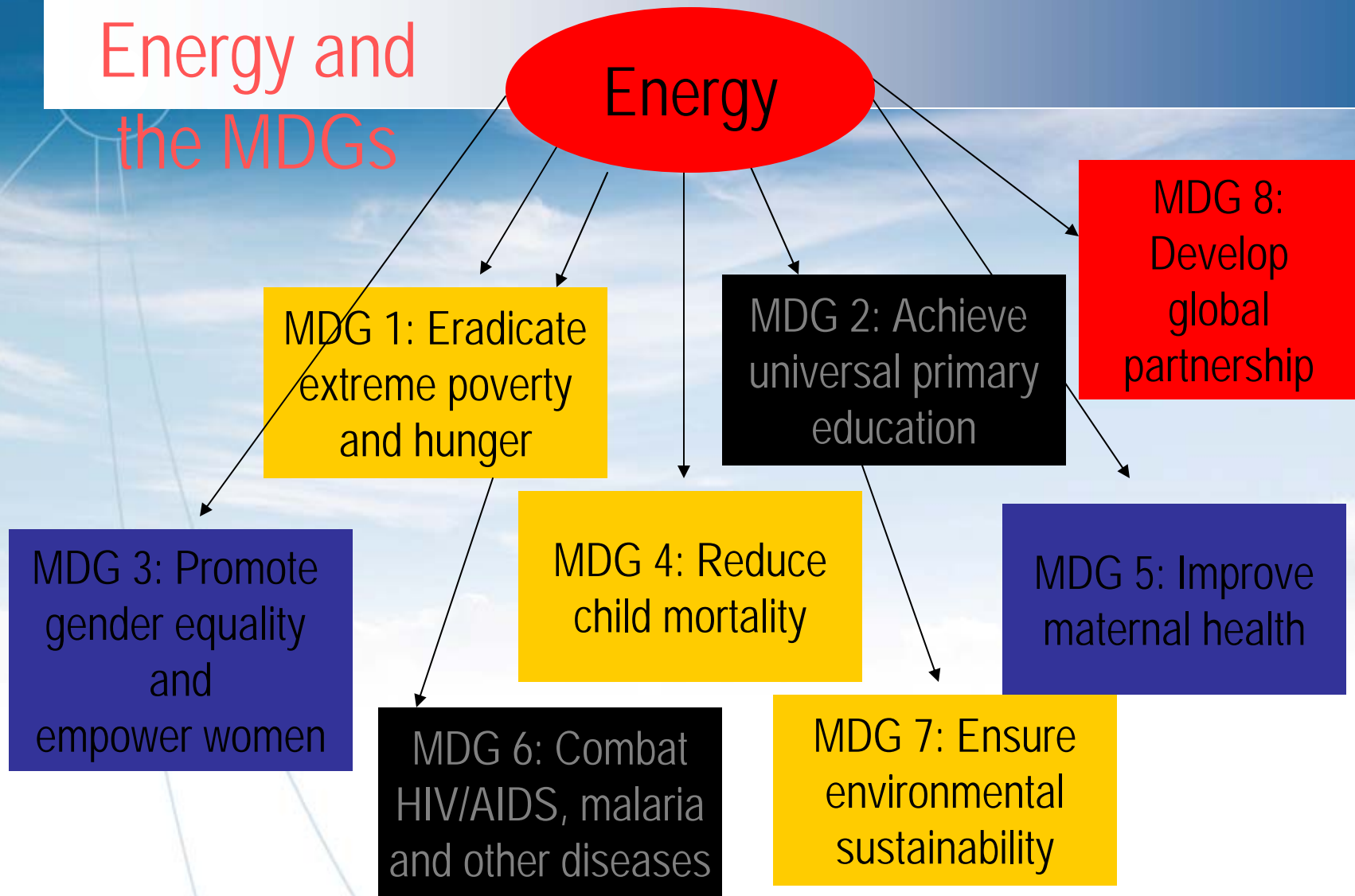
Women and Energy

Lack of access to energy affects women and girls disproportionately

- Health: carrying tens of kilos of fuelwood over long distances; indoor air pollution
- Literacy: girls are kept from school
- Fertility: illiteracy increases family size
- Safety: household fires, personal attack
- Economic opportunities: heat using activities
- Energy policy: gender neutral or gender blind?



Energy and the MDGs



What is LP Gas

- A readily available, clean-burning, modern energy carrier; Liquefied Petroleum Gas (LP Gas) is one option to support sustainable rural development
- LP Gas has demonstrated health and environmental benefits compared to traditional fuels
- LP Gas is critical for household and productive uses
- However, availability of fuel, canister size, financing of first costs, refilling costs and transportation are constraints to LP Gas use by poor people



LP Gas in context

Consumption

212 million tonnes/yr in 2004 – global increase of 2.4% on 2003

In context:

Annual consumption (on energy content basis) equivalent to 7% of annual oil consumption

Or:

11% of annual natural gas consumption or,
42% of annual hydroelectric consumption



LP Gas is available, clean and modern without the need for infrastructure investment

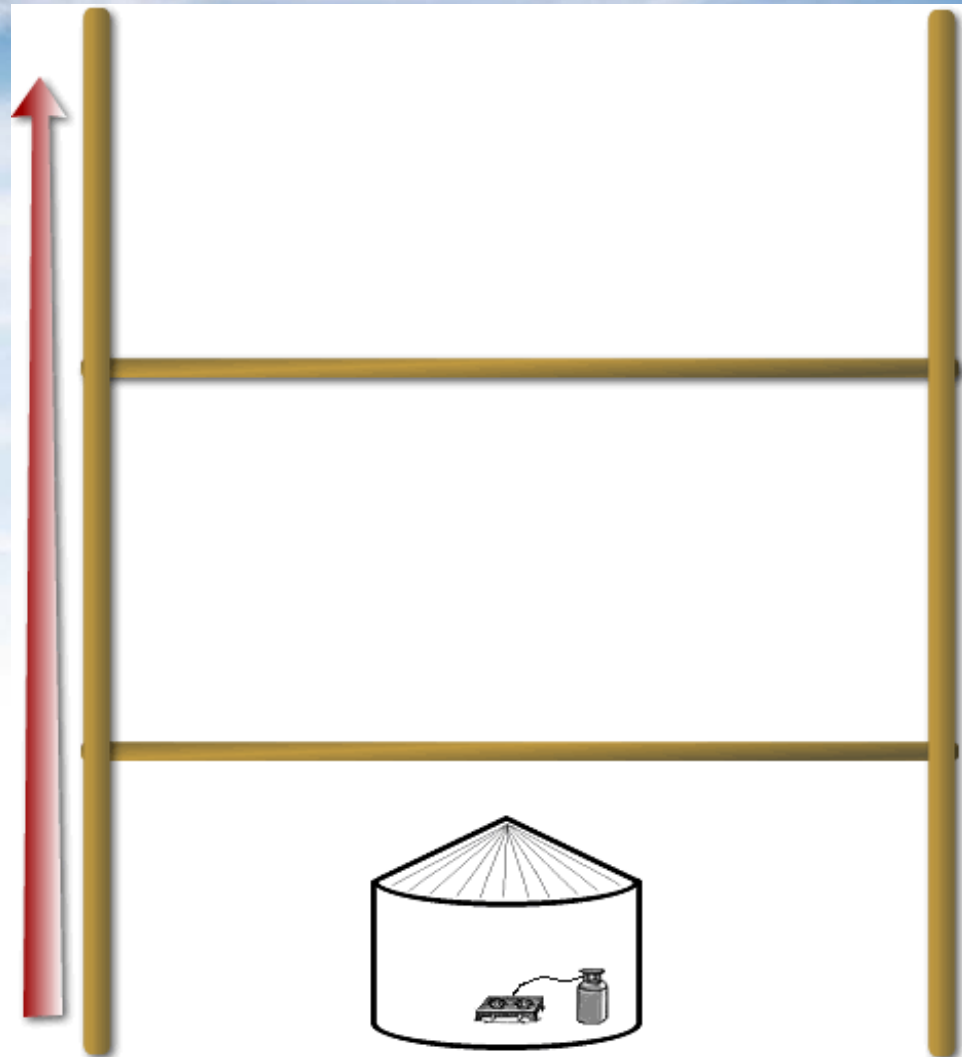


LP Gas allows for incremental development

Stage 3: LP Gas bulk tank, fuelling stove, refrigerator, water boiler and generator

Stage 2: LP Gas cylinder outside, piped in to fuel stove, refrigerator and light

Stage 1: LP Gas cylinder inside feeding stove



The WLPGA

- 158 member organisations headquartered in 55 countries worldwide
 - WLPGA unites international and local, private and state companies involved in one, several or all activities of the LP Gas industry.
 - Producers, marketers, shippers, equipment manufacturers, distributors, national and regional LP Gas associations and consulting firms are all represented.
- WLPGA has many partners at a global level including:
 - The World Bank
 - The United Nations Environment Programme
 - The International Energy Agency



The UNDP

UNDP is the UN's global development network, advocating for change and connecting countries to knowledge, experience and resources to help people build a better life.

- Democratic Governance
- Poverty Reduction
- Crisis Prevention and Recovery
- Energy and Environment
- HIV/AIDS



A Public-Private Partnership

- UNDP Strengths
 - expertise on financing mechanisms
 - capacity building to support governments in policy development
 - collaboration with local organisations to stimulate investment and employment generation
- LPG Industry Strengths
 - expanding storage capability for imported LP Gas to capture shipping economies of scale
 - addressing recurring user costs through investment in the production of smaller, more affordable bottles



Why did we form a partnership?

- Complementary competencies and resources
 - Global reach
 - Experience with partnerships
 - Access to the worlds major private sector companies
- Comparative advantages as partners
 - e.g. LP Gas is a privately traded good that depends on public sector determined policies
 - Different entry points (profit vs. non-profit) → same goal (improved standard of living)



The LP Gas Challenge

- Use of traditional fuels results in: respiratory disease from indoor and local air pollution, drudgery, reduced productivity, land degradation, and constrained income-generation
- A readily available, clean-burning modern energy carrier— LP Gas —is one option to support sustainable rural development
- LP Gas has demonstrated health and environmental benefits compared to traditional fuels
- However, availability of fuel, financing of first costs, and refilling costs are constraints to LP Gas use



What is the LP Gas Rural Energy Challenge?

- A Public – Private Partnership (UNDP/WLPGA)
- Address lack of access to clean energy through the use of LP Gas
- Improve living standards
- Contribute to achieving the Millennium Development Goals
- Create viable and commercially sustainable LP Gas markets in rural / suburban areas of developing countries
 - for domestic consumption
 - for industrial productive uses
- Through identifying and addressing barriers to rural market development



Expectations and Indicators

- UNDP creates awareness and mobilizes financing to address clean fuels issues
- Establishment of new, viable markets for LP Gas delivery and consumption
- Rural people increase access to LP Gas and appliances
- Development of markets that adhere to both good safety and good business practices
- Lessons learned from public-private partnership are publicized and replicated



Programme plan

- First key step for the partners was the selection of 7 countries for multi-stakeholder workshops:
 - Ghana; Honduras; Morocco; South Africa; Vietnam, Turkey and China
- Objectives of these workshops are:
 - Initiate dialogue between all stakeholders (public sector, private sector and consumers)
 - Agree priority actions to remove barriers to development
 - Identify projects to demonstrate feasibility of rural market development.





Multi-stakeholder workshops held in :

- Ghana (August 2003)
- Honduras (September 2003)
- South Africa (April 2004)
- Morocco (May 2004)
- Vietnam (October 2004)
- China (July 2005)
- Turkey (January 2007)

Similar Partnership Outcomes

Interestingly, despite cultural diversity, the 7 workshops highlighted similarities in terms of barriers



Barriers

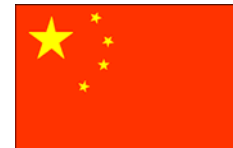
- Low density of LPG target population
- Low purchasing power and even sometimes barter communities
- Need for local credit facilities
- Inadequate cylinder size
- Lack of safety culture and poor enforcement of regulations
- Strong competition of cheaper alternative energy sources (sometimes subsidized)
- Inadequate energy State policy to stimulate LP Gas development (sometimes driving major players away)
- Weakness of LP Gas distribution networks in remote rural area



Outcomes

Workshop recommendations

- To set up a transversal national LPG industry association
- To initiate a transparent dialogue with the State, on structure, incentives, safety and law enforcement levels, to create convergence of interests
- To develop affordable and appropriate appliances
- To activate current local micro-credit facilities
- To seek and tap bilateral/multi-lateral funding
- To test recommendations in field project samples



Learning Process

More accurate evaluation of the limits of players:

- Willingness of Private Sector to risk capital
- The budget/treasury limitation of the States
- The capacity of States to implement large scale new projects
- The existence of competitive energy lobbies
- The lack of local consumer associations

Expectations and Indicators

- UNDP creates awareness and mobilizes financing to address clean fuels issues
- Establishment of new, viable markets for LP Gas delivery and consumption
- Rural people increase access to LP Gas and appliances
- Development of markets that adhere to both good safety and good business practices
- Lessons learned from public-private partnership are publicized and replicated



Next Steps

- Identify further pilot countries
- Define clear and feasible projects based on workshop findings
- Secure project financing from private and public sources
- Hire a local coordinator in each selected country
- Execute projects and scale up
- Monitor and report on progress
- Transfer knowledge



Conclusions

- LP Gas is a readily available, clean-burning, modern energy carrier
- Safety and affordability for consumer is key
 - Whilst allowing for suitable distributor margin
 - Taking account of alternative traditional fuels
- Progress is measured differently by the stakeholders
 - Private Sector vs Public Sector priorities can be different
- Success will come from recognising a win-win-win solution is both possible and necessary



LP Gas Rural Energy Challenge

www.undp.org/energy

www.worldlpgas.com



PARTNERSHIPS
for SUSTAINABLE
DEVELOPMENT



WORLD LP GAS ASSOCIATION
WWW.WORLDPGAS.COM

And Finally...

Mark it in your agenda now:


Our 20th anniversary event

24th – 26th October 2007


Cape Town, South Africa



20th WORLD
LP GAS FORUM
CONFERENCE & EXHIBITION

24th-26th October 2007
Cape Town  South Africa

www.wlpgasforum2007.com

 WORLD LP GAS ASSOCIATION
www.worldlpgas.com

The poster features a scenic sunset over the ocean with a sailboat and a silhouette of a mountain range. The text is in white and orange, and the logos are in blue and white.