

PARTNERSHIP INITIATIVES INFORMATION SHEET

Name of the Partnership/Initiative	The LPG Challenge
Expected date of initiation:	October, 2002
Expected date of completion:	October, 2004 (initial stage)
Partners Involved:	
Governments:	To be determined
Intergovernmental organizations:	United Nations Development Programme (UNDP)
Major groups:	World LP Gas Association (WLPGA)
Other:	Local and international LPG suppliers/distributors as well as national NGOs and CSOs
<i>Leading Partners:</i>	UNDP, WLPGA
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Main objectives of the Partnership/Initiative	
<p>This initiative is designed to support the achievement of critical energy-related sustainable development goals, specifically poverty reduction, environmental protection, and economic growth. This partnership addresses concrete barriers to meeting the thermal energy needs (heating, cooking, and heat using productive processes) of rural and peri-urban populations in developing countries through expanded use of a clean-burning, readily-available fuel: liquefied petroleum gas (LPG). Over 2 billion people in developing countries depend on traditional fuels including wood, animal and crop residues, and charcoal, to meet their heating, cooking and industrial needs. This has adverse health effects on women and children, degrades the local natural resources base and contributes to global environmental degradation through the emission of unburned hydrocarbons. Social and economic limitations for women, low quality energy services in heat using industries due to fuel inefficiency, and lost opportunities for agricultural product processing, are all directly related to traditional fuel use patterns.</p> <p>The <i>LPG Challenge</i> will bring LPG to rural populations by linking UNDP's knowledge and experience in rural development and community consultation together with industry suppliers of LPG and the appliances required for its utilization. The key issue is to address market and technical barriers to the expanded use of LPG and to design local partnerships, business models and financing mechanisms to overcome these barriers. This will be accomplished through local dialogue processes and partnerships involving government officials, consumer representatives, current LGP market participants (local and international business), local entities that operate in</p>	

rural communities, UNDP and other multilateral and bilateral funding agencies committed to bringing modern energy (electricity and clean fuels) to rural communities.

Please also provide a brief description of the relationship of the Partnership/Initiative with the objectives of Agenda 21 as well as relevant goals and objectives of the United Nation Millennium Declaration:

Energy is a vital for social and economic development and directly impacts local, national and global environmental conditions. This initiative addresses the heat related aspects of energy services provision. Energy's vital linkages to support rural development including through opening up value added economic opportunities in the agriculture sector was recognized in *Chapter 14 of Agenda 21* on rural development. Though there is no specific chapter dealing with energy in Agenda 21, energy's vital link with the social, economic and environmental aspects of sustainable development is referred to throughout Agenda 21 in the chapters dealing with industry, transport, climate, health and women. These vital linkages were reaffirmed at the Ninth meeting of the Commission for Sustainable Development (CSD-9), which specifically recommended increased efforts to expand the use of cleaner and efficient fuels to meet domestic and industrial energy needs.

With regard to the Millennium Development Goals (MDGs), while there is no specific goal on energy, the services that it provides are required as inputs to meet all of the MDGs; this is especially true with regard to poverty reduction. Without increased energy services to support jobs creation, economic activities, and increased value added production in the agricultural sector, it is unlikely that poverty can be reduced. Similarly, while millions of women and girl children spend long hours in the collection and transport of traditional fuels, it is unlikely that poverty can be reduced nor women empowered unless basic household energy needs are met. The MDG on gender quality (Goal 3) cannot be achieved if girls are unable to attend school due to family fuel collection obligations. Fuels are essential for cooking food and boiling water, which are obvious inputs to meeting the MDGs on hunger (MDG 2) and sanitation (MDG 10) respectively.

With respect to both Agenda 21 and the Millennium Declaration, energy is both everywhere (an essential means) and nowhere (no defined goals) at the same time. This initiative has clear linkages to the objectives expressed in both Agenda 21 and the Millennium Declaration.

A readily available, clean-burning fuel, **liquefied petroleum gas (LPG)** is an important alternative to address indoor air pollution-related health concerns associated with the use of traditional fuels. Furthermore, access to modern fuels such as LPG also supports the key Millennium Development Goal (MDG) of poverty alleviation by providing energy that can be harnessed for productive, income-generating activities, such as agricultural processing, food processing, and industrial activities including ceramics firing, metal working, and brick-making. In the global context, although it is a fossil fuel--making it unsustainable in the long-term--when used as a bridge to renewable energy carriers (such as biofuels) that are presently less developed, LPG has significant environmental advantages. For example, if two billion people in rural areas of developing countries were to begin using LPG to meet their thermal energy needs, this would correspond to under 3% of current annual oil consumption, and result in a less than 1% increase in annual global energy use, and a net decrease in greenhouse gas emissions, given that LPG is more efficient and cleaner burning than traditional fuels.

Expected results:

New business models, financing mechanisms and supportive policy frameworks to address fuel and equipment pricing are needed to expand the use of LPG. This will require collaboration between government officials, business, consumer groups and the development assistance community. At the national level, this initiative will begin with an in-country consultation with stakeholders to determine the specific barriers to be addressed and to define the specific outcomes to be achieved. Outcomes will include increased numbers of households using LPG as well as increased total volume and sales of LPG in the target area. The barriers and outcomes will be specific to each country or area but will have in common a focus on the affordability and availability of LPG and will involve multi-stakeholder collaboration and partnerships.

This initiative will bring liquefied petroleum gas to rural populations using **public-private partnerships** to address two issues: **affordability** and **availability**. Where affordability is concerned, partnerships may propose special subsidy and financing arrangements by host governments to address the critical first cost barrier to consumers presented by the necessity to purchase an LPG cylinder and appliances. Projects to finance cylinder and appliance purchase through establishment of ESCOs, micro credit, or other mechanisms may also be supported.

While the price of the LPG fuel itself may be affordable once cylinder and appliance costs are dealt with as described, distorting subsidies on competing fuels such as kerosene will have to be explicitly addressed in many cases. This partnership does not depend on the subsidization of the fuel itself. The ability to pay, or the existing practice of paying, for traditional fuels will be a key determinant in selecting areas for operational activities under this initiative. In terms of availability, partnerships may propose projects to increase local LPG availability addressing distribution issues such as LPG marketer ownership of a small storage and bottling facilities nearer to the target market. Such projects might involve a number of different LPG marketers and in some cases will enhance domestic and international business collaboration.

Another possible supply-side effort is the expansion of storage capability for imported LPG in order to capture the economies of scale in shipping to lower the price to rural users. Projects may also address recurring user costs through investment in the production of smaller LPG cylinders. In addition, rural delivery systems may be expanded by building on existing non-LPG industry distribution networks. In this regard, the role of agricultural cooperatives, civil society organizations working in rural areas and non-energy sector businesses with mature distribution systems in rural areas will be important elements of partnerships.

Specific targets of the Partnership/Initiative and timeframe for their achievement:

Several pilot projects will be initiated in different regions, beginning in late 2002. Specific targets remain to be finalized but will have two basic categories: affordability of LPG and availability of LPG. UNDP hopes to undertake this partnership in not less than 10 countries and each partnership will depend on the commitment of government and business to expand LPG use in the country in question.

Coordination and Implementation mechanism:

The initiative will be coordinated at the global level by UNDP's New York based Sustainable Energy Programme drawing on the in-country presence of the UNDP Country Offices. Under the

leadership of the Resident Representative, the UNDP country offices will work with local officials to ensure in-country coordination. Energy and environment is one of UNDP's six corporate priorities worldwide and UNDP is currently working on energy issues in the majority of all country operations.

The main industry partner at the global level is the World LP Gas Association that will facilitate the involvement of its member companies. Membership includes both major multinational energy companies as well as independent LPG marketers (domestic and international). Member companies will become involved based on their interest and commitment to the specific country where the activities will be implemented.

UNDP and the WLPGA will look for partners from both the bilateral donor community as well as other multilateral organizations to participate in country level partnerships. Depending on the country of operations, this initiative could be closely linked to the Global Village Energy Partnership (GVEP) facilitated by ESMAP (Energy Sector Management Assistance Programme) in which UNDP is also a partner.

Arrangements for funding:

UNDP and WLPGA members will raise resources for the initiative jointly. UNDP's initial commitment to this effort will be funded through core resources available under the Sustainable Energy Global Programme due to the innovation aspect of this public private partnership model. WLPGA will commit funding and technical expertise for the country identification and dialogue phase and will invite member companies to contribute funds and technical expertise on a country-by-country basis. UNDP is also seeking to raise non-core contributions from bilateral donors to support this initiative using the new Thematic Trust Fund on Energy for Sustainable Development as the funding window to accept and disburse LPG Challenge project funding. Details of this arrangement remain to be finalized.

Arrangements for capacity building and technology transfer:

As described, each country level operation will begin with an in-country workshop that will include a needs assessment which will include the capacity building, policy, financing and technical barriers to be addressed in the partnership. UNDP efforts will focus primarily on the policy and capacity development requirements while business partners engagement will focus on the financing and technical barriers to be overcome. This nominal allocation is based on the comparative advantage of each type of organization but in some cases will involve joint collaboration on common issues. For example, in those instances where local business development and training is the identified bottleneck to expand LPG distribution, both public and private sector organizations will be required to support the capacity development efforts.

Based on experiences in India, Brazil and West Africa, it is expected that one of the main technology issues to be addressed will be related to how to manufacture and introduce small size LPG cylinders (bottles) to increase accessibility of LPG to families and small-scale businesses. The second technical issue to be addressed is how to manufacture LPG burners locally where they don't exist or increase the business trade in this technology where they are being produced. Technology transfer aspects related to investment in LPG bottling, storage and distribution facilities are also expected to be key issues that will require the active engagement of the business partners in the LPG challenge. In the case of this initiative there are known and proven

technologies which can address the heating, cooking and small industrial uses of LPG but the challenge is how to increase their availability and affordability in the countries participating in this initiative.

Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any):

The LPG Challenge will compliment such international-level energy for sustainable development efforts as the Global Village Energy Partnership (GVEP) by providing modern energy services to rural areas, specifically targeted at meeting thermal energy needs. In addition, in the event that countries in which the LPG Challenge is undertaken are the same as those in which the World Bank's Global Gas Flaring Reduction Initiative is implemented, it will support the latter by using gas that would otherwise be wasted through flaring for productive purposes.

Monitoring Arrangements:

Using the already established Result Oriented Annual Reporting (ROAR) mechanism used to monitor all UNDP country level operations, output, outcome and overall progress indicators will be available to track progress on this initiative in the countries of operation on a yearly basis. Due to the innovation aspect of the partnership and the need to capture and learn from experiences, UNDP will also collect project progress information at the national level drawing on out posted policy and technical specialists as well as the New York based Sustainable Energy Programme Team.

Other relevant information:

www.undp.org/seed/eap, www.worldlpgas.com/sustdev

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