

# World LP Gas Association

For a cleaner, healthier and more prosperous world



Annual Report 2005



WORLD LP GAS ASSOCIATION

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PORTABLE

CONVENIENT

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Welcome to the 2005 Report of the World LP Gas Association's activities This introduction provides me with the opportunity to review the key events in the world of LP Gas during 2005 and to evaluate the role of the Association in the context of what is a very dynamic industry.



2005 may unfortunately be remembered as the year of catastrophic natural disasters: from the Asian Tsunami; widespread flooding in India; a record-breaking hurricane season in the Atlantic and devastating earthquakes such as the one to hit Pakistan. In the aftermath of these tragic events it is worth

remembering that survivors need fuel for warmth and for cooking. In many cases, the LP Gas industry responded to these disasters however coordination of the industry at a global level in future may further improve the effectiveness of the response.

2005 has been characterised by unusually high and volatile fuel prices. LP Gas price volatility has also given rise to a somewhat counter-cyclical behaviour with higher than normal prices until the beginning of last winter followed by a reduced price until the beginning of the summer. In late summer, we saw prices increase significantly, now breaking through the \$600/tonne level. I hope that prices for 2006 will be less erratic and more acceptable for our consumers.

With the ratification of the Kyoto Protocol in February this year, there has been an increasing global focus on climate change and the environment in general. This trend can only be positive for LP Gas which is far cleaner burning than most other fuels. This is particularly true in the large areas of the world that are not already served by any modern energy. Against this background it is surprising that there are still some governments that are not taking a more consistent approach towards fiscal policies related to fuel use. It is clear that those governments that do use taxation as a lever to influence consumer choice generally

see an increased use of cleaner fuels such as LP Gas. In the introduction to last years report I mentioned the growth of LP Gas use in Asia and we continue to see Asia as a large growth market. The rapid growth in India brings into sharp focus the question of fuel subsidies, the burden of which will increase as domestic consumption continues to increase.

Finally, the global LP Gas business remains dynamic from, for example, the point of view of mergers and acquisitions. Movement in Morocco with the acquisition of the market leader by the number two in the market has now led to a dominant position for Afriquia; and above all, one of the world's largest LP Gas marketing companies – Shell Gas (LPG), is likely to be divested to one or several buyers over the course of the next 12 months. Clearly 2006 promises to be an interesting year for companies operating in this sector.

As you can tell from my 2005 observations, the world of LP Gas continues to be dynamic but fragmented. In such an environment, the World LP Gas Association is providing a crucial role in the exchange of information between stakeholders, promotion of good practices, lobbying and the formation of partnerships with influential organisations around the globe. The strength of the WLPGA comes from its broad and representative membership base and I strongly encourage all businesses operating in the LP Gas value chain to become involved.



FRANCIS JAN  
President

Being a member of our powerful network has never been more attractive than it is today. To give you a couple of examples, we held one of our best-ever annual Forum's in Shanghai which attracted more than 500 delegates and nearly 50 exhibiting companies. WLPGA staff and / or officers of the association actively participated in more than 20 international conferences in 16 countries on 6 continents during the year, successfully ensuring that LP Gas is on the business agenda of policy makers and opinion leaders around the world.



On behalf of our members we implemented six major programme areas in 2005, consisting of 31 projects – a record number for the association. I am very pleased to announce that we accomplished or exceeded nearly all of the agreed annual performance targets for the year.

Key achievements for 2005 include:

- Directly supporting ten national or regional LP Gas Associations at their annual conferences.
- Publication of five major reports addressing LP Gas business and policy issues.
- Revitalised communications following the recruitment of an experienced communications manager.
- Revamped website including quarterly html emails to a large global data base of stakeholders
- Development of a partnership to prepare a pilot project using micro-finance for LP Gas access.
- The completion of a UNDP / WLPGA workshop in China addressing rural market development
- The translation of our "Guidelines for Good Business Practice" into Chinese.

We successfully grew the influence of the association around the world, welcoming five new members from the Americas, four new members from Asia-Pacific and five

new members from the Europe, Middle East and Africa region. Three of these new members are from countries not previously represented in the WLPGA. During 2005 we lost seven companies due to resignation. During 2005 many member companies have been proactively engaged with the association and providing positive feedback. We have included some of their quotes in this annual report.

A prerequisite for our strong 2005 performance has been the quality of our core team in Paris, with the addition this year of a number of experienced staff. We recruited Volker Andresen as Communications Manager, Laurence Poret as Office Manager and Yvon Sellier as Director of Business Liaison. 2005 also saw the departure of Sandie Boll who retired after more than eight years of valuable service to the association.

In 2006 the WLPGA team will continue to build on the successful programmes that we have in place. With the engagement of our members around the world the association will continue to be the global authoritative voice for LP Gas to foster a cleaner, healthier and more prosperous world.



JAMES ROCKALL  
Managing Director

CLEAN



*Purvin & Gertz has been involved with the WLPGA since its founding and we are pleased to be members of this important and prestigious association. The WLPGA represents the interests of the LP Gas industry around the world and is an effective advocate for producers and consumers alike.*

**KEN OTTO**  
Senior Vice President and Director, Houston office – Purvin & Gertz, Inc.

Formerly known as the World LPG Forum and founded on 19th June 1987 in Dublin to organise an annual Conference and Exhibition, the World LP Gas Association (WLPGA) has evolved to become the authoritative global voice for LP Gas.

With approximately 150 members covering the globe, the activities of the WLPGA have expanded considerably over the last 15 years to include all activities expected of an effective global trade association.

**WLPGA'S MISSION**

**Vision of the World LP Gas Association (WLPGA)**

As the authoritative, global voice for LP Gas, the WLPGA promotes the use of LP Gas worldwide to foster a cleaner, healthier and more prosperous world.

**Mission**

- Enhance awareness of LP Gas as a clean, all-purpose and efficient source of energy.
- Identify and support LP Gas market development opportunities and innovation.
- Promote good business practices and support improvement of, and compliance with, technical and safety standards.
- Represent the LP Gas industry in the formulation of policies.
- Facilitate information exchange and communication among all LP Gas stakeholders.

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## THE BOARD OF DIRECTORS

## INDUSTRY COUNCIL

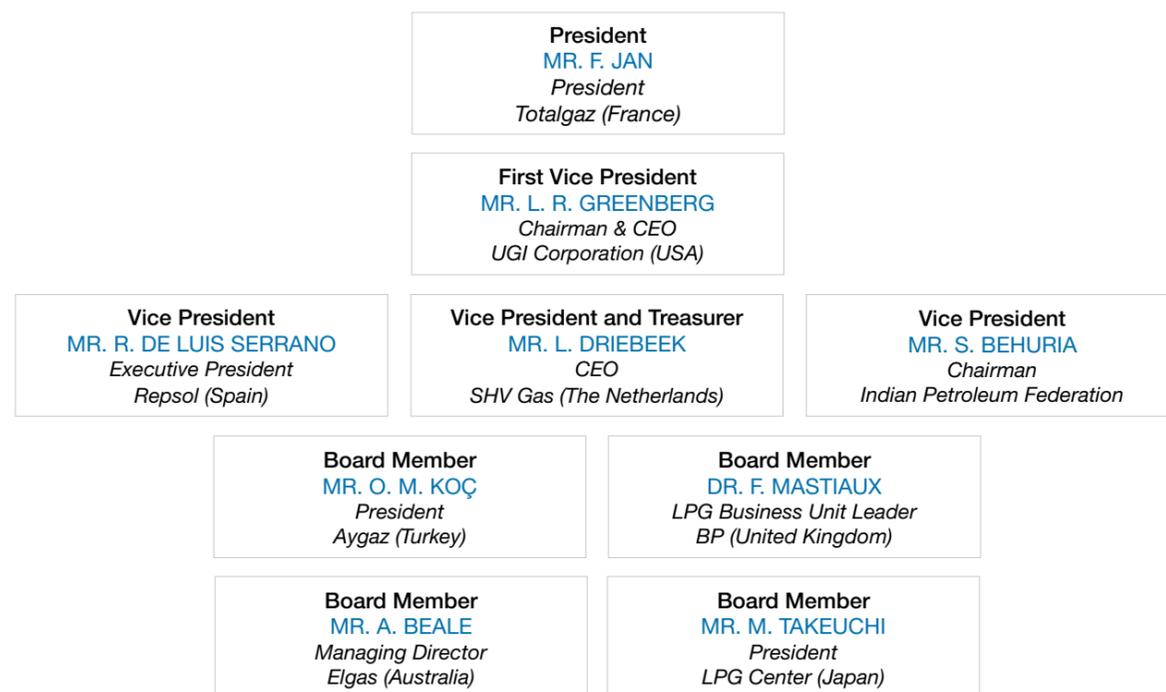
### GOVERNANCE/STAFF

The WLPGA staff is supported and assisted by the Board of Directors and the Industry Council. This structure ensures that members are fully represented in the activities and strategies of the Association whilst also ensuring that the WLPGA can truly speak as the voice of the industry.

### THE BOARD OF DIRECTORS

The WLPGA Board of Directors has a new structure as of 14th September 2005. It is comprised of the President, the First Vice-President, the three regional Vice-Presidents, the Treasurer and up to three other Board Directors, all of whom are elected by the General Assembly. The Board composition is representative of the business activities of members and geographic diversity of members.

The Board meets at least twice a year to agree the budget and approve the accounts for ratification by the General Assembly.



**Board of Directors**  
Board elected on 14th September 2005

The Industry Council was inaugurated in 1996 and is comprised of leading companies in the LP Gas business. The Industry Council directs the Association's actions by identifying issues, developing strategies and formulating projects.

During 2005, the WLPGA statutes were revised to formally include the role of the Industry Council. Actions launched by the Industry Council aim at enhancing the positive image of LP Gas worldwide and promoting LP Gas use to satisfy the growing need for an all-purpose, efficient and environmentally friendly fuel. Whether focused on specific market segments or the LP Gas industry in general, the Industry Council's actions are designed to increase the worldwide use of LP Gas.



**WLPGA STAFF**



**JAMES ROCKALL**  
Managing Director



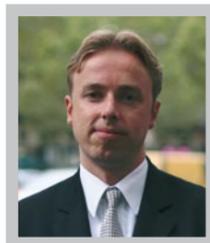
**BRUNO DE CALAN**  
Director,  
Technology &  
Business Practices



**BEN MUIRHEID**  
Director,  
Market Development



**YVON SELLIER**  
Director,  
Business Liaison



**VOLKER ANDRESEN**  
Communication Manager



**PAULA-MAE DE LIEGE**  
Assistant Manager,  
Communications



**JOHANNA WICKSTRÖM**  
Project Manager



**LAURENCE PORET**  
Office Manager



**TRISTAN CHEN**  
Office Assistant

Led by James Rockall, the Managing Director, the WLPGA staff is based in Paris, France. The permanent staff of seven is supported by two new part-time staff members: Yvon Sellier, Director of Business Liaison, who shares his time between the WLPGA and the European LP Gas Association (AEGPL) and Tristan Chen, Office Assistant.

Consultants assist the WLPGA staff as needed.

**2005 EVENTS**

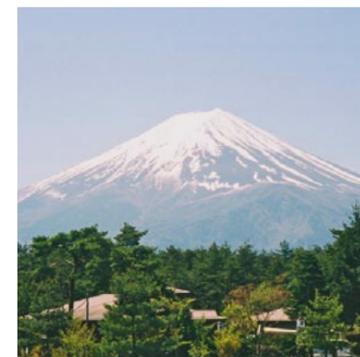
During 2005, the WLPGA participated and presented at 20 international conferences in 16 countries on six continents. These included:



**Japan, Tokyo**  
**INTERNATIONAL LPG SEMINAR**  
(LPG CENTRE OF JAPAN)

**Poland, Warsaw**  
**9TH POLISH LP GAS FORUM**

**Mexico, Cancun**  
**LATIN AMERICAN**  
**LPG CONGRESS (AIGPL)**



**UK, Warwickshire**  
**LPGA ANNUAL GENERAL MEETING**

**Portugal, Lisbon**  
**EUROPEAN LPG**  
**CONVENTION (AEGPL)**

**USA, San Antonio, Texas**  
**PROPANE TECHNOLOGY FORUM**



**Switzerland, Geneva**  
**THE UNECE WORKING PARTY**  
**ON GAS**

**South Africa, Durban**  
**LIQUEFIED PETROLEUM GAS**  
**ASSOCIATION OF SOUTHERN**  
**AFRICA ANNUAL CONFERENCE**



**Senegal, Dakar**  
**ENERGY IN AFRICA SUMMIT**

**France, Paris**  
**UNEP CONSULTATIONS**  
**WITH BUSINESS AND INDUSTRY**

**Montreal, Canada**  
**THE COP 11 (UNFCCC) MEETING**

## BENEFITS TO MEMBERS



The LP Gas Safety Association of Southern Africa (LPGSASA) has been a member of the WLPGA for the past three years. During this time, the relationship has been mutually beneficial with both parties learning much from each other.

From the LPGSASA's point of view, the WLPGA's promotion and endorsement of the Rural Energy Challenge was just the stimulus needed for the South African industry, through its representative Association, to embark on its own challenge, which it refers to as the Low Income Household (LIH) Project.

With the local industry's commitment and the WLPGA's guidance and encouragement, this project has been launched and is already enjoying much success. To date, over 65 000 households have been converted from dangerous and unhealthy 'traditional' fuels, such as wood, coal and illuminating paraffin (kerosene) to LP Gas.

The WLPGA's involvement and intercession with the Minister and her Department gave the project the additional credibility and impetus needed to initiate the roll out.

James Rockall, MD of the WLPGA has, for the past three years, attended and addressed the LPGSASA's members at its annual conference where he provided an accurate update on trends and challenges faced by the international LP Gas industry.

The LPGSASA is extremely proud that South Africa has been selected as the host country for the 2007 World Forum. As this is the first time that the Forum is to be held in sub-Saharan Africa, every effort is, and will continue to be made, to ensure its success. The LPGSASA will obviously work very closely with the WLPGA to facilitate in the organizing and arranging of this prestigious event.

**MPUMI GABA**  
Managing Director – LPGSASA

### WORLDWIDE ACTION

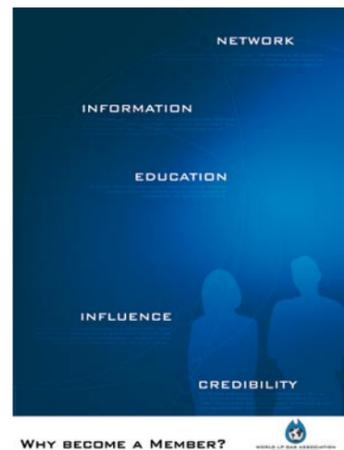
The World LP Gas Association unites the broad interests of the worldwide LP Gas industry into one strong independent organisation. Our Paris-based operation is complemented by a powerful industry membership structure that operates around the world.

### DIVERSITY OF WLPGA MEMBERS

The WLPGA represents every sector of the LP Gas industry from producers to equipment manufacturers. With companies headquartered in some 50 countries around the world, members benefit from a global leadership position that can only be achieved thanks to such full industry representation. The powerful industry membership structure provides unique opportunities for members in both mature and developing LP Gas markets to communicate and become credible partners for business development.

### ANNUAL WORLD LP GAS FORUM

The World LP Gas Forum is the premier global conference & exhibition on LP Gas, attended every year by over 400 top executives of LP Gas companies from all around the world. The Forum is the major annual event where the industry communicates about global LP Gas business developments and issues relevant to both the industry and outside partners. The 19th World Forum will be held from 17th – 20th October 2006, in Chicago, USA. This time, an inaugural LP Gas Technology conference will be run as part of the World Forum. Sponsored by the WLPGA



and the Propane Education & Research Council, the Technology conference will bring together the best and brightest from the LP Gas industry to share best practice and innovations.

As well as receiving significantly discounted rates on conference registration fees and on exhibition booth rental, members get preferential treatment at the Forum. They can discuss the exhibition floor plan at the exhibitors' preview meeting before commercialisation of the exhibition. There is also an excellent opportunity to network with other members at the yearly Members' Dinner.

### MEMBER QUERIES & BUSINESS CONTACTS FOR MEMBERS

This permanent service is provided by WLPGA as an international trade association. Questions from individual members which are answered by staff every week address topics such as: fuel specification standards; equipment standards; consulting firms; engineering firms; regulations; safety rules; model taxation policies; new business contacts; new technologies; etc. The WLPGA staff aims to respond to queries within five working days.

### ACCESS TO INTERNATIONAL INSTITUTIONS

Membership brings you direct access to intergovernmental organizations that is only possible through an independent organization such as the WLPGA. Granted Special Consultative Status with the United Nations Economic and Social Council in 1989, the WLPGA has

since developed partnerships with several major international institutions including for example, the World Bank, the United Nations and the International Energy Agency.

### GLOBAL AUTOGAS INDUSTRY NETWORK (GAIN) & GLOBAL TECHNOLOGY NETWORK (GLOTEC)

Member companies have access to the GAIN and GLOTEC Networks. These networks are successful in coordinating focused activities and action throughout the world. Membership brings access to a large resource of experts in all markets across the globe and facilitates exchange of good practices and experiences amongst members with common goals. GAIN co-ordinates efforts of the autogas community, while GLOTEC supports innovation, advances understanding of developments in research and explores ways to use technology to expand LP Gas markets and prosperity.

### MEMBERS ONLY REPORTS

The WLPGA publishes reports which are exclusively distributed to WLPGA members.

### WEB SITE – MEMBERS ONLY DATABASE & RESOURCE CENTRE

Since 2002, WLPGA has been providing a customer-oriented web service for member organisations and their staff. This service provides on-line information to members through a protected password system. More data, reports and links are added on a regular basis.



### EMAIL REPORTS / NEWSLETTERS

WLPGA issues regular activity and news reports to all WLPGA members via email with information on WLPGA actions, achievements, Board and Industry Council meetings, projects, new international developments and external representation.

### GLOBAL LP GAS STATISTICS

The WLPGA produces the definitive publication on LP Gas statistics. This highly referenced annual publication is used throughout the industry and includes LP Gas production and consumption data for more than 80 countries. Members receive one free copy and discount on additional copies.

### DISCOUNT ON PUBLICATIONS

WLPGA members get one free copy of all new publications and benefit from discounted prices on additional copies.

### SPECIAL PROJECTS FOR MEMBERS

Coordination of specific custom-made projects for a consortium of at least three members.

### DISCOUNT ON TRAINING COURSES

Membership brings substantial discounts on fees for certain educational training courses.

### MEMBER CONTACT INFORMATION

A member directory with full contact details is issued on a quarterly basis.

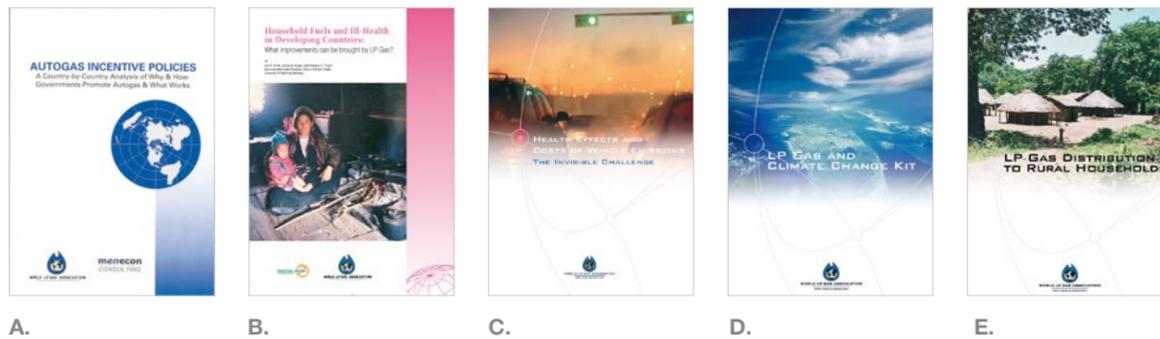
I just received the two publications that were sent out, one on Rural Markets and the other on auto emissions. They are both terrific. This is impressive work.

**JIM FERRELL**

President and Chief Executive Officer - Ferrellgas

The World LP Gas Association regularly publishes in-depth reports and studies related to LP Gas focusing on all aspects of the global LP Gas industry.

In 2005, the WLPGA published the following reports:



**A. Autogas Incentive Policies**

Autogas is one of the LP Gas' fastest growing market segments. This new report explains why and how governments encourage people and businesses to switch to autogas, and assesses the critical success factors to sustain growth of autogas use. Based on an extensive country-by-country survey of the world's largest autogas markets, this in-depth study reveals the policies which work and why.

**B. Household Fuels and III-Health in Developing Countries**

Improved health as a result of reduced indoor air pollution is one of the key benefits of using LP Gas, rather than traditional household fuels such as firewood or coal, in a domestic environment. As well as addressing health, this study also discusses co-benefits of a switch to LP Gas such as reduced pressure on natural forests and lower greenhouse gas emissions.

**C. Health Effects and Costs of Vehicle Emissions, The Invisible Challenge**

People living in numerous cities around the world are exposed to dangerous levels of air pollution. In many cases, road transport emissions are a major, or even the dominant cause of poor air quality. This study investigates the specific health effects related to vehicle emissions and their associated health costs with a view to better understanding the role autogas can play in mitigating these effects and costs.

**D. LP Gas and Climate Change Kit**

Targeting the Switch to a Cleaner Fuel discusses LP Gas from an environmental and land-use perspective. LP Gas produces a much lower environmental impact if considered across the full range of controlled and uncontrolled greenhouse gases, not only over its conventional fuel rivals, but also if compared to so-called CO2 neutral fuels. The Climate Change Kit also contains information on opportunities for LP Gas in emissions trading and CDM markets.

**E. LP Gas Distribution to Rural Households**

Many LP Gas supply companies around the world have an increasing interest in reaching out to the unserved rural household segment. This study investigates the key factors for successful rural distribution and identifies barriers, critical success factors and best practices.

Please visit our Web Site for a complete list of all publications: [www.worldlpgas.com/publications](http://www.worldlpgas.com/publications)

The eleventh edition of the *Statistical Review of Global LP Gas*, containing the detailed breakdown of supply and market sector demand from 1994 to 2004 was issued in August 2005. This yearly review also contains historic data on international trade, shipping and pricing.

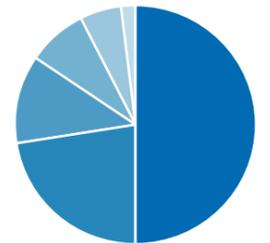
The *Statistical Review of Global LP Gas* is the reference for any company, organisation or individual who requires accurate statistics about the global LP Gas market.

**HIGHLIGHTS INCLUDE**

- LP Gas production continued to grow worldwide at a rate of 2.6%
- The growth of the consumption was driven by China, India and the USA
- International seaborne trade rose to over 50 million tons
- The cost of shipping moved up progressively
- Contract and spot prices of LP Gas rose steadily

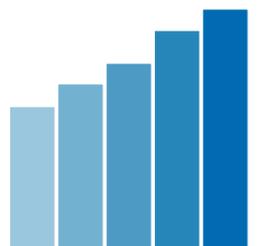
Global LP Gas Consumption by Sector 2004

Domestic	50.1
Chemical	22.4
Industry	12.1
Transport	8.1
Refinery	5.6
Agriculture	1.7

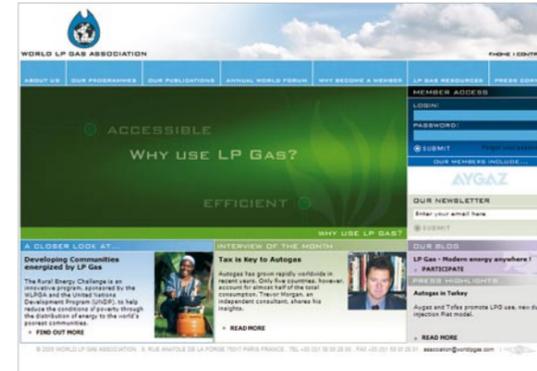


Autogas Dispensing Sites Worldwide 2004

2004	40 955
2003	39 809
2002	36 599
2001	31 690
2000	29 034







WLPGA PROGRAMME AREAS

In 2005, the WLPGA ran six major programmes (Good Industry Practice Programme, Communications, International Outreach & Lobbying, New Market Development, GAIN and GLOTEC) which all delivered excellent results as part of our mission to “enhance awareness of LP Gas as a clean, all-purpose and efficient source of energy”. The base-load projects coordinated as part of each programme delivered several products and reports for the benefit of partners, governments and intergovernmental agencies with whom we have relationships, as well as for the benefit of all members. Products from projects steered by the Industry Council, GAIN and GLOTEC are made available to all our regular members.

GOOD INDUSTRY PRACTICE PROGRAMME

The purpose of a programme on good safety and business practices in the industry, is to promote the need for Good Practices in all regions, to implement within all member companies and, if possible, throughout the entire industry. In 2005, there was a regional focus on a selection of countries in Europe, Asia and Latin America.

The worldwide implementation of good business practices in the LP Gas Industry has been largely promoted by two major WPGA publications, Guidelines for Good Safety Practices in the LP Gas Industry (1998) and Guidelines for Good Business Practices in the LP Gas Industry (2001). Both publications were important benchmark contributions to the international LP Gas industry.

In 2005, the WLPGA translated Good Business Practices to Chinese. The publication was made available for free distribution at the WLPGA booth in the exhibition of the 18th World Forum in Shanghai. The Turkish LP Gas Association took an initiative to translate and disseminate Good Business Practices to industry and government in Turkey. A translation into Portuguese is also in progress. Similar initiatives from other national associations are welcomed. These new translations further show our commitment to promoting these practices.

National associations were supported with presentations on good safety and business practices including Croatia, Mexico (at the occasion of the annual meeting of the IberoAmerican Association/AIGLP) and USA (Texas Technical conference).

It is acknowledged that WLPGA member companies need to set examples of good practices. A Code of Conduct has been developed and translated into eight languages. Several Industry Council member companies have already signed the Code of Conduct, adopted by the Industry Council. We will be looking to obtain many more commitments to the Code of Conduct in the coming year.

To position the World LP Gas Association as the global, authoritative voice of the LP Gas industry, we have started to take some specific actions in 2005:

First, our members laid the groundwork by elevating Communications to one of the Association’s six key program areas. The Association hired an experienced Communications & Marketing professional to run this program and our annual World LP Gas Forum. Finally, taking into account the findings of a strategic review held in 2004, the entire Staff participated in a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis of existing activities and agreed on a plan with short, medium and long-term actions:

As a result of this major exercise, a communications plan was developed and approved by the Industry Council, our key Communications actions were implemented and some goals exceeded. The 2005 highlights included:

- **Annual report:** For the first time ever, the WLPGA published such a document to better showcase its key achievements to a wider audience.
- **Branding:** a refreshed logo and modern, similar look & feel across all WLPGA touch-points has started to help gain visibility.
- **Web site:** After five years, www.worldlpgas.com had a facelift to better serve its visitors. In addition, an editorial calendar has been agreed for regular updates with relevant LP Gas articles and interviews.
- **e-newsletter:** To drive thousands of subscribers to new information on the WLPGA Web site, we have started to e-mail «The Voice» every quarter.
- **Mailing-list:** Since it is critical to get the right information to the right people at the right time, all WLPGA mailing-lists have been updated.
- **Deliverables:** New tri and quart folds, as well as posters and video animations have made it much easier to communicate the value propositions of LP Gas and our WLPGA.
- **Booth:** To display WLPGA offerings like publications and membership, we have invested in our own appearance to be used at the World LP Gas Forum exhibition and others.
- **Press:** We took our media relations to a higher level by pro-actively presenting WLPGA projects through a worldwide press release and conference, as well as building closer relationships with key journalists.



The “Rural LP Gas Challenge” initiative remains one of the most active public private partnerships emerging from the World Summit on Sustainable Development in Johannesburg in 2002. This innovative partnership between the WLPGA and the United Nations Development Programme (UNDP) seeks to address rural poverty issues while facilitating the development of commercially-viable and sustainable markets for LP Gas.

In 2005, the UNDP-WLPGA partnership was active across several continents. A national stakeholder’s workshop was organized in Beijing, China, where decision-makers from industry, the national government, and other community groups met to discuss key barriers and potential solutions to rural distribution of LP Gas. This meeting was followed by a high-level side event at the LP Gas World Forum in Shanghai to discuss the next steps for project implementation.

The Partnership also coordinated pilot action in South Africa and Morocco. Currently, a new model for distribution is emerging in South Africa, while a microfinance pilot project is set for roll-out at the beginning of 2006 in Morocco (see below). A great deal of progress has been made and lessons learned over the past two years under this programme. The WLPGA will continue to support those projects as well as keeping an eye to future action in other countries and continents.

**Microfinance Pilot**

Among the key findings from the Rural LP Gas Challenge workshops is the need for new, innovative financing to help the rural poor gain access to modern energy. In particular, microfinance was identified as a key potential mechanism to help overcome the affordability hurdle for LP Gas, especially for upfront, one-off switching costs.

In order to take action on these findings as well as leverage the WLPGA Microfinance report (2004), the Association coordinated the development of a small-scale pilot project in Morocco - which had been identified by the Rural Energy Challenge workshop as representing an appropriate testing ground for such an action. As

such, the WLPGA brokered an agreement between major Moroccan LP Gas operators and a national microfinance institution to implement and roll-out an LP Gas-specific microfinance pilot scheme in 2006. The longer-term objective is to develop this financing model for application in various markets around the world.

**New Report: Developing Rural Markets for LP Gas**

A major challenge to LP gas use in remote rural areas is the lack of effective and profitable distribution to remote areas. Indeed, the “rural paradox” - when it is more expensive to distribute LP Gas to those who can least afford it – is the major barrier for new market development and increased modern energy access for the rural poor.

The WLPGA completed a report on “Developing Rural Markets for LP Gas” as a means to better understand these challenges and to distil key success factors needed to penetrate such difficult markets. With a view to sharing insights among members and across markets, member companies located in diverse geographic markets were surveyed for key lessons and best practices in distribution to their respective rural markets.

Among some of the key findings in the report is the need to work with new financing mechanisms to help overcome the initial costs barriers associated with the switch to LP Gas. Rural supply models are also analysed to provide insight into reducing rural distribution costs. The report does not limit itself to the LP Gas sector, and investigates successful actions in other industry sectors, such as the service sector, with the cellular phone industry showing strong market penetration in rural areas of the developing world – as well as the bottled beverage industry.



The WLPGA is a recognized and credible organization, granted official Consultative Status with the United Nations Economic and Social Council in 1989 and as such, continues to build and maintain partnerships with important entities such as the World Bank and United Nations agencies. In parallel, the WLPGA addresses major issues with key policymakers and other stakeholder groups such as international business associations and non-governmental organisations (NGOs).

In 2005, the WLPGA continued to represent its members in discussions with different stakeholder groups. High-level relationships have been renewed and extended in order to maximise our leverage on the international stage.

Over the course of the year, the WLPGA participated and presented at more than 20 international conferences in 16 countries on six continents including the following events:

- The UNECE Working Party on Gas in Geneva, Switzerland
- Global Round Table on Climate Change, New York, USA
- Latin American LPG Conference, Cancun, Mexico
- Australian LPG Conference, Gold Coast, Australia
- Liquefied Petroleum Gas Safety Association of Southern Africa Annual Conference in Durban, South Africa
- Energy in Africa Summit, Dakar, Senegal
- UNEP Consultations with Business and Industry, Paris, France
- The COP 11 (UNFCCC) meeting in Montreal, Canada

Relationships with key business associations were further developed in 2005. As a working group member of “Business Action for Energy,” the WLPGA worked closely with the three founding members: the International

Chamber of Commerce, the World Energy Council and the World Business Council for Sustainable Development. Six other business associations are also participating in this initiative to provide input into the 14th and 15th Commission on Sustainable Development (CSD) that will focus on energy, air pollution, climate change and industrial development.

A key role of the WLPGA is seen as facilitating cooperation between LP Gas Associations worldwide. The 2005 target to support local LP Gas markets at 6 conferences of national and regional associations was already increased from last year’s target of 4 conferences. Yet, the WLPGA staff was able to exceed the new target by presenting at 11 association meetings in Croatia, Poland, Spain, UK, Senegal, South Africa, Japan, Australia, USA, Mexico (for Latin America) and Portugal (for Europe). The WLPGA also participated in other types of member activities such as a press conference for a product launch in Turkey.

Recruiting and maintaining members is vital to ensure that the association remains influential in the world. During 2005, 14 new companies became members bringing 3 new countries (Norway, Croatia and Columbia) to our sphere of influence. Seven companies resigned from the association while the Industry Council membership remained stable at 21 members.

Global Autogas Industry Network (GAIN) is a communications and information network for the global autogas community to co-ordinate efforts, leverage experience, encourage technology innovations, and enhance safety measures towards growing the use of clean, safe and efficient autogas as a transport fuel. A member representative chairs GAIN. Members are comprised of senior executives representing key autogas stakeholders from around the world. Active participation in GAIN is available to all members.



2005 represents yet another successful year for the WLPGA's Global Autogas Industry Network (GAIN) and for the global industry as a whole. Autogas continued to solidify its position as the world's first and foremost alternative fuel for transportation, with over 10 million vehicles and 40,000 dispensing stations

in operation around the globe.

A number of new milestones were reached in various world market places including the introduction of an OEM vehicle in Turkey, increased government incentives in the Netherlands, and the reinforcement of the sector in Australia – one of the world's premier autogas markets. Moreover, 2005 saw the legalization of autogas in Pakistan and Poland challenge traditional European markets for autogas supremacy. In the US, the fledgling autogas sector received a big boost from the federal government with the introduction of the Clear Act in August.

GAIN was active in leveraging these promising global developments. In particular, this year marked the completion of two baseline studies for the industry: 1) a global review of tax incentives and 2) the first edition of a major report on the health effects and costs of vehicle emissions. The former takes a country-by-country look at government policies in major autogas markets around the world; while the later demonstrates - in qualitative and quantitative terms – that the uptake of inherently cleaner-burning gaseous fuels can deliver significant

socio-economic benefits to urban communities.

This year also saw the publication of two industry position papers on the safe use of autogas in underground parking and the importance of long-term excise tax reductions. The network also supported the worldwide launching of the first autogas-hybrid vehicle in Monaco in the spring. Along with meetings in China and Portugal, and direct in-country support of national conferences in Poland and Spain, these actions highlight the truly global nature of GAIN's reach and its ability to share knowledge and best practices across borders.

We should not over-look one of the more important developments in 2005: the surge in the price of transportation fuels. Motorists worldwide reacted to rapid increases in prices for petrol and diesel fuel by looking to more economic alternatives - such as autogas. While autogas may not be immune to price increases, especially as world markets push prices ever higher, it is nonetheless the most viable cleaner-burning alternative to traditional liquid fuels, as it is widely- available and accessible in many markets around the world.

Therefore, now is the time to maximize the price advantages available to autogas and to push for rapid market development globally. Suffice it to say, 2006 looks to be yet another very promising year for GAIN and for the autogas sector as a whole.

**ALAN BEALE - GAIN Chairman**  
Managing Director of Elgas

GLOTEC serves as a proactive resource for industry growth through the use of new technologies as well as collecting and disseminating information on the use of new technologies to members. GLOTEC's mission is to support members through the development of sustainable markets internationally. Therefore, GLOTEC sponsors and participates in international symposia where the role of LP Gas technology can be advocated and exploited. A member representative chairs GLOTEC and all WLPGA members receive the products and benefits of GLOTEC projects. Active participation in GLOTEC is available to all members.



Two successful meetings were held in 2005, one in conjunction with the AEGPL convention in Lisbon in May, and the other in conjunction with the WLPGA Annual Forum in Shanghai in September.

2005 found GLOTEC and the Board committing to hold a Global Technology Conference in Chicago in 2006 as part of the WLPGA Annual Forum and to be co-hosted by the Propane Education and Research Council (PERC). Preparations began immediately with a call for papers being issued, and committees formed to execute the planning. The Forum format is to be altered slightly by dedicating the Forum's afternoon program of the second day to the Global Technology Conference, and extending the programme by one full day making ample time available to cover a wide variety of technical subjects. GLOTEC's focus on organizing the programme will be on short term opportunities for new volume of fuel sales.

Technical issues addressed throughout the year included:

- An update of composite cylinders development. Extensive testing is being done by PERC in the US directed toward validating composites for indoor use in cabinet heaters. One area of investigation is the integrity of composite cylinders when exposed to fire. Initial results show strong promise of meeting applicable codes and concerns of the fire service.
- Numerous projects dealing with fuel quality. Odourisation remains a keen topic of interest in the quest to find an effective non-sulfur based odourant. A presentation was given to GLOTEC in Berlin in 2004, and another at the Shanghai Forum, both investigations showing positive promise of developing a near-zero or zero-sulfur based odourant. Also, several other

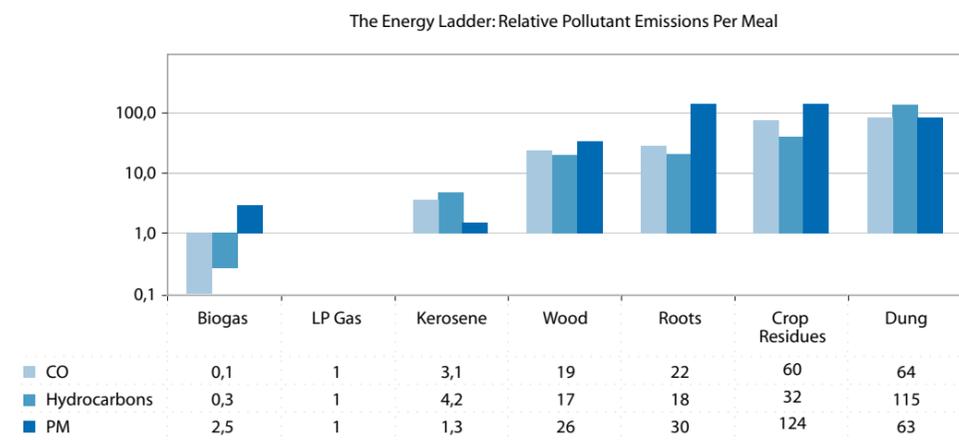
GLOTEC presentations dealt with fuel composition including methods of eliminating water and heavy contaminants.

- A survey of international standards pertaining to qualification and certification of local LP Gas delivery trucks. The results of a PERC funded survey of international truck standards showed a wide variation among countries with some having no re-certification requirements after first use. Because re-certification is expensive and can potentially result in fuel contamination, any effort to minimize or eliminate re-certification may have very positive results.
- Outreach to other industry organizations. Attendance at Ibero-Americano association (Cancun), the International LP Gas Seminar (Tokyo), the Annual Technology Conference (Texas), the Croatian LPG Conference and a DME conference (Shanghai) demonstrates GLOTEC's commitment to sharing of information as well as continuing the search for new technologies that lead to new markets.
- Monitoring of fuel cell developments. Even though fuel cell commercialisation appears to be several years away, GLOTEC continues to monitor fuel cell activities.

The main purpose of GLOTEC is to concentrate on products and services that lead to new fuel sales rather than spend its limited resources on laboratory projects. The underlying belief is that there are many institutions already funding basic research, thus GLOTEC should monitor and share such basic research information but focus on marketing opportunities. Some PERC studies and project results are available to GLOTEC members via PERC's website.

**ROY WILLIS - GLOTEC Chairman**  
President of the US PERC,  
Propane Education and Research Council

In the summer of 2004, the WLPGA stated work on indoor air pollution with distinguished Berkeley professor Kirk R. Smith and two of his doctoral students. The collaboration resulted in a report titled “Household Fuels and Ill-Health in Developing Countries: What improvements can be brought by LP Gas?” The British NGO Practical Action endorsed the report after an extensive review process involving international public health, gender and development experts. The report was published in August 2005 and Professor Smith presented his findings at the World Forum in Shanghai.



Health-damaging pollutants per unit energy delivered: ratio of emissions to LP Gas. Note the use of a log scale in the figure. The values are shown as grams per megajoule of energy delivered to the cooking pot (g/MJ-d).

The figure shows the pollution in the form of the three major categories, CO, total hydrocarbons, and particles emitted by other major household fuels compared to LP Gas per unit energy delivered to the cook pot. This includes consideration of the energy efficiency of the fuel/stove system and is probably the most descriptive illustration of the potential health implications of switching fuels.

**An energy solution for the household**

In the developing world there is no or limited access to modern fuels and electricity. Not unsurprisingly therefore, roughly half of the world’s households cook, and to a large extent heat, using solid fuel. It is estimated that 2.4 billion people burn biomass (organic matter) for cooking and heating. If we add coal the total is 3 billion people or one half of the world’s population.

Burning solid fuels can have serious health repercussions. Smoke in the home is the fourth greatest cause of death and disease in the world’s poorest countries and 1.6 million people die from it annually. Nearly a million of them are children. A switch to LP Gas could dramatically transform this situation and improve the health of many households in the world.

**Benefits for human health and welfare**

The types of solid fuel burned in households range

from wood to agricultural residue or other biomass to coal. The poorest of households often have to resort to burning dung cakes. Replacing these fuels with LP Gas can provide real benefits for the local environment and for human health and welfare.

Although a chimney can reduce indoor smoke levels, in most households the smoke and fumes circulate indoors during the cooking process affecting principally women and the young children in their care.

There is strong evidence of a significant risk factor that this sort of smoke exposure leads to the following diseases:

- Acute lower respiratory infections (ALRI) in young children
- Chronic obstructive pulmonary disease (COPD) in adult women
- Lung cancer (for lung cancer the evidence is strong only for coal)



**There is growing recognition, worldwide, that air pollution places an unacceptable social and economic burden on society. In many regions, exhaust emissions from motor vehicles are a major source of harmful pollutants.**

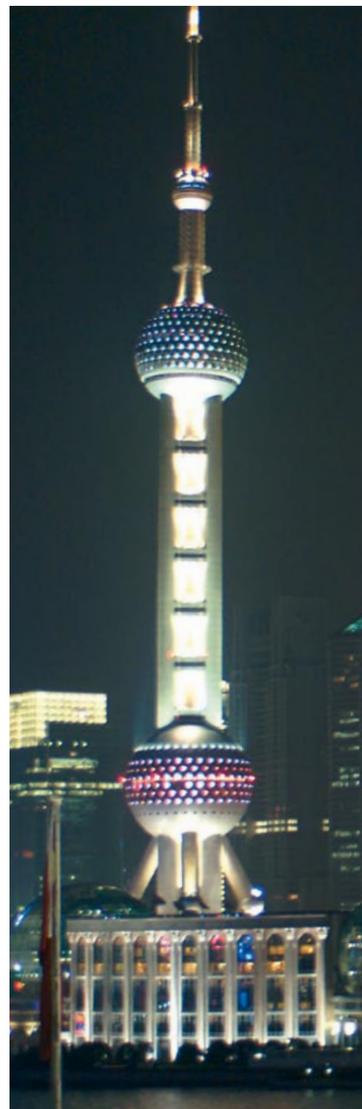
LP Gas used for transport, or Autogas, is the most widely available alternative to the traditional liquid fuels, and its use is growing rapidly around the world. Given autogas’ clean-burning characteristics and lower pollutant levels, policymakers are looking to it to help solve many local air pollution problems.

The new Global Autogas Industry Network (GAIN) report “Health Effects and Costs of Vehicle Emissions: The Invisible Challenge” takes a closer look at key international health and pollution research in order to provide policymakers with a better understanding of the economic benefits of shifting towards the cleaner burning gaseous alternatives.

To do so, the report evaluates the effects of a wide range of air pollutants, including Particulate Matter (PM) and air

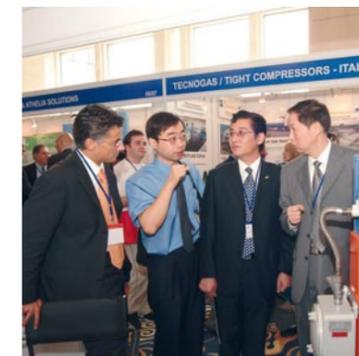
toxics, on human health and estimates the total cost of premature mortality, health care, social services, and lost productivity.

The analysis goes even further by examining the value (health cost) attached to specific pollutants and develops fuel use scenarios for projected future years (in this report 2012 and 2020) to calculate the economic impact of increased use of cleaner fuels, and a corresponding reduction in traditional fuels. The influence of planned or anticipated emission regulations and improved technologies are also factored into these future scenarios to quantify the total health cost benefits of progressively migrating fuel use to the cleaner gaseous fuel alternatives.



*"This is our first year attending the exhibition. We came this year because the Forum provides a global platform for our products. In the future, we intend to generate 50-60% of our revenue from export to international markets, so this is a great opportunity for us to meet potential clients and partners."*

**ASHEESH DABRIWAL,**  
M.D. DHP, India (Exhibitor)



*"I come to this Forum every year, to maintain contact with our customers and suppliers worldwide. It's a good opportunity to find out about new trends and developments in the industry. The event also gives us a chance to meet with the local industry players, wherever it is held in the world - it can help us to introduce our product to new markets."*

**RAFFAELE PERPETUINI,**  
D.G., Icom, Italy (external Visitor)



See you in

**19<sup>th</sup> WORLD LP GAS FORUM**  
CHICAGO  
17-20 October 2006





Leader of the Brazilian LP Gas industry, since its 1937 foundation, ULTRAGAZ has been committed to innovation, best practices and market development. The only Latin American member of the World LP Gas Association Industry Council, ULTRAGAZ sees great value in the opportunity to exchange know how, market expertise and innovative alternatives with the LP Gas industry around the world. As such, ULTRAGAZ actively works to promote and extend the World LP Gas Association contribution to the region.

**PEDRO JORGE**  
Managing Director – Ultragas

**GOAL A: ENHANCE AWARENESS OF LP GAS AS A CLEAN, ALL-PURPOSE AND EFFICIENT SOURCE OF ENERGY**

Description	Status as of December 31
1 Publication on LP Gas and climate change	Done
2 Participate in at least 5 high-level intergovernmental meetings to promote LP Gas and facilitate policy change for market development.	Done
3 Participate in side event at COP 11	Done
4 Add 10 new members and 2 new IC members	Partial 14 new members; no new industry council member

**GOAL B: IDENTIFY AND SUPPORT LP GAS MARKET DEVELOPMENT OPPORTUNITIES AND INNOVATION**

Description	Status as of December 31
1 Prepare program for International Technical Conference	Done
2 Publish one study benchmarking Rural Distribution Models	Done
3 Publish study into social and economic costs associated with emissions from automotive fuels	Done
4 Continue to lead the management of the LP Gas Rural Energy Challenge partnership with UNDP and complete 2 in-country workshops	Partial One WS held in China; WS in India postponed to spring 2006
5 Develop one partnership with microfinance institution and co develop a pilot project	Done
6 Develop action plan for Clean Household Energy Network	Done Not implemented

**GOAL C: PROMOTE GOOD BUSINESS PRACTICES AND SUPPORT IMPROVEMENT OF, AND COMPLIANCE WITH, TECHNICAL AND SAFETY STANDARDS**

Description	Status as of December 31
1 Translate the Guideline for Good Business Practice in the LP Gas Industry to Chinese	Done
2 Presentation on fuel quality issues at two international conferences	Done
3 Collect contact information on technical experts to create a technical directory	On-going



It has already passed half a century since LP Gas utilization was inaugurated and we have promoted it to see more than 50% of total households (approx. 25 million households) utilizing LP Gas. Thus, it forms a crucial part of the core energy portfolio in Japan. However, recently liberalization is promoted in every field in Japan, also in the field of energy. The LP Gas industry is compelled to face intensified energy competition with Electricity and City Gas (LNG). Due to the promotion of energy saving as a counter-measure for global warming and along with the tightening of regulations on vehicle emissions, it is required to advance the improvement of cleaner fuels. Japanese LP Gas industry is now moving forward to the era of evaluating quality above quantity. While, we still expect various countries to expand their volumes in other regions of the world. As we see further diversification in the global market of the LP Gas industry, we believe it is required to have business activities from the global point of view. Under these circumstances, the function of WLPGA is gaining in importance. In the expectation of further development of WLPGA activities, I hope I can be of service to the on-going and future activities.

**MASAAKI TAKEUCHI**  
President - LPG Center of Japan

**GOAL D: REPRESENT THE LP GAS INDUSTRY IN THE FORMULATION OF POLICIES**

Description	Status as of December 31
1 Prepare 2 autogas position papers	Done
2 Publish four issues of autogas Updates and secure revenue through sponsorship of each of the quarterly issues	Done
3 Support one key regional autogas market under threat through the joint organisation and participation in one in-country Seminar	Exceeded France, Poland and Spain
4 Support local LP Gas markets at 6 national assoc. conferences with presentations	Exceeded Presentations at 10 conferences

**GOAL E: FACILITATING INFORMATION EXCHANGE AND COMMUNICATION AMONG ALL LP GAS STAKEHOLDERS**

Description	Status as of December 31
1 Prepare and Implement a Communications and Marketing Plan for the WLPGA	Done
2 Develop HTML emails for GAIN members	Done
3 Update and activate the GLOTEC internet site to communicate with members and external stakeholders	Done
4 Organise a high-level successful and profitable World LP Gas Forum in Shanghai, China.	Done

## WLPGA DISTINGUISHED SERVICE AWARD



Members who render outstanding services to the WLPGA may be recognised with a Distinguished Service Award (D.S.A.).

In 2005, six members (past or present) were awarded the D.S.A. These were presented at the gala dinner of the World Forum:

Mr. A Bracci  
Mr. J. Ferrell (present)  
Mr. R. Mangels (present)  
Mr. M. A. Pathan  
Mr. R.-C. Rathle  
Dr. H. W. Tyczka (present)

The WLPGA would like to thank again all six for their support throughout the years!



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