



WLPGA

World LPG Association

Annual Report 2015



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2015 in Brief



Goals

In 2015 the WLPGA's activities were aimed at:

- Demonstrating the benefits of LPG and informing, educating and influencing a variety of stakeholders.
- Supporting the development of LPG markets.
- Promoting compliance with standards, good business and safety practices.
- Identifying innovation and facilitating knowledge transfer.

Cooking For Life

Launched in 2012 under the Exceptional Energy brand, Cooking For Life is a major WLPGA campaign that aims to convert one billion people from cooking with traditional fuels to cooking with LPG by 2030. The campaign continues to advance with four major reports having been produced during 2015.

WLPGA and Exceptional Energy

The global rollout of the Exceptional Energy brand continues to remain a major initiative for the WLPGA. In 2015 a brand new corporate website was launched (www.wlpga.org) which unites both the association activities and the brand content into a single, modern and focused portal.

The Global Technology Network (GLOTEC)

GLOTEC supports industry growth through the promotion of new technologies and innovation. During 2015, amongst other activities, GLOTEC produced a new members' only fuel quality standard document, launched a marine applications group and continued to develop the online applications database, Exceptional Energy in Action (www.lpg-apps.org).

The Global Cylinder Network (GCN)

GCN is a network dedicated to sharing experience, expertise and best practices on how to manage and develop cylinder markets worldwide, as well as to promote best safety and maintenance practices to build consumer confidence. In 2015 GCN completed the Good Industry Practices Guidelines on the Testing and Requalification of LPG Cylinders.

The Global Autogas Industry Network (GAIN)

Promoting Autogas is a core mission for the WLPGA. GAIN is the only worldwide network that represents Autogas on a global scale via lobbying and raising awareness. In 2015 the dedicated Autogas website (www.auto-gas.net) was completely revamped along with new communications initiatives including an Autogas benefits driven video (also available on the website).

Women in LPG Global Network (WINLPG)

Recognising that gender balance is not optimised in the LPG industry, WLPGA set up a new network that will recommend actions and activities to address this issue. WINLPG held its inaugural meeting during the World LPG Forum and has commenced work to fulfil its objectives which are to support and retain women in the industry; promotion and advocacy of the issue; and to educate and attract women, and young talent in general.

World LPG Forum

The 28th World LPG Forum took place in Singapore under the theme of "Expanding Horizons". This year's event united around 1,500 participants from around the world and provided exceptional networking, learning and business opportunities.



Clean

LPG is a clean-burning fuel that produces lower levels of CO₂, NO_x and other pollutants compared to traditional fuels. In addition it emits virtually no black carbon and if spilled, will not pollute the ground or aquifers. Its use improves air quality, reduces the emissions of greenhouse gases and protects the environment.

Foreword from the President



Yağız Eyüboğlu
President, WLPGA

Dear Members and Friends of the World LPG Association,

It is a great honour for me to address you in this foreword as the newly-elected President of the World LPG Association.

I would like to extend my heartfelt gratitude to the esteemed past presidents, board members, staff and members who have made the WLPGA what it is today. Our combined efforts have increased the WLPGA's impact and strengthened LPG's perception as a viable eco-friendly energy solution. These last years have seen the creation of a stronger member profile and valuable partnerships with international organisations.

Our working groups such as the Global Cylinder Network, the Global Autogas Industry Network, the Global Technology Network and most recently Women in LPG Global Network have greatly contributed to the industry in their own areas.

We have invested in our "LPG Exceptional Energy" brand, spreading and strengthening LPG's perception as an energy source that offers immediate global availability, numerous environmental benefits, and diverse applications.

Through our ongoing "Cooking For Life" campaign we have supported policy makers and NGOs in developing countries. We have derived influential data, compiled best practices and finalised reports. Through such studies, we contributed to regional or nationwide conversion programmes. Our continuing efforts will lay the groundwork for transitioning one billion people to LPG by 2030.

Publication of reports such as "Guidelines for Good Business Practices in the LPG Industry" and "Report on the Testing and Requalification of LPG Cylinders" has contributed to the sustainable development and prosperity of our industry.

All in all, the WLPGA has become an LPG industry champion whose impact is felt worldwide.

In the coming years, we will ensure that the WLPGA strives for a consistent vision and continued success. In order to realise our plans, we will finalise our 2017–2019 strategic plan with valuable contributions from our excellent management team, our members, and our friends.

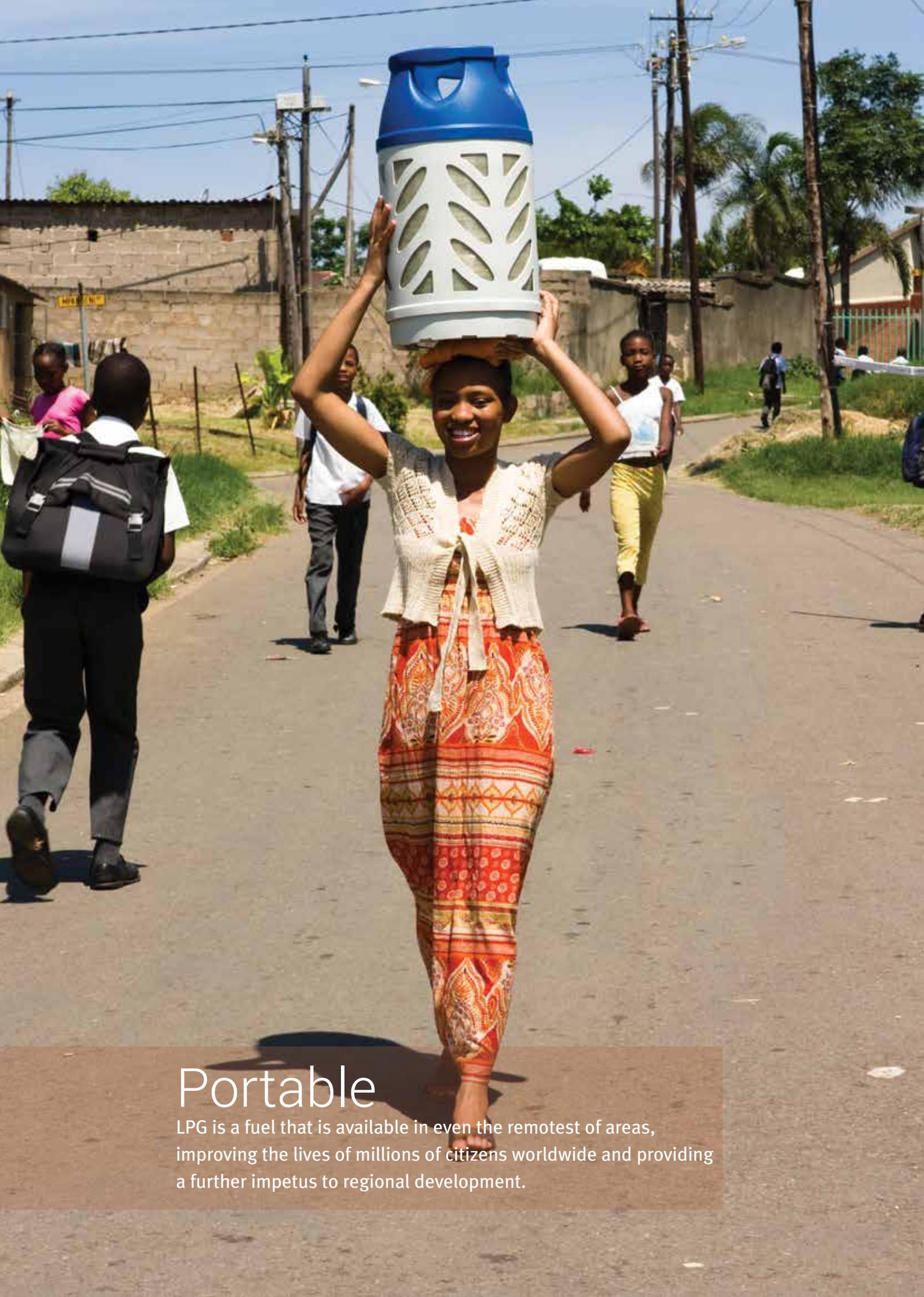
We have focused our efforts on further improving LPG's perception and confirming its inclusion in global energy policies as a preferred alternative fuel. We will continue to highlight LPG's varied usages, including residential, transportation, and industry, and emphasise its benefits to the environment and personal health.

Increasing our efforts in broadening our member profile and developing valuable partnerships with international organisations will contribute to improve the WLPGA's effectiveness as an industry organisation.

Once again, I thank you all and offer my deep appreciation to past management, WLPGA team, and participating members for their unwavering commitment to advancing the WLPGA and the LPG industry as a whole. Together, we will continue to grow a prosperous, sustainable LPG industry and make a positive tangible impact on the world.

Warm regards,

Yağız Eyüboğlu
President, WLPGA



Portable

LPG is a fuel that is available in even the remotest of areas, improving the lives of millions of citizens worldwide and providing a further impetus to regional development.

Managing Director's Report



James Rockall
CEO and Managing Director, WLPGA

If I were to characterise our LPG industry at the end of 2015 then “Expanding Horizons” would neatly and succinctly sum it up. This was the theme of our 28th World LPG Forum that took place in Singapore in September and it is really quite apt. We are experiencing unprecedented change in our business. Diversifying sources of supply with a strong rise in global LPG production, led by the USA which has now become the number one LPG exporter in the world, is fuelling opportunity for growth. Last year LPG consumption increased by 4%, far outstripping growth in primary energy demand. LPG prices at end of 2015 were some 60% lower than a year earlier. In addition the eyes of the world are increasingly focussing on poor air quality – something that LPG can proudly do something to combat. This combination of circumstances presents our industry with significant opportunities which, if we can seize them, will result in greater growth in LPG demand. Greater growth in LPG demand means more ships, more filling plants, more cylinders, more valves, more jobs and, importantly, more lives saved through improved air quality.

“Greater growth in LPG demand means more ships, more filling plants, more cylinders, more valves, more jobs and, importantly, more lives saved through improved air quality.”

Looking at our activities and results, 2015 was a great year for the WLPGA. As we complete the second year of our current three year strategic plan we are slightly ahead with our objectives compared to where we expected to be. Specifically we have made good progress with our Cooking For Life programme, producing four major new studies addressing children’s health, lessons from innovative distribution models and a guideline to LPG for commercial kitchens. We have revamped our flagship report on Global Autogas Incentive Policies and grown our bespoke training services to ensure that companies operate according to the many guidelines that we have produced. One of the key developments in 2015 was the creation and launch of a new network “Women in LPG” which aims to support gender balance in our industry across the world. Already this network is attracting great interest and I fully expect it to become a major part of WLPGA activities going forward.

Our membership grew by a record 32 organisations in 2015 – well in excess of our targets and a clear indicator of the importance and value of the WLPGA to the LPG sector. If you are a stakeholder in the LPG business anywhere in the world and are not yet a member of WLPGA, then join us now. We are the unique, global voice of the LPG industry and together we can **expand our horizons**.

James Rockall
CEO and Managing Director, WLPGA

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[@james_rockall](https://twitter.com/james_rockall)

About the Industry

284
MILLION

TOTAL GLOBAL PRODUCTION
OF 284 MILLION TONNES

+4,1%

PRODUCTION ROSE 4,1% AS
COMPARED TO 2013

-50%

ON AVERAGE, GLOBAL LPG PRICES
HAVE HALVED IN 12 MONTHS

TOP 5 PRODUCERS

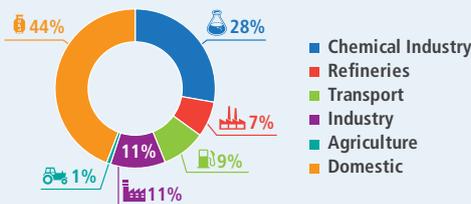
- 1 UNITED STATES
- 2 SAUDI ARABIA
- 3 CHINA
- 4 RUSSIA
- 5 UNITED ARAB EMIRATES



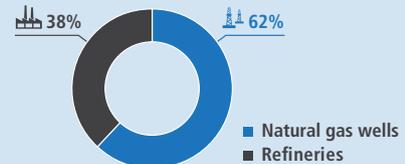
TOP 5 CONSUMERS

- 1 UNITED STATES
- 2 CHINA
- 3 SAUDI ARABIA
- 4 JAPAN
- 5 INDIA

WHERE IT IS USED?



WHERE DOES IT COME FROM?



AT HOME

DOMESTIC USE ACCOUNTED FOR
44% OF GLOBAL CONSUMPTION

IN **AFRICA** **84% OF ALL LPG**
CONSUMPTION IS **DOMESTIC**

THE **ASIA PACIFIC REGION** ACCOUNTED
FOR **48% OF GLOBAL DOMESTIC**
CONSUMPTION

ON THE MOVE

AUTOGAS IS THE MOST USED
ALTERNATIVE FUEL,
POWERING OVER **25 MILLION VEHICLES**

THE BULK OF CONSUMPTION IS
CONCENTRATED IN KEY MARKETS

THE TOP 5 COUNTRIES
SOUTH KOREA, TURKEY, RUSSIA,
THAILAND AND POLAND
ACCOUNT FOR 50%
OF GLOBAL CONSUMPTION

TOP 5
LPG
50%

ON THE FARM

LPG IS INCREASINGLY BEING USED IN
AGRICULTURE ALL OVER THE WORLD

THE **US,** WHERE **4/5 OF FARMERS USE LPG,**
USED 56.3% OF ALL LPG
USED IN **AGRICULTURE** GLOBALLY

LPG IN AGRICULTURE

LPG PRODUCTION
IN THE **US** INCREASED

13.4%

MAINLY THANKS TO
UNCONVENTIONAL **OIL & GAS**

LPG CONSUMPTION
ROSE FASTEST IN

NIGERIA

WITH
A **100%**
YEAR ON YEAR INCREASE WHILST
DEMAND ROSE STEADILY
IN ALL REGIONS

PER CAPITA
CONSUMPTION
IS **HIGHEST** IN **QATAR**

FOLLOWED BY **JAPAN,**
ECUADOR, MOROCCO,
EGYPT AND CHILE

TURKEY HAS THE
HIGHEST

NUMBER OF **VEHICLES**
RUNNING ON AUTOGAS
WITH OVER **4 MILLION**
VEHICLES, FOLLOWED BY
RUSSIA, POLAND,
SOUTH KOREA
AND **INDIA**

About the WLPGA

Vision & Mission

The WLPGA is the authoritative voice of the global LPG industry representing the full LPG value chain. The primary aim of the association is to add value to the sector through driving premium demand for LPG, while also promoting compliance to good business and safety practices. It brings together private and public companies involved in one, several or all activities of the industry, it develops long-term partnerships with international organisations and implements projects on local and global scales. The association was established in 1987 and granted Special Consultative Status with the United Nations Economic and Social Council in 1989.

The World LPG Association Vision

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

The World LPG Association Mission

- › Demonstrate the benefits of LPG and inform, educate and influence all stakeholders.
- › Support the development of LPG markets.
- › Promote compliance with standards, good business and safety practices.
- › Identify innovation and facilitate knowledge transfer.

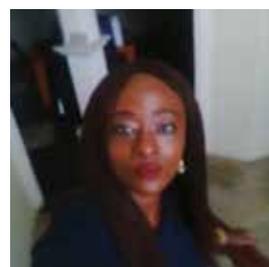


"The World LPG Association is widely respected, with a strong record of leadership and service to the global LPG industry. The International Gas Union is proud to be associated with the WLPGA, and looks forward to working together in an effort to expand the availability of clean, affordable energy to our fellow citizens around the world."

David C. Carroll
President, International Gas Union

"There are many benefits to being a member of the WLPGA. Important for us at NLPGA is the opportunity to leverage the important WLPGA network and the support from the Body and its members. In addition, we have access to a number of resources relating to the LPG industry. These cannot be quantified. WLPGA is one big supportive family."

Damilola Ani
Executive Secretary, NLPGA



Benefits to Members

The WLPGA is the global voice for the LPG industry, uniting the broad interests of the worldwide LPG industry into one strong independent organisation that spans the world. It is the WLPGA members that drive the association and therefore we offer them the best range of benefits:



Network

The WLPGA is a growing leadership network with some 230 members operating in over 125 countries. The WLPGA network brings together leaders of organisations from the entire LPG value chain including, since 2010, observer members from academic bodies, inter-governmental organisations, NGOs and national governments.

Access

The WLPGA members have access to the largest LPG industry focused network in the world which gives them an opportunity to present their position to the entire industry. With members strategically located around the world and by organising regular regional and global events, the WLPGA is an effective platform for members to meet, exchange information and experiences and explore new business opportunities in both mature and developing LPG markets.

WLPGA Networks

The WLPGA has member-driven networks such as the Global Technology Network (GLOTEC), which provides space for discussion and sharing of ideas for developing LPG businesses through the application of new technology. The WLPGA also hosts an annual Global Technology Conference (GTC) where industries can showcase their technologies. In addition to GLOTEC, the WLPGA also runs the Global Cylinder Network (GCN), the Global Autogas Industry Network (GAIN) and the recently launched Women in LPG Global Network (WINLPG). All networks provide the LPG community with

a valuable platform to share its local experiences, technological developments, innovative solutions and to nurture, support and encourage talent in the industry.

Annual World LPG Forum

The annual World LPG Forum has become the most important event in the calendar for the LPG industry, attracting hundreds of exhibitors, and thousands of delegates each year. The event, attended every year by top executives of the LPG industry from all around the world, gives WLPGA members an excellent opportunity to meet “everyone you need to know” in the LPG sector, and beyond. The WLPGA offers its members preferential treatment during the conference, including the possibility to network at the yearly Members’ Dinner.

Information

One of the key goals of the WLPGA is to inform and educate all stakeholders about the benefits of LPG. The WLPGA offers its members an opportunity to exchange views on the upstream and downstream parts of the LPG business, by regularly organising interactive meetings and in-country workshops between technical experts, senior members and key stakeholders. The WLPGA is also able to foster extended influence by offering its members a highly credible source of information to enable members in their own lobbying and outreach initiatives.

Business Contacts for Members & Member Queries

The WLPGA provides its members with a permanent query service,



covering such topics as: fuel specification standards, equipment standards, consulting firms, engineering firms, regulations, safety rules, model taxation policies, new business contacts, new technologies, etc.

■ Member Contact Information

The WLPGA maintains an up-to-date Member Directory with full contact details of all members of the WLPGA. This directory is also available as a Smartphone application for a real time networking capability.

■ Members' Only Extranet

The WLPGA provides a members' only password-protected and customer-oriented web service. This online information system contains data, reports and relevant links, allowing members to access information in a sustainable way.

■ Exceptional Energy Industry Toolkit

WLPGA members have access to the complete Exceptional Energy branding toolkit which comprises a comprehensive range of branding graphics and complementary resources enabling members to fully adopt the brand.

In 2015 the Exceptional Energy and WLPGA websites were merged under www.wlpga.org to give a modern, easily navigable one-stop solution for both LPG data and information about the association.

■ Cooking For Life Toolkit

To support the Cooking For Life campaign, members also have unique access to a full campaign toolkit including a suite of advertisements,

posters, and fact sheets. Members are encouraged to support the campaign by downloading and using this collateral.

■ Members' Only Reports

The WLPGA publishes reports for exclusive distribution to its members.

■ Email Reports/Newsletters

The WLPGA issues regular activity and news reports via email, updating all members on WLPGA actions, achievements, Board and Industry Council meetings, projects, new international developments and external representation. The Voice, Forum Voice and Autogas Updates newsletters are sent industry-wide and members benefit from dedicated newsletters such as Insider and GLOTEC News.

■ Global LPG Statistics

Members receive one free copy of the WLPGA Statistical Review of Global LPG, the highly referenced annual publication used throughout the industry, providing LPG production and consumption data for more than 100 countries around the globe.

■ Publications

Members receive one free copy of all new publications. Publications such as the annual WLPGA Statistical Review of Global LPG and WLPGA Guidelines on Good Business and Safety Practices are the global industry reference points.

Education

Investing in knowledge building among members and in educating key stakeholders is an important part of the WLPGA's work.



"I am honored with the appointment to the WLPGA Board. UGI sees our affiliation with the WLPGA and its member companies as an important element of our global LPG business activities. We look forward to continuing to build these critical relationships in the years ahead.

John Walsh
President and CEO of UGI



“Let us make LPG use both rewarding and sustainable”

“The global demand for LPG has been increasing over the years, and is projected to grow at a CAGR of 3.4% during 2014-2020, as per current forecasts. In the “golden age of gas,” WLPGA has a vital role to play in promoting LPG as an “exceptional energy” by aligning its use with emerging highly-efficient appliances, equipment, machinery, controls and services so as to tap all possible growth opportunities for the LPG industry.

As the fifth largest consumer of LPG in the world, India has registered a robust CAGR of 6.6% in LPG demand in the past five years, which is likely to touch 7% over the next seven years. India also has the third largest domestic LPG user population in the world; LPG is the preferred cooking fuel in the kitchens of 190 million households, with home delivery of 3.8 million cylinders a day. Adding to this, we are implementing an ambitious plan to expand LPG use into hitherto unrepresented areas, especially the rural hinterland, by enhancing both its affordability and accessibility in varied pack sizes to all categories of users.

As one of the oldest associates of WLPGA, Indian Oil Corporation Ltd. is putting in all possible efforts to expand the presence of this versatile fuel across a wide spectrum of uses. Let us work together to make this clean, green and efficient fuel touch and transform every facet of life the world over. Let us make LPG use both rewarding and sustainable.”

B Ashok
Chairman, Indian Oil Corporation Ltd.

■ Workshops & Training Courses

The WLPGA regularly organises interactive workshops and courses between technical experts, members and key stakeholders to demonstrate the benefits of LPG.

Members are entitled to participate at preferential rates.

■ Exceptional Energy Brand

The WLPGA developed a single brand to raise awareness of the exceptional features of LPG among policymakers, industry and consumers. The brand is exclusive to WLPGA members and includes a series of practical messaging tools and communication materials.

■ Special Projects for Members

The WLPGA coordinates specific custom-made projects for consortiums of at least three members.

Influence

The WLPGA develops partnerships with influential international bodies which enables it to address major issues with key stakeholders such as policy-makers and key opinion leaders.

■ Access to International Institutions

Membership brings members direct access to intergovernmental organisations, only possible through an independent organisation such as the WLPGA. The WLPGA has a Special Consultative Status with the United Nations. It also has partnerships with several major international institutions including, the World Bank, the Asian Development Bank and the International Energy Agency.

■ Global Leadership Position

The WLPGA unites the broad interests of the worldwide LPG industry into one strong independent organisation. The diversity in the WLPGA's members allows an effective broad industry representation, where members benefit from a powerful leadership position.

Credibility

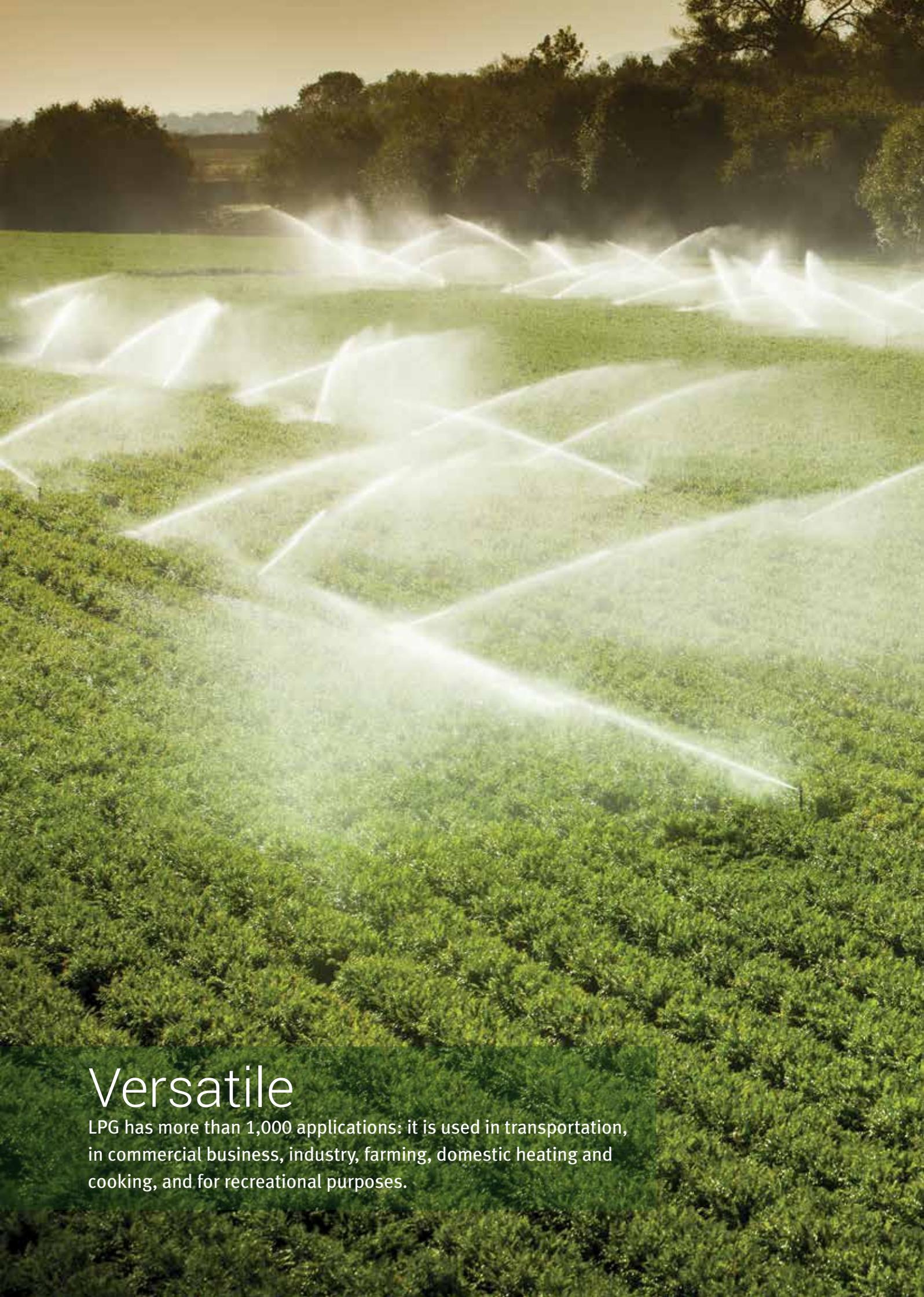
Since 1989, the WLPGA has had official Consultative Status with the United Nations Economic and Social Council (UN ECOSOC). It has also developed long standing partnerships with other international bodies and multi-lateral institutions such as various different departments in the United Nations including Sustainable Energy For All, the World Bank and Regional Development Banks, and a number of respected international NGO's such as the Global Alliance For Clean Cookstoves. The geographical spread and diversity of the WLPGA's membership makes the association a representative, trusted and logical partner in international discussions.

Who can join the WLPGA?

Any organisation that has an interest in the LPG industry can join. There are various categories of membership available to interested organisations.



Contact: **Laurence Poret**
Member Relations Manager
lporet@wlpga.org



Versatile

LPG has more than 1,000 applications: it is used in transportation, in commercial business, industry, farming, domestic heating and cooking, and for recreational purposes.

Membership 2015

WLPGA has a global membership base of some 230 members operating in more than 125 countries.

The following are WLPGA Members during 2015.

Africa

Afriquiagaz, [Morocco](#)
Afrox, [South Africa](#)
Allied East Africa Ltd, [Kenya](#)
Caisse de Stabilisation des Prix des Hydrocarbures, [Cameroon](#)
Engineering Co for Producing Gas Cylinders, [Egypt](#)
Gas to Health Initiative GTHI, [Nigeria](#)
LP Gas Safety Association of Southern Africa (LPGSASA), [South Africa](#)
Ministry of Petroleum, [Ghana](#)
Naftal, [Algeria](#)
Nigeria LP Gas Association (NLPGA), [Nigeria](#)
Nigerian National Petroleum Corporation (NNPC), [Nigeria](#)
Nile Petroleum Company Ltd., [Sudan](#)
Oando Marketing Plc., [Nigeria](#)
Petroleum Institute of East Africa (PIEA), [Kenya](#)
Pilot International, [Uganda](#)
Reatile Gas Pty Ltd., [South Africa](#)
Salam Gaz, [Morocco](#)
SNDP, [Tunisia](#)
Somas, [Morocco](#)
Sonatrach, [Algeria](#)
Strategic Energy Limited, [Nigeria](#)
Techno Oil, [Nigeria](#)
Thomas Aquinas Foundation, [Ghana](#)
TSL Logistics Limited, [Nigeria](#)
Ultimate Gas Ltd., [Nigeria](#)
Vivo Energy, [Morocco](#)

Asia

2A Muhendislik San. Tic. A.S., [Turkey](#)
Altinboga Gas Equipments, [Turkey](#)
Arhan Grup Talasli Imalat San. Ve Tic. Ltd. Sti. Orgaz, [Turkey](#)
Astomos Energy Corporation, [Japan](#)
Aygaz A.S., [Turkey](#)
Bharat Petroleum Corporation Limited, [India](#)
Brothers Gas, [United Arab Emirates](#)
BW LPG, [Singapore](#)

CIMC Enric Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd., [China](#)
Clean Air Asia, [Philippines](#)
Cosmo Petroleum Gas Co. Ltd., [Japan](#)
Dor Alon Gas Technologies Ltd., [Israel](#)
E.ON Masdar Integrated Carbon (EMIC), [United Arab Emirates](#)
E1 Corporation, [South Korea](#)
Elpiji (M) SDN. BHD, [Malaysia](#)
Emirates Gas LLC, [United Arab Emirates](#)
Eneos Globe Corporation, [Japan](#)
Energy Market Regulatory Authority, [Turkey](#)
Gasco Saudia Arabia, [Saudi Arabia](#)
Gazovik, [Russia](#)
Hangzhou Tianlong Steel Cylinder Co. LTD., [China](#)
Hascol Petroleum Limited, [Pakistan](#)
High Pressure Gas Safety Institute, [Japan](#)
Hindustan Petroleum Corporation LTD., [India](#)
Hong Kong & China Gas Co Ltd., [China](#)
Indian Auto LPG Coalition - IAC, [India](#)
Indian Oil Corporation Limited, [India](#)
Ipragaz A.S., [Turkey](#)
Isla LPG Corporation, [Philippines](#)
ITO Corporation, [Japan](#)
Iwatani International Corp., [Japan](#)
Japan LP Gas Association, [Japan](#)
Jordan Petroleum Refinery, [Jordan](#)
Koagas Nihon CO, LTD., [Japan](#)
Korea Gas Safety Corporation, [South Korea](#)
Korea LPG Association, [South Korea](#)
Laugfs Gas Plc., [Sri Lanka](#)
Litro Gas Lanka Limited, [Sri Lanka](#)
LP Gas Center, [Japan](#)
LPG Association of Pakistan, [Pakistan](#)
LPG Industry Association Inc., [Philippines](#)
Maldive Gas Pvt Ltd., [Maldives](#)
Mauria Udyog Limited, [India](#)
Natgaz, [Lebanon](#)
National Gas Company - SAOG, [Oman](#)

New Cosmos Electric Co., Ltd., [Japan](#)
NewOcean Energy Holdings Limited, [Hong Kong SAR China](#)
Oil and Gas Regulatory Authority, [Pakistan](#)
Oil Industry Safety Directorate, [India](#)
Pazgas, [Israel](#)
Pertamina, [Indonesia](#)
Petredex Services (Asia) Ptd Ltd., [Singapore](#)
Petrofed - Petroleum Federation of India, [India](#)
Petronas, [Malaysia](#)
Plantation Human Development Trust, [Sri Lanka](#)
Rawafd International Co., [Saudi Arabia](#)
Reliance Industries Limited, [India](#)
Rinnai Corporation, [Japan](#)
Sahamitr Pressure Container PLC, [Thailand](#)
Saisan CO LTD, [Japan](#)
Saudi Aramco, [Saudi Arabia](#)
Saudi Mas Trading, [Saudi Arabia](#)
SCG (Thailand) Co Ltd., [Thailand](#)
Self Employed Women's Association (SEWA), [India](#)
Shell Hong Kong, [Hong Kong SAR China](#)
Showa Shell Sekiyu K.K., [Japan](#)
SK Gas, [South Korea](#)
SSGC LPG (Pvt.) Limited, [Pakistan](#)
Sunrise LP Gas & Energy (Taiwan) Group, [China](#)
Taiwan Research Institute, [China](#)
The Green Flame Gas Co., [Kuwait](#)
Turkish LP Gas Association, [Turkey](#)
Unigaz International, [Lebanon](#)
Yachiyo Industry Co. Ltd., [Japan](#)
Yanmar Energy System Co. Ltd., [Japan](#)

Oceania

D J Batchen, [Australia](#)
Elgas, [Australia](#)
Origin Energy, [Australia](#)
Wesfarmers Kleenheat Gas Pty Ltd., [Australia](#)

Europe

Aburi Composites, [United Kingdom](#)
 AEGPL, [Belgium](#)
 Amerigas, [Poland](#)
 Amtrol-Alfa Metalomecanica, S.A., [Portugal](#)
 Antargaz, [France](#)
 AOGLP - Asociacion Espanola de Operadores de Gases Licuados del Petróleo, [Spain](#)
 Argus Media Limited, [United Kingdom](#)
 Assogasliquidi Federchimica, [Italy](#)
 Athelia Solutions, [Spain](#)
 AvantiGas Ltd, [United Kingdom](#)
 Calor, [United Kingdom](#)
 Carbon Clear, [United Kingdom](#)
 Cavagna Group, [Italy](#)
 CFBP - Comite Francais du Butane et du Propane, [France](#)
 Clesse Industries, [France](#)
 COIA GmbH, [Germany](#)
 Coral Gas S.A., [Greece](#)
 DCC Energy LPG, [United Kingdom](#)
 Digal Gas, [Portugal](#)
 DVFG, [Germany](#)
 Elaflex, [Germany](#)
 Elpigaz SP. Z.O.O., [Poland](#)
 Finngas GmbH, [Germany](#)
 Flaga GmbH, [Austria](#)
 Flussiggas-Anlagen GmbH, [Germany](#)
 Friedrich Scharr KG, [Germany](#)
 Gascan, S.A., [Portugal](#)
 Gavedra, [Portugal](#)
 Geogas Trading SA, [Switzerland](#)
 GERES, [France](#)
 Gilbarco Veeder-Root, [United Kingdom](#)
 Gok Regler - Und Armaturen GmbH & Co. KG, [Germany](#)
 HEDON Household Energy Network, [United Kingdom](#)
 Hexagon Ragasco A.S., [Norway](#)
 IDtek Track and Trace SA, [Switzerland](#)
 Integrated Gas Technologies Ltd, [Denmark](#)
 International Chamber of Commerce, [France](#)
 International DME Association, [United Kingdom](#)
 International Fertilizer Industry Association (IFA), [France](#)
 International Gas Union, [Norway](#)
 ISA - Intelligent Sensing Anywhere, [Portugal](#)

Kosan Crisplant, [Denmark](#)
 Liguigas, [Italy](#)
 Low8, [Netherlands](#)
 Omal SPA, [Italy](#)
 Orlen Gaz, [Poland](#)
 Oryx Energies, [Switzerland](#)
 POGP, [Poland](#)
 Practical Action, [United Kingdom](#)
 Premier Fosters Australia PTY Ltd., [United Kingdom](#)
 Primagaz, [France](#)
 Prins Autogassystemen B.V., [Netherlands](#)
 Puma Energy, [Switzerland](#)
 REEEP, [Austria](#)
 Repsol, [Spain](#)
 Rochester Gauges International, [Belgium](#)
 Sensile Technologies SA, [Switzerland](#)
 SHV Energy, [Netherlands](#)
 Sibur International, [Austria](#)
 Siraga S.A, [France](#)
 The Partnering Initiative, [United Kingdom](#)
 Total, [France](#)
 Totsa - Total Oil Trading SA, [Switzerland](#)
 Trimex Consulting S.L., [Spain](#)
 Tyczka Trading & Supply GmbH & Co. KG, [Germany](#)
 UKLPG, [United Kingdom](#)
 Veroniki Holdings, [Italy](#)
 Vopak, [Netherlands](#)
 World Alliance for Decentralized Energy (WADE), [United Kingdom](#)
 X-Tech R&P, [Switzerland](#)

North & South America

Abastible S.A., [Chile](#)
 AGREMGAS, [Colombia](#)
 AIGLP Asociacion Iberoamericana de Gas Licuado de Petróleo, [Brazil](#)
 Blackmer, [United States](#)
 Blossman Gas Inc, [United States](#)
 Blue Star Gas, [United States](#)
 Camara Uruguaya de Gas Licuado, [Uruguay](#)
 Canadian Propane Association, [Canada](#)
 Central Gas Ventures, Inc., [United States](#)
 Charbroil, LLC, [United States](#)
 Corken Inc., [United States](#)

Dorian LPG, [United States](#)
 Ecopetrol, [Colombia](#)
 Empresas Lipigas S.A., [Chile](#)
 Energy Transportation Group Inc., [United States](#)
 Ferrellgas, [United States](#)
 Fisher LP Gas Equipment, [United States](#)
 Gas Gombel S.A., [Colombia](#)
 Gas Uno de Puebla, [Mexico](#)
 Gasco GLP S.A., [Chile](#)
 Gasnova, [Colombia](#)
 GenteGas S.A., [Guatemala](#)
 Global Alliance For Clean Cookstoves, [United States](#)
 Grupo Zeta, [Mexico](#)
 IHS, [United States](#)
 Lehr Incorporated, [United States](#)
 Liguigar Distribuidora, [Brazil](#)
 Manchester Tank & Equipment, [United States](#)
 Mangels Industrial, [Brazil](#)
 Marshall Excelsior Co., [United States](#)
 NPGA (National Propane Gas Association), [United States](#)
 OPIS, [United States](#)
 Paraco Gas Corp., [United States](#)
 PERC - Propane Education & Research Council, [United States](#)
 Persistent Energy Partners LLC, [United States](#)
 Red Seal, [United States](#)
 RegO Products, [United States](#)
 Sindigas, [Brazil](#)
 Switch SA, [Haiti](#)
 Trinity Industries de Mexico, [Mexico](#)
 Trovan, [United States](#)
 UGI Corporation, [United States](#)
 Ultragaz, [Brazil](#)
 Unidad de Planificacion Minero Energetica, [Colombia](#)
 Winrock International, [United States](#)
 Worthington Cylinder Corporation, [United States](#)

WLPGA Activity 2015

Communications and Exceptional Energy



A New Look For our WLPGA & Exceptional Energy Website

2015 saw a new look for the WLPGA website. We merged the WLPGA corporate site and the Exceptional Energy brand site into one brand new website. This gives us the opportunity to focus our energies into one compelling and exciting information packed resource. Visit www.wlpga.org.

Global LPG Community Communications

WLPGA produces a suite of communications for the global LPG community. This includes the flagship newsletter, The Voice, an extensive library of case studies both print and video, and awareness campaigns targeting specific and relevant activities. WLPGA also works closely with international press with the goal of ensuring that WLPGA is recognised as the go-to and credible source for all industry information. Any members who have a success story to share with the

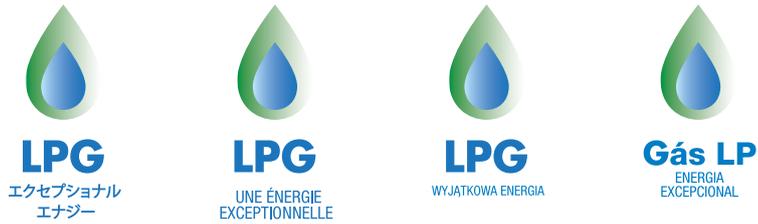
LPG world are welcome to submit their articles to the communications team who will be happy to spread the word amongst the global LPG community.

As well as the WLPGA corporate website, WLPGA manages three campaign websites:

- the Cooking For Life campaign site (www.cooking-for-life.org),
- a relaunched dedicated Autogas portal (www.auto-gas.net),
- the Exceptional Energy in Action applications database (www.lpg-apps.org).

All these sites are public and carry a vast amount of freely available industry information.





“For Gasnova, a Colombian LPG companies association, WLPGA membership has been crucial. For example, recently I had a meeting in Cucuta, Colombia, with governmental and business representatives. They wanted to know about Autogas, as an option to promote in this frontier city. We decided to show the WLPGA Autogas Video, which has just been posted on the website. The audience was delighted to see the Autogas World Experience. Sharing knowledge, experience and how things work is a must for the LPG union through WLPGA.”

Evamaría Uribe
President, GASNOVA, Unión de Empresas Colombianas de Gas Propano

Exceptional Energy

WLPGA has developed the Exceptional Energy brand to unite the industry under one single powerful master brand. This enables our fragmented industry to speak with one voice as we work to raise awareness of the exceptional benefits of LPG.

Exceptional Energy is the master brand under which all WLPGA's campaigns and events sit. **Cooking For Life, Exceptional Energy in Action** and regional events all work under this brand which ensures all WLPGA communications have a consistent message.

Members have privileged access to a branding toolkit which enables them to integrate the logo seamlessly into their own corporate branding wherever they are in the world and whatever the industry sector. Members are encouraged to get creative and weave the brand into their own communications initiatives.



The global rollout of the brand continues with more case studies, a strong social media presence and face-to-face interaction.

Social Media

Get connected - follow us on our various social media channels:



Twitter: [@ExceptionalNRG](https://twitter.com/ExceptionalNRG)



Facebook: [Exceptional Energy](https://www.facebook.com/ExceptionalEnergy)



Youtube: www.youtube.com/user/WorldLPGas

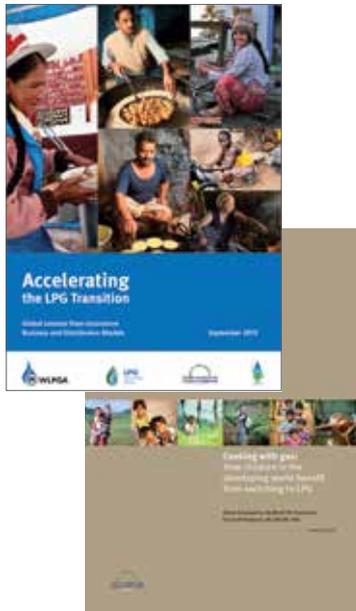


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Cooking For Life

In 2015 Cooking For Life continued to focus on its 2014 – 2016 project plan goal of “Building the Evidence Case” on the benefits of switching from cooking with biomass and other traditional fuels to LPG. Under the leadership of Chairman, Ken Wilson of SHV Energy, the Cooking For Life Steering Committee oversaw a number of different studies that focused on different elements of the advantages of switching to LPG.

The studies include:



■ **Accelerating the LPG Transition: Global Lessons from Innovative Business and Distribution Models:** This report examines how ten countries have switched, or are planning to switch, from traditional fuels such as wood, coal, charcoal, animal waste and kerosene, to LPG as a cooking fuel. It identifies some findings that might be applicable to other countries and has a broad representative geographical spread.

■ **Cooking with Gas: How Children in the Developing World Benefit from Switching to LPG:** Designed as a sister study to 2014’s “Cooking with Gas: Why Women in the Developing World Want LPG and How They Can Get It”, this document looks at the benefits to children of switching to LPG. The analysis carried out by Lisa Thompson of the University of California at San Francisco examines the long term health as well as socio-economic impacts of households that switch to LPG from traditional fuels.



“The oil and gas industry should be proud that it has a product that is an environmental hero of major proportions – LPG is the only currently available product to convincingly attack the largest environmental health threat globally. In addition, driven by the great expansion of natural gas supply globally, the byproduct LPG is potentially posed to be much more widely available for this market. To honestly take full credit for this beneficial product and to effectively open up the billion new customers it represents, however, the industry should apply its substantial resources and capacity to promote large-scale innovations to help governments and others accelerate the natural movement of populations to clean and convenient fuels for cooking. Let’s not have 2.8 billion still stuck with dirty cookfuels after many more decades, when clean fuels are available for all today.”

Kirk R. Smith, MPH, PhD
Professor of Global Environmental Health. University of California, Berkeley

Cooking For Life advanced in its mission of transitioning one billion people from cooking with biomass and other dirty and dangerous fuels to LPG by 2030.

In doing so it helps ensure that the world makes progress in combatting the age old health menace of indoor air pollution and ensuring that cooking does not kill.

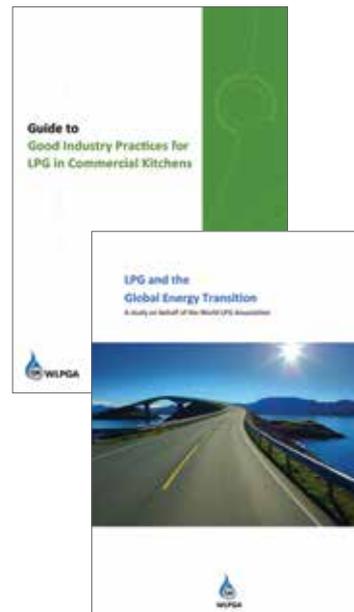
■ **Guide to Good Industry Practices for LPG In Commercial Kitchens:**

This good industry practices guide designed for conversion of kitchens in large institutions such as hospitals, orphanages, prisons, barracks, schools, etc was written together with World Central Kitchen (WCK) a US based NGO that is headed up by Chef and activist José Andrés. This document even includes a recipe from Chef Andrés for making *pollo al chilindrón*.

■ **LPG and the Global Energy Transition:** LPG is set to play an increasingly important role as a “bridging fuel” alongside natural gas in the long-term transition to a truly sustainable global energy system. This document looks at this long term role that LPG will play in both a developed and developing world setting.

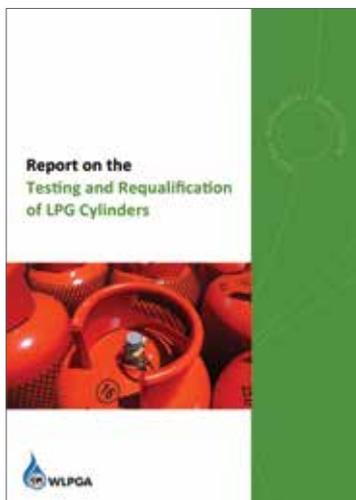
Cooking For Life was also active in representing the industry and communicating its message in many different events as well as establishing cooperation with organisations as varied as the World Bank, the Global Alliance For Clean Cookstoves and the US Center for Disease Control (CDC). By representing the industry and forging long term partnerships with

a variety of key stakeholders, Cooking For Life advanced in its mission of transitioning one billion people from cooking with biomass and other dirty and dangerous fuels to LPG by 2030. In doing so it helps ensure that the world makes progress in combatting the age old health menace of indoor air pollution and ensuring that cooking does not kill.



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The Global Cylinder Network (GCN)



The domestic use of LPG - mainly for cooking, room and water heating - constitutes roughly 50% of total global consumption and is growing as LPG use continues to expand strongly in the developing world. Most of these markets are cylinder based and availability and access to cylinders has a direct impact on their ability to expand. Thus, in 2015 the GCN, under the able leadership of Abdelkader Benbekhalel of Salam Gaz Morocco, continued to build its catalogue of know-how to fulfil its mission of sharing experience, expertise and best practices on how to manage and develop cylinder based markets in a safe and sustainable way.

In 2015 the GCN completed work on the "Good Industry Practices Guidelines on the Testing and Requalification of LPG Cylinders". This document looks at cylinder requalification regimes around the world in 15 different markets at various stages of development and maturity to shine a light on global practices and to demonstrate what time frames are most commonly employed. This document will prove key for policy makers in developing countries establishing regulatory regimes that want to incentivise the long term, safe and sustainable growth of those LPG markets.

“The Global Cylinder Network was founded in 2011 to focus on the development of the LPG cylinder business. The domestic use of LPG mainly for cooking, room and water heating constitutes roughly 50% of total global consumption, and the LPG cylinder is the main vehicle used to sustain this demand. Today eight of the ten largest domestic markets are located in the developing world, are largely cylinder based and are growing strongly. And more importantly there is a broad consensus that the future of the LPG cylinder in these regions is bright. Thus, sharing experience, expertise and best practices on the best way to develop and manage all elements of cylinder markets will provide tangible benefits for WLPGA members and in doing so reinforce the image of WLPGA as an organisation that covers all segments of LPG industry.”



Blaise Edja

GCN Chairman, General Manager, Global LPG Business, Oryx Energies



“Given the positive dynamics of LPG as a portable, clean, versatile and increasing competitive fuel, DCC Energy has been investing significantly in the LPG sector in recent years. We have ambitions to expand from our current footprint across seven countries in North West Europe to build a Global business over time. Our membership of the WLPGA supports this ambition by giving us the opportunity to network with all the key stakeholders in the Global LPG market. We actively support the WLPGA and would urge all LPG industry stakeholders to do likewise.”

Donal Murphy

Managing Director, DCC Energy

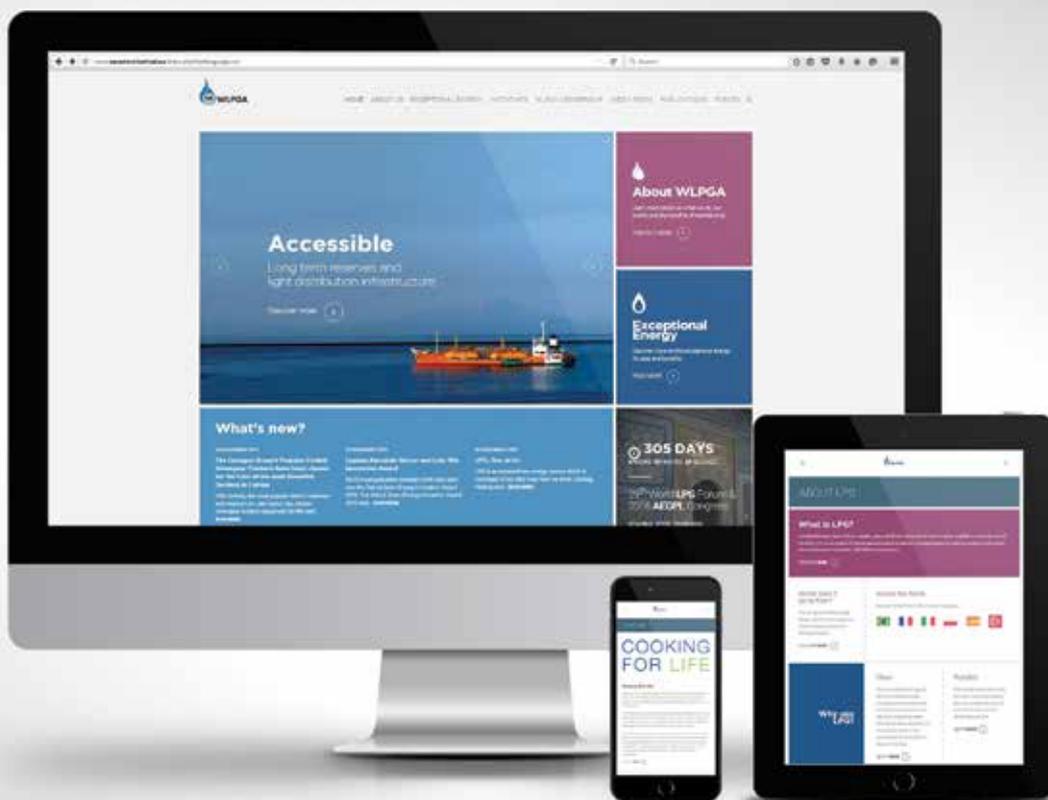
2015 also saw a change in leadership within GCN with Chairman Abdelkader Benbekhaled of Salam Gaz stepping aside for Blaise Edja of Oryx Energies who promised to build on the work of Benbekhaled and stated:

“The GCN is dedicated to continue the sharing of experience, expertise and best practices on how to manage and develop cylinder based markets, the fastest growing segment of the LPG industry in the developing world. By doing so the GCN will provide tangible benefits for WLPGA members and reinforce it’s as an organisation that covers all segments of LPG industry.”



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Discover the new WLPGA website



- Renewed
- Resourceful
- Responsive

www.wlpga.org



The Global Autogas Industry Network (GAIN)



"I'm delighted to be nominated as Chairman of GAIN. Through GAIN I am seeking to connect and share with our global community in working together to find solutions for the current and future challenges. My vision for GAIN is that we have a strong communication strategy to influence and connect with policy makers and consumers, we have a strong engagement strategy with the OEMs to lead to increase take up of LPG vehicles and also how we position Autogas as a renewable energy in the future will be important."

Cameron Ure

GAIN Chairman, General Manager, Sales, Elgas

Three GAIN meetings held in 2015

The WLPGA's network group which focuses on the Autogas business, GAIN, held meetings in Seoul, Berlin and Singapore during 2015. The GAIN chairman, Armando Viçoso (Repsol, Spain), stepped down in September and handed over the responsibilities to Cameron Ure (Elgas, Australia) during the World LPG Forum meeting in Singapore.

Cameron's vision for Autogas is to:

- Have a strong communication strategy to influence and connect with policy makers and consumers.
- Have a strong engagement strategy with the Original Engine Manufacturers to promote LPG vehicles.
- Better position Autogas as a renewable energy in the future.

Successful Autogas Summit in South Korea

As part of the hugely successful WLPGA Regional Summits programme, WLPGA and the Korea LPG Association co-hosted an extremely well attended Autogas Summit in Seoul in January 2015. The theme of the Summit was "Autogas: Fueling a Cleaner and Healthier Future" united some 300 delegates from not only South Korea but around the world to discuss the future of Autogas.

Relaunching Autogas with a new communications campaign

One of the main focus areas for the latter part of 2015 was the complete overhaul of the Autogas communications campaign. Recognising an urgent need to raise awareness on

a global scale, WLPGA has developed a new suite of tools for the global Autogas community to leverage.

This includes the complete revamp of the Autogas dedicated website, www.auto-gas.net, which now becomes a more campaign driven website; a new video focusing on the key benefits of Autogas (www.auto-gas.net/libraries/video/), a new Autogas Position Paper which also highlights the key benefits, an updated Autogas Incentives Policies and finally the relaunch of Autogas Updates, a twice monthly newsletter covering worldwide Autogas stories. All of these elements can be found on the website. WLPGA is confident that this new investment in focused communications will help promote Autogas globally.



"It was my great honour to host the WLPGA Autogas Summit 2015 in Korea in January. The summit united more than 200 participants from 20 countries. Without WLPGA's strong cooperation and participants' active support, it would not have been so successful. Indeed, I am grateful for all of you again and this event provided great encouragement to Korean Autogas industry. It provided an excellent opportunity for our stakeholders to gain valuable insights into the effect on diesel emission as well as initiate into an increased awareness of LPG car, as an eco-friendly vehicle. It was particularly significant for us to arrange a special meeting for car manufacturers, WLPGA and its members during the Summit. I would be delighted if it served as a platform for all attendees to share their local experience, technological development and the way for continuous cooperation."

Joonseok Hong

President, Korea LPG Association



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Identification & Stimulation of Innovation

The Global Technology Network (GLOTEC)

In search of the new technologies that will guide future opportunities



“Over the last year I believe we have seen some real progress with our GLOTEC group in two important ways. Firstly within the meetings themselves we have seen genuine debate and very positive workshops. Secondly we have become far more outward looking in our communications and the Exceptional Energy in Action site is rapidly becoming the go-to reference site for people outside the industry.

Looking forward, we have a very busy work programme. Our first video relating to groundcare is now online and has received very positive feedback. We look forward to producing many more of these with the support of our members and our on-going work to promote marine gas is showing great promise.

Finally we will continue to identify and pursue LPG applications that add value to our exceptional energy proposition but we need your help. Keep telling us about initiatives within our industry and keep telling people outside our industry that we are indeed the world's exceptional energy in action.”

Andrew Ford

GLOTEC Chairman and Group Public Affairs Manager, SHV Energy

In 2015 the GLOTEC network saw more discussion, debate and workshop sessions during the meetings, particularly related to the use of LPG and LPG applications. A considerable effort was also made to introduce information and updates related to European policy developments that may concern GLOTEC into the network. Europe has the heritage and also the desire to become the environmental legislators for the world, hence developments in this region have the potential for a much wider impact, such as the European Heating and Cooling Strategy or the European Energy Union. The last GLOTEC meeting of 2015 in Singapore attracted the largest ever participation for a members' only meeting with over 70 participants.

LPG Fuel Quality, Standards, Issues & Good Practices

One of the highlights of 2015 was the release of the GLOTEC document “LPG Fuel Quality, Standards, Issues & Good Practices”. This document aims to raise the profile of the importance

of the quality of LPG as a modern fuel and is a key milestone to establish it as an exceptional energy, high quality fuel for modern applications. In parallel, this document serves as a knowledge-base for raising awareness of the risks of inferior quality and what can be done to control them and improve the product. It is a resource for developing fuel quality requirements for specific applications and a reference for developing or improving national and company standards. This document, available to WLPGA members only, can be found in the members' area of the WLPGA website.

The GLOTEC Exchange

A key feature of GLOTEC is information sharing amongst members, exchange of views on key subjects, and the dissemination of expert advice. A new web based exchange platform has been developed to allow systematic and real-time exchange amongst GLOTEC members. With forums and topics per subject area, it addresses technical issues, safety

subjects, standards, innovation, LPG applications, operations, etc. to match the specific interests of the members. Depending on how the association and members use it, the potential of this platform is enormous and it could very well be expanded to cover the needs of other WLPGA networks.

LPG Marine Applications

2015 was the first complete year that GLOTEC addressed this area. The marine applications group was established to create awareness around the use of LPG for marine purposes, to unite the LPG industry and manufacturers to help grow the LPG marine segment, to help adapt legislation to accommodate and promote LPG as marine fuel and to serve as an expert focus group on the subject.

Throughout 2015, the breadth of activity in this sector was demonstrated through presentations of marine LPG and market activities in, amongst others, Spain, Ghana, Panama, Australia, Dominican



“Innovation management is more strategically important today than it has ever been before. GLOTEC acknowledges the importance of technological leverage to support growth initiatives throughout the entire LPG industry. It however goes beyond mere technical and functional aspects and incorporates the social and environmental dimension to try to seize a new potential market. It is a place that promotes the innovation culture and that encourages the Group to step out of its comfort zone and enter the area of development and growth.”

Davide Cavagna
CEO, Cavagna Group



Republic, Maldives Islands, the British Virgin Islands, Panama and Chile, highlighting once more the great potential of this new sector.

Significant work took also place on legislative and standardisation activities in Indonesia, where a new standard for the use of LPG in marine engines was developed based on the existing European standard. This work was undertaken by Lehr, advising the Indonesian authorities on behalf of WLPGA. This is to be followed in Indonesia with other promotional activities.

The European standard EN 15609 “LPG propulsion systems for boats, yachts and other craft” is also in the process of being updated with the additional expertise of WLPGA members Lehr and X-Tech.

Today, marine outboards, produced principally by Lehr, the only dedicated LPG outboard manufacturer, can be found in 24 countries.

The LPG industry will continue to provide their support to this GLOTEC group to promote LPG as an exceptional marine fuel.

Exceptional Energy in Action – The LPG Applications Directory

Exceptional Energy in Action (EEIA), the LPG online applications database completed its first year of activity. Following its launch in 2014, it was presented during the Atlanta NPGA South-Eastern Convention & International Propane Expo, the AIGLP Congress in Rio de Janeiro, the AEGPL Congress in Berlin and the UKLPG Conference in Manchester. The EEIA initiative was received extremely well at each of these events and by the entire LPG industry and continues to receive very positive comments from users. It is a dynamic site, it is constantly updated and is supported by a strong social media programme including a Twitter feed. Website visits have doubled since the beginning of the year and the site is now at the top of any google search on LPG applications.

2015 saw also the launch of the first of a series of LPG promotional application videos, the LPG lawn mowers, partly funded through sponsorship by WLPGA members Cavagna/Greengear and Calor/SHV. These videos aim to increase awareness of the use of LPG for specific and less well known applications.

The GLOTEC team continued to pursue all the other subjects in its activities such as the LPG Heat Pumps for Heating

and Cooling Applications, the Micro Combined Heat and Power (mCHP) applications and the Harmonisation of Standards through the ISO activities and has established further its priorities with other prime focus areas as the Heavy Duty Engine applications and Power Generation, and the creation of additional working groups to help with technology monitoring and the Exceptional Energy in Action.

Visit Exceptional Energy in Action at www.lpg-apps.org and on Twitter at [@LPGapps](https://twitter.com/LPGapps)



“What brought me in contact with WLPGA and the GLOTEC team was reading in the 2014 Annual Report about the GLOTEC activities, and in particular the new working group on LPG Marine Applications. It was very exciting that WLPGA had decided to put the focus on a sector with such a great potential, where LPG can play a key role as a modern fuel for a cleaner air and water. As a new member in the association, it gave me a great pleasure to be able to contribute to the GLOTEC publication on LPG product quality, an absolutely key aspect for the success of a fuel in the market, and also to exchange with the other members on my other passion and significant part of my business, the LPG Heavy Duty engines and Autogas.”

Rubens Basaglia
X-Tech, Switzerland



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Women in LPG Global Network (WINLPG) – Changing the face of the LPG industry

There's a distinct opportunity for the global LPG industry to address the issue of attracting, retaining and developing women in the industry.

Welcome to WINLPG, the latest WLPGA global network.



"I'm delighted to assume the role of Chair of WINLPG. We see an issue that gender balance is not optimised in the LPG industry and WLPGA is in a unique position to start to make a change, this change to be driven by a network that will recommend actions and activities as part of the WLPGA strategic planning process and we are very excited to have launched WINLPG this year."

Nikki Brown
WINLPG Chair

Managing Director, Cavagna Group U.K. Ltd.

WLPGA recognises that gender balance is not optimised in the LPG industry and WLPGA is in a unique position to start to make this change. This change is to be driven by a global network that will recommend actions and activities as part of the WLPGA strategic planning process. There's compelling business evidence that having more women in management positions can improve a company's financial performance by up to 42%.

WINLPG is a network for women – and men – who have a professional interest in the LPG sector and who support the network's objectives. The first and key step is to demonstrate that WINLPG is not about promoting women just because they

are women, but it is about helping to encourage a process that looks at how to support individuals who are best for the job – without consideration of gender. WINLPG aims to develop a strategic response to the issue of attracting, retaining and developing women, and young people, to work in the LPG industry.

In setting up WINLPG the managing team looked closely at other energy industries such as nuclear, solar, natural gas, industries which share similar challenges to the LPG industry. Each of them has a well-established women's network and so the LPG industry is arguably a little late to the table with this initiative.



WINLPG is not about promoting women just because they are women, but it is about helping to encourage a process that looks at how to support individuals who are best for the job – without consideration of gender. WINLPG aims to develop a strategic response to the issue of attracting, retaining and developing women, and young people, to work in the LPG industry.

WINLPG has three pillars of objectives:

- 1** To support and retain women in the industry
By providing a network through which women can further their professional development and access colleagues with shared interests.
- 2** Promotion and Advocacy
To identify and promote case studies and role models and continue partnerships with similar industry networks and many other industries.
- 3** Educate and Attract
To educate not only the industry itself about the issue but also to educate university graduates to encourage women, and young talent in general, to enter into the industry.



Anita George
 The World Bank Group
 Senior Director,
 Energy & Extractive Global Practice

WINLPG was officially launched with a hugely successful kick off meeting during the World LPG Forum in Singapore. With a keynote by Anita George of the World Bank, the group then split into round tables giving the group the opportunity to have their say in how WINLPG should move forward. The comments have been analysed and the next steps will be implemented during future network meetings.

WINLPG is chaired by Nikki Brown, Managing Director of Cavagna Group UK Ltd and managed on behalf of the WLPGA by Alison Abbott. As with other WLPGA global networks, WINLPG will meet three times a year at the time of the IC and GAIN, GLOTEC and GCN.

WLPGA is very excited about this brand new network, is particularly pleased about the very positive support the initiative has received thus far and looking forward to developing the network further.

Follow us on Twitter [@WINLPG](#)



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[@Exceptional NRG](#)



Efficient

LPG is an energy-rich fuel source with a higher calorific value per unit than other commonly used fuels, including coal, natural gas, diesel, petrol, fuel oils and biomass-derived alcohols. This means that an LPG flame burns hotter, an advantage that can translate into higher efficiency.

Good Industry Practices

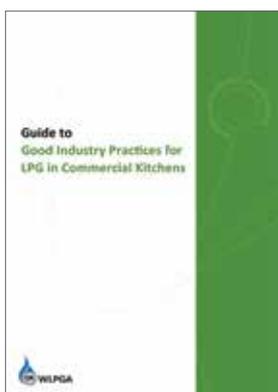


Update of the WLPGA Guidelines for Good Practices

The two flagship documents published by the WLPGA on Good Industry Practices - "*Guidelines for Good Business Practices*" and "*Guidelines for Good Safety Practices*" - were both updated during the year.

The update of these guidelines, with forewords from the International Chamber of Commerce (ICC) and the United Nations Environment Programme (UNEP), were overseen by a steering committee of WLPGA members that represented different regions and LPG markets to ensure all aspects of the business are fully represented.

These two umbrella documents form the basis for the more prescriptive "*Guides to Good Industry Practices*" that the WLPGA also produces focusing on specific parts of the LPG business that require more detailed information.

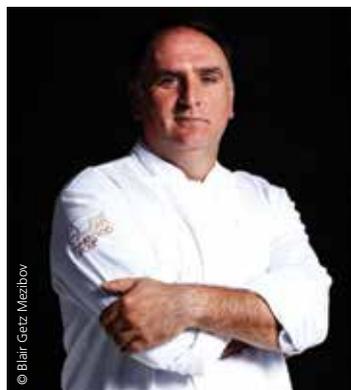


New WLPGA Guide to Good Industry Practices - LPG in Commercial Kitchens

The WLPGA aims to produce at least one new guide every year and in 2015 a guide was published in support of the WLPGA Cooking For Life programme.

The "*Guide to Good Industry Practices for LPG in Commercial Kitchens*", focuses on the conversion of commercial kitchens from traditional fuels, such as coal, charcoal, wood, and kerosene, to LPG.

The increasing use of LPG in households and commercial kitchens is one of several pathways to meet the objective of universal access to clean cooking and heating solutions by 2030. This is one of the three pillars of the UN Sustainable Energy for All (SE4All) initiative.



The "*Guide to Good Industry Practices for LPG in Commercial Kitchens*" was published with support from José Andrés of the World Central Kitchen who provided a foreword and a section on the importance of good hygiene in the kitchen, from sink to stove.

The information included in the guide will be useful for stakeholders grappling with the decision to move away from dirty, inefficient traditional fuels and kerosene to LPG.

The guide contains important advice on the decision to change, designing the LPG system, operation and maintenance and the important question of keeping the kitchen safe.

The Good Industry Practices workshop, planned for Taiwan in October 2015, was postponed due to a Dengue Fever epidemic and will now be held in 2016.



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The Hazardous and Noxious Substances Convention (HNS)



"HNS is a very important issue for our LPG industry globally. We should carry on the present status as an observer in the international maritime regime."

Jun Matsuzawa
President, LP Gas Center, Japan

WLPGA Observer Status renewed for Three Years

WLPGA Director David Tyler, and Mr Yuki Ihara - Deputy Secretary General of the Japan LPG Association, attended two meetings of the Hazardous and Noxious Substances (HNS) Convention in London during 2015, representing the WLPGA as an observer.

The meetings, held at the International Maritime Organisation (IMO) headquarters during April and October each attracted over 100 delegates and addressed the latest position with regards ratification of the HNS Convention.

The HNS Convention affects the global LPG industry and is not limited to the interests of one single nation. It is based on the "polluter pays" principle by ensuring that the shipping and HNS industries – which includes the

LPG industry – provide compensation for victims who have suffered a loss or damage resulting from an HNS incident.

The WLPGA is the only body to truly represent this group on behalf of the LPG industry and this also enables strong links between the WLPGA and the International Maritime Organisation (IMO).

At the October 2015 meetings the observer status to the IOPCF by the WLPGA was reviewed and it was agreed to extend this for a further three years.

For more information about the WLPGA's important involvement in the HNS meetings contact David Tyler (dtyler@wlpga.org) or visit www.hnsconvention.org

Training



"WLPGA creates a good networking, sharing the good business and safety practice to all the members. Pertamina get these added values as part of the WLPGA Member. One of the collaboration between Pertamina and WLPGA was the implementation of the LPG Training Course which has been done in Pertamina Corporate University last year. We are hoping to have a continuing collaboration with WLPGA, giving the chance for Indonesia LPG Industry to learn more on the best practice on LPG."

Ahmad Bambang
Marketing Director, Pertamina

One of the four key mission goals of the WLPGA is to transfer knowledge. In the past it has done this mainly through the publication of Guidelines, Guides and other publications. Towards the end of 2014 the WLPGA ran an inaugural training programme in Indonesia in conjunction with Industry Council member Pertamina.

New WLPGA Training Programmes

The Indonesian training was attended by over 50 delegates and afterwards the Industry Council supported the WLPGA to run a series of these training programmes throughout 2015 in Myanmar, Kenya, Singapore and Indonesia.

These programmes focused on some of the fundamental topics covered in the WLPGA Guidelines and Guides to Good Industry Practices.

They included Cylinder Management, Opportunities for LPG Market Development, Developing a Market for LPG as an Engine Fuel, Bulk LPG Storage, Reticulated Systems and Safety Management, LPG Handling and Distribution, Communications and Branding, Asset Management and the role of LPG in Disaster Recovery.

The WLPGA has formed a partnership with a Singapore company to help develop and market these training programmes and a series of new ones are planned for 2016 in the Middle East region as well as Asia and Africa.



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Global Technology Conference (GTC) and the WLPGA Innovation Awards

Identifying new technology is part of the core of the WLPGA Mission Statement. The GTC features some of the newest LPG technology around the world and the 2015 GTC was held in Singapore during the World LPG Forum to create new opportunities for the LPG industry and give visibility to technology that drives progress.

Each year, representatives from the industry are invited to submit abstracts showcasing some of their most innovative technology. Submissions included topics from the whole downstream distribution chain to consumer, including, tri-generation technologies for cooling, heat and power production, large ship engine advances, heavy duty engines and the use of nano-technology for increasing flame temperature and improving the performance of LPG in cutting applications. Other topics referred to revolutionary new composite cylinders coming from aerospace technology, improvement of the product quality through elaborated filtration technologies, vent free gas heaters, telemetry applications, technology to convert London taxis to LPG and an internal leak limiter intended for disposable LPG cartridges.

The ten best submissions were selected by an independent steering committee against a number of criteria including technical innovation, improvement in safety, commercial potential, new market segment potential, improvement or optimisation of operations and image enhancement. These ten papers were presented at the GTC in Singapore and were shortlisted by the steering committee for the prestigious WLPGA Innovation Award that will take place in Istanbul in 2016.

The winner of the 2015 WLPGA Innovation Award was Mark Walls of the Southwest Research Institute in the USA, for his work "Direct Injection

Liquid Propane". The objective of this work was to determine the feasibility of running a modern turbocharged gasoline direct injected engine on LPG with the OEM calibrations and hardware. It confirmed that liquid LPG injection can be successful in a "plug and play" operation and with some additional adjustments, in some cases, it could have the capacity to produce lower or equal exhaust HC, CO, CO₂, near zero soot emissions and a potential for reduction of NO_x.

The runner-up was Ann Feudner, of Kohler Power Systems in the USA with their paper "Application of Propane to the Mobile Rental Generator Market". This paper demonstrated details of the application of technology in the mobile rental generator market, the significant advantages that it offers and the associated challenges and solutions. LPG as a fuel in the power generation segment is currently one of the top LPG application focus areas in GLOTEC.



James Rockall presented representatives of the winner and the runner up with trophies and with complimentary passes for the 29th World LPG Forum & 2016 AEGPL Congress.



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Accessible

LPG can be accessible to everyone, everywhere today without major infrastructure investment. Nothing needs to be invented and there are enough reserves to last many decades.



2015 Events Overview

The WLPGA supported the following industry events around the world during 2015:

January	WLPGA Board, Industry Council & Network Meetings: Seoul, South Korea
January	WLPGA Autogas Summit: Seoul, South Korea
January	Middle East LP Gas Summit: Dubai, UEA
February	Argus Americas LPG Summit: Miami, USA
March	OPIS NGL Summit: Miami, USA
March	International LP Gas Seminar 2015: Tokyo, Japan
March	IHS International LPG Seminar: Houston, Texas
March	China LPG Conference: Hangzhou, China
March	Ethane & LPG Trading & Shipping Conference: London, UK
April	Southeastern Convention & Expo: Atlanta, USA
April	Argus Asian LPG Conference 2015: Singapore
April	Polish LPG Association Congress: Warsaw, Poland
April	HNS Convention Meetings: London, UK
April	30 th AIGLP Congress 2015: Rio de Janeiro, Brazil
May	WLPGA Board, Industry Council & Network Meetings: Berlin, Germany
May	2015 AEGPL Congress: Berlin, Germany
May	Asia LP Gas Summit: Tokyo, Japan
June	World Gas Congress: Paris, France
June	Gas Turkey: Istanbul, Turkey
June	IHS Asia LPG Seminar: Singapore
June	ADB Climate & Clean Energy Forum: Manila, Philippines
June	Asia Clean Energy Forum: Manila, Philippines
June	Downstream Myanmar Summit 2015: Yangon, Myanmar
June	Vienna Energy Forum 2015: Vienna, Austria
June	Africa LP Gas Summit: Nairobi, Kenya
June	WLPGA Training: Nairobi, Kenya
July	RIVE: Ales, France
August	Philippines LPG Forum: Manila, Philippines
September	UKLPG Annual Conference: Manchester, UK
September	WLPGA Board, Industry Council & Network Meetings: Singapore
September	28 th World LPG Forum: Singapore
October	OPIS Europe LPG Summit: London, UK
October	India Clean Cooking Forum: Delhi, India
October	HNS Convention Meetings: London, UK
October	Argus Africa LPG 2015: Cape Town, South Africa
November	IHS Latin America LPG Seminar: Bogota, Colombia
November	Global Alliance for Clean Cookstoves Clean Cooking Forum: Accra, Ghana
November	Nigerian LPG Association Annual Conference: Abuja, Nigeria
December	UNFCCC COP 21: Paris, France

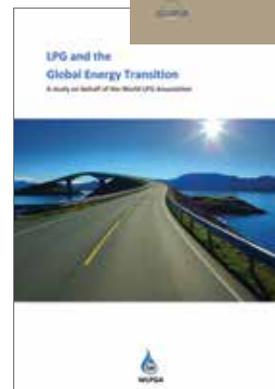
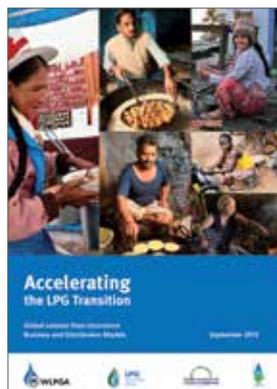
Publications

WLPGA produces a variety of publications, from industry reports freely available on the WLPGA website to dedicated network papers available to members only. In 2015 we released the following publications.

Cooking For Life Studies

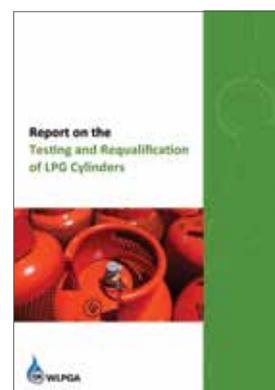
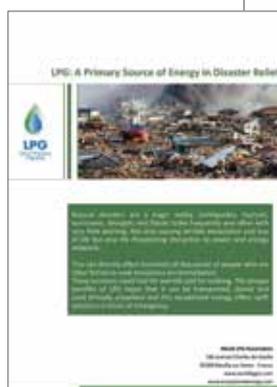
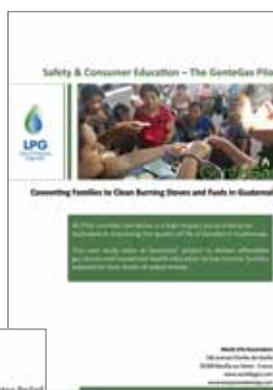
Four major studies have been released to support the Cooking For Life campaign:

- Cooking with Gas: How Children in the Developing World Benefit from Switching to LPG
- Accelerating the LPG Transition: Global Lessons from Innovative Business and Distribution Models
- Good Industry Practices for LPG in Commercial Kitchens
- LPG and the Global Energy Transition



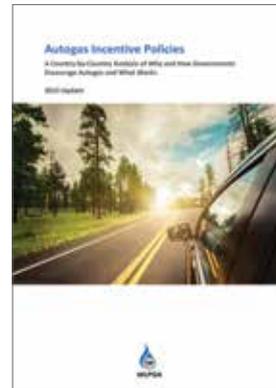
Exceptional Energy Case Studies

Two new paper case studies were released in 2015, an update to the GenteGas project in Guatemala and a study looking at the benefits of LPG in disaster times. There is also a suite of new video case studies looking at various elements of the LPG industry in Turkey.



GCN Reports

The GCN produced a report on the testing and requalification of LPG cylinders to add to the GCN library of reports and guidelines.



Good Industry Practices Guidelines

This core guideline document, Good Business Practices in the LPG Industry, was revisited in 2015 to provide the industry with a tool for ensuring the marketplace, and the customer, is not compromised by those in the industry who carry out “bad practices” and to enlist the support of government in establishing and enforcing policies that create a safe and competitive enforcement for industry participants.

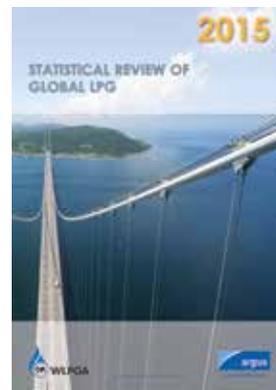
WLPGA also produced an additional guide to enhance the suite of “good industry practices” which addresses Good Industry Practices for LPG in Commercial Kitchens.

Autogas Incentive Policies

This report explains why and how governments encourage switching to Autogas. The report is based on an in-depth survey of the world’s largest Autogas markets and is updated annually.

Statistical Review of Global LPG 2015

Argus Media published the 2015 WLPGA Global Statistical Review in September, the fourth year they have been responsible for this flagship document. The Global Statistical Review is a major element of the WLPGA membership proposition as it is made available free of charge to members. Non-members may purchase a copy directly from Argus Media. This year Argus Media, in cooperation with the WLPGA and BW, produced a world LPG trade flow map showing major LPG trade flows, details of LPG import terminals and highlights from the Statistical Review. This was also issued free to members.



WLPGA Newsletters

WLPGA produces regular newsletters ranging from the monthly global communication ‘The Voice’, to newsletters addressing specific sectors of the industry such as “Autogas Updates” and “The Forum Voice”, and a regular communication just to members “Insider”.



LPG Fuel Quality, Standards, Issues & Good Practices

The GLOTEC network produced a document, “LPG Fuel Quality, Standards, Issues & Good Practices” which aims to raise the profile of the importance of the quality of LPG as a modern fuel and is a key milestone to establish LPG as an exceptional energy, high quality fuel for modern applications. This document is strictly for the use of the members of WLPGA only and it is available in the members’ area of the WLPGA website.

World LPG Forum 2015

The WLPGA hosted the 28th World LPG Forum from 28th September – 2nd October 2015. This marks the first time that the World LPG Forum has taken place in Singapore. The series of events offered unparalleled networking opportunities, very high quality sessions and side events and, of course, a major global exhibition. The theme of the 2015 World LPG Forum was “Expanding Horizons” and the focus of discussions was on global opportunities for LPG and the role of LPG in the future.

Singapore Forum main stats:

More than
1,500 participants
from **76** countries
and **81** exhibiting
companies

There were many highlights of the two-day Forum in Singapore, but most notably the keynote addresses by the Senior Minister of State of Singapore and B. Ashok Chairman of Indian Oil Corporation. A remarkable discussion on the drivers of switching from more traditional fuels to Autogas started the main roundtable **Expanding Horizons**. In addition to the roundtables the event had parallel sessions focusing fundamentally on global changes of the LPG industry as well as strategies and best practices on raising awareness amongst decision makers on the switch to LPG, for instance in indoor cooking.

Another key theme was the synergies LPG has with natural gas. David Carroll, President of the International Gas Union (IGU), spoke during the opening panel. The IGU and WLPGA recognise that there are multiple synergies between natural gas and LPG and under the theme “further together” the two associations are working together to maximise these opportunities.

An additional highlight of the week was the official inaugural meeting of the **Women in LPG Global Network (WINLPG)**. This marks the start of an exciting new global network for the WLPGA (please refer to page 28).

The Forum also included the **Global Technology Conference (GTC)**, an annual event organised by WLPGA. This is the opportunity for companies to showcase the very latest technological innovation impacting the global LPG industry. With a look

at general innovation and a focus on applications, this is always a unique opportunity to explore the latest technology the industry has to offer. As in each year, ten papers featuring some of the latest technologies impacting the LPG industry were presented including innovative applications for LPG as an engine fuel and as a residential energy source. The papers also covered ways to improve LPG quality and safety, and interesting ideas involving communications, packaging and distribution. The best paper presented during GTC Singapore will receive the 2016 WLPGA Innovation award which will be presented next year during the 29th World LPG Forum & 2016 AEGPL Congress in Istanbul.

WLPGA thanks all the Forum sponsors who contributed to this exceptional event.

The **29th World LPG Forum and 2016 AEGPL Congress** will take place in Istanbul, Turkey from 27th – 29th September 2016.

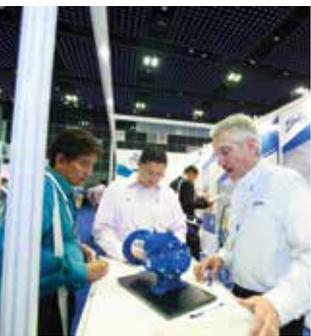


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“As the world’s largest owner of Very Large Gas Carriers, BW LPG is firmly committed to deliver LPG solutions for the world’s energy needs. It is thus important for BW LPG to be actively involved in sharing market updates and maintaining awareness of trends within the industry and the World LPG Forum presented us with an outstanding opportunity. WLPGA’s growing network of partnerships and programmes illustrates the increasing relevance of its role within the industry and of LPG within the energy sector. WLPGA programs such as Cooking For Life and Autogas.net are useful applications of LPG that address global issues of sustainable development and climate change, demonstrating the powerful impact of LPG. I applaud WLPGA’s continuous efforts to bring together market participants across the value chain to discuss ways to harness the growing potential of LPG.”



Martin Ackermann
Chief Executive Officer, BW LPG



Photos clockwise from top left:

- Exhibition
- Exhibition
- M Lee Yi Shyan, Senior Minister of State of Singapore
- B Ashok, Indian Oil Corporation
- Anita George, World Bank Group
- Kimball Chen, ETG, Members’ Dinner at the Bar and Billiard Room, Raffles Hotel
- Gala Dinner at the Gardens by the Bay

WLPGA Organisation

Board of Directors

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

The WLPGA Board is composed of a President, a First Vice-President, a Treasurer, three Vice-Presidents and up to five other Board Members. The current Board was elected at the Annual General Assembly of 28th September 2015 in Singapore. The Board composition is representative of the business activities and geographic diversity of members.

The Board meets three times a year to agree the budget and approve the accounts for ratification by the General Assembly. The Board has an overall governance role for the Association as defined under French law.



Industry Council

The Industry Council was inaugurated in 1996 and is composed of leading companies in the LPG business. The Industry Council directs the Association's actions by identifying issues, developing strategies, and formulating projects. The Council also makes recommendations to the WLPGA Board of Directors.

Actions launched by the Industry Council aim at enhancing the positive image of LPG worldwide and promoting LPG use to satisfy the growing need for an all-purpose, efficient and environmentally friendly fuel. Whether focused on specific market segments or the LPG industry in general, the Industry Council's actions are designed to increase the worldwide use of LPG.

In 2015, the composition of the Industry Council remained the same as in 2014 with 30 leading companies.



The WLPGA Team



From left to right:

Alison Abbott
Communications Director

Rita Pecilunas
Event Sales Manager

Nikos Xydas
Technical Director

Esther Assous
Events Director

Laurence Poret
Office Manager
and Member Relations Manager

Camille Pieron
Communications Coordinator

James Rockall
CEO and Managing Director

David Tyler
Director Projects
and Business Practices

Debbie Tyler

Michael Kelly
Director Market Development
and Deputy Managing Director



During 2015 the WLPGA team has been ably supported by our exceptional interns (left to right):

Marina Carvalho and Marina Ceccarelli

ISTANBUL LÜTFI KIRDAR International Convention and Exhibition Centre

İstanbul

29th World LPG Forum & 2016 AEGPL Congress

Istanbul, 27th - 29th September 2016



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www.worldlpgforum-aegpl2016.com



WLPGA



LPG
EXCEPTIONAL
ENERGY

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