

## BUSINESS PLAN

### CEN/TC 181 DEDICATED LIQUEFIED PETROLEUM GAS APPLIANCES

#### EXECUTIVE SUMMARY

##### **Scope of CEN/TC181 “Dedicated liquefied petroleum gas appliances”:**

The standardization of appliances only using liquefied petroleum gases, related equipments and their installation in vehicles such as: domestic flueless space heaters (including catalytic combustion), barbecues and cooking appliances for use outdoors, small non-domestic space heaters, appliances operating at vapour pressure, camping appliances, refrigerating appliances, space and water heating appliances for use in vehicles and boats, hoses, nozzles, hose connectors and hose assemblies for LPG, high and low pressure regulators and change over devices for LPG, patio heaters. The standards produced address in particular safety, efficiency and fitness-for-purpose issues. Most of these standards are mandated by EC in support of the essential requirements of the Gas Appliance Directive (GAD) 2009/142/EC. The standards produced are expected to be the basis for possible standardization of similar applications.

**Business environment:** The market for dedicated LPG appliances is quite varied. It covers appliances using LPG cylinders or tanks of various sizes and locally distributed to the customers by local retailers or grids.

The uses are mainly for domestic premises, camping and outdoor leisure, café, restaurant, professional heating, refrigeration. The main interested parties are manufacturers, test houses, consumers, LPG distributors and public authorities (from a public safety point of view).

##### **Benefits:**

To provide standards that allow the desired level of commercial exchanges in Europe, based on:

- Confidence of consumers and authorities in respect of safety, quality and ergonomics,
- Rational use of energy,
- Gas Appliance Directive (2009/142/EC) and Energy-Related Products Directive (2009/125/EC) implementation,
- Fewer accidents through increased safety,
- Elimination of trade barriers,
- Opening up of all the internal markets leads to greater competition and efficiency and thus economic benefits to the community as a whole,
- 18 standards are already adopted with several amendments and ongoing revisions.

##### **Priorities:**

- To respond the needs to new applications,
- To maintain existing standards,
- To investigate possible formal objections against the standards.

## **1 BUSINESS ENVIRONMENT OF CEN/TC 181**

### **1.1 Description of the Business Environment**

The development of appliances using liquefied petroleum gas is relatively stable.

Over the past few years, new companies from emergent countries have appeared. They challenge the traditional stakeholders with products that may not always meet the security and quality requirements. The globalization of the market leads to security problems, as well as homogeneity of standards and patents.

Public and health safety are important concerns for producers of appliances using LPG. Gas installations are subjected to important safety constraints, CEN/TC 181 standards are used to fulfill the safety requirements.

Other concerns of the LPG industry are the supply pressures and connections of the appliances, which differ in every European countries; this is specially the case for the recent integration of new countries within the European Union.

### **1.2 Quantitative Indicators of the Business Environment**

Europe remains a key global LPG producer and infrastructure hub, but the region in 2012 began to assess more deeply the likely impact of extra export availability from the US, Russia, Kazakhstan and through the Black Sea.

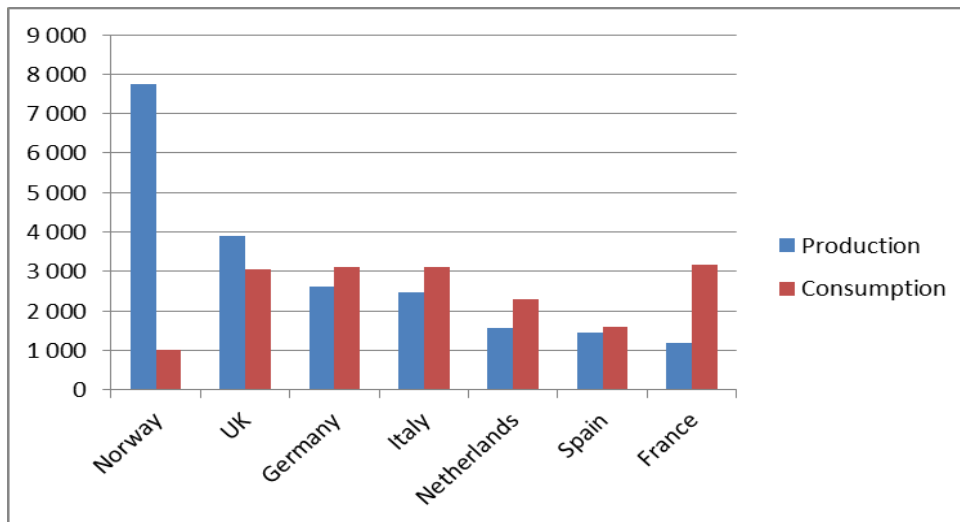
The following list of quantitative indicators describes the European markets' (33 countries including Turkey and Ukraine) global production and consumption in 2012:

|                                |                             |
|--------------------------------|-----------------------------|
| <b>LPG European production</b> | <b>27.2 Million of tons</b> |
| <b>European consumption</b>    | <b>30.3 Million of tons</b> |

Data provided by the AEGPL.

The LPG availability to European markets in 2012 per chosen countries is illustrated below.

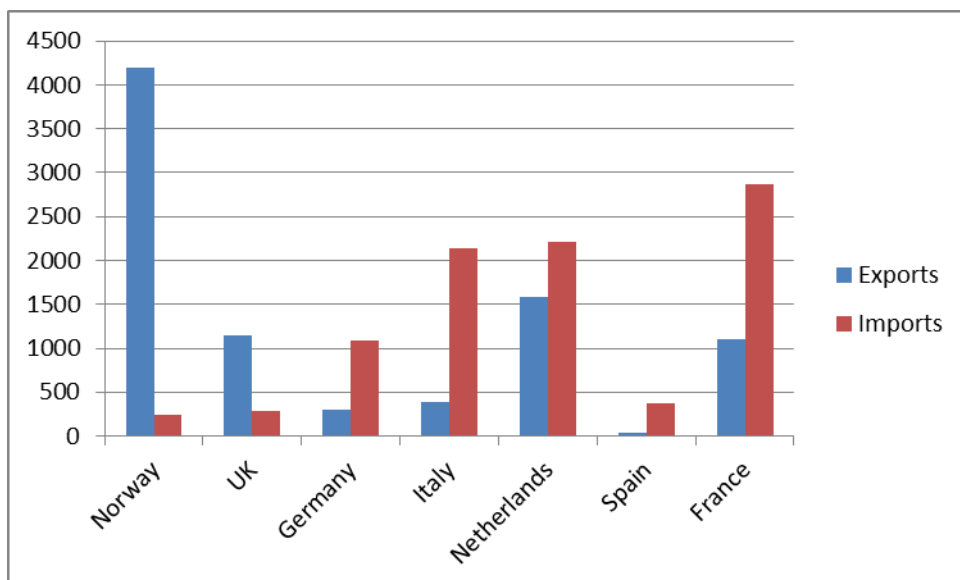
### LPG Production & Consumption in Europe



Data provided by the AEGPL (in kt)

The table shows the biggest producers and consumers of LPG in Europe. It is important to highlight that some countries such as Turkey or Poland are important consumers with 3 704 kt for Turkey and 2 180 kt for Poland however their local production is at the quite low level in comparison to consumption (783 kt for Turkey or 358 kt for Poland). It means that these countries are important importers in Europe.

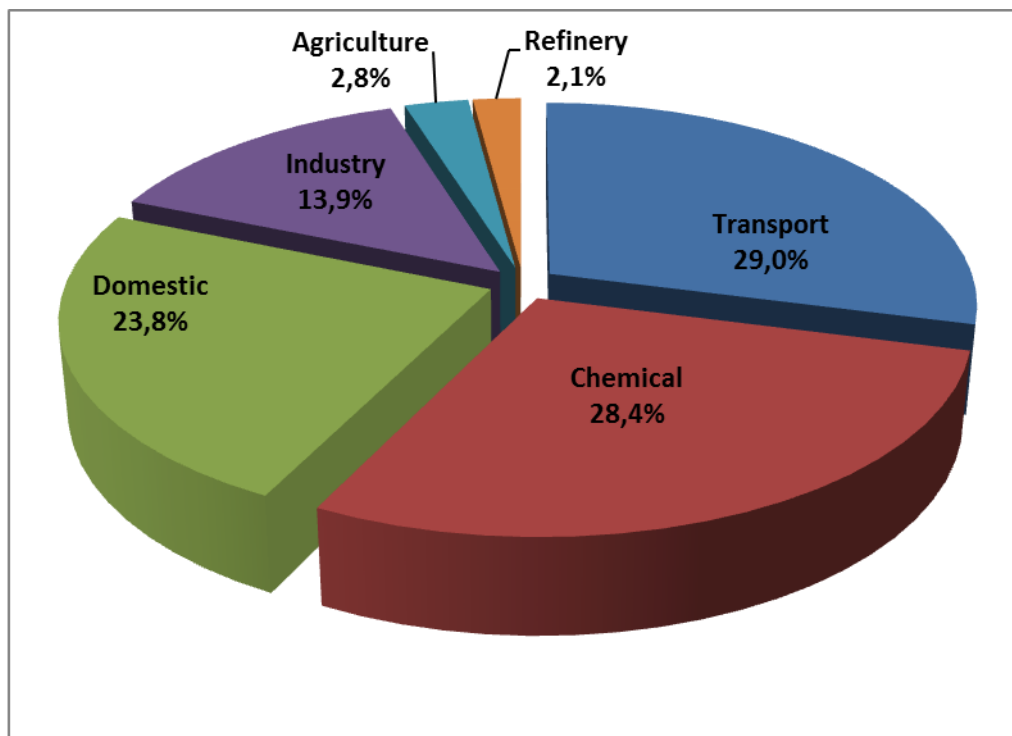
### LPG Export & Import in Europe



Data provided by the AEGPL (in kt)

In recent years, the market share of demand by sector shifted in a surprising direction. It has happened for the first time that LPG use as a transport fuel actually took the largest share of LPG demand (29%), edging petrochemical use (28.4 %).

The below draft shows the market share in 2012 (including chemical uses) in details:



Data provided by the AEGPL

Various European Standards of CEN/TC 181 are adopted into legislation, such as EN 1949 and EN 624 (quoted in annex 8 of the directive on the heating of the vehicles), or EN 417 (standard for gas cartridges in relation with transportation of dangerous goods) EN 16129 and probably in future EN 16436-1 & 2 (National regulations for LPG installations).

## **2 BENEFITS EXPECTED FROM THE WORK OF CEN/TC 181**

Benefits expected from the work of CEN/TC181 are mainly:

- To continuously improve the LPG appliance efficiency and safety requirements
- To create the harmonized standards support the relevant EU directives such GAD or ErP Directive
- To remove trade barriers within the European market by replacing national standards of the EU members

## **3 PARTICIPATION TO CEN/TC 181**

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

## 4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

### 4.1 Defined objectives of the CEN/TC

CEN/TC181 considers having achieved a coherent set of standards that meet most of identified market needs. The priorities are therefore:

- To maintain existing standards: for revision and amendment of the published standards,
- To investigate possible formal objections against the standards to adapt existing standards to the regulatory framework with the revision of GAD to respond the needs to new applications.

### 4.2 Identified strategies to achieve the CEN/TC's defined objectives

The work program is divided into 6 active and 3 disbanded working groups. Their fields of action are:

| Reference | Technical body title  | Status    |
|-----------|---|-----------|
| WG 1      | Flueless space heaters  | Disbanded |
| WG 2      | Barbecues and outdoor cooking appliances  | Active    |
| WG 3      | Small non-domestic space heaters  | Disbanded |
| WG 4      | Vapour pressure appliances and their gas cartridges   | Active    |
| WG 5      | Refrigerators   | Disbanded |
| WG 6      | LPG Installations and appliances for vehicles and boats   | Active    |
| WG 7      | Essential requirements for rubber hoses and flexible assemblies for gas supply of non-industrial LPG appliances | Active    |
| WG 8      | Pressure regulators and changeover devices  | Active    |
| WG 9      | Patio heaters   | Active    |

In addition, CEN/TC 181 maintains some liaisons with others CEN and ISO Technical Committees:

- **CEN/TC 58** Safety and control devices for gas burner and gas burning appliances
- **CEN/TC 180** Overhead radiant heaters and warm air heaters
- **CEN/TC 235** Gas pressure regulators and associated safety shut-off devices for use in gas transmission and distribution
- **CEN/TC 286** LPG equipment and accessories
- **ISO/TC 188** Small craft
- **AEGPL** Association Européenne des Gaz de Pétrole Liquéfiés
- **AFECOR** European Control Manufacturers Association
- **ANEC** European consumer voice in standardisation

The coordination of the CEN/TC activities is handled by:

- **The chairman** Nicolas BUREAU from Primagaz. His mandate is running until June 2016 ([nbureau@primagaz.fr](mailto:nbureau@primagaz.fr)).
- **The secretary** Joanna LAURENT from AFNOR ([joanna.laurent@afnor.org](mailto:joanna.laurent@afnor.org)).

### **4.3 Environmental aspects**

The major trends are towards increased efficiency and reduced emissions:

- Standardization of test methods for the determination of emission to the air
- Standardization of efficiency requirements

## **5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF CEN/TC 181 WORK PROGRAMME**

Expert resources are limited and participation in the works requests more and more personal investments from experts. Non active participation of important countries during the drafting process affects the works efficiency.

The revision of the GAD with a wished by CEN/TC181 modification of its scope and implementation of European Mandate M/495 on Eco-design may lead to the review of the set of standards and the development of new standards.

The lack of clear visibility of European Commission requests' such inconsistencies of standards under GAD, application of eco-design directive on LPG market can be considered as a challenging factor for CEN/TC181 work program accomplishment.