

## Harmonisation of European Gas Quality Specification: Cost Benefit Analysis



# A Harmonised Gas Quality Specification

## BENEFITS

Removal of barriers to free trade of gas across the EU

Consequently:

- Access to cheaper sources of gas
- Development of competition and removal of barrier to market entry

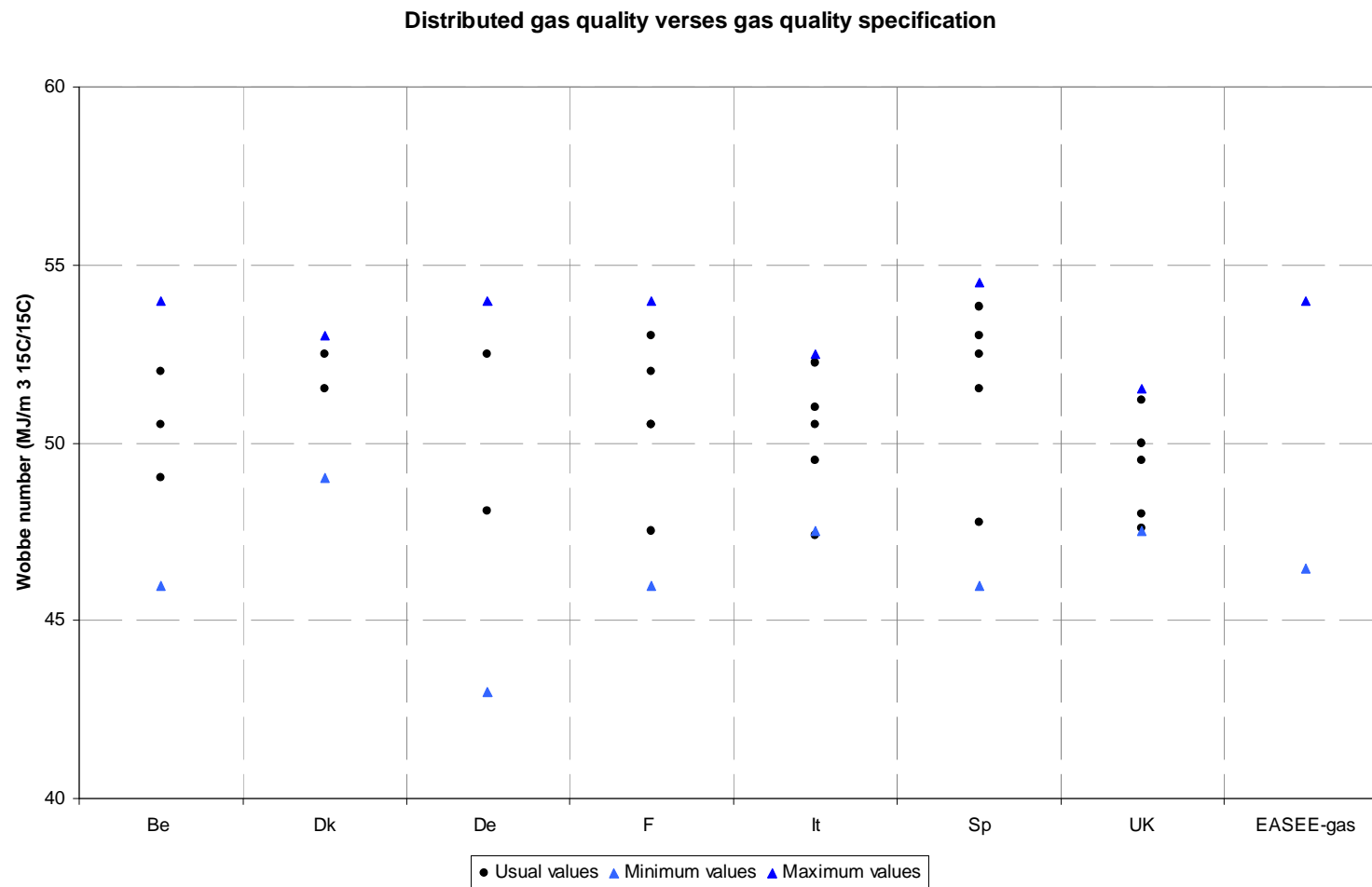
## COSTS

Gas processing to meet local gas quality specification

or

Upgrade or replacement of combustion equipment and appliances as necessary to operate over the harmonised specification

# The Challenge - Gas Quality Variations Across EU



# Cost Benefit Analysis - Aim and Output

In 2009 Pöyry Management Consulting and GL Noble Denton were commissioned by the European Commission to undertake a cost benefit analysis.

## DEFINITION:

The benefit or cost of introducing a harmonised gas quality in the EU will be defined by the financial benefit to consumers by removing existing gas quality restraints verses any additional processing costs and /or the expenditure to upgrade or replace appliances so they can operate safely and efficiently of the harmonised gas quality range

## AIM:

To estimate the value of benefits against possible costs for various scenarios

## OUTPUT:

A recommendation to CEN for a definition of gas quality standards that are the broadest possible within reasonable costs.

# Preliminary Report For Consultation- July 2011

- Presented data and assumptions made
- Detailed estimation of benefits and costs
- Report issued for public consultation to encourage:
  - Supply of accurate information
  - Correction of errors in the report
  - Remedy omissions with correct values
  - Support assumptions or propose alternatives
  - Validate data used

# Summary of Preliminary Findings

- BENEFITS

Estimated at < €0.2bn pa

- COSTS

Gas Processing

Estimated at

CAPEX ~ €10.7bn, OPEX + ~ €0.8bn pa based on 100% design capacity  
[CAPEX ~ €6.5bn, OPEX + ~ €0.5bn pa based on 50% design capacity]

or

Appliance Replacement

Estimated at ~ €178bn

- CONCLUSION:

A net benefit would not be realised by harmonisation  
of Europe's gas quality specification

# Public Response to Preliminary Report

- Public were requested to respond to 13 specific questions
- 45 responses received
  - 37 written responses
  - 8 verbal responses at Madrid Forum - September 2011
- 16 respondents supported the findings of the report
  - notably appliance manufacturers and end users
- 14 respondents disagreed with the report
  - No consensus from other stakeholders
- Report does not consider regional harmonisation which may offer benefits
  - Individual situations might justify harmonisation/investment
- Report does not consider particular parameters
- Odour, bio-methane, rates of change excluded from study
- Misunderstandings and/or lack of clarity on methodologies
- Offers to provide some data and/or bilateral meetings;
- Some (minor) errors

## Revised Appliance Costs based on GasQual Results

Revised cost estimate for replacement of appliances:

If EASEE-gas Wobbe Index specification adopted 46.45 – 53.99 MJ/m<sup>3</sup>

Replacement cost for 75 million GAD compliant domestic appliances - €73bn

Insufficient information to revise I&C, Engines & Turbine cost estimate at – €46bn

Revised cost of appliance replacement: - €116 bn

Significantly larger than predicted benefits of harmonisation



## Support for Regional Harmonisation

- Gas does flow across borders without apparent restriction eg from Spain to France
- Several local specifications close or wider than EASEE-gas eg France, Germany and especially Spain

