

CEN/Liaisons Sector Forum Gas - Marcogaz

- CEN Sector Forum Gas (SFG) encompasses all technical committees which conduct gas-specific standardisation activities
- Marcogaz Standing Committee Sustainability dealt with all environmental issues: technical documents and specifications on emissions, health & safety (EU legislative framework)
- SFG is composed of 2 groups:
 - ▶ SFG_Utilisation (Gas Appliances)
 - ▶ SFG_Infrastructure (Gas Networks)
- ▶ Both groups have elaborated an [environmental guide](#) respectively

Current Situation in the Environmental EU Policy Context

CHALLENGES

Energy efficiency and GHG reduction, consequences:

- power generation from renewable sources (e.g. wind): gas power plants shut-down
- insulation of buildings (EPB Directive): gas appliances (e.g. boilers) replaced by electrical ones in the residential and partly commercial sector.
- ▶ gas consumption regularly decreases, infrastructure (grid and equipment) has still to be maintained although the budget is no longer balanced ⇒ closures – job losses

Facing the challenges

However positive role in reaching the objectives of the EU environmental policy:

Energy transition: decrease of fossil energy over some (?) years

- injection of renewable sources in the gas grid: hydrogen and biogas
- Power to Gas concept (storage, electrolyse, mechanisation)
- new technologies of gas appliances: micro-CHP (co-generation), gas heat pumps ⇒ all combined with renewable sources as hybrid systems



Subject to standardisation activities

Standardisation

Gas Appliances: environmental clauses

- existing standards completed by requirements from directives: Eco-design/Labelling (NO_x)
- new standards on new technologies dedicated to better efficiency and emissions reduction: generally better burner techniques, micro-co-generation, heat pump hybrid systems
- LCA reference to, guidance document, not completed in all appliance standards

Benefits: *manufacturers rely on harmonised standards as evidence of compliance with the whole environmental legislative framework, not only regarding the EU directives but also the national rules from the Member States.*

Standardisation

Gas Infrastructure: environmental clauses

- environmental guidance document CEN/TR 16388 as basis; last update: annex “adaptation to climate change”
- review of standards where applicable
- continuous information on the environmental EU policy (directives, events, road maps, etc.)
- efficiency and environment are linked

Standardisation

Gas Infrastructure: environmental clauses

BENEFITS

Environmental Sections in the standards

- support and substantiate the management system of the network operators (TSO/DSO) in a general manner
- particularly implement relevant aspects of the environmental policy of the company and consequently contribute to fulfilling the certification requirements (e.g. audits ISO 14000)
- reduce the amount of internal work in the company (especially small ones) which otherwise would have to draft more specifications to demonstrate compliance with the EU legislation

Standardisation

Gas Infrastructure: example of EN 12186

- EN 12186 gas pressure regulation stations (TC 234 WG 6)
- different locations: cabinet (open air), underground (pit, buried) ⇒ specific requirements
- internal working procedures of the company taken into account: leeway for the network operator (functional standards)

Standardisation

Gas Infrastructure: example of EN 12186

Whole clause 5 “Environmental impact” dedicated to environmental measures, particularly:

- consideration of the whole life cycle, from the design/planning up to the disposal
- taking care of the surroundings (ground water, dwellings/noises)
- Disposal of sensitive and waste materials (e.g. lubricants, oil, chemical substances)

Standardisation

Gas Infrastructure: example of EN 12186

Some further examples:

- methanol used for avoiding hydrate formation (Clause 8.3 gas pre-heating)
- noise control (clause 8.5), including environmental acceptance (clause 8.5.2)
- Generally for all technical gas stations: relief devices only permitted in few justified cases

Standardisation Marcogaz Contribution

Technical Guidance Documents on estimation and calculation of emissions to air possibly to be passed on to, CEN/SFGas for implementation in the standards

Experts in the CEN/TCs are often those from Marcogaz (practical and daily experiences in their companies and testing houses)