

## POSITIONING, PROFILING AND PROMOTING NEW GAS APPLIANCES

Henk Ensing (member of IGU WOC 5.2)

GasTerra B.V.

P.O. Box 477 - 9700 AL Groningen, The Netherlands

henk.ensing@gasterra.nl

### Background

The gas industry faces a challenging period in which promising new or improved technologies have recently been or are about to be launched onto the market. New technologies which make efficient use of natural gas and contribute to the reduction of emissions. Technologies that also bring with them new opportunities for:

- the gas sector in general;
- gas utilities;
- manufacturers;
- installation companies;
- housing corporations;
- building managers.



These new technologies include:

- Gas-driven heat pumps.
- Hybrid systems: gas boilers combined with an electric heat pump.
- Micro-CHP. At present, the concepts are largely based on Stirling engines, but designs with Otto engines and micro-turbines are also possible. Another system is the fuel cell with which a high electrical output can be achieved.

### Window for market launch

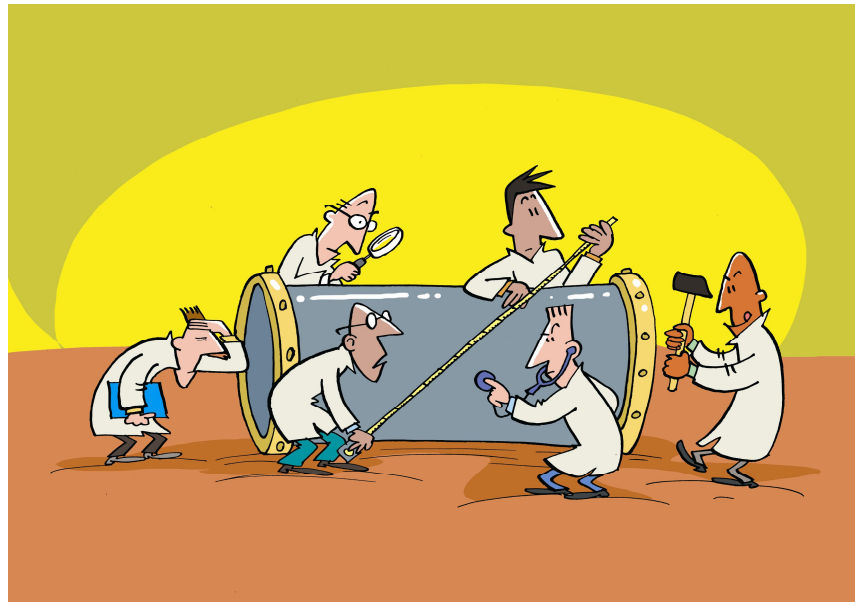
Over the past year, there have been some changes in the development phases/processes within the different technologies. One example is the developments surrounding micro-CHPs based on a Stirling engine and the development of fuel cells. The Stirling-based micro-CHP officially came onto the market in 2010. Fuel cell technology is developing faster than originally expected. It is therefore likely that FCs will become available in large numbers in the fairly near future. A validation of new technologies, their development stage, performance, usability, market potential, estimated pricing and market availability is needed in order to be able to concentrate on the right technology or technologies within the right timeframe.



## Positioning and profiling of new gas appliances

Within this context, it is clear that it will become increasingly important to evaluate these different technologies. Each technology has its own specific advantages and disadvantages in relation to such aspects as:

- Efficiency
- Pricing
- Reliability
- Handling and controlling
- Maintenance
- Product life cycle
- Sound level
- Weight
- Size



The simultaneous development of several new systems call for a clear view on the positioning of the available technologies in the market. Depending on product pricing and the country's energy policy and energy supply situation, among other things, it could be that a certain technology will receive a greater preference in one country than in another.

## Preconditions

### *Appliance performance*

It is not just a view on technical issues and system performance that is required. In order to get a clear idea of the technologies and their market potential, it will be necessary to give some consideration to the commercial pricing of appliances. Energy cost savings, product life cycle and appliance subsidies are other elements that will need to be taken into account in the evaluation.

Moreover, regulations should not become a prohibitive barrier to the development and introduction of new technologies.

### *Availability of gas & infrastructure*

The estimated market potential will also depend on the image of natural gas and its availability in volumes in relation to time/years. In general, building managers make their investments for new climate installations based on the point of view that an installation will be in operation for between one and three decades.



## Creating market demand

### *Promotion*

Developing a new gas appliance for the built environment/sector does not end when it is finally completed. All the players in the market segment - from energy utilities to construction companies, housing corporations, central and local government, policymakers, decision makers, relevant umbrella organisations, installation firms, and consumers/customers – must be accurately and consistently informed of the advantages of new systems.

Integrated promotion and a consistent message by all the market players directly involved is essential in order to establish wide, professional promotion. Within this context, there is also an important role for the gas industry to play in creating and gearing up market demand through intensive promotion of the general concept or innovative system. The promotion of the concept should be followed up by the manufacturers who can promote their brand together with the individual product specifications.



A number of market players (e.g. installation firms) prefer to concentrate on business as usual since the introduction of new technologies brings with it economic risks. Extra investments in time and money are also needed to gain new expertise and experience.

In the Netherlands, installation firms and the energy utilities are the main ambassadors for new efficient gas appliances. By offering training programmes to installers, more commitment could be generated from this sector.

### *Activities*

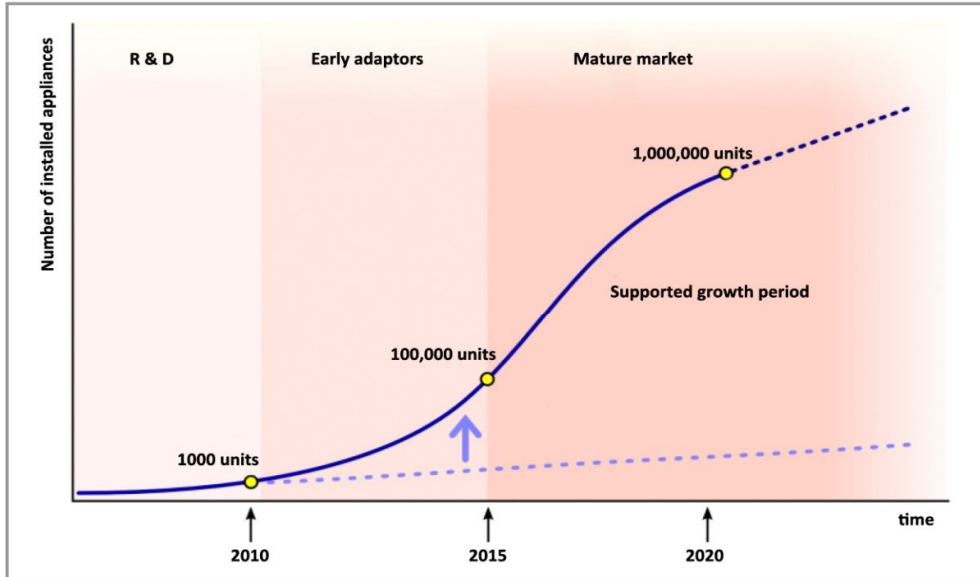
The following activities could form part of an effective promotion:

- Establishing a website/portal for a technology.
- Organising an annual micro-CHP (gas heat pump, fuel cell) day/conference.
- Establishing a branch organisation/foundation.
- Generating support from environmental organisations. If well-known environmental organisations support an innovative gas technology as independent entities, an even stronger market push could be achieved.
- Financial support by the government. Even if it does not really prove necessary, this would be a strong positive message that the government financially supports the introduction of innovative gas applications. Even if the subsidy mainly has a 'symbolic' value.
- Making available an appliance to a VIP (e.g. prime minister) who can provide it as a gift to a societal organisation.

### **Summary**

In view of the development, marketing process and roadmap for new appliances, the following aspects should be clarified as far as possible in advance:

- Market potential, market expectations
- Appliance efficiency
- Reductions (CO<sub>2</sub> emissions, energy costs)
- Performance (reliability, maintenance, sound levels, size, weight)
- Development of product pricing
- 'Appliance effect' scenario for the country concerned
- General economic benefits
- Critical Success Factors



Market acceleration from niche to mass market

During the process, the development stage of other appliance technologies should be carefully monitored in order to have the right technology available at the right time and in the right place.