

25th world gas conference "Gas: Sustaining Future Global Growth"

Positioning, profiling and promoting new gas appliances



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Patron



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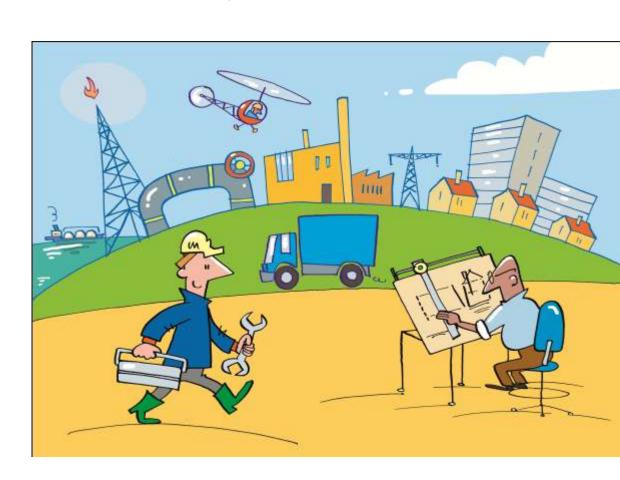
New technologies, new opportunities



- Micro-CHP (Stirling, Otto, micro-turbine, fuel cell)
- Gas-driven heat pumps
- Hybrid systems

Challenges

- Gas sector
- Gas utilities
- Manufacturers
- Installers
- Housing corporations
- Building managers







Increasing amount of technology options:

- Fuel Cell technology
 developing faster than
 expected affecting Stirling
 & IC based micro-CHP's?
- Increasing interest for gas heat pumps - affecting micro-CHP?



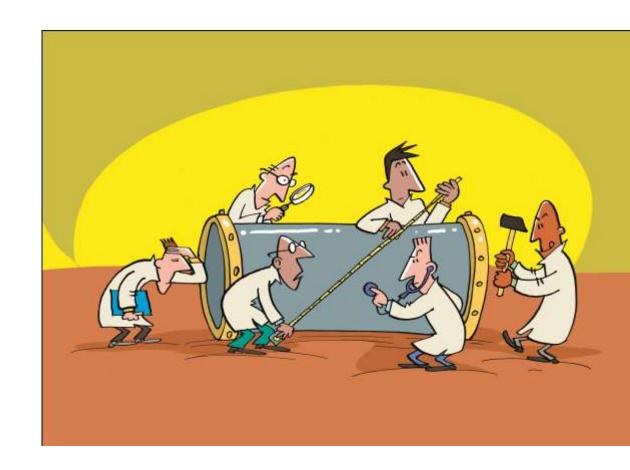




The right technology on the right spot within the right timeframe

Validation of

- Technologies
- Development stage
- Performance
- Efficiency
- Usability
- Market potential
- Pricing preview (economy)
- Product availability
 (scaling up production)



SWOT & CSF's

Product properties/performance



- Reliability
- Life cycle
- Maintenance
- Handling and controlling comfort
- Sound level
- Weight
- Size

Preconditions



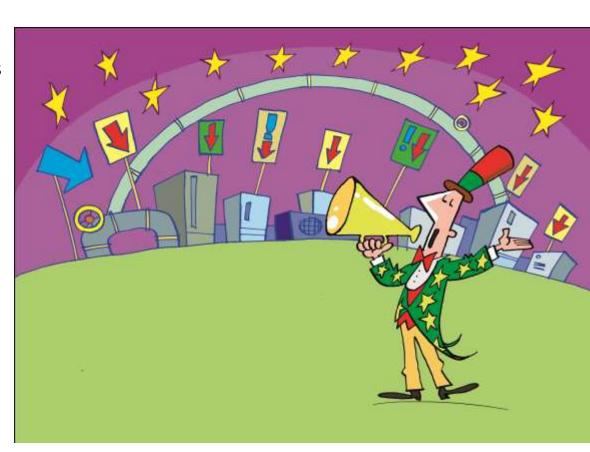
- Product performance
- Energy cost saving
- Emission reduction
- Acceptable product pricing
- Support government
- Transparent, barrier-free regulation framework
- Availability gas & infrastructure



Creating market demand



- Demonstration projects
- Integrated promotion
 - Concept/system: gas industry
 - Brand/product: manufacturers
- Consistent message
- Promotion tools/actions
 - Training sellers/installers
 - Website/portal
 - National annual product conference
 - Establishing support environmental organisations
 - Financial support
 - Free product supply VIP

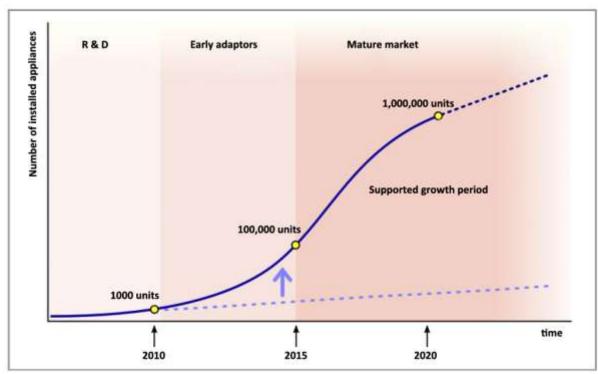






Conclusion

Carefull, consistent, interim monitoring of product and market development phases



Market acceleration from niche to mass market

Mass market development (2)



- Smart grids & smart appliances/systems
 - Shift electricity usage & consumption
 - Energy profiles become less predictable
 - More attention for energy systems as a total instead of individual approach

Natural gas supports increase of sustainable E-production with flexibility

