COUNTRY EXPERIENCES ON HFC REGULATIONS & POLICIES

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OVERVIEW

1. Historic development
2. Possible measures and legislation
3. Experiences and lessons learned
HISTORIC DEVELOPMENT

- Austrian Regulation on HFCs, PFCs and SF$_6$ in 2002
  - Restrictions for use and placing on the market for certain applications of fluorinated greenhouse gases
  - GWP thresholds

- EU-F-Gas Regulation (No. 842/2006)
  - Leakage reduction
  - Quota system
  - Certification of personnel and companies
  - Recovery and recycling obligation

- EU-F-Gas directive (No. 2006/40) on emissions from air-conditioning systems in motor vehicles

- EU-F-Gas Regulation (No.517/2014)
OBJECTIVES OF THE F-GAS-REGULATION (EU) 517/2014

• Reduction of the quantity of HFCs placed on the market (phase-down)
• Emission reduction and containment
• Reporting
• Mandatory recovery and recycling
• Education and certification schemes
• Labelling of HFC containing products
• Use restrictions in certain applications
• Restrictions for placing on the market
MEASURES (1) – PHASE DOWN OF HFCS

- Quota system: reduction of HFCs placed on the market down to 20% as compared to the average of 2009 – 2012 baseline
- Calculation of quantities in CO₂-equivalents
- Electronic registry for quota allocations – all suppliers of F-gases must be registered
- Reporting on production, imports, exports, feedstock uses and destruction of HFCs
- Quota obligation also applies to equipment containing HFCs
MEASURES (2) – PREVENTION OF EMISSIONS

• Intentional release of fluorinated greenhouse gases is prohibited where the release is not necessary for the intended use
• Operators of equipment containing HFCs have to take precautionary measures
• Leakages have to be reduced to a minimum
• Strict servicing cycles for F-gas containing equipment
• Detected leaks must be repaired immediately
• Servicing operations must be conducted by certified technicians, the company needs to be certified as well
• Mandatory leakage detection systems
• Record keeping - to be delivered to the competent authority on request (random checks)
MEASURES (3) – EXAMPLES FOR USE
RESTRICTIONS FOR PRODUCTS AND EQUIPMENT

• 2008 – One component foams containing HFCs with a GWP > 150
• 2015 – Domestic fridges (for HFCs with GWP > 150)
• 2020 – Stationary refrigeration equipment (GWP > 2500)
• 2020 – Moveable room air-conditioning equipment (GWP > 150)
• Single split air-conditioning systems (GWP > 750)
• 2020 – XPS foams (GWP > 150)
• 2023 – other foams (GWP > 150)
• 2018 – Technical aerosols (GWP > 150)
EXPERIENCES AND LESSONS LEARNED (1)

• Use restrictions easy to control, this is also the case for placing on the market of products and equipment
• Certification for technicians and companies difficult to establish but very effective once operational
• Training schemes and certification regulations (+ bodies) need to be established
• Labelling of products has been considered helpful for consumer awareness and inspections
EXPERIENCES AND LESSONS LEARNED (2)

- Quota system requires good collaboration between implementing authorities, in particular with customs offices.
- Quota system effective for substances and mixtures, so far little experience for extension to products and equipment containing HFCs.
- Move from metric tonnes to CO$_2$-equivalents provides an incentive for replacements and/or alternatives with lower GWP.
- Customs authorities should cooperate with inspection authorities.
THANK YOU!

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