

THyGA WP4

Hints for discussion - Electrolux

General items



Gas appliances fall under EU regulation 426/2016 for safety and EU 65/66 2014 for Ecodesign and Energy Label.

- Product certification is not possible without modifications also in the legislation for gas appliances.
- Electrolux will see impact on Domestic and Professional Cooking, Catering, Barbeques, Water Heaters, Gas Dryers:
 - Define and evaluate the meaning and content of “H2Ready” and “H2NG compatible” product ranges to achieve tangible CO2 emission reductions within product usage (usage is 80-90% GWP of gas products)
 - How will the use of H2 impact the sustainability or the LCA of the products?
 - Different scenarios in relation to how appliances would need to be adapted or retrofitted:
 - simple factory pre-setting
 - on-site adjustment
 - H2 Ready with conversion kit, part replacement
 - specific design

Technical items



- Hydrogen blends:
 - how much? 2%, 5%, 10%, 20%, ...
 - Could different national approaches be a barrier with hydrogen blends % variations country by country?
 - Percentage variability over time or compatibility with NG100%? Limit gas must include this variability
 - Are all H₂ the same (CH₄ reforming vs hydrolysis)?
- Appliances already on the market: which strategy for them?
 - Support sells for (x%) Hydrogen ready appliances in order to prepare transition (labeling?)
 - Retrofit kit? Is it to be defined a backwards time limit with incentives?
- CEN TC 49: showed interest in WP8 (end uses) for the pre-normative requirements «PNR H₂NG/H₂ IN NG SYSTEMS» lead by CEN TC 234; no specific activity running so far

Other items



- The need for Certification, Homologation or backward compatibility could drive the business model for adaptation: uncertainty about H2 introduction and impacts could lead consumer towards electric appliances
- Supplier competence and component readiness?
 - Alignment with potential impacts and development schedules
 - Component readiness for H2NG vs Town Gas?
- Testing activities to be updated:
 - unburnt H2 → any limit?
 - unburnt HCN → any limit?
 - NOx → any limit?
 - Gas leakage tests: criteria for limit flow Rates and test pressure; test with air comparison
 - Shall test instruments and requirements be adapted to H2 flows?