The first meeting of WG3 “Calculation methods” on the review of the Ecodesign and Energy Label Regulations for space and water heaters took place on the 10th of March 2020. Please, find enclosed MARCOGAZ’s comments:

1) Hybrid boiler and boiler+HP

MARCOGAZ supports the work of VHK in introducing a more realistic and reliable method for the measurement of the energy performance of hybrid appliances.

The definition of an “hybrid appliance” has not been formally fixed yet (except for the approach given by the existing Eco-design Regulation in force under the term "heat pump space heater"). For this reason, and in order to avoid misunderstanding, the coupling of both units used to set up an “hybrid appliance” must be open to discussion together with the interested parties (manufacturers, gas operators...).

A combination of two high performance appliances (e.g. gas condensing boiler and electric heat pump completed by a control unit to optimize the operation of both generators) could be a solution to improve the efficiency of space heaters under the term "hybrid heat pump".

However, MARCOGAZ is cautious when considering a hybrid appliance as a “black box”. Marcogaz prefers to consider hybrid as a single appliance able to provide heat, cool and hot water and asks for including this view in VHK works.

2) Measure of Hybrid boiler’s Energy Efficiency

Marcogaz wishes to remind on the activities of CEN/TC109 regarding hybrid boilers.

For a few years now, CEN/TC109 has been working on the development of hybrid draft standard prEN15502-2-Y as specific part of the Generic standard for gas boilers EN 15502-1.

The objective is to cover first Gas Hybrid Boilers as “single product” complying to European Ecodesign Regulation.

This draft takes into account:

- all relevant requirements (safety, environmental and specific) due to the coexistence of refrigerant and gas combustion in the same product.
Gas Hybrid Boilers shall be able to reach flow temperature of 80°C: new test conditions are needed for renovation market.

To elaborate this draft, CEN/TC109 has been working within a Joint Working Group with CEN/TC113 (in charge of EN 14825) to discuss different test and calculation methods, dealing among other issues, about:

- Definition: only one definition for Hybrid in CEN/TC113 and CEN/TC109 standards (and notes can be added to say that “Hybrid Heat Pump” and “Hybrid Boiler” are the same appliances),

- Draft standard prEN15502-2-Y will deal with NOx, safety (ref. Gas Appliances Regulation 426/2016, (can add other testing conditions) and refer to EN 14825 as only reference for efficiency test (seasonal space heating efficiency as required by Eco-design Regulation),

- Simplified test method, proposed by CEN/TC109/WG1, is being discussed with CEN/TC113/WG7 to be introduced in future EN14825 revision. The goal is to limit and optimize the number of test points.

Marcogaz wishes VHK to take into consideration that a calculation method is already being developed by the 2 concerned Technical Committees (for hybrid boiler with gas boiler) and that this method should be considered and assessed.

### 3)MEPS of fuel Boilers – Correction Factor (F1)

In Europe the rate of boiler’s replacement is very low, we need very efficient solutions like heat pump, hybrid boilers and also condensing boilers if we want to achieve the required CO₂ emissions cuts.

Marcogaz believe that the policy priority for the short term is to target the renovation of inefficient appliances installed avoiding changing MEPS and calculation method of new, already efficient fuel boilers.