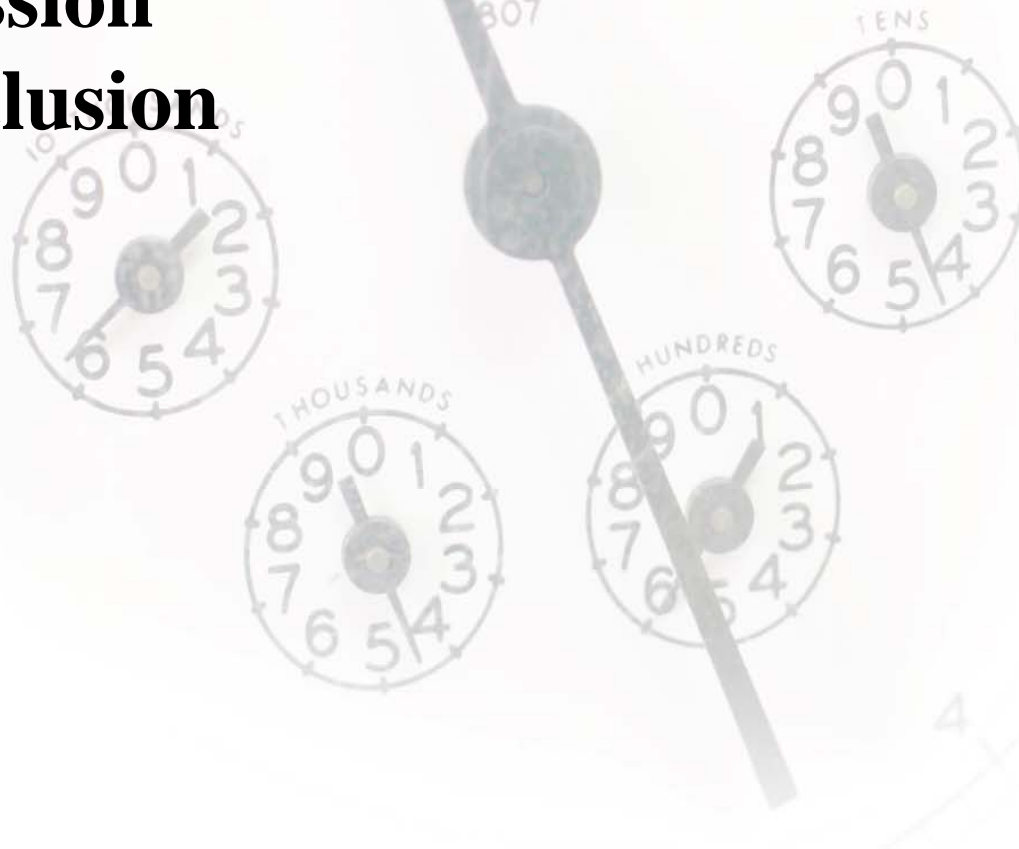


Part 4 What now?

- 1) LABTQ proposal
- 2) Discussion
- 3) Conclusion





LABTQ

Proposal for co normative work
in support of the ECO design

LOT1 and LOT2

Will the standards developed or (existing) propose test methods that are accurate & reproducible enough for an uncontroversial application of the directive?

→ For a number of products such as **gas heat pumps or Micro CHP**, the technology is new and so does the standards. Moreover the technologies are much more sophisticated compared to traditional central heating boilers and the testing procedures that applies to boilers cannot be simply transposed to those new technologies.

Validation through Inter-comparisons would be useful

ECO design LOT1 & 2 ambition is to compare various technologies using different energies but having the same function. However the standards for the testing have been developed by different industries and a very important question is raised by the equivalence of those standards including their accuracy. It is of highest importance to be sure that the standards sue do not introduce some discrepancies in the comparison of the appliances /technologies due to the design of the testing method but to physics only.

What does LABTQ propose?

- We simply propose to test “ECO design” part of the present standards with the goal to identify laboratory test issues and collaborate with the relevant TC in order to improve the procedures that may bring problems so that the standards are ready for use when the directives enter in force.

Why using LABTQ labs to execute the work?

The whole work aims at improving testing standards and not laboratory ability to test given products.

Therefore we need to be sure that when two laboratories are obtaining different test results it is because the test procedure is not well designed and not because labs have measurement problems.

Therefore LABTQ laboratories having worked together since 1990 and having organized regularly round robin test offer the best guarantee that through the programme proposed, the standards are tested and not the laboratory proficiency.

What do we propose in practice (open for discussion)?

In practice we suggest the work shall be organized the following way:

- Part 1: Product standards
- Part 2: horizontal issues

Part 1: Product standards

- ECODesign test can be carried out on one appliance of the following technologies:
 - mCHP stirling engine
 - mCHP fuel cell
 - mCHP motor
 - Gas heat pump air/water absorption
 - Gas heat pump air /water motor based
 - Electrical heat pump water –water
 - Electrical heat pump air-water
 - Solar panel
 - Instantaneous water heater
 - Combi boiler with a water tank

Work programme per appliance

- 2 or 3 laboratories having a recognized expertise in testing a given technology will be selected to execute ECO design testing on the given appliance. In practice only one appliance will be needed.
- The first laboratory will test the appliance according the existing standard. Any missing point in the testing procedure will be noted and discussed by telephone/email with a small group of experts (“follow up group”) that will comprise (test laboratories – those involved in test but also more that are used to do test of the given appliances -, manufacturers, members of the CEN TC).

- The existing standard will be amended/ corrected by the first laboratory based on the discussion above mentioned.
- The first laboratory will continue the test, or perform the test again with the amended procedure when needed.
- At the end of the test by the first laboratory a report will be issued (including test results + explanation of the changes in the standard) and a new experimental and complete standard will be issues and will be delivered to the second laboratory
- The second laboratory will perform the test according the new experimental protocol.
- Possibly a third one, but this is an option to be discussed for the moment.
- Once test are executed, the results are sent to the follow up group and conclusions are made. Possibly the group can make new amendments to the “experimental standard” that is then sent formally to the given TC.

Part 2 Horizontal issues

We have identified two horizontal issues:

- NO_x
- Standby loss

Possibly other issue can be considered

- CO (There are no CO requirements in the ECO design documents, but CO is included in the mandate and will most probably be included in the future revision of ECO design)
- Noise