

<b>Topic</b>	Minutes of the 3 <sup>rd</sup> Technical Working Group Meeting: Ecodesign/ Energy Labelling Preparatory Study: High-Pressure Cleaners (HPC)
<b>Day &amp; Location</b>	17 June 2019 – Avenue Beaulieu 5 Brussels (Belgium)
<b>Project Team</b>	Pierre Henry (Chair – DG ENV); Ruben Dekker (DG ENV); Rocío Rodríguez Quintero (JRC); Dimos Paraskevas (JRC); Jan Viegand (Viegand) as expert.
<b>Participants</b>	8 participants from: <ul style="list-style-type: none"> <li>• 1 Member State: UK.</li> <li>• 3 HPC manufacturers: Kärcher; Dibo; Bosch;</li> <li>• 2 trade associations: European Cleaning Machines Association - EUnited Cleaning; European Garden Machinery Industry Federation</li> <li>• 1 NGO: The European Environmental Citizens' Organisation for Standardisation - ECOS;</li> </ul>

*The agenda of the 3<sup>rd</sup> TWG as well as the presentation and minutes of the meeting have been uploaded to the project website:*

<http://susproc.jrc.ec.europa.eu/HighPressureCleaners/documents.html>

### Update of timeline and Task 1 to 4 chapters of the preparatory study

The JRC team presented an update of the timeline of the project and the main changes in Task 1 to 4 chapters of the preparatory study, as result of the consultation carried out in the previous months. The main change has been the alignment, as recommended by stakeholders, of the proposed scope with the scope of the safety standards for HPC, setting the upper limit pressure to 35 MPa. The main comment was that the project team should ensure that the exclusion of above 35MPa from the scope will not reduce the level of the overall potential savings of the product group. It was also clarified that the cordless and battery driven HPC are within the scope, even if currently very few of them are on the market.

### Task 5: Environment and economics of base cases

The JRC team presented the outcomes of Task 5, where 6 base cases were identified and analysed applying the Ecoreport & Ecomodelling tool for the LCA and LCC, both at unit and EU market levels. One stakeholder, asked whether in calculating the CO2 emissions at EU level over the coming years, the decarbonisation of the electricity mix and other CO2 mitigating policies expected to be implemented in the EU in those years are taken into account. JRC and Viegand replied that these values are set by default in the Ecoreport tool, and that MEErP recommends a constant value that is the average carbon intensity of a decade. The same stakeholder also asked about the heavy metals emissions, since the EU and national legislation forbid the emissions of hazardous substances. The project team explained that those emissions may come from other stages of the life cycle such as extraction of materials or electricity production. It was indicated that information about the Ecoreport tool is publicly available for a better insight on the life cycle stages.

## Task 6: Environment and economics of design options

The JRC team presented the outcomes of Task 6 where the design options are identified and evaluated applying LCC and LCA. Stakeholders stressed the lack of a test method to measure the effect of the nozzle design on cleaning performance. This issue would be further discussed as part of Task 7. However, they generally agreed that the nozzle design is a key aspect in the overall performance of the domestic HPC. Stakeholders from the professional sector raised doubts as to whether the nozzle design could be significantly improved in professional and industrial machines, as these machines are typically sold with a range of specialised nozzles, for different surfaces/purposes. The team acknowledged that the impact was based on the test results on domestic units and asked for any data relating to nozzle performance for professional machines.

Another comment was about the design option "improvement of motor-pump efficiency". Some stakeholders raised concerns that more efficient pumps are often also larger and/or heavier and requirements on pump efficiency could therefore require the redesign of the case and make HPCs larger and less easy to move and use. This may add an extra cost to this option or even make it technically and economically unfeasible. The project team acknowledged that a large proportion of the electric motors in domestic HPCs use universal motors, which are cheap, and usually operate at low efficiencies and low lifetime, whereas professional HPCs use induction motors with higher efficiency levels and longer lifetime, which are larger and heavier than universal motors. However, the project team explained that the proposed design options would not require domestic motors to switch to induction motors, as they would set a minimum efficiency that is currently being achieved by around half of domestic HPCs on the EU market. Potential requirements on motor or motor-pump energy efficiency may however require a change in the 'International Efficiency' (IE) class of motors used for professional units. In this regard, stakeholders highlighted that the increase of efficiency of induction motors in professional units may entail different volumes and weights and therefore redesign of the case may also be necessary within the same type of motors. They would provide further information about this issue, already submitted for the revision of Ecodesign measures for motors.

## Task 7: Policy analysis and scenarios

JRC team presented the policy options and the potential scenarios to develop ecodesign/energy labelling measures.

### Policy measure: ecodesign or energy labelling based on cleaning performance

The proposal envisages that a standardisation request is launched in parallel to the implementation of the proposed measures and that the cleaning performance measures would be added during the revision of the measures for this product group, once the standard is published. Stakeholders foresaw difficulties in preparing the standard and doubted it would be ready by the time of the revision. The main reason for this was the complexity of developing a test method to represent the real use of HPCs. As discussed in previous meetings, the manufacturers explained that the variety of soils and surfaces, the user behaviours and the different types of nozzles could not be easily captured by a test method. For professional machines, the variation in soil/surface/type of nozzle is larger, which makes it even more difficult. Besides, some manufacturers of professional products do not design their nozzles, but they purchase them to suppliers, so they are not able to comment on whether nozzle design can be improved. The project team clarified that the test method would be for the product, meaning that any technology or design besides the nozzle that may improve the performance would be captured by the test.

### Policy measure: durability and reparability

Stakeholders asked whether the requirements proposed for durability and reparability were in line with the work DG ENV and JRC are developing on scoring system and resource efficiency. The chair replied that those projects were still ongoing and that the proposed requirements followed the same structure as recently approved Ecodesign revisions (Washing Machines and Dishwashers). In this regard, a stakeholder indicated that the definitions within the resource efficiency project differentiate accessibility from disassembly and recommended to take them into account.

The repair cost was also raised as an issue to implement this measure in the low segment. Manufacturers argued that the user will not be willing to pay the repair cost of these cheaper machines. The additional cost of lifetime extension would also affect this market segment. Manufacturers strongly recommend taking into account the different price ranges of high pressure cleaners. They also indicated that battery driven units may not be able to fulfil the test since they were limited to the battery capacity.

DG ENV referred to studies showing that the consumers could be willing to pay a little more for more durable/reparable products. In that regard, there was also some confusion about durability requirement and its link to legal guarantees. It was clarified that the requirement would be based on a test method, whose result should be above a minimum value. This value would not be related to the guaranteed lifetime. Enforcement of any minimum requirement on durability would be the responsibility of market surveillance authorities, whereas commercial guarantees fall under consumer law.

Manufacturers showed their concern about the reduction of sales due to longer lifetimes and their impact on employment. JRC indicated that according to the tests, many domestic products comply with the requirement proposed and therefore some brands would be more resilient than others. Furthermore, the modelling shows there is room to grow due to larger market penetration. Data on employment will be provided by stakeholders.

Finally, JRC team asked the opinion of stakeholders about the option of using durability tests to determine the boundary between domestic and professional products. Stakeholders would provide comments and data on this question.

### Policy measure: minimum efficiency of motor-pumps

The test method needed to measure the efficiency of motor-pumps was also discussed. The stakeholders criticised the formula, arguing that the maximum pressure and maximum flow were never achieved at the same time, and that the values declared by manufacturers were not always reliable. The project team explained that in that case a transitional method would be developed that include measurements of power, pressure and water flow, and asked them to propose alternative metrics and formulas, accompanying them with data of representative machines.

Another comment from manufacturers was about water preheating with motor cooling. They did not see how the motor-pump efficiency would take waste heat recovery systems into account. It was also indicated that machines work at lower load in detergent-using modes (up to 50% of the maximum input power). JRC indicated that the thresholds and test conditions can be further elaborated and adjusted within the transition method development.

### Uncertainty and sensitivity analysis

The project team requested the stakeholders views on the assumptions made for modelling the scenarios:

- Usage pattern (frequency and time per use of high pressure cleaners)
- Market share of non-compliant products
- Average performance of products (motor-pump efficiency, burner efficiency and energy consumption and saving potentials)

The project team also asked for information to model water consumption scenarios that had not been produced due to lack of data. The information requested is: average performance and performance of best products in water consumption.

Stakeholders agreed with the average value of burner efficiency assumed in the model (80%) but were not able to provide further information on the rest of questions.

### **Next steps**

- Stakeholders' feedback to be provided to the project team regarding the presented 1<sup>st</sup> draft of Tasks 5 to 7 of the preparatory study through BATIS.
- The deadline for comments is extended to September 8
- After receiving all stakeholders' comments, the project team will revise the documents accordingly.