Meeting Minutes of the 1st stakeholder meeting of the **Preparatory Study on Professional dishwashers**

Project Preparatory study and impact assessment support study on professional dishwashers

Event 1st stakeholder meeting of the Preparatory Study on Professional dishwashers

10 December 2024, 10:00 – 17:00 Date & time

Hybrid: "Centre de Conférences Albert Borschette", 1049 Brussels & Online Location

Available at https://ecodesign-commdishwashers.eu/en/stakeholder-meetings **Documents**

Participants Partner/Institution **People**

> VITO Frank Meinke-Hubeny

Kathrin Graulich, Martin Möller, Oeko-Institut

Carl-Otto Gensch

Trinomics Laurent Zibell, Lucia van den Boogaart

Marco Mense; Mieke de Jager;

Ecomatters Maria Papavasileiou

Fraunhofer IZM **Eduard Wagner**

European Commission Wojciech Sitarz (ENV); Ian Hodgson (ENER)

Ali Group Marco Brugnolaro **APPLIA** Mattia Merlini Aristarco Claudio Lugnan

Belgium – FPS Economy Joachim Nelis

Bonferraro Alberto Brunelli, Diego Ziviani

CEFIC Bernd Kappenberg Comenda Alessandro Rigo

Compliance & Risks Michelle Walsh DIHR - Ali Group Claudia Vezzaro

Ecolab Marion Zwingenberger

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Electrolux Professional Fabio Sinatra

etol **Wolfgang Gauss**

FEICA Dimitrios Soutzoukis

Britta Rummler **FH Muenster**

Germany – Ministry for Economic Sascha Neuendorf Affairs and Climate Action (BMWK)

Germany – German Environment

Agency (UBA)

Germany – Bundesanstalt für

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Gunar Gebauer; Kerim Zaidi

Andrea Harrer

Partner/Institution	People	
НКІ	Andreas Helm, Sascha Deisel	
Hobart	Klaus Padtberg; Verena Wiedenhöfer	
ICF	Tom Lock	
Malta Competition and Consumer Affairs Authority (MCCAA)	Ruth Baldacchino Scerri	
Miele	Andreas Brömmelhaus; Luise Christmann; Ralf Voßhans; Sarah Masmeier	
Netherlands – NL Enterprise Agency	Hans-Paul Siderius	
Sika Switzerland	Nathalie Kowalski	
SMEG	Eliseo Mantovani; Matteo Rigano	
Sweden – Swedish Energy Agency	Carlos Lopes	
Switzerland – Federal Energy Agency (BFE)	Eva Geilinger	
Topten Switzerland	Nadja Groß	
VDE	Ina Hook	
VGG	Thomas Näger	
Viegand Maagoe	Annette Gydesen	
Wexiodisk	Magnus Ericsson	
Winterhalter	Markus Gessler	
ZVEI	Theresa Seitz	

Agenda:

Time	Торіс	Presenter	Institution
10:00	Welcoming / Opening Remarks from DG ENV	Wojciech Sitarz	DG ENV
10:15	The Ecodesign for Sustainable Products (ESPR):	Wojciech Sitarz	DG ENV
	State of play		
10:30	Overview of the Preparatory Study	Kathrin Graulich	Oeko-Institut
10:45	Task 1: Scope and definitions	Martin Möller	Oeko-Institut
11:30	Task 2 – Market analysis:	Laurent Zibell	Trinomics
12:15	Lunch break		
14:00	Task 3 – Users	Kathrin Graulich	Oeko-Institut
14:45	Task 4 - Technologies	Martin Möller	Oeko-Institut
15:30	Coffee break		
16:00	Under discussion: (Extended) EPREL vs. DPP approach	Eduard Wagner	Fraunhofer
	for Professional Dishwashers		IZM
16:20	Outlook: Task 5 – Base Cases	Marco Mense	Ecomatters
16:40	Next steps	Kathrin Graulich	Oeko-Institut
16:50	Closing remarks	Wojciech Sitarz	DG ENV
17:00	End of meeting		

1. ESPR – State of the Play

 The current Member States expert group of the Consultation Forum will be a sub-group of the Ecodesign Forum set by the ESPR. There will be a permanent call for applications where stakeholders can apply to participate in the Ecodesign Forum. Further stakeholders will be called to participate in specific meetings when they are relevant.

Task 1 - Scope: Presentation of the study results + discussion – Martin Möller (Oeko-Institut) Scope and categories of products

- One stakeholder confirms the main direction of the current study that the categories of the 2011 study could be kept and accepts that the term "commercial" dishwashers could be used instead of "professional". Regarding "industrial": since the term "designed and specifically marketed" can be used to delimitate respective categories (the approach is also applied in other professional product categories under EU Ecodesign), the study could rely on it.
- Industrial machines: Distinguishment between commercial and industrial use-cases (industrial: e.g. bottle-cleaning): current categories 5 + 6 are commercial, not industrial dishwashers. The application should be stated in the instructions from the manufacturers. Hence, categories 5 + 6 cannot be used for industrial purposes because commercial machines are not allowed for industrial usage. Both hygiene and performance standards exclude industrial machines. For the distinction it can be referred to the declaration of the manufacturer, i.e. the instructions for use and the Declaration of Conformity (e.g. for Electromagnetic Compatibility). For example, one stakeholder points out to the COMMISSION REGULATION (EU) 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers. In the definition of professional refrigerated storage cabinet 'professional refrigerated storage cabinet' means an insulated refrigerating appliance integrating one or more compartments accessible via one or more doors or drawers, capable of continuously maintaining the temperature of foodstuffs within prescribed limits at chilled or frozen operating temperature, using a vapour compression cycle, and intended for the storage of foodstuffs in non-household environments but not for the display to or access by customers; it was considered sufficient describing that are intended to be used in "non-household environments", giving for grant that the industrial sector is excluded. I.e., the term "nonhousehold" was used to distinguish from household and industrial use.
- **Professional dishwashers operated and heated by gas**: they seem to be no longer built or have not been built for several years. If it is confirmed that they are no longer manufactured, they could be excluded from the scope.

Definition of professional dishwashers / drying function

- The definition of professional dishwashers in the current study includes drying. According to feedback at the stakeholder meeting, however, it is very common that professional dishwashers do not include a drying function; for example, it was mentioned that only 30% of machines in Scandinavia have a drying function; many hood- or undercounter machines do not dry; more than 90% of batch machines do not have an active drying function; also for categories 5 and 6, the drying function is an option. For each category, the drying function is either an option or not.
- According to the stakeholders, professional dishwashers without a drying function should be included in the scope of the study and potential regulation, and not excluded due to the proposed definition.

Detergents

• Detergents and their impacts are part of the system to be investigated under Task 3 (Users) and Tasks 5 and 6. Detergents themselves will not be in the direct scope of a potential regulation on professional dishwashers, but the detergent consumption is dependent of the machines' design (that is subject to the potential regulation) which influences the performance (Sinner's circle principle). The performance and the hygiene standards include a specification of the detergents.

Standards

• Standard EN 50593 is not considered anymore as this standard was superseded by EN 63136.

New labelling scheme

• Feedback recently sent by a stakeholder raising the study team's awareness of the UK labelling scheme (the Energy Technology List which covers commercial dishwashers) was not yet included in the draft study report under the Third Country chapter in MEErP Task 1.

3. Task 2 - Market: Presentation of the study results + discussion - Laurent Zibell (Trinomics)

Stakeholders are invited to confirm or modify the data provided in the draft report and presented during the workshop.

Market share and split of product categories

- The NAFEM source is based on the American market. According to a stakeholder, the
 American market is very different from the European market regarding the split between
 categories. For example, one of the stakeholders stated that category 5 is more common the
 US. Also, the US market has different requirements in terms of features and performances.
- More European market data needs to be shared by the stakeholders; however, they have trouble to share figures on pricing or market share due to trade secrets, confidentiality issues and anti-trust rules as the group of stakeholders in this sector is so small that the data cannot be anonymised enough. The study team proposes as a way forward the same solution as what was done for professional laundry appliances, i.e. a neutral intermediary organisation such as APPLiA opens a "black box" repository for companies to provide their market data, which often is confidential. The data in this "black box" is only visible to the intermediary organisation, and is disclosed neither to the participating companies, nor to the consultant team or the European Commission. As soon as the number of companies having contributed to the "black box" exceeds a certain threshold, for example 4, the intermediary organisation released to the consultants the aggregated figures resulting from the sum of all figures received from the participating companies; the number of participating companies; the share of the total market that the participating companies represent.

Repair + maintenance costs

- A stakeholder indicated that the repair and maintenance costs are of interest but maybe only
 relevant to calculate the total costs. Until now there has been no product regulation where
 the repair and maintenance costs have been included as requirements so a rough estimate
 should be sufficient
- According to the study team, repair and maintenance costs are needed for the Life-Cycle
 Costing that accompanies the Life-Cycle Assessment of environmental impacts. Since e.g. a
 longer lifetime is likely to entail more maintenance or repair but less frequent new purchases
 or installations, knowing these costs is relevant to assess the economic impacts of the
 measure.
- One stakeholder argues that the costs of maintenance differ per Member State and per product, so that the maintenance cost should be sought as an average per year.

Refurbishment

• One stakeholder states that the report should clearly differentiate between "refurbishment" and "remanufacturing". An operation that would lead to machines that would have an energy performance updated would technically be "remanufacturing", where the machine needs to comply with the new requirements (at the time of the new placement on the market), whereas the "refurbished" product (= restoration of the initial product) only needs to comply with the requirements of its initial placement on the market and not with the newer requirements.

Heating, hot-water supply

- One stakeholder proposed to reconsider the use of warm/hot water connection.
- Overall, by heating directly, an improvement of the environmental impact may be possible.
 Hot water can be produced at a lesser energy cost than electricity, because of the low yield of
 the conversion of thermal energy into electricity in thermal power plants and of the transport
 & distribution of electricity, not to mention the possibility of solar thermal supply.
- However, another stakeholder advised not to focus much on this as it may be too complicated.
 It can be difficult to specify how it is produced vs. the electricity. Warm / hot water supply leads to a higher energy consumption because the water needs to be heated somewhere else.
 Further, it could be cumbersome to test a machine with a hot water supply.
- One stakeholder points out that you also have to consider that for instance heat recovery systems often need cold water to run.

Water savings (slide 69)

 One stakeholder pointed out that the most important feature for saving both water and energy is the number of cycles in which the water can be used. The more cycles you have, the more you can reduce the amount of water. In general: multiple tanks, with the dirtiest water closest to the drain. This principle applies to all categories. The stakeholder was asked to provide sources, but it is unclear whether this is available.

Market data on the share of the public sector

- The study teams asks if data can be provided regarding the share of public customers per category of dishwasher?
- Several stakeholders see this challenging as many services, e.g. the catering including dishwashing in public organisations like hospitals, are likely to be outsourced to private companies, so it is unclear who the end-user is (whether private/public).
- Further, it is difficult for manufacturers of professional dishwashers to know the destination of their machines, because the access to the market is organised via professional dealers.

4. Task 3 - Users: Presentation of the study results + discussion - Kathrin Graulich (Oeko-Institut)

There are some discrepancies in the numbers provided by stakeholders compared to the 2011 study. Not all manufacturers have responded yet, in some cases only one source was available, so cross-validation would be helpful; stakeholders should review the information and provide feedback.

Refurbishment

Stakeholders mentioned that some machines are refurbished by the manufacturers (for
example, sandoro gmbH is a sister company of Winterhalter specialised in online marketing),
but this represents only a small number of machines that have been in use only for a short
time (e.g. from exhibitions, closed restaurants etc.); i.e., the significance in the market is very
low. Manufacturers have very little data regarding refurbishment; they recommend asking
dealers/installers/service to gain more information.

Active mode

- Stakeholders asked for a clear definition of the term "active mode" (also in relation to "switched on" as the current way of presenting the data in the study may lead to misunderstandings and wrong answers from stakeholders. The study team explains that "active mode" is understand as the mode where the machine operates and performs the washing, i.e. it does not include the standby mode between different batches. "Switched on" time on the contrary, means the whole time of use per the day including the standby times ("ready to use", left-on mode, filling of the machine) on top the "cycle" times.
- The tables will be checked by the study team, perhaps the terms are based on 2011 and outdated (e.g. for categories 2 and 3, EN 63136 defines ready to use mode). There seem to be significant increases from 2011, which needs to be doublechecked by stakeholders as well.

Contact time

- Some stakeholders informed that standards defined and use the term "contact time" as it is difficult to talk of "cycle time" in conveyor-type machines. The contact time is defined by EN 17735 with separate definitions for batch and conveyor types of machines: "time during which the detergent solution impacts the wash ware; Note 1 to entry: For conveyor-type machines the contact time commences from the centre of first prewash nozzle and extends until the centre of the first freshwater rinse nozzle. For batch type dishwashing machines, the contact time commences upon start of the detergent circulation and lasts until the start of the freshwater rinsing."
- However, drying would not be included in the "contact time" (e.g. if 1 or 2 drying zones are added).
- Another manufacturer stated that they usually mention the term "productivity" (depending on the speed of the conveyor and its length to compute the duration of the process) instead of the "programme time" for their technologies.

Operational day / real-life data

- In real-life use the stand-by time is dictated by the operators and not by standardised standby or by the standby regulation. Also real-life energy use during use phase cannot be answered by the machine manufacturer as it depends for example on the way how the hot water is heated
- The number of cycles per day depend on the customers and might be lower in real life than
 indicated as theoretically possible by manufacturers (cycles per hour). One stakeholder
 suggested to start from the same number of dishes per cycle or year (as not more dishes will
 be cleaned in real-life) and then apply the real life usage parameters.
- One stakeholder suggested to present "an operational day" per category in the study report, for example in a graphic way (e.g. waiting for load, cycle, maybe another load etc.)
- Manufacturers indicated that they have very limited data on "real-world use" and suggest that
 rather professional end users (e.g., hotels, restaurants, institutions, etc.) should be consulted
 (in Germany for example represented by the association of hotels, small bars and restaurants
 (DEHOGA))

Programme duration / hygiene requirements (Slide 91)

• Stakeholders commented with regard to the table entry "up to 630 sec for hygiene-focused programmes" for dishwasher categories 2 and 3 that this is misleading because all cycles must meet hygiene standards. The 10 minutes programme listed refers to the thermal infection / treatment that is relevant for some customers only and is not commonly used; standard machines do not have this 10-minute cycle but still have to meet hygienic requirements. All categories, except for Category 1, are required to meet the hygiene requirements of the standard.

5. Task 4 - Technology: Presentation of the study results + discussion – Martin Möller (Oeko-Institut)

- According to stakeholder feedback, steam is the most expensive energy; therefore, they would not place steam on the "future" technologies list.
- Enzyme detergents are already available on the market and therefore not a "future" technology. It is mainly used for the Category 1 machines and takes more time.

6. Digital Product Passport (DPP) – Eduard Wagner (Fraunhofer IZM)

- The Commission explains that if the preparatory study concludes that an energy label and hence an EPREL entry for the product category is needed, then it can be used to fulfil the DPP requirements and hence the regulator has the choice between the two solutions (EPREL or DPP). Otherwise, then only the DPP is allowed.
- One stakeholder added that if information would be needed on a unit and batch level (not at product level), then also the DPP is needed as EPREL only works at the scale of the product.

7. Outline of Tasks 5 – Life Cycle Assessment and Life Cycle Costing and 6: Ecodesign options – Marco Mense (Ecomatters)

Stakeholders are invited to confirm or modify the data provided in the draft report and presented during the workshop in order to facilitate the definition of Base Cases and subsequent steps of the study.

8. Information by consultant team on the next steps in the process – Kathrin Graulich (Oeko-Institut)

Stakeholders requested an extension of the feedback deadline of 07 January 2025 due to the Christmas holiday period, as at least 4 active weeks are needed to work on the data to be provided.