

Efficiency Standards for Visi-Coolers in Pakistan

2nd Work Shop - Consultative Meeting

17th November 2021

Avari Hotel, Lahore

Hosted by NEECA & CLASP



Background

As part of the effort to develop a broad range of efficiency standards in Pakistan, CLASP and HIMA^Verte are supporting NEECA with the development for commercial visi-cooler MEPS and Labels; the overriding goal of this activity being to reduce electricity consumption across the economy and contribute towards reduced greenhouse gas (GHG) emissions.

This is the second stakeholder consultation on visi-coolers, with the first focused on informing the big three purchasers of the process and gaining their buy-in. That workshop occurred on 9th November 2021 at the WWF office in Lahore.

Objective

To establish a forum for all stakeholders in the visi-cooler industry to participate in the development of visi-cooler MEPs, Standards and Labels process. The workshop included:

- Presenting the current performance of Pakistani manufactured visi-coolers.
- Presenting the current picture of the visi-cooler market
- Compare the performance of local visi-coolers with international beverage coolers, and present the resulting BAU, energy, emission and cost projections in comparison with the best products internationally
- Proposed MEPs level and actions to improve efficiency.

Agenda

The following agenda was followed at the consultative meeting.

Venue: Satluj Hall Avari, Lahore

Time: 10:30 am to 1.00 pm.

Date: 17th November, 2021

TIME	AGENDA ITEM
10.30 – 10.35 am	Welcome note & Round of Introductions
10.35 – 10.55 am	Introductory presentation on MEPS & Labelling Estimates of visi sales and stock/suppliers/buyers/afterlife market) <i>Muhammad Salman Zaffar, Technical Lead, CLASP</i>
10.55 – 11.10 am	Q and A session
11.10 – 12.10 pm	Overview of current test methodologies and regulations used elsewhere, and potential options for MEPS and Labels in Pakistan <i>Stuart Jeffcott – Team Leader, CLASP</i>
12.10 – 12.20 pm	Q and A session
12.20 – 12.30 pm	Way Forward
12.30 – 1.00 pm	LUNCH and informal chat

Proceedings:

Mr Salman Zaffar kicked off the meeting with a round of introductions and thanked the stakeholders for their participation in the workshop. He then described NEECA's mandate to

develop efficiency regulations and gave examples of the products like electric motors that have already been successfully regulated. Salman then briefed the participants on the work being done by HIMA^Verte in collaboration with CLASP. HIMA^Verte/CLASP is covering several appliances including water heaters and as part of the KCEP project, HIMA^Verte is working on developing efficiency standards for commercial refrigeration, currently focusing on visi-coolers.

Mr Asad Mahmood, Technical Manager NEECA spoke over Skype stating that they could not join in person, and reassured the participants that HIMA^Verte/CLASP should be considered as their representatives.

Introduction to Standards and Labels:

Mr Salman described the function of MEPS to establish a floor of product efficiency. Any product that falls below a prescribed MEPS level is not allowed to be sold in the market. Labels provides a mechanism for efficiency ratings in the market. In Pakistan, a star rating is given according to the performance of a product. He explained the effects of MEPS and labels in the market and gave examples of the labels used worldwide. He also made a differentiation between a voluntary and compulsory label and the difference between a rating label versus an endorsement label. A list of soon to be mandatory labels in Pakistan was shown which included Fans, ACs, Refrigerators, motors, water heaters, transformers, commercial refrigerators. Mr Salman then briefly described the visi-cooler regulations currently employed worldwide.

Market Analyses:

Mr Salman then went on to describe the current scenario of the Pakistani visi-coolers market. He identified the major manufacturers and the current sales, stock and lifetime of visi-coolers. He then talked about the refrigerants and parts currently used to construct visi-coolers and identified the room for improvement.

Mr Bhutta from Varioline gave credit to Coke to push for low GWP refrigerant in the market however mentioned that they were not given the institutional support they should have. He said the government should help manufacturers to develop awareness and more efficient products, and now shift to R290 refrigerant.

In response to a query from Salman, a few participants responded that the estimation of stock and sales looked about right.

Mr Stuart stated that there is some discrepancy in the correlation between annual sales, stock and life, which could be explained by there being a “second life” for second hand visi-coolers. The participants were not able to give any insight to resolve this discrepancy.

Standards and Labels for Visi Coolers:

Mr Stuart started his presentation by identifying the difference in service between beverage (visi-coolers) and display cabinets, and confirmed with delegates that beverage coolers were the dominant product in the Pakistan market, and hence were the primary focus of regulatory activity.

Stuart then compared the performance of Pakistani visi-coolers with visi-coolers used in developed economies. He described HIMA^Verte “testing” involving going into several shops and fitting energy monitoring devices. While recognizing the limitations of such testing, in the absence of alternative estimates/more accurate test data on existing products. Based on these tests, Pakistani visi-coolers were estimated to use about 5-7 kWh/day but only operating for approximately 12 hours. Hence, this energy usage value was scaled up to 24 hours to give a degree of comparison with standard 24-hour tests, and a mechanism to measure against the energy usage of products in the rest of the world. Thus, measured values translate to about 12-15 kWh a day while the best available technology (BAT) only uses 1.9 kWh/day.

Stuart then described a range of technical options available to suppliers and specifiers that could improve current efficiency of visi-coolers. Options presented included summary technical detail, estimated improvements to performance and outlines of costs.

He then presented the proposed test method as the new ISO 22044 standard (to be published in 2021) as this has specifically been developed with major international beverage manufacturers to provide accurate energy tests of this specific product, and provide other metrics such as product pull down tests. Stuart proposed the CC2 climate conditions and K1 performance level within this ISO standard were probably optimal for the Pakistan MEPS, but he invited comment from all Stakeholders. Mr Pilari, Director PSQCA stated that their organization can plan to adopt this new standard, and can also download the draft version for reference.

Initial visi-cooler performance thresholds were then proposed by Stuart. 3 stars would correspond to 3kWh/day, 2 stars would be 6 kWh/day and 1 star at 8 kWh/day, with 3-star mandatory from 2023 and 2 star from 2026. Stuart then said MEPS levels would increase incrementally to keep the push for more efficient products. Stuart demonstrated the practicality of suppliers being able to meet these levels by showing US and EU MEPS, and the procurement standard of an international beverage manufacturers that was 5 times more efficient than the levels proposed. NEECA will also develop a registration mechanism for visi-coolers to ensure compliance.

Stuart then summarized the presentation and stated that the base regulations would be based on ISO standards and NEECA is working on a very short timeline to introduce regulations by 2021. Regulations would be broken in two phases with the first till 2023 and second till 2026. He also mentioned that the workshop is designed to get feedback from stakeholders and their input would be incorporated in the next workshop on 14th December.

Mr Badar from Coke welcomed the initiative taken by HIMA[^]Verte/CLASP and NEECA. He mentioned that once an official email is sent to him, they would respond and try and share whatever possible data they can, saying it is likely their standards are aligned with the ISO 22044.

Mr Rizwan from Waves mentioned that the operating conditions for visi-coolers can be quite harsh, ranging from the need to operate with low utility voltage levels, to being placed outdoors in direct sunlight.

Mr Waqas Ali from PEL offered to share testing data from the past 15 years, which would provide a useful reference for developing feasible MEPS.

Conclusion:

Mr Salman thanked all participants on behalf of NEECA, CLASP/HIMA[^]Verte. He stated that meeting minutes and the presentations would be shared with all the participants. All stakeholders were requested to discuss these proposed MEPS for visi-coolers, and send their feedback. Mr Salman said he would also contact key stakeholders.

Mr Stuart stated that another consultative workshop is planned around 14th December, when a final draft of the MEPS will be presented for a final consultation after which it would be shared with PSQCA & NEECA for formal adoption.

Key Takeaways:

- Participants welcomed the initiative of developing MEPS for visi-coolers
- Projections of visi-cooler stock and annual sales were generally endorsed, although there remains an unresolved discrepancy related to the second market (after the end of “standard/refurbished lifetime”) which is required to give 12-year average product lifetimes.
- A recognition that more information on *actual* current product performance, and the Coca-cola representative agreed to seek permission to share unit performance.
- Delegates agreed ISO 22044 is the most appropriate test method by which to measure energy performance (PSQCA agreed to adopt when it comes out in early 2022).
 - Participants are to provide comments on climate and package temperatures to be used in the test.
- First proposals were presented for MEPS and Labelling Thresholds. Generally, there was little objection to the proposed levels, with some stakeholders suggesting target thresholds and dates were insufficiently aggressive.
 - Participants requested to provide feedback on proposed MEPS/Labelling thresholds, particularly those
- Stakeholders requested to plan to attend the follow up consultative workshop planned for 14th December 2021 when the final draft of the visi-cooler MEPS will be discussed.

List of participants

Sr No.	Name	Organization
1	Muhammad Soaib	Arcelik / Dawlance
2	Hunain Mansoor	Varioline Intercool
3	Akhtar Bhutta	Varioline Intercool
4	Muhammad Imran	Nestle
5	Atikah Khan	Nestle
6	Rizwan Yaqoob	Waves
7	Jawad Ahmed	Waves
8	Badr Munir	Coca Cola
9	Sohaib Siddique	Khan Brothers
10	Jahan Zaib Islam	Khan Brothers
11	Waqas Ali Chisti	PEL
12	Attique Ahmad	PEL
13	Nazifa Butt	WWF
14	Muhammad Ashraf Palari	PSQCA
15	Asad Mehmood (on zoom)	NEECA
16	Muhammad Umar (on zoom)	NEECA
17	Ali Raza Hafeez	PEECA
18	Hira Ashraf	PEECA
19	Jeremy Tait (on zoom)	CLASP
20	Stuart Jeffcot	CLASP
21	Ali Habib	CLASP/HIMA^Verte
22	Muhammad Salman Zaffar	CLASP/HIMA^Verte
23	Amna Shahab	CLASP/HIMA^Verte
24	Abdul Rehman	CLASP/HIMA^Verte
25	Meekal Jamil (on zoom)	CLASP/HIMA^Verte

Photographs

