



1. WELCOME ADDRESS BY THE CHAIRMAN:

The meeting began with a round of introduction from all the members present at the meeting. Following which, the chair provided a brief background of mandatory S&L program for air conditioners and its status over the years. Keeping in mind the market transformation achieved in this segment, chair emphasized upon the following agenda points:

- Roadmap for next changeover of standards for fixed speed Room air conditioners
- Round Robin Testing for better verification of testing results
- Way forward for Inverter Type Air Conditioners
- Way Forward for Chillers
- Any other relevant point with the permission of chair

DISCUSSIONS:

Agenda: Way Forward for Chillers

1. The discussion began with a presentation made by CLASP on Chillers in which market size and other findings of the study for chillers were discussed. Chair requested all attendees for the discussions after the presentation and placed following points for discussion: Whether there is a need for standard & labeling program for chillers, if yes, whether it should be endorsement or comparative labeling?
 2. Whether there is need to form a separate technical committee for chillers?
 3. Whether there is any need of modification in findings of the study done by CLASP?
- Mr. Thyagrajan from RAMA opined that there is a need to frame minimum energy performance standard for the chillers. After making the standard, the labeling program may be started since it is first of its kind of a labeling program worldwide. He also mentioned that chiller users are finding it difficult to choose chiller according to application. Chiller is mostly used for buildings and is included in technical performance requirements of ECBC, GRIHA & IGBC ratings so it is difficult for users to choose chillers according to application. He emphasized that conflict shall be avoided between chillers MEPS & ECBC since in ECBC, MEPS for the chillers are already defined so.
- Chair told that ECBC norms and standards are prerequisites for a building to achieve GRIHA & IGBC rating.
- When asked about the status of ECBC, chair told that it is the power of the states to enforce ECBC and ECBC code is now mandatory in a few states.

- Mr. Sinha from RAMA raised a point by recalling the meeting held in 2011 for labeling program for chillers at BEE's Conference hall. He mentioned that in case of chillers, consumer is knowledgeable about the product. Most of the manufacturers have established their own labs to test different capacity of chillers. In order to proceed with the labeling program it is also necessary to have standardized labs to test different capacity chillers.
- Members also agreed to have separate technical committee for chillers chaired by the person from ECBC.

Agenda: Roadmap for next changeover of standards for fixed speed Room air conditioners

- Mr. Thyagrajan from RAMA initiated the discussion with mentioning the total market size. He told that India has 3.5 million markets for RACs against 15 million of China. Out of which the total market share for 5 star ACs is approximately 25% which is less and shrinking due to increasing cost and technology restrictions. With the proposed amendments of year 2014, EER values complied by Indian AC industry would be higher all over the world. So by setting high efficiency standards, we are not helping the consumers or market. He also pointed out that with the high price levels and slow growth of market, AC prices will increase further. The focus therefore should be to make the market and industry grow.
- Mr. Krishan Sachdev deliberated that cost of ACs is going higher due to higher EER values. There has been approximately a 50% increase in the cost as compared to year 2009 which is also affecting the sale of industry. So it is needed to incentivize star rated ACs. In this regard RAMA will present a detailed proposal to BEE which may further submitted to Ministry of Power and Ministry of Finance..
- DG told that in year 2014, BEE may put forward this proposal to Finance Ministry may come up with a proposal to enhance the sales of 5 star ACs among various government departments. Also effective measures would be taken to spread awareness to boost the sales of 5 star ACs.
- Shri Ajay Sharma from LG said that in other countries different ACs has different standards for different volumes of ACs whereas in India single standard deals with different volumes. In order to have proper comparison, India should also follow other countries.
- Chair told that India follows single standard for different volumes so that user has a choice to refer a single standard for any kind and volume capacities of ACs.

Agenda: Way forward for Inverter Type Air Conditioners

- The discussion began with a presentation made by CLASP in which findings of the study of inverter AC testing were discussed. The presentation was completed with giving a starting point for discussion to members "on further proceedings to start with labeling program of inverter".
- Chair mentioned that it has to be decided what should be the parameter (EER or SEER or weighted EER) to be considered for inverter ACs for labeling purpose.
- Member RAMA raised a point that in inverter program, heat pump based technology shall also be included since demand of such kind of ACs is high among users. Chair said that heat pump shall be included in the fixed speed air conditioners itself and will be tested only for cooling performance; however in the label heat pump will be mentioned.
- Mr. Krishan Sachdev suggested considering other country's standards for bin hours considerations mentioning that the R&D for ACs is being done in China and Japan whereas in India, it is not up to that extent. So designing a unique product based on the bin hours discussed in presentation of PWC.
- Mr. Deepak Baid from Voltas raised a point to relook the loading points at which ACs are being tested. He told that instead of considering 50% & 100% loading, 75% and 100% loading can be considered as per the Indian usage pattern.
- Mr. Thyagrajan from RAMA requested BEE not to include International NGOs as a part of the Stakeholder Groups without verifying their credentials. He pointed out that it is apprehended that certain NGOs are lobbying for some companies, and it is necessary to bring in transparency.

Agenda: Round Robin testing for better verification of testing results

- The discussion began with the brief background provided by Mr. Saurabh Diddi, Program Manager, standard & Labeling. Round Robin Testing may be adopted as one of the options to check whether results really vary from lab to lab.
- Mr. Thyagrajan from RAMA mentioned that when anyone goes for testing of same product in different labs, there is a wide variation in the results. However international practice is that lab to lab variation of test results should not be more than 2%.
- Mr. Mukherjee from CLASP told that as per ISO 17043, it is mandatory for labs to go for proficiency test which is also being adopted by NABL.
- Chair said that he will have a meeting with NABL to discuss further course of action.

The meeting ended with a vote of thanks from the chair.