SEAD INDIA WORKSHOP
COP 26 PRODUCT EFFICIENCY CALL FOR ACTION
INDUSTRY PERSPECTIVE

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RAMA

11/4/2020
SEAD : Action on product efficiency COP26 & beyond

- Setting global product policy to double the efficiency of four key products sold globally by 2030 – industrial motors, air conditioners, refrigerators, lighting
- Supporting the delivery of crucial national climate change targets
- Providing consumers and businesses with more efficient products that are affordable and cost-effective to own and operate
- Stimulating innovation and provide businesses with export opportunities
- Promoting making products both energy efficient and climate friendly simultaneously by reducing the use of refrigerants in cooling appliances.
Energy conservation

- India has around 6 to 7% penetration of Room AC
- The per capita consumption of energy per year in space cooling is 69 KWh (IEC 2018 report) against world average of 272
- With increase in penetration the demand for energy will increase and needs to be addressed
- Energy efficiency program is one of the tool to conserve energy
The sale of products was based on brand and unverified claims.

The running cost of the AC was a concern.

The production and sale was ~ 2.1 Mn in 2010.

Small manufacturers competed with organized players.

Manufacturer’s investment in R & D was low and labs were not meeting the ISO 17250 standards.

Window AC share was ~ 30%.

Units were imported as CBU as production capacity was limited.
India journey

- Phase-1: Aligned the products with the EE program and upgraded as per the tables from 2010 to 2016 (Three upgrades)
- Phase-2: Migration from COP to ISEER, a technology agnostic EE program based on ISO 16358 standard.
- Temp range and bin hours as per India Hot and Dry climate zone
- India has considered 24 to 43 Deg C temp range against 21 to 35 in ISO 16358 with 1600 hours of use per year
- In phase-2 to meet higher Star requirements, India specific design with Inverter technology, larger condensers and evaporators with small diameter tubes and BLDC motors technology adopted
- Manufacturers have absorbed the technology and are at par with global players
Post EE labelling program

- The program brought authenticity to the parameters published.

- Customer got a guided choice of selection, experienced the lower running cost and could relate to the buying decision.

- Manufacturers can plan the design and marketing strategies.

- Manufacturers invested in R & D and Technology, accredited laboratories and manufacturing set-up.

- The sales data reflects the maturity of Indian customers as they understand the importance of EE and running cost.
Comparison ISEER & ISO standard performance

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<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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<td>3.8</td>
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<td>ISO ( CSPF) ~ 20 %* plus</td>
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* Actual test data of Inverter A/C from 4 manufacturers taken from Clasp/PWC report 17 Feb, 2014

- India ISEER is stringent
- CSPF : ISO recommended temperature Range : 21 to 35 Deg C
- ISEER : India climate range 24 to 43 Deg C
- **RAMA suggests that study project should be taken**
## Split system table 2009 to 2020

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<tr>
<th>Year</th>
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<th>5 Star</th>
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<td>~ 2.3</td>
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<td>2.7</td>
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<td>2012</td>
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<td>2014</td>
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<td>2016 July</td>
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</table>
3 Star (75%) is preferred choice followed by 5 Star (11%)

One and Four Star are 2% each & 2 Star 8%

Many manufacturers do not offer in 1, 2 and 4 Star category

Though EE is preferred, study is required to understand why Five star share is reducing.

EESL scheme has also not gathered traction
Industry perspective ... 1/2

- Comparison of products of different countries should be made as per ISO 16358 standard for realistic comparison
- The technology adopted is at par with the developed countries.
- Share of Inverter AC reached above 50% in 5 years which is one of the fastest growth in the world
- CLASP report study indicates the average usage is 1200 hours against 1600 considered in ISEER, we should revisit the program parameters
- With comfort for all the EE labelling program should be crafted with 10 years perspective
Industry perspective … 2/2

- Ratcheting the level should be carefully done, by keeping balance between affordability & EE and should not allow the weighted average efficiency of products sold to slide and Window AC share to go up.

- Investment for each changeover is ~ 50 Mn $ and manufacturers need time to recover the cost.

- The challenge is to offer affordable products for which not only technology but supply chain and operational cost optimization needs to be addressed.

- Policy intervention are required to promote high efficiency products.

- Growth is essential for further investment.
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