Maximising Climate Benefits: Enabling Simultaneous Efficiency and Refrigerant Transitions

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Decisions on Energy Efficiency

**Kigali Decision on Energy Efficiency**

Decision XXVIII/3 provides opportunity to enhance energy efficiency of appliances while phasing down HFC usage.

**TEAP report-Energy Efficiency**

Need to maximize climate benefits.

**Energy Efficiency Within MLF**

The decision identifies need to develop cost guidelines associated with maintaining or/and enhancing energy efficiency of replacement technology & equipment.
Climate benefits of simultaneous action are more than quadrupled than either action taken in isolation.
Importance of Energy Efficiency

Most Importantly
Simultaneously enhancing energy efficiency along with HFC transitions prevent lock-in to technologies that only maintain energy efficiency
Learning from the Indian Experience: the ‘price hump’

Price differential between the Super Efficient AC & Starred ACs

<table>
<thead>
<tr>
<th>Star</th>
<th>Price (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Star</td>
<td>456</td>
</tr>
<tr>
<td>5 Star</td>
<td>548</td>
</tr>
<tr>
<td>Super Efficient</td>
<td>837</td>
</tr>
</tbody>
</table>

Price differential between the 3 bidders of India's bulk procurement initiative

<table>
<thead>
<tr>
<th>Raster</th>
<th>Price (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R 410</td>
<td>690</td>
</tr>
<tr>
<td>R 32</td>
<td>815</td>
</tr>
<tr>
<td>R 290</td>
<td>995</td>
</tr>
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</table>
Financial Challenge of the Transition

Graph for illustration only
Instruments to achieve the targets

Policy & Regulations

Institutional Strengthening

Financial Models

Innovative Business Models
Co-Benefits

Social
- Electricity Access
- Access to Cooling
- Health Benefits

Economic:
- Peak Demand reduction
- Enhanced Productivity
- Cost Saving for End Consumer
Takeaways

• Kigali Rules enable **maximizing climate benefits**

• For simultaneous energy efficiency enhancement & refrigerant transition, **price is the main barrier** to their early adoption

• Low interest loans & grants have been used to alleviate this problem
newsTRAC: Addressing servicing sector needs

• As we move towards super-efficiency and new generation refrigerants, servicing sector needs become more pronounced

• Servicing sector professionals highlight lack of proper information on tools and tips for servicing new equipment and refrigerants as a major gap

• newsTRAC – a mobile app intends to bridge this gap
newsTRAC - a mobile based application will serve as a platform for the servicing agent in the field to ask a question directly to the team of experts either through a text based query or a picture.

The query will be addressed within the stipulated period of time by our team of experts.
If I do not have recovery machine, how should I safely recover the refrigerant from AC?
Rajiv Kumar
Jul 5, 2018

What activities have been envisaged to further improve the technical knowledge of servicing technicians?
Suman Singh
Jul 5, 2018

Manjeet Singh
Thank you for your timely question. There are several ways to recover refrigerant without a machine. One is to close the service valve at the outlet of the condenser to the evaporator/cooling coil of the indoor unit. Then you start the compressor. This will enable transfer of the refrigerant from the indoor unit to the outdoor unit. The pump-down refrigerant is then reused.
Download from the Google play store

Search for ‘newsTRAC’