

**Workshop on
Thermodynamic & Techno-Economic Analysis of
Domestic Refrigerators**

Organized by

Bureau of Energy Efficiency (BEE), Ministry of Power, Government of India

In - collaboration of Mechanical Engineering Department, IIT Delhi

October 6-8, 2004

**Venue: IRD Conference Room, 5th Floor, Administrative Block, IIT Delhi,
New Delhi – 110016**

Program

WEDNESDAY, 6TH OCTOBER 2004

09:30 – 10:00	Registration
10:00 – 11:00	Inauguration of the Workshop
10:00 – 10:05	Welcome address - <i>Mr. Sanjay Dube</i>
10:05 – 10:15	Introduction & Purpose of Workshop - <i>Mr. Tanmay Tathagat</i>
10:15 – 10:20	Lighting of Lamp - <i>Mr. V S Verma (DG, BEE)</i>
10:20 – 10:30	Background of Indian Standard and Labeling program - <i>Mr. Satish Sabharwal (BEE)</i>
10:30 – 10:40	Refrigerator Standards and current Standards Setting Process in India - <i>Prof. R S Agarwal (IIT Delhi)</i>
10:40 – 10:55	Inaugural Address - <i>Mr. V S Verma (DG, BEE)</i>
10:55 – 11:00	Vote of Thanks - <i>R S Agarwal (IIT Delhi)</i>
11:00 – 11:30	Tea break

Technical Session I: International experience and Various Design options for Energy Efficiency

11:30 – 12:30	International experience in setting up of refrigerator standards - <i>Mr. Jim Lutz</i>
12:30 – 13:15	Criteria for identification of priority products & product categories - <i>Mr. Jim Lutz</i>
13:15 – 14:15	Lunch break
14:15 – 15:00	Identification of design options - <i>Mr. Jim Lutz /Prof. R S Agarwal</i>

15:00 – 15:45	Presentation from Indian Refrigerator industry on adopted design options - <i>Industry representative(s)</i>
15:45 – 16:00	Discussions
16:00 – 16:30	Tea break
16:30 – 17:30	Introduction to ERA and data need - <i>Mr. Jim Lutz</i>

THURSDAY, 7TH OCTOBER 2004

Technical Session II: Estimation of Life cycle cost and cost effective Design options

09:30 – 10:45	Determination of Life Cycle Cost - <i>Mr. Jim Lutz/Prof. R S Agarwal</i>
10:45 – 11:00	Discussions
11:00 – 11:30	Tea break
11:30 – 13:00	How to develop the cost of design option - <i>Mr. Jim Lutz (less time)</i>
13:00 – 14:00	Lunch break
14:00 – 15:00	How to determine national energy savings & other useful information by using Policy Analysis Tool (developed by LBNL) - <i>Mr. Jim Lutz (more time)</i>
15:00 - 15:30	Discussions
15:30 - 16:00	Tea break
16:00 – 17:00	How to set minimum energy performance standards - <i>Mr. Jim Lutz</i>
17:00 – 17:30	Discussions

FRIDAY, 8TH OCTOBER 2004

09:30- 11:30	Group exercise – Industry representative <i>(Use of ERA model – results with assumptions)</i>
11:30 – 11:45	Tea break
11:45 – 13:00	Evaluation and debriefing - <i>Mr. Jim Lutz/ Prof. R S Agarwal</i>
13:00 – 14:00	Lunch break
14:00 – 15:00	Open house for discussions
15:00 – 15:30	Closing remarks
15:30 – 15:45	Thanks giving - Mr. Sabharwal
15:45 – 16:00	TEA