



# **Indian Scenario for ODS Phase-out**



# India and Montreal Protocol



- **Joined on 17 Sep. 1992**
- **Is an Article 5 country, alongwith 100 other countries**  
**(less than 0.3 kg. per capita ODS consumption)**

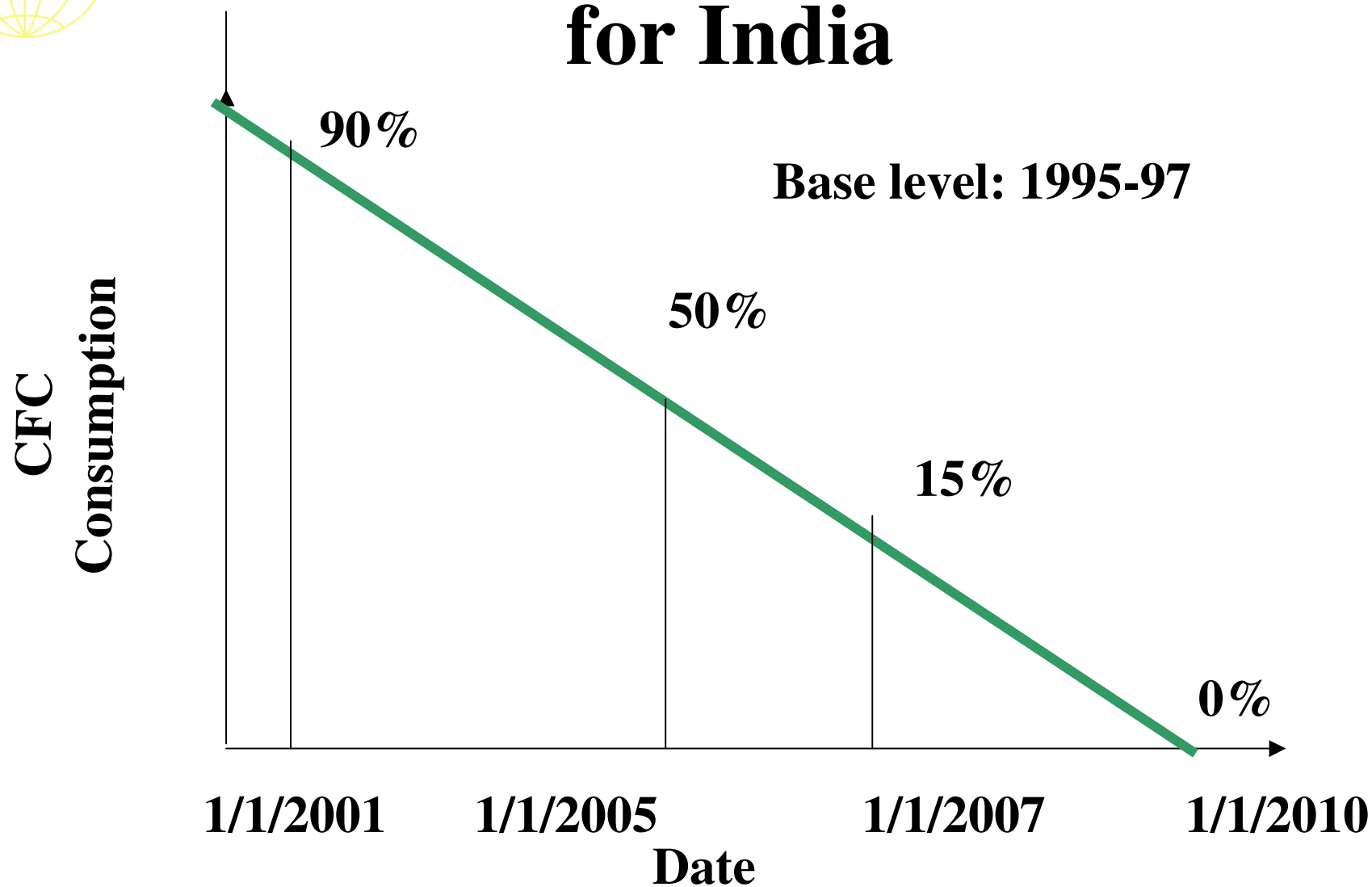


# **Phase-out Schedule as per Montreal Protocol**

| <b>Ozone-depleting<br/>substance</b> | <b>Developed<br/>Countries</b>                                   | <b>Developing<br/>Countries</b> |
|--------------------------------------|--|---------------------------------|
|                                      | <b>Total Phase-out by<br/>1<sup>st</sup> January of the year</b> |                                 |
| <b>CFCs</b>                          | <b>1996</b>  | <b>2010</b>                     |
| <b>Halons</b>                        | <b>1994</b>  | <b>2010</b>                     |
| <b>HBFCs</b>                         | <b>1996</b>  | <b>1996</b>                     |
| <b>CTC</b>                           | <b>1996</b>  | <b>2010</b>                     |
| <b>Methyl Chloroform</b>             | <b>1996</b>  | <b>2015</b>                     |
| <b>Methyl Bromide</b>                | <b>2005</b>  | <b>2015</b>                     |
| <b>HCFCs</b>                         | <b>2030</b>  | <b>2040</b>                     |

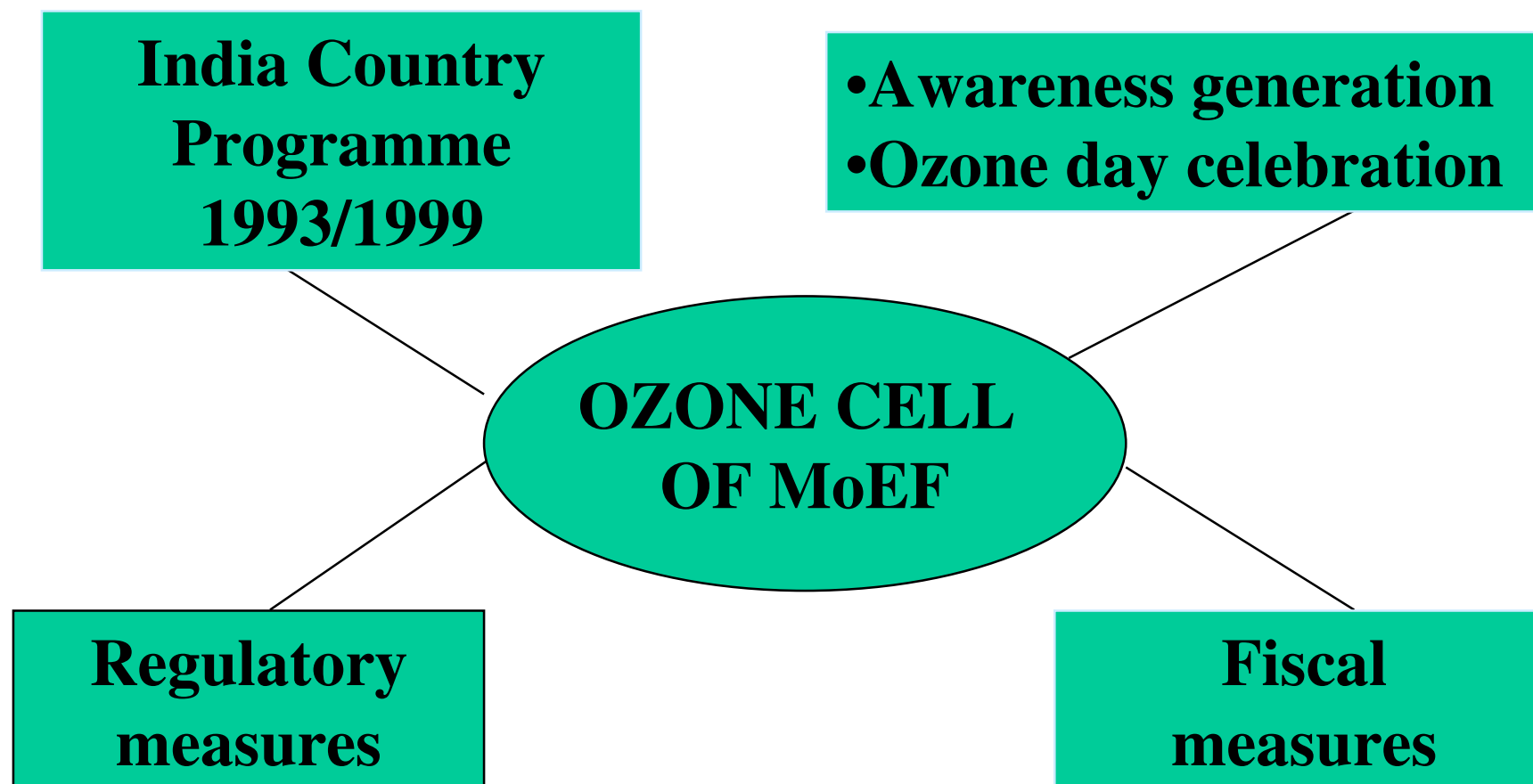


# CFC Phase-out Schedule for India





# India's Initiatives towards ODS Phase-Out





# **ODS (Regulation & Control) Rules, 2000**

- **Framed under Environment (Protection) Act, 1986**
- **Seeks to control production, consumption, export, import, sale and destruction of ODS**
- **Operational with effect from 19 July 2000**



# Key Features

- **No manufacturing of CFC-based appliances after Jan. 1, 2003**
- **Compulsory registration of**
  - **ODS producers**
  - **Manufacturers of ODS based products**
  - **ODS Traders/ Dealers/ Wholesalers/ Sellers**
  - **Compressor manufacturers**
  - **Firms engaged in reclamation & destruction of ODS**



# Registering Authorities

- **ODS producers** (MOEF)
- **Manufacturers of ODS-based products**
  - **Capital less than Rs. 1 crore** (SISIs)
  - **Capital more than Rs. 1 crore** (MoEF)
- **ODS Traders/ Dealers/ Wholesalers/ Sellers**  
(ODS Producer/ Importer)
- **Compressor manufacturers**
  - **Capital less than Rs. 1 crore** (SISIs)
  - **Capital more than Rs. 1 crore** (MoEF)
- **Firms engaged in reclamation & destruction of ODS** (SISIs)





# Dealer Documentation

- **Forms for registration as per prescribed Performa**
- **Dated records & relevant records in respect of actual quantity of each ODS**
  - **purchased**
  - **sold within India**  
(with details of name & address of recipient of each shipment and purpose for which ODS was purchased by the recipient)
- **Report on sale of ODS to be submitted in prescribed Performa**



## **Key Features (Contd.)**

- **Creation or expansion of capacity for manufacturing ODS and ODS based equipment prohibited**
- **Trade in ODS with non-Parties banned**
- **Licensing required for import/ export of ODS and products containing ODS**
- **Import & export of appliances only with labels**
- **Compulsory to maintain records and submit reports**



# Implications for Servicing Firms

- **Refrigerant dealers will need to maintain records of CFC12, R-502 refrigerant purchased from them by the servicing firms**
- **Availability of CFC12, R-502 in the market will reduce considerably**
- **Price of R-12 is expected to increase sharply in the next few years**



# Fiscal Measures

- **100% custom & excise duty exemption for ODS Phase-out & non-ODS investments**
- **No financing for ODS technology investment**
- **Support to seek assistance from MLF**
- **Funding of CFC Production phase-out**



# Multi-lateral Fund and India

- **Purpose:** To provide funds to Article 5 countries to meet incremental cost of ODS Phase-out
- **Coverage:** For units in existence upto 25/7/95
- **As on 31/7/2000:** 276 projects approved (Funds: 935 lakh US dollar). Will save 8620 ODP tonnes
- **In RAC Sector:** 46 projects approved. Will save 2203 ODP tonnes



# Conclusions

- **Alternative refrigerant technologies (CFC, HC and HFC) will co-exist for several years**
- **Service technicians will have to develop skills in better servicing practices for all types**
- **Retrofitting of existing CFC-based appliances with HC blend will be an important area of service**
- **Recovery and recycling of CFC and HFC refrigerants will become increasingly important**



# **RAC Service Sector Strategy**

- **An India RAC Service Sector Strategy is under preparation at present**
- **Supported by Governments of Germany and Switzerland; UNDP and UNEP**
- **Its purpose is to develop a national strategy to reduce & eliminate use of CFC refrigerant in RAC servicing sector**
- **To be completed by end 2002**
- **Ozone Cell, MoEF is the national coordinating agency**