

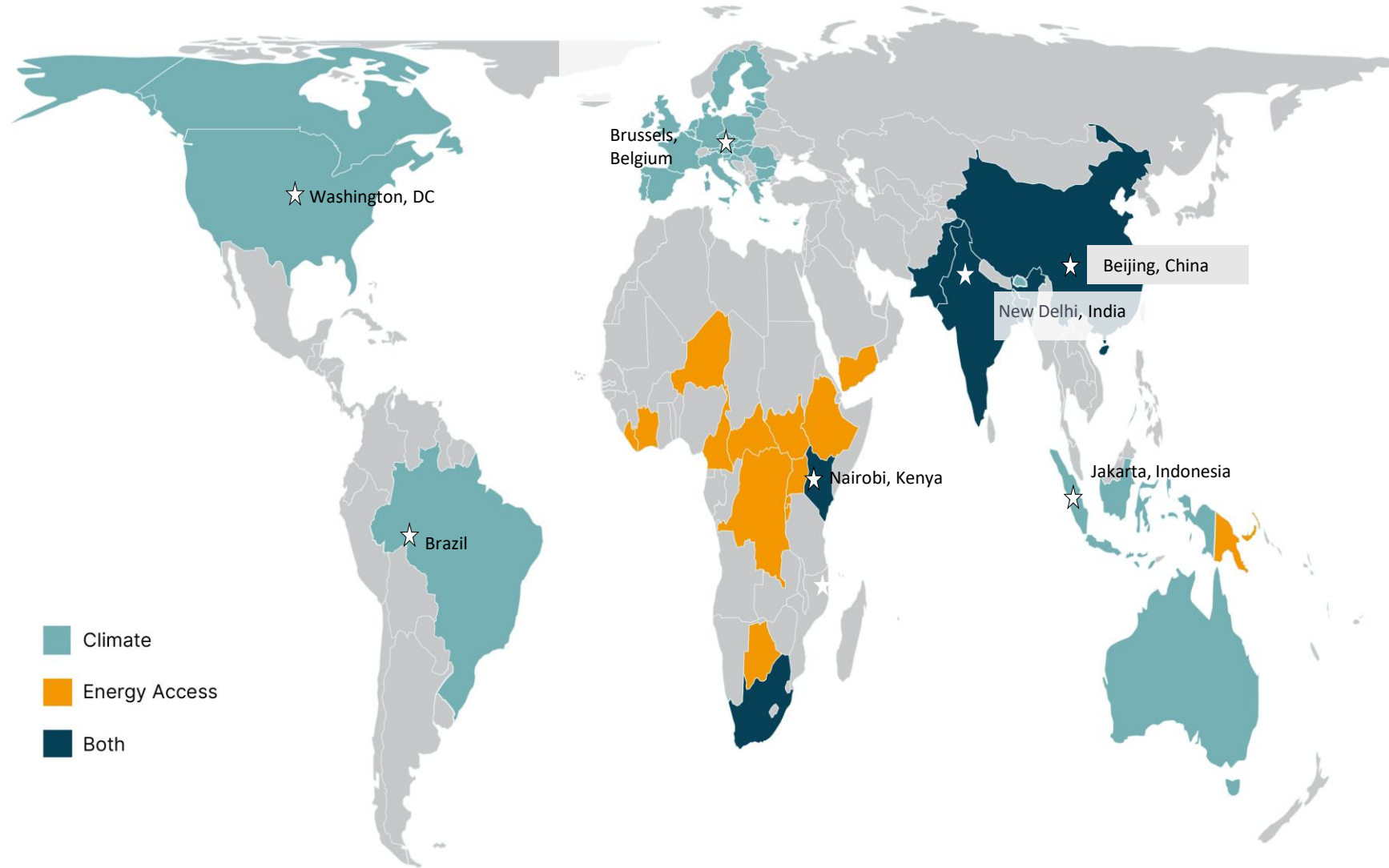


Transforming India's Appliance Efficiency Landscape to Achieve Climate Goals



CLASP works to improve the energy and environmental performance of the **appliances and equipment** we use every day, helping accelerate our transition to a more sustainable world.

Where we work



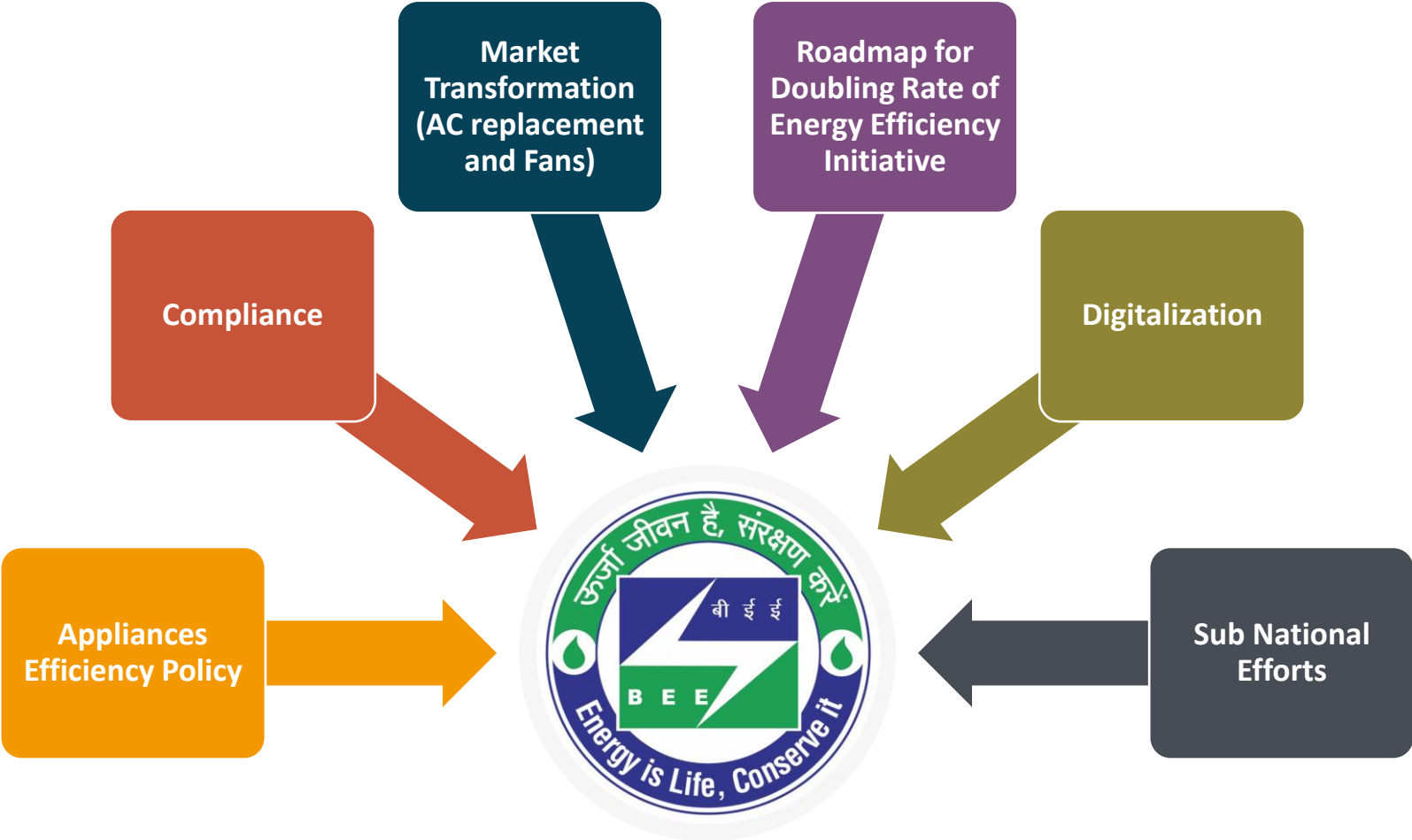
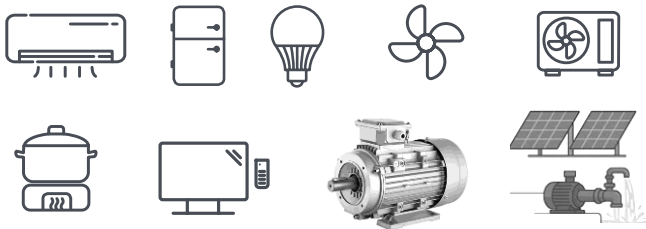
Bureau of Energy Efficiency (BEE) – CLASP Collaboration: Technical Support Overview



CLASP India has been supporting BEE for over 20 years across all aspects of the Standards & Labeling (S&L) program, formalized through a (MoU).

Supporting Ministry of Power and BEE’s Vision:
Advancing Coverage of 50 Appliances by 2030

Focused on Top 10 Appliances



India: Today, and Tomorrow (Climate)

Rapid Economic & Energy Growth



Economy Growth

Fastest growing economy and third largest energy consumer.



Energy Consumption

Per capita energy consumption is a third of the world average.



Manufacturing Ambition

Ambition to boost local manufacturing and appliance EE potential.

Impact of Appliance EE (2023-24)



Monetary Savings

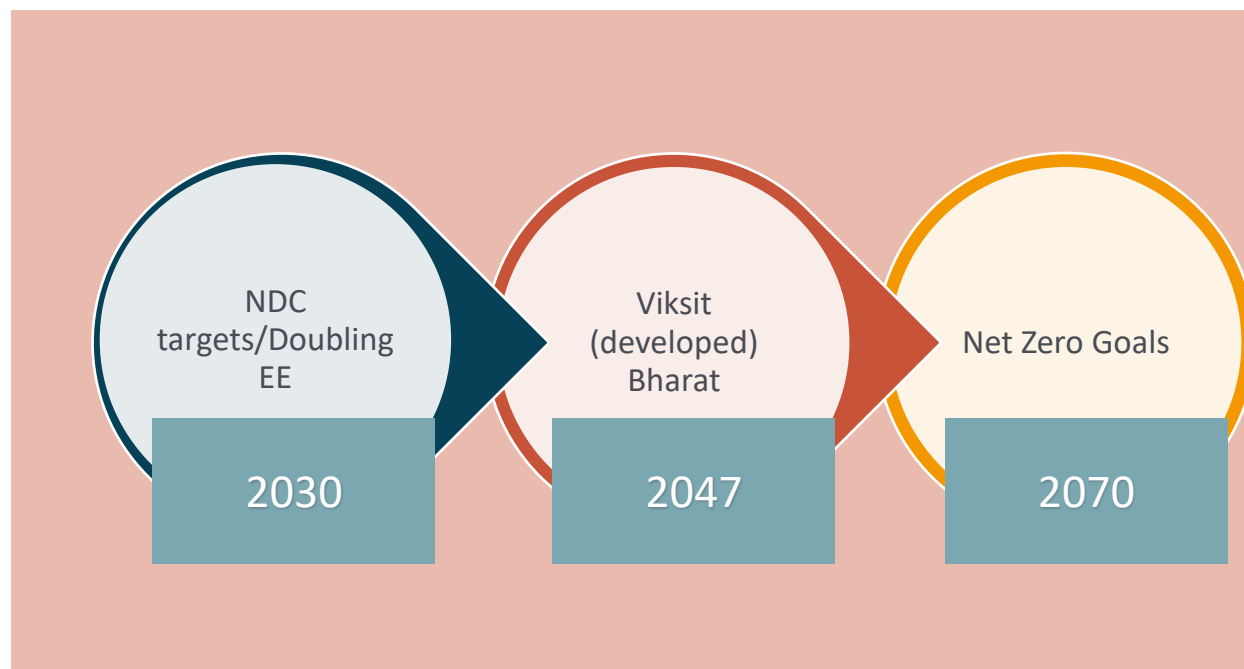
USD 15,580 million for consumers



GHG Reduction

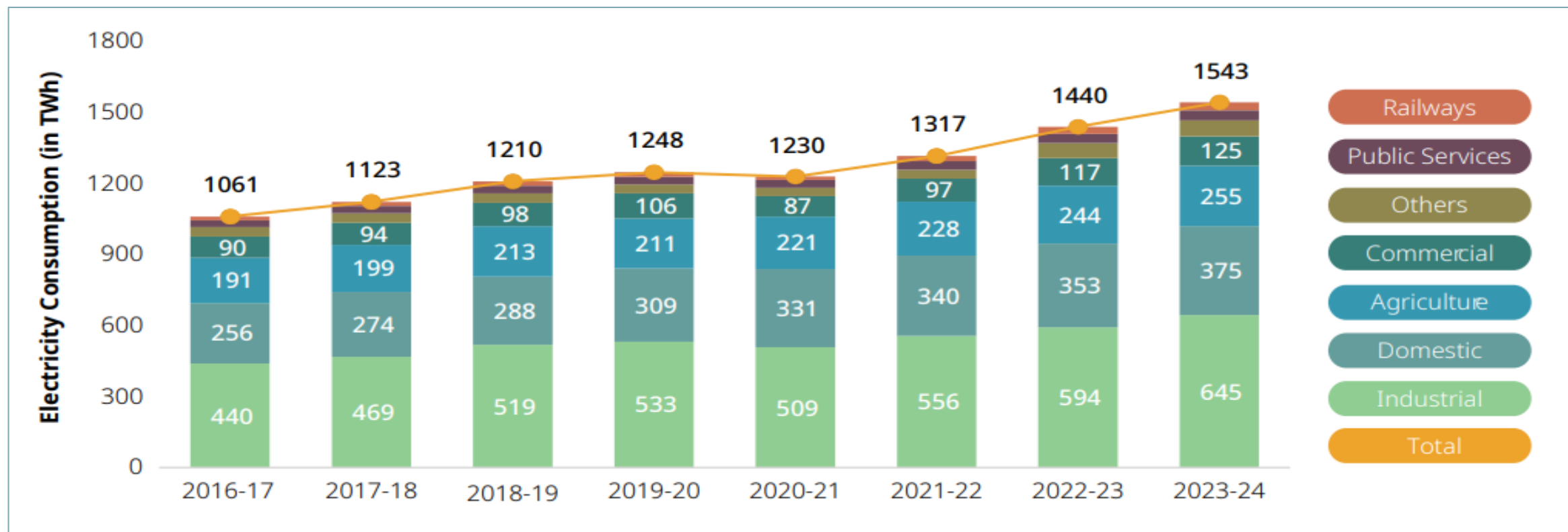
65% of total emissions reduction

National Climate and Energy Goals



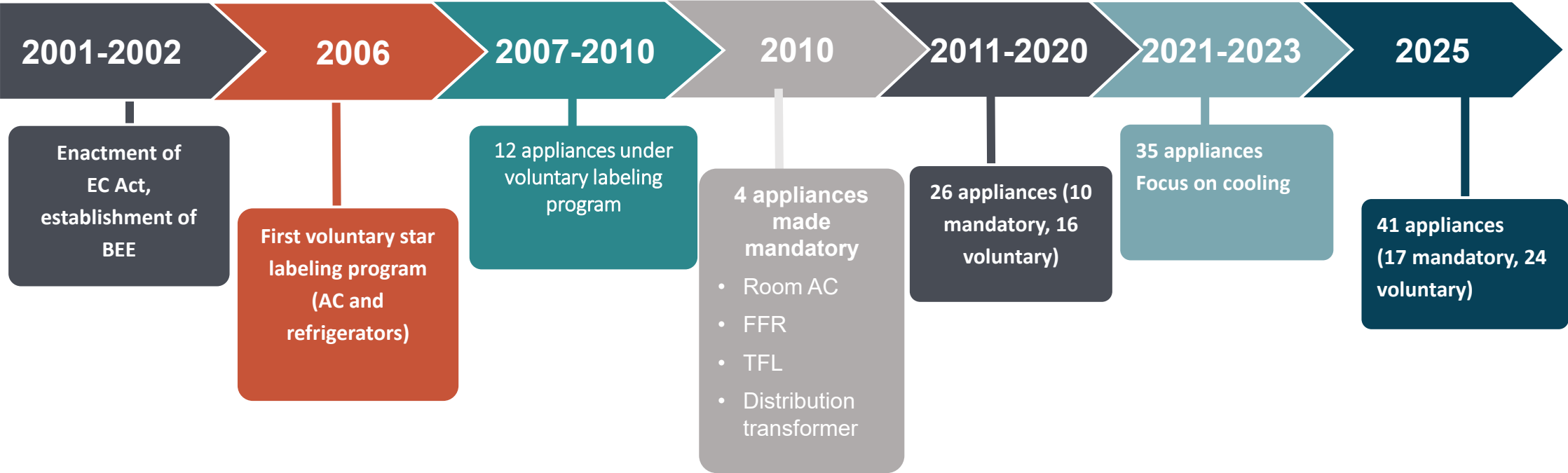
Ranks third in appliance energy efficiency potential

India's Annual Electricity Consumption



In FY 2023–24, India consumed over 1,500 BU of electricity—42% by industry and 24% by the residential sector, which is growing at 6% annually.

India Star Labeling Program: Overview



IMPLEMENTING PARTNERS



KEY STAKEHOLDERS



India has been preferring comparative labels over endorsement labels

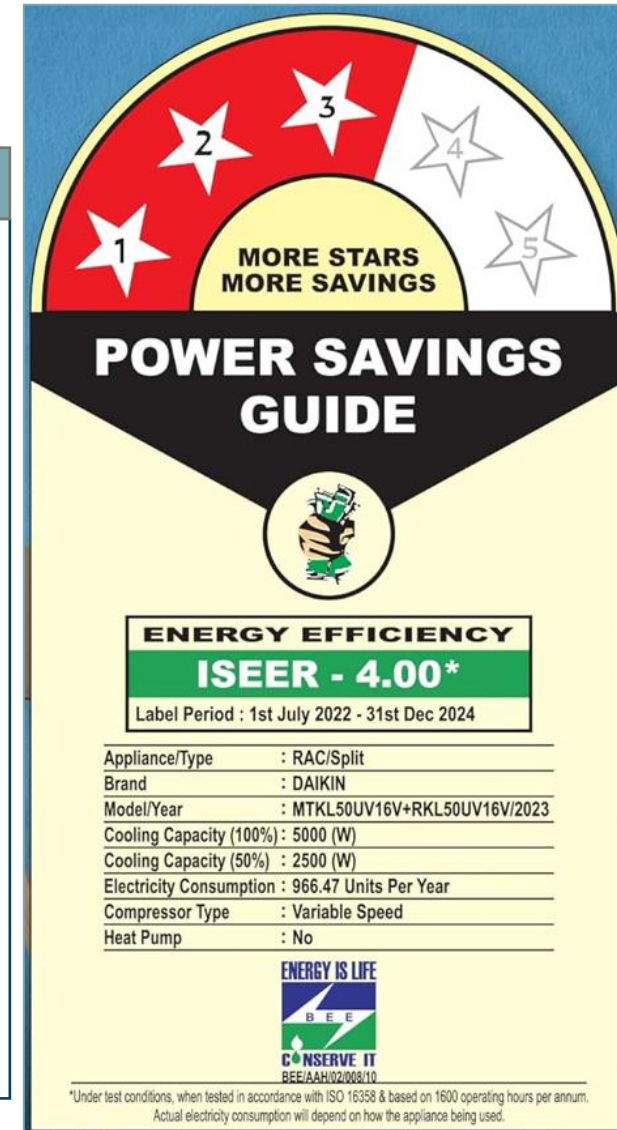
- India has a mix of mandatory and voluntary labels
- Endorsement label has not been preferred and has been used only for laptops / Notebooks

Mandatory Label

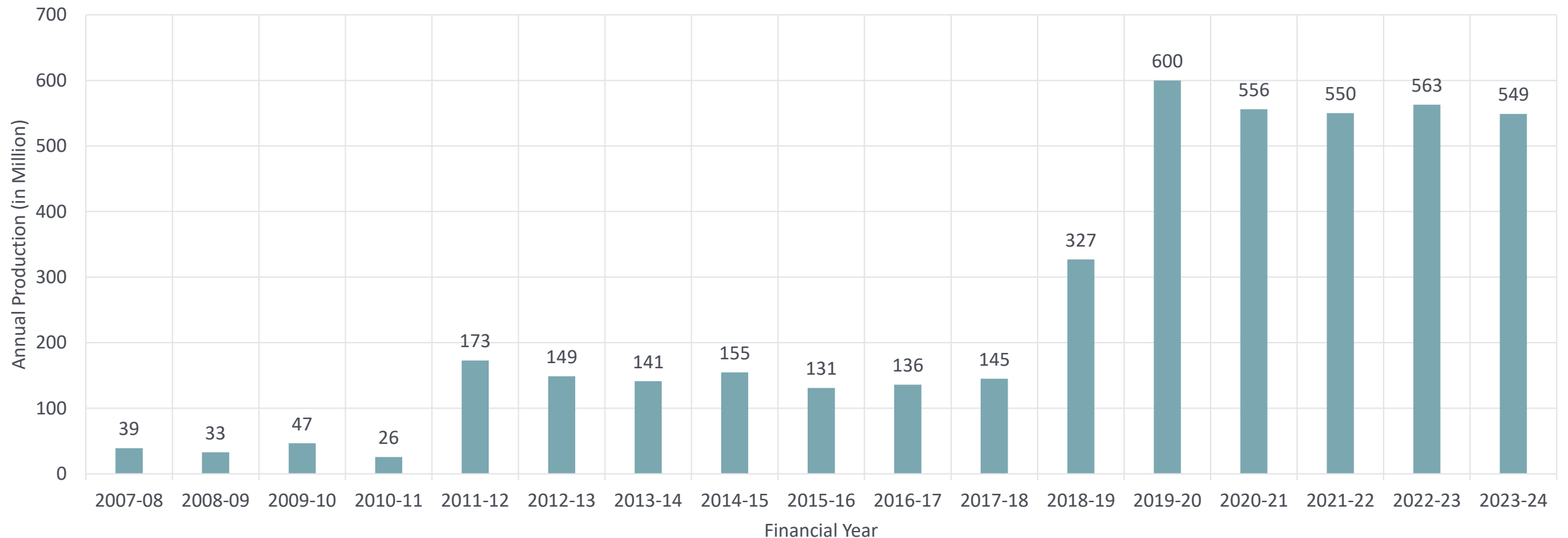
- | | |
|--|--|
| 1. Frost Free Refrigerator | 13. RAC (Cassette, Floor Standing Tower, Ceiling, Corner AC) |
| 2. Stationary Storage Type Electric Water Heater | 14. Distribution Transformer |
| 3. Colour Television | 15. Direct Cool Refrigerator |
| 4. Washing Machine | 16. Ceiling Fan |
| 5. Room Air Conditioner (Variable Speed) | 17. Domestic Gas Stove |
| 6. TFL | |
| 7. LED LAMPS | |
| 8. Chillers | |
| 9. Light Commercial AC | |
| 10. Deep Freezers | |
| 11. Ultra-High Definition (UHD) Televisions | |
| 12. Room Air Conditioner (Fixed Speed) | |

Voluntary Label

- | | |
|---|--|
| 1. General Purpose Industrial Motor | 14. Side by Side/Multi Door Refrigerator |
| 2. Agricultural Pump Set | 15. Pedestal Fan |
| 3. Computer | 16. Table/Wall Fan |
| 4. Ballast | 17. Induction Hob |
| 5. Office Automation Products | 18. Solar photovoltaic module |
| 6. Diesel Engine Driven Moonset Pumps for Agricultural Purposes | 19. Packaged Boiler |
| 7. Solid State Inverter | 20. Commercial Beverage cooler |
| 8. Diesel Generator Set | 21. Grid Connected Solar Inverter |
| 9. Microwave Oven | 22. Refrigerant Compressor |
| 10. Solar Water Heater | 23. Evaporative Air Coolers |
| 11. Air Compressors | 24. EV Charger |
| 12. High Energy Li-Battery | |
| 13. Tyres/Tires | |

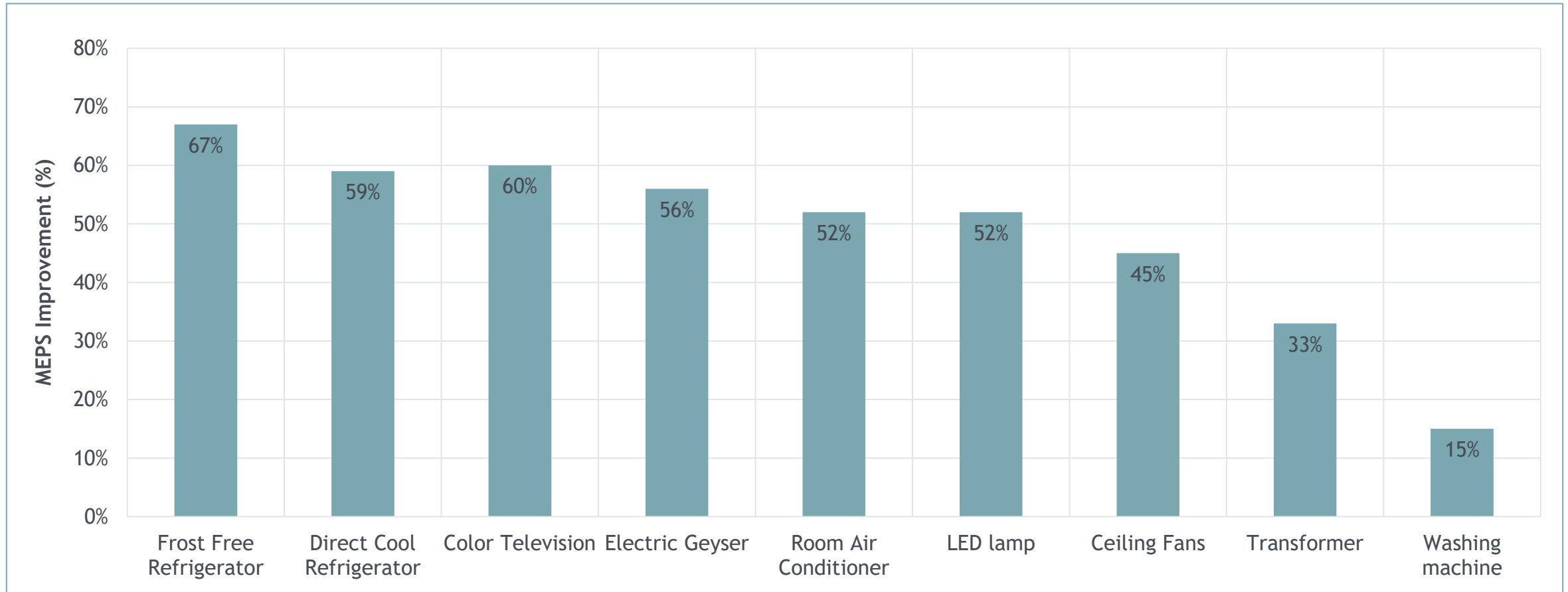


Over 4 Billion Star-Labelled Appliances since 2007



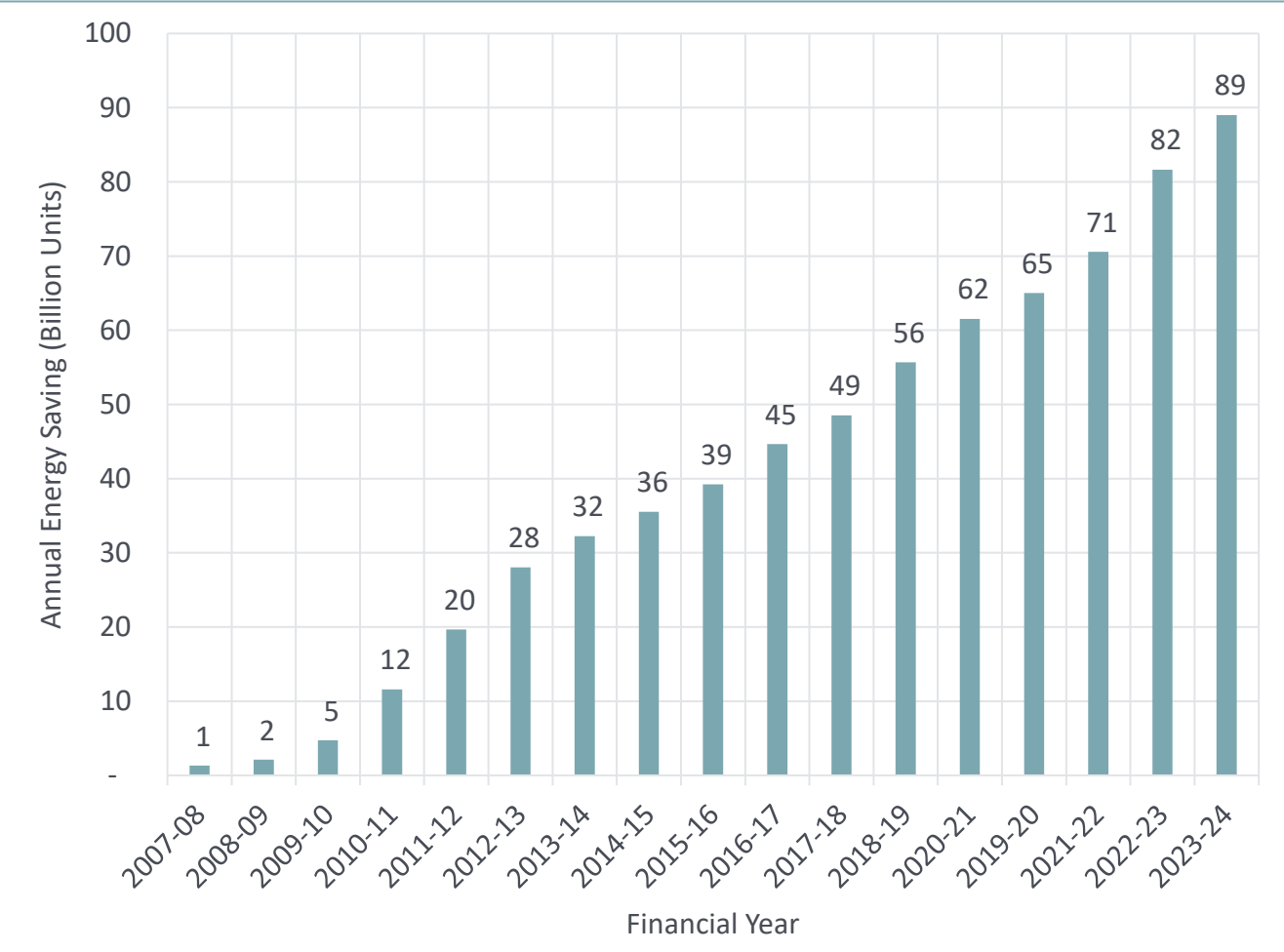
- As of Nov 2024, BEE has registered over **3,500 brands** and **28,000 models**, with **4.3 Billion** star-labelled appliances produced since 2007

MEPS Improvement since 2007 to 2026



- Since 2007, significant progress in MEPS has been achieved across mandatory appliances—particularly refrigerators, televisions, geysers, room air conditioners, and LED lamps—many of which are now comparable with Global Best MEPS.

Impacts of S&L Program: Energy Saving and Co2 Emission Reduction



• As of Nov 2024, BEE saved electricity close to **691 Billion units** and equivalent Co2 Emission Reduction of **543 Mtons** since 2007



Check Testing



BEE or State Designated Agency (SDA) conduct product testing to ensure that product models meet the performance as claimed on the label



Challenge Testing



BEE conducts testing on receipt of written complaint against a any registered product



Market Surveillance



Conducted by BEE or SDA to check the accuracy, correctness and validity of label for the products sold in the market

- In FY 2024–25, BEE completed 20,000+ market surveys across 32 states and is developing mobile app for conducting the surveys.
- BEE plans check testing of 2,000+ appliances under mandatory categories across 36 SDAs in FY 2025–26.

Expand the coverage of the S&L Program from 41 to 50 appliances by 2030 to meet India's climate goals.

Strengthening the compliance framework through collaborations with States Governments

Aligning India's Energy Efficiency Standards with Global Best MEPS for Key Appliances

Harmonize of energy efficiency standards with South Asian countries

Thank you!
Any questions?



Efficient Appliances for People & the Planet

clasp.ngo