



## Environmental Issues facing Electronic Component Industry

AEDE

5<sup>th</sup> December 2006

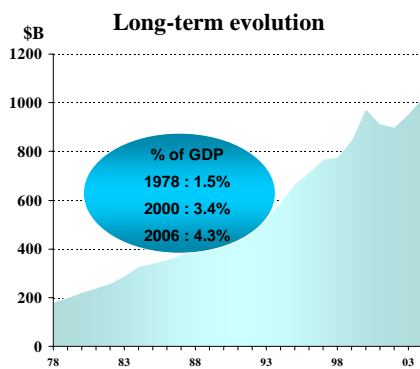
Brussels

**ELCINA ELECTRONIC INDUSTRIES ASSOCIATION OF INDIA**

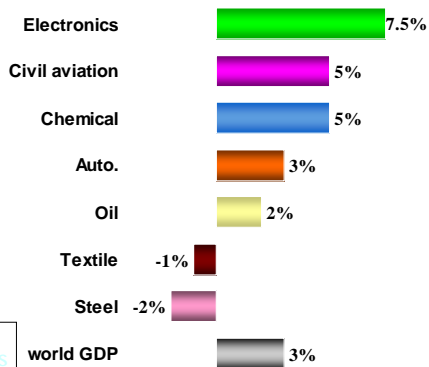


Global scenario..

### Electronic Industry production growth



**CAGR comparisons 1978-2004**



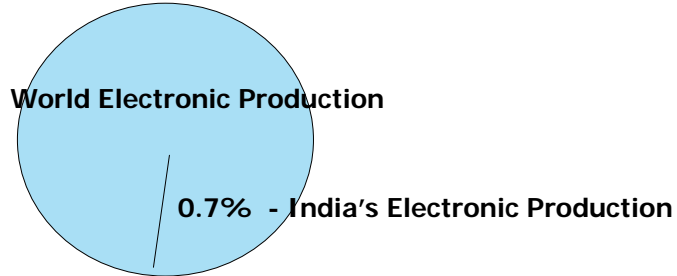
**WORLDWIDE ELECTRONIC INDUSTRY REPRESENTS**  
 4.40 x Oil, Petrol & Minerals; 2.75 x Chemical & Plastics  
 2.45 x Food, Beverage & Tobacco; 2.44 x Transportation  
 2.20 x Electricity, Gas & water

## Electronics is the fastest growing industry

Source : IC Insights, ST



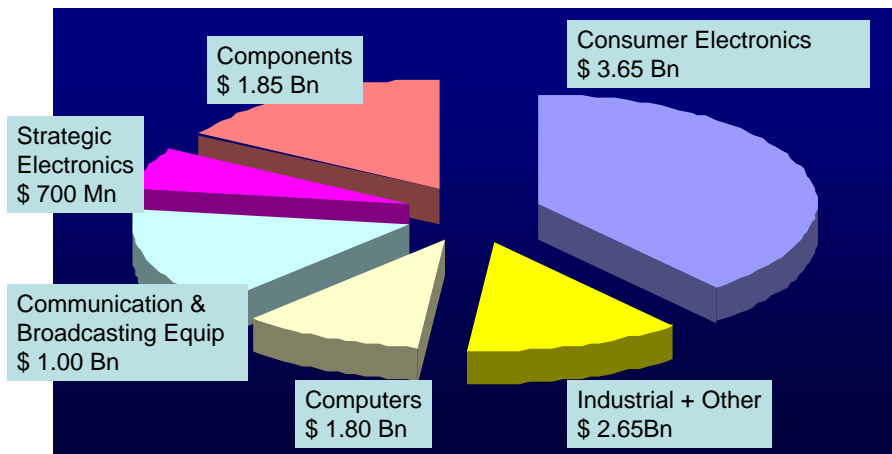
## Where are we today ?

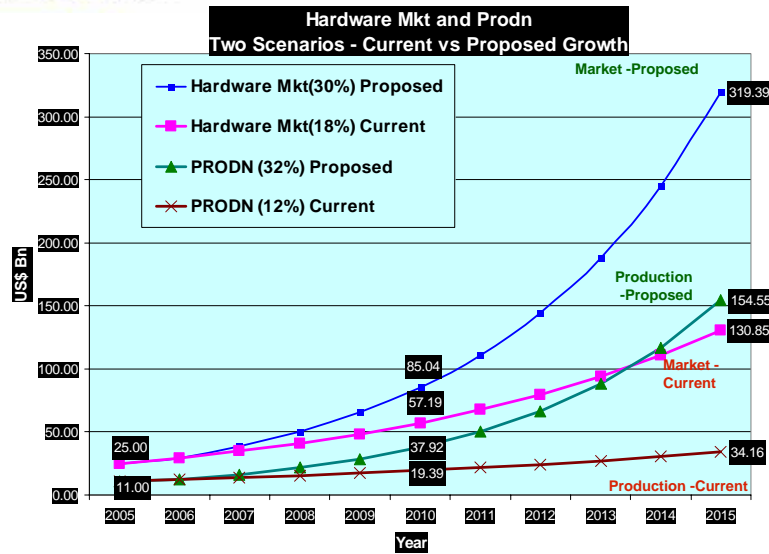


**Electronic Hardware Production in 2005:**  
**WORLD - US\$ 1430 Billion (5% of World's GDP)**  
**INDIA - US\$ 11.6 Billion (1.7% of India's GDP)**



### Indian Electronic Industry (2004-05) Total \$ 11.6 Billion





ISA-Frost & Sullivan Report 2006

## Distribution of Indian Exports

• Europe	26.21%
• Singapore, HKG, S.Asia	25.51%
• USA & Canada	23.73%
• Middle East	11.36%
• Japan, Korea & F.East	7.28%
• African Countries	2.51%
• Rest	3.40%

ESC Directory 2004



## ENVIRONMENTAL

- WEEE: Waste of Electrical & Electronic Equipment
- RoHS : Restriction of Hazardous Substances
- Electronic Code of Conduct
- Packaging
- Industry / Customer Standards
- EMS : ISO 14000
- EUP: Energy Using Products



## Trends...

- Dynamic, Growing...Confusing
- Product → Process Standards
- Mandatory → Market driven
- Environment → CSR
- Value Chain – many non electronic players
- Next turn – NTTBs in Southern nations
- Non enforceability of law in India discourages Indian manufacturers from embracing legislation
- Opportunity to reduce Costs
- Technical solutions – a limitation
- Growth is higher in Developing markets



## Issues

- Lack of information ...CBI, AEDE has been very helpful
- Missing links in supply chain
- Inadequate + Expensive Test facilities
- Economies of scale – yet to catch up
- MNCs prefer to import <– internal taxation + inadequate component base
- Poor infrastructure → “islands” of excellence



## Implications...

- SMEs versus MNCs
- Not a level playing field
- Complexity – when facing Trade & Environmental challenges together
- Local market more attractive than global trade
- Risk of detected failure under RoHS...responsibility?
- Interest in exports is waning



- Stake holder participation – SME representation
- Eco Design as a tool - AEDE experience
- Saving India from becoming an E-Dumping ground : E-waste 146,000 Tns -> 1.6 Mn. Tns by 2012
- “Remanufacturing” push by USA
- An opportunity for enhanced eco friendly manufacturing in India?

THANK YOU