

EcoDesign2006 Asia Pacific Symposium

## Investigation on value increase in inverse distribution process

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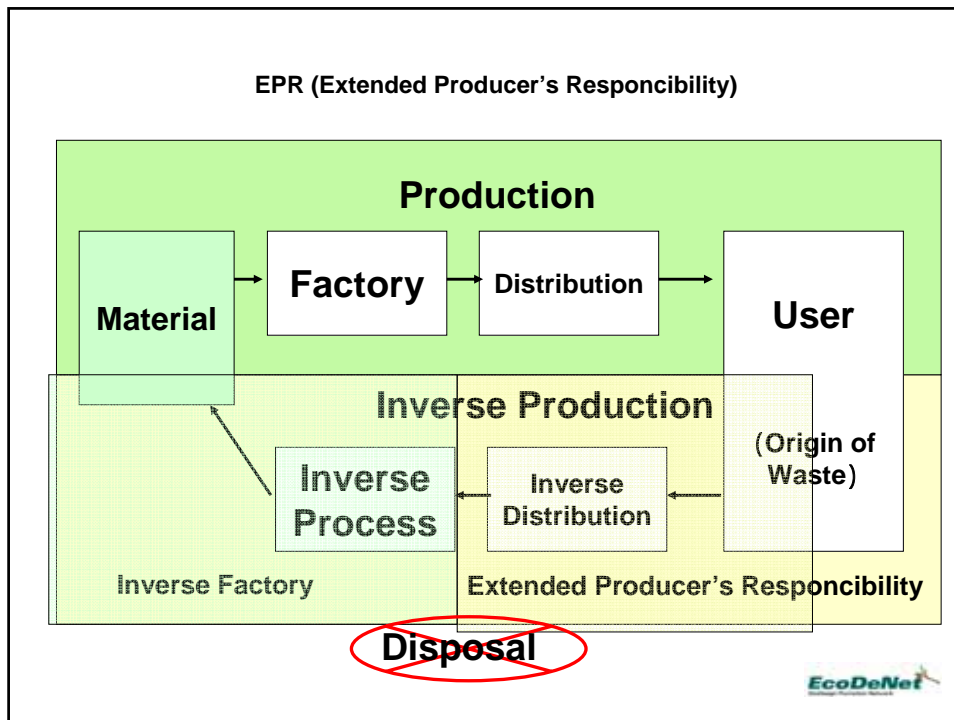
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## Electronic Equipment

- Personalized Product
  - Huge numbers of products are distributed in a market
  - Short lifetime
- Global distribution
  - Mass production
  - Reduce cost
  - Worldwide distribution





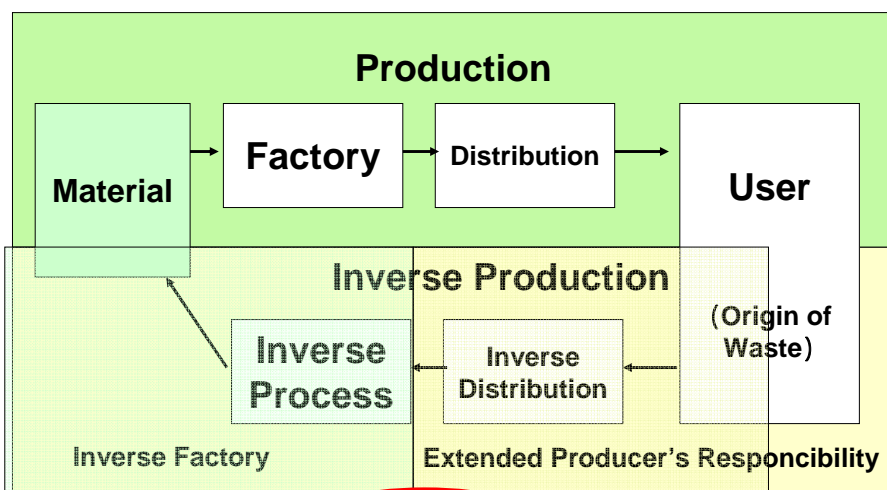
- Mandate Action**
- Prevention of Environment
  - Cost sharing
    - Production process
  - Physical responsibility
  - Financial responsibility
- EcoDeNet

## Today's Focus

- Solutions to find out for Economical Issue



### Recycling Production · Inverse S.C. · Factory



**Disposal**

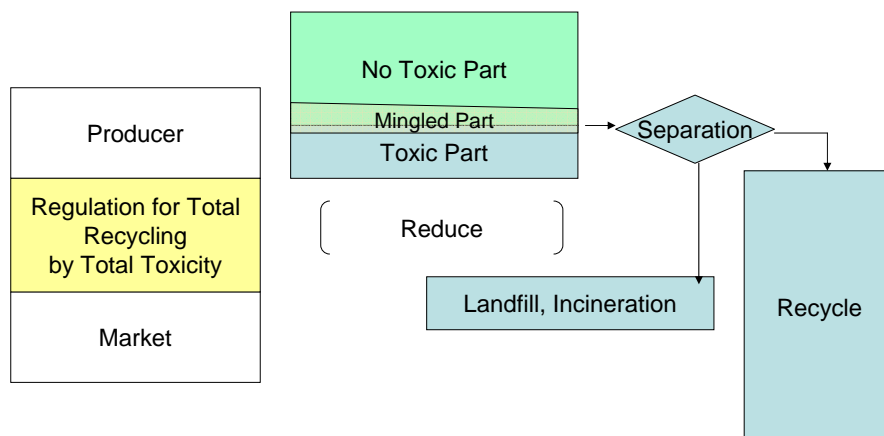


## Improving productivity

- Process improvement
- Increasing volume
- Increasing quality
- Selection of process



### Material separation scheme



### Simplified Partial View of Supply Chain





Input  
Equipment  
1

Output  
Material  
0.75

Material Recovery from Recycle Plants in Japan



## Mandate Action

- Prevention of Environment
- Cost sharing
  - Production process
- Physical responsibility
- Financial responsibility

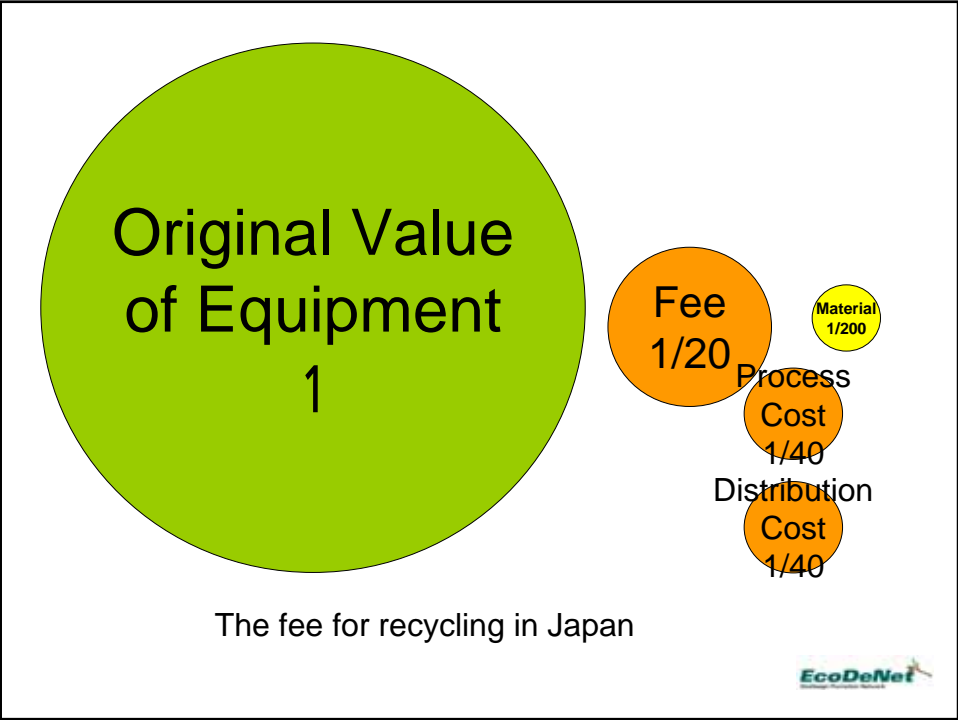
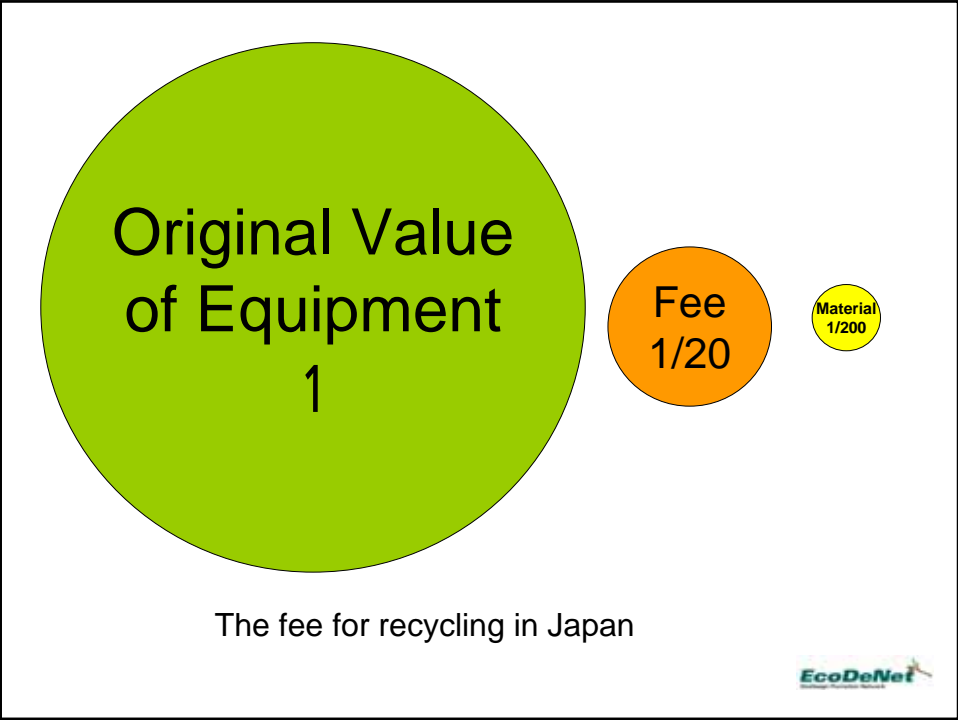


Original Value  
of Equipment  
1

Material  
1/200

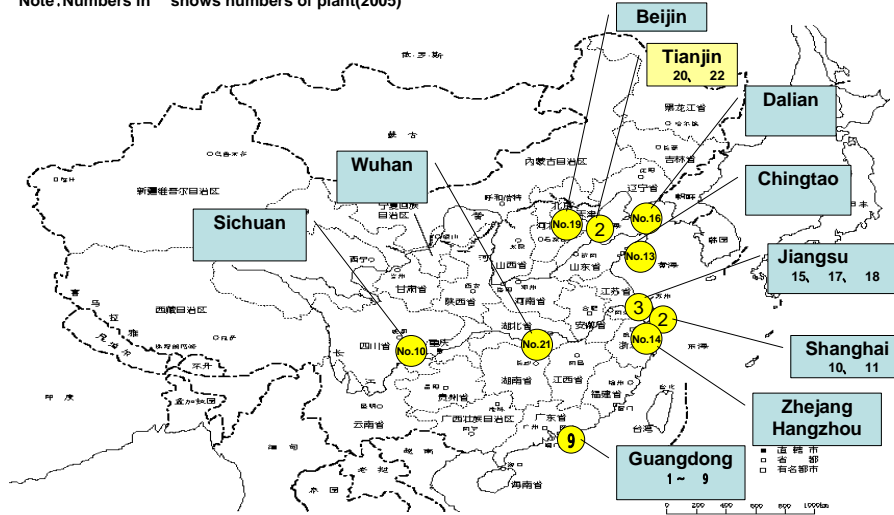
Material Recovery from Recycle Plants in Japan by Value





### WEEE Recycling Project in China

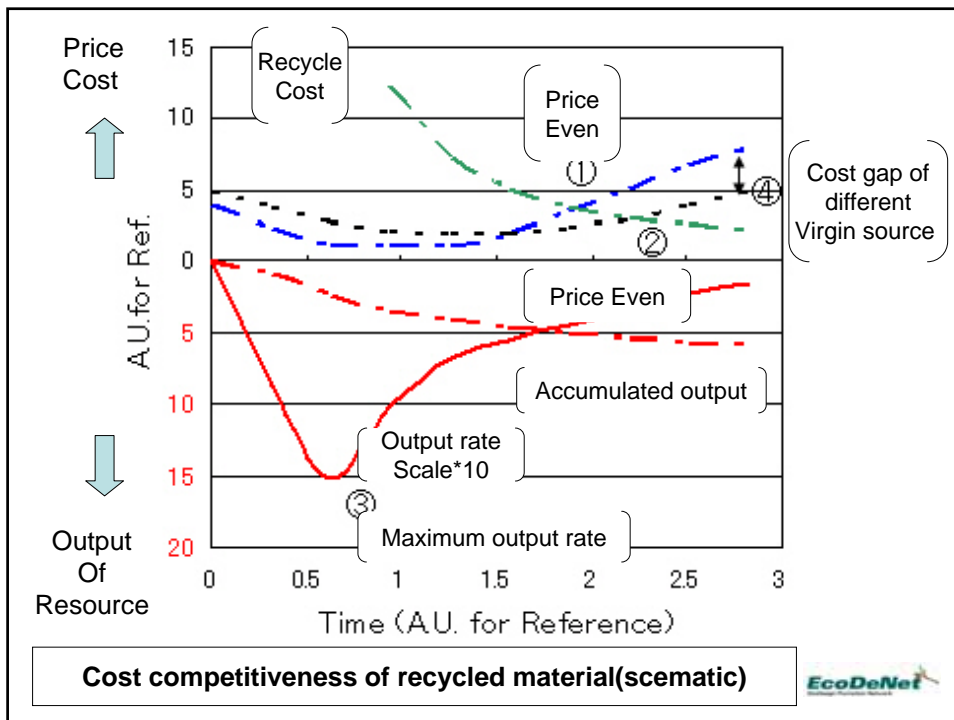
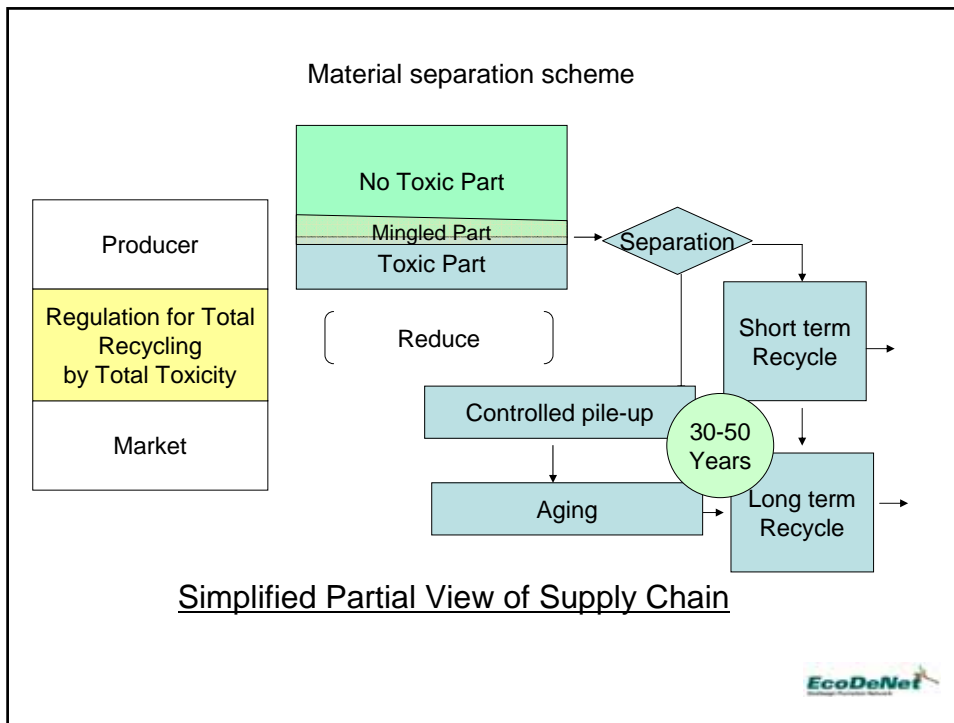
Note: Numbers in shows numbers of plant(2005)

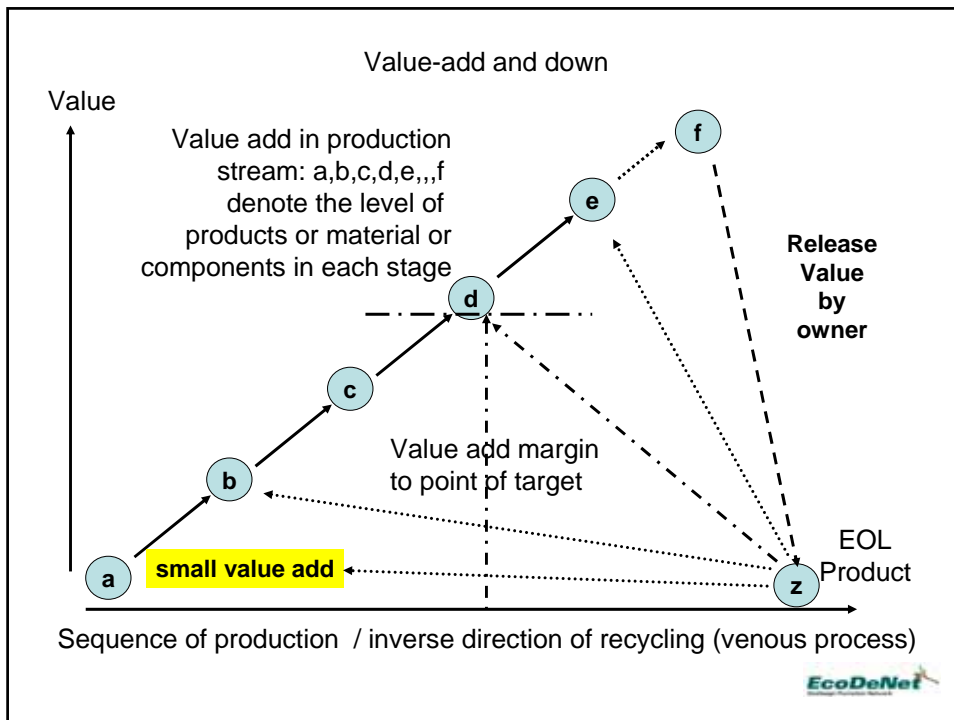


By reducing waste we can use recycled material in Business

	Production Sys	Recycle Sys
Material Source Location	Concentrate	Spread
Material Source Selection	Controllable by Pricing	Limited
Value Chain	Increasing Direction	Decreasing Direction
Product Margin	Controllable	Low
Time Required	Strictly Decided by Market Needs	No Definite
Energy Source for Processing	High Intensity Source Required	Low Intensity Source Acceptable

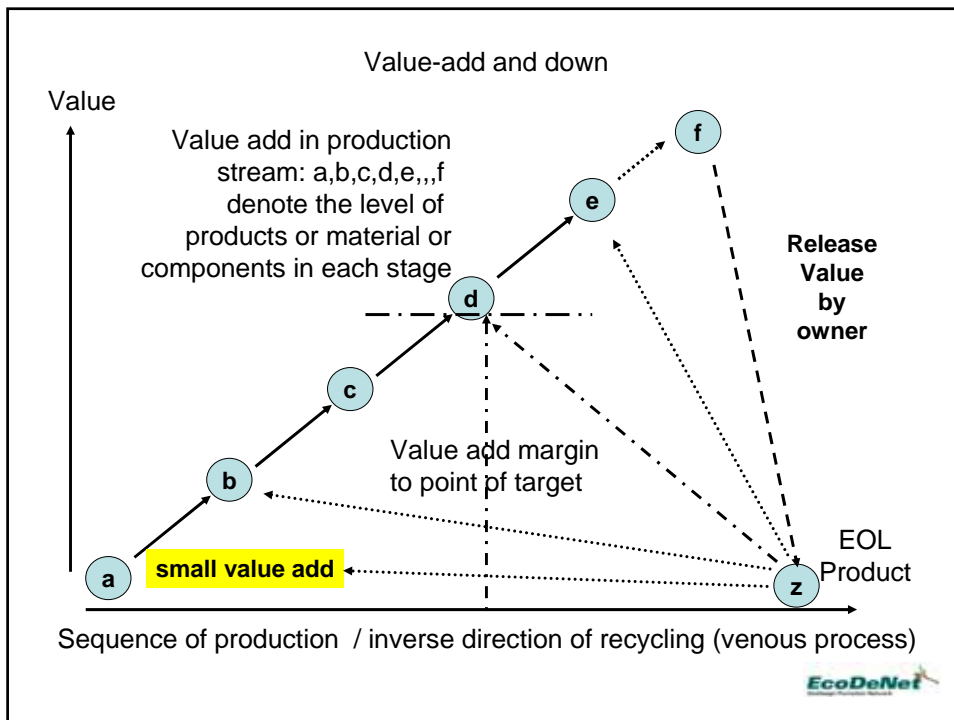
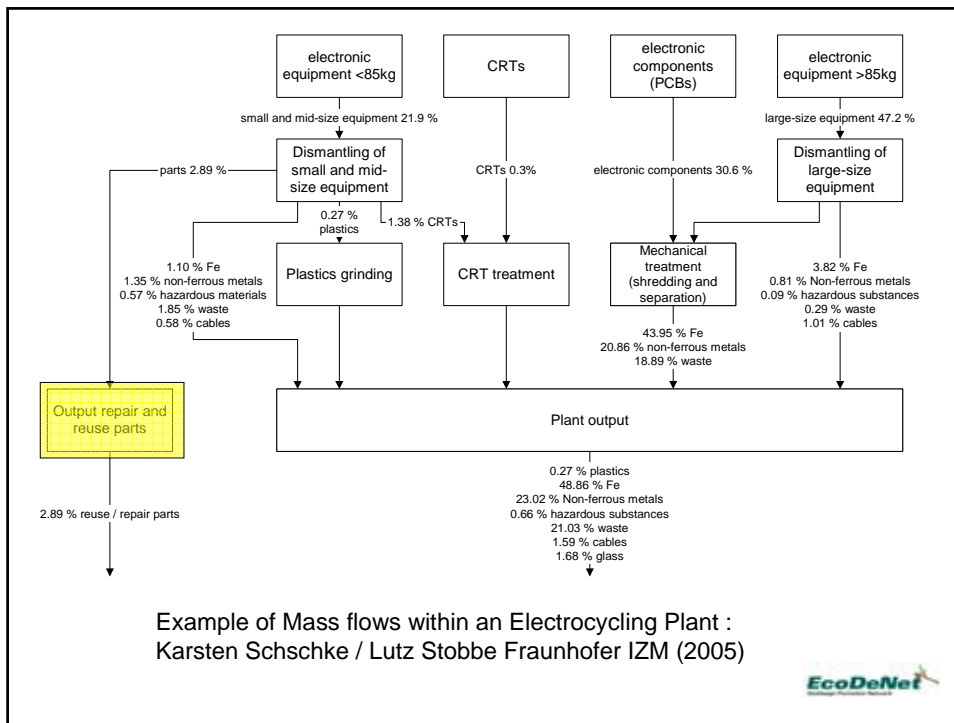


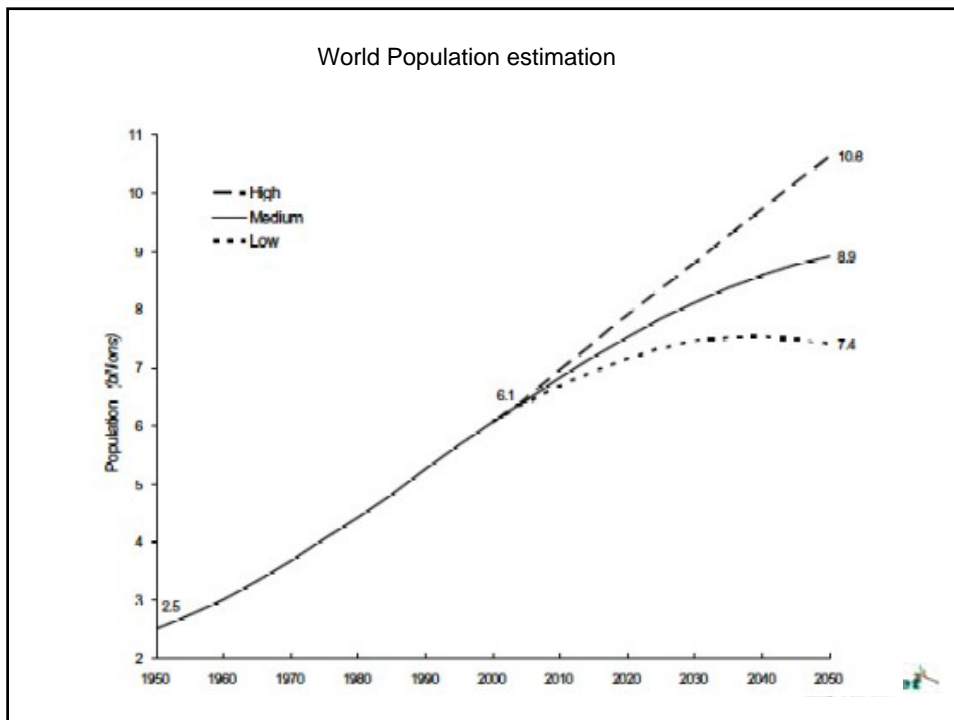
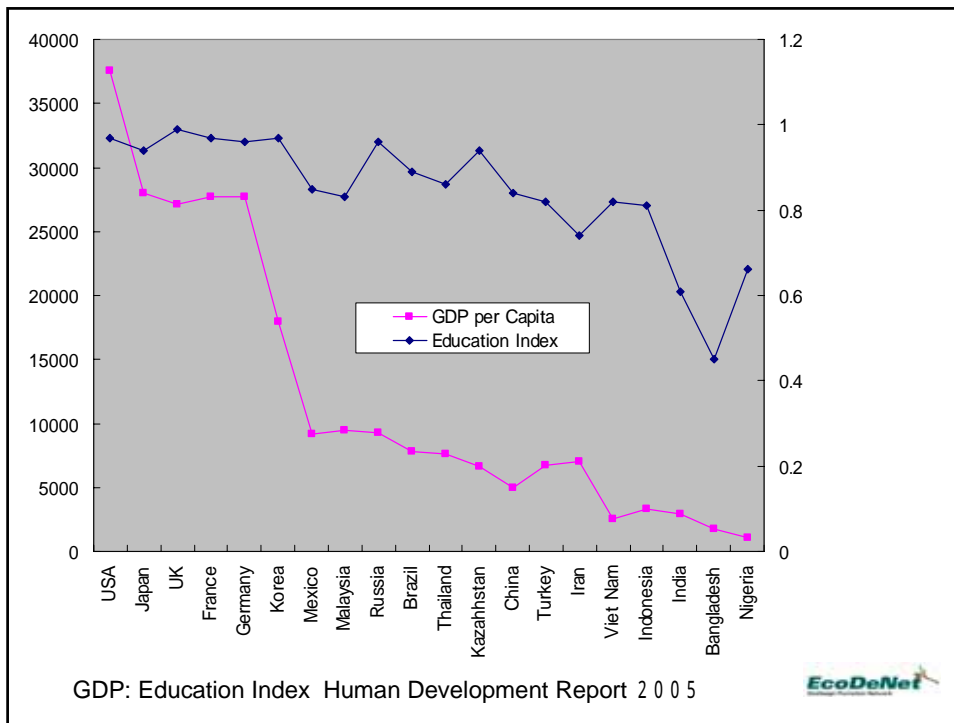


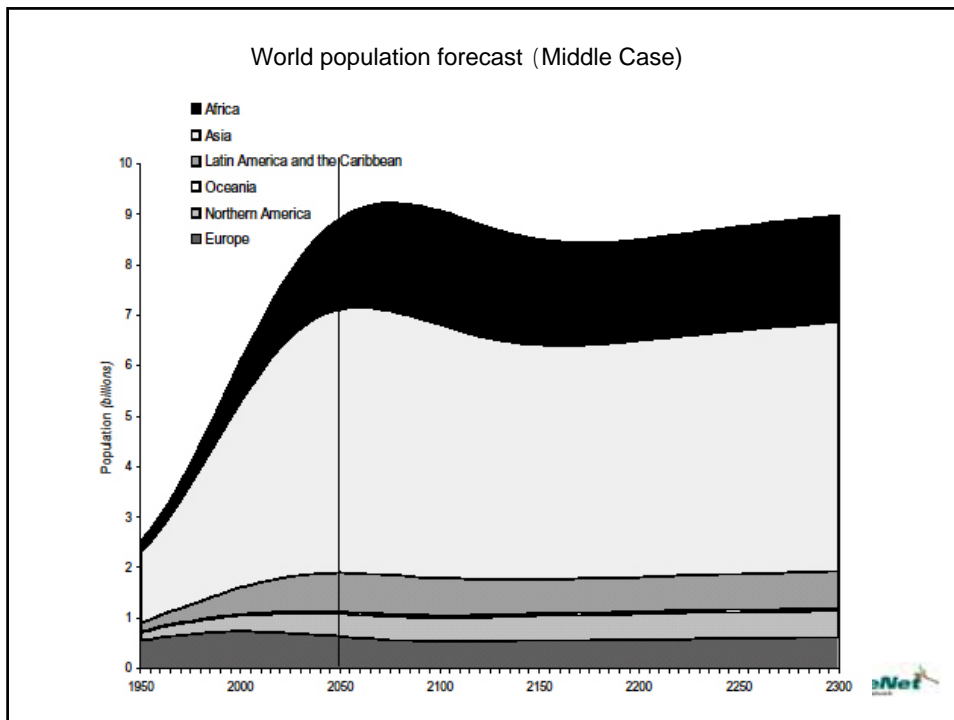


## Value increase in inverse distribution

- Material → Re-use, Recycle
- Components → Re-use
- Equipments → Re-use, Re-manufacturing







- ### Important Issues
- Marketing
  - Upgrading
- EcoDeNet

## Important Issues“UP Grade”

- Energy Consumption
- Upgrade power consuming module
- Replacing Parts using harmful material
- Easy disassembly design
- Easy disassembly tool/ interconnection material



Thank you for your attention

