Environmental Information and the Attitude of Citizen Society
A new trial to change citizen’s awareness of energy/resource productivity
Institute of Industrial Science,
University of Tokyo
Itaru YASUI, Prof.
CREST by JST

Energy/Resource Consciousness
- Tendencies of Japanese Citizen Society;
  “Health of Myself and Comfort”
- Which is More important?
  - Risks on Human Health?
  - or
  - Sustainability with Energy/Resource Consciousness?

Sustainability
Triple Bottom Line
- Economic Aspects
- Social Aspects
- Environmental Aspects

Green & Sustainability; Different Views
- Economic Aspects
- Social Aspects
- Environmental Aspects
- Human Health
- Eco-System Factor
- Resource Factor
- Limitation of Earth
Outline of Research

- Objectives: To Develop Methods of Communication with Civil Society to Attain Sustainability.
- IIS, Univ. of Tokyo
- CCR, Univ. of Tokyo
- National Institute for Environmental Studies
- EcoManagement Institute
- Information
  - LCA DATA with Energy and Resource Info.
  - Risks on Health

Outline of Research 2: Method of Information Transfer

- Method 1: Computer Programs in Events
- Method 2: Internet Questionnaire
- Method 3: Workshops
  - Comparative Risk Assessment Method
  - Simplified Workshop
- Method 4: Lectures and Questionnaire
- Method 5: Questionnaire on Paper

Outline of Research 3

- Core Activities but Personal One
- Internet Page by Yasui
  - A Guide for Environment Science for Citizens
  - 1.3 Million Accesses for Five Years
  - 70,000 Accesses /Month
- Topics
  - Basic Science for Environment
  - How to Understand Information provided by Newspaper and TV

Questionnaire in Exhibition

- 2000.07.21 (Fri) – 08.06 (Sun) (17 days)
- “Dream Technologies for 21st Century”
- Tokyo Big Site
- 5117 data from visitors
Which is your choice? Environmental Burden? Price? Others?

Airplane or Shinkansen Bullet Train?

You are now in Tokyo. You have to go to Hiroshima. Which is your choice, airplane or train?

Airplane  Bullet Train

Information on Price and Travel Time.

Washing Machine? Hand Washing?

Glass? Paper Cup?

Airplane? Bullet Train?

Virgin Paper? Recycled Paper?

Can Beer? Bottled Beer?

Pre-washed Rice? Ordinary Rice?

Tap Water? Bottled Water?
Example of Environmental Burden

CO2 Emission / Person

SO2 & NOx Emission / Person

Airplane vs. Train

Change one’s Opinion?

employee  manager  house wife  shop owner  student  others
Reaction for Different Types of Environmental Data

- Women: Interested in Raw LCA Data
- Men: Require Some Interpretation
- Ex. Environmental Load by Water used for Rice-Wash = 8% of Total Load for Waste Water

Effects on Long Lecture by Yasui on “Environment Today”

- Toxicology in Basic
- Carcinogens in IARC List
- Views by Epidemiologist
- Comparison of Environmental Risks
- Global Environmental Problems
- Energy/Resource Limitation
- Waste Management

Effects of Lectures

- Increase the Importance of;
  1. Population
  2. Food Supply
  3. Energy/Resource Supply
  4. Global Warming
  5. Recycling of Waste
  6. Desertification

Effects of Lectures

- Decrease the Importance of;
  1. Ozone Layer
  2. Dioxin
  3. Final Disposal Site
  4. Risks of Food Additives
  5. Risks of Residue of Agricultural Chemical
Future Direction of Research

- Rough Idea on how citizens react on environmental information
- Environmental Views can be changed by Long Lecture (12 hours)
- Risks on Health — Sustainability
- Citizens Knowledge on environment is fragile by the attach of news media.
- Need More Efficient Methods to move People to “Sustainability Thinking”
- Final Product of Research
- Environmental Teaching Materials for Junior High and High School Teachers.