

# NEC's green purchasing/procurement program and expectations to the Asia-Pacific Region

November, 2006  
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CSR Promotion Unit  
NEC Corporation

# Today's Agenda

1. Company Profile
2. NEC's Environment Policy
3. Green Products
4. Green Purchasing and Green Procurement
5. Expectations to the Asia-Pacific Region

# Company Profile

**Company Name:** NEC Corporation

**Address:** 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan

**Established:** July 17, 1899

**Chairman of the Board:** Hajime Sasaki

**President:** Kaoru Yano

**Capital:** ¥ 337.8 billion - As of Mar. 31, 2006 -

**Consolidated Net Sales:** ¥4,824.9 billion  
- Fiscal year ended Mar. 31, 2006 -

**Operations of NEC Group:** IT Solutions Business  
Network Solutions Business  
Electron Devices Business

**Employees:** NEC Corporation  
23,528 - As of Mar. 31, 2006 -  
NEC Corporation and Consolidated Subsidiaries  
154,180 - As of Mar. 31, 2006 -

**Consolidated Subsidiaries:** 356 ( 142 Domestic, 214 Overseas )  
- As of Mar. 31, 2006 -



Hajime Sasaki

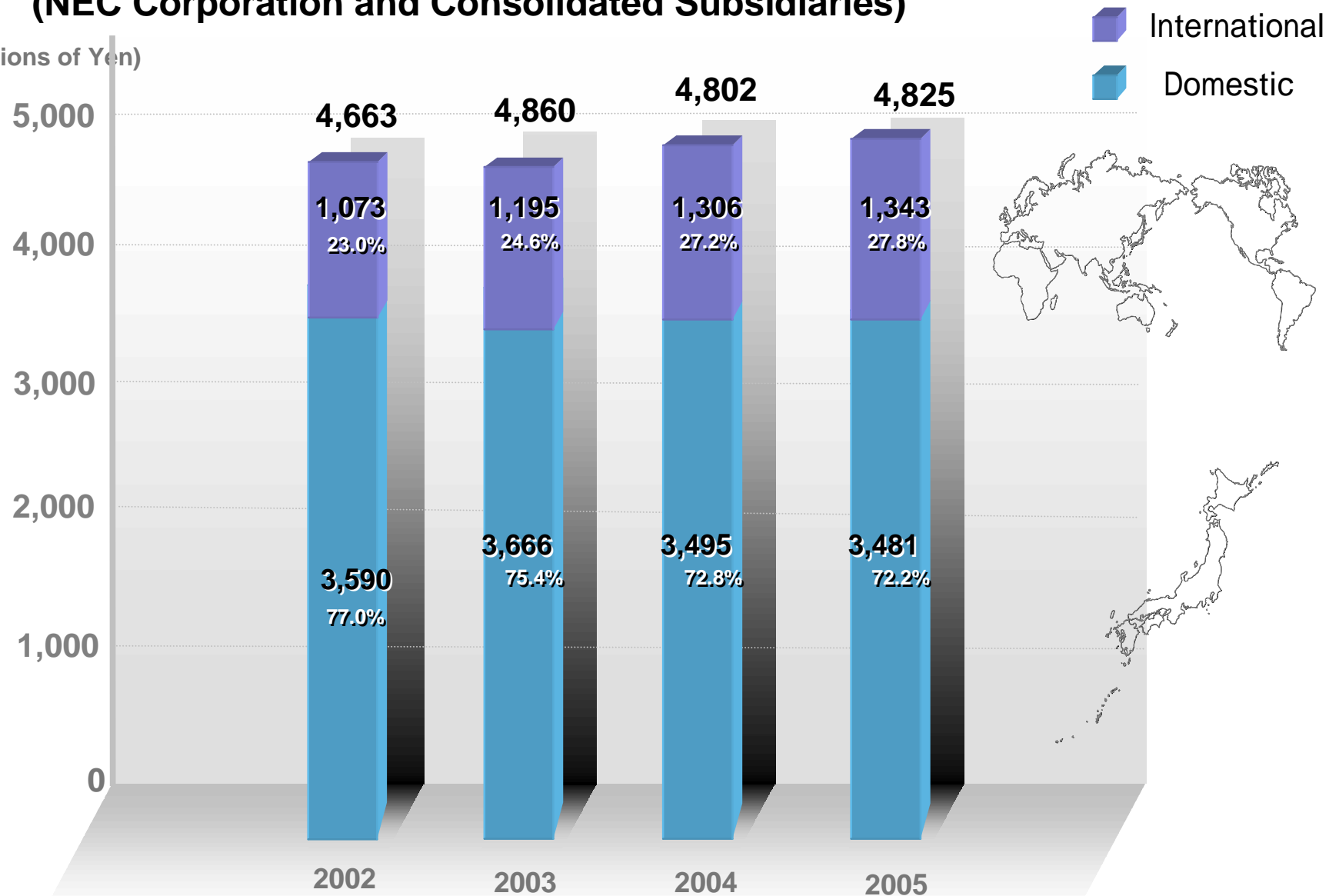


Kaoru Yano

# Net Sales

(NEC Corporation and Consolidated Subsidiaries)

(in billions of Yen)





# Business Field and Main Products/Service

## IT Solution

### SI/Service



### Software

VALUMOウェア

### Computer Platform



### Personal Solution



## Network Solution

### Broad-band

UNIVERGE



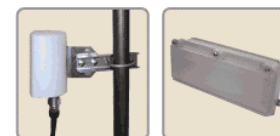
IP NW / Optical NW

### Social Infrastructure



Broadcasting / Postal/ FA

### Mobile Terminal / Mobile Infrastructure



## Semi-conductor



## Display



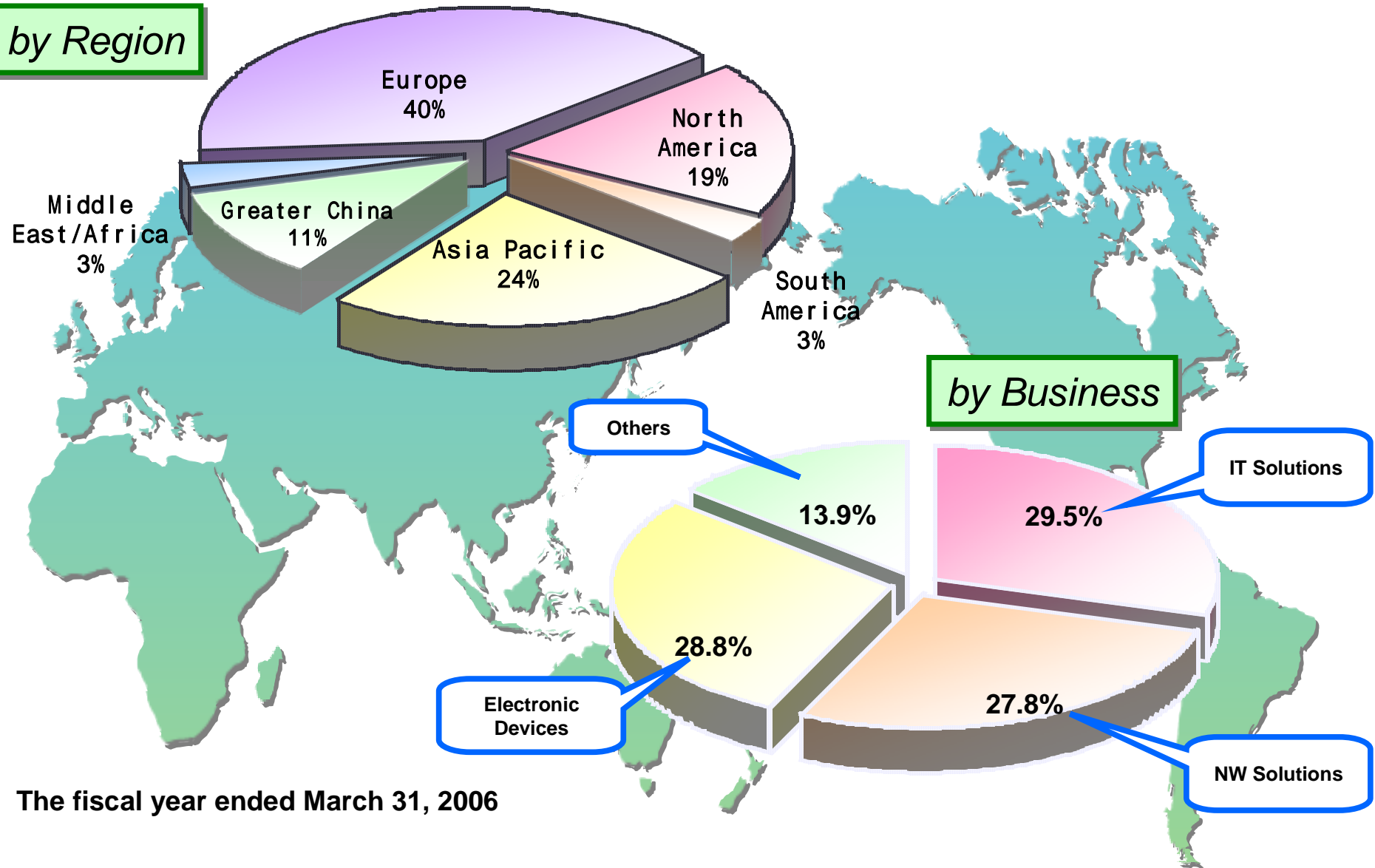
## Electron Devices



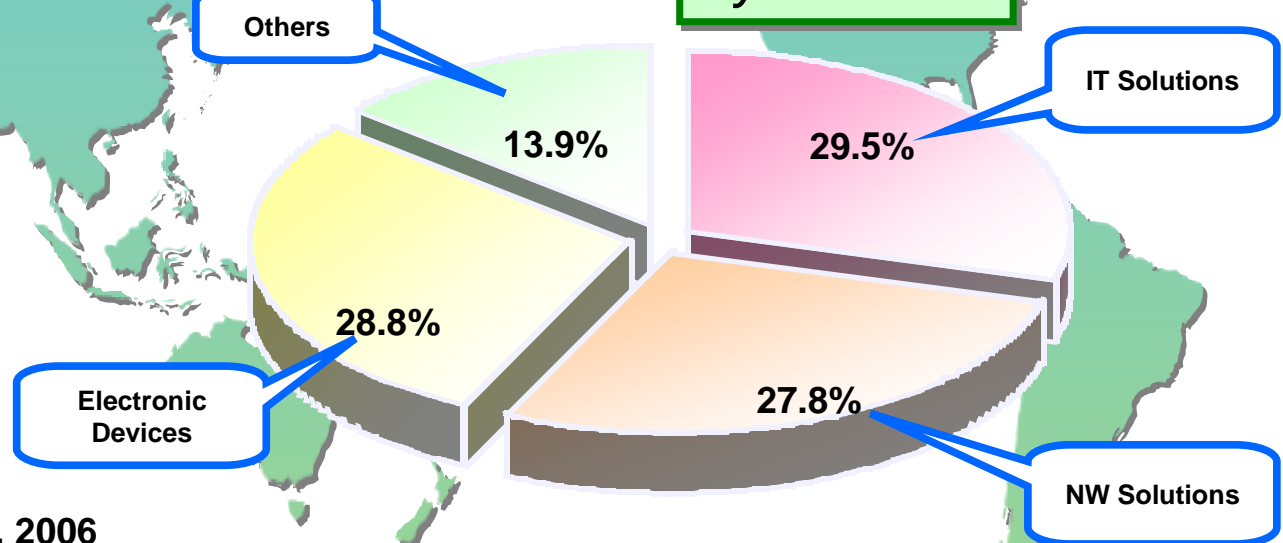
## Electronics Device

# International Sales

## by Region



## by Business



The fiscal year ended March 31, 2006

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# Business Environmental Movement

## Increasingly worse global environmental problems

Environmentally hazardous  
substances  
(chemical substances)

Global warming  
(climate change)

Resource depletion/  
waste disposal

### ⊙ Thorough risk management

- Compliance with restrictions for included chemical substances
- Global warming prevention measures
- Measures against soil contamination

### ⊙ Internalization of social costs

- 3R
- Environmental taxes and emission credits



**Environment  
management aligned  
with business  
strategy**  
**Perfect measures as  
part of CSR**

### ⊙ Accountability and transparency when disclosing information

- Enhance timely information transmissions

### ⊙ Expand range of environmentally sound products

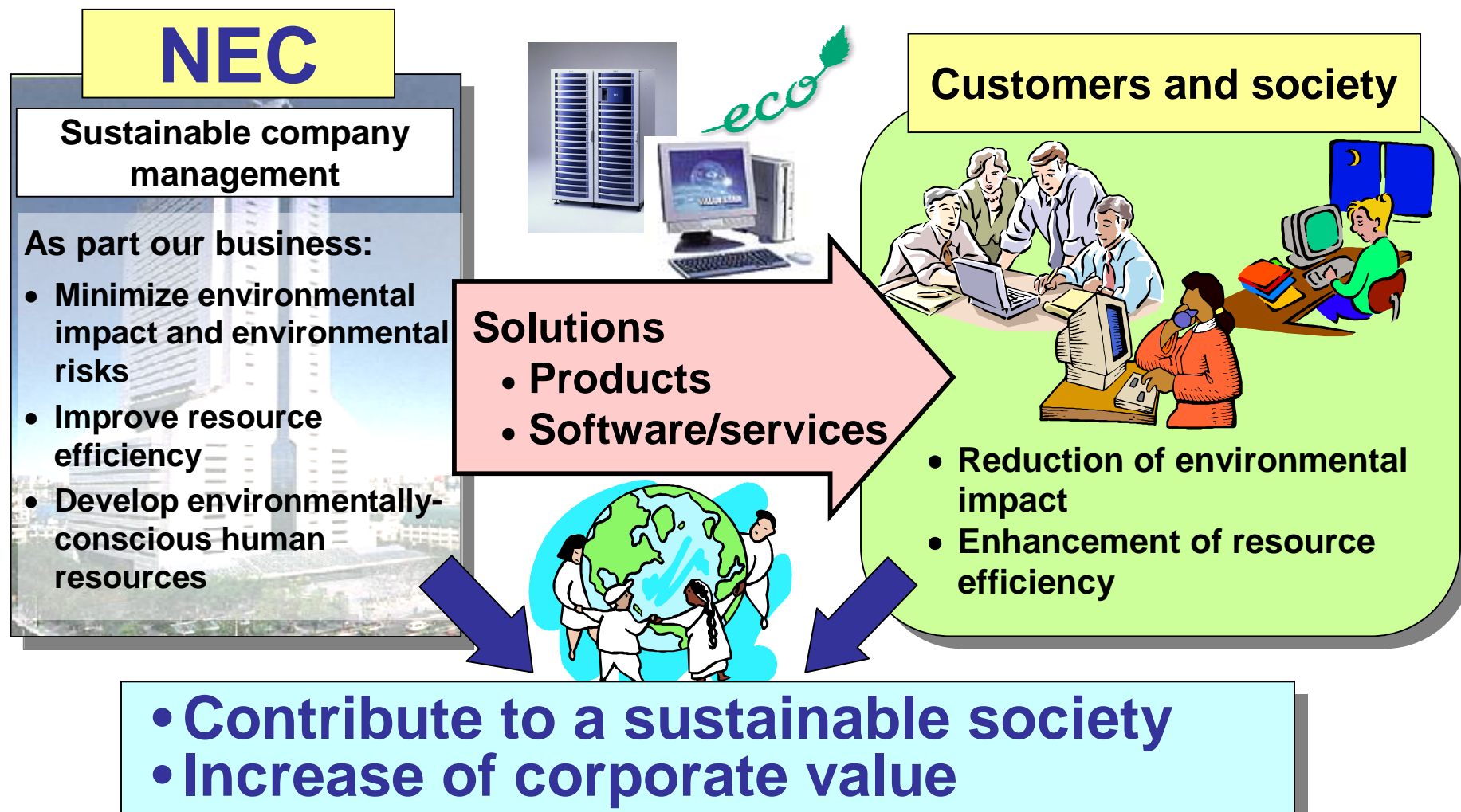
- Strengthen market advantage
- Strengthen brand image

### ⊙ Establishment of recycling business system

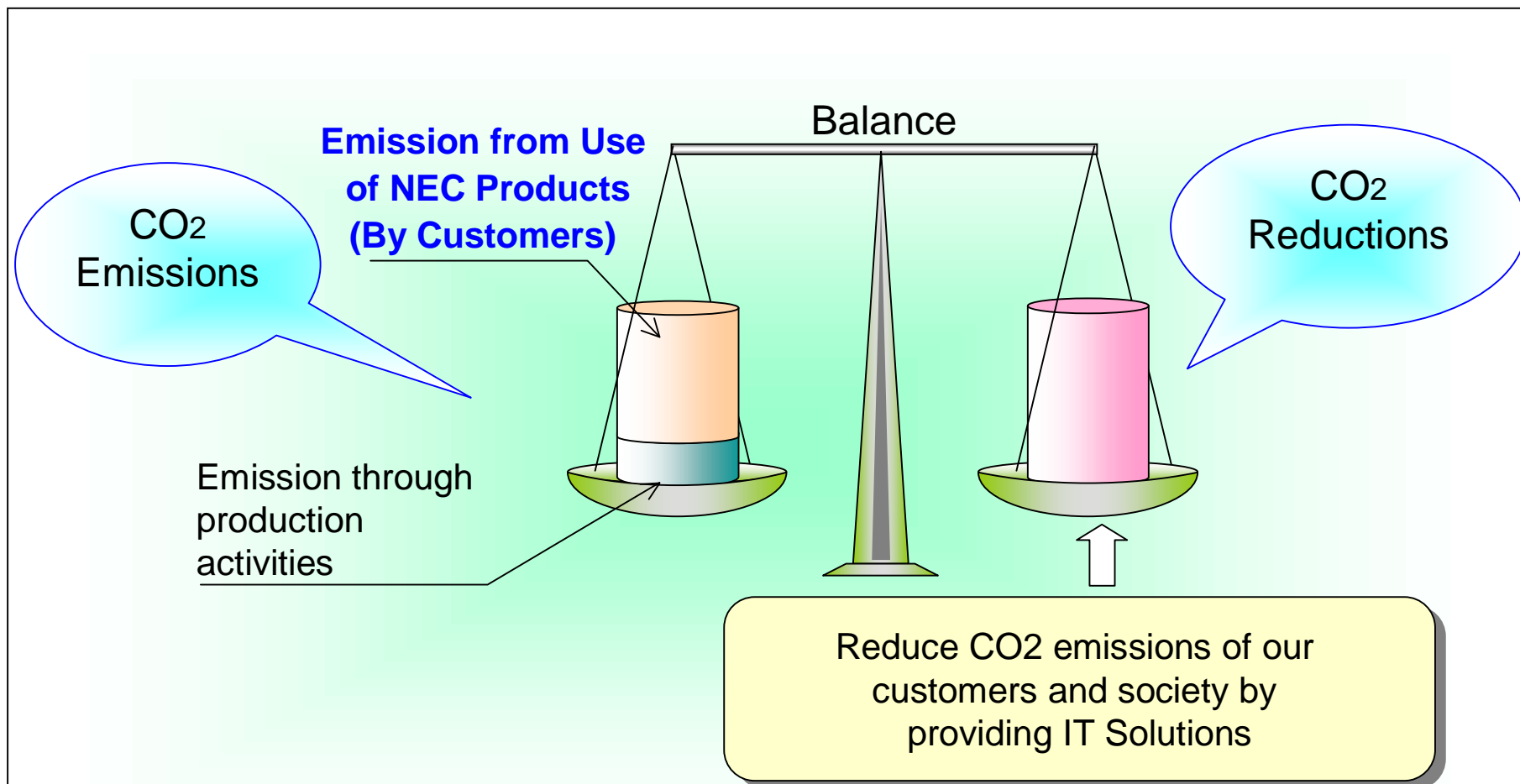
- Extend producer responsibilities
- Aim at recycling businesses through production innovation

# Environment Management Envisioned by NEC

## Concept of NEC's Environment Management



# NEC Environmental Management Vision 2010

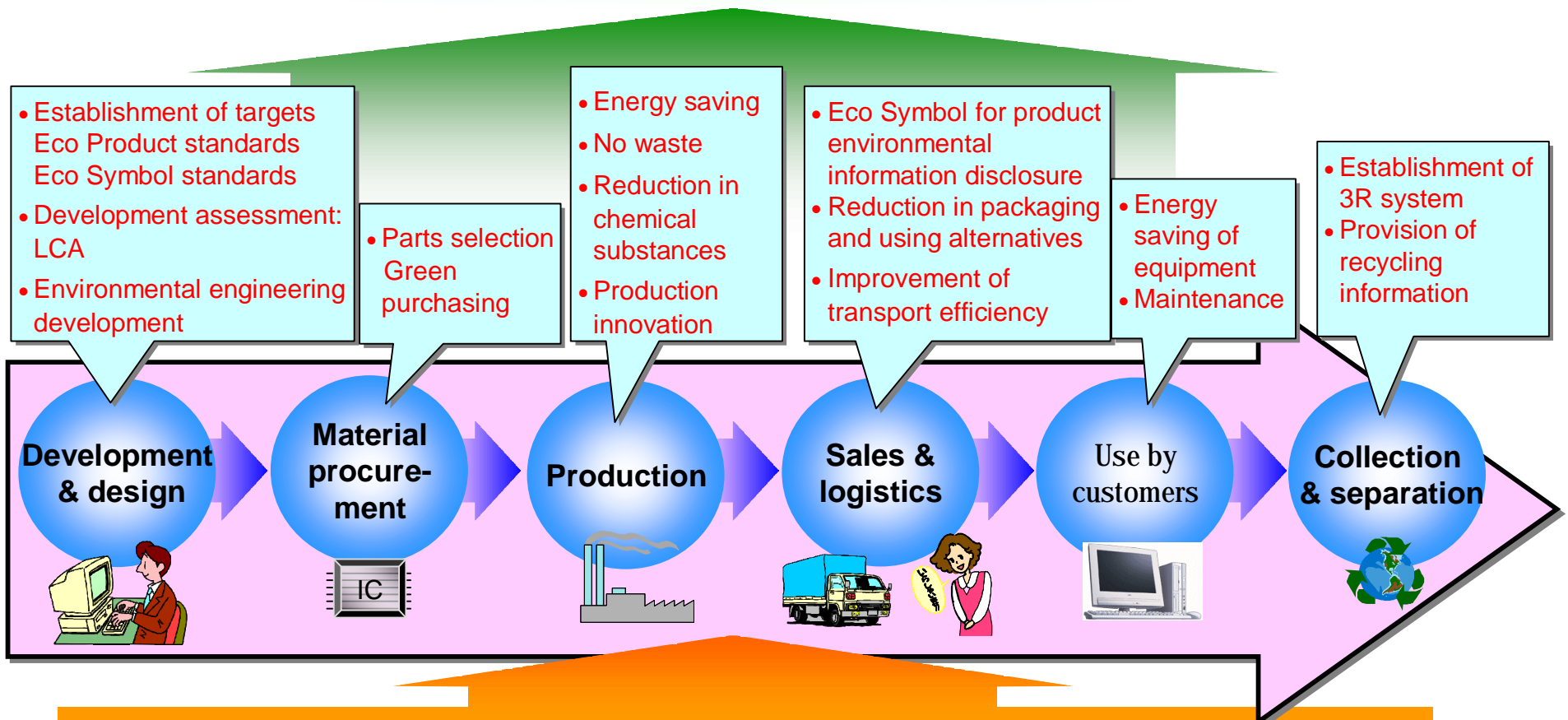


**We will contribute to reducing CO<sub>2</sub> emissions from our customers and society through advanced environmentally sound products and IT solutions. NEC aims the balance of CO<sub>2</sub> emissions and CO<sub>2</sub> reductions in FY 2011.**



# Environmental Awareness in All Business Processes

*Waste reduction (reduction in costs and environmental impact)*



**Utilization of IT (information technology)**

***All employees to become eco-oriented (Eco-oriented mindset, work, and lifestyle)***

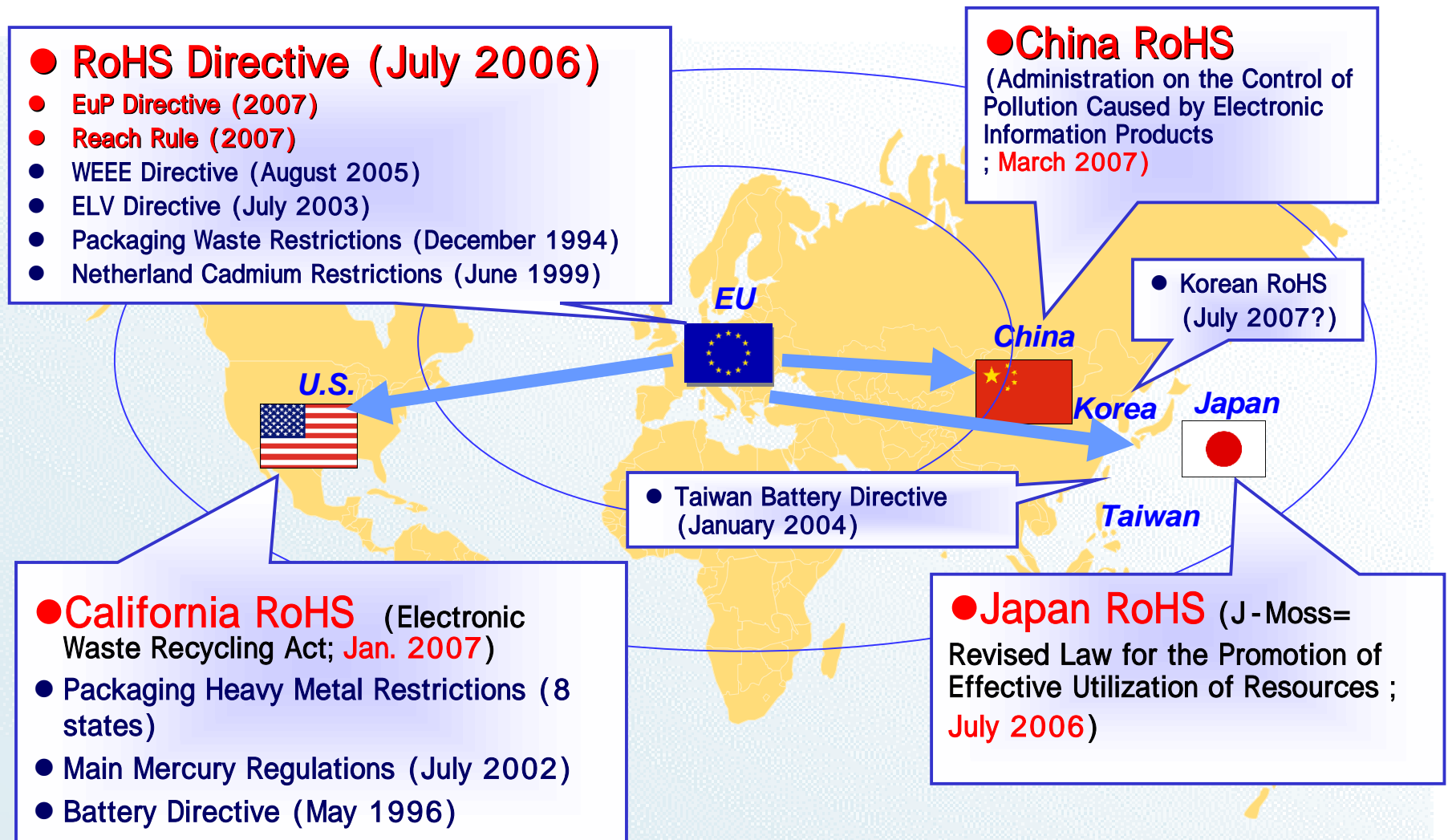
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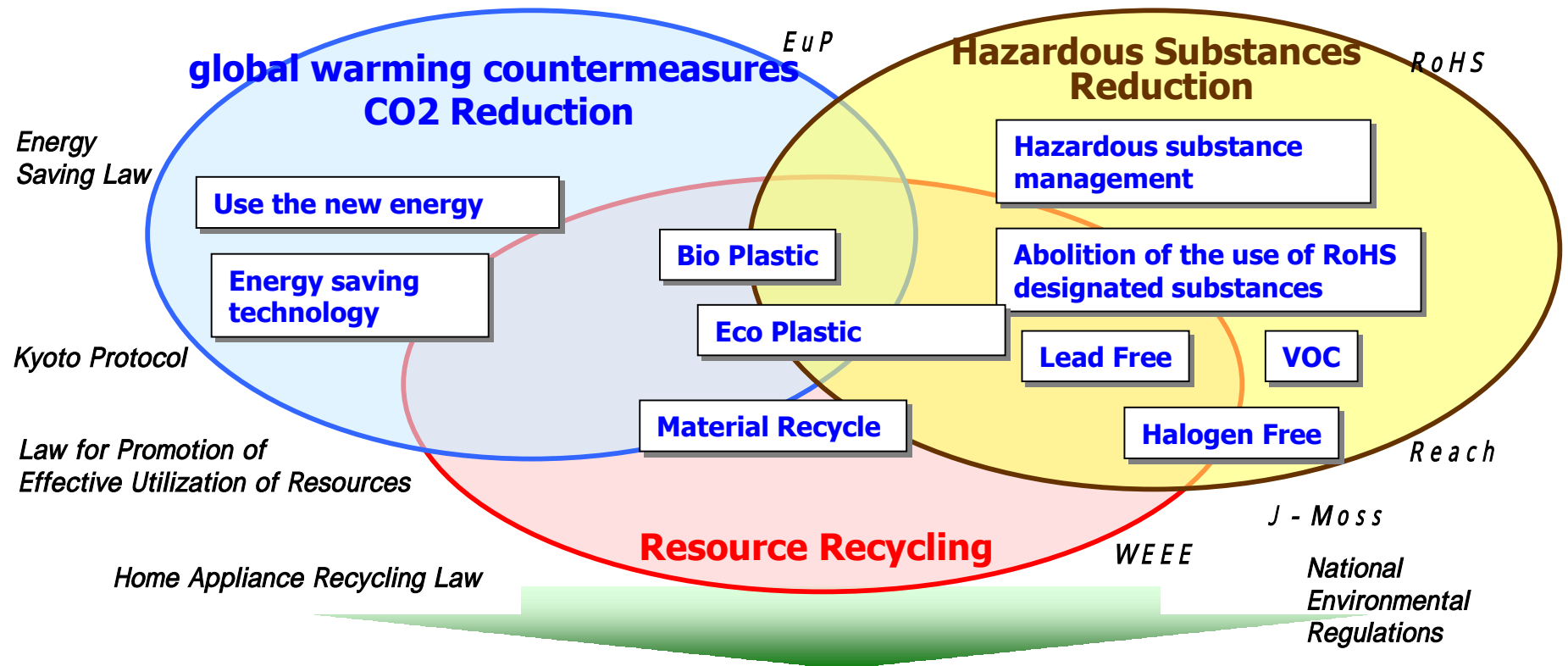
# Environmental Restrictions on Products Spreading Globally from Europe

— Tighter regulations on use of chemical substances in particular—



★ **Product environmental awareness is an important product quality!**

# Strategy on Eco Products Development



**Compliance** with regulations

+

Establish **competitive leadership** through Eco products

**Contribute to NEC's Sustainable Growth Strategy**

# Eco Symbol; Self-declared environmental claims

## The objectives:

- ▣ to **promote Eco Products development**
- ▣ to **disclose the environmental information** to the customers

### [Basic Conditions for Use of the Eco Symbol ]

- ▣ Must **meet all environmental standards** established by NEC
- ▣ Must be environmentally **superior** to conventional or competitors' products
- ▣ Must assure **transparency** in product environmental information



### [Standards for Environmentally Sound Products ]

- ◆ Calculate the **CO2 emission** for all life cycle of the products
- ◆ Must use a design promoting longer product life (**LCA**)
- ◆ **Eco Design** (consideration of Re-use, Easiness of disassembly, Recycle material usage, etc)
- ◆ Conduct **Green Procurement** in selecting the parts
- ◆ Product development, design and production shall be done at ISO 14001 acquired site or plant.
- ◆ **RoHS compliant** .....

# Examples of Eco Symbol Products

3007 products of 55 products categories

(as of Feb., 2006)



# Market-Leading Environmental Products and Branding as an Environmentally Sound Company

## ★ Eco Symbol product: PCs

### Global warming prevention

- Satisfy the international energy-saving standards (International Energy Star Program)
- Conform to the Energy Conservation Law

Adopts lead-free solder to mount motherboard parts.

Recycled plastic (front panel)



Mate box-less model



### Resource recycling

- Facilitate parts removal
- Adopt **recycled plastic**
- List materials on the product, accessories and packaging plastics.

### Environmental awareness

- Adopt **lead-free solder**
- Adopt **halogen-free/ phosphorus-free** flame retardant using plastic (**NuCycle**)
- **Chromium-free steel plates**

## ★ Mobile phones adopting bioplastic

Adopt kenaf fiber-reinforced bioplastic for the case  
"FOMA® N701iECO"  
(launched on March 10, '06)



Advertisements

for branding as an environmentally sound company



# Kenaf Fiber-Reinforced Bioplastic for Mobile Phones

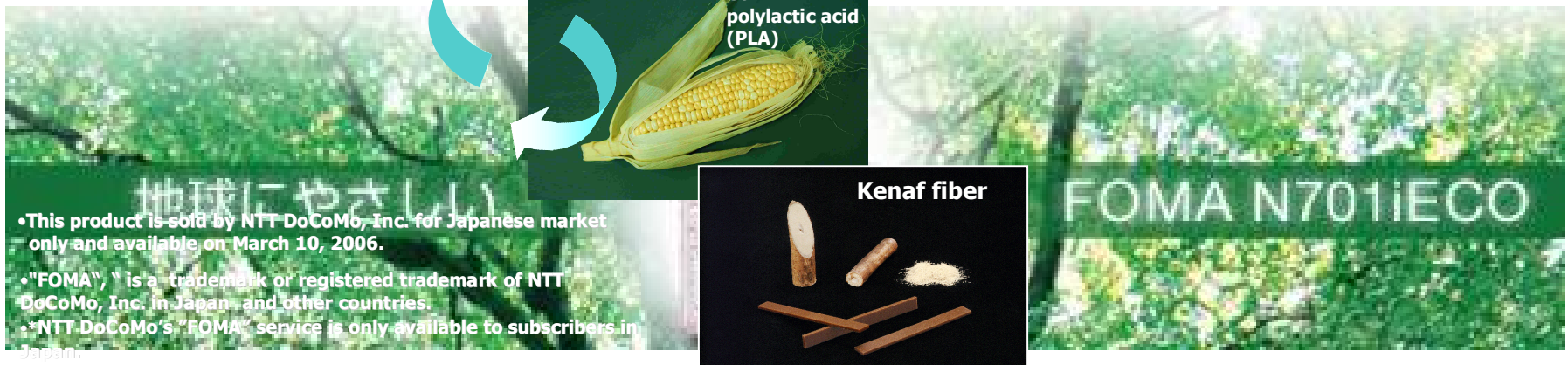
## FOMA N701iECO

Mar.06 on sale

- The world's first Bioplastic strengthened Kenaf fiber is used
- A part of Earth-Conscious efforts



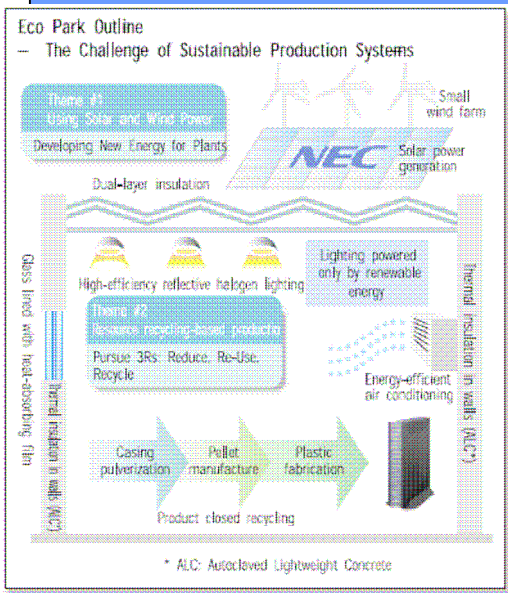
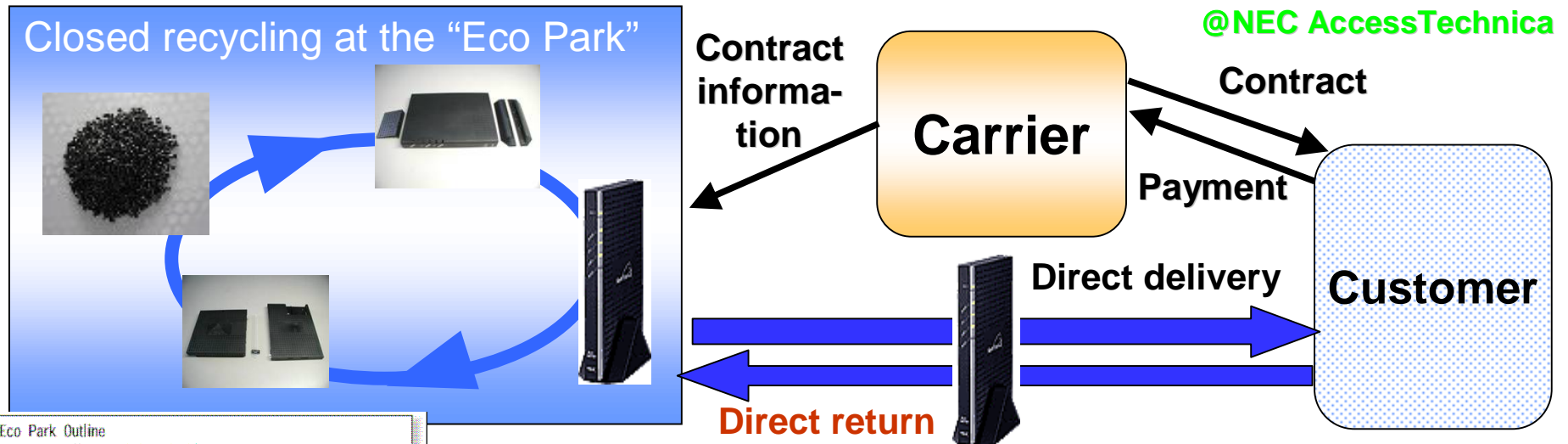
- **High biomass constituent ratio**  
approximately 90% in Plastics, the highest level in bioplastics used for electronic devices.
- **Plant derived plastic**  
consisting of **poly lactic acid (PLA)**, **the fiber of Kenaf** and other biomass- based additives
- Lower use of petroleum and amount of CO2 emissions
- Broken down by microorganisms in the soil
- Mechanical strength improved by adding kenaf fiber



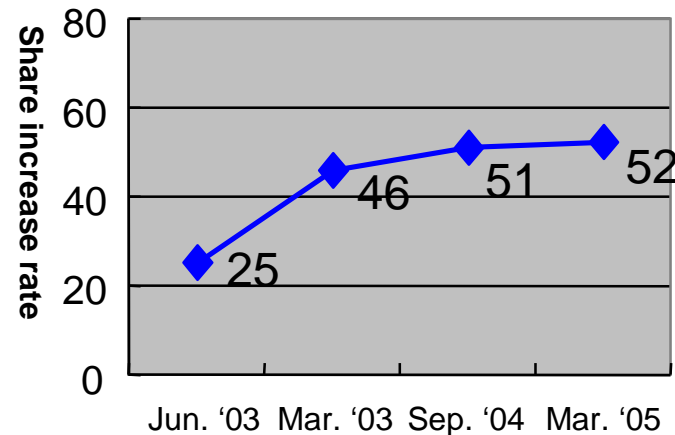
- This product is sold by NTT DoCoMo, Inc. for Japanese market only and available on March 10, 2006.
- "FOMA", is a trademark or registered trademark of NTT DoCoMo, Inc. in Japan and other countries.
- NTT DoCoMo's "FOMA" service is only available to subscribers in Japan.

# Rental and Recycling Business Model

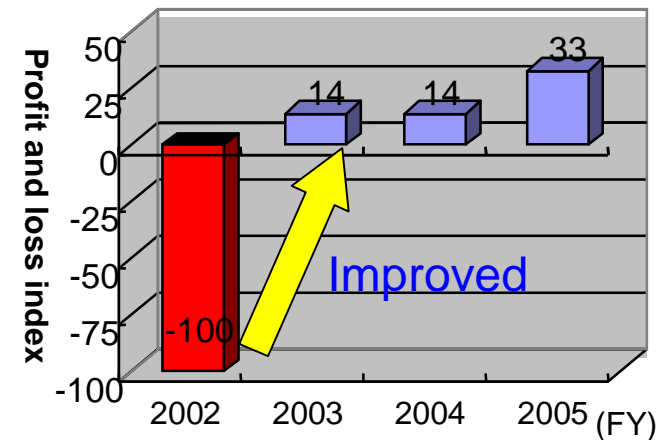
— NEC AccessTechnica: “ADSL Modem” Business Model —



(%) **Development of rental business share**



**Business profit and loss**



★ Environmental measures give new business opportunities.

## Activities for used PC

NEC is promoting the reduce of Environmental Load by the combinations of “Reuse” and “Reduce”.





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# Green Procurement Policy

## Green Procurement Concept

Environmentally sound suppliers

Manufacturing process with low env. impact

Products and materials with low env. impact



**Green  
Procurement**

## Supplier evaluation

**Green certification**

Awarded to suppliers who fulfill green supply criteria

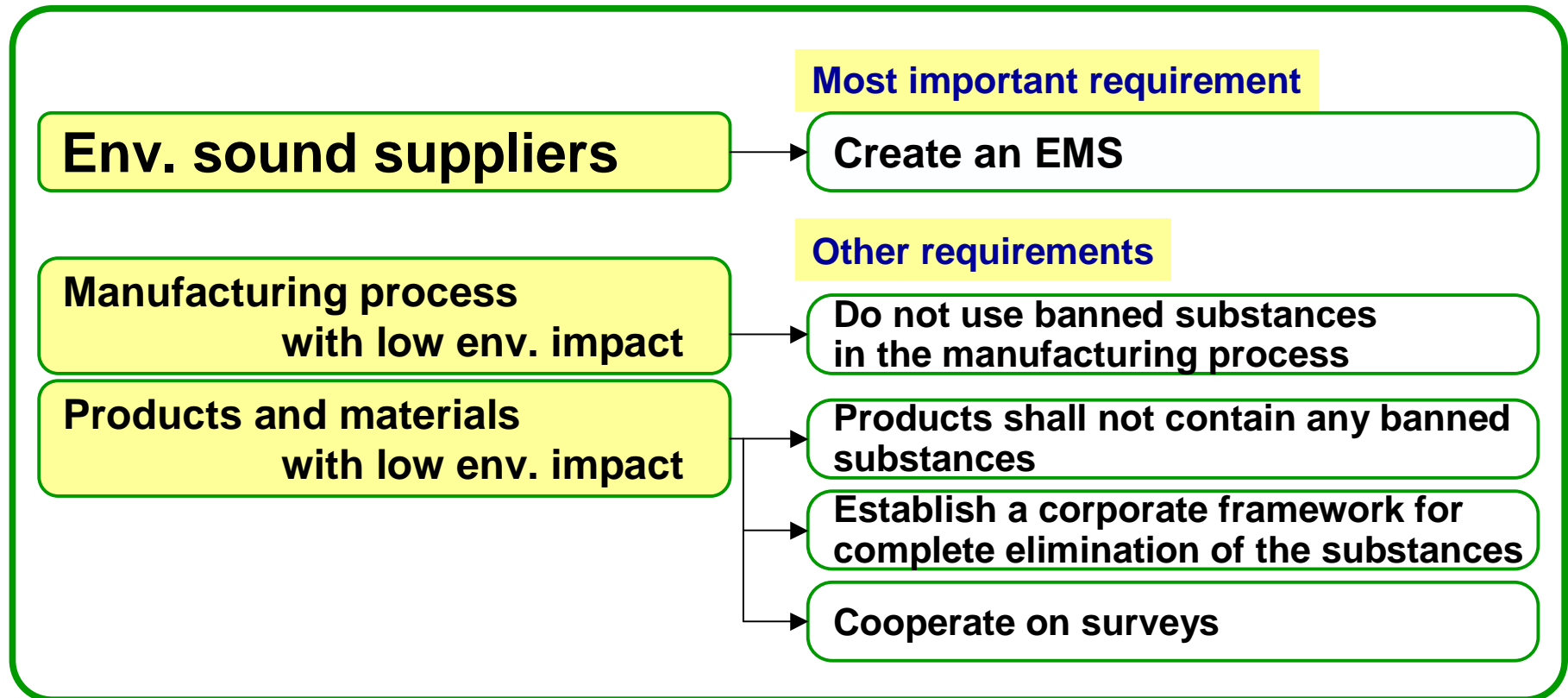
**Env. rating**

Suppliers are evaluated and ranked in accordance with their environmental preservation activities



# Identification of Green Suppliers

**Identify with suppliers fulfill the requirements for green suppliers**



**NEC achieved 100% green procurement using green suppliers in the beginning of April 2006**

# Investigation for Chemical Substances in Products

Classification	No.	Name of substance group	Target date of complete abolition
Banned substances	1	PCB (Polychlorinated byphenyl)	Immediately
	2	Polychlorinated naphthalenes (with more than 3 chlorine atoms)	Immediately
	3	Bis (tributyltin) oxide	Immediately
	4	Tributyltin compounds and triphenyltin compounds	Immediately
	5	Asbestos	Immediately
	6	Short-chained chlorinated paraffin (carbon number: 10-13, chlorine content: 50 wt%)	Immediately
	7	Ozone depleting substances (Montreal Protocol on Substances: Class I)	Immediately
Substances banned with conditions	8	Cadmium and its compounds	March 2005
	9	Lead and its compounds	March 2005
	10	Mercury and its compounds	March 2005
	11	Chromium VI compounds	March 2005
	12	PBB (Polybrominated biphenyl)	Immediately
	13	PBDE (Polybrominated diphenyl ether)	Immediately
	14	Nickel and its compounds (Scope: components that come into contact with human body.)	Immediately
	15	Azo dye (Scope: components that come into contact with human body.)	Immediately
Controlled substances	16	Antimony and its compounds	
	17	Arsenic and its compounds	
	18	Beryllium and its compounds	
	19	Bismuth and its compounds	
	20	Selenium and its compounds	
	21	Bromine flame retardant (Except for PBB and PBDE)	
	22	Phthalate ester	
	23	Ozone depleting substances (Montreal Protocol on Substances: Class II)	
	24	Poly (vinyl chloride)	
	25	Radioactive substances	

NEC is adopting the "JGPSSI format" as one of the investigation sheet



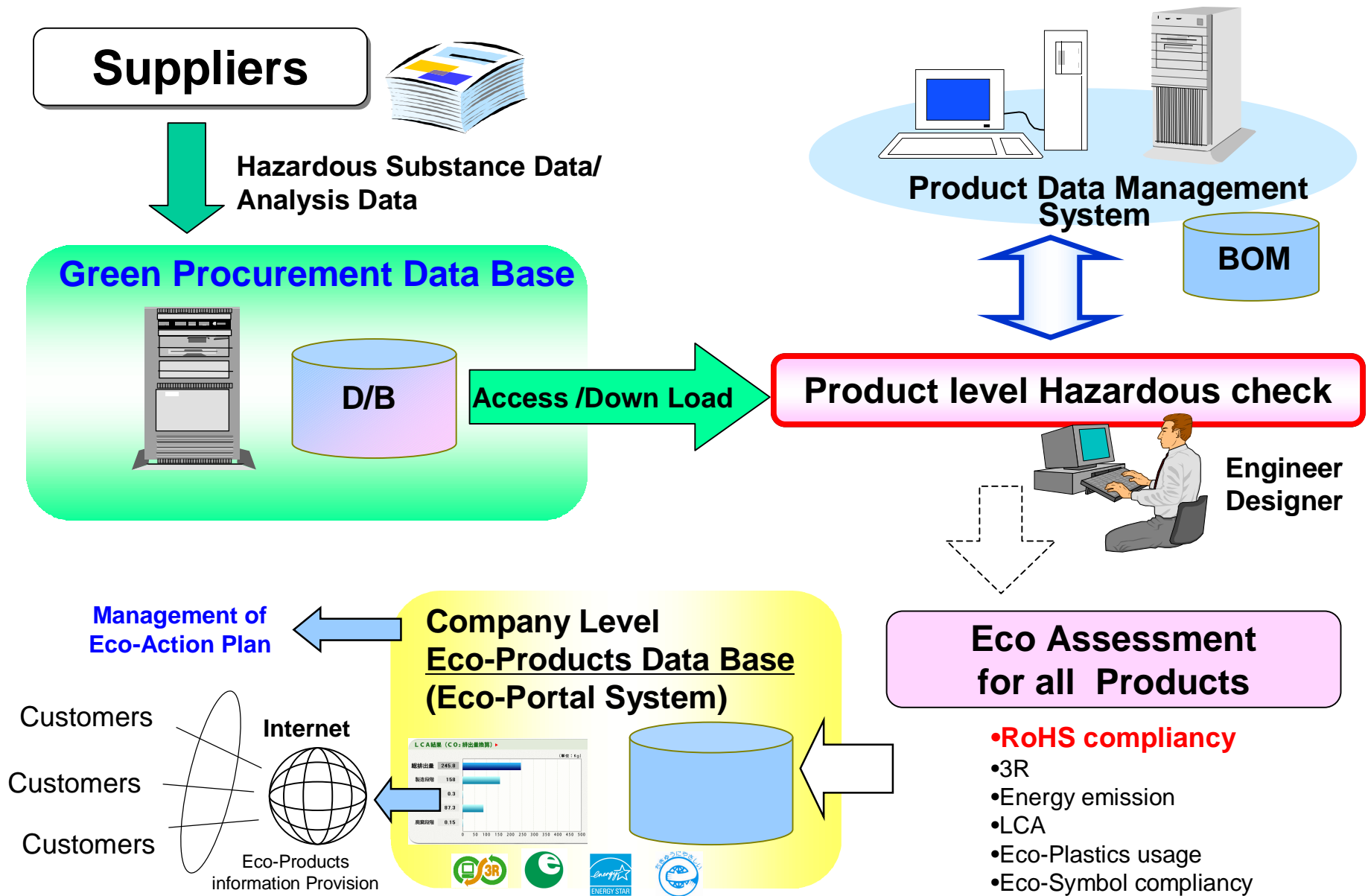
**Same substances with NEC's guide**

NEC  
KANBAN TO 02-004

**GREEN PROCUREMENT  
GUIDELINES**  
(FOR SUPPLIERS)

Ver. 3 December 2004  
NEC Corporation

# Green Procurement Data Managing



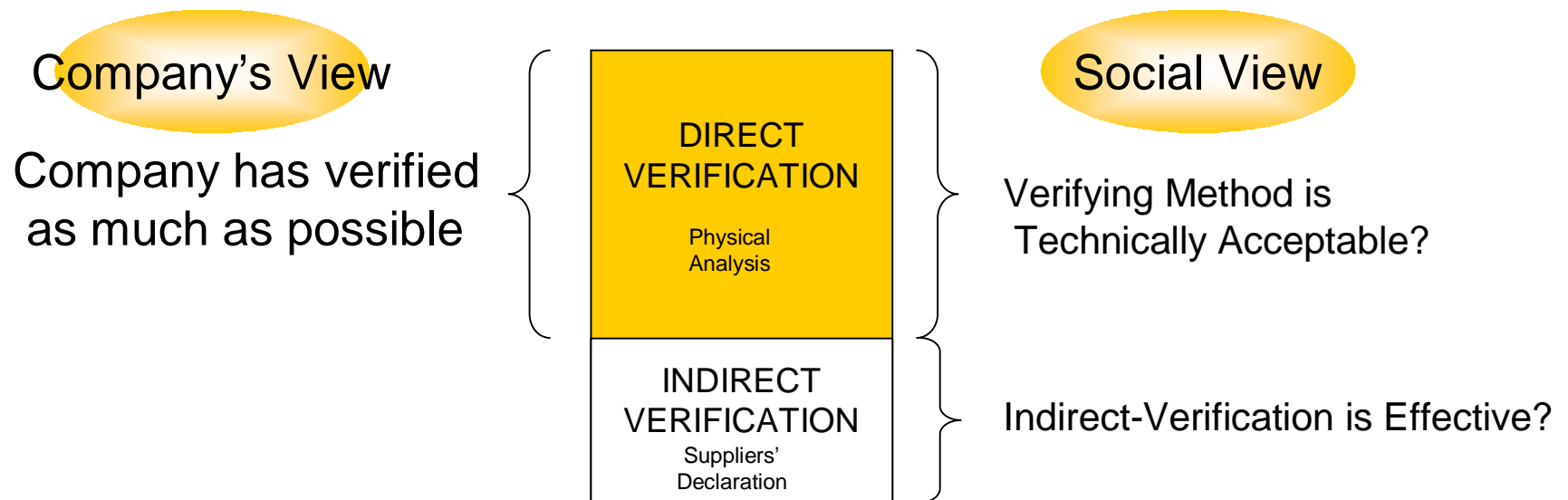
# Risk in RoHS Directive

## RoHS Directive

The fact that you have contravened the law is sufficient to allow a Court to convict, even you didn't intend to do wrong or unaware of requirements

## Rationale by Due Diligence

If one can prove that he took all reasonable steps and exercised all due diligence to avoid committing the offence, he might be entitled to be acquitted.



- We must show the rationale of direct-verification methods.
- We must show the rationale of **indirect-verification procedure**.

# RoHS compliant procedure

## Environmental Hazardous Chemical Substance Management Process

*Procurement Process*

-Chemical substance management in suppliers

*Development Process*

-Database

*Manufacturing Process*

-Change management  
- Pre-shipment inspection

*Emergency Responses Process*

## Compliance Evidence

*Self Declaration of Compliance*

*Positive Proof*

*Record Storage*

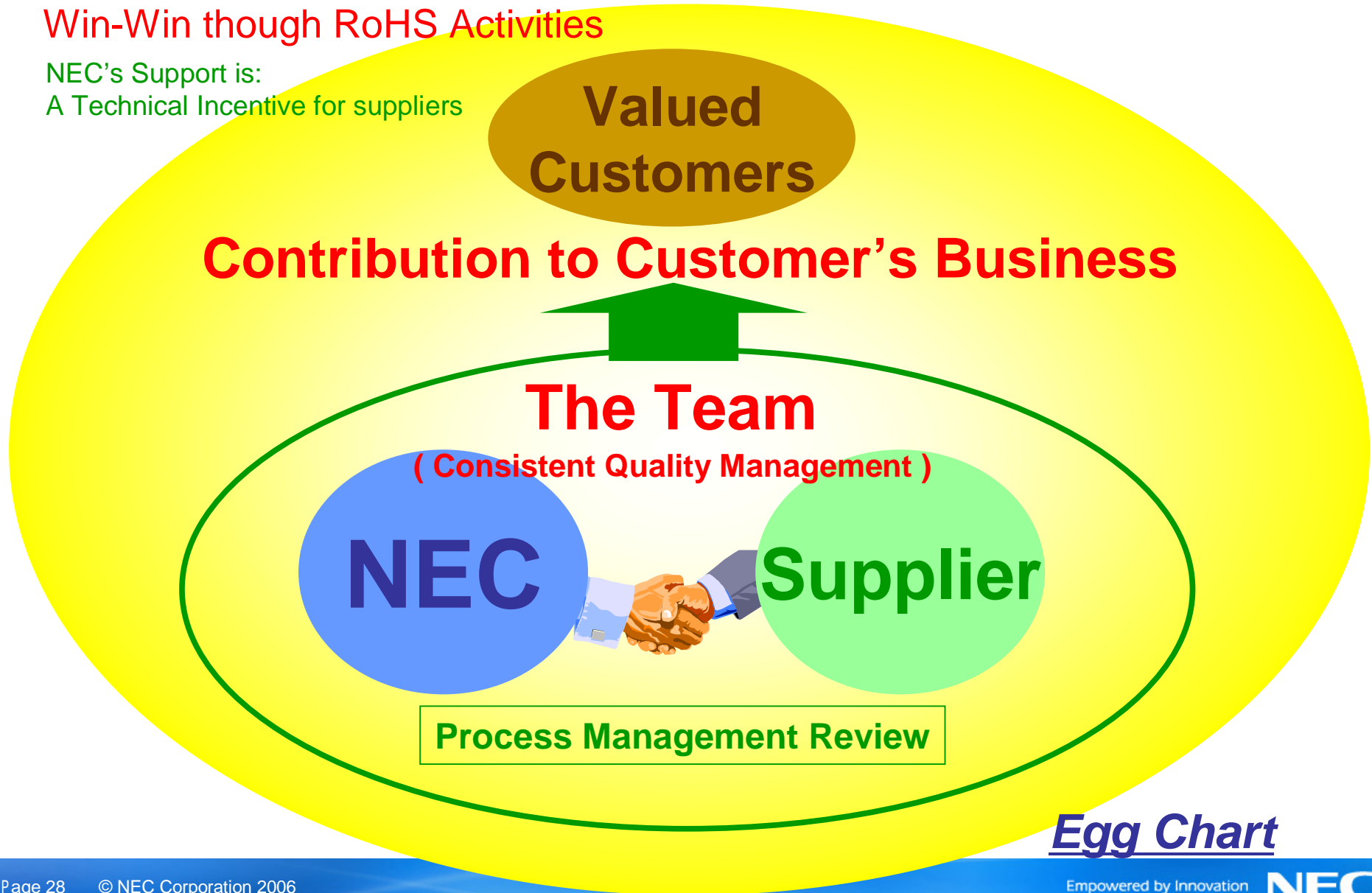
Compliant with  
EU-RoHS

**NEC built the “Supplier Management Program” for chemical substances**

# Supplier Management Program

Win-Win though RoHS Activities

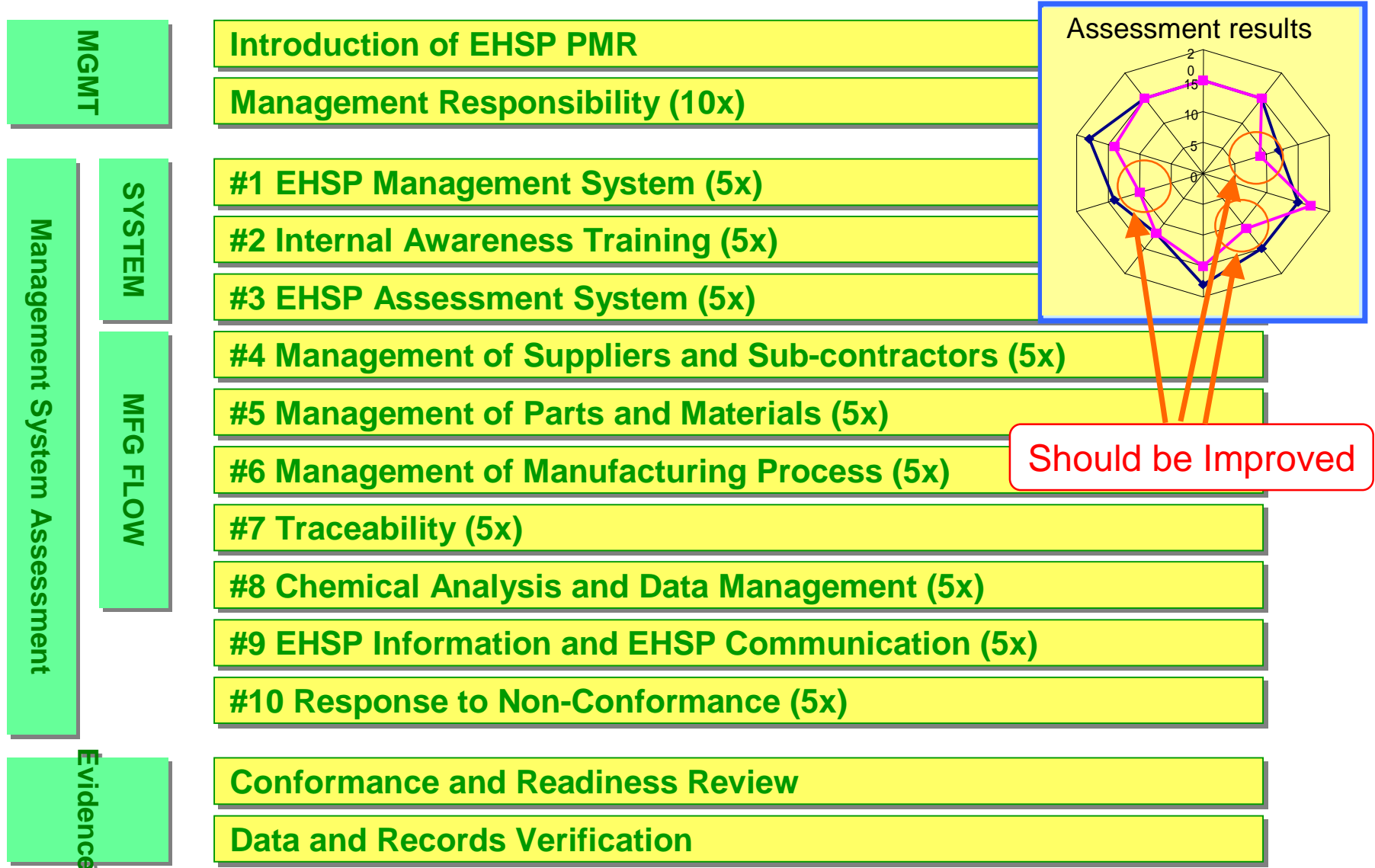
NEC's Support is:  
A Technical Incentive for suppliers



***Egg Chart***




# Assessment Sheet



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# Expectations to Asia-Pacific Region

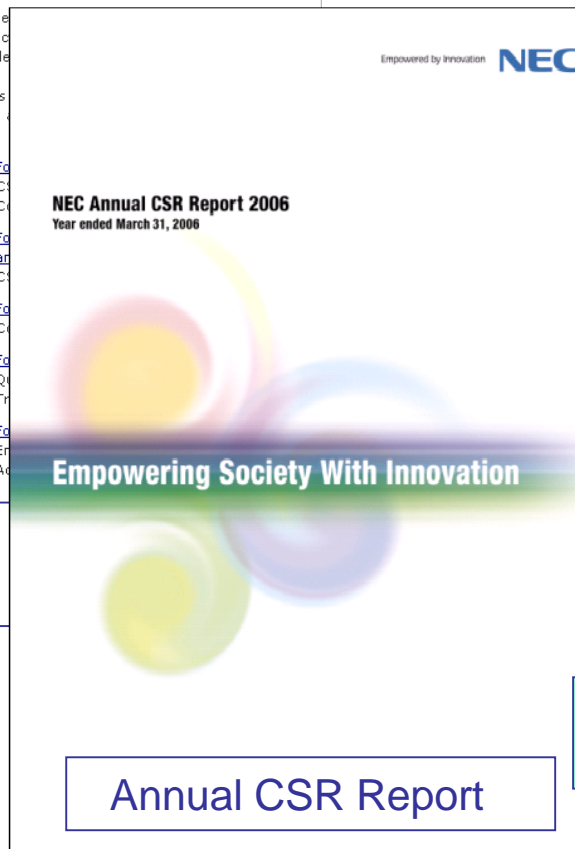
- 
1. Build the smooth flow of the containing chemical substance information, in the mutual country which composes a supply chain.
  2. Reliability securing of the data

# NEC's Corporate Social Responsibility

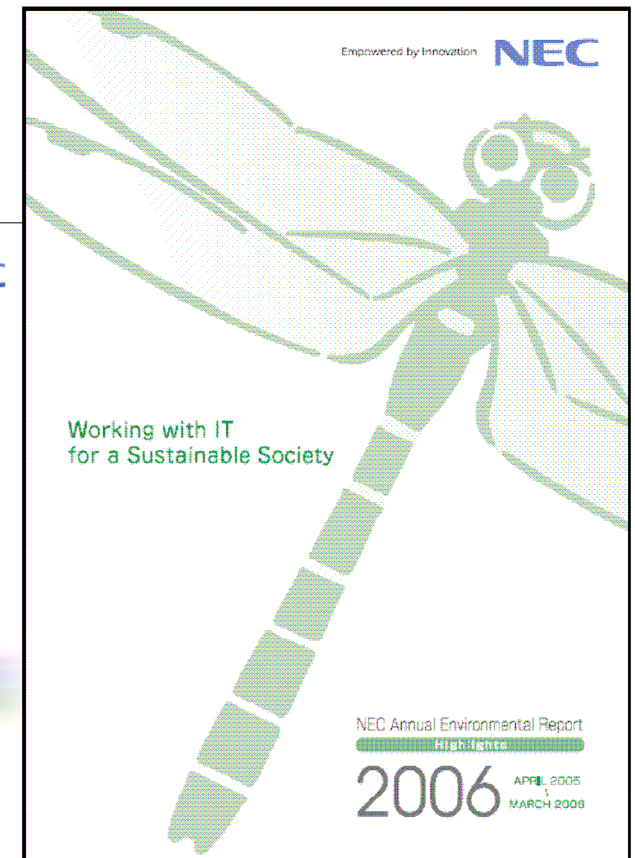
Promote CSR communications including the disclosure and accountability with multi-stakeholders



CSR web site;  
<http://www.nec.co.jp/csr/en/>

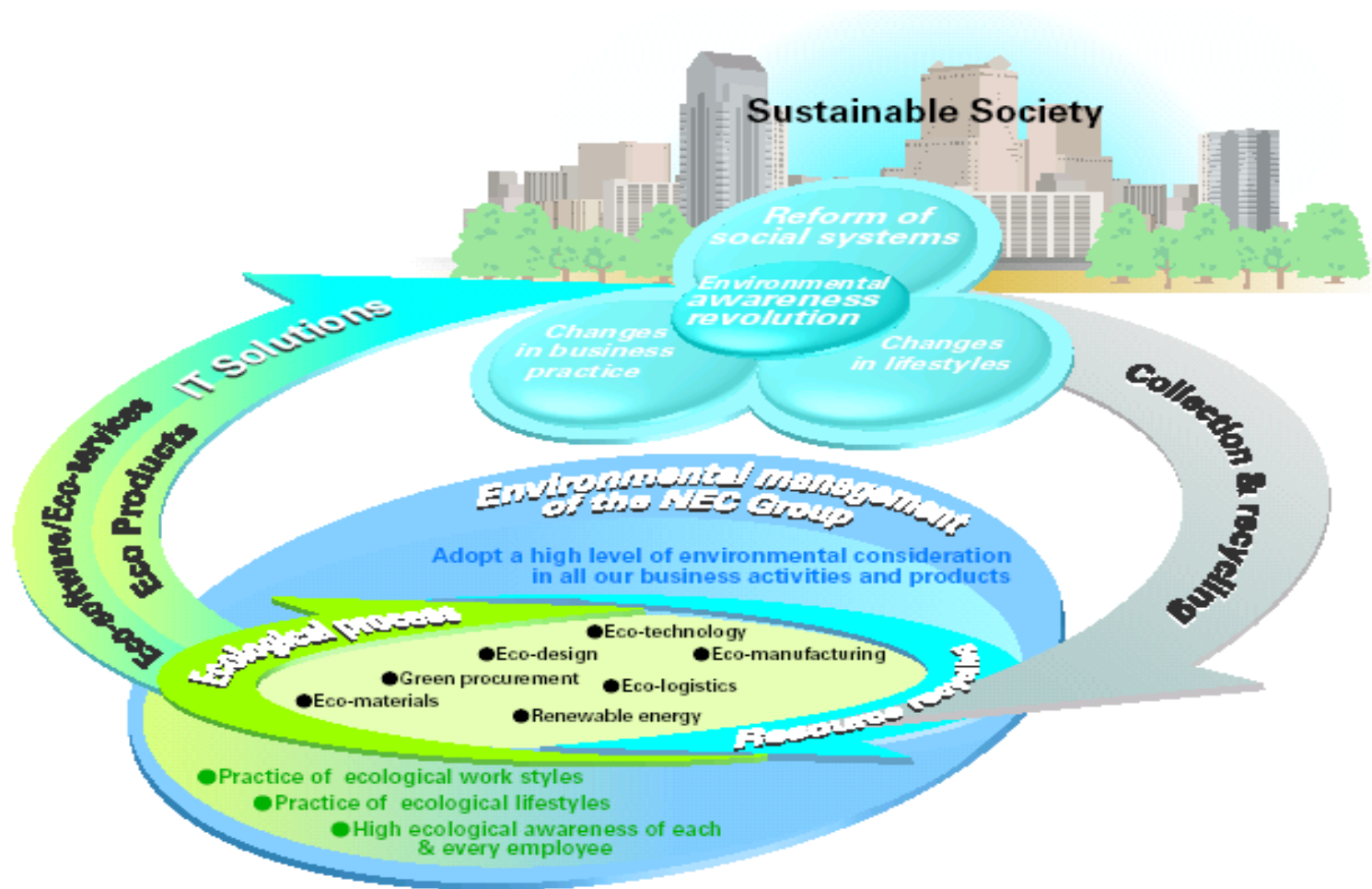


Annual CSR Report

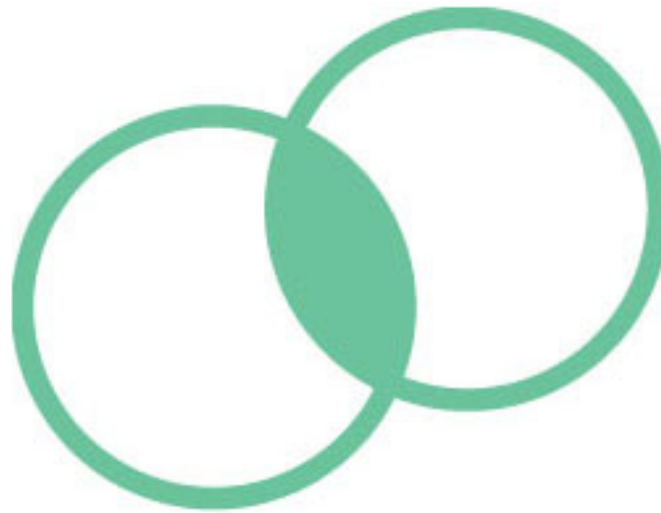


Annual Environmental Report  
<http://www.nec.co.jp/eco/en/annual2006/>

# NEC Environmental Management Vision 2010



The NEC Group aims to be a truly excellent organization, one that promotes the development of social systems, business practices and lifestyles and that contributes to achieving a sustainable society through providing IT solutions



# Ecology through IT

[www.it-eco.net](http://www.it-eco.net)

- ★ **We are helping customers and society as a whole contribute to environmental conservation through our IT businesses.**