

# What is Sustainability?



2003.05.06

Junko Edahiro

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# TWO QUESTIONS

What kinds of global environmental problems can you think of?

What are differences between pollution problems we had in the past and global environmental problems we are facing today?

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# What is the State of the Earth?



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# No.1

Current world population?

1. 4 billion
2. 6 billion
3. 8 billion

## World POPClock Projection

According to the U.S. Bureau of the Census, the total population of the World, projected to 4/18/02 at 18:16:15 GMT is **6,218,830,160**

<http://www.census.gov/cgi-bin/ipc/popclockw>

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# No.2

At what pace is the world population growing?

1. 100 persons per hour
2. 1,000 persons per hour
3. 10,000 persons per hour

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# No.3

What is the trend of food production per person in the world?

1. Growing for the last 50 years but started declining in recent years
2. Slightly, but steadily growing
3. Growing, thanks to developments in biotechnology

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## No.4

What level is the caloric self-sufficiency rate in Japan?

Australia	287%
Canada	152%
France	139%
USA	132%

1. 27%
2. 40%
3. 59%

Is Japan No.1 importer of grain in the world?

1. Brazil
2. Iran
3. Egypt
4. Japan

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## No.5

The world forest area has been...

1. Unchanged for several dozens of years
2. Decreasing drastically
3. Recovering after sharp decrease thanks to international treaties and initiatives

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## No.6

Is it true that medaka fish is at the brink of extinction?

1. I am kidding!
2. True!
3. It is a joke but it is also true that we should carefully save them.

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## No. 7

How many kinds of chemicals can be found in exhaust gas from automobiles?

1. About 50 kinds
2. About 250 kinds
3. About 1,000 kinds

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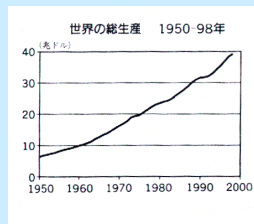
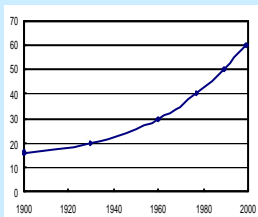
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## Root causes of global environmental problems

Population

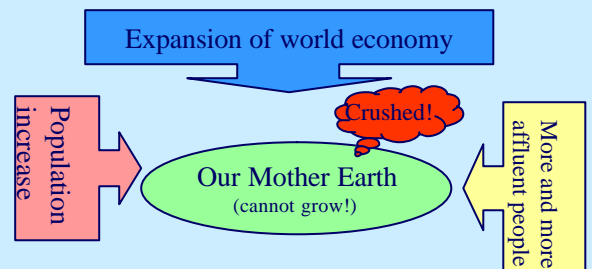
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World Economy



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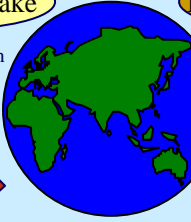
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## Root causes are...

### Too much intake

- Resource depletion
- Lowering aquifers
- Shrinking forests



### Too much emission

- CO2
- Wastes
- Dioxins
- NOx, Sox...

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## Five pillars for fundamental solution

Energy system: from fossil fuel to renewables

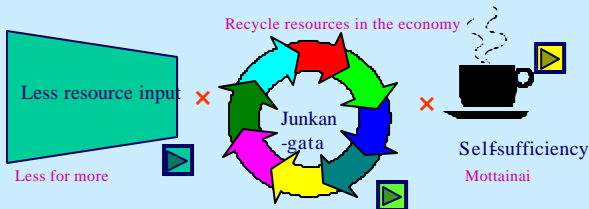
Transportation system:  
from automobile-centered to railway and bicycles

Economy:  
from unsustainable economy to sustainable economy

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## Three pillars for economy



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## Essential tool for fundamental solution

### Tax reform

Now: tax on goods, no tax on bads

Goods: labor, saving  
Bads: environmentally destruction

Decrease tax on goods, impose tax on bads

Objective: × tax revenue increase  
Right signal to the market

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## Toward 「循環型社会」

### 環境基本法

### 循環型社会形成推進基本法

### 廃棄物処理法、リサイクル法

- 食品リサイクル法
- 建設資材リサイクル法
- 家電リサイクル法
- 容器包装リサイクル法

### グリーン購入法

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## What is the "循環型社会" ?

- Driving forces : waste ( no more landfill )
- Mass production, mass consumption, mass disposal  
Only to mass recycling???
- Any proactive approach to preserve Japan as a country?  
× Land preservation : forestry  
× Enhancing food self-sufficiency: agriculture

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# What is the true”循環型社会“?

A society which lives within the cycle of nature

For example...

- Pump underground water within the natural recharge rate
- Emit CO2 within the sequestration capacity of the Earth

A tribe of American Indian says...

# How countries/companies/organizations/individuals are responding?

No need to do anything

Drastically proactive

Shell, Ford, Interface...

Partially proactive

Fuji film, Kikusui

Even universities!

Steadily proactive

# Fuji Film “写るんです”



# Kikusui: Sake Brewer

- 1.8 l bottles: recycling system in place
- But now .....



# What are needed?



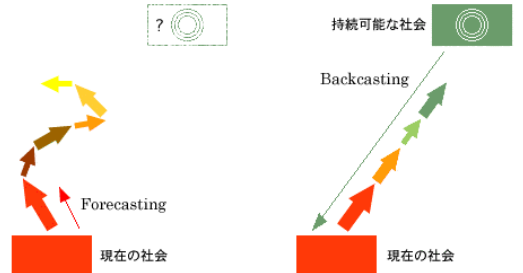
Management system

For your country/company  
For your personal life  
Whenever you want to make your wishes a reality..

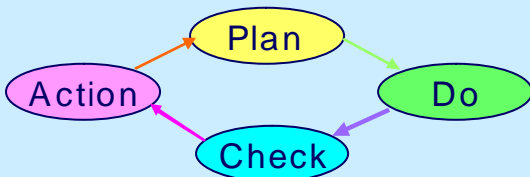
# Vision and backcasting

フォアキャストイング手法

バックキャストイング手法



## Management system



For environment

ISO14001 Eco Action 21

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## Japan for Sustainability

Established : August 2002

Chief Executive : Edahiro, Tada

Director: Prof. Yamamoto, Prof, Mitsuhashi,  
Lester Brown

<http://www.japanfs.org/jp/>

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## JFS's Mission

Japan for Sustainability is a non-profit communication platform to disseminate environmental information from Japan to the world, with the aim of helping both move onto a sustainable path.

Vision and indicators for a sustainable Japan

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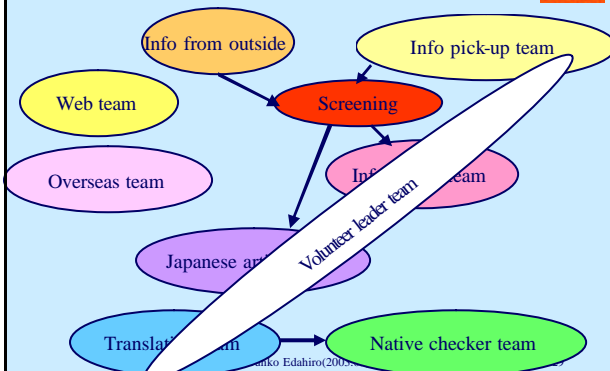
## Activities

- **Website:** 30 articles per month in English/Japanese on environmental activities and developments in Japan
- **Monthly Newsletter:** Features of the months including sector/area specific overviews
- **Interface with the world:** Questions, feedbacks, inquiries

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## Online volunteer organization



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## Japan for Sustainability

- Subscribers from 70 countries
- Website access 7,000-
- Supported by Online volunteers
- More than 150 volunteers around the world
- Diversity : vocation, age, gender, region/country
- Membership: +30 corporate, +200 individuals

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## JFS's logo

JFS's mission  
Link people, sectors,  
fields and countries

The motif of this logo is "mizuhiki", a Japanese traditional red-and-white string to wrap a gift.

The form indicates water flow or "circulation".  
The knot indicates "bonds" between you and me.

The logo represents our will to give good outcome to our future.

## Last message

- Don't stay in a partitioned world
- Have a wide perspective  
ex) LCA : Toyota Prius  
BWA: business wide assessment
- Position what you are doing in a big picture and a longer timeframe
- Go out and try to have different views and approaches around you



<http://www.ne.jp/asahi/home/enviro/>  
『Eco-Networking!』 『Power of One』

## Thank you !

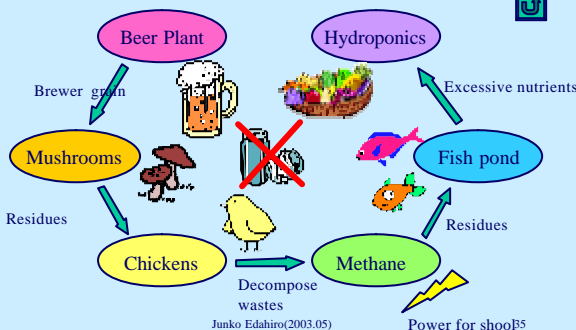


## Task for evaluation

Visit JFS website: [www.japanfs.org](http://www.japanfs.org)  
Search "Information Center" articles

- Discuss what you found in activities and movement for sustainability in Japan
- Propose improvement points for JFS sites and activities

## Zero-Emission ( Fuji )



## What do you want, really?

What do you buy TV?

Do you want the black box and wiring inside?

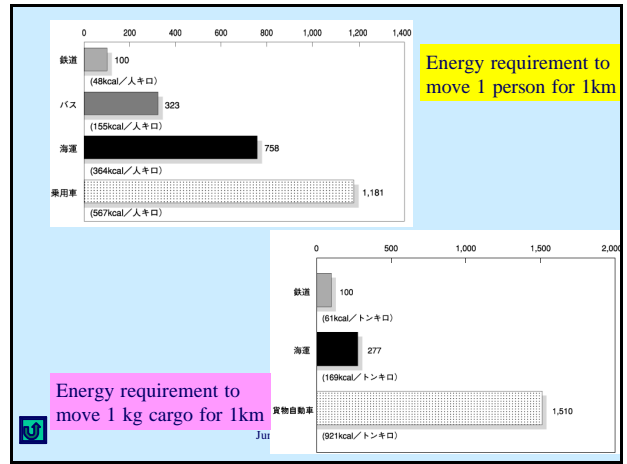
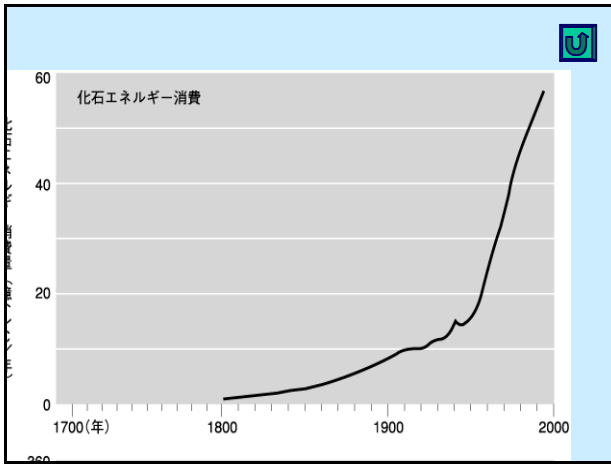
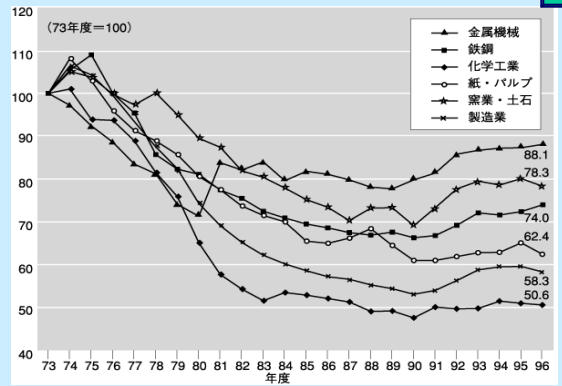


Copier, Washer, Gas Fan heater...

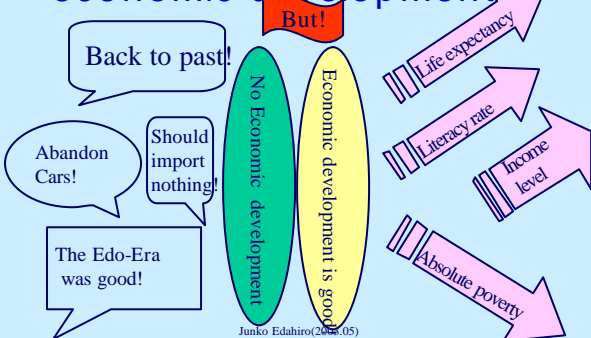
What other example can you think of?

# Toward a new economic era

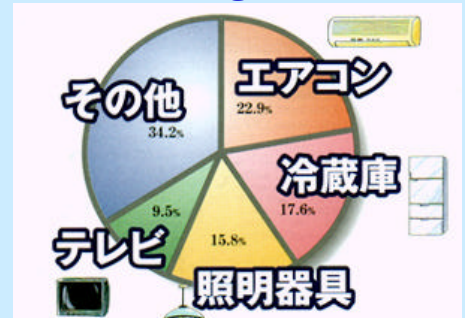
- Current economy: depending on economic growth
- Even with a small economic growth rate of 3%,  
double in size in 20 years, hitting many limits of the Earth
- **What we buy are no more physical things**  
Ex) Interface, 写るんです



# “Shouldn't we stop economic development?”



# 家庭のどこで電気を使っている？





## Increasingly important matters, after seeing 9.11

- Each locality should
- Be self-sufficient in
- Food and
- Energy

No War 『非戦』 (幻冬舎)  
Sustainability for Peace

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## Vision you need to have

