

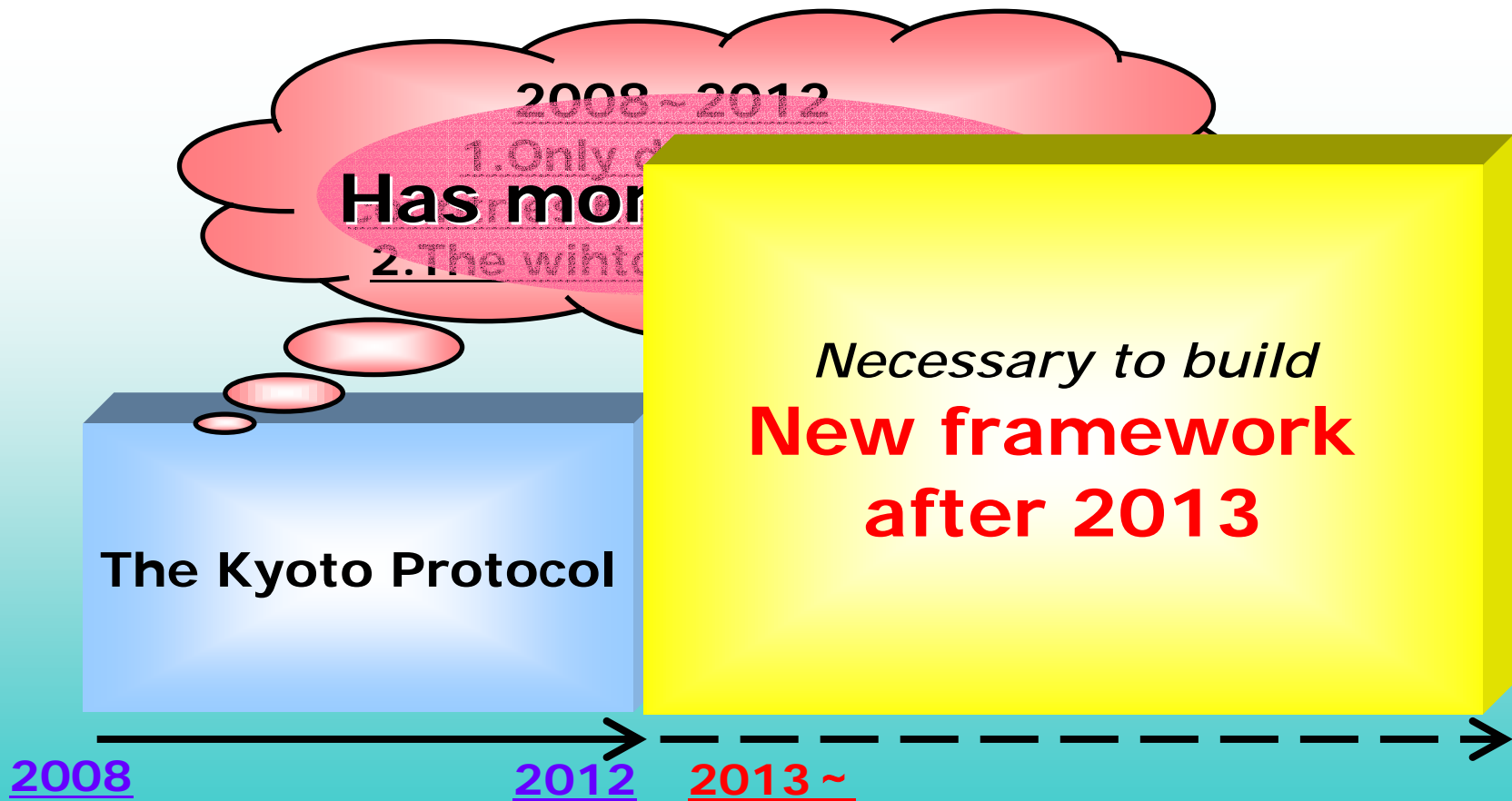


~Building New Regime for Tomorrow~

Presented by Post Kyoto Part

Yosuke Arino Naoko Seki Akiko Nakaya
Koji Hayashi Yumi Hibino

Introduction





Contents for tomorrow

1 . Global Warming Brief

2 . Kyoto's Fantasy Land

3 . Alternatives and Our Proposal

4 . Conclusion

1-1 Present Condition of Warming

- ◆ Most of the warming seen over the last 50 years has occurred in the **last decades.**

We should act as soon as possible.

- ◆ The physical climate system will continue to affect the future.

(IPCC Third Assessment Report)

1-2 Characteristics of Warming

1. **A Problem for Every Country**

Prevention of **free riders**

2. **Huge Impact to Economy**

Cost matters

3. **Uncertainty**

1-2 Characteristics of Global Warming

1. A Problem for every country

Prevent **free riders**

2. Huge impact to economy

Cost matters

3. Uncertainty

Uncertainties should be **considered**



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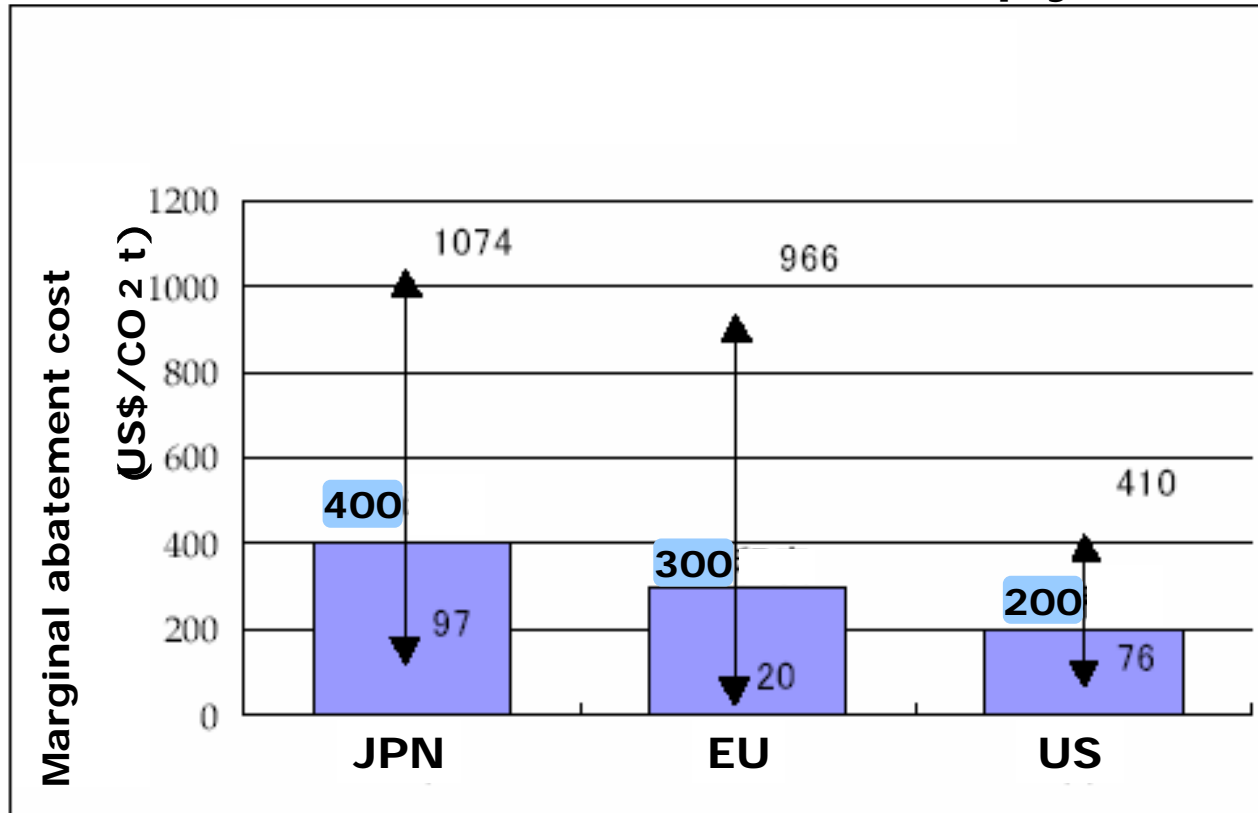
2 . Kyoto's Fantasy Land

1. No consideration for the Costs
2. The Problem of 1/3
3. Non-Compliance Procedure

2-1 No consideration for the cost

Lack of consideration
for the cost

The trial calculation of the cost to comply the KP

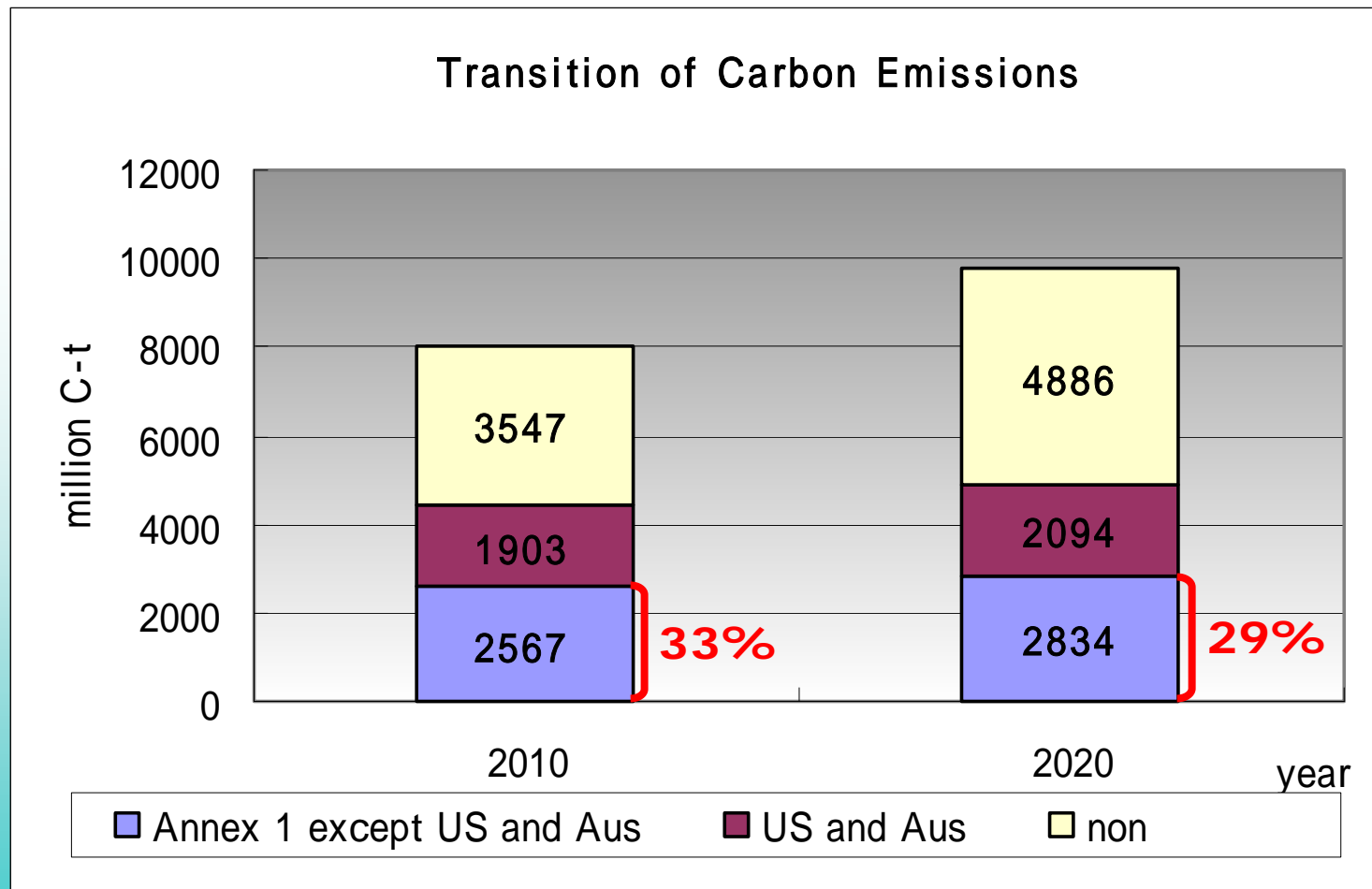


source: IPCC third assessment report (2001)

2-2 The Problem of 1 / 3



2-2 The Problem of 1 / 3



Source : Ministry of Economy, Trade and Industry (2003)

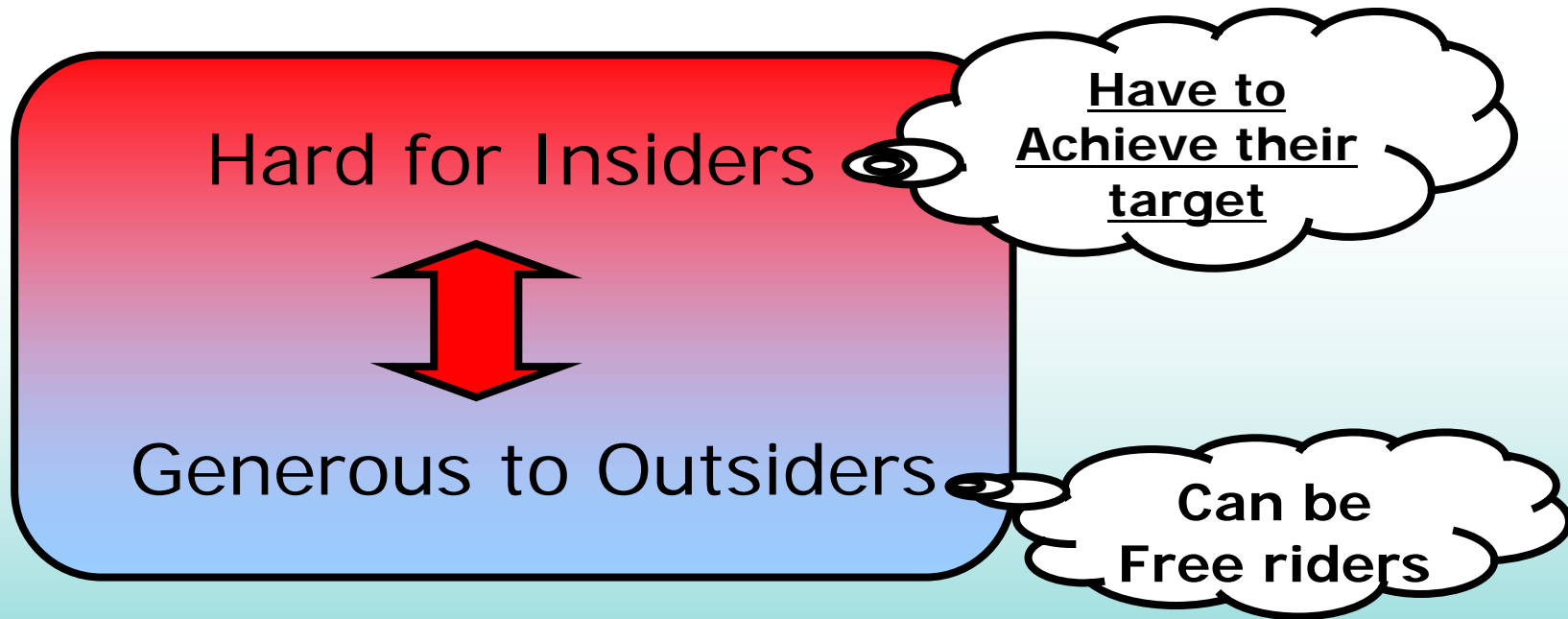
2-2 The Problem of 1 / 3



The protocol will have
little effect
on the global warming

Only covering **1/3** of total emission.

2-3 Non-compliance Procedure



It should be more flexible for insiders!

3 . Alternatives and Our Proposal

1. Cost

1-1 Approach

1-2 Initial allocation

2. Developing countries

3. Non-compliance procedure

3-1-1 Approach

Kyoto = Cap and trade



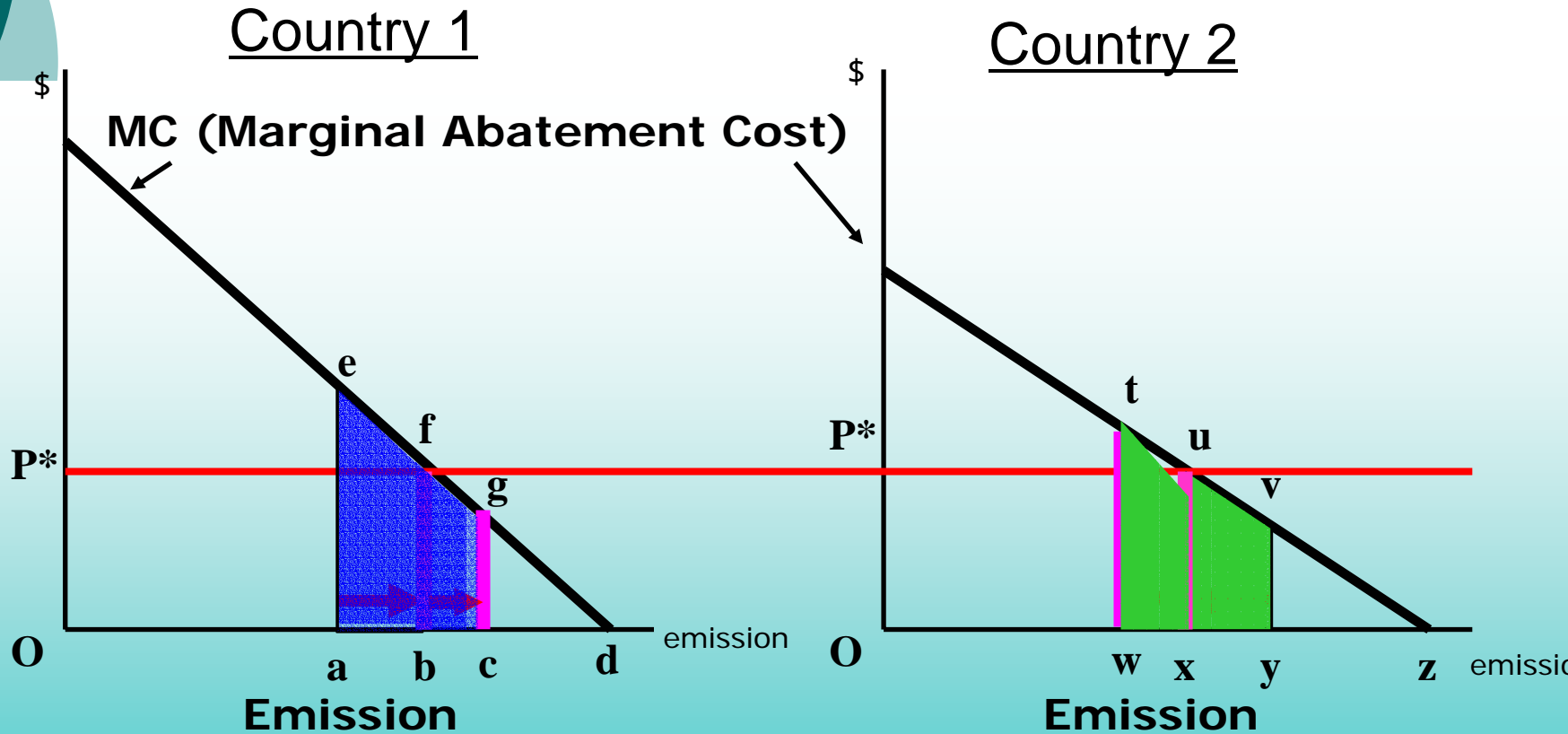
Regardless of the economic growth

- Then what other approaches will be available?
- By comparing such alternatives, will Cap & Trade still remain as the best options?

3-1-1 Approach

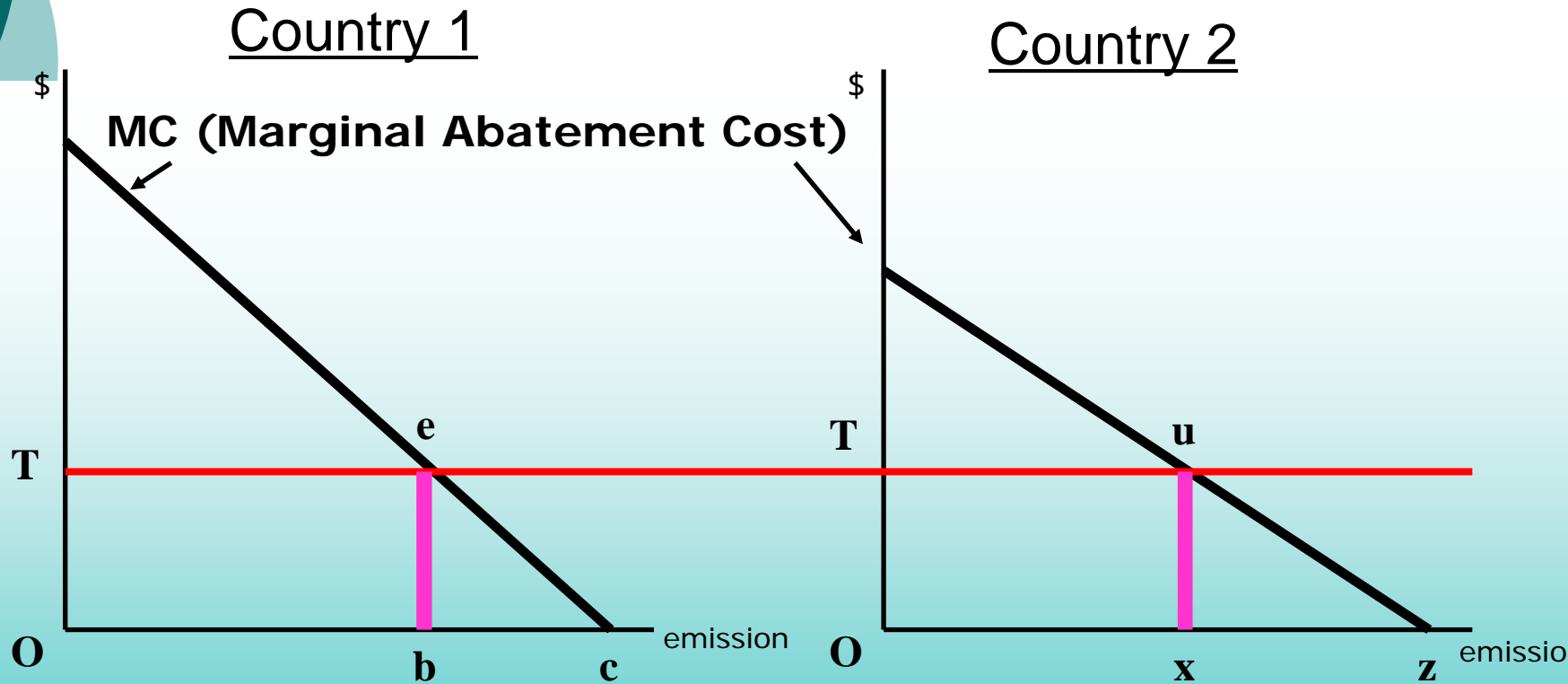
- Cap and Trade
 - Carbon Taxes
 - Hybrid Approach
- ← **Feasibility**

Cap and Trade (Emission Trading)



minimum social abatement cost.

Carbon Taxes



minimum social abatement cost.

Feasibility of Carbon Tax and Hybrid

Carbon Tax

setting uniform tax rate internationally
is impossible

Hybrid

having an aspect of carbon tax
Complexity

Feasibility of cap and trade

What's more...

Cap & Trade is

- Continuous with Kyoto Protocol
- Agreed with about 120 countries.
(October 2003)

3 - 1 - 1 Comparing 3 major options

feasibility Cap & Trade

The way to solve the problem of Kyoto Protocol

Regardless of the economic growth

We solve this problem by

How to decide the initial allocation!

3 - 1 - 2 The Initial Allocation

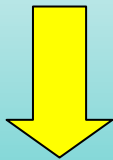
< Bottom-up Approach >

Multi-Sector Approach:

Deciding initial allocation by calculating the reduction rates on the sectoral level.

allows for specific national circumstances

so



High possibility of reaching the target.

3 - 1 - 2 The Initial Allocation

Multi-sector approach

Indicator

(contains the notion of cost)

emission efficiency

3 - 1 - 2 The Initial Allocation

Emission Efficiency

= National GHG emission / GDP

NGE/GDP

Abatement Cost

Can keep the balance of cost !

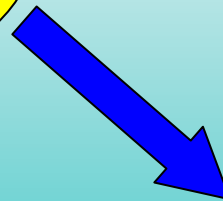
3 - 1 - 2 The Initial Allocation

Comparison

Energy efficiency

= National energy consumption / GDP

Important point is to reduce GHG emission. Not energy consumption



Emission efficiency is better

3 - 1 - 2 The Initial Allocation

How Should We Calculate the Initial Allocation??

Step1:

Emission Efficiency per sector

= GHG emission per sector /GDP per sector

including consideration of specific national circumstances

Step2:

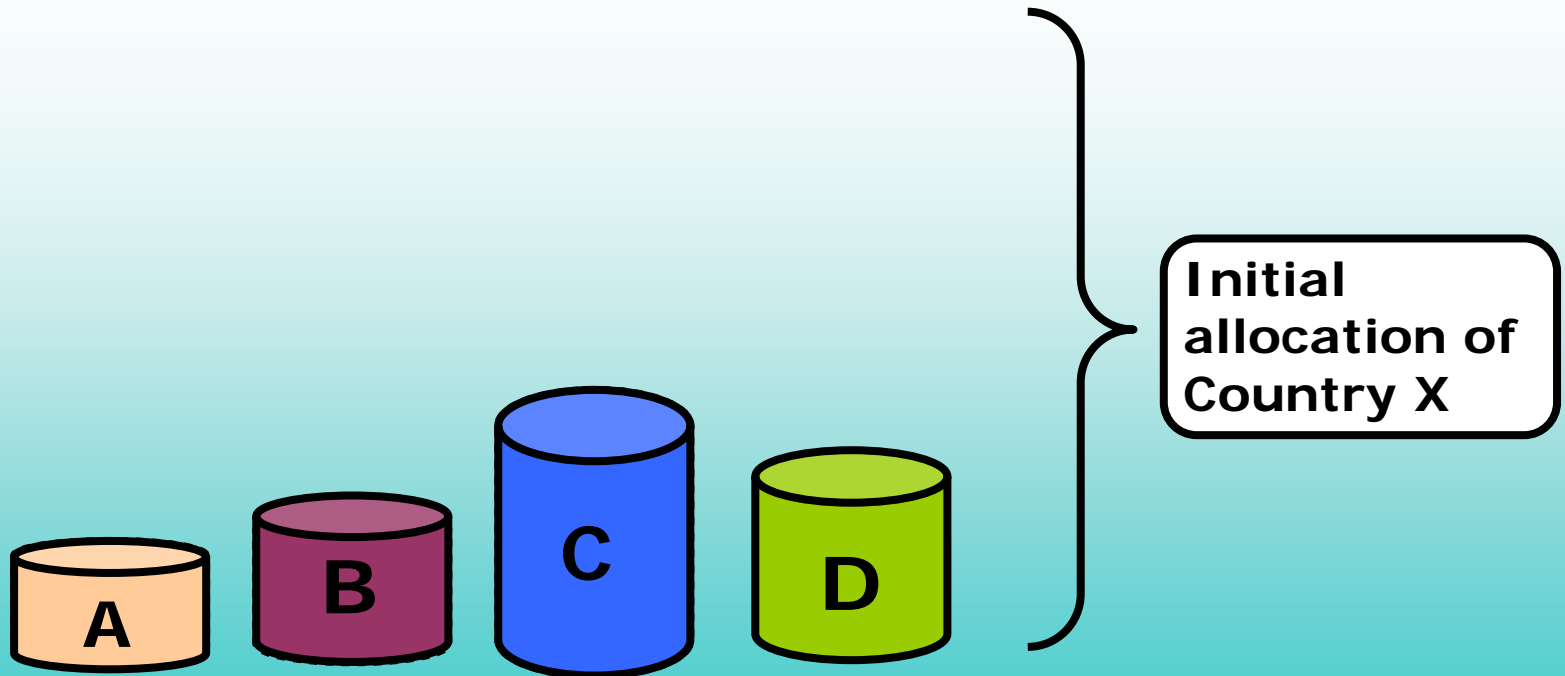
Sum up the *quantity* of abatement per sector.

Not *improvement rate* of efficiency.

For emission trade

3 - 1 - 2 The Initial Allocation

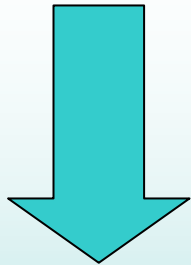
example...Country X



In case of non-compliance

If a country

Succeeded in improving emission efficiency



However!!!!!!!!!!!!

Failed in reduction of GHG (because of unexpected economic growth)



International negotiation

3 - 1 - 2 The Initial Allocation

< Multi-sector Approach >

There will be a possibility that the quantity of abatement fall below that of KP.

Global warming should be managed by
broader participation!

3 . Alternatives and Our Proposal

1. Cost

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3 - 2

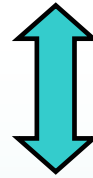
Participation of Developing Countries

《overview》

- 3 - 2 - 1 **Introduction**
- 3 - 2 - 2 What are Developing Countries?
- 3 - 3 - 3 Our Proposal

3 - 2 - 1 Introduction

『 *Common but differentiated responsibility* 』



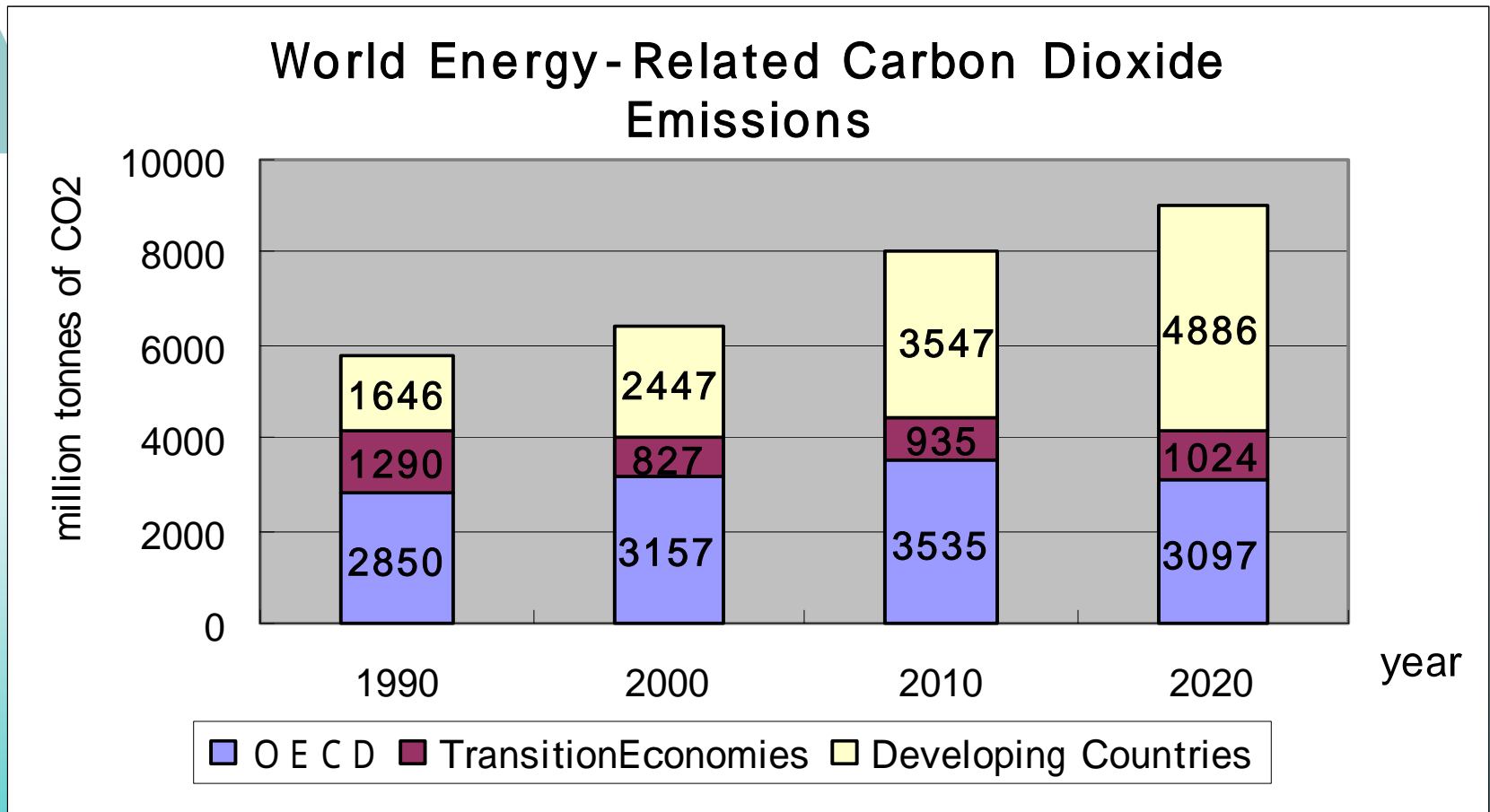
CO2 emissions of DCs is increasing!

DCs also need to act!

**The Timing of DCs' action is
very important!**

Go NEXT

CO2 Emissions of DCs



Source : Ministry of Economy, Trade and Industry (2003)

3 - 2

Participation of Developing Countries

《overview》

- 3 - 2 - 1 Introduction

- 3 - 2 - 2

What are Developing Countries?

- 3 - 3 - 3 Our Proposal

3 - 2 - 2 What are Developing Countries?

Developing Countries...

All countries except
OECD and Transition Economies !

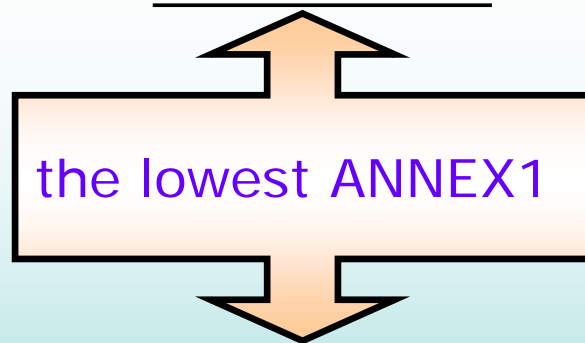


*Each developing levels
are different !!*

3 - 2 - 2 What are developing countries?

Per capita CO2 emissions

25 non-Annex1 countries > Romania



GNP per capita

40 non-ANNEX1 countries > Bulgaria

3 - 2

Participation of Developing Countries

《overview》

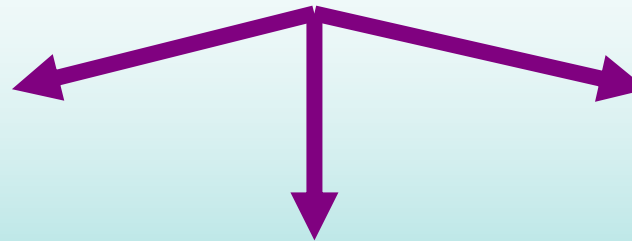
- 3 - 2 - 1 Introduction
- 3 - 2 - 2 What are Developing Countries?
- **3 - 3 - 3 Our Proposal**

3 - 2 - 4 Our Proposal

Past emission volume	Present emission volume	Future emission volume
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Divide into 3 groups

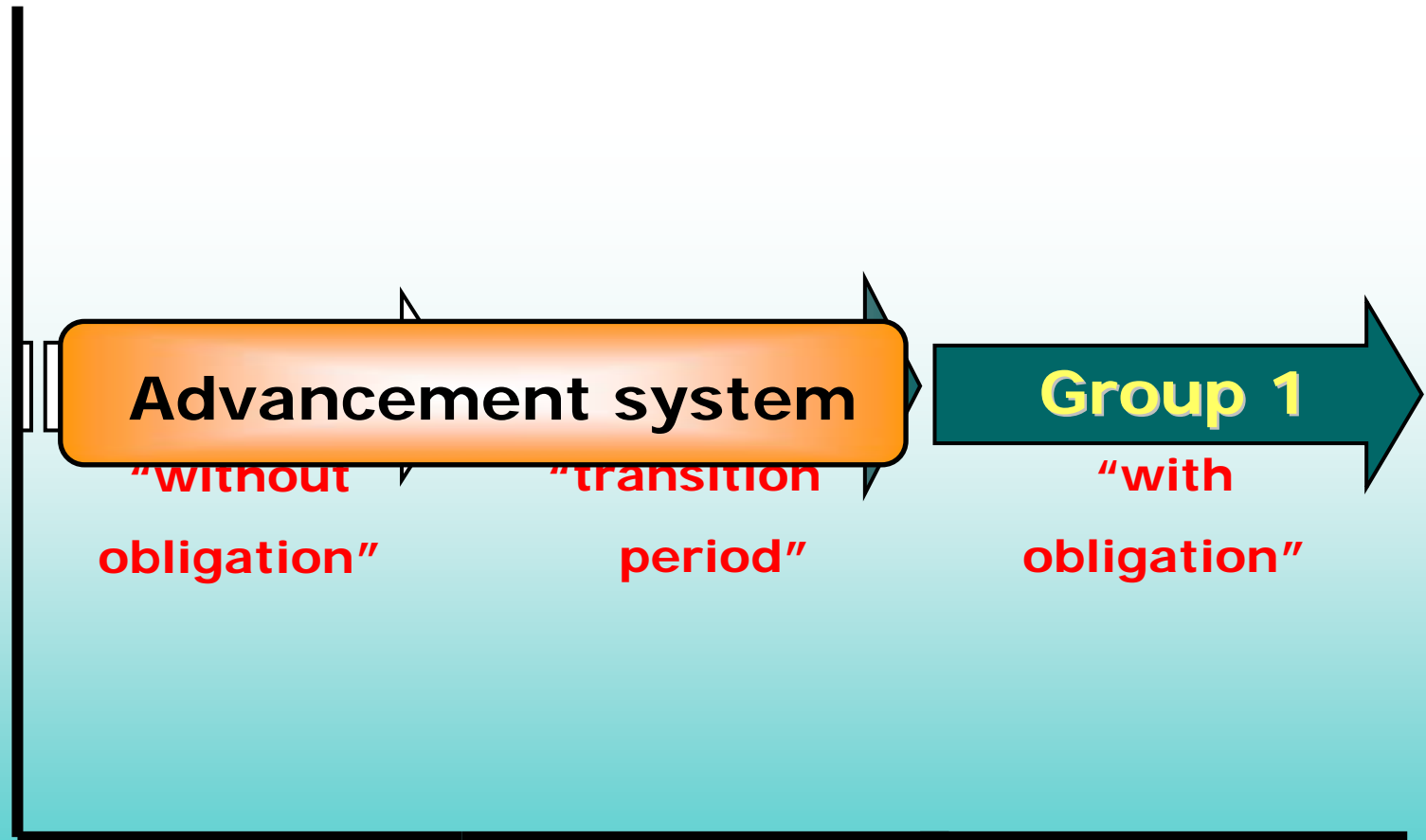
Group 1
"with obligation"



Group 2
"in transition period"

Group 3
"without obligation"

3 - 2 - 4 Our Proposal



NOW

Ex) the case of China and Japan

Past emission
volume

Ranks of impacts
to global warming

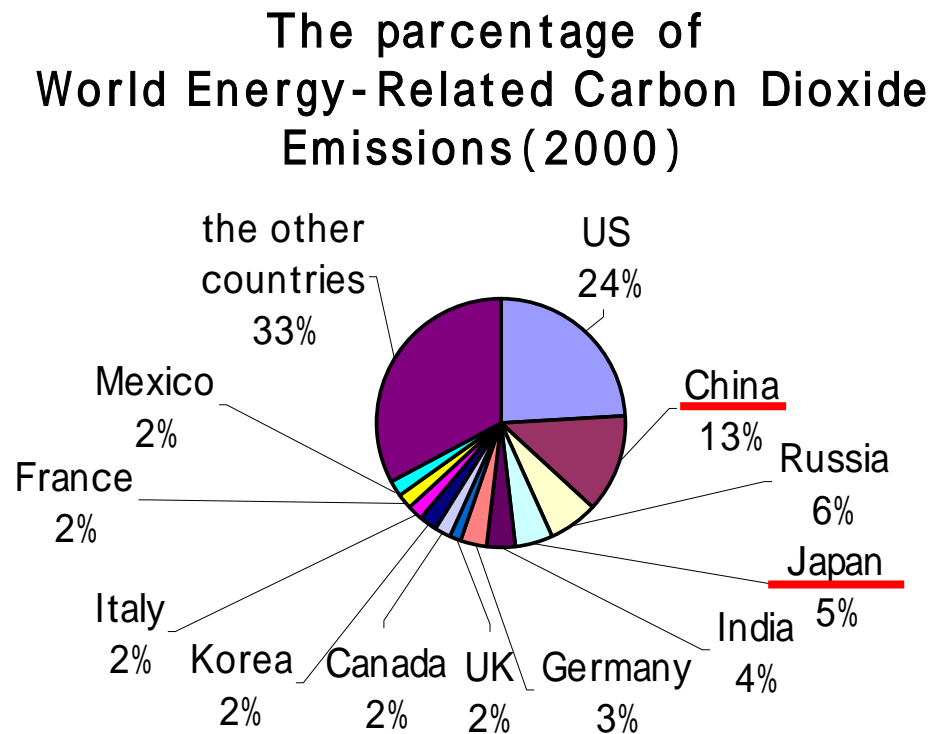
Table A4.2 - Relative Responsibility with Flat CO₂ Emissions from 1990 to 2010, including 1990 Concentration

Country	%
United States	42.2803
United Kingdom	14.1262
Germany	10.2359
Russian Federation	9.8931
Japan	3.5576
France	3.3918
Canada	2.5570
Poland	2.3081
Belgium	1.5200
Italy	1.4423
Australia	1.0981
Czech Republic	1.0831

Source: Brazilian proposal

Ex) the case of China and Japan

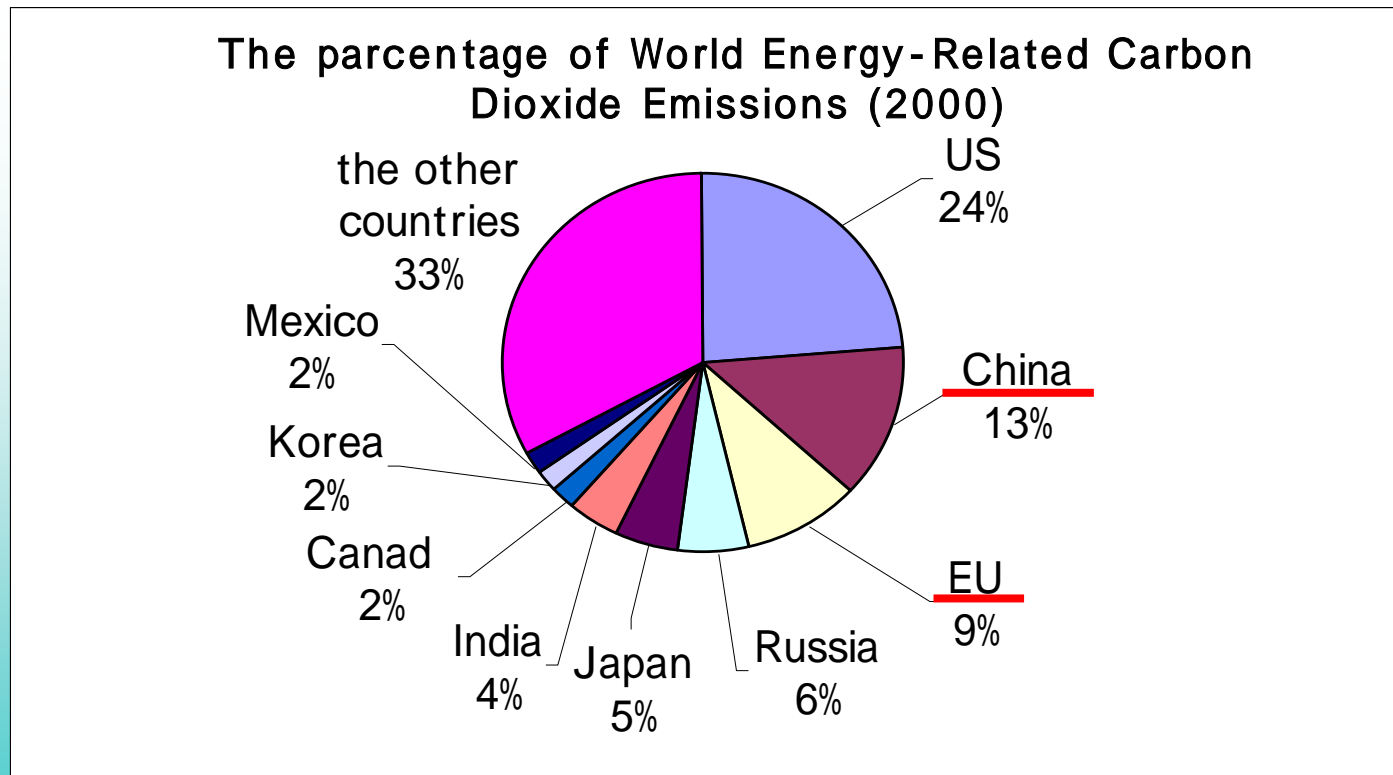
Present emission volume



Source : Ministry of Economy, Trade and Industry (2003)

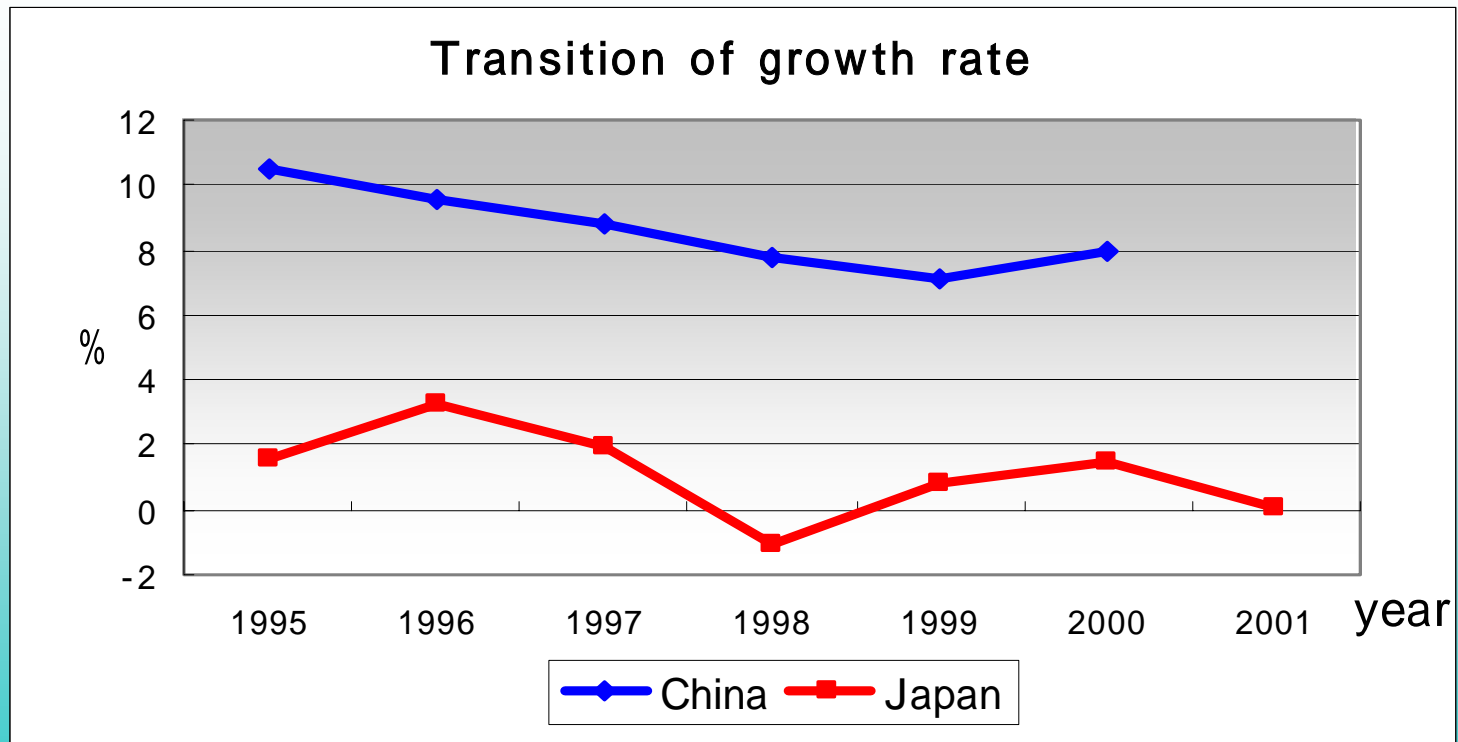
Ex) the case of China and Japan

Present emission volume



Ex) the case of China and Japan

Future emission volume
the growth of GDP



Ex) the case of China and Japan

	China	Japanese
Past emission volume	×	
Current emission volume		
Future emission volume		

Probably, *China belongs to Group2*
Japan belongs to Group1

What do
you think?

3 - 2 - 4 Our Proposal

Advancement system

This plan reflects the **historical responsibility**.

This plan can **review the category** of
developing countries.

We insist our proposal is effective!

3 . Alternatives and Our Proposal

1. Cost

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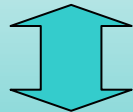
3. Non-compliance procedure

3 - 3 Non-Compliance Procedure

Non-compliance procedure is *a way to help participants carry out their duties*.

It could take two forms, “**penalty**” or “**support**”.

Kyoto Protocol took **penalty!**



Cf. Montreal Protocol (1987) took **support.**

= Overview =

1. *Process of making NCP*
(Marrakech Accords)

2. *Problems of NCP of Kyoto Protocol*

- “1.3 times rule”
- What NCP should be in MEA
(Multilateral Environmental Agreement)

3. *Our proposal*

Process of making NCP

COP6 (Hague: Nov. 2000) Negotiation broken down

COP6 resumed (Bonn: July. 2001)

Reached a consensus

COP7 (Marrakech: Oct ~ Nov. 2001)

Marrakech Accords

--Marrakech Accords--

Non-compliance procedure

Kyoto mechanisms

Sinks

Support for developing countries

Our main theme!!

= Overview =

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-- What NCP should be in MEA
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3. *Our proposal*

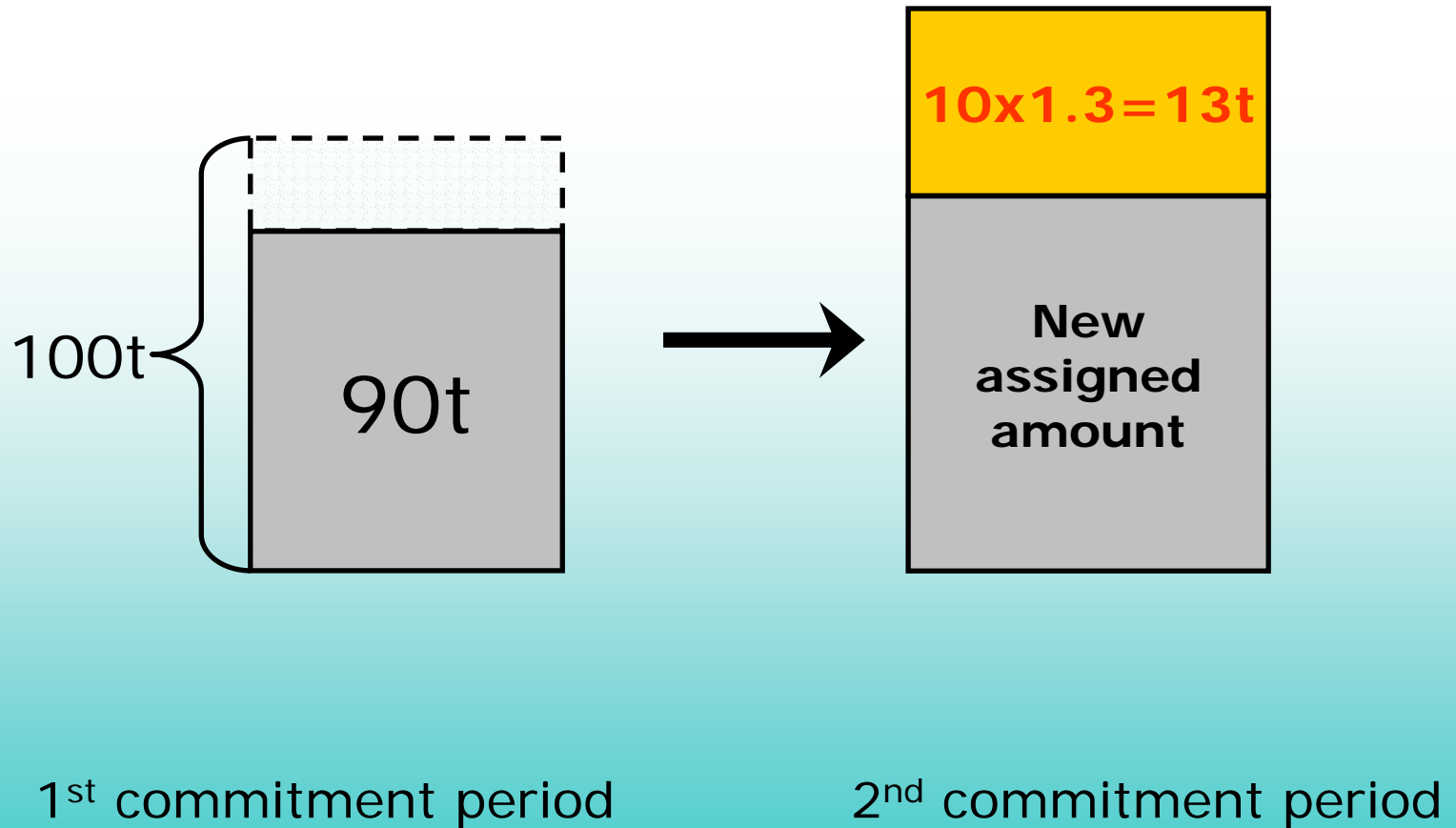
NCP under Kyoto Protocol

If the participants can not reduce assigned emissions, they must

- 
- 1) reduce 1.3 times the amount of excess emissions in the next commitment period,
 - 2) develop a compliance action plan for future,
 - 3) lose an eligibility to join emission trading.

1) is not support but penalty.

1.3 times Rule



Attributes of global environmental measures

International cooperation

Participants should be honored.

Solving global environmental issues promotes public interests of international society.

International adjudication system

Only a suffered country has a right to accuse a certain country of non-compliance.



NCP should be promotive and supportive

= Overview =

1. *Process of making NCP*

(Marrakech Accords)

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--“1.3 times rule”

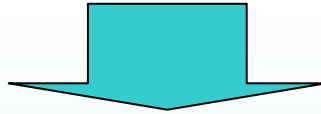
-- What NCP should be in MEA

(Multilateral Environmental Agreement)

3. *Our proposal*

Our proposal

--In reality, turning over the direction of NCP seems impossible in Kyoto Protocol.



--However, more participants will be needed in the future.



--Non-compliance procedure should be **promotive and supportive**, at least not punitive in **new regime**.

4 Conclusion ~ New Regime ~

Our proposals are . . .

keeping the use of **Cap & Trade**

Calculating initial allocation

by **taking multi sector approach**

using **the advancement system**

non compliance procedure should be **supportive.**



~Thank you(^.^) ~