


# State of Affairs of Climate Negotiation towards Copenhagen

MEET follow-up meeting  
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- Overview of state of affairs of international negotiation
  - Post-2012 options for “sustainable transport”

# Our Challenges(1)

- ☛ Some scientific findings from IPCC AR4
  - Climate change is occurring.
  - Most of the observed increase in globally averaged temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations.
  - likely that anthropogenic warming has had a discernible influence on many physical and biological systems.
  - very likely that all regions will experience either declines in net benefits or increases in net costs for increases in temperature greater than about 2-3°C and that developing countries are expected to experience larger percentage losses.

## Our Challenges(2)

- Global emissions of GHGs need to peak in the next 10-15 years and need to be reduced to very low levels, well below half the levels in 2000 by the middle of the twenty-first century in order to stabilize their concentrations in the atmosphere to attain the most stringent mitigation levels to avoid dangerous climate change.

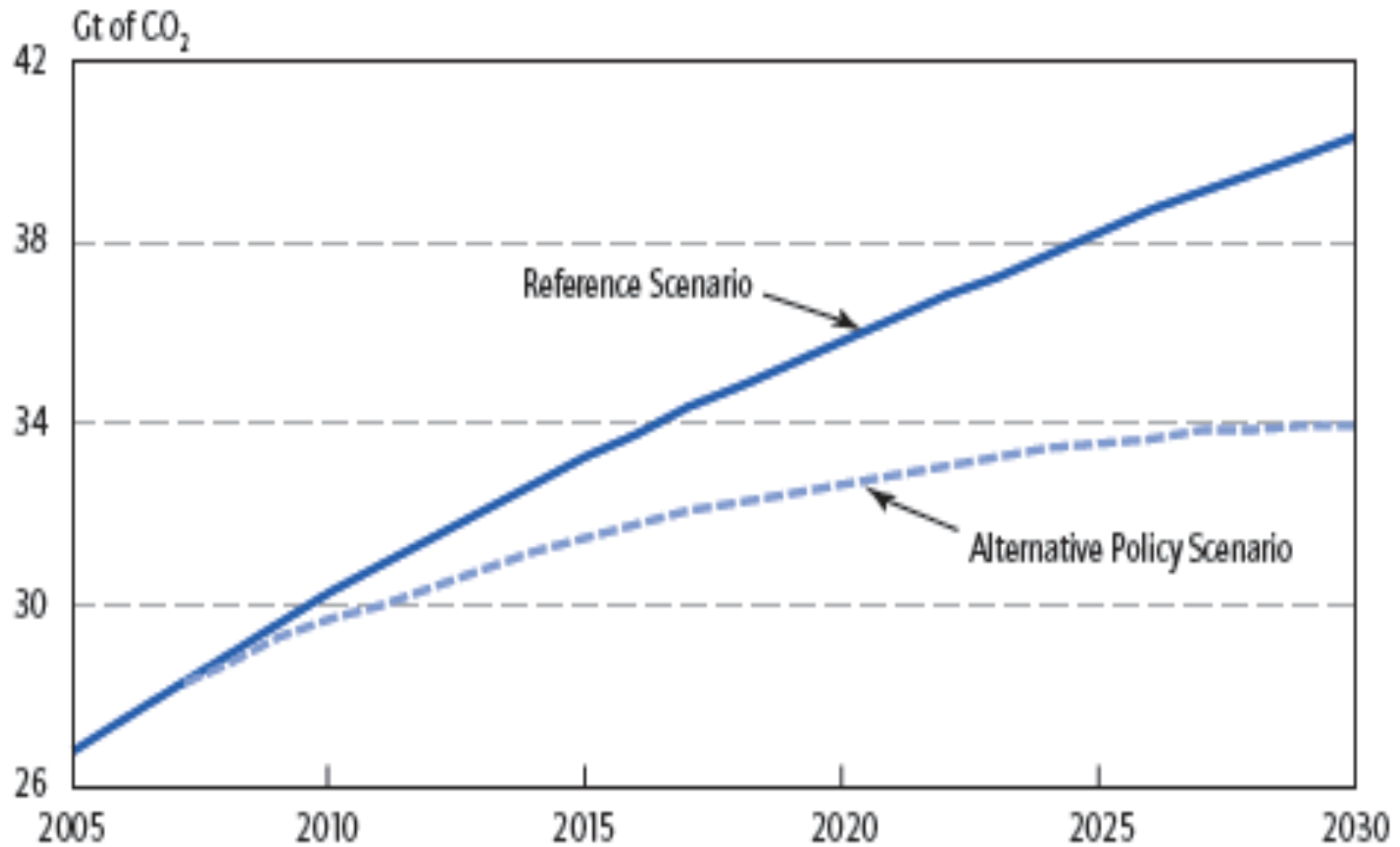
## Shared long term goal?

- In Toyako Summit, G8 countries endorsed “the goal of achieving at least 50% reduction of global emissions by 2050” as the goal that G8 countries want to “share with all Parties to the UNFCCC and together with them to consider and adopt in the UNFCCC negotiations”.
- Basically, countries agree on drastic cut of global emissions by the middle of this century.
- Developing countries argue that long term target must be ambitious and underpinned by strong mid-term target by developed countries.

Category	CO2 concentration (ppm)	CO2-eq concentration (ppm)	Global mean temperature increase above pre-industrial (°C)	Peaking year for CO2 emissions	Change in global CO2 emissions in 2050 (% of 2000 emissions)
I	350-400	445-490	2.0-2.4	2000 - 2015	-85 to -50
II	400-440	490-535	2.4-2.8	2000 - 2020	-60 to -30
III	440-485	535-590	2.8-3.2	2010 - 2030	-30 to +5
IV	485-570	590-710	3.2-4.0	2020 - 2060	+10 to +60
V	570-660	710-855	4.0-4.9	2050 - 2080	+25 to +85
VI	660-790	855-1130	4.9-6.1	2060 - 2090	+90 to +140

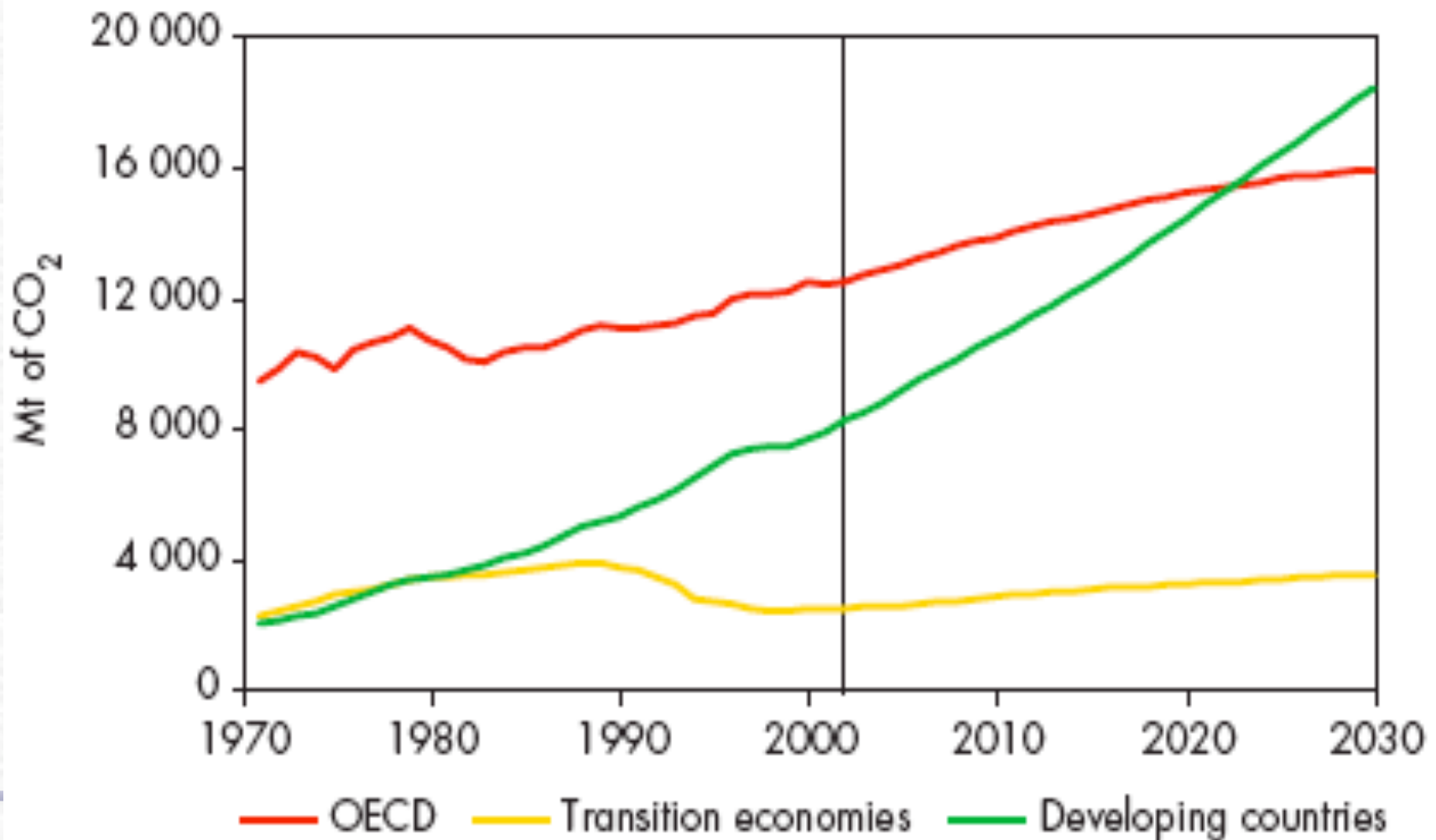
Source: IPCC AR4 (2007)

# Energy Related CO<sub>2</sub> Emission Projection



Source: IEA (2006c).

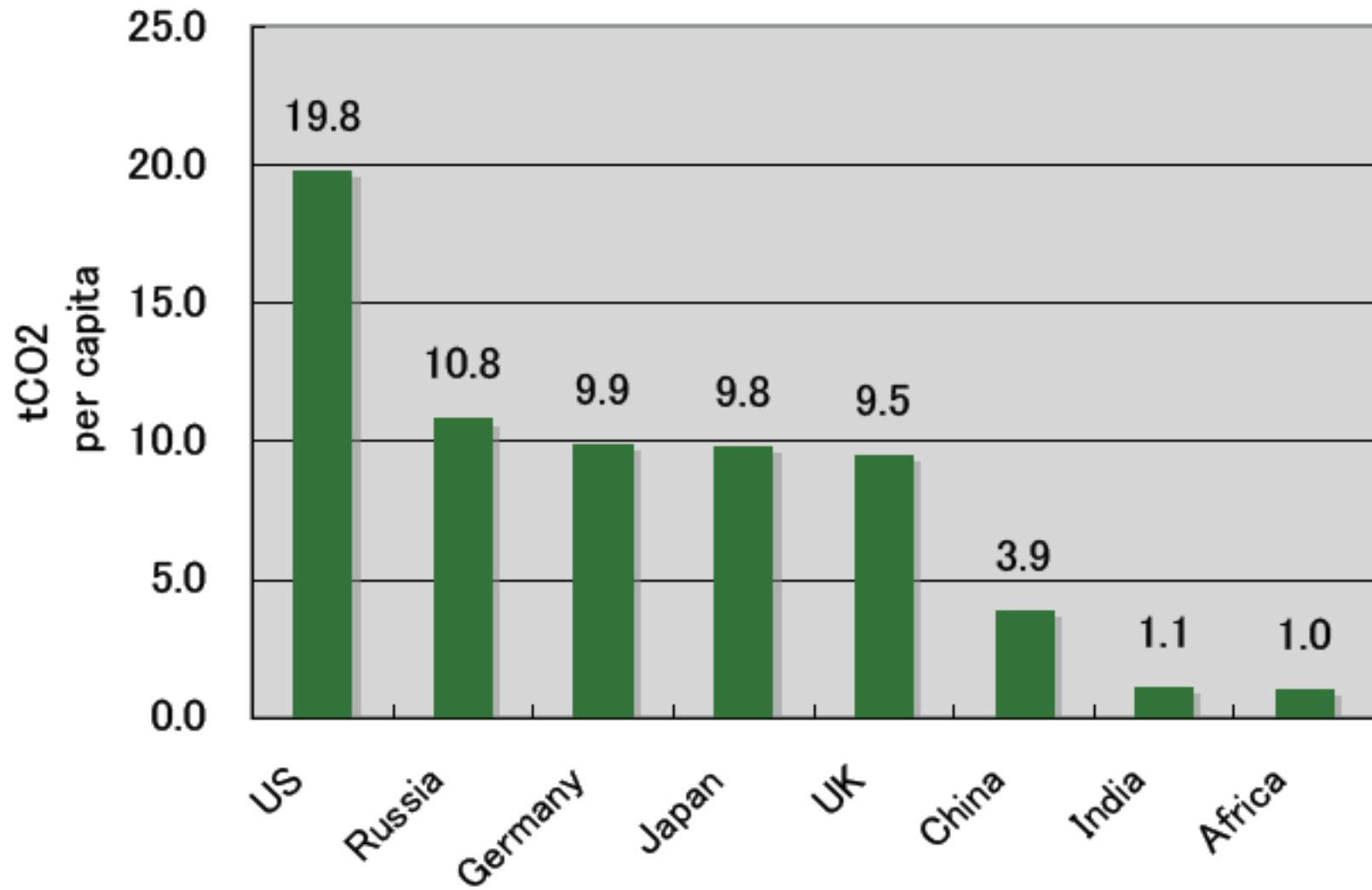
# Energy-Related CO<sub>2</sub> Emissions by Regions



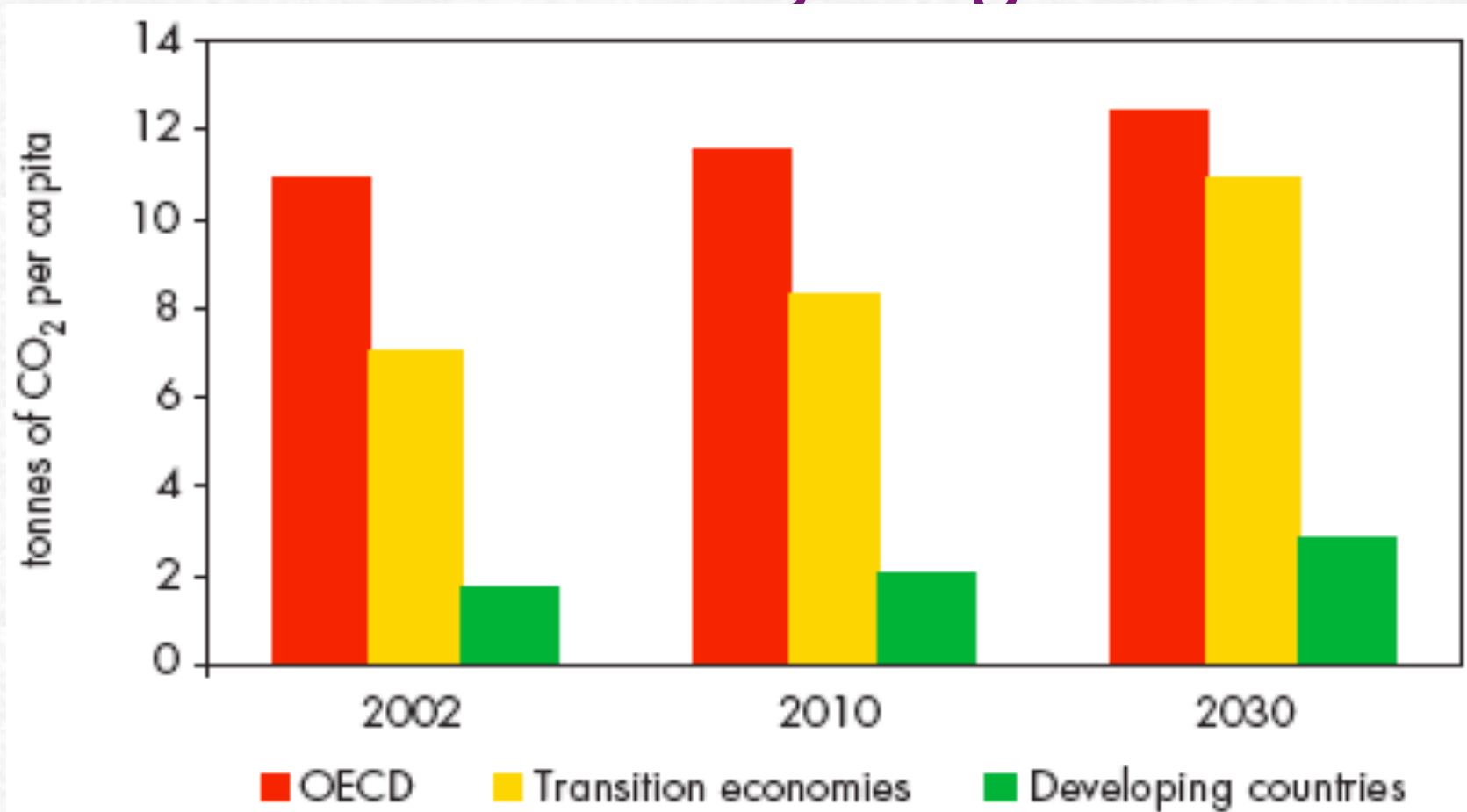
Source: IEA, 2004



Per capita emission of countries and region (2005)



# Per Capita Energy-Related CO<sub>2</sub> Emissions by Region



# Implication of the goal(1)

- ☛ The emerging long-term target requires us to reduce emission more drastically and rapidly and to move as quickly as possible towards a low carbon society.
- ☛ Post-2012 climate regime should deliver significant reduction to make global emission peak out by 2020.
- ☛ Failure in establishing a really effective regime would lead to a failure, or if not, making it difficult, to achieve the long-term target.

## Implication of the goal(2)

- ☛ In order that a post-2012 regime should be effective, both developed countries and developing countries' mitigation efforts are essential.
- ☛ Emission reduction should also occur in DCs, but its cost should be assumed/ shared by international community.
- ☛ International cooperation are more than important to support reduction actions by DCs and to establish a mechanism to make such actions more effective.

# Equity implications

(all GHG emissions without LULUCF)

Scenario category	Region	2020	2050
A-450 ppm CO <sub>2</sub> -eq <sup>2)</sup>	Annex I	-25% to -40%	-80% to -95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia	Substantial deviation from baseline in all regions
B-550 ppm CO <sub>2</sub> -eq	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
C-650 ppm CO <sub>2</sub> -eq	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

# History of Climate Negotiation

- ☛ 1988 Establishment of IPCC
- ☛ 1992 UNFCCC adopted (entry into force in 1994)
- ☛ 1995 COP1: Berlin Mandate adopted
- ☛ 1997 Kyoto Protocol (KP) adopted
- ☛ 2001 Marrakesh Accords (implementation rules) adopted
- ☛ 2005 Entry into force of the KP; Negotiation under the KP (AWG-KP) started
- ☛ 2007 Bali Action Plan adopted; Negotiation under the UNFCCC (AWG-LCA) launched
- ☛ 2009 COP15 (expect to have an agreed outcome)

## 2 track negotiations

- Negotiations toward Copenhagen in 2 tracks
  - Negotiation for developed countries' commitments beyond 2012 under the KP (AWG-KP) since 2005
  - Negotiation under the UNFCCC (AWG-Long-term Cooperative Action (LCA)) since 2007 (Bali Action Plan)

# AWG-KP(1)

- ☛ Negotiation aiming to agree on developed countries' commitments beyond 2012 under the KP
  - “Commitments for subsequent periods for Parties included in Annex I shall be established in amendments to Annex B to this Protocol... [The COP/MOP] shall initiate the consideration of such commitments at least seven years before the end of the first commitment period...” (Article 3.9)



## AWG-KP(2)

- AWG met 11 times since 2005.
- 3 more meetings before Copenhagen
- Negotiation focusing on:
  - Proposal for amendments to the KP
    - Annex B (including numbers); Article 3.1; 3.7; 3.9; ...
  - Other related issues
    - Kyoto mechanisms; LULUCF; coverage of gases and sectors (including international aviation and maritime transport); others

## AWG-KP(3)

- ☞ Based on pledges by developed countries, focus is on scale of aggregate emission reduction by developed countries.
  - Baseyear
    - 1990 or other
    - Single year or multiple years
  - Commitment period
    - 5 years x 1; 5 years x 2; 8 years
- ☞ Kyoto mechanisms and LULUCF continue to use under the KP.
- ☞ Increasing necessity for more consistency with AWG-LCA.

Table: Information on possible quantified emission limitation and reduction objectives

Party	Range or single value by 2020	Reference year	Inclusion of LULUCF	Inclusion of mechanisms	Status
Australia	-5 to -15%; or -25%	2000	Yes	Yes	Officially announced
Canada	-5 to -10%	2006	TBD	Yes	Officially announced
EU	-20 to -30%	1990	No for -20%; Yes for -30%	Yes	Adopted by legislation
Japan	-15%	2005	No	No	Officially announced
Norway	-30%	1990	Yes	Yes	Officially announced
Switzerland	-20% to -30%	1990	Yes	Yes	Consultations in progress
USA	-14%	2005	-	-	Office of management and budget

Source: Informal note by the UNFCCC secretariat (12 June 2009)

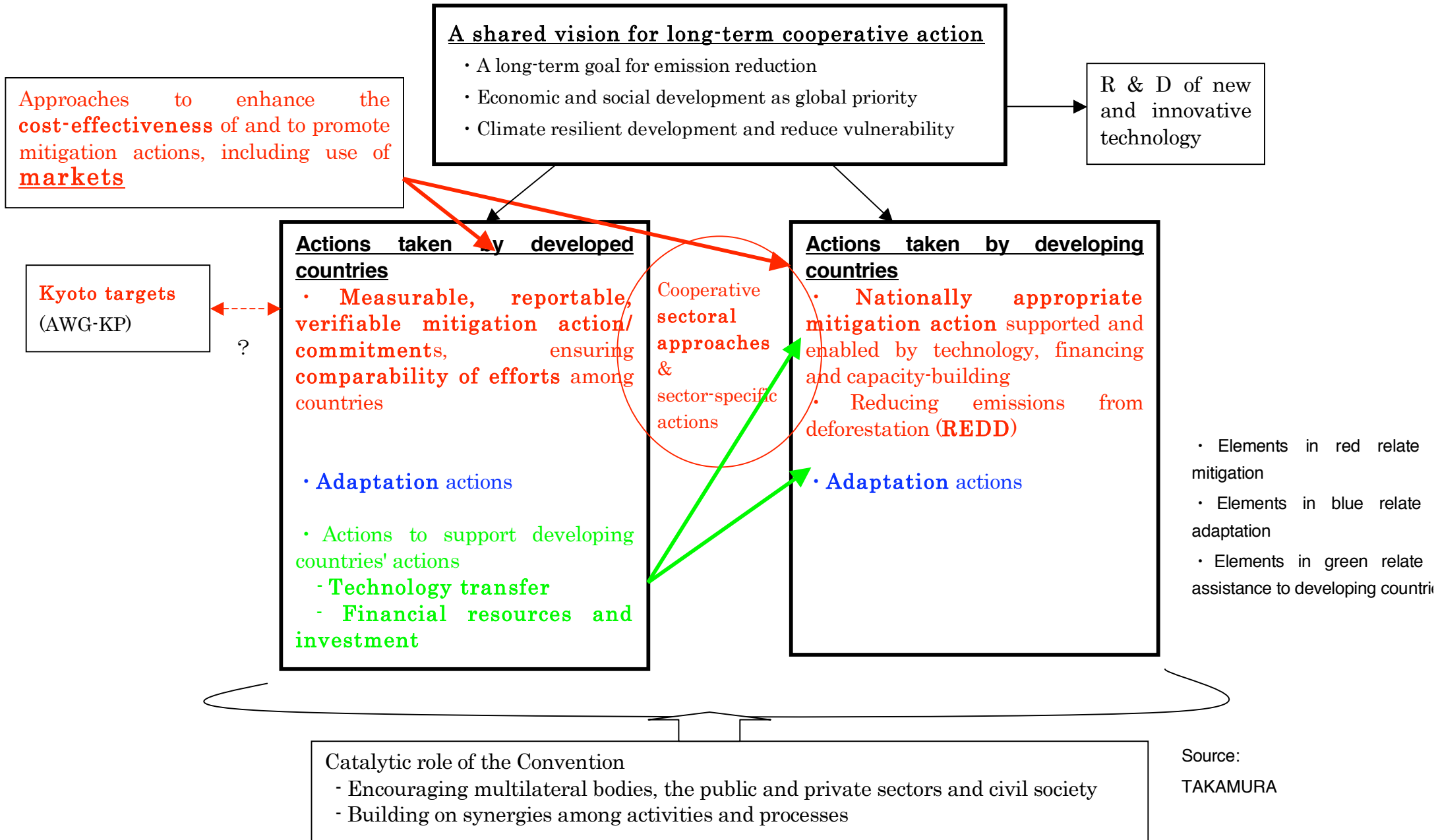
## AWG-KP(4)

- ☞ Proposals on Improved/new market mechanisms
  - Improving CDM
  - Co-benefit requirement
  - Crediting Nationally Appropriate Mitigation Actions
- ☞ International aviation and maritime transport

## AWG-LCA(1)

- Negotiation track in which all parties participate.
- AWG met 6 times since 2007.
- Discuss both mitigation by developed and developing countries.
- Ideas and views had been submitted and exchanged in 2008. Shift to full negotiation mode in 2009.

# Structure of Bali Action Plan indicating outline of a climate regime beyond 2012



## AWG-LCA(2)

- ☛ Negotiation has achieved at:
  - Revised Negotiating Text (outcome of June 2009 session)
    - Mitigation/Adaptation/Technology + Capacity building/ Finance/ Shared vision
  - From August meeting, narrowing down will start.

# Mitigation by developed countries

- ☛ Quantified emission limitation and reduction objectives (Kyoto-type target) are the most likely ones to be adopted.
- ☛ Some nuance in the position of some developed countries.
  - “Conformity with domestic law” clause
  - National schedule approach
- ☛ Comparability among developed countries.
  - Necessity of more consistency with AWG-KP work.



# Mitigation by developing countries

- Nationally Appropriate Mitigation Action (NAMA) will be the core of DCs' action.
  - Derives directly from the BAP.
    - “NAMAs by DC Parties in the context of SD” should be “supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner”.
  - Actions will be recognized and “register”ed internationally.
  - Matching NAMA with technological and financial support by developed countries.
  - How to institutionalize the idea is one of the key points of negotiation.

# NAMA(1)

## Advantages

- More appropriate than QELROs in light of current situation of DCs.
  - No precise data on national wide emissions.
  - Difficult to set an appropriate level of target in case emission is projected to continue to increase.
- Could incentivize DCs to take more actions to decarbonize their economy and society.

# NAMA(2)

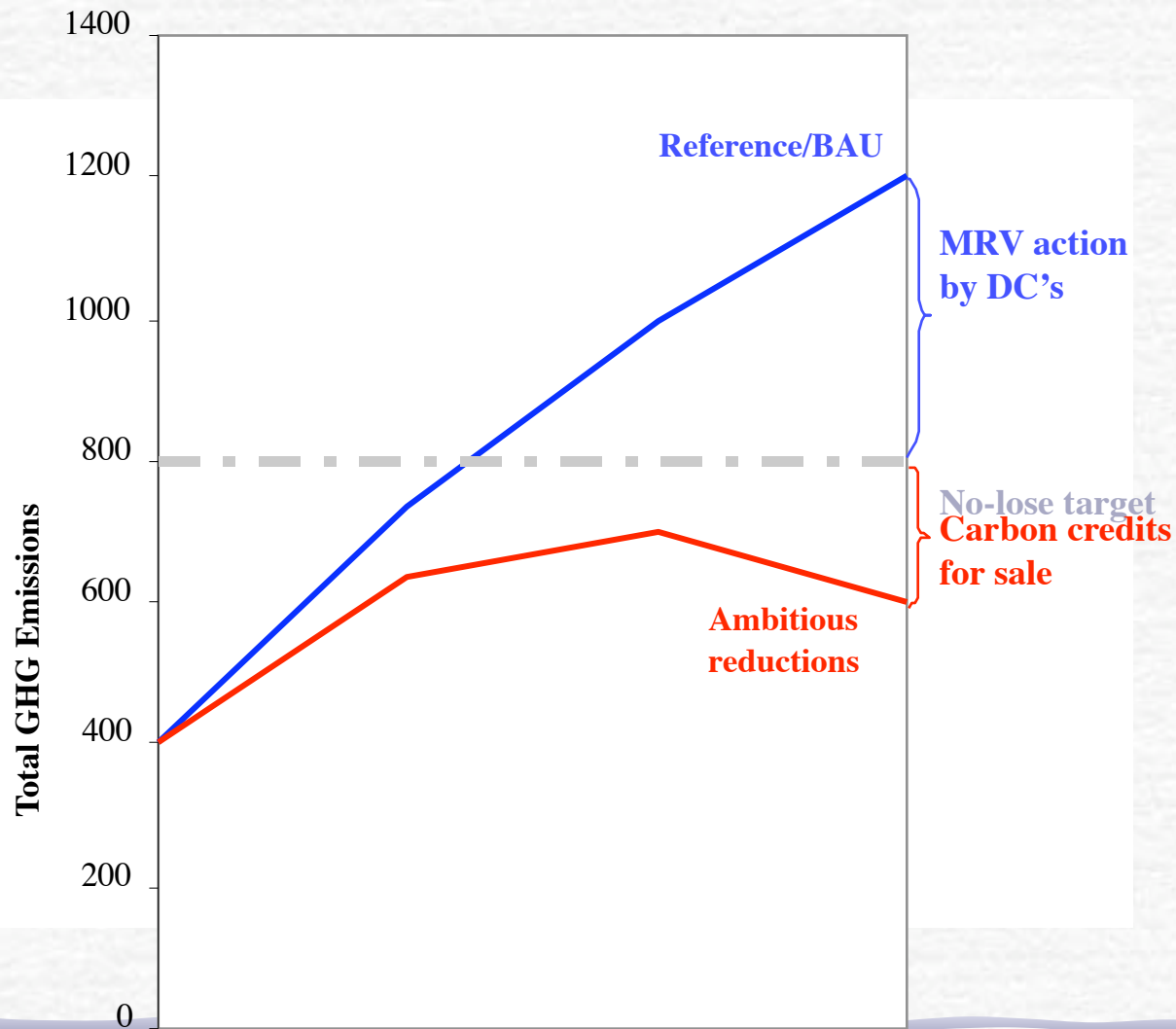
## Challenges

- Definition of NAMAs, especially the ones that receive international support
- How to match NAMAs with support to incentivize these actions.
- How to measure and verify the effectiveness of efforts under NAMAs.
- How effective in case of “insufficient efforts”

# Sectoral approach

- ☞ Sectoral approach: views are diverse.
  - Should be limited to technological cooperation.
  - More focused actions on a specific sector.
    - Agriculture
    - International aviation and maritime transport.
  - Sectoral Crediting Mechanism (SCM) (no-lose target)(EU)

# No-lose targets to credit emission reductions



- Builds on enhanced mitigation action by DC's
- Carbon market incentive for additional emission reductions based on a "no-lose target"
- Limit compliance risk for DC's if target is not met

Source: EU Commission

# SCM(1)

## Advantages

- More appropriate than QELROs in light of current situation of DCs.
  - No precise data on national wide emissions.
  - Difficult to set an appropriate level of target in case emission is projected to continue to increase.
- Experience at a sector level would enhance the capacity of DCs.

# SCM(2)

## Challenges

- Importance and difficulty in setting the baseline for crediting.
  - Loose baseline would lead to an increase in global emission.
  - It would also disturb the functioning of carbon market.
- How effective in case of “insufficient efforts”

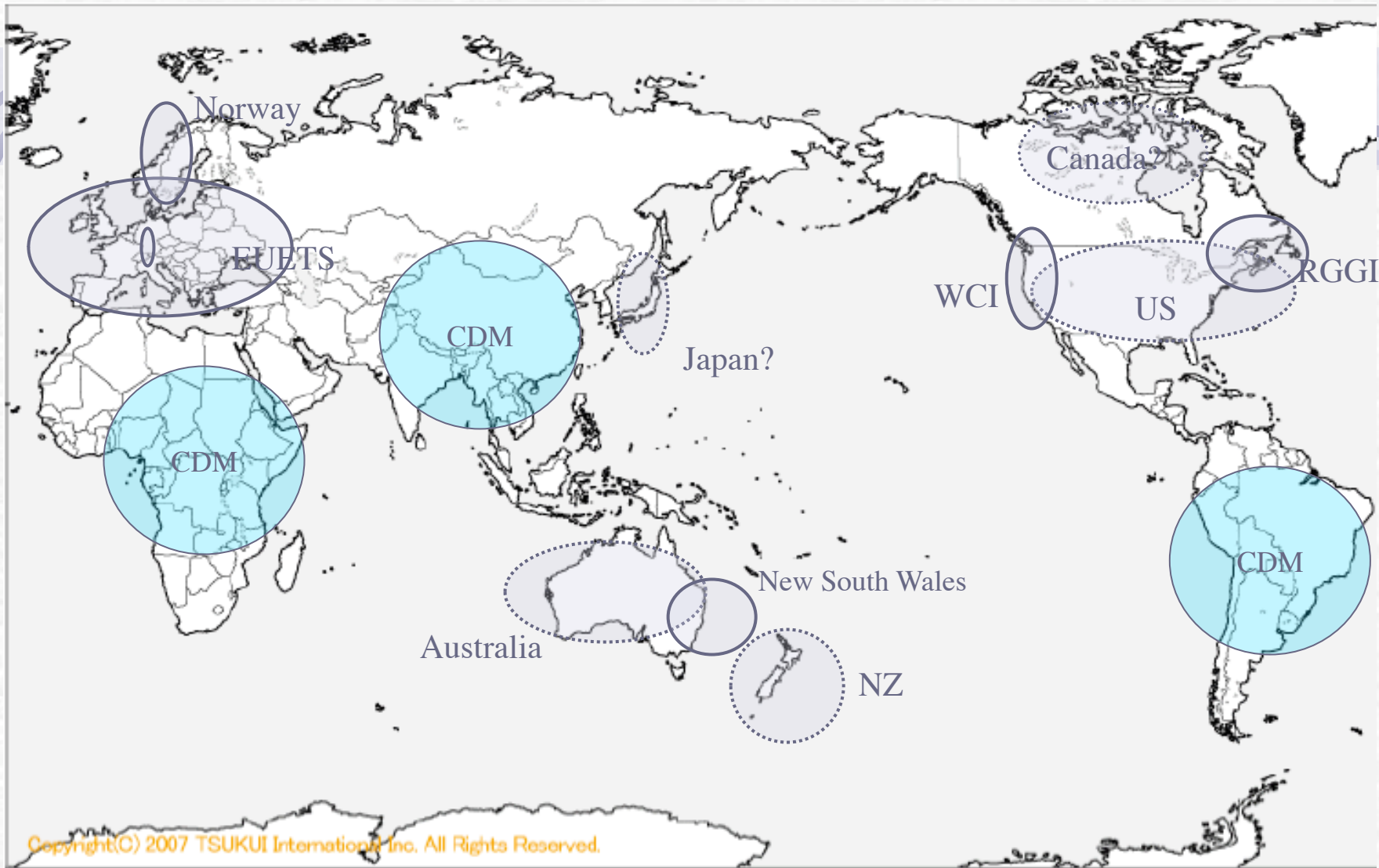
# Investment and financial flows are key

- ☛ Returning global emissions to current levels in 2030 requires additional investment and financial flows about 200 billion US dollar in 2030 (UNFCCC Secretariat 2007). Updates in 2008 show that they will be 170% higher. Over half would be needed in DCs (UNFCCC Secretariat 2008).
- ☛ **Transportation sector** is the one in which additional investment and financial flows are the most needed (**88 billion US dollar in 2030**). Almost half would be needed in DCs.
- ☛ Private funds will play a crucial role.
  - will constitute the largest share of investment and financial flows (86 %) (UNFCCC Secretariat 2007).



# Evolution of Carbon Market

- ☞ 1,652 CDM projects registered and about 2,700 more projects in the pipeline.
- ☞ More than 2.7 GtCO<sub>2</sub> is expected to be reduced by 2012 through CDM.
  - Corresponds to 2 year's aggregated emissions of Japan and to 3 year's emissions of Germany.  
(UNEP Risoe Center, CDM pipeline, as of 1<sup>st</sup> June 2009)
- ☞ In 2007, 7.4 billion US dollar was transacted.
  - Equivalent 3 times of 4 year (2002-2006) GEF funding (GEF3).
- ☞ The CDM Executive Board reported that the amount of investment to developing countries under the CDM by the end of 2006 is 26 billion US dollar.
- ☞ Windows for emission reduction in developing countries and for funding necessary for such reduction.



# Additional funding is still necessary

- ☞ Some mitigation actions might not match with market mechanisms.
  - Particularly for sectors in developing countries in which private sector is reluctant.
  - Assisting developing countries in making policy and measures.
- ☞ Technology transfer and adaptation.
- ☞ The GEF share of total multilateral and bilateral funding between 1997 and 2005 is 1.6 per cent.

# Proposed options for funds raising

- ☛ Application of a levy similar to the 2% share of proceeds from CDM to international transfers of other credits.
- ☛ Auction of allowances
  - By developed countries (Norwegian proposal)
  - By international aviation and maritime emitters
- ☛ International levy
  - On emissions (Swiss proposal)
  - On international air travel (LDC proposal).
- ☛ Tobin tax: tax on currency transactions

# Post-2012 options in the context of sustainable transport (1)

- Improved use of market mechanisms may advance some mitigation actions.
  - Fuel switch and efficiency improvements might fit with improved CDM.
  - NAMA with crediting and SCM would also be an option for that purpose.
  - How to prioritize actions in the transport sector compared to other sectors
    - Competition with projects/ actions in other sectors.
    - Some criteria/ mechanisms leading to prioritizing is worth consideration.
    - Co-benefit requirement is one of the options.

# Post-2012 options in the context of sustainable transport (2)

- ☞ Some type of actions might not be easily incentivized by market mechanisms.
  - Projects/ actions entailing large amount of initial investment such as infrastructure change might have difficulty in attracting interest of private sector.
  - Simply loosening baseline and methodology would a best solution.
- ☞ Overall strategy for funding is necessary.
  - Sharing the work with private finance investment.
  - How to raise the necessary funds.
  - Streamlining and coordinating financial mechanisms
  - How to ensure the funding is transparent and effective for climate change.

# Conclusion

- ☛ International regime is a tool for international cooperation. Big chance to provide input to regime making process.
  - Mitigation actions by DCs and support for them.
  - Financing policy and action for sustainable transport.
  - Mobilization of private finance also depends on how to institute market mechanisms.
  - Enhancing adaptation in transport sector



Thank you for your attention!

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