

***Equitable access to sustainable development:***

# **Carbon Budget Account Proposal**

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*of*

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# structure

- I. Proposal: Basic Idea
- II. Advantages
- III. Results
- IV. Implications

# I. Proposal: Basic Idea

- **Carbon equity** has been the key to addressing global climate change issues.  
—UNFCCC: “common but differentiated responsibilities”.

Nonetheless, both feel unfair ——

**Developed countries** emphasize “**common** responsibility”, while **developing countries** emphasize “**differentiated** responsibilities”.

**Problem:** emission entitlements of all countries have not been clearly defined!

**Carbon budget** is needed so that each country accurately knows its responsibility.

# Basic idea

- **Step 1: setting the global carbon budget** that includes **historic** and **future** budget compatible with the temperature control target;
- **Step 2: allocating the global budget** among all countries according to **per capita accumulative principle**; and establish **Budget Accounts** for each country or groups.
- **Step 3: establishing an effective international collaborative mechanism** based on the initial allocation. Countries with emission deficit or insufficient budget can get more budget from the countries with surplus through purchase, tech transfer, or other collaborations.
- In addition, “**Formula plus**” approach is applied to some special countries, e.g. small countries, islands, countries with high embedded emissions, etc.

# How much is a country's balance?

Depends on:

*(1) How much its emissions entitlements is.*

*(2) How much it has emitted.*

*(3) How much it gets from intl. collaborations through purchase, technology transfer & funds contribution(+ or -)*

- Balance=entitlements –actual emissions + intl. collaborations

# II. Major advantages

- Firstly, **carbon equity**----the principle of ‘common but differentiated responsibilities’ is properly reflected and becomes operational.
- Secondly, the **global target** on emission reduction can be guaranteed.
- Thirdly, **full coverage**----all countries can be covered.
- **Fourthly**, compatible with the existing efforts.

# III. Results: quantified CBDR

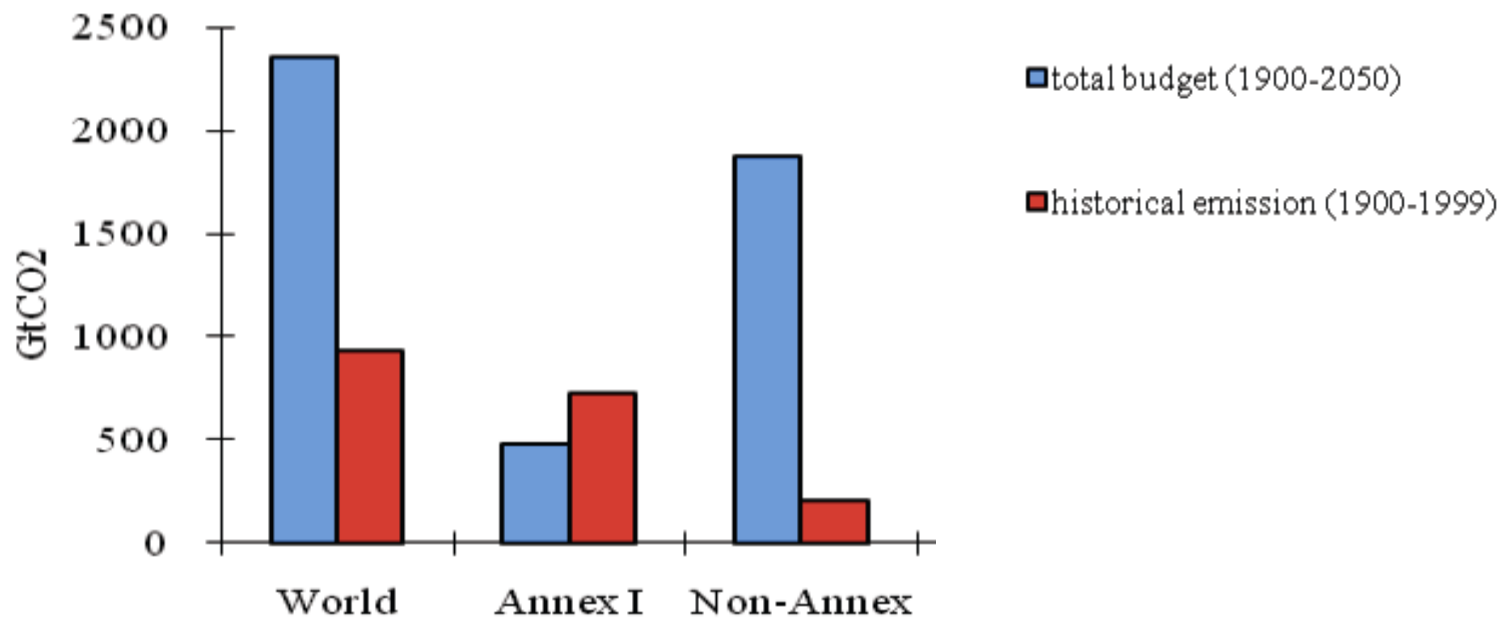
Table 3: Balances of Carbon Budgets Accounts in 2000 with different starting years

Data source: WRI CAIT 8.0

	Starting years*	(1) Emissions entitlements (* -2049, GtCO <sub>2</sub> )	(2) Actual emissions (* -1999, GtCO <sub>2</sub> )	(3)=(1)-(2) Balance GtCO <sub>2</sub> )
World	1900	2367.10	930.91	1,436.19 <sup>^</sup>
Annex 1	1900	483.25	721.91	-238.66
Non-Annex 1	1900	1,883.85	209.00	1,674.85

Note: (1) \* denotes different starting year; (2) Total surplus/deficit=Total budget-Historical emission; (3) Negative figures denote carbon budget deficit, while positive figures mean carbon budget surplus; (4) ^ are different from the original 1,440 GtCO<sub>2</sub> is due to differences in data for some smaller countries and/or rounding errors

# Emissions deficit Vs. surplus





# Mitigation efforts: a fact

- “*There is broad agreement that **developing country pledges actually amount to more mitigation than developed country pledges***”.

—— UNEP(2011), Climate Action Tracker(2011), Mckinsey & SEI (2011), Jotzo (2010).

# Developing countries pledges amount more than developed countries!

	Intensity target (Jotzo 2010)	Mitigation to BAU level (Jotzo 2010)	Share of global pledged mitigation			
			UNEP 2011	Climate Action Tracker(2011)	McKinsey & SEI (2010)	Jotzo (2010)
Annex 1	-37%	-23%	30.1%	25%	42.7%	36.5%
Non-Annex 1	-45%	-24%	69.9%	75%	57.3%	63.5%

Source: re-calculated according to pledges of mid-point target range, from UNEP(2011), Climate Action Tracker(2011), Mckinsey & SEI (2011), Jotzo (2010).

# How much funds should developed countries provide according to the proposal?

Table 6: Financial flows from Annex I to non-Annex I (billion \$) against transfer of carbon budgets

<i>Assumed carbon price</i>	<i>Starting year</i>	<i>Historical emission deficit (*~1999, GtCO<sub>2</sub>)</i>	<i>Payment for deficits of carbon budget (total, bl \$)</i>	<i>Payment for deficits of carbon budget (Per year, 2011~2050, bl \$)</i>
20\$/ton CO <sub>2</sub>	1850	384.52	7,690	192.26
	1900	401.88	8,039	200.94
	1970	250.15	5,003	125.08
50\$/ton CO <sub>2</sub>	1850	384.52	19,226	480.65
	1900	401.88	20,098	502.35
	1970	250.15	12,508	312.69

Note: \* denotes the different starting years.

# How much the developed have paid?

## Fast Start Finance: new and additional?

Countries	Pledge	New?	Additional?
EU	3.36bn\$/y	No information	No information
France	560mn\$/y	No information	No information
Germany	588mn\$/y	70mn\$ to be new	ODA
Ireland	47mn\$/y	No information	No information
UK	800mn\$/y	At least 50% not new	ODA
Australia	243mn\$/y	Not new	Not Additional
Netherland	140mn\$/y	New	Additional
Japan	5bn\$/y	1bn\$ is new	At least 6bn is not additional
USA	776mn\$ in 2010 1045mn\$ in 2011	692 mn\$ in 2010 384 mn\$ in 2011	No information

Sources: documents by AI countries on fast start finance, provided by Teng Fei<sup>12</sup>

# IV. Implications of the proposal

- (1) For the countries out of Kyoto Protocol (1<sup>st</sup> or 2<sup>nd</sup> period), their responsibilities are also clearly defined in the proposal. They need to take comparable efforts.
- (2) A country's responsibility would not change as the track changes----either in dual-track or one track.

## (3) Implications to China

- By any means, China has to take a low carbon road----
- Emission space is obviously insufficient.
- For instance, if China's GDP growth and emission intensity during 2008-2049 follow the same path as Japan's during 1967-2007, then China's GDP, emission intensity and real emissions in 2049 would be 467%, 58.23% and 272% of that in 2007, respectively.
- Carbon budget proposal is for carbon equity, not for the interest of any particular country.

## (4) From zero-sum game of *burden-sharing* to win-win situation of *opportunity-sharing*

- Low carbon development is the ultimate solution to global climate change, and emission mitigation also means **great opportunity**.
- A more constructive and positive position is badly needed from all countries----There is no future for solving global climate change if fail to recognize the opportunity but just take emission mitigation as a burden.
- Developed countries need to demonstrate the feasibility of LCD, and help the developing countries to go LCD through providing tech, funds, and so on.

Thank you very much for your attention!