

**Unilateral measures are harmful for  
developing countries**

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# OUTLINE

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**What are unilateral measures in the context of CC?**

**Negative influence of UM to Developing countries**

**Key concerns for employing UM**

**The priority task of Developing countries**

**Negotiation under UNFCCC instead of UM**

# What are unilateral measures

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- ▶ Inter alia
- ▶ Inclusion of aviation into EU-ETS
- ▶ BTA
- ▶ Carbon labeling
- ▶ .....

# Negative influence of UM to Developing countries

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- **Negative impact from China perspective:**
- According to 2006 data, the embodied energy exports of 8 major energy intensive products to EU and US are 112million tons CO<sub>2</sub>e and 120million tons respectively
- **Tax rate with \$50per CO<sub>2</sub>e, the cost on carbon tariff will reach \$ 5.6billion and \$ 6billion**
- **Inclusion of aviation into EUETS will increase around 2.9billion US for China air companies before 2020**
- **Huge burden to a developing country**

# Key concerns for employing UM

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- ▶ competitiveness lose
  - ◆ Innovation generate additional profits to offset the cost of carbon cost and leading the world to a high efficient and low carbon way
  - ◆ Substitute measures including: Free allocation of emission permits ; subsidies; not only carbon tariff
- ▶ **Carbon leakage** (nothing happens)
  - ◆ Sijm et al: Environmental policies in the past generally have not been a significant decision criterion for the location of the investment and hence do not represent a key explanatory factor for the investments in the developing world (relocation). **Market size and growth** (regional demand) and the **wage level** seem to be more decisive investment criteria.
  - ◆ IEA(2008):The EU emissions trading scheme (EU-ETS) **has not, so far, triggered observable carbon leakage** in sectors like steel, cement and primary aluminium.
  - ◆ World bank(2008) :Although globalization promotes industry transfer, **developed countries are still the net exporters on major energy-intensive products**, and developing countries are net importers.

# **The priority of Developing countries is development, DCs Can not bear extra cost**

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- ◆ **Social-economy development remains on low level**
- ◆ **Undergoing fast urbanization process**
- ◆ **Industrialization with transferred emission**
- ◆ **Resources endowment and energy mix**
- ◆ **Improvement of inefficient facilities**

## Social development remains on low level

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- ◆ 2<sup>nd</sup> largest economy, 2010, 4300 USD per capita, 1/3 of the world average
- ◆ Remarkable disparity in economic development among different regions
- ◆ poverty eradication remains an urgent task, 36million live on below 0.5USD per day.



## Undergoing fast urbanization process

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- ◆ Finalize urbanization still need 20 years
- ◆ Absorbing statistically urbanized residents need more years
- ◆ Urban per capita energy consumption is 1.8 times higher than rural people





## Industrialization with transferred emission



- ◆ Average annual GDP growth is around 10% during the past 30 years
- ◆ Industrialization shift from labor intensive to capital intensive. Steel and cement rank the world No.1 production capacity.
- ◆ Export volume accounts for 26 per cent of GDP in 2010
- ◆ Embodied energy with export commodities account for 30% of total National energy consumption in 2005

## Resources endowment and energy mix

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- ◆ Heavily rely on coal, 72% of total energy consumption in 2010, far exceeding the world average of around 30%.



- ◆ Nuclear and other renewables 3.5% vs France (39.1%) and the world average (6%).



- ◆ Energy mix is unlikely able to change in the near future
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## Inefficient facilities & lock-in effect of technologies

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- ◆ **Out-of-date technologies still occupy a relatively high proportion in China's key industries.**
- ◆ **Energy efficiency is about 10% lower than that of the developed countries, and its per unit energy consumption of energy-intensive products is about 40% higher than the advanced international level.**
- ◆ **Deployment of inefficient technologies will lead to lock-in effect**



# Negotiation instead of UM

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- ▶ Negotiation under UNFCCC provided good platform for finding out the solutions
- ▶ Enhance international cooperation and multi-lateral approaches instead of UM

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**Thanks for your attention!**

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