

Allocation in Beijing Emissions Trading Scheme

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Overview

- **Time period of Phase I:**
 - 3 years (2013-2015)
- **Scope & Coverage**
- **Commodities**
- **Allocation Methodology**
- **Conclusions & Perspectives**

Scope

- **GHG type: only CO2 during Phase I**
 - Referring to international experiences: step-by-step enlargement. EU ETS covered only CO2 under compulsory control in its phase I & II
 - Consistency with national and local GHG control targets
- **Criteria to cover key emission entities**
 - **Enterprises or institutions** with **10,000 tons** of annual average **stationary** CO2 emissions (including **new entrances**)
 - Consistency with definition on **Key Energy Users: 5,000 tce** of annual energy consumption
 - Current **Energy Reporting Scheme**: based on **legal persons**

Coverage

- **3 sectoral categories:**
 - **Power and heat supply:** 3 sub industries
 - **Manufacture:** 21 sub industries
 - **Service:** 17 sub industries
- **Scale of BETS:**
 - 591 Key Energy Users (data published by BDRC)
 - 470 key emission entities (screen out of energy consumption out of Beijing & mobile sources)
 - 41 industrial category: more complex than EU ETS

Commodities

- **Emission allowances:**

- ① **Direct energy emissions** (combustion & raw material use)
- ② **Indirect emissions from electricity consumption**
- ③ **Direct process emissions**

- **Offsets:**

- ① China Certified Emission Reductions (**CCERs**)
 - ② Other offset mechanisms under discussion
- **Cap setting (5%)** for the use of offsets giving priority to self actions

3 Types of Allocation Methodology

- **For existing enterprises and institutions**
 - Based on historical amount
 - Based on historical intensity
- **For new emissions**
 - Benchmarking

Allocation based on historical amount

- **For existing manufacturing and service enterprises (institutions)**

$$A = E * f$$

A: allowances for an enterprises (institutions)

E: annual average emissions in certain historical years

f: Emission Control Factor (as Compliance Factor in EUETS)

Allocation based on historical intensity

- **For existing facilities of heating plants and cogeneration plants**

$$A = P * I * f$$

A: allowances for a facility

P: total heat supply / power supply from the facility in the allocation year

I: historical intensity

f: Emission Control Factor

Benchmarking Allocation

- **For new emissions**

- New legal persons
- New facilities of existing participant enterprises

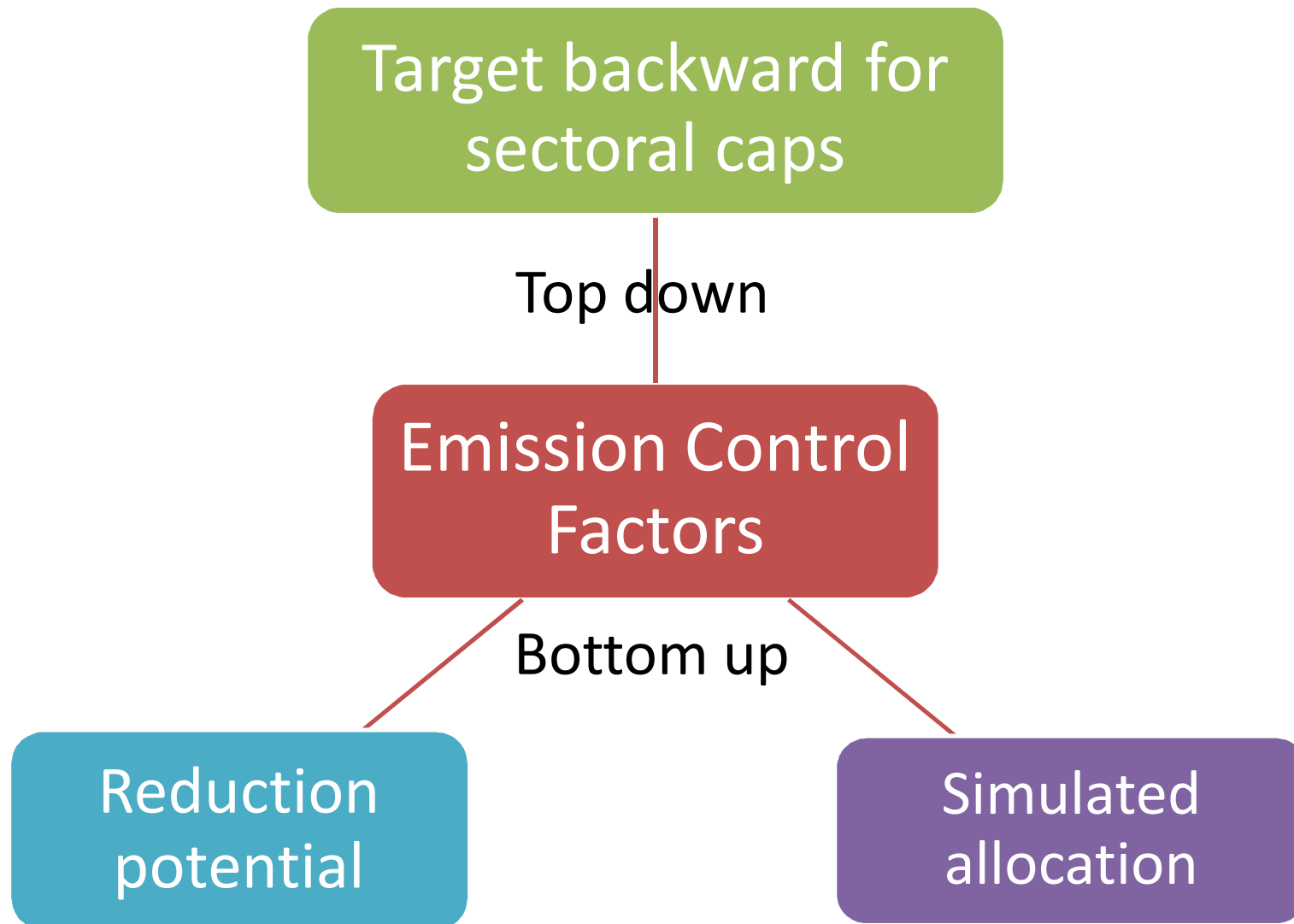
$$N = Q * B$$

N: allowances for the new emissions

Q: activity level corresponding to the new emissions, production / output value / building area

B: industrial benchmark representing low emission intensity

Calculation on Emission Control Factors



Issuance of emission allowances

- **Issuance**

- Most allowances issued **freely**
- Allowances issued **twice** to **legal persons** annually
 - ① Allowances for existing enterprises issued first
 - ② Allowances for new emissions issued before next year's commitment period
- A small amount **reserved** by government for **auctions**

- **Validity period of allowances**

- Borrowing is not permitted
- Reserved to the end of Phase I

Conclusion 1

- The objectives of accounting, reporting and allocations are **legal persons** rather than installations (facilities)
 - such objective boundary fits well with current **Energy Reporting Scheme** in China Statistical field
 - according to current **energy measurement standard** in China, only accurate energy meters on legal person levels are compulsory requirements and therefore currently neither penetration rate nor accuracy of energy meters could support accounting and reporting on installation levels in all sectors covered by BETS

Conclusion 2

- **Indirect emissions from electricity consumption** are counted into emissions reporting and allowances
 - Beijing's **consumer responsibility**: More than 67% of Beijing's electricity consumption is imported from power plants located in other provinces under the dispatch by North China Power Grid.
 - The coverage of indirect emissions from electricity consumption may also help to **prevent carbon leakage** from Beijing to surrounding provinces

Conclusion 3

- BETS takes more account into the **tertiary industry and light industries**
 - After a relatively long time of industrial restructuring, the tertiary industry and light industries have **dominant shares** in Beijing's GDP
 - More than 40 sub industries are involved in BETS. The more industrial categories covered, the more **complexity** of the emissions trading scheme.
 - It is also very challenging that very few neither international experience nor **data** could be referred

Perspectives

- Every emissions trading scheme in the world would pass through the approach of "learning by doing"
- No matter its future trading market booms or not, the BETS is a useful exploration in the field of **developing countries' actions on climate change**
- BETS will provide practical experiences for the construction of **uniformed emissions trading scheme in China** and even in the world

Thank you!

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