

**Redefining Environmental Goods and Services (ES)
from the Side of Demand for Environment**

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Outline

- **Background**
- **Environmental problems**
- **Redefine EGS from side of demand for environment**

Background

- APEC
 - How to promote APEC EGS related to climate change issue, as the pioneer of EGS?
 - APEC environmental service survey report in 3 countries
- WTO
 - How to promote CTE-EGS negotiation?
 - How does EGS response to global environmental challenges related to MEAs?

Environmental problems

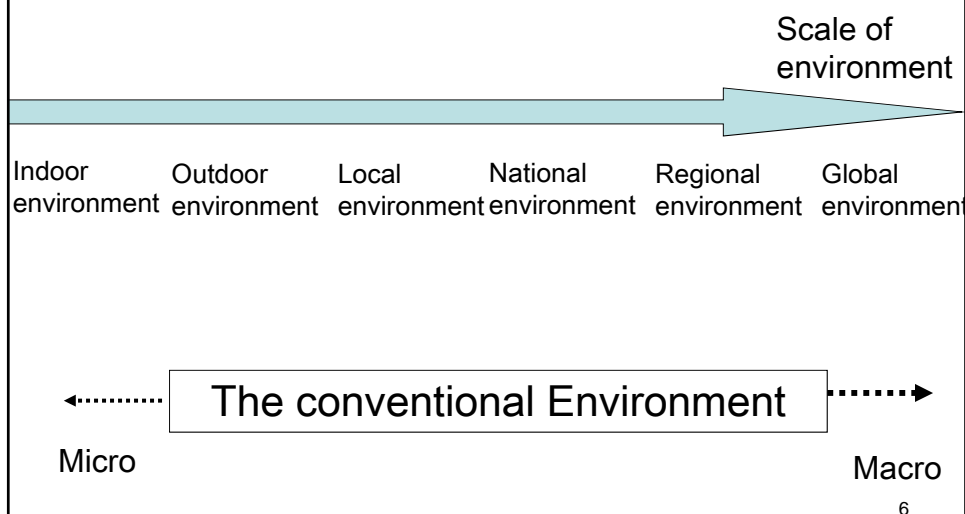
- Clarifying the meaning of the environment
- Problems of the environment
- Demand of EGS
- Environmental priorities

Environmental problems

- What does the environment mean?
- This is a fundamental question that should be answered before talking environmental problems, priorities and EGS
- Deepen our thinking and expand from the common environment towards
 - Micro level to indoor environment
 - Macro level to global environment

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Spectrum of the environment



Meanings of the Environment

- Spectrum of the environment from micro to macro level
 - Indoor environment
 - Outdoor environment
 - Local environment
 - National environment
 - Regional environment
 - Global environment

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Environmental problems

- Indoor environmental problems
 - 70% of people's lifetime are averagely spent indoor where is the direct touch factor of human being
 - WHO reports most of health problems are related to indoor environmental quality
 - Indoor environmental goods and services can reduce, remove, recover and resolve the indoor environmental problems

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Environmental problems

- Indoor environmental problems
 - Air pollution from fossil energy sources for cooking and heating
 - SO_x, NO_x
 - Particulates could reach 500mg/m³ in living room and 1000mg/m³ in kitchen
 - Building materials for house building and decoration
 - Furniture and decoration parts with VOC pollutants
 - Smoking indoor
 - Indoor water drinking and sewage
 - Indoor trash
 - Noise
 - Radiation
 - And others

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Environmental problems

- Demand of EGS for indoor environment
 - The booming housing is bringing more opportunities
 - Each year there are about 1.6-2 billion square meter new houses
 - To ensure energy saving buildings, it is creating a lot of demand of goods and services
 - Landscape and horticulture design services
 - Indoor pollution cleanup and prevention also create a lot of demand for indoor goods and services, such as
 - VOC free furniture
 - Eco-labeled building materials

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Environmental problems

- Outdoor, local and national environmental problems
 - Air pollution
 - Water pollution
 - Solid wastes
 - Biodiversity loss and ecosystem degradation
 - Noise
 - Radiation

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Environmental problems

- Demand of EGS for outdoor
 - Taking China as an example, the environmental targets of 11th five year plan (2006-2010) provides tremendous opportunities
 - Energy intensity 20% reduction
 - SO₂ emissions 10% reduction
 - COD emission 10% reduction
 - Water consumption of value added industry 30% reduction
 - Sewage treatment rate reaching 70%
 - Industrial solid wastes treatment rate higher than 60%
 - The demand of environment is huge, especially
 - energy and GHGs reduction
 - SO₂ reduction

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Environmental problems

- Global environmental problems
 - Climate change
 - Ozone depletion
 - Biodiversity loss
 - POPs
 - Hazardous wastes Trans-boundary transfer regulated by Basal convention
 - And other MEAs regulated global environmental problems

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Environmental problems

- Demand of EGS for global environment
 - Signed and new MEA treaty implementation brings opportunities
 - Both importing and exporting opportunities of energy saving and other GHGs control measures EGS for Post KY negotiation treaty and implementation, as described in IPCC AR4
 - CFC free EGS for ODS reduction
 - EGS for POPs convention implementation for both importing and exporting

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Environmental problems

- Environmental Priorities
 - Key factors of environmental priority setting
 - Health impacts > other impacts
 - Direct impacts > indirect impacts
 - Authorized responsibilities at different level organizations / governments taking their own responsibilities

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Environmental problems

- Environmental Priorities of China
 - From past China's narrow national interests, the rank should be:
 - Indoor > outdoor/local/national > global
 - From the current new strategy of China, the rank could be:
 - Indoor + outdoor/local/national + global
 - Strategy of Co-control of all pollutants
- For international community, like UN, WTO, WHO, they should focus on
 - First on global issues of MEAs and MDGs, and then indoor health issue to accomplish their responsibilities
 - outdoor/local/national is not a necessity because its mainly the national government responsibilities ¹⁶

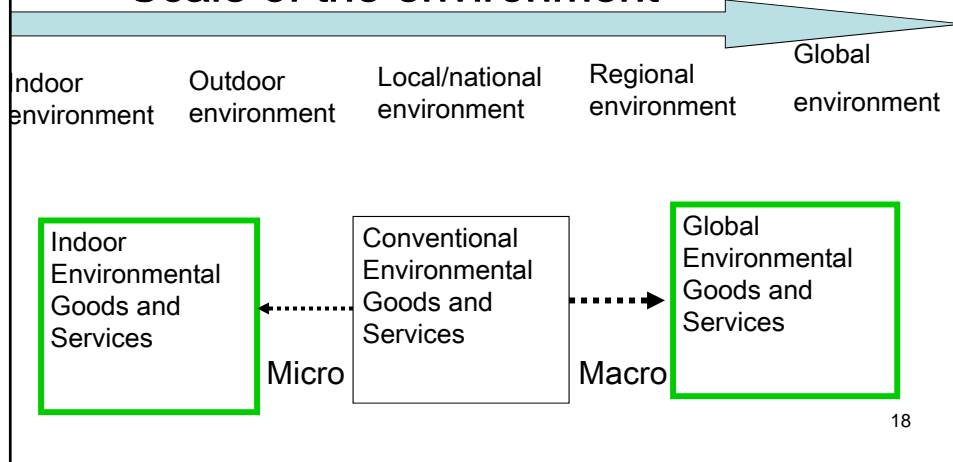
Redefining EGS from side of demand for the environment

- Considerations from trade aspect and supply side of EGS
 - Goods
 - List approach
 - APEC environmental goods list
 - OECD environmental goods list
 - WTO environmental goods list
 - Project approach
 - Request-offer approach
 - Services
 - UN CPC service classification
 - W/120 environmental service classification

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Redefining environmental industry and EGS

Scale of the environment



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Redefining EGS from side of demand for the environment

- Logic of proposal
 - definition of the environment
 - Various environmental problems at different scales of the environment
 - demand for environment improvement
 - redefinition of environmental goods and services (EGS)

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Redefining EGS from side of demand for the environment

- Defining environmental industries for producing EGS based on the demand of environmental challenges at the whole spectrum
 - The EGS for improving indoor environment
 - The EGS for improving outdoor, local and regional environment (conventional ones)
 - The EGS for improving global environment

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Redefining EGS from side of demand for the environment

- To be supplementary, complementary and coherent with existing CPC system
 - Sewage service
 - 9401l means indoor sewage and water service
 - 9401c means conventional sewage and water service
 - 9401g means global sewage and water service
 - Refuse disposal services
 - 9402l means indoor refuse disposal and solid waste service
 - 9402c means conventional refuse disposal and waste service
 - 9402g means global refuse disposal and waste service
 - Sanitation and similar services
 - 9403l means indoor sanitation and similar service
 - 9403c means conventional sanitation and similar service
 - 9403g means global sanitation and similar service
 - Cleaning services of exhausted gases
 - 9404l means indoor exhausted gases and air service
 - 9404c means conventional exhausted gases and air service
 - 9404g means global exhausted gases and air service
 - CPC 9405-9

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Redefining EGS from side of demand for the environment

- **EGS in WTO Negotiations and APEC**
 - **Trade interest driven but environmental demand driven**
 - Environment is used by trade officials as an excuse to promote exporting
 - **National interest driven but global interest driven**
 - It's very necessary to have global environmental goods to improve global environment
 - **Lack of coherence with MEAs**
 - Not mutual supportive
 - Even conflicts
 - US section 301 probe
 - Non-tariff measures Vs barriers

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Thank You!

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