



Template for Organizing Framework for Scoping of PMR activities

Country: **China**

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**For the purpose of the PMR, market instruments refer to domestic instruments (e.g., emissions trading scheme) and, without prejudging the outcomes under the United Nations Framework Convention on Climate Change negotiations, scaled-up market mechanisms.*

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (1/3)

1.1 Policy context, objectives and envisioned role for new market instruments

- In November 2009, China set the target to reduce its CO₂ emissions per unit of GDP by 40–45 per cent by 2020 compared with the 2005 level. In order to achieve this, a binding target of reducing the CO₂ emissions per unit of GDP by 17% during the 12th Five-Year Plan period, i.e. from 2011 to 2015, was established. This binding target has been broken down to sub-targets for the provinces.
- In August 2010, China initiated low carbon pilot projects in five provinces and eight cities. The major task of the pilot projects includes implementing accountability of local governments to control GHG emissions, exploring effective policies combining government guiding and economic incentives, and studying the feasibility of utilizing market mechanisms in helping achieve emission reduction objectives.
- In March 2011, the National People's Congress approved Outline of the 12th Five-Year Plan, which clearly mentions that China will establish statistical and verification systems for GHG emissions and gradually establish a carbon emissions trading system. So besides traditional command-and-control measures, the appropriate use of market mechanisms will be important supplementary means for China to achieve its objective for controlling GHG emissions.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (2/3)

1.2 Overview of country's GHG emissions

China is still at a lower stage of development with a huge population. Its energy consumptions and GHG emissions will continue to grow. According to China's National Program on Climate Change, China's total GHG emissions in 2004 were 6.1 billion tons of CO₂ equivalents, of which the CO₂ emissions accounts for 5.07 billion tons, the methane emissions approximately 720 million tons of CO₂e and nitrous oxide emissions about 330 million tons of CO₂e. After removing the amount of carbon sink, the net emission of carbon dioxide in China in 2004 was 5.6 billion tons.

1. Policy context: Domestic mitigation objectives and role of market instrument(s) (3/3)

1.3 Interest in market-based instrument(s)

- Emissions trading could take full advantage of the role of market mechanism in the optimization of resources allocation, incentivize participation by enterprises and attract capital investments, and thus help achieve the objective of controlling GHG emissions at lower costs. So the Government of China will, according to the requirements of the Outline of the 12th Five-Year Plan, gradually establish a market system for carbon emissions trading to promote the achievement of its carbon intensity reduction objective.
- The National Development and Reform Commission (NDRC), as the government unit in charge of the climate change issue, is prompting with great efforts the establishment of a carbon market. It will firstly promote trading of voluntary credits generated on a project-by-project basis, and then organize relative provinces and municipalities to introduce emissions trading systems. The initial plan is to establish carbon emissions trading schemes in some pilot regions, and try to establish a unified national system in 2015. Together with other policies and measures, emissions trading will contribute positively to the mitigation of global climate change.

2. Organization and consultations (1/2)

2.1 PMR contact point

- The Ministry of Finance as the national focal point to the World Bank will be responsible for contact with the World Bank and financial management of resources from the PMR.
- The NDRC as Implementing Agency of the Project will be responsible for organizing relevant research institutes and other relevant institutions to carry out the PMR project. A project management office will be established in the Climate Change Department of NDRC. Major responsibilities of the project management office include the daily management of the project, preparation of work plans and reports, coordination with relevant organizations and filing of relevant project documents.

2. Organization and consultations (2/2)

2.2 Partners in the formulation and implementation of the country's Market Readiness Proposal

The technical supporting organizations that will be responsible for the drafting of Proposal on Pilot Emissions Trading Schemes at the Provincial Level in China will include:

- Energy Research Institute of NDRC

The Energy Research Institute (hereinafter, ERI) of the NDRC was established in 1980. It is a national research organization conducting comprehensive studies on China's energy issues. Since its establishment, it has been affiliated with the former State Commission and the former State Economy Commission. Throughout, it was guided by the Chinese Academy of Sciences in many aspects of its research work. In 1988, ERI was put under the administration of the now former State Planning Commission. Further reforms in 2003 made ERI part of the National Development and Reform Commission. The ERI is also one of 7 research institutes administrated by the Academy of Macro-economic Research (AMR) of the NDRC.

2. Organization and consultations (2/2)

2.2 Partners in the formulation and implementation of the country's Market Readiness Proposal

- Institute of Nuclear and New Energy Technology (INET) of Tsinghua University
INET of Tsinghua University is the policy research center on issues related to climate change as well as the sustainable development of the energy, environment and economy of Tsinghua University, and is also one of the important bases for the management science and engineering discipline in the university. INET has been very active since the beginning of the 1980s at both the international and domestic levels in the research on energy, environment and economic issues, and has been serving as one of the major think-tanks of the Chinese government on energy and climate change issues. With regard to the climate change area, INET has been undertaking research projects under different research programs such as the Key Scientific and Technology Research Program, etc, since the Eighth Five-Year Plan, financed by the Chinese government, and many internationally financed research projects with significant influence. INET has a series of important achievements related to GHG mitigation strategy, GHG mitigation technology selection, assessment of techno-economic and social impacts of GHG mitigation scenarios, Clean Development Mechanism and the emissions trading, etc.

2. Organization and consultations (2/2)

2.2 Partners in the formulation and implementation of the country's Market Readiness Proposal

- Sino Carbon Innovation & Investment Co., Ltd
Sino Carbon Innovation & Investment Co., Ltd (SCII) is a leading company in exploring market mechanisms for the promotion of low carbon development in China. Main business includes emission trading, full circle of CDM project development service, low carbon investment consultancy, management of carbon assets and carbon funds, development of carbon financial instruments, low carbon technology transfer and promotion, etc. The company has a professional team, which consists of senior experts who are from various backgrounds including energy, finance, commerce and law, and have rich experiences in business involving low carbon development. SCII have independently or jointly undertaken several key research projects in the area of low carbon development at national, regional or sectoral levels, including China's Scientific and Technological Actions on Climate Change under National Program on Key Basic Research Projects (973 Program), Key Projects in the National Science & Technology Pillar Program during the Eleventh Five-Year Plan Period, and CDM methodology development projects. SCII also provides low carbon research and consultancy services to clients including the World Bank, Asia Development Bank, UNDP, national large energy corporations, and financial institutions etc.
- Other relevant Organizations and Experts
Other organizations and experts that will participate in drafting the proposal include local Development and Reform Commissions in pilot regions and their designated local research institutes, the Exchanges in Beijing, Tianjin and Shanghai, and other relevant experts.

3. Technical building blocks of market-readiness (1/3)

3.1 Taking stock of relevant sectors (and/or regions) – *(1 slide per sector/region)*

China is considering to prepare for pilot emissions trading schemes in the two Provinces of Guangdong and Hubei and the four Municipalities of Tianjin, Shanghai, Beijing and Chongqing.

3. Technical building blocks of market-readiness (2/3)

3.2 OPTIONAL - Assessment of readiness of sector/region (*to be specified by country*)

The selected regions are mainly from east China such as Beijing, Tianjin, Shanghai and Guangdong. Hubei and Chongqing are also the relatively economically more developed areas in mid and west China. In general, the “two provinces and four municipalities” are fast growing economies with relatively higher per capita GDP and have relatively more mature market economies. They are better positioned and willing to introduce local emissions trading schemes on trial basis.

3. Technical building blocks of market-readiness (2/3)

3.2 OPTIONAL - Assessment of readiness of sector/region (*to be specified by country*)

Taking Shanghai as an example:

- Work already done: The municipal government attaches great importance to carbon emissions trading. The Outline of the 12th Five-Year Plan of Shanghai, the Regulation for Energy Conservation and the work priorities of the Shanghai Municipal government have specific requirements for establishing the emissions trading scheme and developing carbon financing. Shanghai Development and Reform Commission has already conducted some initial research on carbon emissions trading in combination with the design of a trading mechanism for energy conservation and pollution reduction, and this will be a good basis for moving forward. Shanghai has also established its trading platform, for example Shanghai Environment Energy Exchange has already carried out business in voluntary credits trading which accumulated some practical experiences for pilot carbon emissions trading.
- Major areas for support: the study and formulation of the regulatory measures for emissions trading, the prediction of total GHG emissions in Shanghai in 2020, the study and development of the emission allowances allocation plan, the establishment of a registry, the establishment of the emissions monitoring and verification system, the establishment of carbon exchange and its platform for emission trading, etc.

Other provinces and municipalities are similar to Shanghai in terms of work basis and key research areas.

3. Technical building blocks of market-readiness (3/3)

3.3 OPTIONAL - System for domestic measurement, reporting and verification (MRV)

In order to effectively implement an emissions trading system, the NDRC will organize relevant research institutes and experts to study approaches for emissions accounting, monitoring and verification, accredit independent third party for GHG emissions verification, formulate standards for emissions monitoring and verification, and organize relevant organization to formulate emissions standards for products in key sectors. Research will be carried out on the detailed considerations during the implementation period of the project.

3. Technical building blocks of market-readiness (4/3)

3.4 OPTIONAL- Institutional/legal components

The Government of China is still formulating regulations on the management of trading of emission reductions credits achieved through voluntary projects. For the emissions trading, China will first establish pilot regulatory systems and trading rules at the provincial level, and based on work in pilot provinces and municipalities, consider a unified national rules for carbon emissions trading, and establish a mature regulatory system to maintain an open, fair and transparent market and to ensure the healthy development of the carbon market.

4. Other key relevant initiatives

- Strengthening local capacity to compile local greenhouse gas inventories: NDRC has published guidelines for compilation of provincial greenhouse gas inventories, and initiated the work on the compilation of local greenhouse gas inventories. At the same time, NDRC is considering to further strengthen local capacities in this regard. This will help local governments to have a clear understanding of local greenhouse gas emissions, and lay the foundation for the setting of cap, allowance allocation and emissions trading.
- Plans to organize research on guidelines for emission accounting for key sectors: NDRC is now organizing research on the methodology for emission accounting for key sectors, and will publish guidelines for emissions calculation. This will provide support to the MRV activities in the emissions trading scheme.

5. Organization of work and estimated timeline (1/5)

5.1 Overview of organization of work/tasks envisioned for Preparation Phase to conduct the scoping of market readiness activities

A Project Steering Committee (PSC), consisting of NDRC, Ministry of Finance and other related ministries and agencies, will be established to provide policy guidance to this project. Climate Change Department of NDRC will be the implementing agency of the Project, responsible for the organization and implementation of the project. A Project Management Office will be also established by the Climate Change Department to carry out specific tasks. Energy Research Institution of NDRC, Institute of Nuclear and New Energy Technology of Tsinghua University and Sino Carbon Innovation & Investment Co., Ltd, as the technical implementing organizations, will be responsible for drafting the Proposal on Pilot Emissions Trading Schemes at the Provincial Level in China. Local development and reform commissions in the pilot provinces and municipalities will participate in the discussion and drafting of the proposal. Experts in the energy, financing and other related areas will also participate in the discussion.

5. Organization of work and estimated timeline (1/5)

5.1 Overview of organization of work/tasks envisioned for Preparation Phase to conduct the scoping of market readiness activities

In the preparation phase of the proposal, the following activities will be implemented:

- Activity 1: Research and identify the basic elements and conditions necessary for the operation of a mature emissions trading scheme in other countries;
- Activity 2: Discuss and identify major research areas, elements and conditions necessary for the establishment of local emissions trading systems, either by onsite visits or inviting local development and reform commissions and research institutes to Beijing;
- Activity 3: Draft the Proposal on Pilot Emissions Trading Schemes at the Provincial Level in China;
- Activity 4: Organize discussion and improve the proposal;
- Activity 5: Translate the proposal into English.

5. Organization of work and estimated timeline (2/5)

5.2 Overview of estimated timeline for formulation of Market Readiness Proposal

Activities		2011							2012
		June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Activity 1	Basic research and analysis								
Activity 2	Investigation and analysis								
Activity 3	Draft the proposal								
Activity 4	Discussion and improvement								
Activity 5	Translation								

6. Other relevant information

- none

7. Conclusions – Summary of market readiness priority areas for PMR support

- The study and formulation of trading rules in pilot provinces and municipalities
- The study on the setting of emission caps in pilot provinces and municipalities
- The determination of entities to be included in ETS
- The formulation of a plan for emission allowances allocation
- The establishment of registries for local ETS
- The establishment of transaction platforms
- The establishment of reporting, monitoring and verification systems
- The establishment of regulatory systems
- Relevant capacity buildings

For any question, clarification or comment on this
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