PARTNERSHIP FOR MARKET READINESS (PMR)
Fourth Meeting of the Partnership Assembly (PA4)
Sydney, October 22-24, 2012

Feedback on draft Market Readiness Proposals (MRPs): CHINA

Summary compiled by the PMR Secretariat

Background

China submitted a draft Market Readiness Proposals (English version) to the PMR Secretariat in September 2012, and presented it for consideration by the Partnership Assembly (PA) at PA4.

Resolution PA2/2011-3 endorsed a process for providing feedback on Market Readiness Proposals. It consists of two parts: (i) feedback from PMR Experts; and (ii) feedback from PMR Participants.

A PMR Expert Group consisting of Mr. Felix Matthes (Germany), Mr. Frank Jotzo (Australia), Mr. Yong Gun Kim (South Korea) and Mr. Richard Baron (IEA) provided feedback on China's draft MRP, as did the PMR Secretariat and the World Bank, acting as the Delivery Partner. A compilation of the this feedback was shared with China during a two-day in-country visit in September 2012 made by Mr. Matthes, the PMR Secretariat and the World Bank's regional staff.

Incorporating the feedback collected, China submitted a revised draft MRP on October 5, 2012, which was circulated to all PMR Participants. A representative from China presented the draft MRP at PA4 in order to seek feedback from Participants and to allow all PMR Participants to view a complete proposal prior to the submission of the final version. Subsequently, Participants were invited to submit written feedback on the draft MRP.

This note contains two parts: Part A includes a summary of the feedback and comments made during China's MRP presentation at PA4 and Part B includes written comments on the MRP that were submitted by Participants following PA4. Comments in Part B are recorded in this summary as they were summited, without further summarization. The secretariat received written feedback on China's MRP from Australia, the European Commission, Germany, The Netherlands, and South Africa.

Action:

China is invited to take into account the feedback included in this summary as it finalizes its MRP. It is important to note that some of the feedback is applicable for the finalization of the MRP while some will be relevant during the Implementing Country's PMR Implementation Phase.

A final MRP should be submitted to the PMR Secretariat 3 weeks prior to the PA meeting during which the Implementing Country Participant seeks a PA decision on the allocation of Implementation Funding.

CHINA

China's MRP presentation was made by Mr. Wang Shu (National Development Reform Commission), Mr. Duan Maosheng (Tsinghua University), and Ms. Zheng Shuang (National Climate Change Strategy and International Cooperation Center)

Objective of MRP
The MRP focusses on the development of China's national emissions trading scheme (ETS), including the (i) core technical, institutional and regulatory market readiness components; (ii) design elements under a national emissions trading scheme; (iii) specific consideration and research on issues facing state-owned enterprises; and (iv) the power sector in a national emissions trading scheme.

A. Feedback and clarifications made during PA4

a) General Feedback

- The Partnership Assembly (PA) congratulated China for a comprehensive and ambitious MRP.
- The PA noted the strong political commitment for the proposed national emissions trading scheme, which provides confidence for implementation.
- Participants considered China's MRP substantive and well-structured, and appreciated that it closely followed the structure proposed in the Tool for MRP.

b) Feedback by Participants

General

- Given the length of the MRP, inclusion of an Executive Summary in the final MRP is recommended.
- The MRP lays out a tremendous work program. Participants suggested refining the sequencing and identifying where deliverables fit with one another.
- In order to avoid duplication, more information on the activities supported by various donor countries on ETS would be useful.
- It was suggested that while research and studies on various subjects are necessary, "learning-by-doing" through implementation may be more informative.

<u>Design elements for ETS</u>

Participation

- Regarding whether covered entities under the ETS should be company-based or installation-based, participants indicated that different schemes follow different practice. For example, for the GHG reporting scheme in the United States, its reporting program is managed at the facility level (as opposed to the corporate level) to simplify the reporting process (by avoiding the need to deal with ownership issues).

Interaction with other policies

- Participants highlighted the importance of looking at the interaction between the ETS and other related policy areas. The example of the EU-ETS and its interaction with the Energy Efficiency Directive was noted, as it ultimately had significant repercussion on ETS price levels.

Cap setting and allocation

- Participants highlighted the importance of separating cap-setting from allocation.
- Participants suggested that given repercussion of other related policies (e.g., energy efficiency and renewable energy policies), it would be important to consider integrating a dynamic adjustment of the cap according to external factors.
- Questions were raised on national caps vs. provincial caps and whether China is considering a single national cap or a national cap coupled with caps at the provisional level? What would be the form of the national cap – intensity or absolute—taking into account that the piloting schemes at the sub-national level takes the form of absolute cap.

New entrants

- Reserving adequate allowances for new entrants could be an approach to dealing with a rapidly growing economy. In this context, lessons and experience from California and South Korea would be valuable.

MRV

- As part of implementation of an energy efficiency target, China has set up an MRV scheme. How with this MRV scheme interact with the proposed national ETS?
- Suggestions were made that MRV, which is the backbone of the system, should be considered a priority.

Participation by state owned enterprises (SoEs) in ETS

- Clarification sought on the treatment of SoEs; some participants cautioned against differentiating treatment according to ownership.

Participation by power sector

- Participants noted tremendous challenges for the power sector to participate in an ETS given the command and control structure for this sector, which makes it impossible to pass on costs to end users. It was suggested that some other schemes, such as that in South Korea as well as California, have dealt with similar problems and identified some innovative approaches to using a market instrument for a sector that operates under price control.

CDM and domestic offsets

- Questions were raised on whether and how CDM Credits would be considered during cap setting. Will PMR support the development of domestic offsets, i.e., China CERs (CCERs)?
- It was noted that as offsetting is allowed by the local pilot schemes, this would likely require ability to register offsets in those schemes. Given co-existence of local and national registries, where would the offsets ultimately be recorded?

Linking

- Participants suggested considering linking with other ETS during the design phase.

Institutional arrangement

- Participants indicated the importance of the institutional arrangement for implementation of an ETS and suggested that more work need to be done in this area.

Relationship/interaction with the seven ETS pilots

- What is the expected duration of the seven pilots and what is the expected next step once the pilots conclude? There will be challenges in integrating different pilot schemes while designing a national scheme; early analysis of lessons/experiences drawn from pilots could be helpful.
- While China can learn from other, existing ETS, drawing lessons from its own pilots cannot be overstated.

c) Clarifications by China

General

- Regarding the overall timeline, China plans to develop its carbon market step-by-step, which will be better reflected in the final MRP.

- On the deliverables to be supported by the PMR, the plan is to not conduct generic research; but to put forward practical recommendations and guidelines based on China's situation by the various institutes and agencies that will be useful to NDRC for ETS implementation.

Participants

- The current thinking is to allocate allowances to enterprises. However, suggestions to look at facility level are appreciated and will be explored in a study to be undertaken during the next phase of the PMR.

Cap setting

- Regarding the relationship between the caps at the national and provincial levels, more study is needed taking into account regional differences, equity, consistency and coherence of the scheme.

- China currently has two types of targets – emissions intensity and energy intensity targets. Emissions intensity targets were allocated to provinces on the basis of the energy intensity targets. Going forward, there have been discussions on effective and efficient ways to stimulate energy conservation and GHG mitigation, including, for example, by using one set of targets to coordinate implementation.

MRV

- Some pilot regions cannot wait for MRV guidelines as they are eager to enter into practical trading as soon as possible. However, once national guidelines are issued, the regions will need to follow them. The expectation is that the national MRV guidelines are not significantly different from those developed for the pilots.

SoEs

- The objective of the study is not to provide any special treatment to SOEs. However, there are particular issues that require deeper research. For example: (i) as SOEs account for a large share of GHG emissions and are managed by government, it is expected that they will take a leading role in ETS; (ii) the ETS legislation will take time to develop; how can China incentivize SOEs participation in an ETS? (iii) Institutional characteristics of SOEs are expected to affect ETS design because of their management structure and geographic coverage (e.g., they have many subsidiaries around the world and there is a need to address potential leakage); and (iv) data availability is better for SOEs than for the private sector, so easier to manage SOE in ETS.

Power sector

- The cost to generate power increases every year while at the same time, electricity prices are regulated and difficult to change. This means that an ETS would be an additional burden. This makes the issue of pass-through more complex than in other industries. Nevertheless the power sector takes up more than 40% of China's emissions, participation by this sector in the ETS is critical. With PMR support, an action plan would be proposed to identify approaches to including the power sector in the ETS.

CDM/Ofsets

- The current thinking is to address CDM credits through the allocation process. The work on CCERs is not part of PMR support. China has already issued regulations for CCERs and companies can already request issuance of CCERs. All the pilots are constructing their registries and the NDRC is also developing a national registry. While coordination needs to be further strengthened, the objective is to establish a comparable registry system across China.

B. Written feedback on China's draft MRP submitted by PMR Participants

PMR Participant	Written Feedback on China's draft Market Readiness Proposal
Australia	Australia congratulates China on its detailed MRP and presentation at PA4, which set out a comprehensive plan to develop a national emissions trading scheme (ETS). Australia welcomes the ambition reflected in China's MRP. The MRP tackles complex policy and technical issues in relation to ETS design and presents detailed work plans that detail how these issues will be considered. The experience China gains through the 'learning by doing' approach to piloting emissions trading is likely to provide insights that will inform development of the national scheme. Australia looks forward to continuing to work with China, both through the PMR and under the Australia-China Bilateral Climate Change Partnership, to share experiences on a range of ETS design and implementation issues. Australia welcomes China's clarification at PA4 that it will develop a clear outline of the timelines, milestones and key decision points for each of the work programs identified in the MRP. This will make clear the inter-relationship between issues under consideration in different work streams and help clarify which areas will be a priority for PMR funding. Australia welcomes China's recognition in its MRP of the need to develop robust systems to measure, report and verify emissions, and governance and legal frameworks to support an ETS. We understand from China's MRP and presentation that State Owned Enterprises (CSEs) have existing energy consumption reporting obligations that could provide a good base for greenhouse gas emissions reporting. Australia welcomes China's intention to include CSE's in early phases of an ETS. The MRP indicates a preference for 100 per cent free permit allocation and extensive grandfathering. The MRP also notes that scarcity of allowances is crucial to a well-functioning ETS. To avoid creating an oversupply of permits, Australia recommends consideration be given to design options that support this goal, such as an output-based allocation method. An output-based allocation, such as Australia's fixed number of allowances provided per unit of production of an emissions-intensive trade-exposed (EITE) activity, can take account of expansions in production while also avoiding over-allocation for facilities that decrease production. Australia, through this

	targeted EITE allocation approach, expects to auction the majority of units once the flexible price period commences in 2015 to reinforce incentives for liable entities to reduce emissions. As China's ETS design develops, Australia looks forward to further clarification of how China intends to operate its domestic offset scheme and how that scheme would interact with existing international schemes, such as the Clean Development Mechanism. Australia recommends care is taken to ensure these schemes operate with appropriate accounting methods to avoid any double counting of emissions reductions. Australia encourages China to have continued regard to evolving international views on the environmental integrity and additionality of specific types of emission reduction offset projects and schemes in developing its own offset arrangements.
European Commission	First of all the European Commission would like to thank China for the very comprehensive Market Readiness Proposal (MRP) presented at PA4 in Sydney. The great deal of valuable information that has been made available and the deliverables and timelines of the proposal greatly contribute to define the national framework for using market mechanisms In China. The European Commission would also like welcoming the political commitment undertaken by the Chinese authorities in using ETS as a valuable tool in the fight against Climate Change. It is also very much appreciated that, in the making of its MRP, China is following in the details the different relevant building blocks of the MRP tools as defined by the World Bank. In particular with respect to "Module 4b: Domestic Emissions Trading". This allows for a better understanding and evaluation of the Chinese MRP. In general terms, as emerged also from the discussion at PA4 in Sydney, it is necessary that the Chinese MRP will be better articulated and developed in terms of the timing allocated to specific actions. The present timeline suggests 2 years for all actions to be performed simultaneously. It would help to clarify the time and sequence of the operational elements of the MRP, especially in cases where some actions have to be undertaken as preliminary to others. For example, gathering missing energy and emissions data that are preliminary to cap-setting or MRV actions. In relation to the specific building blocks, please find hereunder our remarks. Building Block 3 (main technical and institutional elements) We welcome in this section the important recognition of data gaps on emissions at national and local level. While data gathering is an important and often time-consuming task, in this case the foreseen timing for the activity is too long (2 years). As highlighted above, this action should be preliminary to all the other following initiatives. As a lot of information on existing ETS is readily available, the time allocated for studying the situation in existing ETS seems too long (2 years). With respect to the dynamics between the 7 ETS Pilots and the future national ETS, it is recommended that the MRP should clarify what are going to be the different interactions at institutional level due to the fact that some of the Pilots (Shanghai,

	Beijing) are already now developing "standards" with respect to ETS coverage, cap allocation and MRV. Building Block 4 (components for the design of a domestic ETS) Section 2) Setting a cap Within this section we welcome the articulation of the different options and the profile that is given to coordinate a "top-down" approach, where CO2 emission reduction targets are fixed at national level with the "bottom-up" experience and methodology developed by the local governments. We notice also the role that should be played in this context by the NDRC as the national authority in charge of coordinating the results of the 2 approaches. All along this section it is underlined how strong this was inspired by the functioning of the EU ETS. With this respect we believe it is important to develop more formally, in the context of setting-the-cap, the possible governance system represented by the relationship between the national competent authority, the regional, local authorities and the operators. Furthermore it is recognised in this section of the MRP that all present Chinese pilots prefer having an absolute cap. However at national level the situation is still left open between the different options represented by an absolute and an intensity cap. It will be important to better clarify and highlight how the present experiences developed by the 7 ETS Chinese pilot with respect to cap-setting will be taken into account in the national framework. Finally the importance of the issue of New Entrants has been underlined due to specific dynamics of the Chinese market and economy with its high growth level. Therefore it looks again not very practical indicating a timeline of 2 years to properly study and analyse the issue where quite a priority should be given to this issue and performed sooner than in the current timeline. Section 3) Allowance allocation Also within this section the needs for eventually gather relevant industrial data and study the possibility of developing benchmarks for the relevant industrial sectors are not operationalized with respect to the nature of the task. This specific action needs to be considered as preliminary to the building of the general picture of establishing the allowance allocation methodology. Section 4) MRV Within the MRV section it is very well recognised that an "An MRV system is a primary support for the data source of ETS". It is recommended that this section should set the timeframe appropriate for the task and priorities. We think that 2 years, having in mind the example of the EU ETS is a realistic timing. This of course should be considered in the Chinese context. However with respect to the other foreseen actions the proper study and development of an MRV system should be done sooner and considered as a preliminary condition. Building Block 5 (key challenges on the institutions of China Emission Trading System and Central State-owned Enterprises)

	We welcome very much the information related to this chapter due to the fact that they are not easily available and at the same time they are very important for the development of the Chinese ETS. With respect to the power sector and its relevant use of coal as the primary source of energy it is highlighted the necessity to develop specific MRV requirements. We welcome very much this approach and we encourage the Chinese authorities to specifically study MRV requirements that take into account such a prominent use of coal. Module 8 Total Budget Finally with respect to the total budget summary at the end of the MRP we welcome that already in the presentation during the Chinese MRP discussion in Sydney this was more articulated and split according to some of the main sources of financing and co-financing. With that respect we recommend to report in the MRP what was clearly summarised in the presentation taking into account the forthcoming European Commission capacity building project and the support from Norway. As a matter of clarity will be also the case to mention in the same table other European donors, such as Germany and United Kingdom in order to build-up the overall budget picture related to establishing the Chinese ETS. Finally the European Commission would like to express once more its availability to share its experience in running the EU ETS and to clarify suggestions where needed.
Germany	Germany welcomes the rapid pace at which China is advancing, inter alia with its provincial ETS pilots. We therefore recommend that China takes into account especially the piloting experiences in order to develop its national ETS. The domestic experiences can give helpful insights on specific national circumstances where experiences e.g. from the EU or Australia might not be fully applicable. Furthermore we believe that China has already built up a lot of expertise especially on the EU-ETS. Analysis will be helpful to a certain extent, but cannot replace the “learning-by-doing”-phase. The sooner this phase will start, the more experience can be gained. We consequently recommend China to focus more on lessons learnt from its pilot regions and consider reducing the amount of new studies on non-Chinese ETS systems as proposed in the MRP. Apart from the EU-ETS and the Australian system it may be instructive, though, to look at the Californian system regarding the integration of a regulated power sector into an ETS. We deem one important issue to be the coordination between current activities in the pilot regions and national regulations. From our conversations with Chinese experts we have gathered that preparatory work for an MRV-system as well as for a registry on the national level is already underway. We recommend that this work should be expedited and finished at the latest when cross-province trading starts at a larger scale. Thus regions and operators therein will have greater security and it will ensure a level playing field for all participants. The draft MRP is well structured and covers all important elements of an ETS. Where we would recommend a more detailed specification, is on how all the different elements will interlock. To illustrate that, a flowchart with milestones, and an

	assessment of interdependencies of the various elements could be helpful. One major question is how soon experience from the pilots can really be used given the fact that the pilot systems are only starting in 2013. Below find some more detailed comments on the various design components for an ETS: Scope: Concerning the inclusion of direct and indirect emitters in the emissions trading system, we are doubtful whether this would not over-complicate the system. Assuming that large consumers would have to surrender allowances for their energy consumption, this would be a trading scheme with a different "currency". It could make sense to have a further trading system in place for energy consumers (something along the lines of "white certificates" or the like). But we would recommend to take one step at a time, separate the development of such trading systems and to concentrate on direct emitters within the PMR-proposal. Of course the interactions of those two systems would have to be taken into account. Nevertheless, as some pilot systems are already designed in such a way (e. g. in Shenzhen, Shanghai, Beijing and Tianjin), useful insights can be gained from these pilots. Cap-Setting: China mentions allowing offset credits or allowances from other markets as a means to avoid over-allocation amongst other measures. We are rather of the opinion that offset credits can increase over-allocation especially if there is no clear limit of how many will be allowed to be used within the ETS. On the other hand limiting the amount of (national) offsets can lessen the incentive for investors if one is also aiming at reducing emissions in Non-ETS-sectors through the offsetting mechanism. Allocating allowances based on predicted output could be a feasible solution combined with ex-post adjustments according to the actual production data. Gathering these data, though, may be met by resistance from industry. In the first trading period (2005-2007) operators in Germany were able to select allocation on the basis of benchmarks (best available technique) multiplied by production projections combined with ex-post adjustment according to actual production data. Generally the production projections were overestimated and the allowances they had to return were fed back into the new entrants reserve. Precise prediction of future emission trends is mentioned as one of the prerequisites for setting the cap. We agree that this is a necessary element but would like to point out that there will always be a large element of uncertainty that cannot be ruled out. To adjust to unforeseen developments that affect emissions we would rather recommend a mechanism to adjust the cap in case of large deviations from the assumptions on which the cap and its trajectory is based. To avoid market insecurity, it is important to explicitly define the kind and magnitude of these deviations as well as the scale of the adjustments beforehand. We commend the Chinese plans to include policy mapping and in-depth analysis or other policy instruments that will affect the emissions as a very important element to

	coordinate your policy mix. The approach (3) under point 2.4.1 – harmonized national rules with some flexibility for regional governments seems to be a feasible approach to ensure a level playing field for all installations while allowing adjustments to regional circumstances. In this context it will be important to ensure that all regional authorities have equal capacity and equal implementation, enforcement etc. We definitely recommend taking on an absolute cap, as it will be easier to handle. Regarding new entrants it is advisable to not disadvantage them compared to incumbents to ensure there remains an incentive for new installations to start operations as they usually have lower emissions intensity than existing installations. Additional allocation from our experience should only be given to companies that increase their technical capacity above certain thresholds; it should not be given only in case of increased degree of capacity utilization. Allowance Allocation The MRP states that it is difficult to acquire accurate historical data for grandfathering from process emissions. Given this fact, we would recommend benchmarking as a reasonable alternative. Thus, there would be no need to formulate additional regulation concerning early action. Using product specific benchmarks for new entrants creates a level playing field for new installations. This could also be an incentive for new installations in underdeveloped regions to be constructed in an energy efficient and low-carbon manner. This could in mid-term enhance the competitiveness of these regions and accelerate their development while different benchmarks for the same product can cement the differing stage and pace of development in diverse regions. Industrial companies with relatively high energy consumption and emissions do not necessarily promote local economic development and improve people's living standard. On the other hand, regarding the diverging industrial structure in Eastern and Western China, if different products are produced in different areas, they will automatically be subject to different benchmarks and thus their varying emissions intensity will be taken into account. The above observations are true in regard to benchmarking for new entrants. Regarding benchmarking for incumbents, different stringencies for different regions with diverging status of development could be a transitory solution. Concerning the setting of benchmarks, an interim solution could be using data of the EU-ETS benchmark setting process but setting the Chinese benchmarks at a certain level below the European benchmarks and increase them gradually and/or replace them by "Chinese benchmarks" as soon as the necessary data to do so have been gathered. Monitoring, Reporting and Verification (MRV) This section of your MRP shows a comprehensive appreciation of the importance of MRV for the credibility and dependability of an emissions trading system. We especially commend your plans to review the documentation of measuring methods and existing problems of China SO2 emission permit trading system as this will give

	you information specific to the instrument as well as to national circumstances. Compliance As above we commend your analysis of existing emissions trading of SO2 permits in China. Apart from setting the fine at a level that encourages companies to comply, we deem it to be essential that the obligation for making up the shortfall in the following year shall be completed, as is rightly observed in the MRP. Price Containment The reasons stated in the MRP for price containment are comprehensible. Nevertheless, we would stress that it counteracts one of the salient characteristics of emissions trading that is to induce the market to find the right price. Furthermore, the knowledge of a price ceiling can also be an incentive for gaming for market actors. China also stipulates that the marginal abatement cost should be considered while setting price floor and ceiling. There are two counterarguments, firstly emissions trading is a quantity based instrument because the abatement costs of individual companies are not known to government and should be mirrored by the market price, secondly diverging abatement costs are one of the reasons that make emissions trading a cost efficient instrument (as you also note in other chapters). Therefore, we would recommend to allow for adjustments by building in review mechanisms and adjustment provisions as suggested in our comments concerning cap-setting. Nevertheless, we accept that for political reasons price containment measures in the first phase(s) of emissions trading could be helpful. Generally we recommend increasing stakeholder engagement especially regarding industry as soon as possible. We took note of the fact, that it is a component of the research process of most design components. Concerning funding by other parties we are missing the contributions by Germany i. e. the projects from the International Climate Initiative “Greenhouse Gas Monitoring in China” and “Capacity Building for implementing emissions trading systems in China“. It would be sensible to list in the MRP existing bilateral support for the ETS development.
The Netherlands	The proposal of China to work towards a national ETS is very well balanced and of impressive high quality. It clearly shows how China already cooperates with other countries having experience, and the components to be assessed under the PMR supported study reflect a logic follow up. China will face some challenges given its “protected status” of state owned companies and the highly regulated power market. But this is also part of the PMR study proposal. During the presentation of the proposal several elements were mentioned of which it is not entirely clear whether and how they are inter linked. Examples are: • To which extend are the pilots in 7 cities and provinces a risk for future fragmentation of the national ETS? • Is the development of CCERs part of the PMR study? If not, what is the status of these CCERs? • In building block 4 (para 2 at page 77) the pros and cons of absolute and relative caps are described. It is not entirely clear whether China has already

	decided on whether absolute caps would be applicable to the national ETS, given the fact that the 7 pilots seem to work with absolute caps only. • It is also not very clear which types of offsets (CERs, VERs and CCERs) can be used under the 7 pilots and under the proposed national ETS. It would be appreciated if the issues raised above could be clarified in the next/final MRP.
South Africa	The Chinese policy propounds for an ideal of, "reducing CO2 emissions per unit of GDP by 40-45% by 2020 compared with that of 2005". This is a positivistic ambition, but it will require a lot of support from the fund in order to be realized.