

# China: wind power development ()

Operational Program: 6 (Climate Change)
GEF Secretariat Review:

Financing (millions): \$0.00 Total (millions): \$0.00

**Summary** 

the concept provides an initial outline of additional activities needed promote wind market development in three Chinese Provinces

Expected Project Outputs: about \$100 million in commercial wind investments (about 90MW)

would be trigged initially in three Chinese provinces by addressing critical

investment barriers. The dissemination of project lessons to other provinces may multiply the project impact over the medium term

Project Duration (months):

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# **Basic Project Data**

Project GEF ID:

Staff		Processing Status	Date	
Program Manager	Rittner	Processing Stage		
Implementing Agency Regional Coordinator Executing Agency	a. jude International Organization	Concept Pipeline Discussion  PDF A - Agency Approval  PDF B - CEO Approval  Bilateral Project Review Meeting  Work Progrom Submission and Approva  CEO Endorsement  Agency Approval  Project Completion		
Cost Summary				
Cost Item		Years	Amount (USD'000)	
Preparation - PDF A - PDF B - PDF C				
Project Allocation				
<ul><li>- Executing Agency Fees and Costs</li><li>- Project Managment Costs</li><li>- Other Incremental Costs</li></ul>			\$0.00 \$0.00 \$0.00	
Completeness of Docum	nentation			
Focal Point	Budget	Logical Framework		
STAP Review	Increment Cost	Length		
Disclosure of Administration	ı Cost	Complete Cover Sheet		

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# 1. Country Ownership

# Country Eligibility

yes

## Evidence of Country Ownership/Country-Drivenness

to be provided before work program entry (government endorsement)

# 2. Program and Policy Conformity

## Portfolio Balance

according to recent PSR outcoems promotion of wind energy will remain a key OP#6 objective, the chinese wind marekt should be of particular importance in this regard given its size and potential

## **Program Conformity**

yes, see above

## Replicability

wind power appears to be widely replicable in many Chinese provinces and other countries of the region

# Potential Global Environmental Benefits of Project

to be specified

#### Sustainability

commercial viability to be justified

# Baseline Course of Action

primary emphasis on fossil fuel in addressing increased energy demand

# Alternative Action Supported by project

wind would be taken into consideration as a viable energy alternative that can be exploited commercially with private invrestment partners

# Conformity with GEF Public Involvement Policy

to be confirmed

## Private Sector Involvement

the project is very much private sector geared, it aims to attract foreign direct investments in the chinese wind market

# 3. Appropriateness of GEF Financing

### **Incremental Cost**

to be determined

## Appropriateness of Financial Modality Proposed

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to be determined

Financial Sustainability of the GEF-Funded Activity

to be determined

Absorptive Capability

plenty

Cost Effectiveness

to be specified

# 4. Coordination with Other Institutions

#### Collaboration

to be clarified

Complementarity with Ongoing Activities

to be clarified

# 5. Responsiveness to Comments and Evaluations

### **Core Commitments**

not applicable

### Linkages

to be explained

### Consultation and Coordination

a consultative process involving key entities engaged in the development of RE markets in China needs to be set in motion to assure proper coordination and division of labour

Consistency w/previous upstream consultations, project preparation work, and processing conditions n.a.

Monitoring & evaluation: Minumum GEF Standards, ME plan, proposed indicators, lessons from PIRs and Project Lessons Study

n.a.

# **Indicators**

n.a.

# Implementing Agencies' Comments

From WB (Robin Broadfield):On behalf of the World Bank, I would like to offer the following comments on this Concept Document, which was recently submitted by the ADB to the GEF for inclusion in the GEF project pipeline. It proposes ADB assistance to China to install 90 MW of grid-connected windfarms and requests \$5-10 million of GEF support for development of related policies, legal, regulatory and fiscal frameworks, capacity

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building and technology transfer.

As we informed ADB during our teleconference on June 15/16 and confirmed in our subsequent note, a Bank/GEF China Renewable Energy Development Project is just starting up, and we are preparing a GEF/World Bank Renewable Energy Strategic Partnership Program for China. The proposed program is large in scope and scale, and will focus strongly on the policy and institutional framework for renewable energy development, as well as physical installation of grid-connected renewable energy facilities. After initial discussions, the State Development Planning Commission has requested World Bank assistance to install 1000 MW of small hydropower, 500 MW of wind, and 200 MW of other renewable energy for power capacity through this program (letter to Elaine Sun, Energy Sector Coordinator at the World Bank Resident Mission in Beijing, dated April 4, 1999).

Aware of the risk of overlap between our operations and possible ADB assistance for renewable energy, we proposed (and you agreed) to invite the World Bank's energy staff in Beijing to join your discussions with the PRC government on ADB renewable energy assistance in July so as to coordinate our activities. We are disappointed that this did not happen.

Unfortunately, we now find that there is significant overlap between activities proposed in the ADB project and activities included in the existing GEF/WB China Renewable Energy Development Project and in the planned Partnership Program. Examples of overlap with activities already completed or underway are: (a) proposed support for development of tax incentives, which would duplicate work already carried out during project preparation on financial incentives for renewable energy development; (b) proposed development of a PPA, which duplicates work already completed for the existing project; and (c) technology transfer for wind turbines above 800 kW, which duplicates support available under the existing project for turbines of all sizes (an early version of the World bank project had proposed a limit of 700 kW, but this was dropped.)

While a full measure of technical assistance work has been done or is underway on these issues, the reality is that the outputs have not been fully implemented at the policy level. This is a major objective of the Partnership Program. To achieve policy change, it is necessary to work at the highest level. This we are doing with the State Development Planning Commission and the State Economic and Trade Commission, which is now responsible for power sector regulation. The planned Partnership Program will provide strong leverage to ensure that the policy and institutional frameworks required to overcome the barriers to large-scale adoption of renewable energy will be adopted by the PRC. While the details are still being worked out, it is planned as an APL, in which the first phase would provide GEF support to apply the policy, legal, fiscal and regulatory frameworks necessary for renewable energy development. The APL would proceed to the investment phase only if the PRC puts in place satisfactory frameworks in these areas. If the necessary frameworks are not adopted, the bulk of the GEF support targeted to other barriers and the investment part of the project would not go ahead.

In this context, we can not support the ADB's parallel request for GEF support for policy, regulatory, financial and fiscal technical assistance activities in its project for two reasons: (1) it would largely duplicate work already done or planned under the existing GEF/Bank project and the more comprehensive and broader GEF/World Bank Partnership Program; and (2) unlike the Partnership Program, the ADB project is unlikely to leverage implementation of the policies that are needed to trigger further major expansion of renewable energy market, so GEF input will do little or nothing to improve the strategic framework for renewable energy development.

If the ADB still wishes to go ahead with an independent GEF-supported wind project, we are willing to discuss other possible applications of GEF funds that would complement the GEF/World Bank's current and planned activities, as well as those of UNDP. However, this would require a major revision of the GEF section of the ADB project proposal.

**UNDP** Comments:

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We feel that the ADB project does have a unique contribution to make in

helping clarify and solidify the legal and regulatory framework for windfarm development in China. It will also help strengthen institutions and may help reduce the costs of the technology. In some ways it complements UNDP GEF's renewable energy project for China. At the same time, there are also some ways that in its current form, it duplicates both UNDP's and the World Bank's renewable energy projects for China.

Development of the Wind energy Database: This activity is the one which most overlaps UNDP's project, including the proposed standardization of wind measurements. We have not yet heard back from the CTA of our project on this one, but we do not feel that this activity is needed from the ADB, even if they are proposing to measure wind in new provinces.

Transfer of technology for large wind turbines: The World Bank project addresses the issue of manufacturing wind turbines of the size normally utilized today elsewhere in the world. We do not view the wind turbines of over 1 MW to be particularly useful in the Chinese context as they are unique to the land-short situation of Europe. We are not convinced of their utility in the Chinese context.

Concession agreement: UNDP's TRAC project (not the GEF project) has worked on this and the World Bank project will have to also. We would advice to maintain close contact on this question to minimize potential duplication.

Development of Standard PPA: Standard wind-relevant PPA should exist based upon the other 2 projects. We are not convinced that more work is needed on this.

Work on Tax and Policy Structure: We are of the opinion that the NFFO is more interesting for China than the RPS as mentioned in the brief. We also maintain reservations about the Green Credit Trading System as we do not see it operating well in China's near monopoly system. The policy, legal and tax incentive schemes deserve attention, but the proper mix in such activities between baseline support and GEF support is somewhat elusive.

In short, we feel that a project to promote broader commercialization of wind farms in China--not just developing a single wind farm-- can be a useful complement to UNDP, UNDP GEF and World Bank projects. We are willing to work more on the preparation and implementation of this project, if asked to do so.

To facilitate discussion, I have attached matrix that relates the Barriers to Wind Power Development with the UNDP/GEF, WB/GEF and proposed ADB project.

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n.a.

#### Council members' Comments

n.a.

#### Technical Assurances

ADB will engage in a consultative process with key domestic and international entities involved in RE market development in China to assure smooth coordination of the project with related efforts, and to avoid duplication of efforts.

#### Convention Secretariat

n.a.

#### Other Technical Comments

see above, the government of China should clarify which agency they have asked to take the lead in developing a strategic RE framework; this agency may request PDF resources to analyze key problems (perceived investment risks and regulatory hurdles) currently hampering commercial RE investments in the whole country, to take stock of already ongoing public and private activities to address relevant constraints, including those sponsored by the GEF,

identify additional actors who may be interested to participate in the development of viable RE markets (government authorities, commercial technology providers and investors, international development organizations, private investment banks etc.)

to organize a consultative process with key actors to identify best ways and means to address identified problems and to assure their participation in coordinated problem resolution efforts.

to develop a medium term framework for RE investments in China, including an indicative list of potential commercial investments and related financing sources; activities necessary to improve relevant regulatory, policy & institutional frameworks, and investment/market development milestones that could be used as triggering points for the release of GEF funds over time.

# **Further Processing**

The concept is recommended for further development, subject to technical comments and recommendations made above. Conditions for work program entry of the proposed project: 1. Confirmation of country driveness and conformity with current RE priorities of the Chinese government (endorsement). 2. Clarification how the project relates to already ongoing RE promotion efforts in China, how it will be coordinated to assure complementarity. 3. The project brief should also clarify how the project relates to currently ongoing efforts to develop a strategic RE market development framework that would guide efforts of all involved partners over the medium term, 4.To avoid duplication of efforts only the lead agency confirmed by the Chinese government (see technical comments) may request PDF funding to assist China in developing a programmatic RE framework that would outline specific RE market goals and performance indicators as a basis for further GEF support over the medium term.

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