

# OFFICE MEMORANDUM

DATE: December 20, 1999

TO: Mr. Ken King, Assistant CEO, GEF Secretariat  
GEF PROGRAM COORDINATION

FROM: Lars Vidaeus, GEF Executive Coordinator



EXTENSION: 3-4188

SUBJECT: **PDF Block B Request**

Please find attached one PDF Block B request.

1. ***China: Strategic Partnership to Support GOC Renewable Energy Program***

We would appreciate receiving any comments by January 5, 2000 and look forward to discussing the request at a bilateral meeting to be scheduled in early January.

Many thanks

**Distribution:**

**Messrs.:** R. Asenjo, UNDP (Fax: 212-906-6998)  
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cc: Messrs./Mmes. Bogach (EASEG); Bossard, Feinstein, Towsey (ENV); Broadfield (EASES); ENVGC ISC, IRIS2

## PROPOSAL FOR PDF BLOCK B GRANT

Country	:	China
Focal Area	:	Climate Change
Operational Program	:	OP 6
Project Title	:	Strategic Partnership to Support GOC Renewable Energy Program
Total Cost	:	tbd (US\$ 10-15 billion?) <sup>1</sup>
PDF Request	:	US\$ 350,000
In-kind contributions	:	US\$ 145,000 (from Government)
Co-financing:	:	US\$ 395,000 (to be mobilized)
Requesting Agency	:	World Bank
Executing Agency	:	Ministry of Finance (MOF)
Block	:	B
Duration:	:	12 months after initiation of PDF Activities

### Program Objective

As part of efforts to achieve sustainable economic development and reduce environmental impacts from coal use, the GOC proposes to develop a major program for renewable energy as part of the 10<sup>th</sup> Five Year Plan that will continue into the 11<sup>th</sup> Plan. This program will give major emphasis to development of grid-connected renewable energy from mature technologies such as windpower, small hydropower and biomass and to off-grid applications of renewable energy. While the GOC Program is still under preparation, the GOC is exploring ways and mechanisms to create a market for power from renewable energy, such as a mandatory requirement that a certain share of electricity generation should come from renewable energy by 2010 (Renewable Energy Portfolio Standard). Maintaining the current share of five per cent of renewable energy in power generation is being taken as the tentative goal for the purpose of preparation of the GOC Program. Trading mechanisms, such as green certificate trading, are also contemplated to create competition and allow the selection of the lowest cost alternatives.

While the actual requirement will depend on growth in electricity consumption, achieving the 5% target is tentatively estimated to require generation of 126 TWh in 2010 from renewable energy. The amount of capacity required depends on the type of facilities installed, but the initial estimate is that approximately 18 GW of additional renewable energy power generating capacity would be required by 2010. Achieving this ambitious goal requires the creation of an enabling framework of appropriate policies, regulations, and institutional and financial support.

The World Bank proposes to assist in preparing and implementing the GOC Program by carrying out the proposed World Bank/GEF Strategic Partnership to Support the GOC Renewable Energy Program (Partnership). The Partnership will take as its development objective one of the major objectives of the GOC Program: to reduce environmental pollution from coal-fired electricity generation by creating sustainable commercial markets for power from renewable energy.

Preliminary discussions indicate that the Partnership would assist the GOC Program objectives in four main ways, by supporting:

- implementation of a strategic framework for renewable energy development including policies, laws and regulations needed for the mandatory share/RPS as well as mechanisms needed to make the market work;

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<sup>1</sup> This is a tentative estimate. The actual amount can only be determined during implementation.

- actions to reduce the cost of renewable energy and make it competitive, including technology improvement to assist local manufacture of good quality equipment to reduce cost;
- building local capacity for project development and financing as well as efficient operation and maintenance of facilities;
- if necessary, selected demonstration and investment projects that have strategic importance.

### **Global Significance**

In 1990, total emissions of greenhouse gases (GHG) in China exceeded 2,900 Tg CO<sub>2</sub>-equivalent<sup>2</sup>, second only to the United States. Among the countries with the highest greenhouse gas emissions in 1990, only China is likely to maintain rapid rates of economic growth well into the next century<sup>3</sup>. With GHG emissions predicted to triple by 2020, the US Energy Information Administration projects that China will become the world's largest carbon emitter sometime between 2015 and 2020<sup>4</sup>.

According to the Asian Development Bank, 82% of China's greenhouse gas emissions came from its energy sector in 1990<sup>5</sup>. While energy consumption is expected to remain the largest contributor to China's greenhouse emissions (86% in 2020), total emissions from the energy sector are expected to increase by more than three-fold. Although emissions from all sub-sectors are expected to increase, the bulk of the energy-based emissions is expected to shift substantially from the industrial sectors to the power sector. GHG emissions from the power sector are expected to increase by a factor of 5 between 1990 and 2020, accounting for nearly 40% of expected energy sector GHG emissions and over one-third of China's overall emissions.

Multiple studies of China's GHG inventory identify renewable energy resources as one of several options for avoiding the power sector's predicted emissions. However, simply maintaining renewable energy's present contribution to the power sector (5% of generation capacity in 1990, nearly all from small-hydropower facilities) through 2010 will require the addition of an estimated 18 GW of grid-connected renewable energy facilities: capacity additions which are almost equivalent to today's installed capacity in China. An effort of this magnitude will require serious commitments from the GOC, but will also require assistance from international partners in the immediate to medium term.

### **Background**

While development of renewable energy for power has been limited in the past mainly to small hydropower, the potential contribution to the power sector is considerable. The technical potential for renewable energy resources in China includes about 160 GW of wind power; over 75 GW of commercially exploitable small hydropower; approximately 125 GW (300 Mtce) biomass energy<sup>6</sup>; about 6.7 GW of known geothermal energy resources; and an abundance of solar insolation<sup>7</sup>. With respect to renewable energy, these resources make China one of the most well endowed countries in the world.

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<sup>2</sup> *China: Issues and Options in Greenhouse Gas Control*, sub-report number 1: *Estimation of Greenhouse Gas Emissions and Sinks in China*, 1990

<sup>3</sup> According to World Resource Institute, the ten nations with the largest CO<sub>2</sub> emissions in 1992 are (in order) the United States, China, the Russia Federation, Japan, Germany, India, Ukraine, the United Kingdom, Canada, and Italy.

<sup>4</sup> International Energy Outlook 1999, US Energy Information Administration

<sup>5</sup> *Asia Least Cost Greenhouse Gas Abatement Strategy (ALGAS)*, Asian Development Bank, 1998.

<sup>6</sup> Based on an energy value of 29.3 GJ/tce, a 30 percent conversion efficiency to electricity and an 80 percent biomass plant capacity factor.

<sup>7</sup> Average annual solar insolation exceeds 5 GJ/m<sup>2</sup> (2,200 hours of sunshine/year) in more than two-thirds of the country.

In 1995, three powerful Commissions in China jointly prepared the *New and Renewable Energy Development Program for 1995-2010*<sup>8</sup>. This program included a number of objectives that were similar in scale to the targets proposed for the 10<sup>th</sup> Five Year Plan. However, the targets for the year 2000 have not been realized. A participatory workshop was held that included participants from GIC agencies and research institutes. They identified the following significant barriers:

- There is no real market as power companies don't want to purchase electricity from renewable energy facilities because:
  - many renewable energy plants are small, dispersed, not dispatchable, and produce intermittently at off-peak hours or seasons;
  - cost per kWh is high compared to electricity from coal, especially since the price of electricity from coal does not include cost of negative environmental impacts from emissions.
- The lack of good quality locally produced renewable energy equipment and support services increases the cost and perception of risk in projects. Another reason for high cost and lack of local equipment is the lack of a real market. This is a vicious circle that must be broken.
- The current "debt repayment" price does not encourage cost reduction as it is a cost plus formula and there is little competition permitted among project developers (the GOC is drafting new pricing procedures).
- Project development, clearance and approval procedures are difficult and untransparent.

The first barrier listed above is the primary hurdle to large-scale renewable energy development. While some policies to encourage renewable energy investment exist in China, there is no requirement or strong incentive for local, provincial or regional utilities to purchase power from renewable energy facilities. In almost every country where renewable energy has been developed on a serious scale for power generation, utilities have been required to purchase power from renewable energy facilities. In the United States, for example, the Public Utilities Regulatory Policy Act (PURPA) requires utilities to purchase electricity from renewable energy facilities at the utilities' avoided costs. The development of wind power in Germany (which reached nearly 3000 MW within 10 years) is based upon the Electricity Feed Law of 1991 which requires utilities to purchase power from renewable energy facilities at premium prices. The Netherlands has agreed with distribution utilities on a mandated share of renewable energy of 3 per cent by 2000 and 10 percent by 2010. The United Kingdom has also adopted a mandatory share of 10 percent by 2010. The European Union is also moving toward introduction of a mandatory share, as are several American states.

Small-hydropower systems and grid-connected wind farms stand out as the technology applications with the greatest potential for displacing power sector GHG emissions. Nevertheless, significant technology-specific hurdles remain:

- Despite one of the best wind resource potentials in the world, *windpower* is still in a demonstration stage in China. As of December 1998, only 224 MWs of grid-connected wind farms have been installed, primarily with financial assistance from bilateral agencies. An additional 540 MWs are planned, including 190 MW under the IBRD/GEF China Renewable Energy Development Project and 90 MW under a project proposed by the Asian Development Bank (with potential GEF support), and other projects with support of bilateral government loans. China's wind industry is in its infancy. Domestically available wind turbines are small in scale and not as efficient and reliable as the larger wind turbines that are presently available on the international markets. Manufacturing wind turbine components under license or joint venture has just started. Efforts to develop a domestic

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<sup>8</sup> The three commissions were: State Planning Commission (now State Development Planning Commission), State Economic and Trade Commission, and State Science and Technology Commission (now Ministry of Science and Technology.)

windpower industry have been hampered by small markets. As a result, China's recent windpower development is based on imported wind turbines.

- China has carried out one of the most successful *small hydropower* development programs in the world, with over 60,000 stations and a capacity of about 17 GW in 1998, constructed mainly since 1979. However, the capacity factors of the stations are low, as they are primarily run-of-the-river plants. The development of small hydropower in China slowed in the 1990s as government support was withdrawn and as the market exhibited a preference for the reliability, lower capital cost and short construction times associated with thermal power generation plants. As part of government down-sizing, the Ministry of Water Resources eliminated the division responsible for promotion and support of small hydropower. Creating a mandatory market would revitalize the established small hydropower industry.

The World Bank and the GOC have recently initiated a dialogue for establishing policies to overcome several of the barriers presented above and to support renewable energy development in the GOC's 10<sup>th</sup> Five Year Plan (2001 – 2005). At the request of the State Development Planning Commission (SDPC), the World Bank submitted a policy note suggesting that a basic policy objective should be to maintain the share of renewable energy in power generation at 5 percent by 2010.<sup>9</sup> As mentioned above, maintaining the 5 percent renewable energy target would require capacity additions of approximately 18 GW to 2010. This is equivalent to doubling the capacity of renewable energy facilities installed in China in 1998. Achieving this target by 2010 requires that ambitious but feasible targets for development of renewable energy systems be established in the 10<sup>th</sup> and 11<sup>th</sup> FYPs. While the market should decide the share of different technologies, an illustrative example of achievable capacities for the primary technologies in 2005 and 2010 is illustrated in Table 1.

**Table 1: Illustrative Example of Cumulative Installed Capacity from Different Renewable Energy Sources to meet 5% Target (2000, 2005 and 2010)**

Technology	Total Exploitable Potential	Installed Capacity 2000	Targets for 2005	Targets For 2010
Small Hydro	75 GW	18 GW	22 GW	28 GW
Wind	160 GW	500 MW	2 GW	5 GW
Biomass <sup>a</sup>	125 GW (300 Mtce/yr)	100 MW	500 MW	2 GW
Solar PV	Very high	20 MW	100 MW	400 MW
Solar Thermal	“ “	20 MW	100 MW	400 MW
Geothermal	6.7 GW	30 MW	100 MW	200 MW
Total		18.7 GW	24.8 GW	36.0 GW

a. Includes biogas power systems.

### Partnership Program Description

**Objectives.** The Partnership aims to support the GOC Renewable Energy Program to be presented in the 10<sup>th</sup> and 11<sup>th</sup> Five Year Plans. The objective would be taken from the GOC Program: to reduce environmental emissions from coal fired power generation by developing sustainable commercial markets for electricity from renewable energy. This would be done by creating a mandated large-scale market and reducing costs for mature technologies such as windfarms, small hydroelectricity and biomass.<sup>10</sup> Possible performance indicators could be: (a) costs (Rmb/kWh) of electricity from key technologies

<sup>9</sup> A number of countries have ambitious targets. Examples are India and Brazil. India has recently adopted a medium term goal to increase the share of renewable energy in electricity generating capacity from 1.5 percent to 10 percent by the year 2012. Brazil announced a program to invest \$25 billion to install 20 GW of renewable energy.

<sup>10</sup> To maintain a level playing field, off-grid electricity should in theory be included in the mandatory share. Whether this is feasible will be investigated during preparation.

competitive with conventional electricity by 2010; (b) good quality equipment produced locally at lower than international cost by 2010; (c) electricity from renewable energy should supply about 5% of total electricity generation (kWh) by 2010. The objectives and performance indicators are preliminary and will be defined after further study during preparation.

**Outputs.** Preliminary discussions indicate that the Partnership would assist the GOC Program in four main ways, by supporting:

- implementation of a strategic framework for renewable energy development including policies, laws and regulations needed for the mandatory share/RPS as well as measures needed to make the market work;
- actions to reduce the cost of renewable energy and make it competitive, including technology improvement to assist local manufacture of good quality equipment to reduce cost;
- building local capacity for project development and financing as well as efficient operation and maintenance of facilities;
- if necessary, selected demonstration and investment projects that have strategic importance.

Preliminary discussions with the GOC of the expected outputs of the Partnership indicated that they would include technical assistance and investment activities. Outputs of technical assistance are expected to include: (a) development of laws or regulations creating a mandatory market for electricity from renewable energy (or equivalent); (b) development of mechanisms/procedures to make the market work, including competitive purchase/pricing policy, fiscal and financial incentives, certificate trading, standardized PPA for small projects, and transparent and simple project approval procedures; (c) increased capability for development of renewable energy power generation projects in banks, financial institutions, regulatory institutions, power companies, other investors, private developers; (d) publicly available data bases on resources at potential windfarm and small hydroelectricity sites and capable institutions to maintain resource assessment; (e) a pipeline of feasibility studies for private sector financed renewable energy investment projects; and (f) removal of barriers to one or more technologies through; resource assessment, creation of public data bases, strengthening of standards and certification, capacity building and selected pilot-scale demonstration projects

The GEF and World Bank can make only a small contribution to the investment requirements of the GOC Program. The enormous investment required for the GOC Program, on the order of \$15 to \$20 billion, can only be mobilized through commercial channels by public and private investors. The Partnership should only be used to support strategic investments that would substantially accelerate the program and also provide a window into the way that the GOC Program is working on the ground.

Preliminary discussions with GOC agencies indicate that investment in technology improvement is a high priority. The GEF Grant could be used to cost-share investments by manufacturing industries to improve the performance and lower the cost of locally produced equipment. This would significantly accelerate cost-reduction. A Bank-assisted strategic investment could be used to accelerate development of one technology. An example of a strategic investment would be the use of a World Bank loan to attract much larger investment from the public and private sector, in a few large windfarm sites. A second example would be a similar Bank-assisted large-scale program to attract public and private financing to rehabilitate small hydropower facilities in southern China, combined with development of bagasse cogeneration or biomass power generation from shut-down coal plants. The combination of the two technologies would substantially increase the value of the power, through seasonal complementarity. Other strategic investments would be identified during preparation.

**Institutional Arrangements.** Because a number of agencies will need to be involved in implementing the Partnership, MOF, as the GEF focal point, will coordinate preparation and implementation of the Partnership. During the preparation stage of the Partnership, SDPC has been entrusted to lead the activities because of its responsibility to develop policies and programs under the 10<sup>th</sup> Five Year Plan. A coordinating committee will be formed to guide preparation and implementation of the Partnership, including MOF, SDPC, SETC, MOF, MOST, SPPC, SEPA, Ministry of Forestry, Ministry of Agriculture, Ministry of Water Resources and China Academy of Sciences, as well as the People's Bank of China and the China Development Bank. The coordinating committee will help to build consensus among GOC agencies and to provide guidance during the preparation of the GOC Program/Partnership.

**Relationship to Other Programs and Projects.** The proposed GOC Program, together with the Partnership, is conceived as an umbrella under which existing programs and projects could continue to be implemented and new ones developed. Once the GOC Program and the Partnership have been developed, there will be many opportunities for other agencies to collaborate, either as formal or informal partners. The possibility of opening the Partnership Program to formal participation by other multilateral and bilateral organizations and foundations is being actively explored, especially with UNDP and ADB. While the benefits are recognized, the procedural complexities also need to be examined. The best option may be to first prepare the GOC Program, then identify international assistance to be provided through the Partnership and other means. Other agencies could then choose to either join the Partnership or to support the GOC Program through separate but complementary activities. It is expected that there may also be separate but complementary renewable energy projects that are assisted by the GEF.

**Proposed Phases and Timing of the Partnership.** It is proposed that the Partnership would be integrated into the GOC Program in the 10<sup>th</sup> and 11<sup>th</sup> Five Year Plans as follows:

(a) 10<sup>th</sup> Five Year Plan (2001-2006):

*Implementation of Strategic Framework:* (first two years) would involve TA to support implementation of the strategic framework and capacity building, and start-up of technology improvement activities. There would be a trigger at the end of this period for further disbursement.

*Market Expansion* (remainder) would involve TA to support capacity building and program implementation, continued technology improvement support and start-up of Bank-assisted investment program and assistance to prepare 11<sup>th</sup> Five Year Plan. There would again be a trigger at the end of this period to measure performance before authorizing further disbursement.

(b) 11<sup>th</sup> Five Year Plan (2006-2011):

*Market expansion* (continued): As above including additional TA at the end to support program phase out and evaluation.

Preparation of the Partnership will take place in two phases:

(a) *Concept preparation to Sept. 30, 2000.* The Bank PCD would be prepared and approved for the Partnership by June 30, and the proposed GOC Program would be drafted by June 30 and integrated into the 10<sup>th</sup> Five Year Plan by September 30.

(b) *Detailed Preparation to Sept. 30, 2001.* Strategic framework instruments would be drafted, scopes of work prepared for TA, feasibility studies completed for any investments, and the PAD completed.

### **Description of Proposed PDF Activities.**

The proposed Block B grant, in combination with other funding sources, would support the first phase of Partnership preparation. A subsequent application for a PDF grant may be requested to support the second phase of detailed preparation work.

Activities in the first phase of preparation work would also assist in the preparation of the GOC Program for the 10<sup>th</sup> Five Year Plan, as well as providing inputs for the preparation of the Partnership. Proposed activities would include the following:

Studies by international/local consultants:

- a) Policy/institutional studies to determine the main elements to be used in the strategic framework and the broad outline of how they will be implemented including: regulation or law for mandatory share, certificate trading, pricing, financial incentives, related capacity building. Also propose institutional responsibilities and staffing requirements.
- b) Technology studies to determine potential contribution of each major technology to the GOC Program, by region, including assessment of resources, economic and financial viability, impact of penetration on regional grids, capacity building activities required for major program, potential strategic investments. Technologies to be covered include wind, small hydropower, biomass, other grid-connected and off-grid technologies. The off-grid study will look at whether to include electricity from off-grid renewable facilities in the mandatory share, and if so how.
- c) Financial studies to recommend changes to financial incentives system now in place to encourage investment and recommend TA to increase financing capacity from commercial banks and other channels such as bond markets.
- d) Macro-economic study to estimate cost of total investment required, impact of GOC Program on regional economies, consumers, utilities, government budget.
- e) Support to GOC/SDPC for preparing the GOC Program for the 10<sup>th</sup> Five Year Plan using these studies.

Study tour/workshops:

- a) Study tour by senior policy makers in SDPC, SETC, MOF, People's Bank, China Development Bank, MOST, SEPA to one or two countries to investigate in detail how such policies are implemented.
- b) Consensus building, participatory project development and awareness creation workshops in China for policy makers and actors involved in implementation of the Partnership.

Support to GOC/PMO:

- a) Consultant, logistical and translation support to the GOC counterpart agency in order to enable in-country participation in preparation of the Partnership.



## **PDF Block B Outputs**

The primary output resulting from the activities supported by the proposed PDF Grant will be the PCD for the Partnership for presentation to World Bank and GEF management. The PDF activities will also contribute to the preparation of the GOC Renewable Energy Program to be included in the 10<sup>th</sup> Five Year Plan.

## **Eligibility**

China ratified the UN Framework Convention on Climate Change on January 5, 1993. The Program seeks to remove the barriers to development of mature renewable energy technologies by creating a substantial market, providing financial incentives, preparing a pipeline of investment projects, strengthening utility capacity and promoting quality and cost improvements in locally manufactured equipment. The proposed Program is therefore consistent with GEF Operational Program 6 which aims to, inter alia, “remove the barriers to the use of commercial or near-commercial [renewable energy technologies] RETs”.

## **National Level Support**

The Partnership has strong support from GOC (see letter from MOF dated Dec. 15, 1999.) The activities proposed for the Partnership were identified during a participatory workshop held by the Bank and with government agencies including SDPC, SETC, MOST, MOF, SPCC and experts from the Chinese Academy of Science and the Energy Research Institute. There was broad agreement on the approach. The goals of the proposed GOC Program and Partnership were also the goals of renewable energy development during the 9<sup>th</sup> Five Year Plan, but the policies and institutional mechanisms were not in place to realize these objectives. In the 10<sup>th</sup> Five Year Plan, the SDPC has been asked by State Council to identify the policy and institutional mechanisms required to realize GOC goals in all sectors. This is a new approach to planning in China, and the SDPC has sought the World Bank’s policy advice in a number of areas, including renewable energy. The Partnership offers a vehicle to provide not only policy advice but to mobilize the resources needed to develop and support the required policy and institutional measures over the longterm.

Under the ongoing China Renewable Energy Development Project, the GOC has shown its commitment to renewable energy by committing to borrow Bank funds and use its own resources.. This project is upheld by the GOC’s 1995 Electricity Law which supports power generation from renewable energy resources and the 1995 *New and Renewable Energy Development Program, 1996 – 2010* (developed by the former State Planning Commission (now State Development Planning Commission), State Economic and Trade Commission, and former State Science and Technology Commission (now a Ministry.) The GOC ratified the FCCC in 1993.

## **Justification**

The proposed GEF Partnership aims to substantially expand markets for power generation from renewable energy, thereby reducing greenhouse gas emissions in a country which is anticipated to become the world’s largest emitter of greenhouse gas emissions between 2015 - 2020. The primary basis for achieving these objectives will be the development of legislation and/or regulations to create markets and a number of measures designed to reduce costs to make renewable energy for power competitive with conventional energy. The Partnership is therefore fully consistent with the Framework Convention on Climate Change, supporting the FCCC objective of “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”. The Partnership also supports China’s commitment as a signatory of the Convention to “formulate programmes containing measures to mitigate climate change ...”.

Substantial preparation work is required to further define the Partnership in terms of (i) its total and incremental costs and global environmental benefits, and (ii) the most appropriate interventions. The preparation activities described below will result in the preparation of the Program's barrier removal activities and will be cost-shared by the GEF, GOC, and others, including the possible use of ASTAE and other Trust Funds and possible assistance from ADB.

### **Timetable**

The PDF activities are expected to be completed within 12 months of their initiation. A GEF Project Concept Document is expected to be delivered to the GEF Council for review during the fall 2000 Council meeting.

<b>Budget for Phase One Preparation Work Program (US\$)</b>				
<b>Study</b>	<b>GOC</b>	<b>Other*</b>	<b>GEF</b>	<b>TOTAL</b>
Policy, regulatory and institutional Strategic Framework for mandating market	20,000		180,000	200,000
Technology studies	25,000	295,000		320,000
Financing and financial incentives	10,000	50,000		60,000
Macro-economic impact	15,000	50,000		65,000
Assistance to prepare GOC Program in 10 <sup>th</sup> Five Year Plan	30,000		50,000	80,000
Study Tour on Mandatory Share	5,000		60,000	65,000
Workshops	10,000		30,000	30,000
Support to GOC/PMO	30,000		30,000	60,000
<b>TOTAL</b>	<b>145,000</b>	<b>395,000</b>	<b>350,000</b>	<b>880,000</b>

\* Possible source of funds to include ASTAE, other Trust Funds and support from other international agencies.

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INTERNATIONAL DEPARTMENT

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December 15, 1999

Mr. Sumi Yoshihiko  
Director, EASEG  
The World Bank

**Strategic Partnership to Support Government of China(GOC)  
Renewable energy Development Program**

Dear Mr. Sumi:

Renewable energy is the driving force for the wheels of the new century. The government of China places high emphasis on the development of renewable energy in the past few years. Due to the constraints of many elements such as capacity of institution and technology, the development of renewable energy seems to be slow. It is our belief that renewable energy will bring forth new visions to development and get fundamental change of the way of people's living. Meanwhile it will have sound global environmental benefits. GEF's support in this endeavor is very crucial for GOC to realize its development objective as well as global benefits.

This partnership program is the first such initiative in the country. The World Bank is committed to support GOC develop this program. With it in place, we would like to see that all-potential agencies and donors with GEF will support GOC realize the objectives set up by the program. Furthermore, this will be a dynamic one and will absorb innovative ideas and concepts during its evolvement.

MOF is the agency in charge of GEF in the country, it will take the lead to coordinate activities to initiate and implement this program. SDPC will be entrusted to prepare the phase I of the program.

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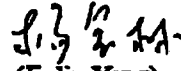
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In this context, I would like to request support from GEF PDF-B and appreciate what your excellent team have done for the development of China's energy sector.

Best regards.

Sincerely yours,



(Julin Yang)

Operational Focal Point for China