The Government of the People's Republic of China

United Nations Development Programme

Enabling China to Prepare Its Second National Communication to the UNFCCC
Terms of Reference (6)

Subcontract Title: China's inventory of GHG emissions from wastewater / sewage treatment

Duration: Two years

Estimated Starting Date: December 2008

Estimated Budget: No more than $275,000

I. Project Background

As a Party not included in Annex I to the United Nations Framework Convention on Climate Change (UNFCCC), China officially submitted its Initial National Communication to the 10th Conference of the Parties (COP10) in December 2004. This project will enable China to fulfill the commitments under the UNFCCC by enabling it to prepare its Second National Communication (SNC) in accordance with the Guidelines for the Preparation of National Communications from non-Annex I Parties (17/CP.8) adopted by the Conference of Parties (COP) to the UNFCCC, and to strengthen the National Communication process.

Based on the experience and lessons learned from the INC, the project will broaden and consolidate the network of stakeholders, including those in the government, social groups, research and education institutions, industries, individuals, and NGOs, enhance technical capacity of national experts, and strengthen the institutional framework for the preparation of national communications. Furthermore, compared to the INC, the project will place greater emphasis on relevant policies on mitigation and adaptation to climate change and the results of their implementation, so as to enable China to effectively address climate change in the process of pursuing national and sectoral sustainable development.

The key purpose of this subcontract is to develop an improved inventory of GHG

emissions from wastewater / sewage treatment with extended categories and sources of GHG emissions. The GHG inventory of the waste sector will report the most recent year of 2005 and apply the IPCC Good Practice Guidance and Uncertainty Management to reduce uncertainties in the inventory. Waste mainly including solid waste, industries and residential wastewater in this project. The subcontractor will confirm GHG emission factors and activity levels, then, calculate the China's GHG emission amount from waste and complete uncertainties analysis.

The Terms of References will provide the supports of qualified organizations to China's inventory of GHG emissions from wastewater / sewage treatment in 2005.

II. Task Descriptions

Tasks of the subcontract will include, but not limited to, the following:

1) Data investigation/collection/analysis, and database establishment and improvement;
2) Field investigations and sampling analysis;
3) Development and improvement of model for quantifying volume of municipal solid waste;
4) Evaluation of the CO_2 emission factors of waste incineration systems, the CH_4 emission factors and N_2O emission factors of industrial wastewater treatment systems and residential wastewater treatment systems;
5) Estimation and compilation of GHG emissions inventory in each category of waste treatment;
6) Summary analysis and finalization of China's 2005 GHG inventory from waste treatment.

III. Expected Outputs and Submission Schedule

Expected Outputs include: (Reporting year is 2005.)

1) Progressive Outputs:
➢ Activity data collection and quantification methods, and activity data for for each source category of wastewater / sewage treatment;
➢ Emission factors for each source category of wastewater / sewage treatment.
2) Final Outputs:

➢ China's GHG inventory in waste treatment;

➢ Report of the inventory compiling methodology for GHG emission inventory of waste treatment sector.

Expected outputs and submission schedule: (Progressive outputs and final outputs should be submitted in both Chinese and English.)

Expected Outputs	Submission Schedule	Submit to
1) Progressive Outputs - Activity data collection and quantification methods, and activity data for each source category of wastewater / sewage treatment - Emission factors for each source category of wastewater / sewage treatment	December, 2009	5 copies to PMO
2) Final Outputs - China's GHG inventory in waste treatment - Report of the inventory compiling methodology for GHG emission inventory of waste treatment sector	December, 2010	5 copies to PMO

To ensure a successful execution of the contract, the subcontractor should hold at least three workshops to solicit suggestions and comments from parties concerned during the contract implementation. All outputs of the subcontractor are subject to the final evaluation organized by the PMO.

IV．Qualifications

The team should have:

● Relevant qualification of Chinese separate legal entity;

● Principal investigators/team leader with a comprehensive knowledge and understanding of GHG inventory of wastewater / sewage treatment and strong capacity in project coordination;

● Significant specialist resources with knowledge and experience in the study subject of climate change and GHG inventory of waste treatment sector;

● Good understanding of the UNFCCC Guidelines for the Development of National Communications for non-Annex I Country Parties and IPCC guidelines for

Greenhouse Gas Inventories;

- Prior experience in compiling national inventories from wastewater / sewage treatment, especially involving in GHG inventory for China's Initial National Communication on Climate Change;

- Research background in landfill, waste incineration, industrial wastewater treatment, domestic wastewater treatment and wastewater / sewage treatment etc.;

- Strong skills in data collection and analysis;

- An extensive cooperating network with government agencies, research institutes, enterprises and associations plus industrial experts, which will facilitate the smooth implementation;

- Excellent Chinese and English language skills.

V. Technical Evaluation Criteria

Detailed evaluation criteria are given in the table below

	Technical Evaluation Criteria	Score Weight	Points Obtainable
1	Expertise of Firm/ Organization Submitting Proposal	30%	**300**
2	Proposed Work Plan and Approach	50%	**500**
3	Personnel	20%	**200**
	Total	100%	**1000**

1. Expertise of Firm/Organization

No.	Description	Points Obtainable
1.1	Reputation of Organisation and Staff (Competence / Reliability)	**50**
1.2	Litigation and Arbitration history	**20**
1.3	General Organisational Capability which is likely to affect implementation (i.e. loose consortium, holding company or one firm, size of the firm / organisation, strength of project management support e.g. project financing capacity and project management controls)	**40**
1.4	Extent to which any work would be subcontracted (subcontracting carries additional risks which may affect project implementation, but properly done it offers a chance to access specialized skills.)	**30**
1.5	Quality assurance procedures, warranty	**60**
1.6	Relevance of: - Specialised Knowledge - Experience on Similar Programme / Projects - Experience on Projects in the Region - Work for UNDP/ major multilateral/ or bilateral programmes	**100** 25 25 25 25

	Total	300

2. Proposed Workplan and Approach

No.	Description	Points Obtainable
2.1	To what degree does the Offeror understand the task?	50
2.2	Have the important aspects of the task been addressed in sufficient detail?	50
2.3	Are the different components of the project adequately weighted relative to one another?	30
2.4	Is the proposal based on a survey of the project environment and was this data input properly used in the preparation of the proposal?	50
2.5	Is the conceptual framework adopted appropriate for the task?	100
2.6	Is the scope of task well defined and does it correspond to the TOR?	120
2.7	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project?	100
	Total	**500**

3. Personnel/ Contractor's Team

No.	Description	Points Obtainable

3.1	Task Manager/Team Leader
	 - General Qualification
	    Suitability for the Project
	     • International Experience
	     • Training Experience
	     • Professional Experience in the area of specialization
	     • Knowledge of the region
	 - Language Qualifications
		100
		 80
		
		 20

3.2	Senior Experts
	 - General Qualification
	    Suitability for the Project
	     • International Experience
	     • Training Experience
	     • Professional Experience in the area of specialization
	     • Knowledge of the region
	 - Language Qualifications
		65
		 55
		
		 10

3.2	Other Experts
	 - General Qualification
	    Suitability for the Project
	     • International Experience
	     • Training Experience
	     • Professional Experience in the area of specialization
	     • Knowledge of the region
	 - Language Qualifications
		35
		 30
		
		 5

	Total	**200**