Mongolia: Ulaanbaatar Clean Air

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<thead>
<tr>
<th>Project Name</th>
<th>Ulaanbaatar Clean Air</th>
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<td>Project Number</td>
<td>43177-012</td>
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<td>Country</td>
<td>Mongolia</td>
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<td>Project Status</td>
<td>Closed</td>
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<tr>
<td>Project Type / Modality of Assistance</td>
<td>Technical Assistance</td>
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| Source of Funding / Amount | TA 7462-MON: Ulaanbaatar Clean Air  
Asian Clean Energy Fund under the Clean Energy Financing Partnership Facility  
US$ 500,000.00 |

**Strategic Agendas**  
Environmentally sustainable growth

**Drivers of Change**  
Partnerships

**Sector / Subsector**  
Energy - Energy sector development and institutional reform

**Gender Equity and Mainstreaming**  
No gender elements

**Description**  
The proposed TA will assist the NCC in the development of a policy and action plan for, and coordination of investments to, reduce air pollution in Ulaanbaatar. To support the Government's action plan to obtain cleaner air in Ulaanbaatar, ADB proposes to assist the Government in carrying out: (i) policy support; (ii) preparatory work; and (iii) a pilot project to support preparation of a multi-donor investment program: the Ulaanbaatar Clean Air Program. The TA has three components as follows: (i) HOB replacement; (ii) development of a mechanism to reduce wintertime emissions in ger areas; and (iii) institutional strengthening, monitoring and evaluation mechanism.

**Project Rationale and Linkage to Country/Regional Strategy**  
The TA is directly linked with the Government’s National Development Strategy, the ADB’s 2009-2012 Country Operations Business Plan (which is expected to be approved in September 2009), and initiating paper for the Country Partnership Strategy (2009-2013) Mongolia: Urban Sector Roadmap. The proposed TA is consistent with the Government’s Action Plan which has as a goal the reduction of air pollution and improvement of air quality in Ulaanbaatar. The TA is consistent with the vision of the MUB as expressed in the (draft) Ulaanbaatar City Air Pollution Reduction Master Plan.

**Impact**  
Improved air quality in Ulaanbaatar

### Project Outcome

**Description of Outcome**  
Coordinated program for introducing clean technology and alternative fuels for heating established

**Progress Toward Outcome**  
This ADB TA project has been carried out in a collaborative manner with deep involvement of large number of stakeholders. Protocol and manual for stove testing were developed in close cooperation with the World Bank team preparing Its Clean Air Project (UBCAP). The mechanism for promoting stove production and distribution were piloted jointly with XacBank and the World Vision International Mongolia Office. Coordination among donors and stakeholders has been highly satisfactory. Coordination meeting among donors and agencies involved in combating air pollution in Ulaanbaatar was regularized under the TA, joint activities with the EA, World Bank, GIZ, World Vision, MCC/MCA, and XacBank and academia have lead to the establishment of Stove Emissions and Efficiency Testing Laboratory (SEET), training of stove producers and development of new smoke-free stove models, pilot programs on stove modifications, lighting behavior, and stove distribution and subsidy mechanisms. Since August 2010, the SEET has tested about 20 different fuel-stove combinations with very positive results.

### Implementation Progress

**Description of Project Outputs**  
NCC capacity strengthened

HOB replacement feasibility study and technical specifications prepared

Awareness campaign developed and launched

Voucher distribution system developed

Laboratory tests and certification system developed by international consultant and implemented by national specialists

Stove research and development training developed and coordinated by international consultant and implemented by national specialists

**Status of Implementation Progress (Outputs, Activities, and Issues)**  
The consultant’s final report summarizing TA achievements was submitted in Aug 2011. The report concludes that highly satisfactory results were achieved under the TA project and valuable experience gained. Two very significant milestones have been achieved: (i) setting up of the testing laboratory and (ii) development of a stove testing protocol. TA project have laid the foundation for a larger scale roll-out. Sustainable operation of the SEET would continue to play the key role in supporting all projects associated with reducing ambient air pollution in Ulaanbaatar. In November 2011 ADB approved the extension of the PATA completion from Nov 2011 to 30 April 2012. This extension will facilitate continued operation of the SEET, support the Government in combating air pollution, and will be in line with the donor coordination efforts.

Implementation of a stove pilot launched in Nov 2010, and has been a very significant achievement. For the first time in Ulaanbaatar such a project has been executed based on a product tested for emission performance in the SEET laboratory. The TA has been a unique project requiring the Consultant to carry out a number of studies and field activities. Eight subject specific reports have been prepared and submitted in addition to the main reports on progress of the project. It is hoped that some of these reports would have lasting value for the Ulaanbaatar Clean Air Project (UBCAP) being prepared by the World Bank in general and also from technical and academic perspectives.

### Geographical Location

### Summary of Environmental and Social Aspects

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<th>Environmental Aspects</th>
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<tr>
<td>Involuntary Resettlement</td>
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<td>Indigenous Peoples</td>
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<td>Stakeholder Communication, Participation, and Consultation</td>
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During Project Design
MNRM-led reconnaissance missions in 2008 for the urban strategy and roadmap held numerous discussions with the Government, Municipality of Ulaanbaatar, Ministry of Finance, and other stakeholders concerning the scope, objectives, financing, and implementation arrangements. MNRM has also held discussions with the World Bank concerning their planned activities and linkages with the proposed TA. The discussions have been frank, informative, and productive.

During Project Implementation
Consultations with the Government agencies and stakeholders are being undertaken throughout the TA implementation. MNRM coordinates TA activities with the World Bank, MCC, and GTZ and JICA.

Business Opportunities
Consulting Services
The total consultants' inputs are estimated at 136.7 person-months: 8.7 person-months of international and 128 person-months of national. The consultants will be engaged as individuals and as a firm.

Procurement
Shopping procedure will be used in procuring stoves for testing, and laboratory and other equipment.

Responsible ADB Officer
Tuul Badarch

Responsible ADB Department
East Asia Department

Responsible ADB Division
Mongolia Resident Mission

Executing Agencies
Ministry of Mineral Resources and Energy
Mr. Nanzad Boldkhuu
boldkhuu@mmre.energy.mn
Government Building - 2 United Nations Street, Ulaanbaatar

Timetable
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<th>Milestone</th>
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<tr>
<td>Concept Clearance</td>
<td>20 Jul 2009</td>
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<tr>
<td>Fact Finding</td>
<td>23 Jul 2009 to 29 Jul 2009</td>
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<td>Approval</td>
<td>14 Dec 2009</td>
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<td>Last Review Mission</td>
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<td>PDS Creation Date</td>
<td>28 Aug 2009</td>
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<td>Last PDS Update</td>
<td>15 Dec 2011</td>
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TA 7462-MON

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