



Technical Assistance Report

Project Number: 53028-001
Transaction Technical Assistance (TRTA)
August 2019

Mongolia: Preparing the Ulaanbaatar Air Quality Improvement Program, Phase 2

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 1 August 2019)

Currency unit	–	togrog (MNT)
MNT1.00	=	\$0.00038
\$1.00	=	MNT2,666.0

ABBREVIATIONS

ADB	–	Asian Development Bank
TA	–	technical assistance

NOTE

In this report, “\$” refers to United States dollars

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I. THE PROPOSED PROJECT

1. Ulaanbaatar, Mongolia is the world's coldest capital, with temperatures regularly dropping below -20 °C in winter months. In the absence of district heating, heat supply in *ger* areas comes from burning raw coal in household stoves and small heat-only boilers, creating some of the highest levels of air pollution in the world.¹ Key drivers of air pollution include the lack of: (i) an effective regulatory framework to regulate emissions from heat supply and to set and enforce building standards; (ii) alternative, cleaner fuels that can replace raw coal use in the short-term and ameliorate pollution levels; and (iii) strategies and long-term plans to deliver a sustainable clean heat supply to *ger* areas.

2. During 2018–2019, the Asian Development Bank (ADB) implemented the Ulaanbaatar Air Quality Improvement Program policy-based loan (phase 1).² Aimed at establishing a basis for actions to adapt to and mitigate the air pollution crisis in Ulaanbaatar and at identifying and piloting immediate alleviation measures, this support successfully raised the aspiration of the Government of Mongolia. Because this increased aspiration is challenging within its current fiscal constraints, the government requested a second policy-based loan (phase 2) to support its expanded targets and to build on the impetus delivered by phase 1 to move further and faster towards long-term solutions.

3. Consistent with this request, the proposed phase 2 aims to (i) embed the strategies to address air pollution developed under phase 1 into Mongolia's legal and regulatory framework; (ii) support the government in fully realizing its increased aspirations; and (iii) put in place sustainable long-term measures for clean heating supply in Ulaanbaatar. Under phase 2, a total of \$160 million will be disbursed in two tranches of \$80 million. Loan effectiveness is targeted for November 2019 with implementation until March 2020.

II. THE TECHNICAL ASSISTANCE

A. Justification

4. The government will require assistance in designing and implementing key elements of the reform program where internal capacity is limited. The initial program parameters, including scope, key policy actions, financing amount, and implementation arrangements were discussed with the government during a reconnaissance mission fielded in February 2019, pre-fact finding mission in April 2019, consultation mission in May 2019 and will be confirmed during the fact-finding mission scheduled for September 2019.

5. Key policy actions include embedding climate adaptation and urban resilience strategies into the 20-year Ulaanbaatar master plan under development, developing a clean heat supply plan for *ger* areas and a community engagement program to support the roll-out of improved fuels for winter 2019–2020, and designing an indoor air pollution monitoring program. The proposed transaction technical assistance (TA) will support these actions where the government lacks internal capacity. With a policy-based program, there is no associated project loan which can pay for the necessary implementation assistance. The proposed loan is included in ADB's country operations business plan for Mongolia, 2019–2021.³

¹ *Gers* are traditional portable round tents covered with skins or felt and used as dwellings by nomads in the steppes of East Asia. *Ger* areas comprise traditional *gers* and houses often constructed with poorly insulating materials.

² ADB. 2018. *Report and Recommendation of the President to the Board of Directors: Proposed Policy-Based Loan to Mongolia for the Ulaanbaatar Air Quality Improvement Program*. Manila.

³ ADB. 2018. *Country Operation and Business Plan: Mongolia, 2019–2021*. Manila.

B. Outputs and Activities

6. The major outputs and activities are summarized in Table 1.

Table 1: Summary of Major Outputs and Activities

Major Outputs	Delivery Dates	Key Activities with Milestones
1. Climate adaptation and urban resilience incorporated in the Ulaanbaatar master plan	November 2019 –June 2020	1.1 Review draft master plan and identification of gaps 1.2 Report on recommended climate adaptation and urban resilience strategies for inclusion in the master plan 1.3 Conduct stakeholder consultation on recommended strategies 1.4 Submit final report with recommended amendments and additions to the draft master plan
2. Clean heat supply plan for ger areas developed	November 2019 –June 2020	2.1 Review existing studies and proposed optimal selection of technologies based on economic viability and technical feasibility 2.2 Conduct stakeholder consultation on proposed options 2.3 Develop implementation plan showing technologies to be deployed by scale, location, and timing, and estimated investment needs 2.4 Submit final report with recommended clean heating technologies and accompanying implementation plan
3. Design of indoor air pollution monitoring program developed	November 2019 –June 2020	3.1 Review existing studies and identify mitigation options, monitoring arrangements, and assessment criteria 3.2 Conduct stakeholder consultation on proposed options and criteria for assessment 3.3 Develop procurement plan and implementation plan and propose funding options 3.4 Submit final report with recommended options and criteria for assessment and implementation arrangements
4. Gender and community engagement plan developed	November 2019 –December 2019	4.1 Prepare gender action plan 4.2 Design community engagement program for roll-out of improved fuels in ger areas 4.3 Monitor implementation of community engagement program by government and civil society organizations 4.4 Evaluate success of community engagement program and lessons learned

Source: Asian Development Bank.

C. Cost and Financing

7. The TA is estimated to cost \$275,000, to be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-VI) and from government in-kind contributions. The key expenditure items are listed in Appendix 1.

8. The government will provide counterpart support in the form of counterpart staff, domestic transportation, data collection, logistic support in arranging workshops and field visits, and other in-kind contributions. The government was informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

9. ADB will administer the TA. The East Asia Environment, Natural Resources, and Agriculture Division will select, supervise, and evaluate consultants.

10. The implementation arrangements are summarized in Table 2.

Table 2: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	November 2019–September 2020		
Executing agency	Ministry of Finance		
Implementing agencies	Ministry of Construction and Urban Development, Ministry of Energy, Ministry of Environment and Tourism, Ministry of Health, and Municipality of Ulaanbaatar		
Consultants	To be selected and engaged by ADB		
	Individual selection	International expert (4.0 person-months)	\$0.140 million
	Individual selection	National expert (10.0 person-months)	\$0.100 million
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		

ADB = Asian Development Bank, TA = Technical Assistance.

Source: Asian Development Bank.

11. **Consulting services.** ADB will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.⁴ ADB will also engage resource persons during the implementation period.

⁴ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 2).

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Table A1.1: Cost Estimates and Financing Plans

Item	Amount
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	120.0
ii. National consultants	80.0
b. Out-of-pocket expenditures	
i. International and local travel	10.0
ii. Surveys ^b	20.0
iii. Reports and communications ^c	8.0
iv. Miscellaneous administration and support costs ^d	2.0
2. Contingencies	10.0
Total	250.0

Note: The technical assistance (TA) is estimated to cost \$275,000, of which the contribution from the Asian Development Bank is presented in the table. The government will provide counterpart support in the form of counterpart staff, domestic transportation, data collection, logistic support in arranging workshops and field visits, and other in-kind contributions. The value of the government contribution is estimated to account for 10% of the total TA cost.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-6).

^b Includes costs of community engagement activities conducted by civil society organizations.

^c Includes interpretation and translation costs.

^d Includes general operating costs, office supplies, and translation costs.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=53028-001-TARreport>

1. Terms of Reference for Consultants