



Mongolia: Ulaanbaatar Air Quality Improvement Program

Project Name	Ulaanbaatar Air Quality Improvement Program								
Project Number	51199-001								
Country / Economy	Mongolia								
Project Status	Closed								
Project Type / Modality of Assistance	Loan								
Source of Funding / Amount	<table border="1"><tr><td colspan="2">Loan 3648-MON: Ulaanbaatar Air Quality Improvement Program</td></tr><tr><td>Ordinary capital resources</td><td>US\$ 130.00 million</td></tr><tr><td colspan="2">Loan: Ulaanbaatar Air Quality Improvement Program</td></tr><tr><td>Korea Exim Bank</td><td>US\$ 60.00 million</td></tr></table>	Loan 3648-MON: Ulaanbaatar Air Quality Improvement Program		Ordinary capital resources	US\$ 130.00 million	Loan: Ulaanbaatar Air Quality Improvement Program		Korea Exim Bank	US\$ 60.00 million
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Strategic Agendas	Environmentally sustainable growth Inclusive economic growth								
Drivers of Change	Gender Equity and Mainstreaming Governance and capacity development								
Sector / Subsector	Energy / Energy sector development and institutional reform Health / Health sector development and reform Public sector management / Public administration Transport / Transport policies and institutional development Water and other urban infrastructure and services / Urban policy, institutional and capacity development								
Gender	Some gender elements								
Description	<p>The Government of Mongolia has requested financial assistance from the Asian Development Bank in the form of a policy-based loan to address Ulaanbaatar's severe air pollution problem which (i) harms citizens' health, disproportionately affecting children and poor people; and (ii) results in significant health and economic costs, which are a long-term burden on the already weak national economy. The proposed program is grounded in the 2017-2025 National Program for Reducing Air and Environmental Pollution.</p>								
Project Rationale and Linkage to Country/Regional Strategy	<p>Ulaanbaatar is the world's coldest capital, with temperatures regularly dropping below 20 degrees Celsius in winter (October-March). It is also one of the most polluted cities in the world. During January 2018, levels of harmful fine particulate matter in the ambient air were nearly forty times the daily limits recommended by the World Health Organization. These dangerous high levels of pollution are a seasonal fact of life for Ulaanbaatar's residents with severe health impacts. Medical costs, lost productivity, chronic illnesses, and shorter life expectancy affect the economy and quality of life of people in Ulaanbaatar, especially poor families who cannot afford proper nutrition and medical care. Children are particularly vulnerable to pollution.</p> <p>The air pollution problem in Ulaanbaatar stems from unplanned and inadequate urban development. In the past 20 years, Ulaanbaatar has witnessed rapid urban development due to the inflow of people who have looked for better lives in the capital city or have sought refuge after losing their livelihoods to more frequent and severe climate induced disasters in the countryside. The city core has expanded only marginally to accommodate the new migrants and a vast peri-urban area (named ger areas) has developed with no adequate public services such as water, sanitation, heat supply, and public transport.</p> <p>In ger areas, most households rely on the combustion of raw coal (or solid waste, for the poorest) for heating and cooking. Government and private buildings mostly rely on highly polluting and inefficient coal-fired heat-only boilers. These highly polluting energy systems are the largest sources of air pollution, affecting the whole city; they contribute to an estimated 80% of ambient concentrations of inhalable particulate matter of less than 2.5 micrometers in diameter. Ulaanbaatar's central core, where jobs and services are concentrated, has seen an increasing number of private vehicles and highly polluting public transport buses. These sources are thought to be responsible for 10% of ambient particulate matter of less than 2.5 micrometers in diameter. Coal burning in the combined heat and power plants generating electricity and heat for the city contributes to 5%-6% of ambient particulate matter of less than 2.5 micrometers in diameter, and resuspension of unpaved ger road dust and combined heat and power plant fly ash add 4%-5%. Moreover, the city's topography and climate are conducive to poor air quality. Ulaanbaatar is surrounded by mountains which, in combination with cold, dry air in the autumn and winter months, traps the air near the surface in and around the city, preventing dispersion of the pollution.</p> <p>Inadequate urban and energy planning and insufficient investment in infrastructure often result in haphazard urban development, which leads to air pollution and unlivable cities. In Ulaanbaatar, these conditions are exacerbated by declining economic growth and fiscal budget constraints that leave very few resources for the government to tackle the problem.</p> <p>Mongolia's economy is recovering from its latest budgetary crisis, triggered in 2014 by declining foreign direct investment, falling commodity prices, and growth moderation in the People's Republic of China (Mongolia's biggest trading partner), which prompted a deceleration in gross domestic product growth from 17.3% in 2011 to 1.2% in 2016. The implementation of an International Monetary Fund program, which aims to restore debt sustainability and improve fiscal and monetary management, has had a positive impact on the economy, which has seen growth recover solidly to 5.1% in 2017.</p> <p>Strengthening environmental sustainability is a pillar of Asian Development Bank's country partnership strategy for Mongolia, 2017-2020. ADB will support efforts to reduce Ulaanbaatar's air pollution and greenhouse gas emissions under the national program by helping the government prioritize and deliver its implementation action plan commitments based on cost-effective policy actions.</p> <p>By developing the capacity of relevant agencies and strengthening their coordination, the program will (i) promote complementary measures, (ii) encourage consistent policy objectives through measures that are financially and economically viable and sustainable, and (iii) minimize contradictory actions. The program will also ensure timely and adequate allocation of resources for the national program implementation action plan. The program will achieve this by prioritizing and expanding public resources for air pollution reduction efforts, focusing on cost-effective actions, and catalyzing private sector finance.</p>								
Impact	Public health and living standards in Ulaanbaatar improved								
Project Outcome									
Description of Outcome	Air quality in Ulaanbaatar improved								

Progress Toward Outcome The project has achieved the intended goal of encouraging the Government of Mongolia to prioritize the air pollution problem, with substantially increased budget allocated to air pollution reduction efforts. The government also announced a city-wide ban on the use of raw-coal for burning - starting May 2019 - for which the Municipality is actively working with Ministry of Energy and of Environment to secure adequate production of cleaner coal.

Implementation Progress	
Description of Project Outputs	Improved implementation action plan efficiency and air pollution control regulatory framework Key measures on air pollution reduction and health protection Mechanisms for environmentally sound and integrated urban, energy, and transport systems
Status of Implementation Progress (Outputs, Activities, and Issues)	Most of the policy actions under this output have been complied with. Pending a few policy actions, most of the commitments under the last two outputs have been completed with ADB support. The release of tranche 2 is expected to be Quarter 3 2019.
Geographical Location	Ulan Bator

Safeguard Categories	
Environment	C
Involuntary Resettlement	C
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	No adverse environmental impacts have been identified and, as such, the program is categorized C for the environment. The policy-based loan adopts a systematic, multisector approach to address the air pollution problem from short-, medium-, and long-term perspectives. The provision of 80,000 tons of cleaner coal is a key short-term policy, which can significantly reduce air pollution; the longer-term development of the ger areas will reduce the urgency of this measure. The Asian Development Bank technical assistance will aid in the design and monitoring of effective, transparent, and accountable distribution of high-quality lower-emitting coal, significantly reducing pollution locally and creating both demand and supply for cleaner coal, thereby ensuring sustainability of the policy. In addition, expanding the heating network will create opportunities to connect ger households and other buildings to district heating, further reducing traditional air pollutants and greenhouse gas emissions through the retirement of heating only boilers. Positive environmental impacts also include co-beneficial climate mitigation through short-lived climate pollutants (i.e., black carbon) emission reductions. Other policy actions, such as on upgrading air quality monitoring systems, may further reduce emissions by improving regulatory enforcement and environmental supervision, but their actual contribution is difficult to quantify. Hence, the team adopted the proportionality approach to estimate the climate finance for the program, considering two policy actions in tranche 1 and four policy actions in tranche 2 contributing towards climate mitigation. Climate change risks direct and indirect have been mitigated by including policy commitment that urban and energy planning agencies take into consideration anticipated climate impacts in the rural areas on future migration patterns (i.e., increased frequency of climate-induced natural disasters) and, in the urban context, on the infrastructure (i.e., heat waves increasing peak electricity demands, or freezing temperatures compromising renewable energy supply systems).
Involuntary Resettlement	Program activities are confined to policy reforms, and their benefits will accrue to all Ulaanbaatar residents. None of the policy actions will result in or lead to involuntary resettlement or adversely affect indigenous peoples. The program is categorized C for involuntary resettlement.
Indigenous Peoples	The program is categorized C for indigenous peoples.

Stakeholder Communication, Participation, and Consultation

During Project Design	
During Project Implementation	

Responsible ADB Officer	Ramachandran, Pavit
Responsible ADB Department	East Asia Department
Responsible ADB Division	Environment, Natural Resources & Agriculture Division, EARD
Executing Agencies	Ministry of Finance (formerly Ministry of Finance and Economy)

Timetable

Concept Clearance	21 Sep 2017
Fact Finding	23 Oct 2017 to 31 Oct 2017
MRM	23 Jan 2018
Approval	23 Mar 2018
Last Review Mission	-
Last PDS Update	30 Sep 2019

Loan 3648-MON

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
23 Mar 2018	04 Apr 2018	30 Apr 2018	30 May 2019	30 Nov 2019	30 Oct 2019

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	130.00	Cumulative Contract Awards			
ADB	130.00	17 Jun 2022	130.00	0.00	100%
Counterpart	0.00	Cumulative Disbursements			

Cofinancing		0.00	17 Jun 2022	130.00	0.00	100%
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Project Page <https://www.adb.org/projects/51199-001/main>

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