RISK ASSESSMENT AND RISK MANAGEMENT PLAN

The risk assessment for the proposed Air Quality Improvement in the Greater Beijing—Tianjin—Hebei Region—Regional Emission-Control and Pollution-Reduction Facility was conducted following the Asian Development Bank's governance and anticorruption policy to identify risks associated with project implementation. It defines the mitigation measures built into the project design and assesses the residual risk once the mitigation measures are in place.

Risk Description	Rating	Mitigation Measures	Responsibility
1. Public Financial Management			
Inherent Risks 1.1 Country-specific risks. National accounting system is different from international accounting standards.	L	No mitigation measures are considered necessary based on the most recent ADB country FM assessment. National standards are equivalent to international standards and acceptable to ADB.	Government of the PRC
1.2 Entity-specific risks. CECEP has an inadequate assessment structure.	L	Documentation and reporting on project operations will follow the requirements set out in the PAM.	CECEP
1.3 Project-specific risks: (i) Insufficient capacity of the CECEP project management team to identify and appraise many diverse subprojects with a variety of technologies may delay implementation and undermine the project's outcome.	L	CECEP is an experienced company with an established record of completing multiple projects with a wide variety of technologies and applications. It has committed sufficient staff to work on the project team and will partner with third-party entities to enhance capacity in technical and safeguard due diligence and appraisal. Parallel TA will further mitigate this potential risk. ^a	ADB and CECEP
(ii) Weak demand from potential borrowers slows implementation.	L	Achievement of air pollution control objectives in the BTH area will require more than \$30 billion in new investment in the immediate future. Based on the review of initial subproject proposals, demand for additional financing is strong, and is expected to increase as the government maintains regulatory pressure for air quality improvements.	CECEP
(iii) A possible conflict of interest may arise in situations where the facility and the funds will finance subprojects of companies affiliated with CECEP.	M	The following measures were included in the project design: (i) limiting financing of such subprojects to the regional fund with participation by non-CECEP-affiliated investors or otherwise with ADB approval, and (ii) including mechanisms for review and approval or waiver of conflicts of interest, that are acceptable to ADB and approved by all fund investors.	ADB
(iv) A potential fund mismatch may occur when using loan proceeds to invest equity.	М	Equity investment by the facility or the funds will only be allowed if (i) it is protected with a put option by a creditworthy third party or (ii) there is another viable exit strategy. Every equity investment requires ADB's prior approval. ADB has set an aggregate limit for equity investments. CECEP will monitor the	ADB and CECEP

Risk Description	Rating	Mitigation Measures	Responsibility
		creditworthiness of the put provider for put-protected equity, and actions will be taken if the creditworthiness drops.	
(v) Insufficient fund management staffing.	Н	The Management Company will get its new recruitment plan approved by CECEP and execute it in a timely manner.	CECEP
(vi) Unsustainable financial structure of the project.	М	Financial sustainability of the project has been modeled with positive cash flows under conservative assumptions. The Facility shall, and shall cause each Fund to, establish a reasonable target floor rate of return for each investment which has properly considered the interest risk and investment risk.	CECEP
(vii) Poor investment performance.	н	The Management Company needs to get the market-based compensation incentive policy for its staff approved by CECEP and implement it.	CECEP
(viii) Delayed establishment of funds and identification of enough subprojects for these funds to invest in.	М	ADB will provide support for formulation of key agreement templates before the first disbursement. A robust pipeline has been developed by CECEP.	ADB and CECEP
Control Risks 1.4 Adverse movement in foreign exchange rate results in financial risk to CECEP.	М	CECEP is financially robust and has the financial strength to undertake the foreign exchange risk and can implement hedging actions as necessary.	CECEP
1.5 Accounting policies and procedures and FM systems differ from ADB requirements and procedures.	L	Capacity training on ADB requirements and procedures for disbursement and procurement will be provided to ensure staff understand them in advance.	ADB and CECEP
1.6 Internal audit: CECEP may not fully meet its responsibility of day-to-day project accounting, monitoring, reporting, and auditing.	L	CECEP's Audit Department has extensive experience in project auditing. CECEP will conduct routine internal audits during implementation, with adjustments made as necessary to meet ADB monitoring and reporting requirements.	CECEP
1.7 External audit: ADB-loan-related entities are subject to annual external audits; external audits are inadequate in their coverage or quality standard.	L	The SASAC-designated auditing firms are familiar with the international accounting standards and can provide proficient auditing services to the ADB loan-related entities.	CECEP
Reporting and monitoring fails to achieve required standards.	L	The PAM will include guidance on preparing progress reports and annual reports.	ADB and CECEP
Overall Financial Management Risk Assessment	M		
2. Procurement	1		
2.1 Unfamiliarity with ADB procurement guidelines results in irregularities and potential implementation delays.	M	A procurement manual was prepared for CECEP to ensure that subborrowers apply commercial procurement practices consistent with ADB procurement principles.	ADB and CECEP
Overall Procurement Risk Assessment	М		

Risk Description	Rating	Mitigation Measures	Responsibility		
3. Project Implementation					
3.1 Macroeconomic slowdown constrains (i) investments from cofinancing partners in the facility and (ii) private sector investment in high-technology projects with high perceived risk.	L	The investment requirements for BTH will be driven primarily by regulatory pressure, which will require structural adjustments in certain sectors. Initial assessment of subprojects presented to CECEP and ADB suggests that the investment pipeline will remain robust even in a macroeconomic downturn.	PRC Government		
3.2 The complex nature of the high- technology subprojects may affect safeguard compliance and technical and financial due diligence.		The ESMS has good ownership by CECEP, which has also partnered with other institutions to build its capacity in these areas.	CECEP		
Overall Implementation Risk	L				
Assessment					
4. Governance and Corruption					
4.1 Lack of clarity in responsibility for anticorruption measures	L	The PAM includes anticorruption responsibilities and measures that will be reinforced in all subloan agreements. CECEP and subborrowers will be provided copies of ADB's Anticorruption Policy (1998, as amended to date).	ADB, CECEP, and subborrowers		
4.2 Failure to enforce anticorruption measures	L	The government has introduced an integrity program for corruption prevention and punishment.	PRC Government		
4.3 Lack of transparency	L	The PAM includes promotion of transparency and public availability of information, including the availability of financial products, procurement opportunities, and contract awards.	CECEP		
Overall Governance and Corruption Risk Assessment	L				

ADB = Asian Development Bank, BTH = Beijing-Tianjin-Hebei, CECEP = China Energy Conservation and Environmental Protection Group, ESMS = environmental and social management system, FM = financial management, H = high, L = low, M = moderate, PAM = project administration manual, PRC = People's Republic of China, S = substantial, SASAC = State-Owned Assets Supervision and Administration, TA = technical assistance.

^a ADB. 2017. Technical Assistance to the People's Republic of China for Strengthening Capacity in the Implementation of the Clean Air Financing Facility in the Greater Beijing–Tianjin–Hebei Region. Manila. Source: Asian Development Bank.