Project Procurement Risk Assessment Report for Project Entities

Project Number: 47051-002 October 2015

People's Republic of China: Chemical Industry Energy Efficiency and Emission Reduction Project

CONTENTS

Page

Executive Summary

I.	Intr	oduction	1
II.	Pro	ject Procurement Risk Assessment	. 1
	Α.	Procurement Environment	1
	В.	Expected Procurement	1
	C.	Procurement Roles and Responsibilities	. 3
	D.	Assessment of Agency Resources	. 5
	Ε.	Procurement Strengths	.11
	F.	Procurement Weaknesses	.12
III.	Pro	ject-Specific Procurement Thresholds	.14
IV.	Cor	nclusion	.14

APPENDIXES

1	PRC Law Governing National Competitive Bidding	15
2	CHC Procedure for Bidding and Tendering Management	17
3	Questionnaire	25
4	Procurement Plan	51
5	Procurement Risk Assessment and Management Plan (P-RAMP)	57

EXECUTIVE SUMMARY

OVERALL RISK ASSESSMENT

Moderate.

STRENGTHS

(i) The implementing agency, China Haohua Chemical Group (CHC), has an established record of project delivery with projects of similar or larger scale and complexity as the two proposed subprojects; and (ii) CHC's corporate procurement regulations follow those of the executing agency, China National Chemical Group (ChemChina), and comply with national procurement laws and guidelines.

IDENTIFIED WEAKNESSES

(i) The project management organization requires more personnel who can communicate in English; and (ii) project planning for this project is not as advanced as it should be.

RISK MITIGATION OR MANAGEMENT MEASURES TO BE ADOPTED

The procurement staff of CHC and subsidiary companies involved in project delivery should receive capacity building training in the procurement requirements of the Asian Development Bank (ADB). It is recommended that ADB monitor project development maturity to ensure that, before the start of procurement, (i) each subproject has an appointed project manager and a project delivery organization fully mobilized with appropriately skilled and dedicated personnel; (ii) a project charter has been established, with the designated project manager taking full ownership; and (iii) project planning and design has reached an appropriate stage.

I. INTRODUCTION

1. This report was prepared in accordance with the Asian Development Bank (ADB) guidelines for assessing country, sector, and project procurement risks. The assessment took place from 1 November 2014 to 31 March 2015. It covered the national procurement environment and the implementing agency, China Haohua Chemical Group (CHC), including subsidiary companies involved in the delivery of the subprojects. Assessment data were collected by the project preparatory technical assistance (PPTA) team through interviews with counterparts, a review of internal procurement guides, and discussions with various internal and external industry stakeholders.

II. PROJECT PROCUREMENT RISK ASSESSMENT

A. Procurement Environment

1. Procurement Laws of the People's Republic of China

2. The legal and institutional system in the People's Republic of China (PRC) is well established. Laws and regulations are in place and systematically implemented, and the use of international competitive bidding under a strict corruption prevention system is encouraged. In accordance with the system, either the central or the provincial government must approve most major procurement decisions, and the implementing agencies must strictly follow central government policies and regulations. However, these policies and regulations are not always consistent with those of ADB.

3. Audit is done by an independent national government organization with a strict code of ethics. The implementing agency does not provide accommodation for auditors during site inspection. But government and implementing agency staff members are well trained.

4. The provisions of the PRC national procurement law governing national competitive bidding are found in Appendix 1.

2. Procurement Procedures of the China Haohua Chemical Group

5. CHC's procurement procedures are well established and follow those established by its parent company, China National Chemical Group (ChemChina). ChemChina's procurement procedures conform to the provisions of the PRC's national procurement law.

6. CHC's procurement procedures are provided for reference in Appendix 2.

B. Expected Procurement

7. Procurement under the project will primarily involve the acquisition of equipment and the hiring of installation contractors (99.7%), and consulting services (0.3%). Except for one equipment and installation package, which will be procured through international competitive bidding (ICB) based on selective tendering, all procurement will follow domestic procurement

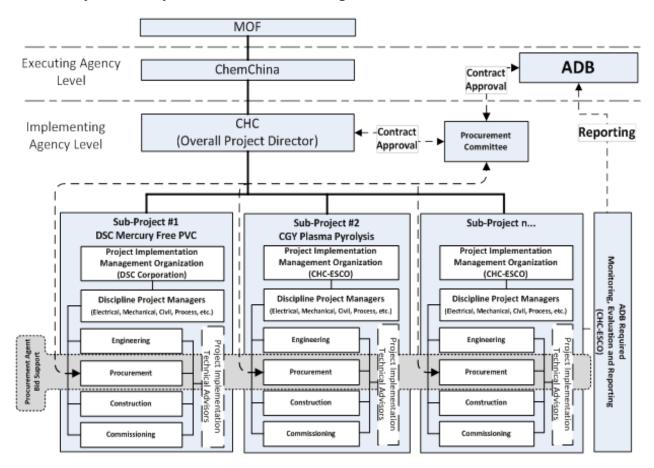
procedures. Consultants will be selected on the basis of their qualifications. A qualified and experienced bidding agent with the PRC Government approval to work on ADB projects will be recruited to assist the implementing agency in undertaking the procurement in accordance with ADB's Procurement Guidelines (2015).

8. ChemChina, the executing agency, will be responsible for overall project implementation. CHC will take on a high-level supervisory role in subproject implementation, including procurement, and will have signing authority for procurement contracts worth over CNY500,000. A procurement agent endorsed by the PRC Government for ADB project work will be hired to support the preparation of bid documents, and bid preparation and implementation.

9. Procurement for subproject 1 will be implemented by Dezhou Shihua Chemical (DSC) and will be managed by a project management group in DSC. The group will oversee day-to-day project implementation, ensure quality management, and manage the procurement of goods and services. DSC will have signing authority for contracts of goods and works under CNY500,000. CHC will review and approve contracts worth at least CNY500,000.

10. Subproject 2 will be implemented at the existing production facility of the Zhonghao Chenguang Research Institute of Chemical Industry (CGY). Day-to-day implementation will be managed by CHC's home energy service company (ESCO), Beijing Zhonghao Huatai Energy Technology (Huatai). The CGY technical staff will closely support on-site implementation activities and the development of technical specifications for goods and works for bid documentation. Huatai will have signing authority for contracts under CNY500,000.

11. A procurement committee formed by ChemChina, with members independent of subproject implementation activities and having extensive technical, financial, and procurement expertise in the subproject areas, will monitor the bidding, provide independent advice on procurement, settle disputes, and appoint bid evaluation committees. The chart below shows the overall project delivery and procurement arrangements.



Overall Project Delivery and Procurement Arrangements

ADB = Asian Development Bank, CGY = Zhonghao Chenguang Research Institute of Chemical Industry, CHC = China Haohua Chemical Group, ChemChina = China National Chemical Group, DSC = Dezhou Shihua Chemical, ESCO = energy service company, MOF = Ministry of Finance, PVC = polyvinyl chloride. Source: Asian Development Bank.

C. Procurement Roles and Responsibilities

1. China National Chemical Group

12. ChemChina will have overall responsibility for project implementation. It will form a procurement review committee to supervise and manage the entire procurement process. The committee in turn will appoint bid evaluation committees for specific contract packages.

2. China Haohua Chemical Group

13. ChemChina has entrusted CHC with the day-to-day management and implementation of the project, through Huatai. CHC has appointed a director to take charge of overall project delivery. CHC will (i) conduct an initial review of all procurement-related documents to ensure compliance with the specific procurement procedures of ChemChina and ADB; and (ii) approve procurement contracts amounting to CNY500,000 and above.

3. **Procurement Review Committee**

14. Working within CHC, the committee will meet regularly to ensure that project procurement activities comply with ChemChina's and ADB's procurement regulations. The committee will comprise experts independent of the project.

15. During detailed design and project planning, the committee will meet monthly to review the progress of procurement activities and will be called on to provide an independent review and evaluation of bid packages and negotiated contracts. The committee will also review the bidding rules and methods. In particular, the committee will be expected to (i) review project status, development, and readiness, to ensure that the requested procurement is appropriate; (ii) supervise and inspect bid preparation and implementation; and (iii) regularly evaluate the bidding agent's performance and role, the supplier's performance, and the selection of bid evaluation experts.

4. Beijing Zhonghao Huatai Energy Technology

16. As the project implementation unit for Subproject 1, Huatai will be responsible for seeing to it that ADB's monitoring, evaluation, and reporting requirements are met. For Subproject 2, Huatai will sign an energy savings performance contract and act as subborrower. Therefore, Huatai will (i) also be responsible for managing the day-to-day implementation of Subproject 2, including procurement activities, on behalf of CHC; (ii) take charge of bid document preparation, bid evaluation (through the bid evaluation committees), bid evaluation reporting, and contracting with successful bidders; and (iii) be authorized to sign contracts below CNY500,000.

5. Zhonghao Chenguang Research Institute of Chemical Industry

17. CGY will not formally manage project implementation for Subproject 2. Instead it will provide technical support to Huatai when asked to do so, particularly during the preparation of bid documents, to ensure the accuracy of technical specifications for goods and works.

6. Dezhou Shihua Chemical

18. DSC will be responsible for (i) managing the day-to-day implementation of Subproject 1, including the procurement activities, on behalf of CHC; and (ii) preparing bid documents, evaluating bids (through the bid evaluation committees), preparing bid evaluation reports, and finalizing contracts with successful bidders. DSC will have authority to sign contracts below CNY500,000.

7. Bidding Agent

19. The bidding agent will (i) assist the project implementing organizations in preparing documentation for bid packages; (ii) advertise bids; (iii) facilitate responses to bidders' questions during the bidding process; (iv) support the assigned bid evaluation committee in bid evaluation; and (v) assist in the preparation of bid evaluation reports. They will see to it that all bid documentation and procedures follow ADB guidelines.

D. Assessment of Agency Resources

1. Organizational and Staff Capacity

20. **Overview.** Neither CHC nor its subsidiaries (DSC, CGY, and Huatai) have implemented ADB projects. However, CHC has an established procurement system. Procurement processes and regulations at the subproject host organizations must follow CHC's procurement processes and regulations, which are based on ChemChina's.

21. CHC is currently implementing a loan from the European Investment Bank (EIB) and is therefore familiar with international procurement requirements. DSC has implemented an energy efficiency and emission reduction loan from the World Bank through Huaxia Bank. On the other hand, neither CGY nor Huatai has experience in implementing projects with international institutions (although Huatai procurement staff members, drawn from CHC, have done such work).

22. The subproject hosts, DSC and CGY, carry out their procurement activities through a dedicated department with the required skills and expertise. Both have implemented projects that were financed by the PRC Government and that required compliance with government policies and procedures.

23. A professional bidding agent, approved by the PRC Government, will be hired to provide procurement support to CHC and its subsidiaries to ensure compliance with ADB's specific processes and regulations related to procurement and bidding documentation, and the management of the bid advertisement, submission, and evaluation processes.

24. **China Haohua Chemical Group.** A procurement department within CHC, with seven full-time employees, is in charge of domestic procurement and bidding. The head of the department has more than 20 years of experience in the procurement field in the PRC. According to the procurement rules and regulations of CHC, all procurement processes require endorsement from a higher authority in the procurement department of ChemChina, CHC's parent company. CHC has therefore optimized its internal procurement rules and enforces strict internal approval procedures.

25. Although CHC has undertaken foreign-assisted procurement, including an ongoing project with the EIB (CHC's energy saving and emission reduction project), it has no experience with ADB's procurement procedures. Training in ICB, in accordance with ADB's Procurement Guidelines (2013) and in the preparation of bidding documents for ICB contracts, will familiarize the CHC team with the required procedures for the only ICB procurement, which is for the supply of different towers at a cost of \$34 million. This training will be provided by a Procurement Specialist from ADB's Operations Services and Financial Management Department (OSFMD), who is outposted to the PRC Resident Mission. A government-approved bidding agent will assist with all the procurement activities during the project. CHC has also confirmed its willingness to hire other experts with adequate skills to provide procurement advice according to the specific project requirements.

26. **Dezhou Shihua Chemical.** 13 full-time staff members of DSC's procurement department have been engaged in procurement for many years. The department director has 20 years of experience in the procurement field in the PRC. In addition, the selected bidding agent will assist the procurement team, to ensure the smooth implementation of the project and build

the team's capacity to comply with ADB's requirements.

27. The DSC Procurement Department has its own office with the necessary equipment and a detailed description of the required procurement process. It can thus take on the additional procurement work.

28. DSC personnel are experienced in the procurement of works and goods according to the rules and regulations of the PRC and receive regular training in bidding process updates and revisions. The procurement department, however, lacks experience in projects financed by ADB and other international funding agencies and therefore has insufficient understanding of ADB's procurement regulations. Dedicated training in ADB's procurement and consulting guidelines is recommended. The team's English communication capability also needs to be reinforced and there may be a need for a resource person who speaks English fluently.

29. In 2009, DSC launched an extensive investment and expansion program, with CHC's support. A wide range of procurement actions applying domestic procedures, shown in Table 1, was part of that program.

Construction			Completion	Goods/Name of	Bid-Winning	g Amount
Unit	Project Name	Start Date	Date	Engineering Project	CNY	\$
Dezhou Shihua Chemical	1 million tons/year Refined Salt Project	Jun 2013	Apr 2015	240 tons/hour circulating fluidized bed boilers	19,980,000	3,330,000
				130 tons/hour flue gas desulfurization apparatus supplementary to circulating fluidized bed boilers	11,875,000	1,979,167
				Brine well drilling and construction	10,808,100	1,801,350
				Manufacture and installation of heaters, evaporimeters, and non-tendering equipment	40,567,700	6,761,283
Dezhou Shihua Chemical, Hebei	Joint Tendering for Chlor-Alkali Devices Relocation	Mar 2009	Dec 2012	Ion-exchange membrane cells	399,000,000	66,500,000
Shenghua Chemical, and	Project			Chlorine gas compressors	48,265,500	8,044,250
Haohua Yuhang				Polymerizers	66,600,000	11,100,000
Chemical				Polyvinyl chloride sizing agent centrifugal machines	28,018,000	4,669,667
				Rectifier transformers	32,170,000	5,361,667
				Water purifiers	32,400,000	5,400,000
				Refrigeration units	28,950,000	4,825,000
				Converters	68,300,000	11,383,333
				Lithium bromide absorption refrigeration	23,130,000	3,855,000
				Chloroethylene compressors	17,870,000	2,978,333

Table 1: Large-Package Procurement Experience of Dezhou Shihua Chemical and China Haohua Chemical Group

Construction			Completion	Goods/Name of	Bid-Winnin	g Amount
Unit	Project Name	Start Date	Date	Engineering Project	CNY	\$
				Hydrogen chloride synthetic furnaces	19,780,000	3,296,667
				Fluidized drying beds and stripping towers	20,100,000	3,350,000
TOTAL					867,814,300	144,635,717

30. **Zhonghao Chenguang Research Institute of Chemical Industry.** CGY has been in existence for over 50 years and has an experienced procurement unit, which is responsible for all procurement and contract management for CGY. The unit has managed tenders and contracts for small- to large-scale projects for many years. Procurement-related matters are authorized and approved by the procurement committee, under the general manager.

31. Written procedures for contract and procurement management are available, and CGY has sufficient number of full-time staff members responsible for the function. Three key staff members from the company's procurement unit will be assigned to the project.

32. But the CGY staff is inexperienced in procurement and contract management for ADB-funded projects. There is also likely to be a need for support staff fluent in English, to improve communication.

33. CGY will not be responsible for procurement during the project. It will only provide technical support to Huatai, which will direct the implementation of Subproject 2 at the CGY site.

34. **Beijing Zhonghao Huatai Energy Technology.** Huatai was founded in August 2014 as CHC's home ESCO. Its current staff members all came from CHC. Huatai has set up an engineering department to take charge of procurement for the project. The department has six employees. Qiu Guiyang, the principal, has worked in procurement for 20 years. Technical supervisor Ren Yun and business supervisor Liu Jianxin each have over 10 years of work experience. While still with CHC, Huatai staff accumulated rich experience in the technical and business aspects of project procurement. They were part of a 5,000 ton/year specialty polytetrafluoroethylene resin dispersion project at CGY in 2011 and a 300,000 ton polyvinyl chloride plant relocation project at DSC in 2010. Some of them also worked on EIB-financed projects and completed training in procurement for foreign-funded projects. A handbook on foreign-funded procurement was among the significant outcomes of that experience.

35. For the ADB project, Huatai will participate in the tender, bid evaluation, and the compilation of bid evaluation reports. The engineering department will guide the company's procurement work. The department will communicate with the relevant project implementation units and develop procurement plans. It will also participate in key steps of the procurement process. The department principal, Mr. Qiu, together with the two supervisors, will complete the technical documentation.

36. Since it is a wholly owned subsidiary of CHC, Huatai will continue to follow CHC rules in all its procurement tendering, just as it has done so far. Its procurement activities will be reported to the procurement committee of CHC for confirmation. The committee will supervise and review the procurement work and results, and approve implementation.

2. Management Information Systems

37. **Overview.** CHC, DSC, Huatai, and CGY have no referencing system specifically for procurement files. But all of them already have procurement records management systems. Moreover, CHC has declared its intent to set up a procurement management information system for ADB-financed projects at the CHC corporate, subproject host, and Huatai levels.

38. China Haohua Chemical Group. CHC was made aware of the procurement record-keeping requirements of ADB during the contract signing for this project. CHC has

allocated enough resources for record-keeping infrastructure, including the record-keeping system, hardware and software, office space, and system administration personnel. All records are kept for 10 years and original contracts are stored at a fire- and theft-proof location. Copies of evaluated bids or proposals are retained, as are the original advertisements with the pre-contract papers. With a referencing system for procurement files, CHC would have the resources (facilities, equipment, and personnel) it needs to manage its procurement and contracting information and records.

39. **Dezhou Shihua Chemical.** DSC already has a relatively complete document management process but has likewise set aside adequate resources for record-keeping infrastructure. It keeps all records for over 10 years, to facilitate follow-up and auditing. A procurement file referencing system would greatly improve its procurement capacity.

40. **Beijing Zhonghao Huatai Energy Technology.** Huatai's engineering department manages procurement for the company. A member of its staff is dedicated to procurement activities and is tasked with optimizing procurement processes and working with the designated procurement agent to provide additional technical and administrative support. Huatai will develop a simple referencing system for procurement documentation that is aligned with the CHC's information management processes.

41. Huatai will archive all bidding documents for 5 years. At the outset, it will adopt CHC's corporate systems for procurement records management and archival. But Huatai plans to assess the need for an ADB-specific system of managing information to better serve the needs of ADB-funded projects and facilitate compliance with ADB's reporting and auditing requirements. The procurement management information system will store all documents signed by Huatai personnel, for use as supporting documents in subsequent audits.

3. Bid Preparation and Evaluation Measures

42. **Overview.** CHC, DSC, Huatai, and CGY have not worked previously on ADB projects and are unfamiliar with ADB's procurement procedures. Of these four, only CHC has experience with internationally funded (EIB) projects, besides being thoroughly familiar with the different procurement procedures and requirements in the PRC. During the project, a qualified bidding agent will support CHC in validating and carrying out procurement activities.

43. **Compliance checks.** All procurement regulations and activities at CHC and its subsidiaries DSC, Huatai, and CGY must conform to ChemChina's internal procurement rules and processes, the government's procurement guidelines, and international procurement requirements. During the project, the assigned bidding agent and the procurement committee will see to it that day-to-day procurement for both subprojects meets the requirements of the PRC Government, ChemChina, and ADB.

44. DSC will have overall responsibility for bid preparation for Subproject 1. All bid packages will be reviewed by the designated procurement committee and the designated bidding agent. The latter will verify their compliance with the government's and ADB's requirements.

45. **Participation of bidding agents.** Huatai and DSC staff will implement the ICB and NCB tendering. But experienced bidding agents will be hired to assist in the development of supplemental bidding documents for specific projects. The bidding agents will indicate the bid deadline and the bid opening date on the bidding documents and carry out related tender work,

such as prequalification and bid compilation, 2 months in advance of the bid date. They will also answer the questions of bidders. Answers to written inquiries will be made available to all bidders. All inquiries and replies will be recorded.

46. **Bid evaluation.** The bid evaluation committee for the tender, consisting of five to seven experts chosen by the procurement committee, will evaluate the bids transparently and fairly according to the criteria set by the committee. All bid evaluations will be witnessed, facilitated, and documented by the bid agent, and the results will be made publicly available.

4. Bid Effectiveness Measures

47. **Record keeping and periodic audits.** ChemChina's corporate policy requires CHC and its subsidiary companies to keep detailed records of all procurement activities and to have periodic audits performed by independent auditors to determine, among other things, the effectiveness of the tendering process and contract performance. A management information system, already in place, can be used to review and track the procurement activities against the related parameters.

48. **Dispute resolution.** Among the procurement practices that have been instituted is a nonjudicial dispute resolution mechanism based on the standard contract.

49. All procurement decisions and dispute resolution processes must be documented in official project files.

5. Accountability Measures

50. **Code of ethics.** CHC and its subsidiaries must strictly follow the ChemChina code of ethics, which also governs their procurement activities. All participants in procurement are required to declare any conflict of interest.

51. **Approval process.** The procurement approval process is well defined and independent of budgeting activities. Procurement can start only after plans meeting specified requirements have been developed and approved at appropriate levels of management.

52. ChemChina is the final approval authority for procurement transactions. Its procurement department is adequately staffed with experienced professionals.

53. **Levels of authority.** There is a designated hierarchy for authorizing procurement transactions, coordinating the development and review of tender documentation, authorizing payments, and ensuring that appropriate documentation, such as minutes, is generated for all procurement activities to support dispute resolution, contract negotiation, and periodic audit.

E. Procurement Strengths

1. Established Procurement Systems and Staffing

54. CHC and all its subsidiaries involved in the delivery of the subprojects have established procurement systems that are aligned with ChemChina's procurement regulations. CHC, CGY, and DSC also have procurement departments staffed with competent professionals who have

experience in delivering projects of similar size and complexity as the proposed subprojects. Existing procurement processes are subject to regulations that require robust documentation archived in established management information systems. Existing management information systems are easily accessible and can provide data to support contract negotiation, dispute resolution, and required audits. The procurement processes and systems now in place should be more than adequate to satisfy any ADB requirements with only minor adjustments.

2. Previous Experience with Internationally Funded Projects

55. CHC has worked previously on international cooperation projects funded by the EIB and is therefore familiar with their additional requirements for procurement and documentation.

F. Procurement Weaknesses

1. Lack of Experience with ADB-Funded Projects

56. **Description of risk.** Although CHC has delivered projects funded through international development cooperation initiatives, like the EIB, neither CHC nor any subsidiary involved in the delivery of the proposed project has previously been part of an ADB-funded project. Procurement processes will need to be adjusted to comply with ADB requirements.

57. **Potential impact.** This weakness will have limited negative impact on project implementation, since only one ICB contract for \$34 million, for the supply of towers, will be procured according to ADB's Procurement Guidelines (2013). An OSFMD procurement specialist outposted to the PRC Resident Mission will provide training to the CHC team in ADB's procurement procedures and the preparation of bidding documents.

2. Inadequate Project Planning

58. **Description of risk.** A formal project charter documenting the formal project implementation arrangements, procurement frameworks, and approval process has not been developed specifically for this project. The risk is that project planning for the satisfactory delivery of the project will not be adequate.

59. **Potential impact.** This issue could delay the project and result in cost overruns. The PPTA team believes that this is a matter of project management maturity with regard to planning. But CHC is likely to accelerate project planning in the coming months.

3. Insufficient Human Resources

60. CHC, CGY, DSC, and Huatai have limited human resources for the additional procurement activities needed to comply with ADB's procurement policy and procedures. Staffing insufficiency and the other risks mentioned above are summarized in Table 2, together with the assessed level of risk and the proposed mitigation measures.

Table 2: Procurement Risk Assessment and Management Plan (P-RAMP)

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
CHC, DSC, CGY, and Huatai have no experience in implementing ADB projects, and are not familiar with	Low	CHC, DSC, and CGY staff will be trained in procurement and disbursement by an ADB specialist.
ADB's procurement procedures. The risk is that ADB's requirements for procurement processes, reporting, and monitoring will not be adequately followed.		The procurement agent will provide on-the-job training during bid document preparation and bid evaluation, and will provide guidance in addressing ADB's comments.
		ADB will require (i) prior review of all ICB contracts, the first DP contract (works and goods), and recruitment of consultants; and (ii) post review of shopping (goods and works).
		Capacity-building activities should be undertaken before procurement.
There are deficiencies in procurement planning (packaging, technical specifications, contracting strategy) and processing.	Substantial	The development of a project charter is a best practice. The charter, to be made available to all stakeholders, should clearly define how the project will be implemented, how it is to be
A formal project charter documenting the formal project implementation arrangements, procurement frameworks, and approval process has not been		financed, what quality control steps will be taken, who will commission the project, and what terms have been set for final acceptance and completion. CHC should take responsibility for developing a formal project charter.
developed specifically for this project. The risk is that project planning for the satisfactory delivery of the project will not be adequate.		ADB should monitor this risk closely to ensure that the subproject PMOs develop as required and project implementation accelerates and is sufficient before procurement starts.
CHC, CGY, DSC, and Huatai do not have adequate human resources to undertake the additional procurement activities needed to comply with ADB's procurement policy and procedures.	Low	It is recommended that dedicated staff be assigned to manage and direct the ADB-required procurement procedures at CHC, DSC, CGY, and Huatai and ensure that procurement is documented according to ADB procedures.
Overall Risk	Moderate	

ADB = Asian Development Bank, CGY = Zhonghao Chenguang Research Institute of Chemical Industry, CHC = China Haohua Chemical Group, DP = domestic procurement, DSC = Dezhou Shihua Chemical, Huatai = Beijing Zhonghao Huatai Energy Technology, ICB = international competitive bidding, PMO = project management organization.

III. PROJECT-SPECIFIC PROCUREMENT THRESHOLDS

61. ADB will require (i) prior review of all ICB contracts, the first NCB contract (works and goods), and consultant recruitment; and (ii) post review of shopping (goods and works).

Method	Threshold	Comment
International competitive bidding (ICB) for works	\$40,000,000 and above	Not applicable
ICB for goods	\$10,000,000 and above	Prior review by ADB (East Asia Energy Division [EAEN], Operations Services and Financial Management Department, Office of the General Counsel)
Domestic Procurement (DP) for works	Below that stated for ICB, works	Acceptability check to be made by EAEN during loan review missions
DP for goods	Below that stated for ICB, goods	Acceptability check to be made by EAEN during loan review missions

IV. CONCLUSION

62. CHC, DSC, CGY, and Huatai have their own procurement departments and procedures, which are modeled after CHC's and ChemChina's corporate regulations and processes. These procurement processes and regulations comply with the PRC's legal requirements and ChemChina's procurement regulations. The procurement activities of subsidiaries are supervised by CHC, and CHC's procurement activities are supervised by ChemChina. Procurement transaction approval levels are defined at the subsidiary level, at the project management organization level, and at the CHC level.

63. CHC, Huatai, DSC, and CGY procurement teams have no experience with ADB projects and are unfamiliar with ADB procurement procedures. CHC plans to hire a qualified and experienced bidding agent, approved by the PRC government to work on ADB processes and procedures, and to help build staff capacity to comply with ADB's procurement procedures and procurement documentation requirements.

64. Procurement approval levels for this project have been defined and will be reviewed and processed by CHC and ChemChina supervising staff under ChemChina's procurement regulations for the group. According to the national law of the PRC, procurement must be carried out with the assistance and guidance of a government-approved bidding agent.

65. A procurement capacity risk assessment undertaken for CHC has confirmed that a procurement agent, with capacity-building assistance from ADB, CHC, DSC, CGY, and Huatai, could appropriately conduct procurement work and competently review procurement documentation as described in this assessment.

LAW GOVERNING NATIONAL COMPETITIVE BIDDING IN THE PEOPLE'S REPUBLIC OF CHINA

The Borrower's Law of Tendering and Bidding of the People's Republic of China, promulgated by Order No. 21 of the President of the People's Republic of China on 30 August 1999, is subject to the following clarifications required for compliance with the Guidelines of the Asian Development Bank (ADB):

- (i) All invitations to prequalify or to bid shall be advertised in the national press, or official gazette, or a free and open-access website in the borrower's country. Such advertisement shall be made in sufficient time for prospective bidders to obtain prequalification or bidding documents, and to prepare and submit their responses. In any event, a minimum preparation period of 30 days shall be given. The preparation period shall count (a) from the date of advertisement, or (b) when the documents are available for issue, whichever date is later. The advertisement and the prequalification and bidding documents shall specify the deadline for such submission.
- (ii) Qualification requirements of bidders and the method of evaluating the qualification of each bidder shall be specified in detail in the bidding documents, and in the prequalification documents if the bidding is preceded by a prequalification process.
- (iii) If bidding is preceded by a prequalification process, all bidders that meet the qualification criteria set out in the prequalification document shall be allowed to bid and there shall be no limit on the number of prequalified bidders.
- (iv) All bidders shall be required to provide a performance security in an amount sufficient to protect the borrower/project executing agency in case of breach of contract by the contractor, and the bidding documents shall specify the required form and amount of such performance security.
- (v) Bidders shall be allowed to submit bids by mail or by hand.
- (vi) All bids shall be opened in public; all bidders shall be afforded an opportunity to be present (either in person or through their representatives) at the time of bid opening, but bidders shall not be required to be present at the bid opening.
- (vii) All bid evaluation criteria shall be disclosed in the bidding documents and quantified in monetary terns or expressed in the form of pass/fail requirements.
- (viii) No bid may be rejected solely because the bid price falls outside any standard contract estimate, or margin or bracket of average bids established by the borrower/project executing agency.
- (ix) Each contract shall be awarded to the lowest evaluated responsive bidder, that is, the bidder that meets the appropriate standards of capability and resources and whose bid has been determined (a) to be substantially responsive to the bidding documents, and (b) to offer the lowest evaluated cost. The winning bidder shall not be required, as a condition of award, to undertake responsibilities

for work not stipulated in the bidding documents or otherwise to modify the bid as originally submitted.

- (x) Each contract financed with the proceeds of the loan shall provide that the suppliers and contractors shall permit ADB, at its request, to inspect their accounts and records relating to the performance of the contract and to have said accounts and records audited by auditors appointed by ADB.
- (xi) Government-owned enterprises in the borrower's country may be permitted to bid if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not a dependent agency of the borrower/project executing agency.
- (xii) Rebidding solely because the number of bids is less than three shall not be allowed.

BIDDING AND TENDERING MANAGEMENT PROCEDURES OF THE CHINA HAOHUA CHEMICAL GROUP (CHC)

A. Terms of Reference for Centralized Tendering Management for China Haohua Chemical Group's Project

1. Invitation for bids must be conducted for technological introduction, reconnaissance, design, supervision, overall contracting, construction, consulting, installation, equipment and materials, and large equipment transport for construction projects, such as new construction, expansion, technological transformation, relocation, and new hi-tech industrialization for CHC's wholly owned and holding (including indirect holding) enterprises. The construction bid for detached or insular buildings will, on principle, enter the local tangible architectural market to allow the selection of optimum construction units.

2. The centralized tendering projects for CHC's uniform management are as follows: projects incorporated into the fund investment plans in the central budget; projects with a total investment below CNY1 billion but over CNY100 million that were approved and authorized by ChemChina; projects with a total investment below CNY100 million but above CNY30 million; or projects with an estimated separate contractual price of over CNY1 million for construction, equipment, or materials procurement, and CNY500,000 for services in terms of reconnaissance, design, supervision, or consulting, but less than CNY30 million in total investment. No organization or individual must not break up whole projects into parts or turn big into small projects, in order avoid project tendering and approval procedures.

3. Bid opening should, in principle, be conducted in Beijing for those centralized tendering projects under CHC's uniform management.

B. Requirements for Construction Units to Engage in Project Tendering

4. Project construction units eligible for tendering must conduct relevant work in accordance with the Terms of References, and the detailed rules and procedures stipulated in Detailed Rules and Regulations for Implementing Construction Projects Tendering and Bidding Management issued by CHC. The tendering work for major construction projects must be carried out by agencies with corresponding credentials confirmed by CHC.

- 5. The following requirements must be met, if construction project tendering is conducted:
 - (i) The project feasibility study report has been approved and project contracting and design tendering can begin. Construction tendering for long-term equipment installation, engineering supervision, relocation or renovation projects can be conducted after the preliminary design has begun to be prepared and before it is given official approval. Tendering for general equipment, materials, and construction must be conducted after the preliminary design is officially approved.
 - (ii) Projects must have been officially incorporated into ChemChina's annual investment plans.
 - (iii) Sources of project capital and funds are crystal clear.
 - (iv) Work on expropriating and leasing construction land has been completed.
 - (v) The tendering group has been approved by CHC for establishment.

C. Modalities of Project Tendering Used by Construction Units

6. Tendering for CHC's project construction is required, in principle, to be conducted through public bidding. Invited tendering or other procurement modalities can be used upon the approval of CHC or ChemChina's tendering management departments, in the following scenarios as stipulated in the Detailed Rules and Regulations for Implementing Construction Projects Tendering and Bidding Management are met.

- (i) Invited tendering can be used if any of the following scenarios is met:
 - (a) Technological introduction and overseas equipment purchase;
 - (b) Design tendering required for relatively high professional technology and expertise in the main installation processes and unsuited for public tendering;
 - (c) EPC tendering constrained by process engineering and level of design;
 - (d) Special equipment or equipment with special materials available from only a few domestic manufacturers and must be purchased from among such manufacturers;
 - (e) The cost of public tendering accounting for an excessively large proportion of the total project value; or
 - (f) Approval given by CHC's or ChemChina's tendering management department to engage in invited tendering, for construction, supervision, project construction management, or QC.
- (ii) Procurement through negotiated tendering (competitive negotiations) can be used to obtain favorable conditions if the following scenarios are met:
 - (a) No response to the invitation to tender or no qualified bidders, or re-tendering is not possible;
 - (b) Technological requirements cannot be determined, because of technological complexity or special properties;
 - (c) The time needed for tendering is too long and would delay the project progress;
 - (d) The total price cannot be calculated; or
 - (e) For other special reasons.
- (iii) Single-source procurement can be used if the following scenarios are met:
 - (a) Only one supplier has to be relied on for procurement;
 - (b) Procurement cannot be made from other suppliers in an unforeseen emergency; and
 - (c) Under a scenario where consistency with the original project procurement must be guaranteed or the project matching and supporting requirements must be met, and it is necessary to continue to make the replenishments from the original suppliers, but the total amount must not exceed 10% of the original procurement amount.

D. Principles for Project Tendering Management

7. After the FSR is approved by the state, ChemChina, or CHC, the project legal person will set up a Tendering Group (for the format of the documents, see Detailed Rules and Regulations for Implementing Construction Projects Tendering and Bidding Management). After its establishment, the Tendering Group may engage in the engineering procurement and

construction (EPC) and design tendering, and it may also conduct the construction tendering for long-term equipment installation, supervision, relocation, or renovation projects during the period between the start of the preliminary design and its official approval.

9. The project construction unit should, according to the project construction situation and the plan for overall project tending prepared by the tendering agency, submit a report to CHC's Tendering Office, after it has been studied and endorsed by the Tendering Group and the Supervisory Department. After preliminary review by CHC's Tendering Office, the report will be submitted to the leader in charge, for review and approval. If a need arises to submit it to ChemChina for review and approval, according to the regulations, CHC's Tendering Office will submit it to ChemChina's Tendering and Bidding Department for review and approval.

10. Project construction tendering and bidding management should adhere to the principle of "separation of tendering staff from those in charge of bidding evaluation and bid awarding," and the tendering and bidding activity should follow the principle of openness, fairness, impartiality, and good faith. No organization or individual must illegally interfere with the tendering and bidding activity in any way, but must strictly follow the procedure and adhere to the criteria according to the laws and regulations.

E. Project Tendering Management Procedures

1. **Preparation of the Tendering Documents**

11. In the preparation of the tendering documents, it is necessary to scientifically and rationally formulate relatively accurate technical norms and standards, and requirements, based on the actual conditions of the project. Single quotation should be practiced for technologically mature devices, equipment, and construction and clearly indicated in the tendering documents.

12. The project construction units may engage in initial technical discussions with the suppliers, but they must not incorporate the specific technology or configurations of a certain supplier into the tendering documents, in order to avoid ambiguities or exclude other suppliers.

2. Monthly Tendering Plans

13. After the tendering work officially kicks off, the project legal person should prepare the monthly tendering plan, including names of goods (or services) for tendering, estimated costs, procurement models, and estimated time of announcement (see specific format at the end of this appendix). After it is studied and endorsed by the project legal person's Tendering Group, this plan should be submitted to CHC's Tendering Office together with the tendering documents on the 25th of each month. After a preliminary review, CHC's Tendering Office should submit the plan to the leader in charge, for review and approval. Only after the approval can it be allowed to proceed to the next step in the tendering procedure. If the goods (or services) for tendering have not been incorporated into the monthly tendering plan and no tendering documents have been submitted for them, tendering must not be conducted in principle. In special circumstances, special requests for approval must be made with CHC's Tendering Office.

3. Release of Tendering Announcements and Suppliers' Sign-Ups

14. After the monthly tendering plan is approved, the project legal person will notify the

tendering agency and ask it to issue the tendering announcement within 7 days at a statedesignated information network and ChemChina's PMIS network. Enterprises must not release tendering announcements without authorization. If suppliers not connected to the PMIS network wish to participate in the tendering, the project construction unit should guide them in handling the relevant registration formalities.

15. After the cutoff date of the tendering announcement, if fewer than three suppliers have signed up, the enterprise will have to invite other eligible suppliers from within the PMIS network to participate in the tendering.

4. Review of Eligibilities

16. The tendering agency will make a preliminary review of the eligibilities of suppliers that have signed up from within the PMIS network. If, for special reasons, a need arises to select bidders beyond the PMIS network after CHC's Tendering Office has given its approval, the project legal person's Tendering Group and Supervisory Department will make a preliminary review of bidders' eligibilities, which should cover the potential bidders' historical development, state of industrial and commercial registration, registered capital, operational and financial position, credit record, and industry and relevant experience. There should be no fewer than three eligible bidders before bidding evaluation; if there are fewer than three eligible bidders after the preliminary review of eligibility, the tendering announcement/announcement of eligibility should be made one more time. If multiple tenders are invited at the same time, the number of bidders for each tender should be no less than three, and the total number of bidders should be no less than twice the number of tenders and should be no less than five.

5. Sale of Tendering Documents

17. After the tendering announcement is made, the tendering agency will start to sell the tendering documents, which should, in principle, be targeted at the networked suppliers that have successfully registered on the PMIS network. The sale period should be no less than 5 days, and the cutoff date should be no less than 15 days after that period.

6. Tendering Application

18. The tendering application should be made on the PMIS network after the tendering announcement period is over. The project engineer designated by the project legal person will create the tendering application. Two files should be uploaded: the Pre-Bid Opening Supervision for the Project Construction Tendering Supervisory Report and the Tendering Documents. If suppliers outside the PMIS network are participating in the bid, it is also necessary to upload the Table of Suppliers' Prequalification. After the tendering application is created, it should be submitted to the Project Manager for review. After passing the review, it should be submitted to CHC's Tendering Office for preliminary evaluation and then to the leader in charge, for review. After passing the review, it will be submitted to ChemChina's Tendering Office for review. The review by ChemChina completes the process of tendering application. The process of creating the tendering application should be finished within 1 working day and the review process should be finished within 2 working days.

7. Bid Opening

19. Bid opening should be hosted by the project legal person. If the task has been entrusted to the tendering agency, bid opening should be hosted by the tendering agency, with the bidding organizations and tendering management departments invited to participate in the bid opening meeting. The standards, methods of bid evaluation, and bid awarding principles should be announced, with the bidding documents and supplementary correspondence unsealed publicly and the main contents of the bidding documents made known to the participants. The project legal person should put the whole bid opening process on record and keep the file for future reference. The bid opening process should be supervised by the relevant supervision departments.

8. Bid Evaluation

20. The formation of the Bid Evaluation Committee should be based on relevant stipulations in ChemChina's Measures for Managing Construction Projects Tendering and Bidding and CHC's Detailed Rules and Regulations on Implementing Construction Projects Tendering and Bidding Management. The methods of bid evaluation should be based on the contents of the actual tendering.

21. If all the bidding documents are thought not to conform to the requirements in the tendering documents, after being reviewed by the Bid Evaluation Committee, all the bids can be voted down and re-tendering organized.

22. In the bid evaluation process, the essential contents and requirements stipulated in the tendering documents should not be altered at will. For bids (packages) that have been classified and determined in the tendering documents, their scope must not be changed; the bids (packages) must, in principle, not be split up when successful bidders are recommended. For equipment tendering, it is necessary to give full consideration to the economic efficiency and stability of the project. To ensure the smooth running of equipment and division of responsibility, split purchases should not be made.

9. Bid Awarding

23. After the bid evaluation, the tendering agency should prepare the Bid Evaluation Report based on the bid evaluation results and submit it to the project legal person and CHC. The project legal person will then create the Bid Evaluation Report on the PMIS network based on the Bid Evaluation Report and submit it to CHC's Tendering Office, and apply for the submission of the bid awarding results (within 5 working days). Four appendixes should be uploaded with the Bid Evaluation Report. These are the Project Construction Tendering Supervisory Report: the Bid Opening, Bid Evaluation Supervision, and Project Construction Tendering Supervisory Report: the Comprehensive Opinions on Tendering Supervision; and the Bidding Results. After consolidation and preliminary review by CHC's Tendering Office, these reports will be submitted to the Bidding and Tendering Management Committee for review. After the review, they will be submitted based on the limits of authority to ChemChina's Tendering Office. After the review by ChemChina's Tendering Office , the bid awarding process will be over (finished within 7 working days). The Tendering and Bidding Management Committee meets every Friday.

10. Signing of Technical and Business Contracts

24. Within 2 working days after the Bid Evaluation Report is reviewed and approved, the tendering agency makes the announcement of successful bidders (the same announcement is made on the PMIS network at the same time). After the announcement of bid winners, the bid-winning notice is issued. Within 30 working days after the notice is issued, the project construction units and bid winners sign the contract.

11. Submission of Summary of Tendering Work

25. The project construction unit should make a summary of the tendering work for each month and submit the Statistical Information on the Completed Tendering Work for the previous month to CHC's Tendering Office before the 3rd of each month. (Note from ADB: See specific format at the end of this appendix.)

- 1. Requests for Instructions on Submitting the Construction Project Monthly Tendering Plan (Reference Format)
- 2. Statistical Information on the Completed Tendering Work

Request for Instructions on Submitting the Construction Project Monthly Tendering Plan

To CHC Tendering Office:

Given that the Project Tendering Group of this company has been approved by CHC for establishment and the preparation of its overall tendering plan has been completed and approved by CHC, we now herewith make the following report on the tendering plan for next month, in order to make the tendering orderly and smooth:

1. (What has been planned for tendering? What is the total budget estimate?)

2. (Please explain reasons if a non-public tendering method is to be used)

3. (Other)

See the table for specific information.

Your reply would be greatly appreciated.

XX Company Date:

Table of Tendering Plan (____Month)

Cons	Construction Unit							
Proje	Project Name:							
Com	pleted by:	Dept.:	Tel.: Dat	te:				
No.	Content of Goods (Services)	Budget Estimate (CNY10,000)	Method of Procurement (Public, Invited)	Estimated Time of Tendering Announcement	Estimated Bid Opening Time and Venue	Requirements for Bidding Organizations on Levels of Qualifications	Remarks	
1								
2								
3								
4								
5								

Statistical Information on the Completed Tendering Work (____Month)

Const	Construction Unit							
Proje	Project Name:							
Comp	Completed by: Dept.: Tel.: Date:							
No.	Bid Opening Date	Content of Goods (Services)	Tendering No.	Tendering Method	Tender Price	Bid Winner	Tendering Agency	Remarks
1								
2								
3								
4								
5								

COMPLETED QUESTIONNAIRES

1. China Haohua Chemical Group

Question	Response	Risk
A. ORGANIZATIONAL AND STAFF CAPACITY		
PROCUREMENT DEPARTMENT/UNIT		
A.1 Does the agency or government have a procurement committee that is independent of the head of the agency?	Yes. CHC has an expert committee, which is independent of the head of the agency and takes care of the procurement committee.	Low
A.2 Does the agency have a procurement department/unit, including a permanent office that performs the function of a secretariat of the procurement committee?	Yes. CHC has a procurement department, and it can provide support to the procurement committee.	Low
A.3 If yes, what type of procurement does it undertake?	The department undertakes all types of procurement for major chemical sector projects and provides technical and policy support to subsidiary companies as needed.	Low
A.4 How many years' experience does the head of the procurement department/unit have in a direct procurement role?	More than 10 years	Low
 A.5 How many staff in the procurement department/unit are: i. full time ii. part time iii. seconded 	6 3 3 0	Moderate
A.6 Do the procurement staff have a high level of English language proficiency (oral and written)?	Normal level of proficiency	Moderate
A.7 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes. Experts from the procurement department of the ESCO with international procurement experience will provide assistance.	Low
A.8 Does the unit have adequate facilities, such as PCs, internet connection, photocopy facilities, printers, to undertake the planned procurement?	Yes	Low
A.9 Does the agency have, or have ready access to, a procurement training program?	Yes	Low
A.10 At what level does the department/unit report (to the head of agency, deputy, etc.)?	Procurement results will be reported to the procurement committee and can be processed only with the approval of the committee.	Low

Question	Response	Risk
A.11 Do the procurement positions in the agency have job descriptions, which outline specific roles, minimum technical requirements, and career routes?	Yes, they have a detailed job description and career routes.	Low
A.12 Is there a procurement manual for goods and works?	Yes	
A.13 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Yes, it is up to date and covers foreign-assisted projects.	Low
A.14 Is there a procurement manual for consulting services?	Yes, there is a detailed procurement manual for consulting services.	Low
A.15 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Yes. It's not latest version, but it covers foreign-assisted projects.	Low
PROJECT MANAGEMENT UNIT		
A.16 Is there a fully (or almost fully) staffed PMU for this project currently in place?	Yes	Low
A.17 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes	Low
A.18 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes	Low
A.19 Are there standard documents in use, such as standard procurement documents/forms, and have they been approved for use in ADB-funded projects?	Yes	Low
A.20 Does the agency follow the national procurement law, procurement processes, guidelines?	Yes	Low
A.21 Do TORs for consulting services follow a standard format such as background, tasks, input, objectives, and output?	Yes	Low
A.22 Who drafts the procurement specifications?	The procurement department and the bidding agent	Low
A.23 Who approves the procurement specifications?	The procurement committee	Low
A.24 Who in the PMU has experience in drafting bidding documents?	Director Li Jianbin, with 20 years of experience	Low
A.25 Are records of the sale of bidding documents immediately available?	Yes	Low
A.26 Who identifies the need for consulting services?	The agency and subsidiary companies	Low
A.27 Who drafts the TORs?	The procurement department and the engineering	Low

Question	Response	Risk
	management department	
A.28 Who prepares the request for proposals (RFPs)?	The procurement department and the engineering management department	Low
B. INFORMATION MANAGEMENT		
B.1 Is there a referencing system for procurement files?	No, but it will be built later to meet work requirements.	Average
B.2 Are there adequate resources allocated for record keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?	The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support.	Average
B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)?	5 years	Low
B.4 Are copies of bids or proposals retained with the evaluation?		
B.5 Are copies of the original advertisements retained with the pre-contract papers?	Yes	Low
B.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	Yes	Low
B.7 Are copies of invoices included with the contract papers?	Yes	Low
B.8 Is the agency's record-keeping function supported by IT?	Yes	
C. PROCUREMENT PRACTICES		
Goods and Works		
C.1 Has the agency undertaken the procurement of goods or works related to foreign assistance recently (last 12 months or last 36 months)? If yes, indicate the names of the development partner/s and project/s.	No. The ESCO is a new company, but its staff members came from CHC and worked previously on the European Investment Bank project.	Low
C.2 If the answer is yes, what were the major challenges faced by the agency?	No prior experience with ADB projects; training may also be needed	Low
C.3 Is there a systematic process of identifying procurement requirements (for a period of 1 year or more)?	Yes, the technology development department will propose the requirements and the work management, draw up the procurement plan, and work with the bidding agent.	Low
C.4 Is there a minimum period for the preparation of bids, and if yes, how long?	Yes. The department generally starts working 2 months in advance, reviewing qualifications, preparing bidding documents, and so on.	Low

Question	Response	Risk
C.5 Are all queries from bidders replied to in writing?	Yes. All bidders get a reply even if only one of them submits a written inquiry.	Low
C.6 Does the bidding document state the date and time of bid opening?	Yes	Low
C.7 Are bids opened in public?	Yes	Low
C.8 Can late bids be accepted?	No	Low
C.9 Can bids (except late bids) be rejected at bid opening?	Yes	Low
C.10 Are minutes of the bid opening taken?	Yes	Low
C.11 Are bidders provided with a copy of the minutes?	Yes	Low
C.12 Are the minutes provided free of charge?	Yes	Low
C.13 Who undertakes the evaluation of bids (individual/s, permanent committee, ad hoc committee)?	An ad hoc committee composed of 5–7 experts from the bidding agent selected randomly.	Low
C.14 What are the qualifications of the evaluators with respect to procurement and the goods and/or works under evaluation?	For general goods, the lowest bid price will win. For higher technical goods, the highest comosite score will win.	Low
C.15 Is the decision of the evaluators final or is the evaluation subject to additional approval?	If there is no objection, the decision of the evaluators is final.	Low
C.16 Using the three "worst-case" examples in the last year, how long after the issuance of the invitation for bids can the contract be awarded?		
C.17 Are there processes in place for the collection and clearance of cargo through ports of entry?	Yes	Low
C.18 Are there established procedures for receiving purchased goods?	Yes	Low
C.19 Are all goods that are received recorded as assets or inventory in a register?	Yes	Low
C.20 Is the agency/procurement department familiar with letters of credit?	Yes	Low
C.21 Does the procurement department register and track warranty and latent defects liability periods?	Yes	Low
Consulting Services		1
C.22 Has the agency undertaken foreign-assisted procurement of consulting services recently (last 12 months or last 36 months)? (If yes, please indicate the names of the development partner/s and the project/s.)	No	Moderate
C.23 If the answer to the previous question is yes, what were the major challenges?		Low
C.24 Are assignments and invitations for expressions of interest (EOIs) advertised?	Yes	Low

Question	Response	Risk
C.25 Is a consultants' selection committee formed with appropriate individuals, and what is its composition (if any)?	Yes. The selection committee is composed of experienced professionals from the appropriate sector.	Low
C.26 What criteria are used to evaluate EOIs?	It should meet the project needs.	Low
C.27 Historically, what is the most common method used (QCBS, QBS, etc.) to select consultants?	QCBS or CQ	Low
C.28 Do firms have to pay for the RFP document?	No	Low
C.29 Do the proposal evaluation criteria follow a predetermined structure and are they detailed in the RFP?	Yes	Low
C.30 Are pre-proposal visits and meetings arranged?	Yes	Low
C.31 Are minutes prepared and circulated after pre-proposal meetings?	Yes	Low
C.32 To whom are the minutes distributed?	To CHC	Low
C.33 Are all queries from consultants answered/addressed in writing?	Yes	Low
C.34 Are the technical and financial proposals required to be in separate envelopes and remain sealed until the technical evaluation is completed?	QCBS and QBC are sealed in different envelopes, but CQ is not.	Low
C.35 Are proposal sureties required?	No	Low
C.36 Are technical proposals opened in public?	No	Low
C.37 Are minutes of the technical opening distributed?	Yes. ADB can go over them in the appointed publication or on the website.	Low
C.38. Do the financial proposals remain sealed until technical evaluation is completed?	Yes	Low
C.39 Who determines the final technical ranking and how?	It will be determined by experts on the committee.	Low
C.40 Are the technical scores sent to all firms?	Yes	Low
C.41 Are the financial proposals opened in public?	Yes	Low
C.42 Are minutes of the financial opening distributed?	Yes	Low
C.43 How is the financial evaluation completed?	The lowest price will be awarded the full score, and others are scored according to a scale.	Low
C.44 Are face-to-face contract negotiations held?	Yes	Low
C.45 How long after financial evaluation are negotiations held with the selected firm?	Within 2 weeks	Low
C.46 What is the usual basis for negotiation?	Payment clause, tax, and transfer of deliverables	Low
C.47 Are minutes of the negotiations taken and signed?	No	Low
C.48 How long after negotiation is the contract signed, on average?	Within 2 weeks	Low

Question	Response	Risk
C.48 How long after negotiation is the contract signed, on average?	Within 2 weeks	Low
C.49 Is there an evaluation system for measuring the output of consultants?	Yes. Experts are invited to review the deliverables.	Low
Payments		
C.50 Are advance payments made?	Yes; 10%	Low
C.51 What is the standard period for payment included in contracts?	30 days	Low
C.52 On average, how long is it between receiving a firm's invoice and making payment?	A week	Low
C.53 When late payment is made, are the beneficiaries paid interest?	No	Low
D. EFFECTIVENESS		
D.1 Is contractual performance systematically monitored and reported?	Yes	Low
D.2 Does the agency monitor and track its contractual payment obligations?	Yes	Low
D.3 Is a complaints resolution mechanism described in national procurement documents?	Yes	Low
D.4 Is there a formal nonjudicial mechanism for dealing with complaints?	Yes	Low
D.5 Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default/withheld payment?	Yes	Low
E. ACCOUNTABILITY MEASURES		
E.1 Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes	Low
E.2 Are those involved in procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes	Low
E.3 Is the commencement of procurement dependent on external approval (formal or de facto) outside the budgeting process?	No	Low
E.4 Who approve procurement transactions, and do they have procurement experience and qualifications?	General manager	Low
E.5 Which of the following actions require approval outside the procurement unit or the evaluation committee, as the case may be, and who grants the approval?		
i. Bidding document, invitation to prequalify, or RFP	ESCO bidding agent	Low
ii. Advertisement of invitation for bids, prequalification, or call for EOIs	ESCO bidding agent	Low
iii. Evaluation reports	ESCO bidding agent	Low
iv. Notice of award	ESCO bidding agent	Low
	ESCO bidding agent	Low

Question	Response	Risk
vi. Contracts	ESCO bidding agent	Low
E.6 Is the same official responsible for (i) authorizing procurement transactions, procurement invitations, documents, evaluations and contracts; (ii) authorizing payments; (iii) recording procurement transactions and events; and (iv) having custody of assets?	Yes	Low
E.7 Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes	Low

Beijing Zhonghao Huatai Energy Technology

Question	Response	Risk
A. ORGANIZATIONAL AND STAFF CAPACITY		
PROCUREMENT DEPARTMENT/UNIT		
A.1 Does the agency or government have a procurement committee that is independent of the head of the agency?	Yes. The normal process is to have an expert committee, which is independent of the head of the agency and takes charge of the procurement committee.	Low
A.2 Does the agency have a procurement department/unit, including a permanent office that performs the function of a secretariat of the procurement committee?	The ESCO has just been formed, but it will have a procurement group that is managed by the engineering department. It is anticipated that procurement will be heavily supported by the parent company, CHC, in the early stages of ESCO development.	Low
A.3 If yes, what type of procurement does it undertake?	The department undertakes all types of procurement for major chemical sector projects and provides technical and policy support to subsidiary companies as needed.	Low
A.4 How many years' experience does the head of the procurement department/unit have in a direct procurement role?	More than 10 years	Low
A.5 How many staff in the procurement department/unit are:	6	Moderate
i. full time	3	
ii. part time	3	
iii. seconded	0	
A.6 Do the procurement staff have a high level of English	Normal level of proficiency	Moderate

Question	Response	Risk
language proficiency (oral and written)?		
A.7 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes. Experts from the procurement department of ESCO with international procurement experience will provide assistance.	Low
A.8 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes	Low
A.9 Does the agency have, or have ready access to, a procurement training program?	Yes	Low
A.10 At what level does the department/unit report (to the head of agency, deputy, etc.)?	Procurement results will be reported to the procurement committee and can be processed only with the approval of the committee.	Low
A.11 Do the procurement positions in the agency have job descriptions, which outline specific roles, minimum technical requirements, and career routes?	Yes. They have detailed job descriptions and career routes.	Low
A.12 Is there a procurement process manual for goods and works?	Yes	
A.13 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Yes, it is up to date and covers foreign-assisted projects.	Low
A.14 Is there a procurement process manual for consulting services?	Yes. There is a detailed procurement process manual for consulting services.	Low
A.15 If there is a manual, is it up to date and does it cover foreign-assisted projects?	It's not latest version, but it covers foreign-assisted projects.	Low
PROJECT MANAGEMENT UNIT		
A.16 Is there a fully (or almost fully) staffed PMU for this project currently in place?	Yes	Low
A.17 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes	Low
A.18 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes	Low
A.19 Are there standard documents in use, such as standard procurement documents/forms, and have they been approved for use on ADB-funded projects?	Yes	Low
A.20 Does the agency follow the national procurement law, procurement processes, guidelines?	Yes	Low
A.21 Do TORs for consulting services follow a standard format such as background, tasks, input, objectives, and output?	Yes	Low

Question	Response	Risk
A.22 Who drafts the procurement specifications?	The procurement department and the	Low
	bidding agent	
A.23 Who approves the procurement specifications?	The procurement committee	Low
A.24 Who in the PMU has experience in drafting bidding documents?	Qiu Guiyang, with 10 years of experience	Low
A.25 Are records of the sale of bidding documents immediately available?	Yes	Low
A.26 Who identifies the need for consulting services requirements?	The agency and subsidiary companies	Low
A.27 Who drafts the terms of reference?	The procurement and engineering management department	Low
A.28 Who prepares the request for proposals?	The procurement and engineering management department	Low
B. INFORMATION MANAGEMENT		
B.1 Is there a referencing system for procurement files?	No, but it will be built later to meet work requirements.	Average
B.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?	The ESCO has its own procurement department and is optimizing the function. A bidding agent will also provide technical support.	Average
B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)?	5 years	Low
B.4 Are copies of bids or proposals retained with the evaluation?		
B.5 Are copies of the original advertisements retained with the pre-contract papers?	Yes	Low
B.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	Yes	Low
B.7 Are copies of invoices included with the contract papers?	Yes	Low
B.8 Is the agency's record-keeping function supported by IT?	Yes	
C. PROCUREMENT PRACTICES		
Goods and Works		
C.1 Has the agency undertaken procurement of goods or works related to foreign assistance recently (last 12 months or last 36 months)? If yes, indicate the names of the development partner/s and project/s.	No. The ESCO is a new company, but its staff came from CHC and worked on the European Investment Bank project.	Low
C.2 If the answer is yes, what were the major challenges faced by the agency?	No prior experience with ADB projects; training may also be needed	Low

Question	Response	Risk
C.3 Is there a systematic process of identifying procurement requirements (for a period of 1 year or more)?	Yes, the technology development department proposes the requirements and work management, draws up the procurement plan, and works with the bidding agent.	Low
C.4 Is there a minimum period for the preparation of bids, and if yes, how long?	Yes. The department generally starts working 2 months in advance, reviewing qualifications, drawing up bidding documents, and so on.	Low
C.5 Are all queries from bidders replied to in writing?	Yes. All bidders receive a reply even if only one of them submits a written inquiry.	Low
C.6 Does the bidding document state the date and time of bid opening?	Yes	Low
C.7 Are bids opened in public?	Yes	Low
C.8 Can late bids be accepted?	No	Low
C.9 Can bids (except late bids) be rejected at bid opening?	Yes	Low
C.10 Are minutes of the bid opening taken?	Yes	Low
C.11 Are bidders provided with a copy of the minutes?	Yes	Low
C.12 Are the minutes provided free of charge?	Yes	Low
C.13 Who undertakes the evaluation of bids (individual/s, permanent committee, ad hoc committee)?	An ad hoc committee composed of 5–7 experts selected randomly from the bidding agent	Low
C.14 What are the qualifications of the evaluators with respect to procurement and the goods and/or works under evaluation?	For general goods, the lowest bid price will win. For higher technical goods, the highest composite score will win	Low
C.15 Is the decision of the evaluators final or is the evaluation subject to additional approval?	If there is no objection, the decision of the evaluators is final.	Low
C.16 Using the three "worst-case" examples in the last year, how long after the issuance of the invitation for bids can the contract be awarded?		
C.17 Are there processes in place for the collection and clearance of cargo through ports of entry?	Yes	Low
C.18 Are there established goods receiving procedures?	Yes	Low
C.19 Are all goods that are received recorded as assets or inventory in a register?	Yes	Low
C.20 Is the agency/procurement department familiar with letters of credit?	Yes	Low

Question	Response	Risk
C.21 Does the procurement department register and track warranty and latent defects liability periods?	Yes	Low
Consulting Services		
C.22 Has the agency undertaken foreign-assisted procurement of consulting services recently (last 12 months or last 36 months)? (If yes, please indicate the names of the development partner/s and the project/s.)	No	Moderate
C.23 If the above answer is yes, what were the major challenges?		Low
C.24 Are assignments and invitations for expressions of interest advertised?	Yes	Low
C.25 Is a consultants' selection committee formed with appropriate individuals, and what is its composition (if any)?	Yes. The selection committee is composed of experienced professionals from the appropriate sector.	Low
C.26 What criteria are used to evaluate EOIs?	It should meet the project needs.	Low
C.27 Historically, what is the most common method used (QCBS, QBS, etc.) to select consultants?	QCBS or CQ	Low
C.28 Do firms have to pay for the RFP document?	No	Low
C.29 Do the proposal evaluation criteria follow a predetermined structure and are they detailed in the RFP?	Yes	Low
C.30 Are pre-proposal visits and meetings arranged?	Yes	Low
C.31 Are minutes prepared and circulated after pre-proposal meetings?	Yes	Low
C.32 To whom are the minutes distributed?	To the ESCO and subproject companies	Low
C.33 Are all queries from consultants answered/addressed in writing?	Yes	Low
C.34 Are the technical and financial proposals required to be in separate envelopes and remain sealed until the technical evaluation is completed?	QCBS and QBC are sealed in different envelopes, but CQ is not.	Low
C.35 Are proposal sureties required?	No	Low
C.36 Are technical proposals opened in public?	No	Low
C.37 Are minutes of the technical opening distributed?	Yes. ADB can go over them in the appointed publication or on the website.	Low
C.38. Do the financial proposals remain sealed until technical evaluation is completed?	Yes	Low
C.39 Who determines the final technical ranking and how?	It is determined by experts on the committee.	Low
C.40 Are the technical scores sent to all firms?	Yes	Low
C.41 Are the financial proposals opened in public?	Yes	Low

Question	Response	Risk
C.42 Are minutes of the financial opening distributed?	Yes	Low
C.43 How is the financial evaluation completed?	The lowest price is awarded the full score, and others are scored according to a scale.	Low
C.44 Are face-to-face contract negotiations held?	Yes	Low
C.45 How long after financial evaluation are negotiations held with the selected firm?	Within 2 weeks	Low
C.46 What is the usual basis for negotiation?	Payment clause, tax, and transfer of deliverables	Low
C.47 Are minutes of the negotiations taken and signed?	No	Low
C.48 How long after negotiation is the contract signed, on average?	Within 2 weeks	Low
C.49 Is there an evaluation system for measuring the output of consultants?	Yes. Experts are invited to review the deliverables.	Low
Payments		
C.50 Are advance payments made?	Yes; 10%	Low
C.51 What is the standard period for payment included in contracts?	30 days	Low
C.52 On average, how long is it between receiving a firm's invoice and making payment?	A week	Low
C.53 When late payment is made, are the beneficiaries paid interest?	No	Low
D. EFFECTIVENESS		
D.1 Is contractual performance systematically monitored and reported?	Yes	Low
D.2 Does the agency monitor and track its contractual payment obligations?	Yes	Low
D.3 Is a complaints resolution mechanism described in national procurement documents?	Yes	Low
D.4 Is there a formal nonjudicial mechanism for dealing with complaints?	Yes	Low
D.5 Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiations, notices of default/withheld payment?	Yes	Low
E. ACCOUNTABILITY MEASURES	· · · · · · · · · · · · · · · · · · ·	
E.1 Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes	Low
E.2 Are those involved in procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes	Low
E.3 Is the commencement of procurement dependent on external approval (formal or de facto) outside the budgeting process?	No	Low

Question	Response	Risk
E.4 Who approv procurement transactions, and do they have procurement experience and qualifications?	General manager	Low
E.5 Which of the following actions require approval outside the procurement unit or the evaluation committee, as the case may be, and who grants the approval?		Low
i. Bidding document, invitation to prequalify, or RFP	CHC	Low
ii. Advertisement of invitation for bids, prequalification, or call for EOIs	СНС	Low
iii. Evaluation reports	CHC	Low
iv. Notice of award	CHC	Low
v. Invitation to consultants to negotiate	CHC	Low
vi. Contracts	CHC	Low
E.6 Is the same official responsible for (i) authorizing procurement transactions, procurement invitations, documents, evaluations, and contracts; (ii) authorizing payments; (iii) recording procurement transactions and events; and (iv) having custody of assets?	Yes	Low
E.7 Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes	Low

Dezhou Shihua Chemical

Question	Response	Risk
A. ORGANIZATIONAL AND STAFF CAPACITY		
PROCUREMENT DEPARTMENT/UNIT		
A.1 Does the agency or government have a procurement committee that is independent of the head of the agency?	Yes	Low
A.2 Does the agency have a procurement department/unit, including a permanent office that performs the function of a secretariat of the procurement committee?	Yes. DSC has a procurement department, and it can provide support to the procurement committee.	Low
A.3 If yes, what type of procurement does it undertake?	The department undertakes all types of procurement for major chemical sector projects and provides technical and policy support to subsidiary companies as needed.	Low
A.4 How many years' experience does the head of the procurement department/unit have in a direct procurement role?	More than 10 years	Low
A.5 How many staff in the procurement department/unit are:	6	Moderate
i. full time	3	
ii. part time	3	
iii. seconded	0	

Question	Response	Risk
A.6 Do the procurement staff have a high level of English language proficiency (oral and written)?	Normal level of proficiency	Moderate
A.7 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes, Expert from the procurement department of the ESCO with international procurement experience will provide assistance.	Low
A.8 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes	Low
A.9 Does the agency has, or have ready access to, a procurement training program?	Yes	Low
A.10 At what level does the department/unit report (to the head of agency, deputy, etc.)?	Procurement results are reported to the procurement committee and can be processed only with the approval of the committee.	Low
A.11 Do the procurement positions in the agency have job descriptions, which outline specific roles, minimum technical requirements, and career routes?	Yes. They have detailed job descriptions and career routes.	Low
A.12 Is there a procurement process manual for goods and works?	Yes	Low
A.13 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Yes. It is up to date and covers foreign-assisted projects.	Low
A.14 Is there a procurement process manual for consulting services?	Yes. There is a detailed procurement process manual for consulting services.	Low
A.15 If there is a manual, is it up to date and does it cover foreign-assisted projects?	It's not the latest version, but it covers foreign-assisted projects.	Low
PROJECT MANAGEMENT UNIT		
A.16 Is there a fully (or almost fully) staffed PMU for this project currently in place?	Yes	Low
A.17 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes	Low
A.18 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes	Low
A.19 Are there standard documents in use, such as standard procurement documents/forms, and have they been approved for use on ADB-funded projects?	Yes	Low

Question	Response	Risk
A.20 Does the agency follow the national procurement law, procurement processes, guidelines?	Yes	Low
A.21 Do TORs for consulting services follow a standard format such as background, tasks, input, objectives, and output?	Yes	Low
A.22 Who drafts the procurement specifications?	The procurement department and the bidding agent	Low
A.23 Who approves the procurement specifications?	The procurement committee	Low
A.24 Who in the PMU has experience in drafting bidding documents?	Sun Fengrui, director of the procurement department, has 20 years of experience	Low
A.25 Are records of the sale of bidding documents immediately available?	Yes	Low
A.26 Who identifies the need for consulting services requirements?	The agency and subsidiary companies	Low
A.27 Who drafts the terms of reference?	The procurement and engineering management department	Low
A.28 Who prepares the request for proposals?	The procurement and engineering management department	Low
B. INFORMATION MANAGEMENT		
B.1 Is there a referencing system for procurement files?	No, but it will be built later to meet work requirements.	Average
B.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?	The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support.	Average
B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)?	5 years	Low
B.4 Are copies of bids or proposals retained with the evaluation?		
B.5 Are copies of the original advertisements retained with the pre-contract papers?	Yes	Low
B.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?	Yes	Low
B.7 Are copies of invoices included with the contract papers?	Yes	Low
B.8 Is the agency's record-keeping function supported by IT?	Yes	
Question	Response	Risk

C. PROCUREMENT PRACTICES Goods and Works C.1 Has the agency undertaken procurement of goods or No. The ESCO is a new Low works related to foreign assistance recently (last 12 months or company, but its existing last 36 months)? If yes, indicate the names of the development staff came from CHC and partner/s and project/s. worked on the European Investment Bank project. C.2 If the answer is yes, what were the major challenges faced No prior experience with Low by the agency? ADB projects; training may also be needed C.3 Is there a systematic process of identifying procurement Yes. The technology Low requirements (for a period of 1 year or more)? development department proposes the requirements and work management, draws up the procurement plan, and works with the bidding agent. C.4 Is there a minimum period for the preparation of bids and if Yes. The department Low yes, how long? generally starts working 2 months in advance, reviewing gualifications, drawing up bidding documents, and so on. Yes. All bidders get a reply C.5 Are all queries from bidders replied to in writing? Low even if only one of them submits a written inquiry. C.6 Does the bidding document state the date and time of bid Yes Low opening? C.7 Are bids opened in public? Yes Low C.8 Can late bids be accepted? No Low C.9 Can bids (except late bids) be rejected at bid opening? Yes Low C.10 Are minutes of the bid opening taken? Yes Low C.11 Are bidders provided with a copy of the minutes? Yes Low C.12 Are the minutes provided free of charge? Yes Low C.13 Who undertakes the evaluation of bids (individual/s, An ad hoc committee Low permanent committee, ad hoc committee)? composed of 5-7 experts selected randomly from the bidding agent C.14 What are the qualifications of the evaluators with respect For general goods, the Low lowest bid price wins. For to procurement and the goods and/or works under evaluation? higher technical goods, the highest composite score wins.

Question	Response	Risk
C.15 Is the decision of the evaluators final or is the evaluation subject to additional approval?	If there is no objection, the decision of the evaluators is final.	Low
C.16 Using the three "worst-case" examples in the last year, how long after the issuance of the invitation for bids can the contract be awarded?		
C.17 Are there processes in place for the collection and clearance of cargo through ports of entry?	Yes	Low
C.18 Are there established goods receiving procedures?	Yes	Low
C.19 Are all goods that are received recorded as assets or inventory in a register?	Yes	Low
C.20 Is the agency/procurement department familiar with letters of credit?	Yes	Low
C.21 Does the procurement department register and track warranty and latent defects liability periods?	Yes	Low
Consulting Services		
C.22 Has the agency undertaken foreign-assisted procurement of consulting services recently (last 12 months, or last 36 months)? (If yes, please indicate the names of the development partner/s and the project/s.)	No	Moderate
C.23 If the above answer is yes, what were the major challenges?		Low
C.24 Are assignments and invitations for expressions of interest advertised?	Yes	Low
C.25 Is a consultants' selection committee formed with appropriate individuals, and what is its composition (if any)?	Yes. The selection committee is composed of experienced professionals from the appropriate sector.	Low
C.26 What criteria are used to evaluate EOIs?	It should meet the project needs.	Low
C.27 Historically, what is the most common method used (QCBS, QBS, etc.) to select consultants?	QCBS or CQ	Low
C.28 Do firms have to pay for the RFP document?	No	Low
C.29 Do the proposal evaluation criteria follow a predetermined structure and are they detailed in the RFP?	Yes	Low

Question	Response	Risk
C.30 Are pre-proposal visits and meetings arranged?	Yes	Low
C.31 Are minutes prepared and circulated after pre-proposal meetings?	Yes	Low
C.32 To whom are the minutes distributed?	To the ESCO and subproject companies	Low
C.33 Are all queries from consultants answered/addressed in writing?	Yes	Low
C.34 Are the technical and financial proposals required to be in separate envelopes and remain sealed until the technical evaluation is completed?	QCBS and QBC are sealed in different envelopes, but CQ is not.	Low
C.35 Are proposal sureties required?	No	Low
C.36 Are technical proposals opened in public?	No	Low
C.37 Are minutes of the technical opening distributed?	Yes. ADB can go over them in the appointed publication or on the website.	Low
C.38. Do the financial proposals remain sealed until technical evaluation is completed?	Yes	Low
C.39 Who determines the final technical ranking and how?	It is determined by the experts on the committee.	Low
C.40 Are the technical scores sent to all firms?	Yes	Low
C.41 Are the financial proposals opened in public?	Yes	Low
C.42 Are minutes of the financial opening distributed?	Yes	Low
C.43 How is the financial evaluation completed?	The lowest price is awarded the full score, and others are scored according to a scale.	Low
C.44 Are face-to-face contract negotiations held?	Yes	Low
C.45 How long after financial evaluation are negotiations held with the selected firm?	Within 2 weeks	Low
C.46 What is the usual basis for negotiation?	Payment clause, tax, and transfer of deliverables	Low
C.47 Are minutes of the negotiations taken and signed?	No	Low
C.48 How long after negotiation is the contract signed, on average?	Within 2 weeks	Low

Question	Response	Risk
C.49 Is there an evaluation system for measuring the output of consultants?	Yes. Experts are invited to review the deliverables.	Low
Payments		
C.50 Are advance payments made?	Yes; 10%	Low
C.51 What is the standard period for payment included in contracts?	30 days	Low
C.52 On average, how long is it between receiving a firm's invoice and making payment?	A week	Low
C.53 When late payment is made, are the beneficiaries paid interest?	No	Low
D. EFFECTIVENESS		
D.1 Is contractual performance systematically monitored and reported?	Yes	Low
D.2 Does the agency monitor and track its contractual payment obligations?	Yes	Low
D.3 Is a complaints resolution mechanism described in national procurement documents?	Yes	Low
D.4 Is there a formal nonjudicial mechanism for dealing with complaints?	Yes	Low
D.5 Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default/withheld payment?	Yes	Low
E. ACCOUNTABILITY MEASURES		
E.1 Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes	Low
E.2 Are those involved in procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes	Low
E.3 Is the commencement of procurement dependent on external approval (formal or de facto) outside the budgeting process?	No	Low
E.4 Who approve procurement transactions, and do they have procurement experience and qualifications?	General manager	Low
E.5 Which of the following actions require approval outside the procurement unit or the evaluation		Low

Question	Response	Risk
committee, as the case may be, and who grants the approval?		
i. Bidding document, invitation to prequalify, or RFP	СНС	Low
ii. Advertisement of invitation for bids, prequalification, or call for EOIs	СНС	Low
iii. Evaluation reports	CHC	Low
iv. Notice of award	СНС	Low
v. Invitation to consultants to negotiate	СНС	Low
vi. Contracts	CHC	Low
E.6 Is the same official responsible for (i) authorizing procurement transactions, procurement invitations, documents, evaluations and contracts; (ii) authorizing payments; (iii) recording procurement transactions and events; and (iv) having custody of assets?	Yes	Low
E.7 Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes	Low

Zhonghao Chenguang Research Institute of Chemical Industry

Question	Response	Risk
A. ORGANIZATIONAL AND STAFF CAPACITY		
PROCUREMENT DEPARTMENT/UNIT		
A.1 Does the agency or government have a procurement committee that is independent of the head of the agency?	Yes. CGY has an expert committee, which is independent of the head of the agency and takes charge of the procurement committee.	Low
A.2 Does the agency have a procurement department/unit, including a permanent office that performs the function of a secretariat of the procurement committee?	Yes. CGY has a procurement department, and it can provide support to the procurement committee.	Low
A.3 If yes, what type of procurement does it undertake?	The department undertakes all types of procurement for major chemical sector projects and provides technical and policy support to subsidiary companies as needed.	Low
A.4 How many years' experience does the head of the procurement department/unit have in a direct procurement role?	More than 10 years	Low

Question	Response	Risk	
A.5 How many staff in the procurement department/unit are:	6	Moderate	
i. full time	3		
ii. part time	3		
iii. seconded	0		
A.6 Do the procurement staff have a high level of English language proficiency (oral and written)?	Normal level of proficiency	Low	
A.7 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes. Experts from the procurement department of the ESCO with international procurement experience will provide assistance.	Low	
A.8 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes Low Yes Low Procurement results are Low		
A.9 Does the agency have, or have ready access to, a procurement training program?	Yes	Low	
A.10 At what level does the department/unit report (to the head of agency, deputy etc.)?	reported to the procurement committee and can be processed only with the approval of the committee.	Low	
A.11 Do the procurement positions in the agency have job descriptions, which outline specific roles, minimum technical requirements, and career routes?	Yes. They have detailed job descriptions and career routes.	Low	
A.12 Is there a procurement process manual for goods and works?	Yes		
A.13 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Yes, it is up to date and covers foreign-assisted projects.	Low	
A.14 Is there a procurement process manual for consulting services?	Yes, they have a detailed procurement process manual for consulting services.	Low	
A.15 If there is a manual, is it up to date and does it cover foreign-assisted projects?	Yes, it's not latest version, but it covers foreign-assisted projects.	Low	
PROJECT MANAGEMENT UNIT			
A.16 Is there a fully (or almost fully) staffed PMU for this project currently in place?	Yes	Low	
A.17 Are the number and qualifications of the staff sufficient to undertake the additional procurement that will be required under the proposed project?	Yes	Low	
A.18 Does the unit have adequate facilities, such as PCs, internet connection, photocopying facilities, printers, to undertake the planned procurement?	Yes	Low	

A19 Are there standard documents in use, such as standard procurement documents/forms, and have they been approved for use on ADB-funded projects? Yes Low A20 Does the agency follow the national procurement law, procurement processes, guidelines? Yes Low A21 Do TORs for consulting services follow a standard format such as background, tasks, input, objectives, and output? Yes Low A22 Who drafts the procurement specifications? The procurement department and the bidding agent and the solution agent and head of the procurement office, has 30 years of experience. Low A24 Who in the PMU has experience in drafting bidding documents? Tag Janguo, chief economist and head of the procurement office, has 30 years of experience. Low A25 Are records of the sale of bidding documents immediately available? Yes Low A27 Who drafts the records freference? The agency and subsidiary companies and head of the procurement and engineering management department Low A27 Who drafts the terms of reference? The procurement and engineering management department Low B. INFORMATION MANAGEMENT Seares on the agency and subsiding the procurement files? Low is optimizer for proposals? The procurement and engineering management department B. 1 Is there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B. 2 Are there ade	Question	Response	Risk
procurement processes, guidelines? Image: Comparison of the set	procurement documents/forms, and have they been approved	Yes	Low
such as background, tasks, input, objectives, and output? The procurement A.22 Who drafts the procurement specifications? The procurement department and the bidding agent Low A.23 Who approves the procurement specifications? The procurement and the bidding agent Low A.24 Who in the PMU has experience in drafting bidding documents? Tang Jianguo, chief experience. Low A.24 Who in the PMU has experience in drafting bidding documents? Tang Jianguo, chief experience. Low A.25 Are records of the sale of bidding documents immediately available? Yes Low A.26 Who identifies the need for consulting services The agency and subsidiary companies Low A.27 Who drafts the terms of reference? The procurement and engineering management department Low A.28 Who prepares the request for proposals? The procurement and engineering management department Low B. INFORMATION MANAGEMENT So but it will be built later to meet work requirements. Low Low B.1 Is there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B.2 Are there adequate resources allocated for record-keeping agent will also provide agency? Sears Low B.3 Does the agency adhere to a document retention policy (i.e., for what period are re		Yes	Low
department and the bidding agent Implement A.23 Who approves the procurement specifications? The procurement committee Low A.24 Who in the PMU has experience in drafting bidding documents? Tang Jianguo, chief economist and head of the procurement office, has 30 years of experience. Low A.25 Are records of the sale of bidding documents immediately available? Yes Low A.26 Who identifies the need for consulting services subsidiary companies The agency and subsidiary companies Low A.26 Who drafts the terms of reference? The procurement and engineering management department Low A.28 Who prepares the request for proposals? The procurement and engineering management department Low B. INFORMATION MANAGEMENT No, but it will be built later to meet work requirements. Low B.1 Is there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B.2 Are there adequate resources allocated for record-keeping procurement department and is optimizing the function. The bidding agency? Low B.3 Does the agency adhere to a document retention policy (i.e., for what period are records keeping?) 5 years Low B.4 Are copies of bids or proposals retained with the evaluation? S years Low B.5 Are copies of the original advertisements retained with the pre-contract papers? Yes Low B.6 Is there a single contract file		Yes	Low
A.24 Who in the PMU has experience in drafting bidding documents?committeeA.24 Who in the PMU has experience in drafting bidding documents?Tang Jianguo, chief econmist and head of the procurement office, has 30 years of experience.LowA.25 Are records of the sale of bidding documents immediately available?YesLowA.26 Who identifies the need for consulting services requirements?The agency and subsidiary companiesLowA.27 Who drafts the terms of reference?The procurement and engineering management departmentLowA.28 Who prepares the request for proposals?The procurement and engineering management departmentLowB. INFORMATION MANAGEMENTInstructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?No, but it will be built later function. The bidding agert will also provide technical support.LowB.3 Does the agency adhere to a document retention policy (i.e., for what period are records kepi?)?5 yearsLowB.4 Are copies of bids or proposals retained with the evaluation?YesLowB.5 Are copies of the original advertisements retained with the ere-contract papers?YesLowB.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.6 Is the agency's record-keeping function supported by IT?YesLowB.7 Are copies of invoices included with the contract pap	A.22 Who drafts the procurement specifications?	department and the	Low
documents? economist and head of the procurement office, has 30 years of experience. A.25 Are records of the sale of bidding documents immediately available? Yes Low A.26 Who identifies the need for consulting services requirements? The agency and subsidiary companies Low A.27 Who drafts the terms of reference? The procurement and engineering management department Low A.28 Who prepares the request for proposals? The procurement and engineering management department Low B. INFORMATION MANAGEMENT No, but it will be built later to meet work requirements. Low B.1 Is there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B.2 Are there adequate resources allocated for record-keeping procurement records keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency? The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support. Low B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)? 5 years Low B.5 Are copies of bids or proposals retained with the evaluation? Yes Low B.5 Are copies of invoices included with the contract papers? Yes Low B.6 Is there a single contract file with a cop	A.23 Who approves the procurement specifications?		Low
available? The agency and subsidiary companies A.27 Who drafts the terms of reference? The procurement and engineering management department A.28 Who prepares the request for proposals? The procurement and engineering management department B. INFORMATION MANAGEMENT Low B. INFORMATION MANAGEMENT No, but it will be built later to meet work requirements. Low B. 2 Are there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B. 2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency? The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support. Low B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)? 5 years Low B.5 Are copies of bids or proposals retained with the evaluation? Yes Low B.5 Are copies of the original advertisements retained with the pre-contract papers? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.8 Is the agency's record-keeping function supp		economist and head of the procurement office, has 30 years of	Low
requirements? subsidiary companies A.27 Who drafts the terms of reference? The procurement and engineering management department Low A.28 Who prepares the request for proposals? The procurement and engineering management department Low B. INFORMATION MANAGEMENT The procurement and engineering management department Low B.1 Is there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency? No, but it will also provide technical support. Low B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)? 5 years Low B.4 Are copies of bids or proposals retained with the evaluation? Yes Low B.5 Are copies of the original advertisements retained with the pre-contract papers? Yes Low B.6 Is there a single contract file with a copy of the contract and all subsequent contract and all subsequent contract with the contract papers? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low	available?	Yes	Low
engineering management departmentA.28 Who prepares the request for proposals?The procurement and engineering management departmentLowB. INFORMATION MANAGEMENTEB.1 Is there a referencing system for procurement files?No, but it will be built later to meet work requirements.LowB.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support.LowB.3 Does the agency adhere to a document retention policy (i.e., for what period are records keept)?5 yearsLowB.4 Are copies of bids or proposals retained with the evaluation?YesLowB.5 Is there a single contract file with a copy of the contract and al subsequent contractual correspondence?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.8 Is the agency's record-keeping function supported by IT?YesLow	requirements?		Low
A.28 Who prepares the request for proposals? The procurement and engineering management department Low B. INFORMATION MANAGEMENT Edited and the procurement files? No, but it will be built later to meet work requirements. Low B.1 Is there a referencing system for procurement files? No, but it will be built later to meet work requirements. Low B.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency? The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support. Low B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)? 5 years Low B.5 Are copies of the original advertisements retained with the evaluation? Yes Low B.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.8 Is the agency's record-keeping function supported by IT? Yes Low <td>A.27 Who drafts the terms of reference?</td> <td>engineering management</td> <td>Low</td>	A.27 Who drafts the terms of reference?	engineering management	Low
B.1 Is there a referencing system for procurement files?No, but it will be built later to meet work requirements.LowB.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support.LowB.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)?5 yearsLowB.4 Are copies of bids or proposals retained with the pre-contract papers?YesLowB.5 Are copies of the original advertisements retained with the pre-contract papers?YesLowB.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.8 Is the agency's record-keeping function supported by IT?YesLow	A.28 Who prepares the request for proposals?	The procurement and engineering management	Low
to meet work requirements.B.2 Are there adequate resources allocated for record-keeping infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?The ESCO has its own procurement department and is optimizing the function. The bidding agent will also provide technical support.LowB.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)?5 yearsLowB.4 Are copies of bids or proposals retained with the evaluation?YesLowB.5 Are copies of the original advertisements retained with the pre-contract papers?YesLowB.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.8 Is the agency's record-keeping function supported by IT?YesLowC. PROCUREMENT PRACTICESVesLow	B. INFORMATION MANAGEMENT		
infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the agency?procurement department and is optimizing the function. The bidding agent will also provide technical support.B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)?5 yearsLowB.4 Are copies of bids or proposals retained with the evaluation?5 yearsLowB.5 Are copies of the original advertisements retained with the pre-contract papers?YesLowB.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.8 Is the agency's record-keeping function supported by IT?YesLowC. PROCUREMENT PRACTICESVesYes	B.1 Is there a referencing system for procurement files?	to meet work	Low
B.3 Does the agency adhere to a document retention policy (i.e., for what period are records kept)? 5 years Low B.4 Are copies of bids or proposals retained with the evaluation? 5 years Low B.5 Are copies of the original advertisements retained with the pre-contract papers? Yes Low B.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence? Yes Low B.7 Are copies of invoices included with the contract papers? Yes Low B.8 Is the agency's record-keeping function supported by IT? Yes Low C. PROCUREMENT PRACTICES Ves Low	infrastructure, including the record-keeping system, equipment, space, and personnel to administer the procurement records management functions within the	procurement department and is optimizing the function. The bidding agent will also provide	Low
evaluation?Image: constraint of the original advertisements retained with the pre-contract papers?YesLowB.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?YesLowB.7 Are copies of invoices included with the contract papers?YesLowB.8 Is the agency's record-keeping function supported by IT?YesLowYesC. PROCUREMENT PRACTICES		· · · · ·	Low
pre-contract papers?YesB.6 Is there a single contract file with a copy of the contract and all subsequent contractual correspondence?YesB.7 Are copies of invoices included with the contract papers?YesB.8 Is the agency's record-keeping function supported by IT?YesC. PROCUREMENT PRACTICES			
and all subsequent contractual correspondence? Image: C. PROCUREMENT PRACTICES B.8 Is the agency's record-keeping function supported by IT? Yes C. PROCUREMENT PRACTICES Image: Contract processing function supported by IT?		Yes	Low
B.8 Is the agency's record-keeping function supported by IT? Yes C. PROCUREMENT PRACTICES		Yes	Low
C. PROCUREMENT PRACTICES	B.7 Are copies of invoices included with the contract papers?	Yes	Low
	B.8 Is the agency's record-keeping function supported by IT?	Yes	
Goods and Works	C. PROCUREMENT PRACTICES		
	Goods and Works		

Question	Response	Risk
C.1 Has the agency undertaken procurement of goods or works related to foreign assistance recently (last 12 months or last 36 months)? If yes, indicate the names of the development partner/s and project/s.	No, The ESCO is a new company, but its existing staff came from CHC and worked on the European Investment Bank project.	Low
C.2 If the answer is yes, what were the major challenges faced by the agency?	No prior experience with ADB projects; training may also be needed	Low
C.3 Is there a systematic process to identify procurement requirements (for a period of 1 year or more)?	Yes. The technology development department proposes the requirements and work management, draws up the procurement plan, and works with the bidding agent.	Low
C.4 Is there a minimum period for the preparation of bids and if yes, how long?	Yes. The department generally starts working 2 months in advance, reviewing qualifications, drawing up bidding documents, and so on.	Low
C.5 Are all queries from bidders replied to in writing?	Yes. All bidders get a reply even if only one of them submits a written inquiry.	Low
C.6 Does the bidding document state the date and time of bid opening?	Yes	Low
C.7 Are bids opened in public?	Yes	Low
C.8 Can late bids be accepted?	No	Low
C.9 Can bids (except late bids) be rejected at bid opening?	Yes	Low
C.10 Are minutes of the bid opening taken?	Yes	Low
C.11 Are bidders provided with a copy of the minutes?	Yes	Low
C.12 Are the minutes provided free of charge?	Yes	Low
C.13 Who undertakes the evaluation of bids (individual/s, permanent committee, ad hoc committee)?	An ad hoc committee composed of 5–7 experts selected randomly from the bidding agent	Low
C.14 What are the qualifications of the evaluators with respect to procurement and the goods and/or works under evaluation?	For general goods, the lowest bid price wins. For higher technical goods, the highest composite score wins.	Low
C.15 Is the decision of the evaluators final or is the evaluation subject to additional approval?	If there is no objection, the decision of the evaluators is final.	Low
C.16 Using the three "worst-case" examples in the last year, how long from the issuance of the invitation for bids can the contract be awarded?		

Question	Response	Risk
C.17 Are there processes in place for the collection and clearance of cargo through ports of entry?	Yes	Low
C.18 Are there established goods receiving procedures?	Yes	
C.19 Are all goods that are received recorded as assets or inventory in a register?	Yes	
C.20 Is the agency/procurement department familiar with letters of credit?	Yes	
C.21 Does the procurement department register and track warranty and latent defects liability periods?	Yes	
Consulting Services		
C.22 Has the agency undertaken foreign-assisted procurement of consulting services recently (last 12 months or last 36 months)? (If yes, please indicate the names of the development partner/s and the project/s.)	No	Low
C.23 If the above answer is yes, what were the major challenges?		Low
C.24 Are assignments and invitations for expressions of interest advertised?	Yes	Low
C.25 Is a consultants' selection committee formed with appropriate individuals, and what is its composition (if any)?	Yes. The selection committee is composed of experienced professionals from the appropriate sector.	Low
C.26 What criteria are used to evaluate EOIs?	It should meet the project needs.	Low
C.27 Historically, what is the most common method used (QCBS, QBS, etc.) to select consultants?	QCBS or CQ	Low
C.28 Do firms have to pay for the RFP document?	No	Low
C.29 Do the proposal evaluation criteria follow a predetermined structure and are they detailed in the RFP?	Yes	Low
C.30 Are pre-proposal visits and meetings arranged?	Yes	Low
C.31 Are minutes prepared and circulated after pre-proposal meetings?	Yes	Low
C.32 To whom are the minutes distributed?	To the ESCO and subproject companies	Low
C.33 Are all queries from consultants answered/addressed in writing?	Yes	Low
C.34 Are the technical and financial proposals required to be in separate envelopes and remain sealed until the technical evaluation is completed?	QCBS and QBC are sealed in different envelopes, but CQ is not.	Low
C.35 Are proposal sureties required?	No	Low
C.36 Are technical proposals opened in public?	No	Low
C.37 Are minutes of the technical opening distributed?	Yes. ADB can go over them in the appointed publication or on the website.	Low

Question	Response	Risk
C.38. Do the financial proposals remain sealed until technical evaluation is completed?	Yes	Low
C.39 Who determines the final technical ranking and how?	It will be determined by the experts on the committee.	Low
C.40 Are the technical scores sent to all firms?	Yes	Low
C.41 Are the financial proposals opened in public?	Yes	Low
C.42 Are minutes of the financial opening distributed?	Yes	Low
C.43 How is the financial evaluation completed?	The lowest price is awarded the full score, and others are scored according to a scale.	Low
C.44 Are face-to-face contract negotiations held?	Yes	Low
C.45 How long after financial evaluation are negotiations held with the selected firm?	Within 2 weeks	Low
C.46 What is the usual basis for negotiation?	Payment clause, tax, and transfer of deliverables	Low
C.47 Are minutes of the negotiations taken and signed?	No	Low
C.48 How long after negotiation is the contract signed, on average?	Within 2 weeks	Low
C.49 Is there an evaluation system for measuring the output of consultants?	Yes. Experts are invited to review the eliverables.	Low
Payments		
C.50 Are advance payments made?	Yes; 10%	Low
C.51 What is the standard period for payment included in contracts?	30 days	Low
C.52 On average, how long is it between receiving a firm's invoice and making payment?	a week	Low
C.53 When late payment is made, are the beneficiaries paid interest?	No	Low
D. EFFECTIVENESS		
D.1 Is contractual performance systematically monitored and reported?	Yes	Low
D.2 Does the agency monitor and track its contractual payment obligations?	Yes	Low
D.3 Is a complaints resolution mechanism described in national procurement documents?	Yes	Low
D.4 Is there a formal nonjudicial mechanism for dealing with complaints?	Yes	Low
D.5 Are procurement decisions and disputes supported by written narratives such as minutes of evaluation, minutes of negotiation, notices of default/withheld payment?	Yes	Low

Question	Response	Risk
E. ACCOUNTABILITY MEASURES		
E.1 Is there a standard statement of ethics and are those involved in procurement required to formally commit to it?	Yes	Low
E.2 Are those involved in procurement required to declare any potential conflict of interest and remove themselves from the procurement process?	Yes	Low
E.3 Is the commencement of procurement dependent on external approval (formal or de facto) outside the budgeting process?	No	Low
E.4 Who approve procurement transactions, and do they have procurement experience and qualifications?	General manager	Low
E.5 Which of the following actions require approval outside the procurement unit or the evaluation committee, as the case may be, and who grants the approval?		Low
i. Bidding document, invitation to prequalify, or RFP	СНС	Low
ii. Advertisement of invitation for bids, prequalification, or call for EOIs	СНС	Low
iii. Evaluation reports	СНС	Low
iv. Notice of award	СНС	Low
v. Invitation to consultants to negotiate	СНС	Low
vi. Contracts	СНС	Low
E.6 Is the same official responsible for (i) authorizing procurement transactions, procurement invitations, documents, evaluations and contracts; (ii) authorizing payments; (iii) recording procurement transactions and events; and (iv) having custody of assets?	Yes	Low
E.7 Is there a written auditable trail of procurement decisions attributable to individuals and committees?	Yes	Low

PROCUREMENT PLAN

Basic Data						
Project Name: Chemical Industry Energy Efficiency and Emi	ssion Reduction Project					
Project Number: 47051-002	Approval Number: xxxx					
Country: People's Republic of China	Executing Agency: China National Chemical					
	Corporation					
Project Procurement Classification: B	Implementing Agency: China Haohua Chemical					
Procurement Risk: Moderate	Group					
Project Financing Amount: \$ 245.01 million	Project Closing Date: 31 August 2021					
ADB Financing: \$100.00 million						
Non-ADB Financing: \$145.01 million						
Date of First Procurement Plan: 22 March 2015	Date of This Procurement Plan: 8 Sept 2015					

A. Procurement Methods and Thresholds, and 18-Month Procurement Plan

1. Procurement Methods and Thresholds

1. Except as the Asian Development Bank (ADB) may otherwise agree to in writing, the following process thresholds shall apply to the procurement of goods and works.

	i loculement methods and	THE SHOLDS				
Method	Threshold	ADB Prior or Post Review ¹				
ICB for goods	\$10,000,000 or above	Prior review by ADB (EAEN, OSFMD, OGC)				
Domestic procedure (DP) for	Below that stated for ICB,	Acceptability check by EAEN during				
goods	goods	loan review mission				
ADB = Asian Development Bank, EAEN = Energy Division, East Asia Department, ICB = international competitive bidding, OGC =						

Table 1: Procurement Methods and Thresholds

ADB = Asian Development Bank, EAEN = Energy Division, East Asia Department, ICB = international competitive bidding, OGC = Office of the General Counsel, OSFMD = Operations Services and Financial Management Division.

¹ The first contract package for goods and works is subject to prior review by ADB. The subsequent international and national competitive bidding procurement documents can be reviewed before or after approval.

Table 2: Method of Procurement of Consulting Services

Method	Comments
Selection based on consultants' qualifications	Subject to prior review

2. 8-Month Procurement Plan (as of 16 May 2015)

2. **Goods and works contracts costing \$1 million or more.** Table 3 below lists goods and works contracts for which the procurement activity is either ongoing or expected to start within the next 18 months.

Table 3: Goods and Works Contracts Costing \$1 Million or More

Package Number	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
1D (master doc.)	Fixed-bed reactor for VCM phase 1	5,384,000	DP		1S1E	Q2 2015	Goods
2D	Polymerization unit for PVC	8,616,000	DP		1S1E	Q2 2015	Goods
3D	Specific towers for VCM phase 1 / PVC	3,910,000	DP		1S1E	Q3 2015	Goods

Package Number	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
4D	Centrifugal separator for PVC unit	2,154,000	DP		1S1E	Q3 2015	Goods
5D	Towers for VCM phase 1	34,262,000	ICB	Prior	1S1E	Q4 2015	Goods
6D	PVC drying system	1,023,000	DP		1S1E	Q4 2015	Goods
7D	Compressor unit for VCM phase 1	1,292,000	DP		1S1E	Q1 2016	Goods
8D	VCM phase 1 Chemical reaction gas purification unit	1,122,000	DP		1S1E	Q1 2016	Goods
9D	Piping installation for VCM phase 1	9,270,000	DP		1S1E	Q1 2016	Goods
10D	Piping installation for PVC	7,009,000	DP		1S1E	Q2 2016	Goods
11D	Instrument control for VCM phase 1	1,522,000	DP		1S1E	Q1 2016	Works
12D	Instrument control for PVC	1,480,000	DP		1S1E	Q2 2016	Works
1C (master doc.)	Plasma incinerator	3,958,000	DP		1S1E	Q2 2015	Goods
2C	Fluorubber (FKM) drying system	3,269,000	DP		1S1E	Q4 2015	Goods
3C	Drying system for polytetrafluoro- ethylene (PTFE)	7,468,000	DP		1S1E	Q4 2015	Goods
4C	Lot 1: Instrument control Lot 2: Energy	531,000 2,055,000	DP		1S1E	Q4 2015	Goods
	management						
5C	Ventilation system for production lines	1,588,000	DP		1S1E	Q4 2015	Goods

1S1E = single-stage, one-envelope procedure; DC = direct contracting; DP = domestic procedure; ICB = international competitive bidding, PVC = polyvinyl chloride, VCM = vinylchloride monomer.

3. **Consulting services contracts costing \$100,000 or more.** Table 4 below lists consulting services contracts for which the recruitment activity is either ongoing or expected to begin within the next 18 months.

		Estimated		Review	Advertisement		
Package	General	Value	Recruitment	(Prior/	Date	Type of	
Number	Description	(\$)	Method	Post)	(Quarter/Year)	Proposal	Comment
1	Building of capacity to implement energy- saving measures in the chemical industry (study tour)	300,000	Domestic	Prior	Q3 2015	BTP and CQS	2 person- months

BTP = biodata technical proposal, CQS = consultants' qualification selection.

4. Goods and works contracts costing less than \$1 million and consulting services contracts costing less than \$100,000 (smaller-value contracts). Table 5 below groups together smaller-value contracts for goods, works, and consulting services for which the activity is either ongoing or expected to begin within the next 18 months.

Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Bidding Procedure	Advertise ment Date (Quarter/ Year)	Comments
13D	Heat exchangers VCM phase 1	934,000	1	DP	1S1E	Q1 2016	Goods
14D	Tanks for VCM phase 1/ PVC	662,000	1	DP	1S1E	Q1 2016	Goods
15D	Standard pumps for VCM phase 1	94,000	1	DP	1S1E	Q1 2016	Goods
16D	Compressor for VCM phase 1	264,000	1	DP	1S1E	Q1 2016	Goods
17D	Gas recycling fans for VCM phase 1	18,000	1	DP	1S1E	Q1 2016	Goods
18D	EDC pumps for VCM phase 1/ PVC	984,000	1	DP	1S1E	Q1 2016	Goods
6C	Nitrogen– oxygen station modification	365,000	1	DP	1S1E	Q3 2015	Goods
7C	Vinylidene fluoride (VDF) cracking furnace Electric motor	37,000 429,000	1	DP	1S1E	Q4 2015	Goods

Table 5: Goods and Works Contracts Costing Less than \$1 Million

1S1E = single-stage, one-envelope procedure, PVC = polyvinyl chloride, VCM = vinylchloride monomer.

B. Indicative List of Packages Required under the Project

5. Tables 6 and 7 provide an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (those expected beyond the 18-month period).

Table 6: Indicative List of Good and Works Packages Required under the Project

Package Number	General Description	Estimated Value (Cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior / Post/Post [Sample])	Bidding Procedure	Comments	

Table 7: Indicative List of Consulting Services Packages Required under the Project

Package Number	General Description	Estimated Value (Cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal	Comments

54 Appendiix 4

C. Awarded and Ongoing, and Completed Contracts

6. Tables 8 and 9 list the awarded and ongoing contracts, and completed contracts.

Table 8: Awarded and Ongoing Goods and Works Contracts

Package	General	Estimated	Awarded	Procurement	Advertise-	Date of	Comments
Number	Description	Value	Contract	Method	ment	ADB	
	-		Value		Date	Approval of	
					(Quarter/	Contract	
					Year)	Award	

Table 9: Completed Goods and Works Contracts

				·	Advertisement	Date of ADB Approval of		
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Date (Quarter/ Year)	Contract Award	Date of Completion	Comments

D. Non-ADB Financing

7. Tables 10 and 11 list goods, works and consulting services contracts over the life of the project, financed from sources other than ADB.

Table 10: Goods and Works Contracts (Not Financed by ADB)

Package Number	General Description	Estimated Value	Estimated Number of Contracts	Procurement Method	Comments
N1D	Reactor fabrication according to technical specifications and drawings provided	5,385,000	1	DP	Domestic bank
N2D	Fabrication of different towers (acetylene drying, product recycling, ethylene dichloride [EDC] dehydration, etc.) according to technical specifications and drawings provided	22,580,000	1	DP	Domestic bank
N3D	Fabrication of different heat exchangers according to technical specifications and drawings provided	625,000	1	DP	Domestic bank
N4D	Fabrication of different tanks according to technical specifications and drawings provided	154,000	1	DP	Domestic bank
N5D	Fabrication of compressors	94,000	1	DP	Domestic bank
N6D	Fabrication of compressors for gas	172,000	1	DP	Domestic bank

Package Number	General Description	Estimated Value	Estimated Number of Contracts	Procurement Method	Comments
	recycling				
N7D	Fabrication of recycling fans according to technical specifications and drawings provided	18,000	1	DP	Domestic bank
N8D	Supply of different pumps	224,000	1	DP	Domestic bank
N9D	Supply and installation of piping, and operation and control equipment, for VCM unit phase 2	5,470,000	1	DP	Domestic bank
N10D	Operation and control equipment for PVC and VCM phase1 unit	15,252,000	1	DP	Domestic bank
N11D	Installation of electric meter	5,380,000	1	DP	Domestic bank
N12D	VCM phase 1 and PVC: construction cost	7,256,000	1	DP	Domestic bank
N13D	VCM phase 2: Construction cost	7,854,000	1	DP	Domestic bank
N14D	Technical support and VCM implementation	10,484,000	1	DP	Equity
N1C	Civil engineering for water supply and sewerage works	3,098,000	1	DP	Domestic bank
N2C	Civil engineering for energy management center	2,404,000	1	DP	Domestic bank
N3C	Pipeline	274,000	1	DP	Domestic bank
N4C	Electrical engineering	1,799,000	1	DP	Domestic bank
N5C	Construction unit management fees, etc.	2,508,000	1	DP	Domestic bank
N6C	Recycling system equipment	755,000	1	DP	Equity
N7C	Civil engineering and electrical and communications engineering	840,000	1	DP	Domestic bank
N8C	Supply of variable frequency drives for existing pumps	240,000	1	DP	Domestic bank
N9C	Supply and installation of instrument control	100,000	1	DP	Domestic bank

DP = domestic procedure, PVC = polyvinyl chloride, VCM = vinylchloride monomer.

Consulting Servi	Consulting Services									
General Description	Lot Number	Estimated Value (Cumulative)	Estimated Number of Contracts	Recruitment Method	Comments					
Project management and consulting services	9	13,375,000	9	DP	Equity					
Survey and design		1,638,000		DP	Equity					

SL No.	Risk	Impact ^a	Likelihood ^b	Strategy ^c
A6, A7, A9, A16, A17, A23, C1, C2, C14, C22, C23	Procurement department or project management unit (PMU) has insufficiently qualified staff to efficiently undertake the procurement required to implement the project.	High	["Unlikely" if PMU is already established, and the procurement dept. or the PMU has adequate qualified staff and access to a public procurement capacity development or professionalization program]	
A19, A20	The agency uses practices inconsistent with national procurement law or bidding documents unsuitable for ADB-funded procurement.	High	["Unlikely" if the agency follows the national procurement law, procurement processes, guidelines, and bidding documents]	
B2, B3	Record keeping is inadequate to enable internal or external audit of procurement processes.	High	["Unlikely" if the agency has adequate record-keeping infrastructure and a robust document retention policy]	
A25, C4– C12, C24– C44, C47, D5, E7	Agency does not promote nondiscriminatory participation and transparent tender processes (including advertisement, tender documentation, tender evaluation, complaints mechanism).	High	["Unlikely" if the agency uses nondiscriminatory, transparent tender processes]	

PROJECT PROCUREMENT RISK ANALYSIS

^a Any risk that may result in actions inconsistent with ADB's Procurement Guidelines or Guidelines on the Use of Consultants is assessed as "High."
 ^b "Likely" or "Unlikely" to occur during the project, given the response to the question in Appendix 2 and the guidance

note in the column. ^c "Mitigate" (either through the procurement plan, including the national competitive bidding annex, or through

measures indicated in Appendix 5), "Monitor," or "Avoid."