

PROGRAM FIDUCIARY SYSTEMS ASSESSMENT

1. The Henan Provincial Government initiated the Cleaner Fuel Switch Investment Program (2018–2030), which aims to establish a county-based distributed gas supply that will reach 4.5 million customers in 80 less developed, and geographically scattered counties, and thereby accelerate a switch from coal to natural gas and biogas for industrial, commercial, and household energy use. The program has reached 308,557 customers in 11 counties since June 2018. The Cleaner Fuel Switch Investment Program covers a 12-year period under the medium- and long-term energy development plan (2012–2030) of Henan Province,¹ within the greater Beijing–Tianjin–Hebei (BTH) region.² The program is being implemented in a phased manner, and the proposed results-based lending (RBL) program supports activities at the initial stage of the Cleaner Fuel Switch Investment Program to help achieve the goal of the overall program by 2030.
2. The executing agency is the Henan Provincial Government, which will have overall responsibility for the program. Zhongyuan Yuzi Investment Holding Group (ZYIG), which is a provincial state-owned enterprise (SOE), is the implementing agency, and is responsible for implementing and monitoring the activities in the program through Henan Yu-Tian New Energy Co. Ltd. (YTNE), a joint venture project company established by ZYIG (which has a 60% stake) and China Tian Lun Gas Co. Ltd. (CTLG), a private natural gas supplier (which has a 40% stake). A program coordination committee (composed of ZYIG, YTNE, and provincial government agencies) will be established to oversee program implementation and provide strategic guidance and direction.
3. ZYIG is the implementing agency for the RBL program. It is fully owned by Henan Provincial Finance Department (HPFB), and its board chairman is appointed by the provincial government. ZYIG has a registered capital of CNY10 billion and 50 subsidiaries in the province. ZYIG is mandated by the provincial government to finance and manage assets for urban and rural development. YTNE is the special purpose vehicle jointly established by ZYIG and CTLG to implement the overall Cleaner Fuel Switch Investment Program, including the proposed RBL program, and is responsible for day-to-day program implementation under ZYIG. YTNE was incorporated in 2018 with CNY100 million of registered capital. Its core business includes natural gas supply, energy technology development and operation, and research and development of cleaner fuel in townships and villages. CTLG is a private natural gas supplier in the PRC and a listed company in the Hongkong Stock Exchange. It has 89 natural gas projects in 17 provinces in the PRC.
4. The fiduciary system assessment was conducted in accordance with the ADB’s staff guidance to determine the degree to which the system, procedures, regulations for financial management, procurement, and anticorruption will provide reasonable assurance that the program financing will be used for the intended purposes with due consideration for economy and efficiency.³ Mitigation measures for identified major risks in the fiduciary assessment are to be implemented either as disbursement linked indicators or through the program action plan (PAP),⁴ which is to be monitored by the independent verification agent (IVA).

¹ Government of Henan Province. 2012. *Medium- and Long-Term Energy Development Plan (2012–2030)*. Zhengzhou.

² The greater BTH region includes Beijing and Tianjin Municipalities; Hebei, Henan, Liaoning, Shandong, and Shanxi provinces; and the Inner Mongolia Autonomous Region.

³ ADB. 2013. *Staff Guidance for Piloting Results-Based Lending for Programs*. Manila.

⁴ Program Action Plan (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

A. Information Sources

5. The assessment was undertaken from April to July 2019. It includes reviews of financial management, procurement, and anti-corruption mechanisms; regulations; governance structure; management information system; and practices in ZYIG and YTNE. The assessment was based on answers to questionnaires regarding financial management assessments and procurement assessments, audited financial statements, and interviews with key staff in ZYIG and YTNE.

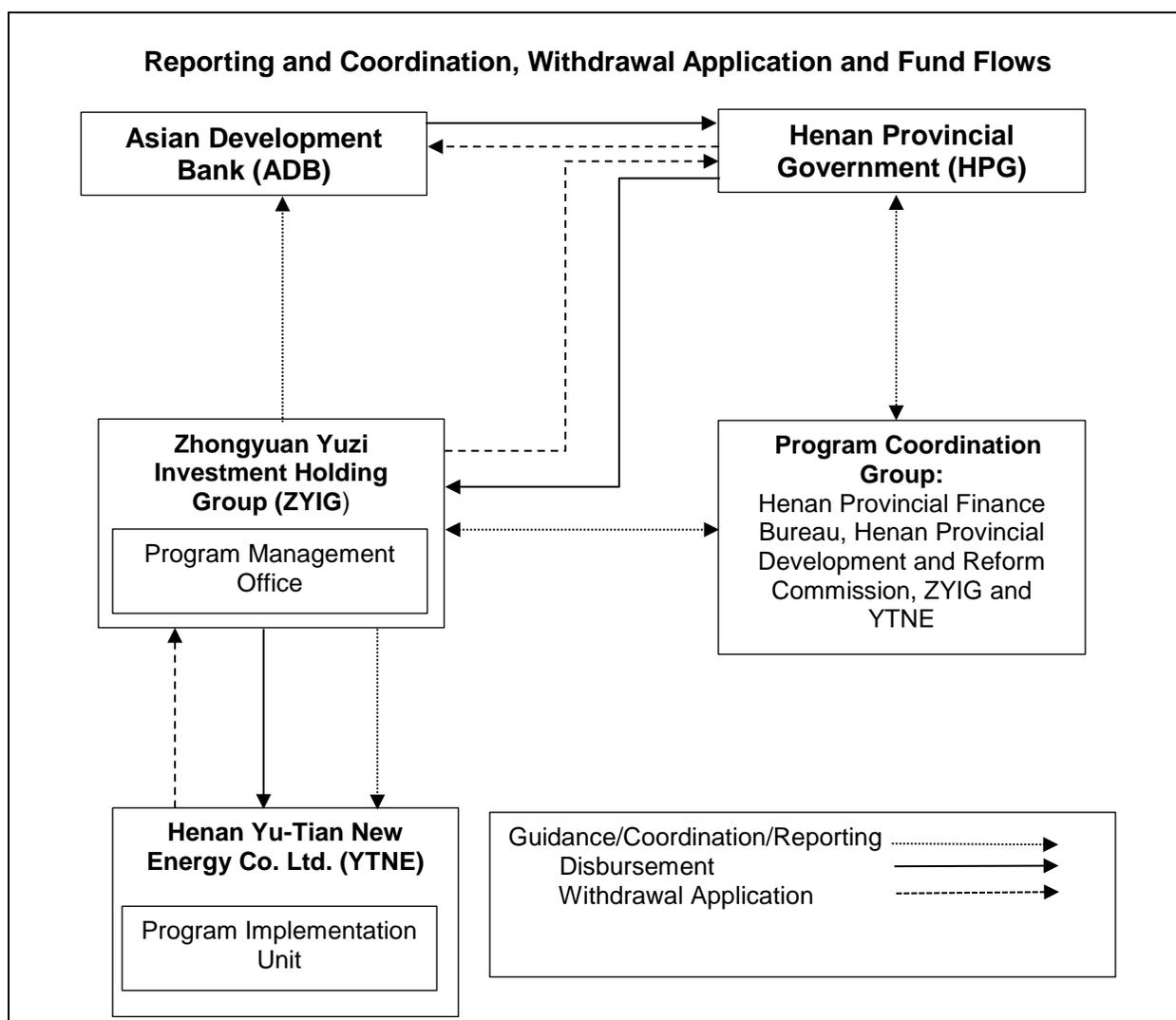
B. Financial Management System

6. **Financial management rules and regulation.** ZYIG is a provincial SOE fully owned by HPFB, and YTNE is directly controlled by ZYIG; therefore, the financial management rules and regulations of the Government of the People's Republic of China (PRC) apply to both entities. ZYIG and YTNE adopt accrual-based accounting and follow business accounting standards aligned with the International Accounting Standards. ZYIG developed comprehensive financial management guidelines and procedures to manage its revenues, budget, expenses, cash, and assets; these are commonly adopted by SOEs and are under strict supervision of HPFB. ZYIG also adopts asset management regulation that includes risk-based asset classification and loan loss provision for credit risk management. However, regulation of foreign exchange rate risk is not yet in place for foreign currency-denominated debt and losses from unfavorable foreign exchange movements could affect ZYIG's financial strength and the financial viability of the RBL program. Establishing a foreign exchange fluctuations risk reserve to mitigate foreign currency debt by 2020, is included in the PAP.

7. **Budgeting and planning, and information system.** ZYIG has clearly defined planning and budgeting procedures for operation and investment, so that it can carry out strict cash flow matching to meet its business demand. The board of directors makes final decisions regarding planning and cash budget management. The Strategic Planning Department is responsible for planning; the annual work plan, based on the 3-year rolling development plan, guide the group's budgeting for fund raising, operations, and capital expenditures. Both plans are reviewed by senior management and approved by the board of directors. The financial management department is responsible for overall budget consolidation and associated coordination with the budget units of ZYIG's relevant departments. The annual budget plan becomes effective following management review and approval by the board of directors. Each relevant department's budget unit prepares its own monthly funding plan in accordance with the approved company-wide annual budget plan. Implementation progress is monitored and reported to the management team by the financial management department. Any monthly discrepancies within the annual budget plan are submitted to the general manager for approval, while monthly discrepancies that exceed the annual budget must be approved by the board of directors in advance before being paid. YTNE will follow the same planning and budget management system to guide its business activities. A comprehensive management information system for financial management, risk control, budget planning, and budget execution is in use by ZYIG and YTNE.

8. **Disbursement and fund flow arrangements.** Disbursements will be made in accordance with Asian Development Bank's (ADB) Loan Disbursement Handbook (2017, as amended from time to time) and detailed arrangements agreed between the government and ADB. Loan disbursements will be made to a dedicated account to be designated by the Government of Henan Province based on the verified achievement of disbursement-linked indicators (DLIs). Financing of prior results achieved not more than 12 months before loan signing is allowed to support achieving the results as scheduled, given that such prior activities comply with the program action

plan and the prior results are verified in accordance with verification protocols. ADB loan proceeds will be onlent from the Government of the PRC to the Henan Provincial Government for further relending to ZYIG, with further onlending of the proceeds to YTNE. For disbursement, YTNE will initiate a preparation of withdrawal application, together with a result validation report and independent verification report, which are to be submitted to ADB via ZYIG and HPFB. Upon confirmation of the verified results, ADB loan proceeds will flow to a designated account of HPFB, and then be transferred to the account in ZYIG, and then to the account in YTNE. Reporting, guidance, coordination, withdrawal application, and fund flow are detailed in the figure.



Source: Henan Yu-Tian New Energy Co. Ltd. and Zhongyuan Yuzi Investment Holding Group.

9. **External audit.** As a provincial, government-owned SOE, the financial statements of ZYIG are subject to annual external audits by a certified public accounting firm selected from the candidate accounting firms acceptable to HPFB. The external audit is conducted in accordance with the PRC's Auditing Standards. YTNE is controlled by ZYIG and will therefore be covered by the same external audit. In addition, ZYIG and YTNE are subject to inspections and economic audits conducted by provincial government agencies, which seek to check compliance with financial management rules, and assess progress and achievement with respect to corporate

performance targets. The RBL program accounts of ZYIG and YTNE will also be audited by the accredited auditor to be selected by HPPFB. The audited program accounts will be submitted in English to ADB within 6 months after the close of the fiscal year. ADB reserves the right to require a change in the auditor (in a manner consistent with the laws and regulation of the PRC), or require additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed.⁵

10. **Internal control.** Internal control of ZYIG involves strategic, budget, fund, expense, investment decision process, and compliance control. At present, the board of ZYIG oversees the group's internal control system. All contracts are subject to review by ZYIG's legal section to ensure legal compliance with applicable laws and regulations. In addition, ZYIG's financial management system monitors cash inflows of all subsidiaries in support of integrated management. YTNE has a similar internal control structure. The board of YTNE oversees the internal control system. All contracts are subject to review by the administration and legal unit to ensure legal compliance with applicable laws and regulations. YTNE's financial management unit controls cash flows.

11. **Staff capacity.** As the program gradually expands the use of gas, ZYIG's capacity for internal audit and risk management could be insufficient. ZYIG has two staff members in the audit department who are responsible for internal audit for the entire group (covering 12 departments and 50 subsidiaries), and one staff member for corporate risk management in the financial management department. An increase in staff for internal audit and corporate risk management of ZYIG and YTNE, with adequate training, are in the PAP. YTNE also plans to increase staffing from 187 (15% of whom are female) in 2018 to 250 (20% female) in 2020, and to 300 (30% female) in 2022 to sustainably implement the overall program and meet its outreach target by 2030, which is one of the indicators for DLI 8 (institutional and organizational capacity enhancement).

12. **Corporate governance.** SOE reforms in the PRC have been gradually implemented since 2015, and include professional management, separation of management and operations, mixed ownership, and private sector involvement in areas monopolized by the public sector, such as electricity, gas and oil, and railways. ZYIG has adopted competitive selection to appoint the general manager responsible for the group's operations. The assessment observed that ZYIG can enhance the board of director's oversight and internal control capacity to strengthen corporate governance.⁶ Based on the Opinion on Institutional Arrangement of Assigning Specialized External Director in SOEs Administered by Henan State Asset Supervision and Administration Commission issued in 2018, ZYIG intends to appoint an external board of director to its existing board through a competitive selection process by 2020. In parallel with an engagement of an external board of directors, ZYIG plans to strengthen the function of the board by establishing

⁵ ADB's approach and procedures regarding delayed submission of audited project financial statements are as follows:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

⁶ This observation was made in comparison with the following: Organisation for Economic Co-operation and Development (OECD). 2015. [G20/OECD Principles of Corporate Governance](#). Paris: OECD Publishing.

four specialized committees under the board by 2020, covering: (i) strategic development, (ii) remuneration and appraisal, (iii) audit and risk management, and (iv) investment decisions. The audit and risk management committee will be under the external board of director (which has yet to be appointed). These actions for ZYIG corporate governance reform are included in the PAP. The existing financial and risk management rules and regulations also needs to be upgraded to reflect corporate governance reforms. Adopting financial and risk management guidelines that incorporate comprehensive corporate risk management code and control by 2019 is one of the actions in DLI 8 (institutional and organizational capacity enhancement). YTNE is a subsidiary of ZYIG and has a three-member board of directors; two board members are appointed by ZYIG and one is appointed by CTLG.

13. Financial management risks and mitigation measures are outlined in **Table 1**. Progress with respect to financial management-related DLIs, and actions in the PAP, and their achievement, are to be monitored and verified by the independent verification agency, which must be selected in accordance with qualification requirements and terms of reference in the Program Implementation Document.⁷ The selection of the agency requires prior approval of ADB.

Table 1: Financial Management Risk Analysis

Risk Description	Risk Rating^a	Mitigation Measures
Inherent Risks^b		
Entity governance. ZYIG's board has no external board of directors and has no specialized committee to enhance corporate governance.	Moderate	The PAP requires ZYIG to appoint an external board of director on its board of directors that will oversee internal control and risk management, and establish a specialized committee under the board to enhance internal control and corporate governance.
Entity financial strength. Although ZYIG has good financial standing, with accurate cash flow matching, its financial leverage is relatively high, with a recent debt-to-equity ratio of 75:25. YTNE has registered capital of CNY100 million, which is less than the required minimum equity capital of about CNY900 million for the RBL Program if the minimum equity ratio of 20% is applied.	Moderate	ZYIG will ensure that (i) its debt-to-equity ratio remains greater than 75:25, and (ii) its net revenues are at least 1.2 times its debt service requirements. YTNE will ensure that (i) its debt-to-equity ratio remains greater than 70:30, and (ii) its net revenue is at least 1.2 times its debt service requirements. Both are covenanted.
Overall Inherent Risk	Moderate	
Control Risks^c		
Foreign exchange risk and interest risk. The interest risk is small and can be disregarded, but foreign exchange rate fluctuations may impact financial sustainability.	Moderate	The PAP requires that ZYIG and YTNE establish a foreign currency risk reserve by 2020.
Staffing. ZYIG and YTNE are sufficiently staffed to undertake tasks related to accounting, implementation and financial management of the identified subprojects. However, ZYIG and YTNE's	Moderate	The PAP requires that ZYIG and YTNE increase their internal audit and risk control staff.

⁷ Program Implementation Document (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

Risk Description	Risk Rating^a	Mitigation Measures
internal auditing staff and risk control staff are considered insufficient.		
Internal audit. Internal audit systems are in place for both ZYIG and YTNE but there is a room to improve internal control and risk management.	Low	In addition to increasing their internal audit and risk control staff, the PAP specifies that ZYIG and YTNE undertake corporate governance reforms, including appointing an external board of director on the existing board and establishing specialized committees, including for audit, which will enhance both their internal audit function and corporate governance.
Information Systems. ZYIG and YTNE both use specialized accounting software, which follows the Chinese Accounting Standards. But the accounting system is independent from the other associated management information system.	Moderate	YTNE will install an integrated enterprise resource planning system by 2020, which is one of the output level DLIs.
Overall Control Risk	Moderate	Implementing the mitigation actions mentioned above will reduce the risk to low.
Overall Risk	Moderate	

ADB = Asian Development Bank, PAP = Program Action Plan, PRC = People's Republic of China, RBL = results-based lending, YTNE = Henan Yu-Tian New Energy Co. Ltd., ZYIG = Zhongyuan Yuzi Investment Holding Group.

^a Risk factors are assessed against two dimensions: (i) the likelihood that the risk will occur, and (ii) the impact of the risk on the outcome. Rating scale: low = low likelihood and low impact; moderate = substantial to high likelihood, but low to moderate impact; substantial = low to moderate likelihood, but substantial to high impact; and high = high likelihood and high impact.

^b Inherent risk is the susceptibility of the program financial management system to factors arising from the environment in which it operates, such as country rules and regulations, and the agency's working environment (assuming the absence of any counterchecks or internal controls).

^c Control risk is the risk that the program's accounting and internal control framework is inadequate to ensure that funds are used economically, efficiently, and as intended, and that the use of funds is properly reported.

Source: ADB, YTNE, and ZYIG.

C. Procurement System

14. **Public procurement regulatory framework.** Public procurement in the PRC is conducted in compliance with the Tendering and Bidding Law (1999), the Government Procurement Law (2002), and amended regulations on the Government Procurement Law (2015). The PRC's procurement laws and regulations require the use of open competitive bidding, with the lowest compliant bid as major procurement method, which is consistent with international best practices and principles, and ADB procurement policy (2017, as amended from time to time). The national standard bidding document in the PRC is a template incorporating World Bank and ADB procurement policy principles. For the RBL program, ZYIG is authorized by the provincial government to establish a program management office (PMO) to supervise procurement activities under YTNE to ensure compliance with national procurement policy and procurement-related actions in the PAP.

15. **Procurement profile.** Procurement for the RBL program will include natural gas distribution and biogas production-related equipment, materials, civil works, and installation services. The RBL program will use open competitive bidding as the default procurement method. YTNE has experience in procurement through early stage of overall program, which reached

300,000 customers in 2018. Procurement practice under YTNE in 2018 was in line with CTLG procurement policy, but YTNE changed the procurement practice in 2019 to be compliant with national procurement policy and the RBL program procurement-related PAP actions. A national procurement agent has been recruited for smooth implementation of procurement under the program. Contracts for equipment and materials, civil works, and services will not exceed the limit defined for high-value contracts: (i) \$50 million for works, turnkey and supply, and installation contracts; (ii) \$30 million for goods; (iii) \$20 million for information technology systems and non-consulting services; and (iv) \$15 million for consulting services. ZYIG and YTNE also confirmed the program will not include procurement from ADB non-member countries.

16. **Procurement implementation arrangements.** YTNE is primarily responsible for procurement, with assistance from the national procurement agent and supervision by the PMO. Procurement and budget planning are linked through annual work plan preparation and implementation. YTNE's Program Implementation Unit prepares annual work plans—including staffing and procurement, construction, and budget plans—to achieve annual targets under the RBL program. The procurement plan is to be prepared every 12 months (and updated as needed), submitted to the ZYIG PMO for approval, and disclosed on the YTNE website. The national procurement agent will assist YTNE in preparing bid documents and conducting bid evaluations and contract negotiations. Information on procurement, including bid advertisement and contract awards, is to be disclosed on the official government website for public procurement. Any disputes and complaints regarding procurement and contracts are to be handled by the ZYIG's discipline inspection and supervision office. Contracts will be reviewed and endorsed by ZYIG's legal section prior to being concluded, and annual payments to the contractors under each contract will be made in accordance with the approved annual work plan budget.

17. **Information management system.** The procurement process and contract management under the program will also be monitored by the YTNE management information system (MIS), which is composed of separate systems for customer information, financial data, engineering and construction management, equipment and maintenance, and safety monitoring. The financial management system contains information on revenues, budgets and expenditures, payments and settlement of accounts, and human resources; it supports accounting and financial reporting to the boards and the management of ZYIG and YTNE. The engineering and construction system contains information on the procurement packaging plan, procurement progress, construction progress, and contract management, for real time monitoring of physical construction activities. The equipment and maintenance system is used to monitor maintenance schedules, maintenance records, and inventory information for spare parts stocks, and timely operation and maintenance equipment purchases.

18. The procurement assessment highlighted several risks in the program procurement system, including YTNE's limited experience with procurement that meets national procurement policy requirements; the lack of an information disclosure policy, including information on procurement; and the narrowly defined conflict of interest in the national procurement policy. To sustainably implement the overall program and achieve the outreach target by 2030, ongoing capacity enhancement of YTNE related to procurement and of ZYIG for procurement oversight is essential. All procurement risks are mitigated by implementing the procurement-related actions in the PAP; compliance with these actions will also be monitored by the IVA, which will be selected in accordance with qualification requirements and terms of reference in the Program Implementation Document (footnote 7); the selection of the IVA requires prior ADB approval. The risk profile and mitigation measures are detailed in **Table 2**.

Table 2: Risk Profile and Mitigation Measures for Procurement

Risk Description	Risk Assessment	Risk Measures/ Risk Management Plan	Mitigated Risk Assessment
Limited YTNE experience with procurement that meets national procurement policy causes a delay in procurement	Substantial	An accredited procurement agent has been engaged to support procurement from 2019. The ZYIG PMO supervises procurement activities under YTNE. Make qualified procurement experts, training of procurement staff, and adoption of the standard national bidding document by 2019 are in the PAP.	Moderate
Limited information disclosure on Procurement, which results in a lack of competition in bidding	Moderate	A procurement plan is prepared every 12 months, updated as needed, and disclosed on the ZYIG and YTNE website. Information on procurement is also accessible to ADB for monitoring. Information on bid advertisements and contract awards are also disclosed in the official public procurement website in the PRC. Adoption by 2019 of an information disclosure policy on RBL activities, including the procurement plan, is an action in the PAP.	Low
Lose control in monitoring business cycle for procurement in planning, implementation, and management.	Low	In addition to the involvement of ZYIG PMO and national procurement agent, the existing management information system comprehensively monitors the procurement process and contract management.	Low
Narrowly defined conflict of interest and related party transactions in national procurement policy could lead to increased integrity risk in procurement.	Substantial	Adopting ADB's anti-corruption guidelines and avoiding conflicts of interest and related party transactions in procurement are in the PAP. The independent verification agent is also responsible for monitoring implementation of the PAP with respect to procurement.	Moderate
	Moderate		Moderate

ADB = Asian Development Bank, PAP = program action plan, PMO = program management office, PRC = Peoples' Republic of China, RBL = results-based lending, YTNE = Henan Yu-Tian New Energy Co. Ltd., ZYIG = Zhongyuan Yuzi Investment Holding Group.

^a Risk factors are assessed against two dimensions: (i) the likelihood that the risk will occur, and (ii) the impact of the risk on the outcome. Rating scale: low = low likelihood and low impact; moderate = substantial to high likelihood, but low to moderate impact; substantial = low to moderate likelihood, but substantial to high impact; and high = high likelihood and high impact.

Source: Asian Development Bank.

D. Anticorruption System

19. Both ZYIG (as an SOE fully owned by the provincial government) and YTNE (which is directly controlled by ZYIG) are governed by the anticorruption system of the Government of the PRC.

20. **Anti-corruption policy and institutional framework.** The State Council issued China's Efforts to Combat Corruption and Build a Clean Government in 2010, which sets out corruption prevention measures and institutional anti-corruption mechanisms. Major organizations responsible for anti-corruption are the Communist Party of China's committee for discipline inspection against party members, supervisory department who administers punishments to those who violate the anti-corruption policy, and public security, and auditing, administrative law enforcement refer to those who committed corruption to judicial department, and judicial department, who investigates the allegation. The State Bureau for Letters and Calls provides multiple channels for individual citizens to exercise the right of supervision against party members.

21. **Applicable policies and supervision arrangements.** The anticorruption regulations applicable to the program are (i) the regulation on SOEs issued in 2011 by the State-owned Asset Supervision and Administration Commission of the State Council that all SOEs are obliged to avoid corrupt, collusive, coercive, and collusive practices in their operations; and (ii) anti-corruption regulations of the provincial and national governments.

22. In 2011, the State-owned Asset Supervision and Administration Commission enacted Methods for Implementing the Certain Rules relating to the Professional Integrity of SOE Leaders. Comprising 5 chapters and 35 articles, it governs the actions of leaders of central SOEs and their controlled subsidiaries through: (i) conduct codes, with a focus on decision-making procedures, personal appointments, forbidden activities, remuneration and part-time job control, reporting of key private matters, and financial discipline; (ii) implementation and supervision; and (iii) penalties. In 2016, the Henan Provincial Government issued the Interim Methods for Investigating the Responsibilities of SOE's Rule-Violating Operation and Investment, which addresses principles; institutional arrangements; the definition of accountability; investigation of state asset losses; punishment; and dismissal of SOE management, which is accountable for breaches of the regulations when making decisions regarding investment and operations. In 2017, the Government of PRC amended the Provisions on Leaders to Report Certain Private Matters, which requires high ranking officers in the government, SOEs, and public institutions supported by public funding to annually report their family's assets and revenues.

23. ZYIG's discipline and monitoring office and internal audit office are responsible for monitoring implementation of the anti-corruption policy. China Commission of Discipline Inspection and Supervision, which is the agency of the PRC Government, will also carry out spot inspections to check compliance with anti-corruption policy.

24. **Risks and mitigation measures.** Fraud and corruption-related risks arise with respect to financial management and procurement activities. ADB's Country Governance Risk Assessment⁸ in 2015 indicated the likelihood that conflict of interest arises from connected parties; given weak internal controls and procurement capacity, such conflict of interest and related party transactions will result in fraud and corrupt practices. Financial management and procurement-related actions in the RBL program PAP will directly mitigate such fraud and corruption risks.

25. ADB has a fiduciary responsibility to ensure that its loans and other forms of financing are used only for the purposes for which they were granted, in accordance with the Agreement Establishing the Asian Development Bank.⁹ To uphold that obligation, ADB developed guidelines to prevent or mitigate fraud, corruption, and other prohibited activities in RBL operations financed

⁸ ADB. 2015. *Country Governance Risk Assessment. People's Republic of China*. Manila.

⁹ ADB. 1965. [Agreement Establishing the Asian Development Bank](#). Manila.

in whole or in part of ADB, as detailed in Appendix 2 in the Program Implementation Document (footnote 7).