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R77-19 Corrigendum 1 27 September 2019

## Corrigendum to Document R77-19 Proposed Loan Shandong Green Development Fund Project (People's Republic of China)

The following corrections were made in the above document to correct the following typographical errors.

(i) Page 8, para. 30, first sentence

Replace "Economic analysis prepared for the same indicative subprojects included the main co-benefit of GHG emissions reduction, valued based on recommendation by the International Panel on Climate Change." with "Economic analysis prepared for the same indicative subprojects included the main co-benefit of GHG emissions reduction, valued based on recommendation by the Intergovernmental Panel on Climate Change."

(ii) Page 8, Footnote 29

Replace "International Panel on Climate Change. 2019. Refinement to the 2006 International Plan on Climate Change Guidelines on National Greenhouse Gas Inventories. Geneva." with "Intergovernmental Panel on Climate Change. 2019. Refinement to the 2006 International Plan on Climate Change Guidelines on National Greenhouse Gas Inventories. Geneva."

(iii) Page 10, para. 37, first sentence

Replace "The project is expected to improve the resilience to climate change impacts of 2.5 million people in Shandong Province by 2027." with "The project is expected to improve the resilience to climate change impacts of 2 million people in Shandong Province by 2027."



#### **FOR OFFICIAL USE ONLY**

R77-19 4 September 2019

## Proposed Loan Shandong Green Development Fund Project (People's Republic of China)

- 1. The Report and Recommendation of the President (RRP: PRC 51194-001) on the proposed loan to the People's Republic of China for the Shandong Green Development Fund Project is circulated herewith.
- 2. This Report and Recommendation should be read with *Country Operations Business Plan: People's Republic of China, 2019–2021*, which was circulated to the Board on 28 May 2019 (DOC.IN.92-19).
- 3. In the absence of any request for discussion and in the absence of a sufficient number of abstentions or oppositions (which should be communicated to The Secretary by the close of business on 25 September 2019), the recommendation in paragraph 46 of the paper will be deemed to have been approved, to be so recorded in the minutes of a subsequent Board meeting. Any notified abstentions or oppositions will also be recorded in the minutes.

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# Report and Recommendation of the President to the Board of Directors

Project Number: 51194-001

September 2019

Proposed Loan
People's Republic of China: Shandong Green
Development Fund Project

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Asian Development Bank

#### **CURRENCY EQUIVALENTS**

(as of 15 August 2019)

Currency unit - yuan (CNY) CNY1.00 = \$0.1453 or €0.1290 \$1.00 = CNY6.8808 or €0.8873 €1.00 = CNY7.7547 or \$1.1270

#### **ABBREVIATIONS**

ADB Asian Development Bank AFD Agence Française de Développement CICC Capital Management Co., Ltd. CCM CICC China International Capital Corporation Limited carbon dioxide  $CO_2$ carbon dioxide equivalent CO<sub>2</sub>eq **ESMS** environmental and social management system **FMC** fund management company GAP gender action plan GDP gross domestic product greenhouse gas GHG international financial institution IFI MERV monitoring, evaluation, reporting, and verification INDC Intended Nationally Determined Contribution PAM project administration manual PIC private, institutional, and commercial **PRC** People's Republic of China SDG Sustainable Development Goal Shandong Development & Investment Holding Group SDIHG Shandong Green Development Fund SGDF SPG Shandong Provincial Government

#### **NOTE**

tons of carbon dioxide equivalent

tCO<sub>2</sub>e

In this report, "\$" refers to United States dollars.

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### **PROJECT AT A GLANCE**

1.	Basic Data		Proie	ct Number: 51194-0	01
	Project Name	Shandong Green Development Fund Project	Department	EARD/EAPF	0 1
	.,	,	/Division		
	Country	China, People's Republic of	Executing Agency	Shandong Provinci	
	Borrower	People's Republic of China		Finance Department	nt
	Country Economic	https://www.adb.org/Documents/LinkedDocs/?id=5119 4-001-CEI			
l	Indicators Portfolio at a Glance	https://www.adb.org/Documents/LinkedDocs/?id=5119			
	Portiono at a Giance	4-001-PortAtaGlance			
2.	Sector	Subsector(s)	ADB Fina	ncing (\$ million)	
✓	Finance	Infrastructure finance and investment funds		100.00	
			Total	100.00	
3	Operational Priorities		Climate Change Info	rmation	
<b>J</b> .	Addressing remaining poverty and reducing inequalities		CO <sub>2</sub> reduction (tons per 2,500		
			annum)		-,
	Accelerating progress	9 ,	Climate Change impa	ct on the	High
	Tackling climate changenhancing environmenta	ge, building climate and disaster resilience, and I sustainability	Project		
	_	ance and institutional capacity	ADB Financing		
	Otteriginering governe	ance and institutional capacity	Adaptation (\$ million)		25.00
			Mitigation (\$ million)	-	75.00
	Sustainable Developme SDG 9.1 SDG 13.a	nt Goals	Gender Equity and N Effective gender main Poverty Targeting		1
			Poverty rangeting		
5.	Risk Categorization: Safeguard Categorization Financing	Complex on Environment: FI Involuntary Resettlem	nent: Fl Indigenous P	<b>Peoples:</b> FI-C	
5.	Safeguard Categorization	·			
5.	Safeguard Categorization	·	nent: Fl Indigenous P		
5.	Safeguard Categorization Financing Modality and Sources ADB	on Environment: Fl Involuntary Resettlem		100.00	
5.	Safeguard Categorization Financing Modality and Sources ADB	·			
5.	Safeguard Categorization Financing Modality and Sources ADB Sovereign Developm	on Environment: Fl Involuntary Resettlem		100.00	
5.	Financing  Modality and Sources  ADB  Sovereign Developm capital resources  Cofinancing  Agence Francaise de (Not ADB Administered)	e Developpement - Development financing institution (DFI)	Amount (\$ million)	<b>100.00</b> 100.00	
5.	Financing  Modality and Sources ADB  Sovereign Developm capital resources  Cofinancing  Agence Francaise de (Not ADB Administered)  KfW Bankengruppe Administered)	e Developpement - Development financing institution (DFI)	Amount (\$ million)	100.00 100.00 198.22	
5.	Financing  Modality and Sources ADB  Sovereign Developm capital resources  Cofinancing  Agence Francaise de (Not ADB Administered)  KfW Bankengruppe	e Developpement - Development financing institution (DFI)	Amount (\$ million)	100.00 100.00 198.22 84.53	
5.	Financing  Modality and Sources ADB  Sovereign Developm capital resources  Cofinancing  Agence Francaise de (Not ADB Administered)  KfW Bankengruppe Administered)	e Developpement - Development financing institution (DFI)	Amount (\$ million)	100.00 100.00 198.22 84.53	
5.	Financing  Modality and Sources ADB  Sovereign Developm capital resources  Cofinancing  Agence Francaise de (Not ADB Administered)  KfW Bankengruppe Administered)  Counterpart	e Developpement - Development financing institution (DFI)	Amount (\$ million)	100.00 100.00 198.22 84.53 113.69	

**Currency of ADB Financing:** Euro

#### I. THE PROPOSAL

- 1. I submit for your approval the following report and recommendation on a proposed loan to the People's Republic of China (PRC) for the Shandong Green Development Fund Project.
- 2. The project will pilot an innovative leveraging mechanism to catalyze private, institutional, and commercial (PIC) capital for the development of climate-positive infrastructure and business in Shandong Province. It will support a portfolio of mitigation and adaptation subprojects assessed against both climate and financial eligibility criteria. The project will contribute to the province's transition to low-carbon and climate-resilient development patterns.

#### II. THE PROJECT

#### A. Rationale

- 3. The PRC plays a pivotal role in managing the climate change challenge in Asia and the Pacific. Given the country's current level of greenhouse gas (GHG) emissions and climate vulnerability, there is a vast need for climate-related investments going beyond business as usual to underpin its development targets.<sup>2</sup> With high reliance on coal power and heavy industry, Shandong Province is initiating systemic interventions to build climate resilience and decarbonize its economy. The province has a population of about 100 million and ranks eighth in the PRC in terms of gross domestic product (GDP) per capita. Shandong Province has a similar economic structure to that of the PRC with a rapid industrial development and high GHG emissions.<sup>3</sup>
- 4. Since 2010, the Government of the PRC, with the support of the Asian Development Bank (ADB) and other international financial institutions (IFIs), has established a strong policy framework for climate change to promote ecological civilization rather than a GDP-oriented development.<sup>4</sup> To support this paradigm shift and address the high level of vulnerability to climate change, the PRC committed to new climate actions through its Intended Nationally Determined Contribution (INDC) signed under the Paris Agreement.<sup>5</sup> The Work Plan for Controlling GHG Emissions During the 13th Five-Year Period has set specific tasks and measurable and binding GHG emissions control goals by 2020.<sup>6</sup> Shandong Province aims for carbon dioxide (CO<sub>2</sub>) emissions to peak around 2027, three years earlier than the INDC (around 2030).
- 5. Shandong Province is making efforts to scale up climate investments, but public sector resources are scarce and insufficient to meet the huge financing needs. Private sector participation is required to bridge the funding gap and to bring in expertise, efficiency, and advanced technologies. A new approach beyond traditional financing and banking modalities is needed to unlock significant climate finance. The project is designed to catalyze PIC finance at scale for a new generation of climate-positive subprojects with perceived high risks that, otherwise, may not be attractive to commercial investors. The project will cater to climate financing requirements for longer-term, flexible structuring and competitive pricing; build climate finance

<sup>1</sup> At least 70% of the subprojects financed (in line with the fund commitment) need to be located in Shandong Province.

In 2016, the PRC was the largest GHG emitter worldwide—accounting for just under one-third of global emissions (10,151 million tons of carbon dioxide equivalent in the PRC versus 36,183 million tons of carbon dioxide equivalent worldwide); the Global Climate Risk Index ranks the PRC as the 12th most affected country by extreme weather events and estimates financial losses amounting to \$82 billion and economic losses up to 3.5% GDP.

<sup>&</sup>lt;sup>3</sup> It is PRC's largest coal and energy consumer (about 10% of the country's consumption).

<sup>&</sup>lt;sup>4</sup> Harmony between humans and nature, resulting in a low- carbon economy.

<sup>&</sup>lt;sup>5</sup> United Nations. 2016. *Paris Agreement*. Paris.

<sup>&</sup>lt;sup>6</sup> Government of the PRC, State Council. 2016. *The Work Plan for Controlling Greenhouse Gas Emissions During the 13th Five-Year Plan Period.* Beijing.

capacity and knowledge; and provide policy advice. It will help overcome barriers such as affordability constraints, first-mover risks, behavioral risks, and low-technology penetration rates. The project design represents a paradigm shift over the business as usual climate-related investment, which typically complies with local regulations with minimum climate impacts. This is critical for Shandong Provincial Government (SPG) to meet its aggressive climate targets. As such, the Shandong Green Development Fund (SGDF) will function as the financial arm of the SPG to support its proactive climate policies, and crowd in PIC investors to fund subprojects which produce climate change public goods and positive externalities.

- The project is consistent with ADB's country partnership strategy to facilitate the government's reform agenda of managing climate change. 7 It supports ADB's Strategy 2030 operational plan of tackling climate change by fully integrating climate change mitigation and adaptation into the project design, contributing to increase climate finance targets, and accelerating low GHG development in line with the PRC INDC.8 The project contributes to the Sustainable Development Goals (SDGs)-especially SDG 9: Industry, Innovation, and Infrastructure, by building climate-resilient infrastructure and fostering a new climate finance model; and SDG 13: Climate Action, by taking urgent actions to promote climate-related investments to combat climate change impacts. ADB has long-term engagement in the PRC's environment-related financing initiatives such as the Low Carbon City Program; the Yangtze River Economic Belt Framework; and the Air Quality Improvement Program in the Greater Beijing-Tianjin-Hebei Region. Under the Air Quality Improvement Program, ADB approved an investment loan for Shandong Province in 2018 targeting mitigation, energy efficiency, and air quality improvement at county level administrations with low capacity.9 Based on these experiences and in partnership with the PRC agencies, the project is meant to have a catalytic, qualitatively different role in relation to climate finance and to complement other facilities.
- 7. **Priority sectors**. Shandong Province was designated to pilot a shift to a low-carbon and climate-resilient growth paradigm that could be replicated nationwide if successful. The portfolio distribution (Table 1) of the SGDF is guided by a GHG profile and climate vulnerability assessment, which analyzes where climate financing can have most impacts to achieve the provincial policy objectives and is summarized in the climate change assessment. The assessment concluded that the main sources of GHG emissions in Shandong Province are in the energy production sector, buildings, and the rapidly growing urban transport, resulting in the SGDF's mitigation priorities (i) renewable energy production, including wind, solar, biomass, and geothermal; (ii) green buildings; and (iii) low-carbon transport. The SGDF's adaptation priorities are irrigation and integrated urban water management, including flood proofing, through low-impact development (sponge cities); and coastal protection.

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<sup>&</sup>lt;sup>7</sup> ADB. 2016. Country Partnership Strategy: People's Republic of China, 2016–2020—Transforming Partnership: People's Republic of China and Asian Development Bank. Manila.

<sup>&</sup>lt;sup>8</sup> ADB. 2018. Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific. Manila.

<sup>&</sup>lt;sup>9</sup> ADB. 2018. Report and Recommendation of the President to the Board of Directors: Proposed Loan and Administration of Technical Assistance Grant to the People's Republic of China for the Air Quality Improvement in the Greater Beijing—Tianjin—Hebei Region—Shandong Clean Heating and Cooling Project. Manila.

<sup>&</sup>lt;sup>10</sup> Shandong is required to reduce its CO<sub>2</sub> emission intensity by 20.5% by 2020, the toughest goal set for a province.

<sup>&</sup>lt;sup>11</sup> Mitigation and Adaptation Priorities in Shandong (accessible from the list of documents in Appendix 2) were developed during project preparation.

<sup>&</sup>lt;sup>12</sup> Climate Change Assessment (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>13</sup> Shandong's provincial capital, Jinan, was ranked the most congested city in the PRC in 2017.

**Table 1: Climate Change Portfolio Weights** 

Tuble 1: Chinate Change i Ortione Weights					
Mitigation Sector	Carbon Dioxyde Emissions (million ton)	Weights (%)	Adaptation Sector	Potential Beneficiaries (million)	Weights (%)
Power production	420.4	51.2	Flood	8.2	5.9
Buildings	105.3	12.8	Drought	6.9	5.0
Transport	51.5	6.3	Coastal protection	14.4	10.4
Energy efficiency	38.5	4.7	Heating/greening	5.2	3.7
Total	615.7	75.0		34.7	25.0

Source: Mitigation and Adaptation Priorities in Shandong (accessible from the list of documents in Appendix 2).

- 8. **Shandong Green Development Fund structure**. The SGDF is a multi-tiered fund structure to accommodate a timing difference between the ADB loan (20 years) and investment horizon of the PIC investors (up to 10 years). It includes a 20-year catalytic fund holding the seed capital from the IFIs. The IFIs and public funding will then be blended with PIC capital at an initial target ratio 45:55 into a series of shorter-term funds (8 to 10 years) to match the investment horizon of PIC investors to finance climate-positive subprojects. The SGDF will be structured as limited partnerships and managed by a top-tier fund manager. Any qualified subproject financed under the project will comply with the provisions set forth in the loan and project agreements.
- 9. **Shandong Green Development Fund investment strategy**. The SGDF's investment strategy consists of facilitating the transition to a low-carbon future and to both encourage the development of climate-positive subprojects and leverage its public funding in Shandong Province. The objective is to tap new funding sources and leverage existing sources of finance into a pipeline of viable climate-positive investments by (i) ensuring the SGDF addresses priority climate impacts and vulnerabilities in Shandong Province, where at least 70% of the investment is targeted; (ii) incorporating a project development mechanism funded under the output 2 capacity development program to develop a pipeline of climate-positive, sustainable, and replicable subprojects based on high level of performance against the SGDF Green Climate Assessment Guidelines; (iii) incorporating structures for leveraging PIC finance, targeting pension funds, insurance companies, commercial banks, and corporate investors in the SGDF and in the subprojects; and (iv) bringing into subprojects the expertise from the private sector and advanced technologies. <sup>14</sup> By establishing clear definitions, guidelines, and systems for climate finance following international best practices, the SGDF will ensure transformational change with adequate risk mitigation.
- 10. **Shandong Green Development Fund selection criteria**. Any subprojects that contribute to climate change mitigation (measured through GHG/CO<sub>2</sub>eq emissions reduction) or climate change adaptation (measured through improvement of the beneficiaries' resilience) that meet eligibility criteria in the Project Administration Manual (PAM) may be considered for investment. <sup>15</sup> All investments will be screened with the criteria set under the SGDF Green Climate Assessment Guidelines (footnote 14). Subprojects will be enhanced through the capacity development program to maximize their climate benefits and the adoption of high-level technologies. All investments will be evaluated based on financial, economic, commercial, legal and safeguards due diligence.
- 11. Climate investment process. All subprojects must be financially sustainable and bring

14 Shandong Green Development Fund Green Climate Assessment Guidelines (accessible from the list of linked documents in Appendix 2 and as an appendix to the project administration manual developed during project preparation and based on the Green Climate Fund Investment Framework).

<sup>15</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

measurable and positive climate impacts. They will be screened with the SGDF Green Climate Assessment Guidelines (footnote 14) and categorized under the guidelines as exhibiting "good practices" or "advanced benefits" or being "transformational" depending on the climate impacts. The SGDF's investment process will incorporate screening, monitoring, evaluation, reporting, and verification (MERV) of the climate performance of the subprojects. The SGDF will link financing terms to the level of climate benefits of the subprojects. By mobilizing public and catalytic funding, the project can prioritize financing to subprojects with higher climate impacts (expected to be categorized "transformational" or "advanced benefits") and possibly higher financial risks, thereby establishing bankability support conditions and incentivizing structures linked to climate results.

#### B. Project Description

- 12. The project is aligned with the following impact: peaking of CO<sub>2</sub> emissions around 2030 or earlier on best efforts achieved.<sup>17</sup> The project will have the following outcome: climate resilience in Shandong Province enhanced.<sup>18</sup>
- 13. Output 1: Shandong Green Development Fund established with private, institutional, and commercial financing leveraged. The SGDF will be structured as an investment pooling vehicle for climate financing and run by a professional fund management company (FMC). The SGDF will target investing 75% in mitigation, measured through carbon dioxide equivalent (CO<sub>2</sub>eq) emissions reduction; and 25% in adaptation, measured through improvement of the beneficiaries' resilience. By 2027, the project is expected to reduce CO<sub>2</sub>eq emissions by 2.5 million tons per year and directly build resilience for at least 2 million people in Shandong Province. The project will leverage PIC funding at a market rate in both SGDF and subprojects, with reinvesting occurring from years 5 to 15.
- 14. Output 2: Knowledge and skills of local governments, civil society, and private sector to prepare climate-positive subprojects enhanced. The FMC will manage a capacity development program financed under the loan to provide: (i) consulting services for design-review-advice to improve the quality of the subproject proposals and maximize climate benefits; (ii) MERV for green climate ratings of subprojects and portfolios; and (iii) capacity development, especially for safeguards and disbursement procedures and policy advisory to the SPG to define its climate policies for the next five-year plan (2021–2025).

#### C. Value Added by ADB

- 15. ADB's participation is considered critical for the design and establishment of the SGDF, benchmarked to international green and climate best practices in the following aspects.
- 16. Leveraging effect. ADB will provide and mobilize the IFIs' catalytic funding, on which the SGDF depends, to attract local public resources and maximize PIC capital flows into climate-positive subprojects. SGDF financing will be targeted (climate-related investment), time-bound (3–10 years), and transitional (up to 67% of subproject costs for up to 10 years). The project's design positions the SGDF as an anchor investor to help catalyze significant additional resources. By revolving distributions from shorter-term funds, the SGDF will finance a large number of climate-positive subprojects over the 20-year project life span. IFIs' contribution to the SGDF (about €260 million) is expected to achieve a leveraging ratio over five. In addition, the level of

<sup>&</sup>lt;sup>16</sup> Such terms are defined in the Shandong Green Development Fund Green Climate Assessment Guidelines.

<sup>&</sup>lt;sup>17</sup> Government of the PRC. 2015. *Intended Nationally Determined Contribution*. Paris.

<sup>&</sup>lt;sup>18</sup> The design and monitoring framework is in Appendix 1.

catalytic funding enables the SGDF to enter subsectors (e.g., low-impact development, sponge cities, urban and rural sanitation, green transport, and the circular economy), which otherwise cannot undertake structural change because of the higher cost of climate-positive investment.

- Comprehensive climate investment framework. ADB has designed the assessment 17. and final selection of climate-positive subprojects based on climate impacts and benefits (which will be maximized) and bankability (which will be improved). The shift from business as usual, complying with national legislation, to subprojects delivering advanced and transformational benefits, is supported by the stricter green climate investment criteria enshrined in the loan and project agreements. The project will also incentivize subprojects to adopt green procurement standards, 19 as greening a subproject's supply chain such that it shifts from "good practices" to "advanced benefits" will enable access to better financing terms and conditions from the SGDF.
- 18. Project development. The SGDF will promote the adoption of SOURCE, a multilateral digital platform initially developed by ADB and adopted by other IFIs and the private sector, to fast-track the delivery of quality infrastructure projects. 20 SOURCE is designed to help public sector agencies better prepare, manage, and publish their infrastructure projects to attract private sector investors. This cloud-based system allows the FMC to present information on all aspects of the development of an infrastructure project for consistency, quality, transparency, and accountability using sector-specific templates. A comprehensive digital platform for an enhanced project management information system for MERV facilitates reporting to the IFIs and the central and provincial governments.21
- 19. Knowledge management. The project concept was based on an ADB publication on "Catalyzing Green Finance". 22 Shandong Province is piloting the project, which ADB is scaling up nationally through the Ministry of Ecology and Environment in the PRC; and in Southeast Asia (Association of Southeast Asian Nations and Indonesia) and Mongolia.<sup>23</sup> A knowledge product under preparation will further disseminate lessons learned during the SGDF project preparation.<sup>24</sup>

#### **Summary Cost Estimates and Financing Plan** D.

The government has requested a financial intermediation loan of €88.73 million from 20. ADB's ordinary capital resources to help finance the project. The loan will have a 20-year term, including a grace period of 15 years; an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a commitment charge of 0.15% per year; and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average maturity is 17.75 years, and the maturity premium payable to ADB is 0.20% per year.

<sup>&</sup>lt;sup>19</sup> The Green Procurement Manual (accessible from the list of Supplementary Documents in Appendix 2) was developed during the project preparation and customized from European Union standards.

<sup>&</sup>lt;sup>20</sup> SOURCE. <u>http://sif-source.org</u>.

<sup>&</sup>lt;sup>21</sup> Financed by the Financial Sector Development Partnership Special Fund (financing partner: Government of Luxembourg) and administered by ADB and developed during the project preparation.

<sup>&</sup>lt;sup>22</sup> ADB. 2017. Catalyzing Green Finance: A Concept for Leveraging Blended Finance for Green Development. Manila. <sup>23</sup> ADB. 2019. Technical Assistance to the People's Republic of China for the Study on the Municipal Climate Finance Roadmap. Manila; ADB. 2019. ASEAN Catalytic Green Finance Facility under the ASEAN Infrastructure Fund. Manila: ADB. (proposed for 2020), INO - SDG INDONESIA ONE - Green Finance Facility, Manila: ADB. (proposed for 2021). MON - Establishing Green Finance. Manila.

<sup>&</sup>lt;sup>24</sup> ADB. forthcoming. PRC - Catalyzing Climate Finance: Lessons Learned from the Shandong Green Development Fund. Manila.

21. The summary financing plan is in Table 2. ADB will finance (i) investments in qualified enterprises by funds to pay for goods, works, and services for qualified subprojects; (ii) the costs of operating the funds, including taxes and duties; and (iii) capacity development (mostly services, but potentially also goods).

**Table 2: Summary Financing Plan** 

•	Amount	Share of Total	
Source	(€ million)	(%)	
Sovereign	263.73	44.0	
ADB (ordinary capital resources financial intermediation loan)	88.73	14.8	
KfW <sup>a</sup>	100.00	16.7	
AFD <sup>a</sup>	75.00	12.5	
Public <sup>b</sup>	322.39	53.8	
Qingdao Municipal Government <sup>c</sup>	322.39	53.8	
Private <sup>b</sup>	12.90	2.2	
General partnersd	12.90	2.2	
Total	599.02	100.0	

ADB = Asian Development Bank ; AFD = Agence Française de Développement.

Note: Includes taxes and duties; such amount does not represent an excessive share of the project cost since limited partner contributions and profits are not taxed at the fund level but at the corporate level.

- <sup>a</sup> German development cooperation through KfW is reapproving a loan of €100 million and signed a collaborative cofinancing memorandum of understanding with ADB.
  - AFD is approving a loan of €75 million and is signing a collaborative cofinancing memorandum of understanding with ADB.
- <sup>b</sup> Public and private investors' contributions are in yuan equivalent.
- <sup>c</sup> Qingdao will provide 25% of the funds commitment (up to CNY2.5 billion).
- <sup>d</sup> The contribution from general partners is 1% of the fund commitment, expected to be CNY10 billion. Source: Asian Development Bank estimates.
- 22. Collaborative cofinancing with German development cooperation through KfW and the Agence Française de Développement (AFD) is needed to achieve a critical mass of catalytic funding to leverage significant PIC capital. Additional catalytic funding may be sought later, especially from the Green Climate Fund. PIC funding is expected to be more than 50% (about €690 million) of the total investment cost for the SGDF and from one-third to two-thirds of the total investment cost for the subprojects.
- 23. Climate mitigation is estimated to cost \$75 million and climate adaptation is estimated to cost \$25 million. ADB will finance 15% of total mitigation and adaptation costs.

#### E. Implementation Arrangements

24. SPG is the executing agency, represented by Shandong Province Finance Bureau. SPG is establishing the SGDF under an experienced financial intermediary, Shandong Development & Investment Holding Group (SDIHG), a state-owned enterprise wholly owned by SPG, as the implementing agency. SDIHG operates under the PRC Company Law, 2018 and is financially autonomous. As a provincial investment platform to support infrastructure development and industrial transformation, SDIHG has experience in ensuring that planned investments meet broader policy requirements. Qingdao Municipal Government will invest in the SGDF to (i) strengthen Qingdao as a regional green investment center and (ii) leverage its contribution with PIC finance to fund climate-positive urban infrastructure and business locally. A fund manager incorporated in the PRC, CICC Capital Management Co., Ltd. (CCM), a subsidiary of a leading investment bank, China International Capital Corporation Limited (CICC), was selected by SDIHG to manage the SGDF based on the criteria required by the IFIs: (i) top-ranked asset manager in the PRC in terms of track record, size of assets under management, governance, risk

management, and management profile; (ii) licensed by the regulator to operate a fund in the PRC; (iii) more than 8 years' experience, including opening and closing a fund; and (iv) experience with public and IFI funding mechanisms. CCM has assets under management of CNY300 billion across more than 20 funds with extensive experience in setting up and managing commercialized funds, including mandates from the central and local governments to realize strategic visions.

- 25. Shandong Province Finance Bureau receives the loan proceeds from the Ministry of Finance, maintains the foreign currency account, and transfers the proceeds to SDIHG in local currency for investment in a 20-year catalytic fund, which will manage and revolve the long-term catalytic funding from IFIs, including ADB, into a series of shorter-term funds that reflect PIC investors' investment horizons in line with market practices. Generally, the shorter-term funds will have an investment period of 4 to 5 years, an exit period of about 3 years, and a possible 2-year extension period to complete exits from investments in an orderly manner. Using their own funds, CCM and SDIHG will invest in the SGDF as co-general partners. Distributions from the shorter-term funds will be made to the catalytic fund for reinvestment, except as distributed to SDIHG to pay its debt service on onlent IFI debt.
- 26. ADB's no-objection will be required before the ADB loan is disbursed to any fund and to the first three subprojects. Subprojects and investees that receive more than the limit of €70 million will also require ADB's no-objection.<sup>25</sup> The implementation arrangements are summarized in Table 3 and described in detail in the PAM (footnote 15).

**Table 3: Implementation Arrangements** 

Ia	Die 3. implementation Arra	ngementa		
Aspects	Arrangements			
Implementation period	January 2020–December 2026			
Estimated completion date	31 December 2026			
Estimated loan closing date	30 June 2027			
Management				
(i) Executing agency	Shandong Provincial Government			
(ii) Key implementing agency	Shandong Development & Inv	Shandong Development & Investment Holding Group		
(iii) Implementing unit (fund	CICC Capital Management Co	CICC Capital Management Co., Ltd. with offices in Qingdao (headquarters)		
management company)	and Jinan, Shandong, and Bei	and Jinan, Shandong, and Beijing (total staff 46)		
Procurement	All procurement to be financed under the project will be carried out in			
	accordance with the ADB Procurement Policy (2017, as amended from t			
	to time) and regulations for fin-	ancial intermediation loans.		
Consulting services	QBS (green rating)	1 contract	\$1.0 million	
	ICS (MERV, PDF, capacity	Person-months:	\$8.5 million	
	development, knowledge	International (180) and		
	management)	national (480), as required	\$0.5 million	
	RPS (policy workshops)			
Disbursement	The loan proceeds will be disbursed following ADB's Loan Disbursement			
Handbook (2017, as amende		from time to time) and detailed	d arrangements	
agreed between the government and ADB.				

ADB = Asian Development Bank; ICS = individual consultant selection; MERV = monitoring, evaluation, reporting, and verification; PDF = project development facility; QBS = quality-based selection; RPS = resource person selection Source: Asian Development Bank estimates.

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<sup>&</sup>lt;sup>25</sup> An investment shall be deemed to exceed the limit if the amount of such investment, when added to the amount of all other investments previously made or authorized by the relevant fund for the same subproject or the same investee company, exceeds the limit. The FMC will submit to ADB an application for approval of the investment, with a description and appraisal of the subproject, the financial terms and conditions, and draft investment agreement.

#### III. DUE DILIGENCE

#### A. Technical

- 27. ADB validated the SGDF Green Climate Assessment Guidelines (footnote 14) and the CO<sub>2</sub>eq emissions reduction, as well as the environmental and social co-benefits, on 10 subproject concepts, including three pre-feasibility studies<sup>26</sup>
  - (i) Transformational Energy Management for Zero Energy–Zero Waste at Expressway Service Centers: low-carbon–circular economy of service stations along the expressways, based on a micro grid for energy management from renewable energy; systematic enhancement of energy saving, allowing the setting up of service stations in isolated and remote areas without access to electricity.
  - (ii) Solar Smart-Grid for Inclusive Access to Information and Communication Technology: inclusive photovoltaic power generation for telecom towers for mobile phones, WiFi, and Internet of Things equipped with solar panels.
  - (iii) Large-Scale Biomass Delivers Decarbonization: carbon storage biomass renewable energy production in peri-urban areas.
- 28. The total costs of those three indicative subprojects are more than \$600 million, with a total CO<sub>2</sub>eq emissions reduction of 3.5 million tons per year corresponding to a displacement of about 178,000 tons of coal and resulting in an annual reduction of 2,000 tons of nitrogen oxide and 3,700 tons of sulfur dioxide. One subproject linked to fossil fuels (improving boiler efficiency) was dropped and the other six subprojects are under preparation.

#### B. Economic and Financial Viability

- 29. Financial analysis was prepared to demonstrate that the SGDF will provide satisfactory returns from investments in climate-positive subprojects. <sup>27</sup> The analysis was prepared under the following assumptions: (i) type of financing, debt or equity; (ii) targeted portfolio allocation by climate performance; (iii) financing terms and conditions, linked with climate performance; (iv) nonperforming asset ratio; and (v) portfolio allocation by direct investments in subprojects and sub-funds. For debt financing, the assumptions were tailored to provide attractive funding to climate subprojects, reflecting the catalytic terms of the funding from IFIs. The financial analysis shows that the investments will provide a return to the PIC investors that is commensurate with market standards and will provide a lower return for the funding from the public investors, consistent with the project design: to use catalytic and public money to crowd in PIC finance and provide affordable financing for climate-positive subprojects. Under the assumptions made, the financial analysis shows that SGDF will provide sufficient cash flow to SDIHG to repay the IFI debt and will provide the SGDF's private investors with a return on their higher cost of capital invested and return expectations.
- 30. Economic analysis prepared for the same indicative subprojects included the main cobenefit of GHG emissions reduction, valued based on recommendation by the Intergovernmental Panel on Climate Change. <sup>28, 29</sup> Other co-benefits were reduced air pollutants, gases, and wastewater pollution. The economic analysis showed that the economic co-benefits added significant value to the overall business case and a minimum of 35% to the main financial benefits.

<sup>&</sup>lt;sup>26</sup> Pre-feasibility studies (accessible from the list of Supplementary Documents in Appendix 2).

<sup>&</sup>lt;sup>27</sup> Financial Analysis (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>28</sup> Economic Analysis (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>29</sup> Intergovernmental Panel on Climate Change. 2019. *Refinement to the 2006 International Plan on Climate Change Guidelines on National Greenhouse Gas Inventories*. Geneva.

The economic internal rate of return analysis for the indicative subprojects showed returns of more than 14% estimated in real terms.

#### C. Sustainability

- 31. The sustainability of the SGDF relies on the efficiency and effectiveness core indicators, preliminarily estimated at (i) \$4 per ton of CO<sub>2</sub>eq (tCO<sub>2</sub>eq) for the ADB cost over the expected lifetime emissions reduction of the project, and (ii) \$60 per tCO2eq for the total CNY10 billion SGDF. Performance by sector (mitigation only) is established and benchmarked against the McKinsey China Cost-Abatement calculations, adjusted for improvements in technology and current costs.<sup>30</sup> The SGDF incentive structure encourages investee companies to improve climate performance in relation to the relevant benchmarks so they can access better financing terms. The FMC managing the SGDF is one of the top tier fund managers in the PRC, with enough investment experience to build the capacity of the stakeholders. Under an agreement with the implementing agency, the FMC will undertake the procurement for the capacity development program and will oversee procurement by the investee companies. The SGDF excludes projects classified category A for both environment and involuntary resettlement and categories A and B for indigenous peoples. The Environmental and Social Management System (ESMS) to be agreed between ADB and the FMC, and the Gender Action Plan (GAP), apply to the entire SGDF.<sup>31</sup> The project monitors subprojects' beneficiaries, including vulnerable people, through the socioeconomic data disaggregated by gender and recorded in the MERV report.
- 32. The ADB project team worked with development partners—the China Council for International Cooperation on Environment and Development, the United Nations Environment Programme, and PIC funds—on cofinancing, policy development, institutional arrangements, and harmonizing safeguard principles and requirements across cofinanciers. The subprojects' feasibility studies provide the expected environmental, social and health, and economic and environmental co-benefits, as well as gender consideration. Each subproject must demonstrate that it has considered ways to (i) maximize the local economic benefits of the proposed investment and (ii) incorporate gender-sensitive design features to enhance women's inclusion. Subprojects should be designed to provide opportunities for enhancing employment either directly or indirectly through enhanced productivity, skills, and competitiveness as documented in the gender framework.<sup>32</sup>

#### D. Governance

33. The assessed pre-mitigation financial management risk is substantial mainly because of the greenfield nature of the SGDF. The financial management assessment, as part of a broader assessment of institutional performance, covers the financial and legal status; accounting staffing; accounting policies and procedures; fund flow arrangements; financial reporting and monitoring procedures and practice; financial management information systems in place; and the requirements, guidelines, and results of internal and external audits.<sup>33</sup> The results showed that the financial management systems and procedures put in place and strengthened by CCM as the

<sup>&</sup>lt;sup>30</sup> McKinsey and Company. 2009. China's Green Revolution: Prioritizing technologies to achieve energy and environmental sustainability. Beijing.

<sup>&</sup>lt;sup>31</sup> Financial Intermediary: Environmental and Social Management System Arrangement and Gender Action Plan (accessible from the list of linked documents in Appendix 2)

<sup>&</sup>lt;sup>32</sup> Gender framework (accessible from the Supplementary Documents available in Appendix 2) was developed during the project preparation.

<sup>&</sup>lt;sup>33</sup> Conducted following ADB. 2018. Financial Due Diligence for Financial Intermediaries: Technical Guidance Note. Manila.

FMC meet ADB requirements. The external audit reports from 2015 to 2018 for SDIHG and CCM have unqualified opinions. As one of the investment vehicles in Shandong Province, SDIHG fully complies with local regulations and is under the oversight of the provincial government agencies. CCM qualifies as a "institution of private investment funds" by the Asset Management Association of China. SDIHG and CCM are confirmed to have adequate financial management capacity to manage the project. ADB will review and issue no objection on all the key fund documents and templates to ensure compliance with ADB requirements.

- 34. All procurement for subprojects financed under the project must be carried out in accordance with ADB's procurement policy and regulations for financial intermediaries. 34 Procurement, including the recruitment of consultants, must follow the ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). A procurement capacity assessment of the implementing agency and a procurement assessment of private sector commercial practice concluded that the overall procurement risk for the project is moderate since the SGDF concept is being pilot tested. The FMC will be responsible for the procurement activities for the capacity development program.
- 35. Investee companies will undertake procurement under the loan in accordance with established private sector or commercial procurement practices that are acceptable to ADB. Investee companies may use open competitive bidding for the purchase of large single items or in cases of large quantities of goods for bulk purchasing. All procurement will ensure (i) reasonable prices as a result of preferably competitive procedures, (ii) procurement from eligible source countries, and (iii) fair canvassing and/or evaluation.
- 36. Integrity due diligence was conducted on the project stakeholders, especially CCM and SDIHG.<sup>35</sup> No significant integrity risks were identified. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, SDIHG, and CCM. The specific policy requirements and supplementary measures are described in the PAM (footnote 15).

#### E. Poverty, Social, and Gender

- 37. The project is expected to improve the resilience to climate change impacts of 2 million people in Shandong Province by 2027. Social co-benefits include improved cultural preservation, health, and safety. ADB social development and safeguards policies need to be addressed adequately in the subprojects to ensure community involvement, limit negative health impacts, and promotes safety. The project leads to active adoption of climate-positive action and ensures that investment benefits are shared by lower-income or vulnerable groups in terms of employment, community participation, and quality of life. The project includes an output on capacity development to finance knowledge products, workshops, community outreach, and specific education programs designed to meet ADB's social objectives. Environmental co-benefits include improved air quality, water and soil quality, and biodiversity. For the SGDF, the output of 2.5 million tons of CO<sub>2</sub>eq reduction per year displaces about 10 million tons of coal, resulting in a reduction of 80,000 tons of nitrogen oxide and 70,000 tons of sulfur oxide.
- 38. The project is classified *effective gender mainstreaming*, with gender-specific indicators in the design and monitoring framework (footnote 18). The PRC has limited experience with gender-

<sup>34</sup> Procurement documents are in the appendix to the PAM (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>35</sup> ADB. 2003. Enhancing the Asian Development Bank's Role in Combating Money Laundering and the Financing of Terrorism. Manila.

responsive approaches in climate financing. This will be the first climate fund in the PRC that systematically integrates gender equality considerations in the requirements for subproject financing. Under the SGDF, all proposed subprojects are required to conduct a social analysis and gender assessment. As an incentive to promote gender equality in climate financing, subprojects that identify specific gender design features and prepare a GAP will move to the "advanced benefits" or "transformational" category, enabling access to better financial terms. The SGDF has set an ambitious target of 50% for projects preparing a GAP, to be financed by the investee companies with monitoring by the FMC.

#### F. Safeguards

- 39. Due diligence findings show that, while CCM has a strong record in corporate environmental and social governance, it has no specific environment and social policies in place or dedicated procedures beyond a requirement under national laws and regulations to avoid, minimize and mitigate, or compensate the adverse impacts of subprojects on the environment and affected people. In compliance with ADB's Safeguard Policy Statement (2009), an ESMS arrangement has been prepared. <sup>36</sup> The ESMS arrangement details: (i) the exclusion of subprojects that fall under category A for environment and involuntary resettlement, and the exclusion of subprojects that fall under categories A and B for indigenous peoples; (ii) setting up of the FMC, which includes the establishment of a safeguards unit with two full-time staff and resources to strengthen staff capacity; and (iii) the preparation of an ESMS to be agreed between ADB and the FMC as a condition of the first disbursement.
- 40. **Environment and involuntary resettlement (category FI).** The project excludes category A subprojects from financing by the SGDF. For category B and C subprojects, it will require ADB's review and approval of the required safeguard documents for the first three subprojects or until such time that ADB confirms that the FMC safeguards unit is fully staffed and has sufficient capacity to do their own due diligence and review of safeguards planning documents; and any subproject above the limit of €70 million.<sup>37</sup> Semiannual monitoring reports and annual consolidated environmental and social reports will be submitted to ADB for review.
- 41. **Indigenous peoples (category FI-C).** The project does not target any distinct or vulnerable indigenous people groups and is not expected to have adverse impacts on ethnic minority groups.

#### G. Summary of Risk Assessment and Risk Management Plan

42. The project preparation for the SGDF with SPG and the cofinanciers provided a robust design in which risk management and risk mitigation are evaluated. The level of financial management risk that could affect project performance is considered *substantial* because of the greenfield nature of the SGDF. The MERV and the FMC's established operational tools are expected to mitigate most of the risks. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>38</sup>

38 Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

<sup>&</sup>lt;sup>36</sup> Financial Intermediary: Environmental and Social Management System Arrangement (accessible from the list of linked documents in Appendix 2). Financial Intermediary: Environmental and Social Management System in Chinese language will be made available at the CCM office in Beijing and SDIHG office in Jinan.

<sup>&</sup>lt;sup>37</sup> This applies for category C subprojects on indigenous peoples safeguards.

Table 4: Summary of Risks and Mitigating Measures

Risk	Mitigation Measure
Financial management. The FMC	Financial management capacity. The SGDF is established under an
manages several loans with different	experienced financial intermediary, Shandong Development &
terms and conditions from international	Investment Holding Group. It is strengthened by CCM, one of the top-
financial institutions and private,	tier fund managers in the country, to operate the SGDF. As a
institutional, and commercial investors,	professional fund manager, the FMC will manage the foreign exchange
with currency mismatch.	risk since CCM has access to various financial instruments to mitigate
	this risk.

CCM = CICC Capital Management Co., Ltd; FMC = fund management company; SGDF = Shandong Green Development Fund.

Source: Asian Development Bank.

#### IV. ASSURANCES AND CONDITIONS

- 43. The government and SPG have assured ADB that implementation of the project shall conform to all applicable ADB requirements, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, financial management, and disbursement as described in detail in the PAM and loan documents.
- 44. The government and the SPG have agreed with ADB on certain covenants for the project, which are set forth in the draft loan agreement and project agreement.
- 45. **Conditions for disbursement:** (i) ADB has issued a written no-objection to the fund contracts for the catalytic fund and for the SGDF I Fund and any other fund then in existence; (ii) the limited partnership agreements and fund management agreements for the Catalytic Fund and for the SGDF I Fund have been executed by the general partners and such of the limited partners as are necessary, in ADB's determination, for these funds to commence operations; (iii) the catalytic fund and the initial SGDF are licensed and registered with authorities of the borrower as required by regulation for both to commence operations; (iv) the executing agency has entered into the onlending agreement with the implementing agency; and (v) the then-existing funds and the fund manager have adopted the ESMS, and the fund manager has retained two qualified and experienced full-time staff to manage implementation of the ESMS.

#### V. RECOMMENDATION

46. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of €88,730,000 to the People's Republic of China for the Shandong Green Development Fund Project, from ADB's ordinary capital resources, in regular terms, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 20 years, including a grace period of 15 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements presented to the Board.

Takehiko Nakao President

#### **DESIGN AND MONITORING FRAMEWORK**

Impact the Project is Aligned with
Peaking of carbon dioxide emission around 2030 or earlier on best efforts achieved (Intended Nationally Determined Contribution)<sup>a</sup>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks	
Outcome Climate resilience in Shandong Province enhancedb	By 2027: a. At least 2.5 million tCO <sub>2</sub> e annual greenhouse gas emissions reduction <sup>c</sup> (2019 baseline: 0) b. At least 2 million people (of which 50% are women) with strengthened climate and disaster resilience <sup>d</sup> (2019 baseline: 0) c. SGDF financial sustainability met through positive cash flow to service the debt, positive financial internal rate of return for the PIC investors, and lower return for the public sector contribution (2019 baseline: not applicable)	a. Shandong Province annual yearbook (Shandong Development and Reform Commission) b. Annual performance report (SGDF) c. Annual financial audited statement	Economic slowdown reduces financing available for climate-positive subprojects	
Outputs 1. SGDF established with PIC financing leveraged	By 2026:  1a. SGDF established with €260 million catalytic funds leveraging €320 million public funds and crowding in about €700 million PIC finance (2019 baseline: 0)  1b. Additional €1 billion climate finance mobilized (2019 baseline: 0)  1c. Completed and gender action plan implemented in 50% of subprojects financed by the SGDF, based on the gender framework (2019 baseline: 0)  1.d. At least two climate- and disasterresilient infrastructure assets and/or services for women and girls established or improved (2019 baseline: 0)	1a.–1d. Annual performance report (SGDF)	Regulatory changes in SGDF operations	
2. Knowledge and skills of local governments, civil society, and private sector to prepare climate-positive subprojects enhanced	2a. At least 500 persons, including 40% women, with increased knowledge and skills in implementing mitigation and low-carbon development actions <sup>g</sup> (2019 baseline: 0)  2b. At least €8 million worth of financial preparedness instruments provided <sup>h</sup> (2019 baseline: 0)	2a. Annual performance report (SGDF), post-training survey, and questionnaires (consultants' report)  2b. Annual performance report (SGDF)	Funding for consulting services cannot be sustained, resulting in poorly prepared subprojects	

#### **Key Activities with Milestones**

#### 1. SGDF established with PIC financing leveraged

- 1.1. Set up CNY10 billion SGDF with €260 million catalytic funds (2025)
- 1.2. Approve one climate-positive subproject (2021)
- 1.3. Leverage pilot climate-positive subprojects by reinvesting catalytic loans with PIC funds (2026)
- 2. Knowledge and skills of local governments, civil society, and private sector to prepare climatepositive projects enhanced
- 2.1. Recruit consultants for the capacity development program (2020–2024)
- 2.2. Develop and screen SGDF pipeline of bankable climate-positive subprojects (2020–2025)
- 2.3. Prepare climate-positive subprojects categorized transformative (10%) or advanced (60%) (2020–2026)
- 2.4. Train staff from fund management company, local governments, and qualified enterprises (2020–2025)
- 2.5. Start using SOURCE for project preparation and the monitoring, evaluation, reporting, and verification digital platform (2020)
- 2.6. Implement climate and financial ratings of subprojects financed by the SGDF (2025)
- 2.7. Implement green procurement guidelines in at least one subproject financed by the SGDF (2025)
- 2.8. Implement at least three policy seminars and document outcomes for use by policy makers (2020–2025)

#### Inputs

ADB: €88.73 million (ordinary capital resources loan)

KfW: €100.00 million (loan) AFD: €75.00 million (loan)

Government of the PRC: CNY2.5 billion

PIC: CNY5.4 billion

#### **Assumptions for Partner Financing**

Collaborative cofinancing with international financial institutions

ADB = Asian Development Bank; AFD = Agence Française de Développement; PIC = private, institutional, and commercial; PRC = People's Republic of China; RFI = results framework indicator; SGDF = Shandong Green Development Fund; tCO<sub>2</sub>e = ton of carbon dioxide equivalent.

- <sup>a</sup> Government of the PRC. 2015. Intended Nationally Determined Contribution. Paris.
- b ADB. 2018. Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific. Manila. Operational Priority 2 Accelerating progress in gender equity: Pillar 5 Women's resilience to external shocks strengthened; and Operational Priority 3 Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability: Pillar 1 Mitigation of climate change increased; Pillar 2 Climate and disaster resilience built.
- <sup>c</sup> Contribution to ADB Results Framework (Level 2A): RFI 9 (total annual greenhouse gas emissions reduction).
- <sup>d</sup> Contribution to ADB Results Framework (Level 2A): RFI 10 (people with strengthened climate and disaster resilience) and RFI 8 (women and girls with increased resilience to climate change, disaster, and other external shocks). Based on calculations of the total number of beneficiaries of subprojects.
- e Contribution to ADB Results Framework (Level 2A): Tracking Indicator 25 (additional climate financed mobilized) 75% of SGDF funding allocated to mitigation.
- <sup>f</sup> Contribution to ADB Results Framework (Level 2A): Tracking Indicator 22 (number of climate- and disaster-resilient infrastructure assets and/or services for women and girls established or improved) 25% of SGDF funding allocated to adaptation, of which more than 50% targets women and girls, with an average project size of \$100 million.
- <sup>9</sup> Contribution to ADB Results Framework (Level 2A): Tracking Indicator 26 (people with increased capacity in implementing mitigation and low-carbon development actions).
- h Contribution to ADB Results Framework (Level 2A): Tracking Indicator 30 (Number of financial preparedness instruments provided to be determined during implementation). SGDF \$10 million Capacity Development Program.

Source: Asian Development Bank.

#### LIST OF LINKED DOCUMENTS

http://www.adb.org/Documents/RRPs/?id=51194-001-3

- 1. Loan Agreement
- 2. Project Agreement
- 3. Sector Assessment (Summary): Finance
- 4. Project Administration Manual
- 5. Financial Analysis
- 6. Economic Analysis
- 7. Summary Poverty Reduction and Social Strategy
- 8. Risk Assessment and Risk Management Plan
- 9. Climate Change Assessment
- 10. Gender Action Plan
- 11. Financial Intermediary: Environmental and Social Management System Arrangement

#### **Supplementary Documents**

- 12. Mitigation and Adaptation Priorities in Shandong
- 13. Shandong Green Development Fund Green Climate Assessment Guidelines
- 14. Indicators for Green Finance in the PRC
- 15. Financial Due Diligence (Confidential)
- 16. Integrated Financial Model (Confidential)
- 17. Integrity Due Diligence (Confidential)
- 18. Detailed Economic Analysis
- 19. Procurement Assessment of Private Sector—Commercial Practice
- 20. Market and Green Procurement Risk Assessment
- 21. Green Procurement Manual
- 22. Project Concept Notes
- 23. Subproject Pre-Feasibility Studies
- 24. Gender Framework
- 25. Annual Performance Report (Green Climate Fund)